EVALUATION OF A MARKETING PROGRAM DESIGNED TO INCREASE CONSUMER CONSIDERATION OF ENERGY-EFFICIENT PRODUCTS IN DENVER, COLORADO

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- Prepared For -

OFFICE OF CONSERVATION
DIVISION OF BUILDINGS & COMMUNITY SYSTEMS
U.S. DEPARTMENT OF ENERGY

- Prepared By -

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1624 Market Street
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I. INTRODUCTION

During the fall of 1977, and January 1978, the Division of Buildings and Community Systems of the U.S. Department of Energy (at that time known as the Energy Research and Development Administration) sponsored a project designed to motivate consumers to incorporate the concept of "Energy Cost of Ownership" when making various consumer product decisions. It had been reasoned that, if consumers are to make more informed purchase decisions, they should consider the cost of operating a product over the lifetime of that product, as well as the initial price of the product. Consumer awareness and acceptance of that concept (i.e., "Energy Cost of Ownership") could be key to the eventual acceptance of new energy-efficient technologies, since many of the new products have higher first costs, but lower operating costs and lower total costs.

However, the concept of "Energy Cost of Ownership" is a complex and difficult notion to convey to the mass marketplace. The term (as well as its immediate predecessor, "life cycle costing") has had limited usage and exposure and thus is immediately understood by only an infinitesimal fraction of the general public. Explanation of the entire process is cumbersome and time-consuming. Therefore, the long-term communications task of the "Energy Cost of Ownership" program involves increasing consumer awareness and acceptance of the simple, yet key elements of "Energy Cost of Ownership"; e.g., the incorporation of operating costs into the total cost picture and the fact that the purchase of efficient products saves energy and thus results in a financial pay-back when compared to the purchase of less efficient models.

As a first step in the process the Department of Energy developed an integrated marketing/communications program, the purpose of which was to sensitize the consumer marketplace to the economic benefits of purchasing energy-efficient products. Denver, Colorado, was chosen as the pilot city for that initial program.

The demonstration program consisted of two major components:

(1) The communications project which included:

- paid multi-media advertising.
- a home energy retrofit contest.
- a shopping center display of a home energy-use simulator.

(2) A research phase which had as its objectives:

- measurement of the overall program and concept and
- development and evaluation of various communications strategies.

Personal interviews with Denver area homeowners were conducted, both before and following the marketing/communications program. The first survey, conducted during May and June of 1977, consisted of 357 randomly-selected adult homeowners. The purpose of that first survey was two-fold: (1) to establish a baseline for consumer awareness and acceptance of energy conservation and conservation-related products, and (2) to provide information which could be utilized in developing marketing strategies related to energy conservation and the concept of energy cost of ownership.

In February 1977, the second survey, consisting of an independent sample of 506 randomly-selected adult homeowners, was conducted. The purpose of that second survey was to measure shifts in awareness and attitudes which might have occurred as a result of the marketing demonstration program.

The research design also called for similar surveys to be conducted during these same two time periods in a control city, Salt Lake City, Utah. The inclusion of the control city was to permit the evaluation of the demonstration marketing effort, exclusive of any national emphasis on energy conservation which might have occurred during the demonstration project. If only Denver homeowners had been surveyed, it would have been impossible to determine whether changes in awareness and attitudes had been due to the marketing program alone, or if such changes had been produced by a national media emphasis. Because of the difficulties involved in establishing an appropriate sample frame, no evaluation of changes in in-store traffic within the 125 participating retail outlets could be made.

The purpose of the pilot test was twofold:

(1) to discover whether the concept of "Energy Cost of Ownership" does possess the potential to help accelerate the acceptance of energy efficient and energy conserving products and

(2) to determine what marketing/communications approaches would most effectively accomplish the program objectives.

If the concept did show potential, the findings could then be used as input for Phase II, a major demonstration designed to create a similar, positive selling environment for energy-conserving products. This latter demonstration would take place with heavy private-sector participation in five test markets coinciding with the market territories of the major retailers. This would allow a close evaluation of the program across varied geographic regions, fuel sources, fuel prices and climatic conditions in order to determine the feasibility of a national program to take place the following year.

A number of individuals and organizations made significant professional contributions and fortunately did not practice personal energy conservation in assisting with the evaluation effort. The sample design benefited from the thoughtful input of Peter Warren and George Bardwell of the University of Denver. Community Response of Colorado and Research Services provided a superlative field interviewing effort. Madalyn Parsons, Jacki Harrier, Nancy Casey and Rosalie Nemeth were responsible for preparation of much of the tabular data and for typing the final reports. Their efforts are appreciated.

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II. SUMMARY AND CONCLUSIONS

From the very beginning the planning process for the "Energy Cost of Ownership" program recognized that marketing the key elements of the concept - traditionally known as "life cycle costing" - would be difficult. Not only is the concept itself foreign to many consumers, but until fairly recent attempts by several automobile manufacturers to cause buyers to consider future operating costs as well as the initial price as part of the purchasing decision, manufacturers of consumer products have made little effort to promote consumer acceptance of the principle of "life cycle costing".

Compounding the problem is the fact that the concept is complex and that communication of the entire concept is difficult within the message confines of commercial media. Therefore, from a marketing standpoint the pragmatic decision to base the marketing program on the sensitization of the consumer marketplace to key elements of the concept, rather than to the entire concept, was a wise choice. However, that approach made the evaluation effort complicated. Instead of being asked to evaluate consumer response to a single concept, the research had to address several component elements which had varying initial degrees of consumer acceptance, as well as differing rates of acceptance as a result of the marketing program.

The basic assumption in the research design was that the concept of "Energy Cost of Ownership" truly qualified as an innovation in the public marketplace and, therefore, that its acceptance in the marketplace would conform to an innovation-diffusion model in terms of consumer acceptance. The classic model entails a three stage process as follows:

(1) the knowledge stage ("Awareness") wherein the individual is exposed to the innovation's existence and gains some understanding of how it functions.

(2) the persuasion stage ("Attitude") wherein the individual forms an attitude, either favorable or unfavorable toward the innovation.

(3) the decision stage ("Behavior") wherein the individual behaves in ways which lead to a choice to adopt or reject the innovation.

The present research also investigated a stage intermediary between Stages (2) and (3) - an "intention to behave" in which the respondent is asked to commit verbally to a certain behavior, but in which there is no assurance that the behavior will actually occur. That "intent" stage might also be regarded as a higher level of the persuasion stage.

The results of the evaluation process can best be summarized in terms of the changes which took place within the four stages identified above: (1) awareness, (2) attitude, (3) intent, and (4) behavior.

Changes in Awareness

Before consumers can fully incorporate the "Energy Cost of Ownership" concept into their purchasing-decision framework, they must recognize where in the home major energy usage occurs and they must be aware of the energy-conserving potential of many household products. Denver homeowners proved to be significantly* more aware of the energy-saving potential of various measures, particularly those which entailed the installation of specific energy-conserving devices in the home. Of 15 such measures which were examined, Denver residents exhibited more "savings consciousness" on nine of them, including many of the products mentioned in the marketing program; e.g., automatic set-back thermostat, adequate insulation.

Following the demonstration program, homeowners in Denver were more cognizant of the overriding role of home heating in the total household energy utilization pattern. When compared with the energy consumed in heating the home, every other household energy-user pales. Denver residents were more aware of the magnitude of that difference after the marketing program.

*As used in this report results which are stated as "significant" mean that the change from pre- to post-test when Denver (the demonstration city) and Salt Lake City (the control city) are compared is statistically significant; that is, the observed changes in Denver were significant at the 95 percent level of confidence. For a more complete explanation, the reader should refer to page 27 of this report.

Despite their awareness of the energy-saving potential of various behaviors and purchases, Denver homeowners were skeptical that those energy savings could be translated into dollar savings through reduced utility bills. Whereas the potential savings in monthly utility bills (assuming no changes in rates) which can be realized through personal energy conservation has been conservatively estimated by experts in the field at somewhere between 20 and 35 percent, Denver residents in the post-survey estimated the potential dollar savings at only nine percent. The fact that the later estimate dropped from 13 percent in the pre-test to nine percent in the post-test situation may have been due in large part to a significant increase in utility rates which occurred in Denver prior to the post-survey. Future marketing efforts should stress the fact that personal energy conservation - if unable to produce large decreases in monthly utility bills - can help hold the line against anticipated, future rate increases.

On a more general level a significantly greater awareness of the energy issue as a top national priority developed in Denver during the eight-month interval between the two surveys. Also, the perception of Denver residents regarding their ability to contribute personally to the solution of the energy problem increased significantly. There was no such personal optimism expressed with regard to other important national concerns such as inflation or tax pressures.

There was some expectation that overall increases in the awareness of energy-conservation would be reflected in wider recognition and understanding of the jargon of energy conservation. Such a consequence would constitute accidental "fall-out" since none of the terms evaluated was actually used in the marketing program. However, on nine of the twelve energy terms which were evaluated, Denver residents failed to exhibit any greater definitional prowess following the demonstration program. Denver residents were more adept at defining three terms: blackout, EER and vanpooling. The very significant difference between Denver and Salt Lake City homeowners in their ability to define the latter term could well have been due to the extensive media mention of vanpooling as a partial solution to the air pollution problem in Denver.

In addition to increased awareness of conservation-related measures in Denver, awareness and recall of the marketing program itself was substantial. Recognition of the three television commercials which were used in the marketing program averaged approximately 45 percent, one to four weeks after the commercials actually appeared. In most evaluations of commercial recall a figure of 30 percent would be deemed satisfactory one week after the commercial's appearance.

The slogan "Products That Save Energy Pay For Themselves," which was used as a tag-line during the demonstration program was better understood by Denver residents than by Salt Lake City homeowners, even though the absolute recall was not high. Nearly 30 percent of the Denver homeowners (compared with 19 percent in Salt Lake City) were able to give the substantive meaning of the slogan. It should be noted that the slogan was developed as a summary statement which tied the commercials and display material to the "Energy Cost of Ownership" concept and, without verbal reinforcement, was not intended to stand alone.

The weakest portion of the marketing program in terms of consumer impact was the in-store promotional displays which turned out to be relatively ineffective due in large part to the absence of significant participation by the clerks on the floor. However, the Energy Sweepstakes promotion proved to be an excellent generator of in-store traffic.

Changes in Attitudes

Denver residents expressed significantly greater willingness to pay from ten to 15 percent more up-front for a product which conserved energy. Although such stated willingness may waver when the purchase decision is actually faced, the findings do indicate an absence of surface resistance to the "Energy Cost of Ownership" concept.

Partially offsetting that favorable attitude towards the major concept was the mounting fear among individuals in Denver that a nationwide energy conservation program might result in a detrimental impact on their personal standard of living. The source of that anxiety was not specifically identified, but there were indications that worries were related to the possible diminishing of comfort and convenience which might result from behavioral changes (e.g., setting the thermostat at 65° during the night, driving less often) rather than possible negative consequences which might occur after purchasing energy-conserving products.

There was also a growing tendency among Denver residents to support the contention that there are other people who waste more energy than themselves and that others are the ones who should be forced to conserve. However, a majority of Denver homeowners refused to pass the buck in that manner, viewing themselves as responsible for energy conservation.

Consumer acceptance of the automatic set-back thermostat (one of the items featured in a television commercial as part of the Denver marketing program) increased significantly in Denver following the demonstration program. Denver homeowners were also much more supportive of regulations which would enforce personal energy conservation (i.e., regulations which would set standards for proper levels of home insulation and for home appliance energy use).

Changes in Behavioral Intentions

In ten out of 15 potential energy-conserving measures which were studied, Denver homeowners expressed a significant increase in their positive, future consideration of the use of those measures. In every instance, those favorable intentions were related to the purchase and installation of new, energy-conserving products (e.g., automatic set-back thermostats, heat pumps, chimney flue dampers) rather than to changes in behavior (e.g., regulating the thermostat, driving habits). In other words, individuals are not adverse to the future purchase of energy-conserving products as a means of saving energy, instead of merely making minor behavioral changes as they are doing at the present time.

When placed in a scenario which described the "Energy Cost of Ownership" concept there was no change in the percentage of Denver residents who would opt for a more expensive, energy-saving appliance over a cheaper, less energy-efficient model. However, the percentage who selected the more expensive alternative was high to begin with (i.e., 71 percent in Denver) and it might be that such a figure represents a "ceiling"; above which the public will not extend in the absence of cost data (e.g., appliance labeling) on which to make a more meaningful choice.

Another measure of intent was provided by a question which asked individuals whether they would pay five to ten dollars a year to belong to an organization whose objective would be the promotion of energy-conserving behavior. There was a significant increase in the number of Denver residents who were interested in joining such an organization and paying a fee, even though no such concept had ever been explored in the local media.

Changes in Energy-Conserving Behavior

In the eight—month period between the first and second surveys, Denver homeowners in a free response situation reported a significant increase in the following areas of energy-conserving behavior:*

(1) the installation of storm windows and doors
(2) regulating the thermostat in order to maintain a temperature of 65°
(3) the installation of automatic set-back thermostats
(4) the installation of devices which restrict hot water flow in the shower.

However, the reported purchase frequency of 12 energy-conserving items which were stressed in varying degrees by retailers during the Denver marketing program did not differ between Denver and Salt Lake City. The apparent inconsistancy between this finding and the one above can be explained by the fact that there were no pre-test measures of purchase of the 12 specific items, so that no change over time could be measured. It is entirely possible that Denver residents also would have reported increases in the purchase of some of those 12 items (especially storm windows and doors and set-back thermostats) had the question been asked in the pre-survey.

There was also a significant increase in the percentage of Denver residents who reported that their friends and acquaintances had:

(1) installed automatic set-back thermostats
(2) installed automatic light timers
(3) installed fluorescent light bulbs
(4) decreased their use of the automobile

It was interesting to note that opinion leaders - who had been hypothesized as the most likely "change agents" with regard to the promotion of pro-conservation attitudes and behavior - reported an increase with regard to all 15 energy items studied in the number of peers who were either engaging in energy-conserving behavior or buying energy-efficient products.

*In many instances, accepting respondent's accounts of purported behavior can lead to inflated estimates of the actual occurrence of that behavior. However, in the present evaluation relative differences in reported behavior are the units of analysis and there is no a priori basis for believing that Denver and Salt Lake City residents, or summer and winter survey respondents differ appreciably in their relative veracity.

CONCLUSIONS

The stated objective of the Denver demonstration marketing program was to sensitize Denver homeowners to incorporate the "Energy Cost of Ownership orientation in their decision process regarding in-home energy consumption, as a necessary step to the eventual purchase of energy-efficient products. That sensitization process encompassed not only attitudes towards products, but also attitudes towards energy conservation.

The Denver marketing program was generally successful in meeting those objectives. Significant changes were brought about in terms of (1) levels of consumer awareness, (2) attitudes towards individual products and important aspects of energy conservation, (3) behavioral intentions regarding a wide variety of energy-conserving measures, and (4) some actual behaviors.

The only stage in the process which was minimally impacted by the marketing program occurred at the behavioral level, where expectations for change were low to begin with. In fact, harking back to the innovation-diffusion model which was outlined above, the original research proposal stated:

> "In terms of the ... demonstration program, it is proper to assume that the major emphasis will be on the knowledge stage, with considerable importance attended to the persuasion stage, and that there is small likelihood that the decision stage will be reached by many individuals within the four month period."

Despite the success of the marketing program in raising awareness levels and in promoting attitudes favorable to energy conservation, the research identified some aspects of the consumer psyche which still must be addressed before expectations for widespread acceptance of an "Energy Cost of Ownership" orientation can be realized.

The first of those possible barriers has to do with the perceived costs and dollar benefits to be derived from energy conservation. When asked to give their reasons for considering certain energy-conserving measures as difficult to adopt, many consumers answered that they were too costly. On the other hand, many homeowners failed to perceive major savings in monthly utility bills which could result from practicing energy conservation. The average potential savings in utility bills was seen as only nine percent, a drop of four percent from the initial survey findings in Denver. Given an average monthly winter utility bill of $62 in Denver, that represents a perceived monthly savings of less than six dollars. Whether such perceived

savings are sufficiently large to motivate substantial behavioral changes or new purchases is somewhat problematic. It would appear that the consumer must anticipate a much greater potential savings - perhaps as much as 30 to 50 percent - before he will begin to practice serious conservation.

Also, it appears that Denver residents experience some anxiety that widespread energy conservation will cause a general decrease in individual standard of living. While this survey instrument did not probe to the bottom of those fears, certainly future survey efforts should address that issue.

Nine out of ten Denver homeowners presently see themselves as practicing some form of energy-conserving behavior in the home. Therefore, it is conceivable that a substantial number of individuals already feel that they are discharging their personal obligation to help in a national crisis and that no further personal action is necessary - particularly if such action were to entail either greater discomfort or higher costs. Forty-two percent of the individuals stated that other energy users should be forced to conserve before they themselves do. That feeling, in combination with fears about a decrease in standard of living, is detrimental to further consumer acceptance of energy-conserving measures.

The survey data leave little doubt but that much of the media emphasis on energy conservation must also have a heavy educational component. Much of the present energy rhetoric goes over the head of the average consumer. Although terms such as "solar energy" and "blackout" have both high awareness and understanding levels, many commonly employed terms (at least common in the literature of energy conservation) such as "R value" and "retrofitting" puzzle a vast majority of the public. The term "Energy Cost of Ownership" has little meaning in either Denver or Salt Lake City, although the concept itself - when explained in sufficient detail - encounters high consumer acceptance.

The ability to accomplish the necessary educational effort will depend in great part on the media employed. The most credible sources of information concerning the energy situation were found to be representatives of the scientific community and the Department of Energy.

Next in order of credibility were the media (i.e., local television and radio stations and the local daily newspapers). Elected officials suffered in terms of their perceived credibility, and even lower in believability were the retailers and utilities which were perceived as profiting from the sale of energy-related products.

Despite some of the aforementioned problem areas in changing attitudes and behavior related to energy conservation, there was clear-cut evidence that an energy-conservation constituency already exists. Between 20 and 25 percent of Denver residents expressed a willingness to pay an annual membership fee to an organization which promoted conservation behavior. That conservation constituency tends to be well-educated and contains a high proportion of community opinion leaders. It is not necessarily a highly affluent group. However, it is composed of people who have the potential - through their educational levels, their real interest in the energy issue and their leadership status - to assist as "change agents" in the process which leads to more widespread energy-conserving behavior among the general public.

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III. METHODOLOGY

The original research design was dictated by a set of hypotheses generated by well-founded assumptions regarding consumer attitudes towards energy conservation and energy-efficient products. The basic assumptions were as follows:

(1) that many Americans have life-styles in which energy-wasting behavior is well-ingrained.

(2) that there have been conflicting messages regarding the imminence of a national energy shortage.

(3) that many Americans - either consciously or subconsciously - believe that future technology will obviate the need to solve energy shortages through changes in individual behavior.

(4) that many individuals are unaware of the manner in which home retrofitting and the installation of energy-efficient appliances can effect significant energy conservation.

(5) that attempts to change existing consumer behavior to conform more closely to an energy conservation life style could be viewed as innovative (at least in terms of representing "new ideas" to a substantial portion of the general public).

Those assumptions led to the conclusion that any marketing program designed to sensitize individuals to the consideration of energy-efficient products and of those components of the "Energy Cost of Ownership" concept would conform to many of the principles identified in prior research on the diffusion of innovation.

Those well-documented research findings postulate three stages in the acceptance of an innovation:

(1) the knowledge stage (or awareness)

(2) the persuasion stage (involving attitude formation and change)

(3) the decision stage (which entails in this instance actual purchase behavior).

Therefore, the survey instrument was designed to measure changes within those three stages as a result of the actual marketing program. Copies of the questionnaires used are reproduced in Appendix B of this report.

The sampling plan called for pre- and post-demonstration surveys of homeowners to be conducted in both Denver and Salt Lake City. Denver was selected as the location for the demonstration program due to its relative media isolation and the absence of the severe weather conditions during the 1976-77 winter which might have made individuals in other areas of the country more energy-conscious. The latter location was introduced as a "control city" in order to factor out the effect of changes which could have occurred through national media emphasis on energy conservation, changes in national policy, etc. which would have been uncontrolled and independent of the Denver marketing program.

Salt Lake City was selected as the "control city" for several reasons:

- It, along with Denver, had escaped the harsh winter of 1976-77 experienced by many other U.S. cities
- The demographic characteristics of its population are similar to those of the Denver population
- The normal climatological patterns for the two cities are nearly identical
- Local opinion research experts in the two cities assumed - on an a priori basis - that the two populations would not differ in their attitudes toward energy conservation, and that with regard to the subject matter of the present research the major differences in religious emphasis between the two populations would not be a factor.

GENERAL PUBLIC SAMPLE

	PRE-TEST SURVEY	POST-TEST SURVEY
Denver	N = 357*	N = 506
Salt Lake City	N = 447	N = 452

SEARS-WARDS CUSTOMER SAMPLE (Denver Only)

	PRE-TEST SURVEY	POST-TEST SURVEY
Denver	N = 197**	N = 200

An additional survey was conducted among a random sample of entrants in the special "Energy Sweepstakes" which took place during the Denver marketing program. Telephone interviews were conducted with 282 entrants, utilizing the questionnaire in Appendix B.

All interviewing was done by professional market research interviewers who were trained in the administration of the questionnaires. The completion rates in the various surveys ranged from 55 to 72 percent.

*"N" refers to the number of completed interviews in each location. In the tables which are included in this report "N" also refers to the size of the sub-groups (e.g., age groups, income groups) on which the columnar data are based.

**Respondents in the Denver general public survey were asked to indicate at which local department stores they had charge accounts. Those individuals who reported having accounts at either Sears or Wards were compared with the special Sears-Wards customer samples on the basis of their demographic characteristics. Those comparative characteristics indicated that the two groups were indeed derived from the same population (i.e., Sears and Wards charge customers) and therefore the data were combined to produce a pre-test sample of 435 customers and a post-test sample of 541 customers. (See Appendix D for the results of those special customer surveys.)

After interviews were completed, edited and verified,they were coded and the information was key-punched on standard IBM cards. The responses were tabulated and cross-tabulated by key demographic and behavioral variables; e.g., age, education, income levels, perceived utility savings through energy conservation. The results of the analyses of the general public and contestant surveys are presented in Section V of this report.

IV. THE DENVER TEST MARKET MEDIA CAMPAIGN

During the period September 26, 1977 through January 29, 1978, a multi-media advertising and public relations campaign was conducted to sensitize Denver area homeowners to the positive consideration of energy-efficient products.

The campaign consisted of the following components:

- a 14-week paid television and radio advertising campaign.
- a home energy retrofit sweepstakes promotion.

Other promotional activities, including:

- a shopping center display of a home energy use simulator.
- retailer displays.

Copies of all promotional materials are appended to this report (see Appendix A).

Advertising Campaign: Television and Radio

The media effort to build awareness of the value of energy-conserving products in Denver consisted of a broadcast mix of television and radio. Two flights of advertising were aired - the first flight covering the ten-week period between September 26, 1977 and December 4, 1977, and the second flight covering the four-week period between January 2-29, 1978. The flights were designed to impact the marketplace prior to and during the heavy winter months.

The broadcast media campaign consisted of three different commercial executions which promoted specific types of energy-efficient home improvement products. The three executions aired in versions for television and radio were:

Television Commercials

"Thermostat"	-	30 second - automatic thermostats
"Insulation"	-	30 second - insulation and storm windows
"Pilot Light"	-	30 second - pilotless gas appliances

Radio Commercials

"Thermostat"	-	60 second - automatic thermostats
"Robber"	-	30 second - insulation and storm windows
"Fire"	-	30 second - pilotless gas appliances

Both the television and radio commercials were designed to reach upscale, better-educated Denver homeowners - identified by the initial survey research as the prime prospects for energy-efficient technology.

Television Schedule

The Denver media schedule included 154 paid 30-second television spots airing within programming identified as having the greatest reach and frequency among the target group. The commercials appeared on a rotating schedule within network and local morning, early and late news shows, "Sixty Minutes", and NFL Football telecasts. The television buy consisted of 175 gross rating points per week for the first flight and 150 gross rating points per week for the second flight of advertising. It is estimated that the Denver television buy reached 83 percent of all Denver adults 14 times (See Schedule A).

Radio Schedule

As a supplement to the television schedule, 676 paid 30 and 60 second radio spots were aired during morning drive, daytime and weekend listening times. The three spots were rotated and aired equally. The radio schedule, composed of news, classical and "easy listening" type programming, was directed toward building high frequency among upper-income, better-educated Denver consumers.

Radio Schedule

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Further, the schedule was designed to reach the light television viewer and to increase impact among consumers who were exposed to the television spots. Radio stations KLIR and KVOD, with the greatest reach and frequency among the target audience, were used for both advertising flights. To build additional awareness of the energy cost of ownership concept prior to the heavy winter months, KOA, the news and sports station with the greatest audience, was included in the first flight of advertising. The radio buy for the 14-week campaign consisted of approximately 90 gross rating points per week during the first flight and approximately 75 gross rating points per week during the second flight (See Schedule B).

Sweepstakes Promotion

A retail-oriented promotion, aimed at encouraging Denver homeowners to enter a retrofitting sweepstakes, was an integral part of the media campaign. The sweepstakes promotion was designed to heighten awareness of specific energy-efficient home improvement products, to build traffic in energy centers, (i.e., Sears, Wards, K-Mart, appliance, hardware, and home remodeling retailers), and to dramatize the need for energy conservation to both consumers and retailers.

Black-and-white spreads promoting the retrofit sweepstakes appeared in area newspapers between October 28 and November 21, 1977. The ads contained coupons for consumers to fill out and deposit in participating energy centers. The newspaper ad was selected by the American Advertising Federation to receive its "Best in the West" Award in the public service division.

The sweepstakes was open to all owners of single family detached dwellings. At the close of the contest, approximately 12,400 entries had been received. Each of the 11 winners was awarded up to $1,500 worth of products designed to save energy, including: storm windows, insulation, special set-back thermostats and electronic pilot lights (See Schedule C).

Other Promotional Activities

Promotional materials in the form of brochures and point of purchase displays were sent to participating energy center retailers for the twofold purpose of educating and stimulating both the retailer and the consumer. All promotional materials displayed the rainbow logo and slogan "Products That Save Energy Pay For Themselves".

In addition, a home energy use simulator was displayed at the Denver Home and Garden Show, February 3 - 12, 1978. Attendance at the show was approximately 41,000. During the remainder of February through mid May, 1978, the exhibit traveled to various Denver area shopping malls to provide additional impetus to the total marketing effort.

SCHEDULE A

DENVER TELEVISION SCHEDULE

Flight I

September 26 - December 4, 1977
10 weeks

TIME	STATION	PROGRAM	NUMBER OF SPOTS
6 - 7 AM	KMGH - 7	CBS Morning News	2 times weekly
7 - 9 AM	KOA - 4	Today Show	2 times weekly
7 - 9 AM	KBTV - 9	Good Morning America	2 times weekly
6 PM	KMGH - 7	Pre Walter Cronkite	2 times weekly
10 - 10:40 PM	KBTV - 9	Nine News at 10	2 times weekly
10 - 10:40 PM	KMGH - 7	The News - 10	2 times weekly
10 - 10:30 PM	KOA - 4	Newswatch 4 - 10	2 times weekly
EXTRA SPOTS			
6 - 7 PM	KMGH - 7	Sixty Minutes - 10/2,9,16,23,30; 11/6,13,20,27; 12/4	10 total
11 AM - 5 PM	KMGH - 7	Chicago Bears vs. Minnesota Vikings October 16	1
		Dallas Cowboys vs. New York Jets November 6	1
		Chicago Bears vs. Detroit Lions November 24	1

Flight II

January 2 - 29, 1978
4 weeks

TIME	STATION	PROGRAM	NUMBER OF SPOTS
6 - 7 AM	KMGH - 7	CBS Morning News	2 times weekly
7 - 9 AM	KOA - 4	Today Show	1 time weekly
7 - 9 AM	KBTV - 9	Good Morning America	2 times weekly
6 PM	KMGH - 7	Pre Walter Cronkite	2 times weekly
10 - 10:30 PM	KOA - 4	Newswatch 4 - 10	1 time weekly
10 - 10:40 PM	KBTV - 9	Nine News at 10	2 times weekly
6 - 7 PM	KMGH - 7	Sixty Minutes - 1/8,15	2 total

SCHEDULE B

DENVER RADIO SCHEDULE

Flight I

September 26 - December 4, 1977
10 weeks

TIME	STATION	NUMBER OF SPOTS
Morning drive, day and weekend	KOA-AM 85	18 spots weekly
6 AM - 10 PM	KLIR-FM 100.3	18 spots weekly
6 AM - 10 PM	KVOD-FM 99.5	18 spots weekly
6 AM - 10 PM	KOSI-FM 101.1	4 spots total - donated as public service time due to conflict of interest with station ownership

Flight II

January 2 - 29, 1978
4 weeks

TIME	STATION	NUMBER OF SPOTS
6 AM - 10 PM	KVOD-FM 99.5	16 spots weekly
6 AM - 10 PM	KLIR-FM 100.3	18 spots weekly

SCHEDULE C

SWEEPSTAKES NEWSPAPER SCHEDULE

October 28 - November 21, 1977

NEWSPAPER	DATE	SPACE
The Denver Post	Fri., Oct. 28	Center spread
	Mon., Nov. 21	Center spread
Rocky Mountain News	Mon., Oct. 31	Center spread
	Wed., Nov. 16	Center spread
Sentinel newspapers	Wed., Nov. 2	Center spread
Denver Catholic Register	Wed., Nov. 2	Center spread
Aurora Sun	Thurs., Nov. 3	Center spread
Littleton Independent	Thurs., Nov. 3	Center spread
Intermountain Jewish News	Fri., Nov. 4	Center spread

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V. RESULTS OF THE EVALUATION

Included in this section are the results of the pre-test and post-test surveys in Denver and Salt Lake City, as well as the results of the telephone survey of Sweepstakes entrants in Denver. The results are presented in the following sub-sections:

A. Levels of Awareness of Energy Conservation
B. Attitudes Towards Energy Conservation
C. Consumer Intentions Concerning Energy Conservation
D. Existing Levels of Energy Conserving Behavior
E. Credibility of Information Sources
F. Evaluation of Specific Elements of the Denver Marketing Program
G. Evaluation of the Energy Sweepstakes Program

Each sub-section contains a narrative analysis, followed by the tabular data to which the narrative refers. In many instances, the text makes references to cross-tabulations by demographic or attitudinal groups which are not included in the tables. Those cross-tabulations have been omitted in the interests of brevity, but are available upon request.

The tables contain the percentage response (or average rankings for those questions in which the respondents were asked to rank-order variables) for both the pre-test and post-test surveys in the two cities. The shifts in those percentages are also reported.

Where identical questions were asked in both surveys and in both cities, the statistical significance of "the difference of the differences", i.e.,

(Denver pre-test / Denver post-test) minus

(Salt Lake City pre-test/ Salt Lake City post-test)

has been reported in the last column on the right-hand side of the table. The word "YES" means that the obtained difference between the changes was significant at the 95 percent level of confidence; i.e., the chances are 95 out of 100 that a true difference as large as the obtained difference exists in the population encompassed by the survey effort.

In some instances, a negative shift in awareness, attitude or behavior occurred in both cities. In those situations, the difference was tested to determine whether the decrease in Denver was significantly different than the decrease in Salt Lake City (i.e., would Denver have exhibited even a greater decrease in the absence of the marketing program?).

In some tables in which a pre- and post-test comparison was impossible (e.g., awareness of the television commercials used in the marketing program), the 95 percent confidence intervals have been reported for individual percentages.

Example: Estimated percentage = 80 percent

95 percent confidence interval = 70-90 percent

In the above example, if the estimated value from the survey was 80 percent, then the chances are 95 out of 100 that the population (i.e., the true value) would fall within the range of 70 percent to 90 percent. In other words, it is highly unlikely that the true value falls below 70 percent or above 90 percent. The term "true value" refers to the value which would be obtained if a census of the entire population were taken.

A. LEVELS OF AWARENESS OF ENERGY CONSERVATION

1. Energy As a National Priority

In both the pre- and post-surveys in Denver, the energy crisis was perceived as the third most important national priority among 12 national issues which respondents were asked to rank (Tables A-1 and A-2). In the summer of 1977 the energy situation took a back seat to two "pocketbook concerns" - slowing down inflation and reducing the tax burden. Eight months later the latter issue had been replaced by a mounting concern over air pollution in Denver.

In Salt Lake City the energy crisis actually dropped from the third ranked to the fourth ranked priority during the eight-month interval between surveys. Whereas the energy situation was perceived with equal emphasis in Denver and Salt Lake City in the summer of 1977, it received a significantly higher priority in Denver by the following winter.

Where perception of the importance of the energy issue is analyzed by various demographic, attitudinal and interest subgroups, definite patterns emerge - many of which are consistent with the "innovation-diffusion" hypothesis which formed the basis of the initial research strategy (Table A-3). The energy issue was viewed as most critical by:

- Women
- The highest income group
- The well-educated
- Opinion leaders
- Individuals under the age of 55

Because of the traditional high correlation between income levels and educational attainment, similar levels of concern with the energy issue would be expected. However, a more detailed analysis of the data revealed that education was the more critical of the two factors. Affluent individuals with less than a college degree actually assigned the energy issue lower than average rankings.

People who would pay to belong to an organization dedicated to energy conservation placed more importance on the national energy issue than did individuals with no interest in such an organization.

2. Perceived Ability to Contribute Personally to Solving the Energy Problem.

Although Salt Lake City homeowners regarded themselves as better able to make personal contributions to solving the energy crisis than did Denver residents, there were significant shifts in perceived ability to make contributions between residents of the two cities over the eight month period (Table A-4). For example, Denver homeowners remained fairly level in terms of their perceived ability to arrive at personal solutions, whereas residents of Salt Lake City expressed less personal control in February of 1978 than they had during the prior summer. In Denver those individuals who perceived themselves as most able to contribute to a personal solution consisted of opinion leaders, the highly educated, and individuals with an interest in joining an energy conservation organization. The most apathetic individuals were the more traditionally alienated groups, such as the poorly educated and lower income groups.

3. Ranking of In-home Energy Users

Respondents were presented with a list of ten in-home appliances, ranging from central air conditioning to water heaters and automatic washers, and were asked to rank order those appliances in terms of their average energy use. The average rankings were correctly sequenced by Denver homeowners and there was only one mis-sequenced pair of energy users among the average Salt Lake City rankings (Table A-5).

The most interesting aspect of the question had to do with the fact that Denver residents, in the survey following the marketing program, correctly gave much more weight to "heating" as an energy user than they did in the first survey. All of the other in-home energy users paled in terms of their average rankings when compared with that of "heating". In other words, Denver homeowners became increasingly more aware that heating is far and away the chief culprit among in-house energy users.

4. Perceived Impact of Energy Conservation on Present Utility Costs

A cornerstone of the "Energy Cost of Ownership" concept should entail a belief on the part of the consumer that by installing energy efficient products or by practicing energy conservation at home the consumer will experience operating efficiencies which presumably will be reflected in his monthly utility bill. If utility rates were to remain stable, the operating efficiencies should result in lower utility bills. Informed estimates of the maximum utility costs which could be saved by thorough energy-conserving behavior are in the range of 20-35 percent.

Survey respondents were asked to estimate the percentage of their present utility costs which could be saved by installing energy efficient products and by vigorously practicing energy conservation. The average estimates in both cities were well below the maximum level which might be achieved. For example, Denver homeowners guessed that it might be possible to save as much as 13.1 percent of present utility costs, where Salt Lake City residents perceived slightly lower savings - 11.5 percent (Table A-6). In each instance, those estimates dropped in the second survey - to 9.0 percent in Denver and to 9.9 percent in Salt Lake City. In other words, nothing occurred over the eight month period, either in Denver or Salt Lake City, to convince homeowners that vigorous energy conservation would result in lower utility bills. However, the drop in Denver could well have been due to the fact that utility rates rose sharply in Denver during the winter of 1977-78 (immediately prior to the post-survey) - the perception of which could cancel out any perceived increase in savings due to energy conservation.

In both cities, respondents were of the opinion that the use of new energy conserving appliances were likely to be more effective in lowering utility costs than would energy-conserving behavior (Table A-7). That greater expectation regarding the importance of products (vs. behavior) in leading to reductions in utility costs was more prevalent in Denver than in Salt Lake City.

The prospect of reducing utility bills through energy conservation was not considered likely by key segments of the potential energy conservation constituency. For example, opinion leaders, the highly educated, and people interested in joining an energy conservation-oriented organization were the least optimistic about the prospects of achieving lower utility bills through conservation. It is entirely possible that these individuals, being more sophisticated with regard to the future costs of energy and its impact on utility rates, have more realistic expectations that energy conservation will only allow the consumer to hold the line at current cost levels, rather than to achieve lower costs.

5. Perceptions of the Energy-Saving Properties and Initial Costs of Energy-Saving Measures

As a means of arriving at a more concrete evaluation of the "Energy Cost of Ownership" concept, individuals were asked to choose both the greatest energy savers and those items with the highest first costs from a list of 15 products and energy conserving behaviors. Included in the list were such things as installing more efficient insulation, installing storm windows or doors, buying energy-conserving appliances and devices, installing solar hot water heaters, etc. (Table A-8). In Denver there was generally increased awareness that the use or purchase of such products would result in substantial energy savings. On the other hand, Salt Lake City homeowners exhibited a decreased awareness in the energy-conserving properties of those items.

However, that increased awareness in Denver of the energy-saving properties of many products, when coupled with the concomitant increase in the average winter utilities increase (Table A-9), may not have been sufficient to convince Denver home-owners that their utility bills will decrease through the use of energy-conserving products. Perhaps consumers need to be told that energy-conservation, at worst, will help to hold the line against potential rate increases.

The following measures were viewed as producing significantly greater energy savings by Denver homeowners as compared with Salt Lake City resident (Table A-8):

- Driving less
- Installing storm windows or doors
- Turning the thermostat down to 65^{o}
- Installing weatherstripping
- Installing the most efficient insulation
- Installing fluorescent light bulbs
- Buying energy-conserving appliances
- Installing a chimney flue damper
- Installing an automatic set-back thermostat

In other words, out of the 15 comparisons, in nine of them a significantly greater number of Denver residents increased their awareness of the energy-conserving attributes of those measures following the demonstration program. Six of those nine measures were featured in various phases of the marketing program, thus making a strong case for the positive impact of the program on the perception of potential energy-savings through product purchase.

In Denver there was little change between the two survey periods in terms of the initial perceived cost of the various products. The only exception was that individuals in the second survey were much more likely than were the respondents in the first survey to perceive storm windows and doors as having the highest initial cost and there was a decrease in the percentage of individuals who regarded solar hot water heaters as having the highest initial cost. The latter finding was replicated in Salt Lake City where the number of individuals perceiving solar hot water heaters to have the highest initial cost decreased by one-third.

It appears, then, that the Denver homeowners experienced a significantly heightened level of awareness regarding the energy conserving properties of various products and behaviors. However, there was little significant change, one way or the other, with regard to the initial perceived cost of those products and behaviors.

6. Knowledge of Energy Terminology

One aspect of an individual's adherence to a concept or policy might be measured by his familiarity with the jargon associated with that concept or policy. Energy conservation, like any other sociopolitical movement (e.g., the renaissance of the ecology movement in the early 1970's), has developed its own specialized terminology. Respondents in the two survey periods were presented with 12 energy-related terms (e.g., coal gasification, R value, retrofitting) and were asked first whether they had ever heard the term or phrase and, if so, were they able to define it (Table A-9).

Although Salt Lake City residents exhibited greater superficial awareness of the 12 energy terms, the definitional level among Denver homeowners was slightly higher than among the Salt Lake City residents. However, the Denver increase was limited to better understanding of three terms: "van pooling", "blackout", and "EER". The latter term was also better understood in Salt Lake City after the eight-month period, but only to a slight degree.

As might be expected, awareness and understanding of energy terminology was often a function of education. However, the level of understanding of such terms was generally higher among individuals who perceived substantial savings in their monthly utility bills as a result of energy conservation. In other words, as individuals become more exposed to the jargon of energy conservation, they also learn that conservation behavior can benefit them through lower utilities costs.

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TABLE A-1

PERCENT RANKING ENERGY ISSUE
AMONG THE TOP THREE NATIONAL PRIORITIES

	Percent Ranking Energy Issue As 1, 2, or 3						
	DENVER GENERAL PUBLIC			SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-PER CENT	POST PER CENT	PER CENT CHANGE	PRE PER CENT	POST PER CENT	PER CENT CHANGE	
Making sure there's enough energy to go around	38	40	+ 2	40	31	- 9	YES

TABLE A-2

AVERAGE RANKING
OF NATIONAL PRIORITIES *

	DENVER GENERAL PUBLIC			SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE TEST RANK	POST TEST RANK	CHANGE IN RANK	PRE TEST RANK	POST TEST RANK	CHANGE IN RANK	
Reducing the costs of living and slowing down inflation	3.8	4.2	+0.4	3.6	3.6	0.0	-
Reducing the tax burden	5.0	5.5	+0.5	5.0	4.8	-0.2	-
MAKING SURE THERE'S ENOUGH ENERGY TO GO AROUND	5.1	5.1	0.0	5.1	5.6	+0.5	YES
Reducing corruption in business and government	5.8	6.5	+0.7	5.3	5.3	0.0	-
Reducing air pollution and environmental damage	5.8	4.6	-1.2	7.4	7.9	+0.5	-
Providing jobs for the unemployed	6.0	6.6	+0.6	6.5	6.5	0.0	-
Caring for the elderly	6.5	6.7	+0.2	6.8	6.7	-0.1	-
Providing adequate health care	7.0	7.5	+0.5	7.6	7.6	0.0	-
Reducing the occurrence of violent crimes	7.1	6.4	-0.7	5.9	5.5	-0.4	-
Providing first-rate educational opportunities for young people	7.1	7.0	-0.1	6.8	6.3	-0.5	-
Fighting the problems associated with alcohol and drug abuse	8.8	8.5	-0.3	7.8	8.0	+0.2	-
Reducing racial and religious prejudice	9.5	9.5	0.0	9.8	10.1	+0.3	-
N =	357	506	-	447	452	-	-

*Priorities were ranked from 1 = top to 12 = bottom. Therefore, a (+) change represents a drop in priority from pre- to post-test.

Question Number	Den	SLC
Pre-Test	1	1
Post-Test	1	1

TABLE A-3

AVERAGE RANKING OF ENERGY ISSUE
AMONG SELECTED GROUPS
(Denver Post-Test)

	AVERAGE RANKING	N
Total Denver Sample	5.1	506
SEX: Men	5.5	205
Women	4.8	301
AGE: Under 35	5.0	139
35 - 54	4.9	234
55 and over	5.4	131
INCOME: Under $10,000	5.4	74
$10,000 - $19,999	5.3	136
$20,000 and over	4.9	245
EDUCATION: 11th grade or less	5.5	64
H.S. grad and some college	5.2	304
College grad and post-grad	4.6	137
OPINION LEADERS:	4.6	85
PERCEIVED UTILITIES SAVINGS THROUGH ENERGY CONSERVATION:		
Perceives a savings of at least 20 percent	5.0	78
Perceives a savings of less than 20 percent	5.1	395
INTEREST IN JOINING AN ENERGY ORGANIZATION:		
Would pay to belong	4.3	124
No interest in joining	5.3	352

TABLE A-4

ABILITY TO CONTRIBUTE
PERSONALLY TO SOLUTION
OF THE ENERGY PROBLEM

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Can do a great deal	14	16	+ 2	31	20	-11	YES
Can do something	58	56	- 2	52	61	+ 9	YES
Can do very little	22	25	+ 3	12	17	+ 5	NO
Can do nothing	6	4	- 2	4	2	- 2	NO
N =	357	506	-	447	452	-	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	2	-
Post-Test	2	2

TABLE A-5

AVERAGE RANKING
OF IN-HOME ENERGY USERS*

	DENVER GENERAL PUBLIC			SALT LAKE CITY GENERAL PUBLIC		
	PRE-TEST RANK	POST-TEST RANK	CHANGE IN RANK	PRE-TEST RANK	POST-TEST RANK	CHANGE IN RANK
Heating	2.4	1.8	-0.6	2.5	2.0	-0.5
Central air conditioning	3.6	4.2	+0.6	3.9	3.7	-0.2
Range	4.4	4.7	+0.3	4.9	4.9	0.0
Lighting	4.9	4.7	-0.2	4.4	4.3	-0.1
Average-sized water heater	5.0	4.7	-0.3	5.2	4.9	-0.3
Standard refrigerator	5.3	5.4	+0.1	5.2	5.5	+0.3
Automatic washer	5.9	5.9	0.0	5.5	5.8	+0.3
Color television	6.0	6.0	0.0	5.3	5.9	+0.6
Electric blanket	8.6	8.7	+0.1	8.9	8.8	-0.1
Coffee maker	8.7	8.9	+0.2	9.1	9.1	0.0
N =	357	506	-	447	452	-

*Energy users were ranked by respondents from 1 = high to 10 = low. Therefore, a low ranking indicates a high energy use.

Question Number	Den	SLC
Pre-Test	5	5
Post-Test	5	5

TABLE A-6

PERCENTAGE OF PRESENT UTILITY COSTS WHICH COULD BE SAVED BY INSTALLING ENERGY EFFICIENT PRODUCTS AND PRACTICING ENERGY CONSERVATION

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Percent to be saved							
0 - 5	24	27	+ 3	21	25	+ 4	-
6 - 10	18	29	+11	24	24	0	-
11 - 15	12	12	0	14	11	- 3	-
16 - 20	13	11	- 2	11	11	0	-
21 - 30	19	8	-11	16	12	- 4	-
31 - 40	4	2	- 2	5	3	- 2	-
41 - 50	3	3	0	4	5	+ 1	-
Over 50	3	2	- 1	1	2	+ 1	-
Don't Know	5	7	+ 2	4	8	+ 4	-
Median percent saved:	13.1	9.0	-4.1	11.5	9.9	-1.6	NO
N =	357	506	-	447	452	-	

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	16	16
Post-Test	16	16

TABLE A-7

PROPORTION OF ENERGY SAVINGS WHICH COULD BE REALIZED THROUGH BUYING NEW PRODUCTS VS. PRACTICING GREATER ENERGY CONSERVATION

	(Percent) DENVER GENERAL PUBLIC POST-TEST			(Percent) SALT LAKE CITY GENERAL PUBLIC POST-TEST		
	TOTAL	DUE TO NEW PRODUCTS	DUE TO BEHAVIORAL CHANGES	TOTAL	DUE TO NEW PRODUCTS	DUE TO BEHAVIORAL CHANGES
Percent Savings						
0 - 5%	27	48	56	25	46	48
6 - 10%	29	22	20	24	20	20
11 - 15%	12	9	7	11	6	8
16 - 20%	11	3	1	11	5	4
21 - 30%	8	3	2	12	6	5
31 - 40%	2	2	1	3	2	-
41 - 50%	3	1	1	5	1	1
Over 50%	2	1	1	2	1	-
Don't know	7	12	12	8	14	14
Median Percent*	9.0	4.6	3.9	9.9	4.7	4.5
N =	506	506	506	452	452	452

*Due to their non-additive properties, medians cannot be added exactly. Therefore, the total of the median percentages in Columns 2 and 3 above do not equal that of Column 1.

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	16a	16a

TABLE A-8

PERCEIVED COSTS OF SPECIFIC ENERGY-CONSERVING MEASURES

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Install most efficient insulation:							
Greatest energy savings:	42	36	- 6	45	32	-13	YES
Highest initial cost:	20	19	- 1	21	19	- 2	NO
Install storm windows/doors:							
Greatest energy savings;	26	34	+ 8	24	18	- 6	YES
Highest initial cost:	20	38	+18	21	20	- 1	YES
Turn down thermostat to 65° in colder months:							
Greatest energy savings:	17	25	+ 8	20	16	- 4	YES
Highest initial cost:	0	1	+ 1	-	1	+ 1	NO
Install solar hot water heater:							
Greatest energy savings:	12	13	+ 1	15	14	- 1	NO
Highest initial cost:	50	42	- 8	54	36	-18	YES
Drive car less; use bus or carpool:							
Greatest energy savings:	8	22	+14	18	13	- 5	YES
Highest initial cost:	1	1	0	-	1	+ 1	NO
Install weatherstripping:							
Greatest energy savings:	6	10	+ 4	13	5	- 8	YES
Highest initial cost:	1	1	0	4	1	- 3	NO
Buy energy-conserving appliances and devices:							
Greatest energy savings:	6	5	- 1	11	4	- 7	YES
Highest initial cost:	10	11	+ 1	14	12	- 2	NO
Install automatic set-back thermostat:							
Greatest energy savings:	4	7	+ 3	5	4	- 1	YES
Highest initial cost:	1	1	0	1	1	0	NO
Install heat pump:							
Greatest energy savings:	3	3	0	1	4	+ 3	NO
Highest initial cost:	12	9	- 3	11	8	- 3	NO
Install device which restricts hot water flow on shower:							
Greatest energy savings:	2	3	+ 1	3	1	- 2	NO
Highest initial cost:	0	-	0	1	-	- 1	NO

TABLE A-8 (Continued)

PERCEIVED COSTS OF SPECIFIC ENERGY-CONSERVING MEASURES

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Install automatic light timer:							
Greatest energy savings:	2	2	0	2	1	-1	NO
Highest initial cost:	1	0	-1	1	1	0	NO
Install chimney flue damper:							
Greatest energy savings:	2	4	+2	5	2	-3	YES
Highest initial cost:	2	2	0	2	2	0	NO
Install fluorescent light bulbs:							
Greatest energy savings:	1	3	+2	6	1	-5	YES
Highest initial cost:	1	1	0	2	-	-2	NO
Get gas range with electronic pilot light:							
Greatest energy savings:	1	1	0	2	1	-1	NO
Highest initial cost:	1	2	+1	4	2	-2	NO
Install insulating hood for hot water heater:							
Greatest energy savings:	1	2	+1	3	1	-2	NO
Highest initial cost:	1	0	-1	1	2	+1	NO
N =	357	506	-	447	452	-	

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	10d, 10e	10d, 10e
Post-Test	10d, 10e	10d, 10e

TABLE A-9

AVERAGE WINTER UTILITIES BILL

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE
Under $30	8	2	- 6	5	4	- 1
$30 - $39	13	6	- 7	9	7	- 2
$40 - $49	24	16	- 8	16	15	- 1
$50 - $59	21	21	0	23	19	- 4
$60 - $69	12	24	+12	19	22	+ 3
$70 - $79	8	12	+ 4	14	14	0
$80 or more	8	18	+10	11	14	+ 3
Don't know	6	2	- 4	5	3	- 2
Median Bill:	$51	$62	+$11	$58	$61	+$3

Question Number	Den	SLC
Pre-Test	31	31
Post-Test	39	33

TABLE A-10

KNOWLEDGE OF ENERGY TERMINOLOGY

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
SOLAR ENERGY: Had heard of	98	99	+ 1	97	97	0	NO
Correct definition	92	92	0	87	88	+ 1	NO
BLACKOUT: Had heard of	92	96	+ 4	95	95	0	YES
Correct definition	82	86	+ 4	88	81	- 7	YES
GEOTHERMAL POWER: Had heard of	69	69	0	73	87	+14	YES
Correct definition	31	32	+ 1	48	45	- 3	NO
COAL GASIFICATION: Had heard of	58	64	+ 6	49	63	+14	YES
Correct definition	44	45	+ 1	38	37	- 1	NO
VANPOOLING: Had heard of	46	68	+22	40	30	-10	YES
Correct definition	41	65	+24	38	25	-13	YES
SUNSHINE RIGHT OF WAYS: Had heard of	32	25	- 7	13	20	+ 7	YES
Correct definition	16	16	0	7	8	+ 1	NO
LIFE CYCLE COSTING: Had heard of	31	27	- 4	23	26	+ 3	YES
Correct definition	15	12	- 3	11	7	- 4	NO
ENERGY COST OF OWNERSHIP: Had heard of	26	26	0	19	32	+13	YES
Correct definition	10	13	+ 3	9	10	+ 1	NO
R VALUE: Had heard of	25	32	+ 7	21	34	+13	YES
Correct definition	17	26	+ 9	16	21	+ 5	NO
EER: Had heard of	23	26	+ 3	20	28	+ 8	YES
Correct definition	3	4	+ 1	6	3	- 3	YES
RETROFITTING: Had heard of	18	14	- 4	8	12	+ 4	YES
Correct definition	6	5	- 1	1	3	+ 2	NO
DEGREE DAY: Had heard of	15	21	+ 6	7	14	+ 7	NO
Correct definition	5	8	+ 3	3	5	+ 2	NO
N =	357	506	-	447	452	-	

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	6	6
Post-Test	6	6

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B. ATTITUDES TOWARDS ENERGY CONSERVATION

1. The Impact of Energy Conservation on the Individual's Standard of Living.

Although a clear majority of homeowners in both Denver and Salt Lake City indicated that a nationwide energy conservation program would produce little change in the individual's standard of living, more people envisioned a detrimental impact than expected a rise in their standard of living as a result of such a program (Table B-1).

The fact that uneasiness is more prevalent in Denver than in Salt Lake City regarding the potential negative consequences of energy conservation is indicated by a comparison of reactions to the statement: "Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living." (Table B-2). Whereas in the Summer 1977 Denver survey a clear majority of individuals were of the opinion that energy conservation would not entail a lower standard of living, in the later survey opinion was squarely divided. Exactly the reverse situation occurred in Salt Lake City. In that location there was a significant increase in the number of individuals who were of the opinion that energy conservation would not cause an attendant decrease in their standard of living.

The difference in that expressed attitude between residents of the two cities was statistically significant. Any future marketing program aimed at widening the acceptance of energy conservation should attempt to allay fears that such a course of action will result in major consumer discomforts.

People most concerned about the detrimental impact of energy conservation on their standard of living were the poorly educated, the low income individuals and the elderly. Least concerned were the opinion leaders, young people and the highly educated. Fortunately, these latter groups were most supportive of energy conservation in general.

2. Feelings of Responsibility About Energy Conservation.

In the 1977 summer survey a significant plurality of Denver homeowners disagreed with the contention that other energy users should be forced to conserve before they themselves would consider it (Table B-2). In the later survey the difference was even greater, with 55 percent disagreeing with the idea that others should be forced to conserve. However, at the same time there was a significant increase in Denver in the number of people who looked to others as being primarily responsible for energy conservation. In Salt Lake City the shift was also in the direction of taking more personal responsibility for energy conservation, although the absolute size of that shift was significantly greater than that which occurred in Denver.

The individuals who were most likely to make people other than themselves responsible for energy conservation were the traditionally disadvantaged: e.g., the poorly educated, less affluent and older individuals. Feelings of personal responsibility for energy conservation were more likely to be manifested by opinion-leaders, the more affluent, and middle-aged individuals.

3. Reactions to Regulations Which Would Enforce Energy Conservation.

Individuals were asked about two hypothetical laws: one which prohibited houses from being sold unless they had proper levels of insulation and the second setting standards for how much energy home appliances could use (Table B-3). In both instances there was a significant shift in Denver in the direction of supporting regulation from the first to the second survey. The increased sentiment for regulation from the first to the second survey was more pronounced with regard to regulation concerning insulation than for support of standards for home energy appliance usage.

In Salt Lake City, however, the swing was in the opposite direction. Whereas homeowners soundly supported regulation in both areas in the summer of 1977, by February 1978, that pro-regulation sentiment had dwindled considerably in Salt Lake City. In fact, a majority of Salt Lake City homeowners in the later survey opposed a law which would set standards for how much energy home appliances could use.

Individuals who were most supportive of regulations in the area of energy conservation tended to be younger and also to have an interest in participating in an energy conservation organization. In addition, they were more likely to view energy conservation as a means of cutting the size of their monthly utility bill. Again, the disadvantaged segments of the population provided the most opposition to some form of government regulation.

4. Willingness to Pay for Energy Conservation.

The willingness to pay more for appliances which conserve energy and thus have lower operating costs increased significantly from the first to the second survey in Denver, when compared with the trend in Salt Lake City (Table B-4). In Salt Lake City, there was a slight decrease in the readiness to pay 10 to 15 percent extra for energy-conserving appliances. The willingness to pay extra up-front appeared to be a direct function of both age and income, in that young people and the more affluent individuals were most receptive to paying more, whereas the elderly and low income individuals expressed the most opposition to greater expenditures.

Although Denver homeowners exhibited an increased willingness also to pay up to $200 more on their next auto purchase for gasoline-saving devices, that shift was not significant when compared with the pattern found in Salt Lake City (Table B-4). There was, however, a significant drop in the number of Denver residents who were unwilling to make such an expenditure.

There was a significant increase among Denver homeowners in their willingness to purchase an automatic set-back thermostat over the eight-month period (Table B-5). Whereas in the summer of 1977 only 33 percent were willing to purchase such a device (compared with 59 percent who were unwilling to make such a purchase), in the second survey that difference was found to be only three percentage points (48 percent unwilling versus 45 percent willing). After the concept of an automatic set-back thermostat was explained to respondents more fully, they were again asked to indicate whether or not they would purchase such a device. Following a more complete explanation another three percent indicated a willingness to purchase, thus making the purchaser and non-purchaser groups equal in size. Although Salt Lake City homeowners also showed an increased willingness from the first to the second survey to buy an automatic set-back thermostat, the increase in that location was not as significant as found in Denver. Purchase resistance still exceeded support in Salt Lake by a margin of about three to two. A more complete explanation of the device, however, increased the percentage of those willing to purchase a thermostat from 35 percent to 45 percent.

5. Identification of an Energy Conservation Constituency.

In October 1977, Cambridge Reports, drawing upon national survey data, constructed a pro-conservation scale based on respondents' answers to four survey questions (Table B-6). The present survey efforts also contained questions which were very similar in content, if not in exact wording, to those contained in the Cambridge study.

The maximum pro-conservation score on both scales was 4.0. The average scores for homeowners in both Denver (2.5) and Salt Lake City (2.7) were considerably higher than the average national score as reported by Cambridge Reports, i.e., 1.9. However, the demographic profiles of all three samples - national, Denver, and Salt Lake City - were nearly identical. The highest energy conservation scores were found among individuals under 35, college graduates, and the highest income group, i.e., $20,000 a year and over. In every case the relationship between energy conservation scores and the three demographic variables was linear, in that the lowest scores were found among the elderly, the less educated, and the lowest income group and the highest pro-conservation scores belonged to young people, the well-educated and the most affluent.

Those findings were repeated throughout both the Denver and Salt Lake City surveys, in which pro-conservation attitudes and behavior were generally more pronounced among younger people, the better educated and the more affluent individuals. Also, opinion leaders - defined in this study as individuals who have held elective office in social and civic organizations within the past two or three years - were generally more conservation-minded than were other individuals.

6. Perceived Difficulty in Adopting Energy-Conserving Measures.

Far and away the least feasible energy-conserving product for most homeowners was seen as the solar hot water heater (Table B-7). In the initial survey more than half of the respondents in both Denver and Salt Lake City singled out that product as the most difficult for the home to incorporate. However, in the second survey, homeowners in both cities were apt to look more favorably on the feasibility of installing a solar hot water heater in their homes. Approximately 40 percent of the homeowners in each location considered it to be most difficult. Perhaps due to the season of the year, respondents in both cities - especially Denver - in the later survey (which was conducted in February) placed greater emphasis on the difficulties involved in driving their cars less and using a bus or car-pool.

A significant drop in perceived difficulty was found in Denver with regard to the installation of the energy-conserving products: (1) a heat pump and (2) a chimney flue damper. However, the same type of decrease in difficulty occurred in Salt Lake City with regard to automatic light timers and the general category of purchasing energy-conserving appliances and devices.

TABLE B-1

PERCEIVED EFFECT OF
NATIONWIDE ENERGY CONSERVATION PROGRAM
ON RESPONDENT'S STANDARD OF LIVING

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE PER-CENT	POST PER-CENT	PER-CENT CHANGE	PRE PER-CENT	POST PER-CENT	PER-CENT CHANGE	
Standard of living will go up	NA	17	NA	NA	16	NA	NA
Standard of living will stay the same	NA	61	NA	NA	64	NA	NA
Standard of living will go down	NA	21	NA	NA	18	NA	NA
Don't know	NA	2	NA	NA	2	NA	NA
N =	-	506	-	-	452	-	

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	9	9

TABLE B-2

ATTITUDES TOWARD CONSERVATION

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
"Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living."							
Agree	38	49	+11	48	40	- 8	YES
Disagree	57	48	- 9	47	56	+ 9	YES
Don't know	6	2	- 4	5	4	- 1	NO
"There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve."							
Agree	40	42	+ 2	48	43	- 5	YES
Disagree	49	55	+ 6	49	53	+ 4	NO
Don't know	11	3	- 8	3	4	+ 1	YES
N =	357	406	-	447	452	-	

Question Number	Den	SLC
Pre-Test	3a, 3b	3a, 3b
Post-Test	3a, 3b	3a, 3b

TABLE B-3

SUPPORT OF SPECIFIC
CONSERVATION MEASURES

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Conservation Measure:							
A law prohibiting houses, including existing ones, from being sold unless they have proper levels of insulation							
Favor	54	64	+10	69	59	-10	YES
Oppose	42	34	- 8	28	39	+11	YES
Don't know	4	2	- 2	3	3	0	NO
A law setting standards for how much energy home appliances could use							
Favor	50	60	+10	70	43	-27	YES
Oppose	36	37	+ 1	26	52	+26	YES
Don't know	14	3	-11	5	4	- 1	YES
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	4a, 4b	4a, 4b
Post-Test	4a, 4b	4a, 4b

TABLE B-4

EXPRESSED WILLINGNESS
TO ENGAGE IN SPECIFIC
ENERGY-CONSERVING BEHAVIOR

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Willingness to pay 10 to 15 percent extra to buy appliances that conserve energy and cost less to operate due to lower energy use							
Willing	76	79	+ 3	85	79	- 6	YES
Not willing	11	12	+ 1	8	13	+ 5	YES
Not sure	13	9	- 4	7	7	0	YES
No answer	0	1	+ 1	0	0	0	NO
Willingness to pay $200 more on next auto purchase in order to get devices which increase gas mileage							
Willing	74	78	+ 4	77	77	0	NO
Not willing	19	15	- 4	17	18	+ 1	YES
Not sure	8	6	- 2	6	6	0	NO
No answer	0	1	+ 1	0	0	0	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	13, 14	13, 14
Post-Test	13, 14	13, 14

TABLE B-5

WILLINGNESS TO PURCHASE AN AUTOMATIC SET-BACK THERMOSTAT

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Willing	33	45	+12	30	35	+ 5	YES
Not willing	59	48	-11	61	54	- 7	NO
Not sure	8	7	- 1	9	8	- 1	NO
N/A				0	3	+ 3	
After explanation of what is meant by "automatic set-back thermostat"							
Would purchase	NA	48	NA	NA	45	NA	NA
Would not purchase	NA	48	NA	NA	52	NA	NA
Not sure	NA	4	NA	NA	4	NA	NA
N -	-	506	-	-	452	-	

Question Number	Den	SLC
Pre-Test	15	15
Post-Test	15	15

TABLE B-6

DEMOGRAPHIC CHARACTERISTICS OF CONSERVATION CONSTITUENCY*

	POINTS					DENVER AVERAGE SCORE	SLC AVERAGE SCORE	CAMBRIDGE AVERAGE SCORE
	0	1	2	3	4			
Denver Total Sample	2	15	26	33	17	2.5	-	-
Salt Lake City Total Sample	2	10	26	32	26	-	2.7	-
Cambridge Sample	10	29	32	20	10	-	-	1.9
Age: Under 35	2	9	18	37	22	2.8	2.8	2.1
35-54	1	14	28	32	19	2.6	2.8	2.0
55 and older	4	23	29	31	9	2.2	2.5	1.7
Education: Less than H.S. graduate	5	25	28	25	6	2.0	2.4	1.5
H.S. graduate/some college	2	13	27	34	18	2.6	2.7	2.0
College graduate & post graduate	2	15	20	34	20	2.6	2.8	2.5
Annual Family Income:								
Under $10,000	4	26	26	28	11	2.2	2.3	1.7
$10,000-$19,999	2	13	27	32	18	2.6	2.8	2.0
$20,000 and over	1	13	25	34	20	2.6	2.8	2.2
Opinion Leaders	0	9	27	33	31	2.8	2.7	-
Perceives possible utility savings of 20% or more	1	19	18	37	18	2.5	2.7	-

*Pro-conservation scores were obtained by assigning one point for each of the following responses:

Can do something or a great deal about the energy situation (Q. 2)

Disagrees with statement that "conservation is not..." (Q. 3a)

Disagrees with statement that "there are others in this nation..." (Q. 3b)

Feels that personal standard of living will not go down if America conserves energy (Q. 9)

Therefore, the maximum pro-conservation score is 4.

Question Number	- Den	SLC
Pre-Test		-
Post-Test	2, 3a, 3b, 9	-

TABLE B-7

SPECIFIC ENERGY-CONSERVING MEASURES WHICH ARE MOST DIFFICULT FOR FAMILY TO ADOPT

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Install solar hot water heater	55	40	-15	58	39	-19	NO
Install heat pump	24	12	-12	21	14	- 7	YES
Turn down thermostat to 65° in colder months	12	14	+ 2	20	21	+ 1	NO
Drive car less; use bus or car pool	12	29	+17	13	21	+ 8	YES
Install chimney flue damper	10	6	- 4	6	7	+ 1	YES
Install storm windows/doors	9	11	+ 2	5	7	+ 2	NO
Install most efficient insulation	8	7	- 1	5	6	+ 1	NO
Buy energy-conserving appliances and devices	7	10	+ 3	8	7	- 1	YES
Get gas range with electronic pilot light	6	4	- 2	6	5	- 1	NO
Install insulating hood for hot water heater	5	2	- 3	5	4	- 1	NO
Install fluorescent light bulbs wherever possible	5	6	+ 1	5	6	+ 1	NO
Install automatic set-back thermostat	4	4	0	7	5	- 2	NO
Install device which restricts hot water flow on shower	3	4	+ 1	5	6	+ 1	NO
Install automatic light timer	2	4	+ 2	6	3	- 3	YES
Install weatherstripping	1	2	+ 1	2	1	- 1	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	10b	10b
Post-Test	10b	10b

*Percentages will total more than 100 percent due to multiple mentions.

TABLE B-8

REASONS WHY SPECIFIC ENERGY-CONSERVING MEASURES WOULD BE DIFFICULT TO ADOPT

	(Percent)* DENVER GENERAL PUBLIC POST-TEST
Solar hot water heater	
Too expensive	74
House is too old	17
Don't know what it is or what it involves	12
Difficult installation	11
Unnecessary	4
Drive car less; use bus	
Inconvenient	97
Too expensive	1
Turn down thermostat to 65°	
Uncomfortable	60
Unhealthy	32
Too expensive	3
Inconvenient	2
Storm windows and storm doors	
Too expensive	90
Unnecessary	2
Almost impossible	2
House is too old	2
Dislike them	0
Heat pump	
Too expensive	62
Don't know what it is or what it involves	20
House too old	20
Unnecessary	4
Energy-conserving appliances	
Too expensive	68
Unnecessary	37
Inconvenient	0
Efficient insulation	
Too expensive	72
House is too old	28
Almost impossible	0
Inconvenient	0
Chimney flue damper	
Too expensive	33
Unnecessary	19
Unhealthy	11
Don't know what it is or what it involves	7
Almost impossible	0
N =	506

Question Number	Den
Pre-Test	-
Post-Test	10c

*Percentages will total more than 100 percent due to multiple mentions.

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C. CONSUMER INTENTIONS

CONCERNING ENERGY CONSERVATION

Although the research model dictated measurement of three components of the "innovation diffusion" process - awareness, attitudes and behavior - an intermediate phase, behavioral intent, can be interposed between the attitudinal and behavioral components. The behavioral intent phase represents a verbal commitment to engage in a particular behavior and often represents a higher level of commitment than indicated by the data reported earlier at the awareness and attitudinal levels.

For a number of reasons, it was most probable that changes would occur at the level of intent, rather than in actual behavior. The short duration of the marketing program, in concert with the novelty of the concept, militated against the likelihood of behavioral change. In addition, the actual focus of the program was directed towards producing shifts in awareness and attitudes, rather than stimulating changes in consumer behavior.

Three areas of behavioral intent were examined in the present research: (1) personal consideration of various energy conserving measures, (2) choice of options within an "Energy Cost of Ownership" scenario, (3) stated interest in an organization whose goal would be the promotion of energy conservation.

1. Personal Consideration of Energy-Conserving Measures

Although there was no large scale increase in energy-conserving behavior in Denver following the demonstration program (see Section D), there was a very dramatic and significant increase in the consideration of certain, specific energy-conserving products, a necessary precursor to purchase since evidence reported later would indicate that impulse buying is not a significant factor in the purchase of energy-saving products. Denver homeowners, with only a few exceptions, were much more willing to consider energy-conserving products than were homeowners in Salt Lake City (Table C-1). Significantly high on the Denver list were the following items:

- Automatic set-back thermostats
- Weatherstripping
- Chimney flue dampers
- Insulating hoods for hot water heaters
- Gas range with electronic pilot lights
- Heat pumps
- Automatic light timers
- Fluorescent light bulbs
- General energy-conserving appliances and devices
- Devices which restrict hot water flow on the shower-head

It can definitely be stated, then, that although Denver homeowners did not actually purchase more energy-conserving products than did Salt Lake City homeowners, they showed a significant shift in positive consideration towards such products. Of all demographic segments, the opinion leaders displayed the greatest acceptance of new, energy-conserving products.

2. Likely Consumer Behavior In An "Energy Cost of Ownership" Scenario

Residents in both Denver and Salt Lake City were presented with a situation in which the "Energy Cost of Ownership" concept was already spelled out in a very general sense and they were then asked which of two options they would be most likely to choose: (1) buying a more expensive appliance which conserved energy or (2) opting for a cheaper appliance because of their doubts about ever recouping the original costs. The questions, then, measured intent to behave within an "Energy Cost of Ownership" conceptual framework rather than adherence or resistance to the concept itself.

In both cities and in both survey periods an overwhelming majority of homeowners opted to buy more expensive appliances that were energy conserving than to purchase cheaper appliances which were less energy-efficient (Table C-2). In Denver there was no change in the percentage of individuals who expressed a preference for more expensive, energy conserving appliances (71 percent in both surveys). However, the percentage of individuals who preferred cheaper appliances rose from 11 percent to 15 percent over the eight month interval. Therefore, the net difference between the two surveys narrowed slightly rather than increased.

There is good reason to believe that there may presently be a "ceiling" on the number of individuals who would automatically select the more expensive, energy-conserving appliances and that the "ceiling" - roughly 75 percent of all home-owners - may have been approached in both Denver and Salt Lake City. The "sweepstakes" survey which is covered later in this report, found that among contest entrants - who appeared to be somewhat more energy-conscious than the general public - 73 percent opted for the costlier, energy-saving appliances (Table G-24). In any event, in the absence of fine cost data and uncertainty about the impact of energy-conserving behavior on monthly utility bills, between 25 and 30 percent of all homeowners are unable to determine whether higher, initial costs can ever be recouped and, therefore, approximately half of those individuals would presently opt for cheaper, less efficient appliances.

Likely purchasers of the more expensive, energy-conserving appliances tended to be drawn from the following groups: (1) young people, (2) opinion leaders, (3) the affluent segment, (4) people with an interest in joining an energy organization, and (5) individuals who perceived a greater utility savings by dint of energy conservation.

The disadvantaged segments (e.g., the elderly, low income and poorly educated individuals) were most skeptical about the feasibility of purchasing expensive energy-conserving appliances.

The average length of time it would take to recoup the cost of an energy-saving appliance that was ten percent higher than a conventional appliance was seen as 31 months in Denver and 33 months in Salt Lake City (Table C-3). Elderly people perceived a longer payout period. For an appliance which was 20 percent more costly than a conventional one, the average perceived payout period was 46 months in Denver and 51 months in Salt Lake City. In other words, by doubling the difference between the initial cost of a conventional appliance versus an energy-conserving one, the payout period was perceived as increasing by approximately 50 percent.

3. Expressed Interest in Membership in an Organization Devoted To Energy-Conservation

Survey respondents were asked to indicate their interest in joining a hypothetical organization which had as its goal the inculcation of energy-conserving attitudes and behavior among neighbors and friends. Interest in such an organization was gauged under different sets of circumstances: (1) if a membership fee of $5 to $10 a year were imposed, (2) if the respondent were rewarded for appropriate energy-conserving behavior and (3) if neither a fee structure nor a reward structure were involved. It was hypothesized that those people who would indicate a readiness to join - even in an artificial situation such as a research interview - represented a very firm segment of the energy-conservation constituency.

In both cities slightly less than 60 percent of the individuals stated that they had no interest in such an organization under any conditions (Table C-3). However, a relatively high percentage of individuals in the initial survey - 22 percent in Denver and 28 percent in Salt Lake City - indicated that they would be willing to pay to belong to such an organization. The percentage rose to 25 percent in Denver and declined to 21 percent in Salt Lake City eight months later.

The difference in shift patterns between the two cities was statistically significant. Some of the initial interest in paying a membership fee in an energy-oriented organization was translated in Salt Lake City to participation only if members were rewarded in some way for energy conserving behavior.

Nevertheless, it would appear that the Denver environment during the time period encompassed by the marketing program was conducive to a significantly positive shift in pro-conservation attitudes - in this instance at the level of behavioral intent.

The hard-core energy conservation constituency identified by this measure had a high proportion of opinion leaders, younger people, and individuals who perceived a potential utilities savings through energy conservation. The least interest in such an organization again was exhibited by the less educated group and elderly individuals. As reported earlier, individuals with an interest in such a group also assigned high priority to the energy situation on a national level.

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TABLE C-1

CONSIDERATION OF SPECIFIC
ENERGY-CONSERVING MEASURES

RESPONDENT WOULD CONSIDER:	(Percent)* DENVER GENERAL PUBLIC PRE-TEST	POST-TEST	CHANGE	(Percent)* SALT LAKE CITY GENERAL PUBLIC PRE-TEST	POST-TEST	CHANGE	
Turning down thermostat to 65° in colder months:	4	5	+ 1	8	7	- 1	NO
Driving car less; using bus or carpool:	8	10	+ 2	9	10	+ 1	NO
Installing storm windows/doors:	31	28	- 3	37	35	- 2	NO
Installing weatherstripping:	15	20	+ 5	26	19	- 7	YES
Installing most efficient insulation:	32	27	- 5	30	22	- 8	NO
Installing fluorescent light bulbs wherever possible:	14	15	+ 1	32	16	-16	YES
Buying energy-conserving appliances and devices	19	29	+10	35	24	-11	YES
Installing an automatic light timer:	8	11	+ 3	14	11	- 3	YES
Installing a chimney flue damper:	10	21	+11	18	14	- 4	YES
Installing insulating hood for hot water heater:	12	20	+ 8	20	12	- 8	YES
Installing device which restricts hot water flow on shower:	19	21	+ 2	22	17	- 5	YES
Installing an automatic set-back thermostat:	10	27	+17	18	17	- 1	YES
Getting gas range with electronic pilot light:	7	20	+13	18	14	- 4	YES
Installing a heat pump:	5	10	+ 5	10	6	- 4	YES
Installing solar hot water heater:	17	17	0	16	15	- 1	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	10, 10a, 10f	10, 10a, 10f
Post-Test	10, 10a, 10f	10, 10a, 10f

*Percentages will total more than 100 percent due to multiple mentions.

TABLE C-2

OPTIONS SELECTED UNDER AN
ENERGY COST OF OWNERSHIP SCENARIO

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Would buy more expensive appliances that conserve energy	71	71	0	75	72	- 3	NO
Would buy cheaper appliances because original cost cannot be recouped	11	15	+ 4	11	16	+ 5	NO
Don't know	18	14	- 4	15	13	- 2	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	7	7
Post-Test	7	7

TABLE C-3

ANTICIPATED TIME FRAME
FOR RECOUPING HIGHER COSTS
OF ENERGY-SAVING APPLIANCES

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
To recoup cost which was 10 percent higher than average:							
Under 6 months	NA	3	NA	NA	2	NA	NA
6 - 12 months	NA	4	NA	NA	7	NA	NA
1 - 1.49 years	NA	23	NA	NA	20	NA	NA
1.5 - 1.9 years	NA	4	NA	NA	2	NA	NA
2.0 - 2.9 years	NA	14	NA	NA	18	NA	NA
3.0 - 3.9 years	NA	11	NA	NA	12	NA	NA
4.0 - 4.9 years	NA	4	NA	NA	2	NA	NA
5 years or more	NA	23	NA	NA	25	NA	NA
Will not recoup	NA	4	NA	NA	1	NA	NA
Miscellaneous	NA	3	NA	NA	2	NA	NA
Don't know	NA	6	NA	NA	8	NA	NA
No answer	NA	2	NA	NA	1	NA	NA
Median time:	NA	2 years & 7 months			2 years & 9 months		
To recoup cost which was 20 percent higher than average:							
Under 6 months	NA	3	NA	NA	2	NA	NA
6 - 11.9 months	NA	3	NA	NA	3	NA	NA
1 - 1.49 years	NA	6	NA	NA	8	NA	NA
1.5 - 1.9 years	NA	3	NA	NA	4	NA	NA
2.0 - 2.9 years	NA	17	NA	NA	16	NA	NA
3.0 - 3.9 years	NA	10	NA	NA	5	NA	NA
4.0 - 4.9 years	NA	8	NA	NA	13	NA	NA
5 years or more	NA	35	NA	NA	35	NA	NA
Will not recoup	NA	4	NA	NA	1	NA	NA
Miscellaneous	NA	2	NA	NA	2	NA	NA
Don't know	NA	6	NA	NA	8	NA	NA
No answer	NA	4	NA	NA	3	NA	NA
Median time:	NA	3 years & 10 months		NA	4 years & 3 months		

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	7a, 7b	7a, 7b

N = 506 - 452

TABLE C-4

INTEREST IN MEMBERSHIP IN ENERGY CONSERVATION-ORIENTED ORGANIZATION

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Would pay to belong	22	25	+ 3	28	21	- 7	YES
Interested, but would not pay	6	6	-	5	8	+ 3	NO
Interested, if respondent were paid	14	15	+ 1	7	13	+ 6	YES
No interest	58	54	- 4	60	58	- 2	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	37	37
Post-Test	43	37

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D. EXISTING LEVELS OF ENERGY CONSERVING BEHAVIOR

1. Perceived Means of Conserving Behavior

In the pre-test surveys (but omitted in the post-surveys due to perceived redundancy) individuals were asked to enumerate the ways in which they could conserve energy. The question occurred very early in the interview prior to any structured examination of attitudes and behavior and thus the answers represent a "top-of-the-head" awareness of possible energy-conserving behaviors. The results are especially meaningful to a program whose long-range goal is the eventual consumer consideration of purchasing products which cost more than conventional products to begin with, but which cost less to operate because of their energy-saving properties.

One of the hurdles which any marketing effort must cross is the existing consumer tendency to think of relatively simple - and definitely inexpensive - changes in existing behavior rather than the consideration of spending money to conserve energy by purchasing energy-efficient products. The top seven measures immediately thought of by homeowners entailed behaviors which were expenditure-free (Table D-1). Only three purchase behaviors - the installation of insulation or weatherstripping, purchase of storm windows or doors and the installation of unspecified energy-conserving appliances - were even volunteered and those only to a minor degree.

2. Ways in Which Families Have Conserved Energy in the Past Year.

In order to measure existing behavior, individuals were asked what they or their families had done in the past year to conserve energy. Slightly less than ten percent of the homeowners, both in Denver and Salt Lake City, reported having done nothing to conserve energy (Table D-2). The number of non-conservers in Denver actually dropped from nine to seven percent over the eight-month period, whereas the non-conserving segment in Salt Lake City rose from seven to eight percent during the same time period. However, the difference between the two cities was not significant. Even where specific conservation behavior decreased in Denver, the magnitude of that decrease was smaller than that which occurred in Salt Lake City.

On the surface it would appear that nearly all homeowners in both Denver and Salt Lake City have enthusiastically embraced the idea of energy conservation; i.e., 93 percent of all Denver residents reported that they engaged in some energy-conserving behavior. However, a close examination of Table D-2 reveals that many of those behaviors are trivial in terms of significant energy-conserving behavior. For example, although Denver residents reported a significant increase in the number who claimed to be conserving heat, there was no such significant change in the numbers of Denver homeowners who were reducing their thermostats to 65° in the colder months (Table D-3).

The types of behavior presently reported rarely entailed out-of-pocket expenditures, particularly for major cost items such as insulation or storm windows and doors. Denver homeowners reported more extensive usage of devices which restrict the flow of hot water in the shower and of automatic set-back thermostats than did residents of Salt Lake City. Also, Denver residents indicated a significantly lower decrease in mass transit usage than occurred in Salt Lake City, perhaps due to the aforementioned increase in awareness of the air pollution problem in Denver. On the other hand, Salt Lake City residents showed a significant increase when compared with Denver in terms of installing chimney flue dampers.

3. Energy-conserving Products Purchased During the Marketing Demonstration Program

The marketing demonstration program covered 12 major products ranging from weatherstripping and ceiling insulation to such items as set-back thermostats and reflective film. Respondents in both Denver and Salt Lake City were presented with a list of the 12 products and asked to indicate which items on the list they had purchased in the period from September 1977 to February 1978 (Table D-4). A nearly identical percentage - 39 percent in Denver and 40 percent in Salt Lake City - reported having purchased one or more of those products during the time period.

In addition, there were no differences between homeowners in the two cities with regard to the frequency of purchase of any one of those energy-conserving products. For example, 23 percent of the homeowners in Denver indicated that they had purchased weatherstripping or caulking during the interval covered by the marketing program, compared with a figure of 21 percent in Salt Lake City. In no product area did the difference in frequency of purchase between Denver and Salt Lake City homeowners exceed two percent.

Purchasers of energy-conserving products appeared to be drawn from the previously identified energy conservation constituency. Product purchasers were very likely to be younger, better educated, more apt to be opinion leaders and were slightly more interested in joining an energy conservation organization.

In slightly more than 60 percent of the cases, a purchaser of an energy-conserving product was either replacing or adding to an existing product with the same function (Table D-5). However, 39 percent of the buyers were making a first-time purchase and for the buyers of ceiling insulation and storm windows/doors 25 percent were making a significant first-time investment in energy-conserving products.

In only three percent of the cases could the purchase be termed an impulse purchase (Table D-6). In nearly every instance, the purchaser had planned to buy the product in question. In most cases, an energy-conserving product was purchased either to provide a more comfortable environment or because the previously owned product was in need of replacement (Table D-7). Only 12 percent of the buyers (but 27 percent of the ceiling insulation purchasers) made the purchase in order to save money and a similar percentage bought in order to conserve energy. The energy conservation aspect was more important to purchasers of storm windows and doors than to purchasers of other types of products, possibly because storm window buyers are less likely to expect to recoup the initial product costs (Table D-12).

Over 60 percent of the purchasers of energy-conserving products had heard something about the product prior to purchase (Table D-8). The extent of that prior information was usually limited to the reliability of the product or to the fact that it was likely to keep the home more comfortable (Table D-9). In only 13 percent of the cases did the respondent indicate that he had heard about the product's energy-saving properties. However, some of those conservation-related responses may have been buried among the 33 percent who answered that the product did what it was supposed to do.

Those individuals who had received prior information about energy-conserving products were most likely to have received that information from the broadcast media (particularly information about ceiling insulation) or from newspapers and magazines (Table D-10). The purchasers who had seen energy-conserving products on television were likely to be in the middle-income category and were moderately well educated. Those people who had received their information about their energy-conserving products from the newspaper were more often highly educated, in the higher income groups and in the 34 to 54 age category.

The average cost of the energy-conserving product purchased was slightly in excess of $154 (Table D-11). Only four percent of the purchases exceeded $1,000. Nearly three-quarters of the purchasers expected to recoup the extra product cost, with expectations being slightly lower among purchasers of storm windows and doors (Table D-12). Only one out of every six purchasers did not anticipate recovering the cost of the product through increased energy savings. The typical purchaser of an energy conserving product expected to recoup the extra product cost within 1.4 years (Table D-13). Expectations varied from a high of 4.3 years for ceiling insulation and 4.0 years for storm windows and doors to a low of seven months for purchasers of weatherstripping and caulking.

4. Friends' Energy-Conserving Behavior

One indirect measure of behavioral shifts is the perception that friends and acquaintances are engaging in a particular behavior. In the present research individuals were asked what percentage of their friends practiced energy conservation in their homes. In each city the median percentage was found to be slightly less than 50 percent, with Salt Lake City residents reporting a slightly larger, but insignificant, increase in the number of friends who were practicing energy conservation (Table D-15).

In examining the behavioral inclinations towards the 15 energy-conserving measures discussed earlier (Table D-3), respondents were also asked to indicate which measures their friends had adopted. Denver residents reported a significant increase in friends' energy-conserving behavior in four product areas:

- Installation of automatic set-back thermostats
- Installation of fluorescent light bulbs
- Installation of automatic light timers
- Decreased car usage

A consistent finding in the research literature on "innovation-diffusion" has been the influential role of opinion leaders in facilitating diffusion by serving as models whose behavior their peers eventually emulate. Support for those prior findings emerges from the present study when the opinion leaders group is examined with regard to the percentage of friends who are engaging in various types of energy-conserving behavior (Table D-16). On every one of the 15 measures opinion leaders reported a higher than average percentage of friends who were presently using that measure. Although the data do not permit the establishment of a cause-and-effect relationship, they are definitely supportive of the influential role of opinion leaders among their friends and acquaintances.

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TABLE D-1

PERSONAL MEASURES WHICH CAN BE TAKEN
TO CONSERVE ENERGY

	(Percent)* DENVER GENERAL PUBLIC PRE-TEST	(Percent)* SALT LAKE CITY GENERAL PUBLIC PRE-TEST
Conserve energy in the home	41	44
Conserve heat; regulate thermostat; 65°	35	27
Use lights only when needed	32	30
Use car less; public transit	22	18
Conserve water	19	26
Proper use/less frequent of appliances	15	17
Save gas	15	13
More/better insulation or weather stripping	14	17
Conserve electricity	14	16
Drive small car; carpool	11	12
Promote or teach energy conservation	8	8
Use dishwasher with full load only	7	3
Use clothes dryer less	6	1
Install storm windows or doors	5	4
Cut down on washing clothes	5	3
Unplug television and other appliances when not in use	3	4
Investigate alternative energy sources	3	2
Combine trips to save gas	3	5
Drive within speed limit to save gas	2	2
Use less hot water	2	1
Install energy-conserving appliances	1	1
Miscellaneous	16	8
Don't know	-	0
N =	357	447

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	2b	2b
Post-Test	-	-

TABLE D-2

WAYS IN WHICH RESPONDENT'S FAMILY HAS CONSERVED ENERGY IN PAST YEAR

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Conserve heat; regulate thermostat	45	71	+26	41	54	+13	YES
Use lights only when needed	42	38	- 4	44	41	- 3	NO
Save water	25	12	-13	38	18	-20	YES
Proper use of/decreased use of appliances	19	15	- 4	27	12	-15	YES
Installed insulation or weather-stripping	18	31	+13	24	40	+16	NO
Use car less; take mass transit	12	9	- 3	17	8	- 9	YES
Cut down on washing clothes	12	8	- 4	11	7	- 4	NO
Cut down use of dishwasher	8	6	- 2	6	3	- 3	NO
Installed storm windows or doors	8	19	+11	5	10	+ 5	YES
Conserved electricity	6	3	- 3	7	3	- 4	NO
Drive smaller car; carpool	6	5	- 1	7	6	- 1	NO
Use clothes dryer less	6	5	- 1	3	3	0	NO
Unplug/turn off television when not in use	5	3	- 2	7	3	- 4	NO
Use less hot water	5	8	+ 3	4	6	+ 2	NO
Save gas	3	2	- 1	-	3	+ 3	YES
Conserve energy at home	3	2	- 1	5	5	0	NO
Installed energy-conserving appliances (all responses combined)	3	9	+ 6	4	12	+ 8	NO
Combine trips to save gas	2	3	+ 1	2	2	0	NO
Investigate alternative energy sources	1	7	+ 6	1	4	+ 3	YES
Promote and teach energy conservation	1	-	0	1	2	+ 1	NO
Miscellaneous	17	8	- 9	15	18	+ 3	YES
Have not conserved	9	7	- 2	7	8	+ 1	NO
Don't know	-	0	0	1	0	0	NO
N =	357	506	-	447	452	-	

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	8, 8a	8,8a
Post-Test	8, 8a	8,8a

TABLE D-3

EXISTING BEHAVIOR REGARDING SPECIFIC
ENERGY-CONSERVING MEASURES

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Turn down thermostat to 65° in colder months:							
Respondent doing now	70	67	- 3	61	58	- 3	NO
Friends have done	47	46	- 1	44	45	+ 1	NO
Drive car less; use bus or carpool:							
Respondent doing now	60	57	- 3	71	52	-19	YES
Friends have done	31	34	+ 3	45	38	- 7	YES
Install storm windows/doors:							
Respondent doing now	52	60	+ 8	45	49	+ 4	NO
Friends have done	45	51	+ 6	32	41	+ 9	NO
Install weatherstripping:							
Respondent doing now	52	56	+ 4	54	60	+ 6	NO
Friends have done	26	33	+ 7	30	36	+ 6	NO
Install most efficient insulation:							
Respondent doing now	46	53	+ 7	51	58	+ 7	NO
Friends have done	46	48	+ 2	38	44	+ 6	NO
Install fluorescent light bulbs wherever possible:							
Respondent doing now	26	29	+ 3	20	26	+ 6	NO
Friends have done	5	8	+ 3	7	6	- 1	YES
Buy energy-conserving appliances and devices:							
Respondent doing now	24	23	- 1	19	22	+ 3	NO
Friends have done	10	9	- 1	7	8	+ 1	NO
Install an automatic light timer:							
Respondent doing now	14	18	+ 4	13	13	0	NO
Friends have done	7	11	+ 4	13	9	- 4	YES
Install a chimney flue damper:							
Respondent doing now	11	12	+ 1	9	18	+ 9	YES
Friends have done	4	4	0	3	4	+ 1	NO

TABLE D-3 (Continued)

EXISTING BEHAVIOR REGARDING SPECIFIC ENERGY-CONSERVING MEASURES

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Install insulating hood for hot water heater:							
Respondent doing now	8	5	- 3	5	5	0	NO
Friends have done	1	3	+ 2	1	1	0	NO
Install device which restricts hot water flow on shower:							
Respondent doing now	7	17	+10	6	8	+ 2	YES
Friends have done	5	9	+ 4	3	6	+ 3	NO
Install an automatic set-back thermostat:							
Respondent doing now	2	8	+ 6	3	6	+ 3	YES
Friends have done	3	10	+ 7	1	4	+ 3	YES
Get gas range with electronic pilot light:							
Respondent doing now	1	4	+ 3	1	3	+ 2	NO
Friends have done	-	2	+ 2	2	2	0	NO
Install a heat pump:							
Respondent doing now	1	-	- 1	1	0	- 1	NO
Friends have done	1	2	+ 1	1	1	0	NO
Install solar hot water heater:							
Respondent doing now	0	1	+ 1	-	0	0	NO
Friends have done	5	4	- 1	3	2	- 1	NO
N =	357	506	-	447	452	-	

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	10, 10a, 10f	10, 10a, 10f
Post-Test	10, 10a, 10f	10, 10a, 10f

TABLE D-4

ENERGY-CONSERVING PRODUCTS PURCHASED
SINCE SEPTEMBER 1977

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Weatherstripping/caulking	NA	23	-	NA	21	-	NA
Ceiling insulation	NA	11	-	NA	10	-	NA
Storm windows and doors	NA	10	-	NA	10	-	NA
Attic vents	NA	3	-	NA	1	-	NA
Double-glazing insulated windows	NA	3	-	NA	4	-	NA
Set-back thermostat	NA	2	-	NA	1	-	NA
Exhaust fan	NA	2	-	NA	2	-	NA
Reflective film	NA	1	-	NA	1	-	NA
Pipe and water heater insulation	NA	2	-	NA	2	-	NA
Power attic vent	NA	1	-	NA	1	-	NA
Pilot light conversion kit	NA	0	-	NA	0	-	NA
Electronically lit gas stove	NA	0	-	NA	1	-	NA
None	NA	61	-	NA	60	-	NA
N =	-	506	-	-	452	-	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	11	11

TABLE D-5

WAS ENERGY CONSERVING PRODUCT
A FIRST-TIME ITEM OR A REPLACEMENT

(Percent)
DENVER GENERAL PUBLIC

	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
First-time purchase	39	56	21	28
Replacement	44	35	21	67
Addition	17	9	57	2
No answer	-	0	0	2
N =	196	114	56	50

Question Number	Den
Pre-Test	-
Post-Test	12b

TABLE D-6

PURCHASE INTENT

	(Percent) DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Had prior intent to purchase	91	97	88	87
Impulse	3	1	0	4
Miscellaneous	5	2	11	7
Don't know	-	0	0	2
No answer	-	0	1	0
N =	196	114	56	50

Question Number	Den
Pre-Test	-
Post Test	12c

TABLE D-7

REASONS FOR PURCHASING ENERGY-CONSERVING PRODUCT

(Percent)*
DENVER GENERAL PUBLIC

	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
To provide a more comfortable environment	38	46	29	39
Needed to be replaced	32	36	23	28
In order to save money	12	5	27	9
In order to conserve energy	12	5	18	24
Price; on sale	4	3	5	7
Remodeling	4	6	2	0
Already in the house	2	1	4	2
Advice from Public Service Co.	2	0	9	0
Liked it	2	0	2	0
Salesman/contractor recommendation	1	2	0	0
Good investment in home	1	0	2	2
Easy installation	1	1	2	0
Heard/saw advertising	-	0	0	0
Saw in-store display	0	0	0	0
Conservation sweepstakes	0	0	0	0
Miscellaneous	2	1	2	7
Don't know	-	1	0	0
No answer	-	0	0	2
N =	196	114	56	50

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	12d

TABLE D-8

PRIOR INFORMATION ABOUT
ENERGY-CONSERVING PRODUCT

	(Percent) DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Had heard something prior to purchase	61	51	75	67
Had not heard anything prior to purchase	37	48	23	30
Don't know	1	1	2	0
No answer	-	0	0	2
N =	196	114	56	50

Question Number	Den
Pre-Test	-
Post-Test	12e

TABLE D-9

EXTENT OF PRIOR INFORMATION
ABOUT ENERGY-CONSERVING PRODUCT

	(Percent)* DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
That product does what it's supposed to	33	32	48	26
Keeps home more comfortable	20	23	14	16
That it saves energy	13	9	14	13
Product saves money	8	2	14	3
Used it before	8	12	2	16
Product conserves gas/ electricity	4	2	7	10
Specific qualities of the product	4	2	5	10
Nothing specitic	3	5	2	0
Miscellaneous	6	5	2	10
Don't know	3	5	0	0
No answer	5	5	5	7
N =	196	114	56	50

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	12f

TABLE D-10

WHERE WAS INFORMATION ABOUT
ENERGY-CONSERVING PRODUCT SEEN

	(Percent)* DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
TV; radio	29	25	50	26
Newspaper; magazine	28	14	36	29
Friends; relatives	20	26	10	26
Spouse	8	12	0	13
Public Service Company enclosure	7	2	24	0
Books	4	7	2	7
Contractor; builder	3	4	2	3
Salesman	2	0	0	10
Miscellaneous	3	2	7	0
Don't know	8	12	2	3
No answer	4	7	5	3
N =	196	114	56	50

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	12f

TABLE D-11

COST OF ENERGY CONSERVING PRODUCT

(Percent)
DENVER GENERAL PUBLIC

	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Under $200	49	69	32	39
$200-$299	11	0	34	9
$300-$399	6	1	14	9
$400-$499	2	0	7	0
$500-$599	1	0	2	2
$600-$999	3	0	4	13
$1,000-$1,999	3	0	0	15
$2,000 and over	1	0	0	2
Don't know	22	27	9	7
No answer	3	3	0	4
N =	196	114	56	50
Median Amount:	$154	$101	$139	$163

Question Number	Den
Pre-Test	-
Post-Test	12g

TABLE D-12

PREDICTION AS TO WHETHER EXTRA PRODUCT COSTS WILL BE RECOUPED

	(Percent) DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Will recoup extra product cost	72	79	75	65
Will not recoup extra product cost	16	13	14	28
Don't know	10	7	9	4
No answer	2	2	2	2
N =	196	114	56	50

Question Number	Den
Pre-Test	-
Post-Test	12h

TABLE D-13

LENGTH OF TIME BEFORE EXTRA PRODUCT COSTS
WILL BE RECOUPED

(Percent)
DENVER GENERAL PUBLIC

	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Under 6 months	22	39	5	10
6 - 12 months	7	9	5	3
1 - 1.49 years	15	18	7	13
1.5 - 1.9 years	0	0	0	0
2 - 2.9 years	13	6	21	17
3 - 3.9 years	2	1	2	3
4 - 4.9 years	7	2	14	3
5 years or more	20	7	33	43
Won't recoup costs	1	1	0	0
Miscellaneous	3	5	2	0
Don't know	11	10	10	7
No answer	1	2	0	0
N =	196	114	56	50
Median time :	1.4 yrs.	0.6 yrs.	4.3 yrs	4.0 yrs

Question Number	Den
Pre-Test	-
Post-Test	12i

TABLE D-14

STORE WHERE ENERGY-CONSERVING PRODUCT
WAS PURCHASED

	(Percent) DENVER GENERAL PUBLIC			
	TOTAL	WEATHERSTRIPPING/ CAULKING	CEILING INSULATION	STORM WINDOWS/ DOORS
Hugh M. Woods	17	24	18	4
Montgomery Ward	8	5	11	9
Public Service Company	6	0	29	0
Sears Roebuck	6	4	4	11
K-Mart	4	9	0	0
J. C. Penney	1	0	0	4
Target	-	1	0	0
Other hardware store	16	24	9	9
Miscellaneous	34	22	29	57
Don't recall	9	11	4	9
No answer	0	0	0	0
N =	196	114	56	50

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	12a

TABLE D-15

PERCENTAGE OF FRIENDS
WHO PRACTICE ENERGY CONSERVATION
IN THEIR HOMES

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Percentage of Friends							
0 - 10	13	18	+ 5	22	19	- 3	-
11 - 20	4	3	- 1	5	3	- 2	-
21 - 30	6	5	- 1	7	4	- 3	-
31 - 40	1	2	+ 1	3	2	- 1	-
41 - 50	20	15	- 5	17	19	+ 2	-
Over 50	34	38	+ 4	35	37	+ 2	-
Don't Know	23	19	- 4	12	17	+ 5	-
Median percentage:	47.9	49.1	+ 1.2	44.6	48.4	+ 3.8	NO
N =	357	506	-	447	452	-	

Question Number	Den	SLC
Pre-Test	17	17
Post-Test	17	17

TABLE D-16

PERCENTAGE OF FRIENDS
WHO ENGAGE IN SPECIFIC
ENERGY-CONSERVING BEHAVIORS

	DENVER POST-TEST	
	TOTAL SAMPLE	OPINION LEADERS
Turn down thermostat to 65° in colder months	46	58
Drive car less; use bus or carpool	34	41
Install storm windows/doors	51	71
Install weatherstripping	33	51
Install most efficient insulation	48	64
Install fluorescent light bulbs wherever possible	8	12
Buy energy-conserving appliances and devices	9	15
Install an automatic light timer	11	13
Install a chimney flue damper	4	8
Install insulating hood for hot water heater	3	5
Install device which restricts hot water flow on shower	9	17
Install an automatic set-back thermostat	10	13
Get gas range with electronic pilot light	2	6
Install a heat pump	2	4
Install solar hot water heater	4	7
N =	506	85

E. CREDIBILITY OF INFORMATION SOURCES

A number of organizations, institutions, individuals, and specific companies were rated according to their credibility in providing information on the energy situation. By far the two most credible information sources were perceived to be (1) a group of scientists and engineers and (2) the U.S. Department of Energy, referred to as the Energy Research and Development Administration in the pre-surveys (Table E-1). Ranking well behind those two information sources, but substantially ahead of other sources, would be a group of university economists. Traditional media sources, such as local television stations, radio stations and local newspapers did not fare so well. However, in Denver at least, the local newspapers showed a slight gain in credibility over the eight-month period, whereas the broadcast media showed a slight decline in credibility. Elected officials, such as President Carter or the local Congressional representatives, experienced lower than average credibility ratings when it came to providing information about energy.

In both Denver and Salt Lake City the most significant increase in credibility occurred with regard to the scientific community. For example, in the later Denver survey 55 percent of the Denver homeowners indicated they would believe such a group "a lot" and another 37 percent would assign them "some" credibility. Those percentages were virtually identical in the second Salt Lake City survey.

As Table E-2 indicates, the credibility of various organizations and individuals varied markedly when analyzed by demographic characteristics. So some of the most relevant patterns regarding information credibility among Denver homeowners are summarized below.

GROUP OF SCIENTISTS AND ENGINEERS

Highest Credibility	Lowest Credibility
Opinion leaders	Age 55 and older
Energy constituency	Low education
Age 35 - 54	Low income
High income	
Moderate education	

It should be pointed out that even among the demographic subgroups which assigned the scientific community its lowest credibility ratings, these average ratings were higher than the average ratings for any other information source.

DEPARTMENT OF ENERGY

Highest Credibility	Lowest Credibility
Under age 35	Age 55 and older
Moderate income	Low income
Energy constituency	Low education
Opinion leaders	

GROUP OF UNIVERSITY ECONOMISTS

Highest Credibility	Lowest Credibility
Under age 35	Age 55 and older
Energy constituency	Low income
Moderate income	Low education

LOCAL TELEVISION STATIONS

Highest Credibility	Lowest Credibility
Under age 35	Age 55 and older
Energy constituency	Low income
Moderate income	Low education
Opinion leaders	

ROCKY MOUNTAIN NEWS

Highest Credibility	Lowest Credibility
Energy constituency	Low education
Under age 35	Age 55 and older
High education	High income
Opinion leaders	
Moderate income	

DENVER POST

Highest Credibility	Lowest Credibility
Under age 35	Low education
Energy constituency	Age 55 and older
Moderate income	Low income
High education	
Opinion leaders	

PRESIDENT CARTER

Highest Credibility	Lowest Credibility
Energy constituency	High income
Under age 35	Age 55 and older
Moderate to low income	High education

FAVORITE RADIO STATION

Highest Credibility	Lowest Credibility
Energy constituency	Low education
Under age 35	Age 55 and older
High education	
Opinion leaders	

PUBLIC SERVICE COMPANY

Highest Credibility	Lowest Credibility
High education	Age 55 and older
Moderate income	Low income
Under age 35	Low education

Consumer faith in the scientific community is understandable. That group is considered to be the most knowledgeable with regard to energy matters, is seen as having no conflict of interest, and is felt to bring considerable objectivity to their assessments (Table E-4). Many of the same reasons also apply to the high credibility ratings given university economists.

Scientists and engineers were viewed as having the capability of making the objective, knowledge-based assessments which are unavailable to the average consumer. The typical homeowner has very little experiential data from which to draw regarding the energy situation. The relative novelty of many energy-conserving appliances has not provided him with an evaluation system based on personal use. Also, there is general confusion regarding utility rate structures and, as was reported earlier, the average, expected utility savings which could result from the use of energy-conserving products and practice of energy-conserving behavior was seen as relatively minor. Confusion regarding the status of future energy supplies has been compounded by contradictory messages from the media and many expert sources.

The least credible sources of information were seen as those organizations which stand to make a profit from energy use or the sale of specific products (Table E-5). For example, the retail establishment and the local public utilities were both assigned very low credibility ratings, primarily due to their profit orientation. In addition, a sizeable number of individuals were of the opinion that the public utilities were operating within a conflict of interest with regard to energy use (Table E-6).

Scientists and engineers, as well as the U.S. Department of Energy, suffered in credibility among the older individuals and those with lower educational levels. However, the credibility ratings were very high among opinion leaders and those individuals who exhibited an interest in joining an energy conservation-oriented organization. In addition, the hard science group found a particularly receptive audience among middle-aged individuals, while the U.S. Department of Energy had very high believability among people under 35.

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TABLE E-1

CREDIBILITY OF ORGANIZATIONS AND INDIVIDUALS
CONCERNING ENERGY INFORMATION

(Percent)
DENVER GENERAL PUBLIC

	A LOT	SOME	NOT MUCH	NOT AT ALL	AVERAGE CREDIBILITY RATING*
A group of scientists and engineers					
Pre-Test	40	46	7	7	2.20
Post-Test	55	37	6	2	2.46
Change	+15	- 9	- 1	- 5	+0.26
U.S. Department of Energy					
Pre-Test	38	47	16	6	2.16
Post-Test	39	45	12	4	2.19
Change	+ 1	- 2	- 4	- 2	+0.03
President Carter					
Pre-Test	26	57	12	5	2.04
Post-Test	22	51	15	12	1.84
Change	- 4	- 6	+ 3	+ 7	-0.20
Local television stations					
Pre-Test	19	67	10	5	1.99
Post-Test	18	59	16	6	1.91
Change	- 1	- 8	+ 6	+ 1	-0.08
A group of university economists					
Pre-Test	27	49	15	9	1.97
Post-Test	33	44	16	7	2.04
Change	+ 6	- 5	+ 1	- 2	+0.07
Public Service Company					
Pre-Test	27	45	18	10	1.90
Post-Test	29	36	20	15	1.79
Change	+ 2	- 9	+ 2	+ 5	-0.11
Favorite radio station					
Pre-Test	14	67	10	9	1.86
Post-Test	15	54	21	6	1.82
Change	+ 1	-13	+11	- 3	-0.04

TABLE E-1 (Continued)

CREDIBILITY OF ORGANIZATIONS AND INDIVIDUALS
CONCERNING ENERGY INFORMATION

(Percent)
DENVER GENERAL PUBLIC

		A LOT	SOME	NOT MUCH	NOT AT ALL	AVERAGE CREDIBILITY RATING*
Denver Post						
	Pre-Test	20	53	16	11	1.82
	Post-Test	16	59	15	8	1.85
	Change	- 4	+ 6	- 1	- 3	+0.03
Rocky Mountain News						
	Pre-Test	12	64	16	8	1.80
	Post-Test	14	61	15	7	1.86
	Change	+ 2	- 3	- 1	- 1	+0.06
Your Congressional representative						
	Pre-Test	17	57	17	10	1.80
	Post-Test	18	49	22	10	1.76
	Change	+ 1	- 8	+ 5	0	-0.04
Sears, Roebuck & Co.						
	Pre-Test	5	47	31	18	1.39
	Post-Test	8	47	30	14	1.50
	Change	+ 3	0	- 1	- 4	+0.11
Montgomery Ward						
	Pre-Test	5	47	30	18	1.39
	Post-Test	6	45	31	16	1.41
	Change	+ 1	- 2	+ 1	- 2	+0.02

*Average credibility ratings were determined by assigning the following values to responses:

3 = believes the source a lot
2 = believes the source some
1 = believes the source not much
0 = believes the source not at all

Therefore, high average ratings are associated with high credibility.

Question Number	Den
Pre-Test	12, 19
Post-Test	18

TABLE E-1-A

CREDIBILITY OF ORGANIZATIONS AND INDIVIDUALS
CONCERNING ENERGY INFORMATION

(Percent)
SALT LAKE CITY GENERAL PUBLIC

	A LOT	SOME	NOT MUCH	NOT AT ALL	AVERAGE CREDIBILITY RATING*
A group of scientists and engineers					
Pre-Test	47	43	5	4	2.34
Post-Test	56	37	5	2	2.47
Change	+ 9	- 6	0	- 2	+0.13
U.S. Department of Energy					
Pre-Test	43	45	8	4	2.26
Post-Test	39	43	13	5	2.15
Change	- 4	- 2	+ 5	+ 1	-0.11
President Carter					
Pre-Test	31	53	13	4	2.10
Post-Test	24	51	16	8	1.91
Change	- 7	- 2	+ 3	+ 4	-0.19
A group of university economists					
Pre-Test	33	46	16	5	2.08
Post-Test	37	49	10	4	2.18
Change	+ 4	+ 3	- 6	- 1	+0.10
Sears, Roebuck & Co.					
Pre-Test	5	34	32	29	1.14
Post-Test	6	41	35	18	1.35
Change	+ 1	+ 7	+ 3	-11	+0.21
Montgomery Ward					
Pre-Test	3	31	35	31	1.06
Post-Test	4	37	36	19	1.26
Change	+ 1	+ 6	+ 1	- 12	+0.20

*Average credibility ratings were determined by assigning the following values to responses:

3 = believes the source a lot
2 = believes the source some
1 = believes the source not much
0 = believes the source not at all

Therefore, high average ratings are associated with high credibility.

Question Number	Den
Pre-Test	12, 19
Post-Test	18

TABLE E-2

AVERAGE CREDIBILITY RATINGS
BY DEMOGRAPHIC SEGMENTS

DENVER POST - TEST

		Scientists and Engineers	Dept. of Energy	College Economists	Leading Television Stations	Rocky Mountain News	Denver Post	President Carter	Favorite Radio Station	Public Service Co.
Income:	Low	2.34	2.04	1.93	1.77	1.86	1.67	1.93	1.84	1.67
	Medium	2.46	2.30	2.13	2.03	1.92	1.95	1.98	1.86	1.87
	High	2.50	2.16	2.04	1.88	1.83	1.88	1.73	1.80	1.76
Age:	Under 35	2.51	2.32	2.26	2.08	1.98	2.06	1.97	1.92	1.87
	35-54	2.52	2.21	2.04	1.89	1.87	1.84	1.80	1.81	1.81
	55 and over	2.30	2.02	1.79	1.75	1.71	1.65	1.76	1.74	1.65
Education:	Under 12th grade	2.33	2.08	1.94	1.78	1.67	1.50	1.81	1.69	1.67
	High school and some college	2.48	2.20	2.06	1.92	1.87	1.89	1.86	1.80	1.74
	College	2.47	2.21	2.04	1.93	1.93	1.94	1.79	1.91	1.96
Opinion leaders:		2.57	2.29	2.08	2.00	1.93	1.90	1.89	1.88	1.82
Energy constituency:		2.56	2.30	2.21	2.07	1.99	2.02	1.99	2.03	1.77
Total:		2.46	2.19	2.04	1.91	1.86	1.85	1.84	1.82	1.79

TABLE E-3

INDIVIDUAL OR GROUP WITH HIGHEST
CREDIBILITY REGARDING ENERGY INFORMATION

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
A group of scientists & engineers	NA	37	NA	NA	47	NA	NA
The U.S. Department of Energy	NA	25	NA	NA	26	NA	NA
A group of economists from colleges & universities	NA	12	NA	NA	10	NA	NA
Public Service Company	NA	9	NA	NA		NA	NA
President Carter	NA	8	NA	NA	7	NA	NA
Your Congressional representative	NA	4	NA	NA	5	NA	NA
Local television stations (such as Channel 2, 4, 7, or 9)	NA	4	NA	NA	4	NA	NA
Your favorite radio station	NA	2	NA	NA	2	NA	NA
The Denver Post	NA	1	NA	NA		NA	NA
Sears, Roebuck and Company	NA	1	NA	NA	-	NA	NA
Montgomery Ward	NA	1	NA	NA	0	NA	NA
The Rocky Mountain News	NA	-	NA	NA		NA	NA
N =	-	506	-	-	452	-	-

*Percentages total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	18a	18a

TABLE E-4

REASON FOR BELIEVING INFORMATION
FROM HIGH CREDIBILITY SOURCE

(Percent)*
DENVER GENERAL PUBLIC

	Total	Dept. of Energy	Public Service Co.	Pres. Carter	Scientists and Engineers	College Economists
Group/Individual is most knowledgeable	61	76	66	10	78	61
Group/Individual is most objective	9	6	0	8	17	10
Group/Individual has no conflict of interest	11	4	0	0	18	23
Group/Individual is most honest/best reputation	15	9	18	31	6	8
Group/Individual gives good service; has quality/good products	1	0	0	0	0	0
Group/Individual is oriented to principle of conservation	4	6	9	8	1	3
Group/Individual gives helpful advice	1	0	2	0	0	0
Group/Individual trying to do a good job; Group/Individual is highest authority available	6	4	2	44	1	0
Group/Individual gives both sides of story	-	0	0	0	0	0
Don't know which group/individual to believe in most	-	0	0	0	0	0
Don't believe any group/individual listed	1	0	0	0	0	0
No particular reason for believing group/individual	1	0	2	0	1	0
Miscellaneous reason	5	2	9	8	1	5
Question not answered	-	1	0	0	0	0
N =	506	127	44	39	188	61

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	18b

TABLE E-5

INDIVIDUAL OR GROUP WITH LOWEST
CREDIBILITY REGARDING ENERGY INFORMATION

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Montgomery Ward	NA	29	NA	NA	39	NA	NA
Sears, Roebuck and Company	NA	29	NA	NA	34	NA	NA
Public Service Company of Colorado	NA	16	NA	NA		NA	NA
President Carter	NA	11	NA	NA	10	NA	NA
Your Congressional Representative	NA	9	NA	NA	8	NA	NA
Your Favorite Radio Station	NA	8	NA	NA	8	NA	NA
A group of economists from colleges and universities	NA	7	NA	NA	4	NA	NA
The Denver Post	NA	7	NA	NA		NA	NA
The Rocky Mountain News	NA	5	NA	NA		NA	NA
Local television stations (such as Channels 2,4,7 and 9)	NA	5	NA	NA	6	NA	NA
The U.S. Department of Energy	NA	4	NA	NA	6	NA	NA
A group of scientists & engineers	NA	1	NA	NA	1	NA	NA
N =	-	506	-	-	452	-	-

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	18c	18c

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TABLE E-6

REASON FOR NOT BELIEVING INFORMATION
FROM LEAST CREDIBLE SOURCE

(Percent)*
DENVER GENERAL PUBLIC

	Total	Congressional Representative	Favorite Radio Station	Public Service Company	Sears, Roebuck & Co.	Montgomery Ward
Group/Individual least knowledgeable; group/individual is impractical (inherently)	17	18	37	3	14	17
Group/Individual is a private business trying to make a profit	38	0	20	52	81	75
Group/Individual is not objective	4	0	2	4	2	1
Group/Individual has a conflict of interest	7	7	5	21	3	2
Group/Individual is not believable	14	34	12	25	3	3
Group/Individual gives contradictory reports	7	5	15	1	0	0
Group/Individual is not competent	3	2	0	4	1	0
Group/Individual is politically motivated	6	39	5	1	1	1
Group/Individual is not interested in energy conservation; has poor attitude towards problem	2	0	7	4	1	1
Respondent has negative feelings about group/individual	6	0	2	12	2	3
Group/Individual is a sensationalist	1	0	2	0	0	0
Group/Individual is unprofessional	0	0	0	0	0	0
Respondent has no confidence in group/individual's products/services	1	0	2	0	1	2
Don't know which group/individual to believe in least or don't believe any groups/individuals on list	1	0	0	0	0	0
Respondent believes in all groups/individuals listed	-	0	0	0	0	0
Don't know why not to believe information from that group/individual	3	0	2	0	1	3
Miscellaneous reasons	3	5	7	1	1	0
Question not answered	-	0	0	0	0	0
N =	506	44	41	81	145	148

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	18d

TABLE E-6 (Continued)

REASON FOR NOT BELIEVING INFORMATION
FROM LEAST CREDIBLE SOURCE

	(Percent) * DENVER GENERAL PUBLIC	
	President Carter	College Economists
Group/Individual least knowledgeable; Group/Individual is impractical (inherently)	21	47
Group/Individual is a private business trying to make a profit	0	3
Group/Individual is not objective	6	11
Group/Individual has a conflict of interest	2	6
Group/Individual is not believable	26	8
Group/Individual gives contradictory reports	8	3
Group/Individual is not competent	11	0
Group/Individual politically motivated	23	0
Group/Individual is not interested in energy conservation; has poor attitude toward problem	4	3
Respondent has negative feelings about Group/Individual	9	11
Group/Individual is a sensationalist	0	6
Group/Individual is unprofessional	0	0
Respondent has no confidence in Group/Individual's products/services	0	0
Don't know which Group/Individual to believe in least or don't believe any Groups/Individuals on list	0	0
Respondent believes in any Groups/Individuals cited	0	0
Don't know why not to believe information from that Group/Individual	2	6
Miscellaneous reasons	4	11
Question not answered	0	0
N =	53	36

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	18d

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F. EVALUATION OF SPECIFIC ELEMENTS OF THE DENVER MARKETING PROGRAM

1. Awareness of Commercials and Advertisements Which Promote Energy Conservation.

In view of the marketing program which occurred in Denver during the fall of 1977 and the early winter of 1978, there was some expectation that the recall of ads, displays, and commercials stressing energy conservation would be higher in that location than in Salt Lake City. The results, although in the expected direction, were not conclusive due to the inability (through lack of pre-test measures) to make a valid test of statistical significance (Table F-1). For example, 91 percent of the homeowners in Denver recalled seeing such advertising, compared with a figure of 87 percent in Salt Lake City, a difference of only four percent. However, recall in Denver was greater than in Salt Lake City in three media areas: newspapers (a 12 percent difference), store displays (a seven percent difference) and television (a six percent difference).

Unfortunately, a methodological oversight prevented measurement of the shift in recall between the two cities over the eight-month interval. In the first survey effort, homeowners in both locations were not asked about their recall of energy conservation-oriented commercials and advertising. It is possible, then, that the net shift in Denver would have been higher. It is equally likely, however, that the net shift would have shown no difference between the two cities.

Although it is impossible to posit a cause-and-effect relationship, known purchasers of energy-conserving products had much higher recall of energy-conserving advertising which appeared on television, on radio, in retail locations, and especially in newspapers. The impact of energy conservation advertising was minimal among low-income groups, the less educated and the older individuals.

Television commercials stressing energy conservation were most noticed by opinion leaders and younger individuals, whereas newspaper advertising which stressed energy conservation was most noticed by individuals who were interested in joining an energy-oriented organization and by people with higher education levels. Radio commercials, as well as in-store displays, also appeared to be effective in reaching opinion leaders.

The commercial content most often recalled had to do with tightening up the home by adding insulation, storm windows and doors, weatherstripping, etc. (Table F-2). Ads featuring those product areas were more often noticed in the newspapers and in-store displays than elsewhere.

Another group of ads which experienced significant recall had to do with automatic set-back thermostats and the need to turn the thermostat down in the evening. Such ads were likely to have been heard on the radio or noticed within the stores. Advertising in booklets published by the local utilities were also mentioned with some frequency.

2. Recall and Evaluation of Energy Conservation Television Commercials.

(a) Recall and reaction to the television commercial showing a $100-bill being consumed by a pilot light.

Slightly more than 40 percent of the Denver homeowners, upon being shown still photos, recalled seeing the commercial which showed a hand holding a $100 bill which was being consumed by the flame from a pilot light (Table F-3). That 40 percent recall is excellent when compared with the 30 percent commercial recall expected after one week of airing a successful television commercial. In the present instance recall was often measured two to four weeks after the commercials had appeared on Denver television. Among all homeowners, 21 percent of the individuals indicated that the major theme of that particular commercial was that pilot lights waste both energy and money (Table F-4). Another 16 percent directly related energy savings to dollars and cents savings, and only 15 percent indicated that the commercial emphasized the need to avoid wasting money.

Among those individuals who recalled seeing that commercial, the positive reactions outweighed the negative reactions by a margin of 44 percent to 12 percent (Table F-5). That commercial was particularly appealing to individuals with lower education levels, under the age of 35, and in the middle-income category. The most vocal reaction against the commercial came from people over the age of 55. Adverse reactions to the commercial usually centered around its lack of believability (Table F-6).

(b) Recall and reaction to the television commercial showing a man holding a candle in front of drafty window.

This commercial was recalled by 47 percent of all the Denver homeowners, nearly two-thirds of whom were of the opinion that the major theme had to do with the energy loss due to the windows (Tables F-7 and F-8). Another 36 percent indicated that the commercial pointed up the need for weatherstripping, storm windows, or thermopanes. The commercial encountered especially high recall among the previously identified "energy conservation constituency" (e.g., opinion leaders, affluent individuals, and younger people).

Nearly two-thirds of the individuals who noticed the commercial also had a positive reaction to it and thus outweighed the negative responses to that commercial by better than seven to one (Table F-9). The major positive features of the commercial were its believability and its ability to make the viewer identify with the problem (Table F-10).

(c) Recall of and reaction to the television commercial showing a young girl awakening in an over-heated room.

This commercial was recalled by 45 percent of the Denver homeowners, especially by individuals below the age of 35 and in the middle-income bracket (Table F-11). By far the greatest proportion of individuals were unable to recall the predominant theme of the commercial and instead remembered individual, specific details (Table F-12). However, 24 percent of the individuals who saw the commercial mentioned the emphasis on the automatic set-back thermostat and its ability to regulate the heat at night.

Of the three commercials tested, this one received the greatest negative reaction (21 percent), compared with 56 percent of the individuals who saw the commercial and had a positive reaction to it (Table F-13). The commercial produced ambivalent reactions from purchasers of energy conserving products. Those individuals had both the greatest positive and the highest negative reactions to the commercial. Other negative reactions were expressed by opinion leaders, individuals at high educational levels and those people who were interested in joining energy organizations. Satisfaction with the commercial, on the other hand, was expressed by low income individuals and younger people. Negative reactions were often based on the fact that the commercial was insulting to the viewer's intelligence and that the participants in the commercial acted in less than an intelligent manner (Table F-14).

In summary, the television commercial showing the man holding a candle in front of a drafty window was not only the most frequently recalled, but it also elicited the most favorable reactions (Table F-15). The commercial depicting a $100 bill being consumed by a pilot light had the lowest recall figure, as well as the lowest positive response. The third commercial which showed a young girl awakening in an overheated room aroused the most frequent negative response.

3. Recall of the Slogan "Products That Save Energy Pay For Themselves"

Of the Denver homeowners who recalled seeing one of the three aforementioned television commercials, only one percent recalled the slogan "Products That Save Energy Pay for Themselves" which served as the visual tag-line on all of the commercials (Table F-16).

In another question, respondents were asked to complete several commercial tag-lines, one of which read "Products That Save Energy ...". Again, only one percent of all individuals were able to correctly complete the slogan with the words "Pay for themselves" (Table F-18). However, another 29 percent submitted phrases which expressed the theme of saving money or helping pay the costs of the product. That percentage was ten percent higher than the percentage obtained in Salt Lake City, where 19 percent rephrased the theme of the slogan.

It is possible, then, that the slogan - which was devised to serve as a summary statement rather than as a stand-alone catch phrase - fulfilled its purpose. Also, in the absence of a pre-test measurement in both cities, the higher slogan interpretation level in Denver may be meaningful, particularly in view of Salt Lake City's higher, initial level of commitment to energy conservation in general.

Individuals were also asked to give their interpretation of the slogan and the most common themes had to do with the fact that products that use less energy save money or that an energy saving appliance will help the purchaser recoup the product's total cost (Table F-19).

4. Recall of In-store Displays.

One out of five Denver homeowners recalled seeing an in-store display which stressed energy conservation (Table F-20). No particular market segment exhibited any higher recall of such displays than did any other, and purchasers of any energy conserving products had only slightly higher recall than did non-purchasers. In no instance, when the respondent noticed such a display did he ask store personnel to explain what it was about (Table F-21). Also, only one percent of the individuals who noticed in-store displays actually purchased products (Table F-22). Reactions to those displays were generally positive (Table F-24).

5. Attendance at Home and Garden Show.

A home energy use simulator was displayed at the Denver Home and Garden Show in February, 1978. Six percent of the Denver homeowners (with a probable range of four to eight percent) reported that they had attended the show (Table F-25). Of that number slightly less than half recalled seeing the home energy use simulator (Table F-26).

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TABLE F-1

NOTICE OF COMMERCIALS
STRESSING ENERGY CONSERVATION

	(Percent)* DENVER GENERAL PUBLIC			(Percent)* SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Respondent has seen/heard commercials on television	NA	74	NA	NA	68	NA	NA
Respondent has heard commercials on radio	NA	31	NA	NA	32	NA	NA
Respondent has seen ads in newspaper	NA	47	NA	NA	35	NA	NA
Respondent has seen ads/displays in stores	NA	20	NA	NA	13	NA	NA
Respondent doesn't know whether he/she has seen/heard commercials/ads	NA	7	NA	NA	2	NA	NA
Respondent has not seen any commercials or ads	NA	9	NA	NA	13	NA	NA
Miscellaneous answer (i.e., respondent has seen ads in magazines or flyers)	NA	1	NA	NA	3	NA	NA
Question not answered	NA	0	NA	NA	-	NA	NA
N =	-	506	-	-	452	-	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	19, 19a	19, 19a

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TABLE F-2

DESCRIPTION OF COMMERCIAL OR AD

	(Percent)* DENVER GENERAL PUBLIC				
	TOTAL	TV	RADIO	NEWS-PAPER	IN-STORE
Mention of ad with candle; ads on insulation, wrapping hot water pipes, storm windows and doors, thermopane windows and doors, siding and weatherstripping	27	30	28	35	39
Ads on energy miser or money saving appliances	8	9	13	12	16
Mention of ads regarding automatic set-back thermostats; ads on thermostats; and ads on turning thermostat down	13	15	21	14	21
Public Service Company ads/booklets	13	13	15	17	11
Tips/ideas on energy-conservation methods	4	4	4	4	2
Messages from government on energy conservation	4	5	5	6	2
Ads on saving hot water/insulation for hot water heater	5	6	7	7	11
Ads on water conservation	4	5	6	3	6
Ads on saving electricity/turn out unused lights	4	4	5	5	6
Petroleum company ads on energy conservation and gas conservation	9	10	8	8	7
Theme of being robbed due to poor insulation	-	1	0	-	0
Ads on gas hogging automobiles	4	4	4	4	3
Ads regarding public transportation	10	11	13	13	8
Ads regarding alternative heating systems and cost	2	1	1	3	2
Ads on solar energy	4	5	3	6	4
Ads regarding Denver as a test city for conservation study	1	1	2	0	0
Ads about energy conservation sweepstakes	-	0	1	-	0
Mention of burning money; pilot light ad	2	2	3	2	3
Ads on energy saving products	2	2	3	3	4
Theme of energy available for the next generation	1	2	2	0	1
Ads on pollution	2	3	3	3	1
Mention of slogan ("Products That Save Energy..."	1	1	1	-	0
Miscellaneous answer and don't remember	23	24	17	21	23
Question not answered	8	2	5	2	3
N =	460	375	155	236	100

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	19b

TABLE F-3

RECALL OF TV COMMERCIAL
WITH $100 BILL BURNING
(Still #1)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Recalled seeing commercial	NA	41	NA
Did not recall seeing commercial	NA	56	NA
Don't know	NA	2	NA
Question not answered	NA	1	NA
N =	-	506	-

Question Number	Den
Pre-Test	-
Post-Test	21

TABLE F-4

RECALL OF CONTENT
OF PILOT LIGHT COMMERCIAL
(Still #1)

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Pilot lights waste energy and money	NA	21	NA
Related energy saving to dollars	NA	16	NA
Wasting money	NA	15	NA
Wasting energy	NA	9	NA
About pilot lights	NA	6	NA
About thermostats	NA	4	NA
About saving energy, fire, gas, heat, etc.	NA	3	NA
Ad for some type of energy (unspecified)	NA	3	NA
Wasting money by not having insulation	NA	2	NA
Done by Public Service	NA	2	NA
How much energy costs	NA	1	NA
Mention of DOE, ERDA or government	NA	1	NA
Recall of slogan ("Products That Save Energy..."	NA	0	NA
Respondent says he didn't understand the point of the commercial	NA	2	NA
Miscellaneous answer	NA	1	NA
Don't recall	NA	19	NA
Question not answered	NA	1	NA
N =	-	209	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	21a

TABLE F-5

REACTION TO THE
PILOT LIGHT COMMERCIAL
(Still #1)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Positive reaction	NA	44	NA
Negative reaction	NA	12	NA
Neutral reaction	NA	34	NA
Don't recall	NA	10	NA
Question not answered	NA	1	NA
N =	-	209	-

Question Number	Den
Pre-Test	-
Post-Test	21b

TABLE F-6

REASONS FOR REACTION
TO PILOT LIGHT COMMERCIAL
(Still #1)

	(Percent)* DENVER GENERAL PUBLIC		
	POSI-TIVE	NEGA-TIVE	NEU-TRAL
Commercial makes a point; gets the message across; realistic; believable; sensible; true; good commercial	53	13	3
People do waste energy needlessly; it's a commodity that should be saved	14	0	0
Do save money/do waste energy	12	4	3
The product advertised is a good idea	1	4	0
Flame makes you think of gas	1	0	0
Emotional reaction	8	8	3
Situation doesn't apply to respondent	1	0	4
We waste money	13	4	3
Too radical/emotional explanation of energy crisis	1	0	1
Don't know enough about product; conflicting reports about how much product actually saves	1	8	1
Selling a product; propaganda	0	4	1
Doesn't affect me; didn't react	0	0	11
Not believable	0	33	4
Doesn't like the product	0	4	1
Doesn't believe TV commercials	0	8	1
Doesn't pay attention to TV commercials	0	0	21

Question Number	Den
Pre-Test	-
Post-Test	21c

TABLE F-6 (Continued)

REASONS FOR REACTION
TO PILOT LIGHT COMMERCIAL
(Still #1)

	(Percent)* DENVER GENERAL PUBLIC		
	POSITIVE	NEGATIVE	NEUTRAL
Humorous/funny commercial	0	0	1
Tired of hearing about energy crisis	0	0	3
Don't know/don't recall	1	4	31
Miscellaneous answers (can't do anything about energy conservation; positive reaction to a money saver; not enough facts)	5	13	3
Question not answered	1	0	3
N =	92	25	71

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	21c

TABLE F-7

RECALL OF COMMERCIAL:
MAN HOLDING CANDLE BY WINDOW
(Stills #2 & #3)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Recalled seeing commercial	NA	47	NA
Did not recall seeing commercial	NA	52	NA
Don't recall	NA	1	NA
Question not answered	NA	-	NA
N =	-	506	-

Question Number	Den
Pre-Test	-
Post-Test	22

TABLE F-8

RECALL OF CONTENT OF "CANDLE" COMMERCIAL
(Stills #2 & #3)

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Energy loss through window	NA	62	NA
Weatherstripping, storm windows, insulation or Thermopanes needed	NA	36	NA
Misinterpretation of ad (coder's judgment)	NA	8	NA
Theme of thief in home/home being robbed	NA	5	NA
Conserving energy/energy-conserving products	NA	4	NA
Respondent couldn't understand commercial	NA	3	NA
Could save money by conserving/insulating	NA	1	NA
Money loss	NA	1	NA
Mention of DOE, ERDA or Government	NA	0	NA
Recall of slogan ("Products that save...")	NA	0	NA
Nothing	NA	2	NA
Miscellaneous answer (i.e., wasting)	NA	2	NA
Don't recall	NA	6	NA
Question not answered	NA	-	NA
N =	-	239	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	22a

TABLE F-9

REACTION TO "CANDLE" COMMERCIAL
(Stills #2 & #3)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Positive reaction	NA	65	NA
Negative reaction	NA	9	NA
Neutral reaction	NA	19	NA
Don't recall	NA	6	NA
Question not answered	NA	-	NA
N =	-	239	-

Question Number	Den
Pre-Test	-
Post-Test	22b

TABLE F-10

REASONS FOR REACTION
TO "CANDLE" COMMERCIAL
(Stills #2 & #3)

	(Percent)* DENVER GENERAL PUBLIC		
	POSITIVE	NEGATIVE	NEUTRAL
Commercial makes a point; gets the message across; realistic; believable; sensible; true	37	0	9
Do lose heat that way; stressed point of energy loss through windows	17	0	2
Respondent can identify with problem	28	0	0
Good commercial; liked it; catches your attention; impressive	5	5	0
Can save money by conserving; do waste money; mention of insulation in relation to above)	4	5	0
Respondent can't identify with problem	3	0	11
Should/will/did check into storm windows; (good idea to have them)	12	0	0
Makes people aware of need for conservation	6	5	0
Clever/cute commercial	3	5	0
Biased promotion for product	0	0	2
No impression; no reaction	0	0	14
Unrealistic; overdone; dumb	1	73	18
Mentions DOE, ERDA or government	0	0	0
Recall of slogan ("Products That Save Energy..."	0	0	0
Respondent doesn't pay attention to commercials	0	0	9
Humorous/funny commercial	3	0	2
Doesn't believe commercials in general	0	9	11
Don't know	1	0	14
Miscellaneous answers (not an effective ad; we use candles on the farm)	3	18	5
Question not answered	0	0	9
N =	156	22	45

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	22c

TABLE F-11

RECALL OF COMMERCIAL
CHILD AWAKENED BY OVERHEATED ROOM
(Stills #4 & #5)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Recalled seeing commercial	NA	45	NA
Did not recall seeing commercial	NA	53	NA
Don't recall	NA	2	NA
Question not answered	NA	1	NA
N =	-	506	-

Question Number	Den
Pre-Test	-
Post-Test	23

TABLE F-12

RECALL CONTENT OF
"OVERHEATED ROOM" COMMERCIAL
(Stills #4 & #5)

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Details of commercial	NA	41	NA
Mention of automatic set-back thermostat; turning heat back at night	NA	24	NA
Specific mention of opening window instead of turning down thermostat	NA	19	NA
Mention of theme of robbery due to loss of heat; thermostat (in general); heat conservation; thermostat set too high	NA	13	NA
Misinterpretation of commercial (coder's judgment)	NA	5	NA
Respondent says he/she couldn't understand the point of the commercial	NA	3	NA
Mention of saving or wasting energy	NA	3	NA
Mention of money savings with automatic set-back thermostat	NA	1	NA
Mention of faulty/old thermostat (wasting heat)	NA	1	NA
Respondent mentions DOE, ERDA or government	NA	0	NA
Recall of slogan, "Products that save energy pay for themselves"	NA	0	NA
Miscellaneous answer (ridiculous commercial; commercial made a point)	NA	2	NA
Remembers commercial, but can't recall any details	NA	12	NA
Question not answered	NA	1	NA
N =	-	227	-

*Percentages total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	23a

TABLE F-13

REACTION TO
"OVERHEATED ROOM" COMMERCIAL
(Stills #4 & #5)

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Positive reaction	NA	56	NA
Negative reaction	NA	21	NA
Neutral reaction	NA	13	NA
Don't recall	NA	10	NA
No answer	NA	1	NA
N =	-	227	---

Question Number	Den
Pre-Test	-
Post-Test	23b

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TABLE F-14

REASONS FOR REACTION
TO "OVERHEATED ROOM" COMMERCIAL
(Stills #4 & #5)

	(Percent)* DENVER GENERAL PUBLIC		
	POSITIVE	NEGATIVE	NEUTRAL
Makes sense; something I can do; true; makes you aware; got the point across; believable	29	6	7
We should keep heat down; could save energy/money that way; should turn therm down at night	20	4	3
Can identify with problem-could happen without thinking	13	0	3
Good commercial; effective ad	5	0	0
Should be able to set therm back yourself; product unnecessary	2	15	7
Good product/should check into product	3	0	0
Doesn't apply to me; we turn the term down; we don't have that problem	2	2	14
About savings/wasting energy; energy conservation and awareness	9	2	0
Stupid/dumb to open windows instead of checking thermostat; shouldn't open windows to reduce heat	11	26	3
Selling a product	0	2	0
Commercial had no effect; no reaction to it		0	17
Stupid commercial/people not that dumb; insults our intelligence	1	30	14
Doesn't like/wouldn't buy product	1	0	0
Don't believe TV Commercials	0	2	0
Don't pay attention to commercials	2	2	17
Humorous/funny commercial	0	2	3
Don't know/don't recall	2	0	21

Question Number	Den
Pre-Test	-
Post-Test	23c

TABLE F-14 (Continued)

REASONS FOR REACTION
TO "OVERHEATED ROOM" COMMERCIAL

	(Percent)* DENVER GENERAL PUBLIC		
	POSI-TIVE	NEGA-TIVE	NEU-TRAL
Miscellaneous (don't like whining children; I like to sleep in a cool room; even heat more healthful; open window could cause child to get sick; "get to the point"	8	11	3
Question not answered	1	2	0
N =	127	47	29

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	23c

TABLE F-15

SUMMARY OF VIEWER REACTIONS
TO THREE TELEVISION COMMERCIALS

COMMERCIAL	DENVER GENERAL PUBLIC POST-TEST	95 PERCENT CONFIDENCE INTERVAL*
$100 BILL BEING CONSUMED BY PILOT LIGHT		
Recalled seeing	41	36.7 - 45.3
Had positive reaction	44	37.3 - 50.7
Had negative reaction	12	7.6 - 16.4
Had neutral reaction	34	27.6 - 40.4
MAN HOLDING CANDLE IN FRONT OF DRAFTY WINDOW		
Recalled seeing	47	42.6 - 51.4
Had positive reaction	65	58.9 - 71.1
Had negative reaction	9	5.4 - 12.6
Had neutral reaction	19	14.0 - 24.0
YOUNG GIRL AWAKENING IN AN OVERHEATED BEDROOM		
Recalled seeing	45	40.7 - 49.3
Had positive reaction	56	49.5 - 62.5
Had negative reaction	21	15.7 - 26.3
Had neutral reaction	13	8.6 - 17.4

*The probability is 95 percent that the true population value lies within the stated interval.

TABLE F-16

RECALL OF SLOGAN:
"PRODUCTS THAT SAVE ENERGY PAY FOR THEMSELVES"

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Recalled "Products That Save Energy Pay For Themselves"	NA	1	NA
Doesn't remember slogan	NA	40	NA
Don't know	NA	21	NA
Other slogan/yes, there was a slogan but can't remember what it was	NA	13	NA
Question not answered*	NA	26	NA
N =	-	506	-

* Question was only asked of those respondents who recalled seeing at least one of the three television commercials.

Question Number	Den
Pre-Test	-
Post-Test	24, 24a

TABLE F-17

COMPLETION OF SLOGAN:
"FORD HAS A BETTER _____"

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
"Idea"	NA	58	NA	NA	50	NA	NA
Other answer	NA	26	NA	NA	37	NA	NA
Don't know	NA	15	NA	NA	10	NA	NA
Question not answered	NA	2	NA	NA	3	NA	NA
N =	-	506	-	-	452	-	-

Question Number	Den
Pre-Test	-
Post-Test	25a

TABLE F-18

COMPLETION OF SLOGAN:
"PRODUCTS THAT SAVE ENERGY _____"

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
"Pay For Themselves"	NA	1	NA	NA	0	NA	NA
Help pay their costs; save money	NA	29	NA	NA	19	NA	NA
Other answer	NA	23	NA	NA	39	NA	NA
Don't know	NA	42	NA	NA	37	NA	NA
No answer	NA	5	NA	NA	5	NA	NA
N =	-	506	-	-	452	-	-

Question Number	Den	SLC
Pre-Test	-	-
Post-Test	25b	25b

TABLE F-19

INTERPRETATION OF SLOGAN:
"PRODUCTS THAT SAVE ENERGY PAY FOR THEMSELVES"

	)Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Products that use less energy save money; save money	NA	29	NA
With an energy-saving appliance you recoup the product's total cost (it costs more to begin with)	NA	23	NA
Saves you money by lowering your fuel bill	NA	12	NA
With an energy-saving appliance you recoup the product's extra cost	NA	10	NA
Saves energy; conserves energy; worth buying	NA	9	NA
Respondent repeated slogan	NA	7	NA
Couldn't be true	NA	2	NA
Selling a product	NA	2	NA
Is true	NA	2	NA
Philosophy: most important thing is saving energy for the future	NA	1	NA
Better product; doesn't wear out as fast	NA	1	NA
It's good to have an energy-saving product	NA	-	NA
Miscellaneous answer (energy consumption [only]; it's a senseless phrase; anything that lasts a long time will pay for itself; energy conservation is being used as a marketing method)	NA	4	NA
Don't know	NA	4	NA
Question not answered	NA	-	NA
N =	-	506	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	25c

TABLE F-20

RECALL OF IN-STORE DISPLAYS

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Recalled seeing displays	NA	20	NA
Did not recall seeing displays	NA	79	NA
Don't recall	NA	1	NA
Question not answered	NA	-	NA
N =	-	506	-

Question Number	Den
Pre-Test	-
Post-Test	26

TABLE F-21

RESPONDENT ASKED STORE PERSONNEL
ABOUT DISPLAYS

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Respondent asked what displays meant	NA	0	NA
Respondent did not ask what displays meant	NA	99	NA
Don't know	NA	1	NA
Question not answered	NA	0	NA
N =	-	102	-

Question Number	Den
Pre-Test	-
Post-Test	26b

TABLE F-22

PURCHASE OF PRODUCT
AFTER HAVING NOTICED
IN-STORE DISPLAY

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Did buy products	NA	1	NA
Did not buy products	NA	99	NA
Don't know	NA	0	NA
Question not answered	NA	0	NA
N =	-	102	-

Question Number	Den
Pre-Test	-
Post-Test	26d

TABLE F-23

STORE IN WHICH PRODUCT DISPLAY WAS NOTICED

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Sears, Roebuck & Co.	NA	15	NA
Montgomery Wards	NA	9	NA
J.C. Penney's	NA	5	NA
Target	NA	2	NA
K-Mart	NA	2	NA
Hugh M. Woods	NA	0	NA
Miscellaneous answer; other store; gives location only	NA	23	NA
Don't remember	NA	49	NA
Question not answered	NA	2	NA
N=	-	102	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	26a

TABLE F-24

REACTION TO IN-STORE DISPLAYS

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Positive reaction	NA	48	NA
Neutral reaction	NA	28	NA
Negative reaction	NA	7	NA
Don't know	NA	13	NA
Question not answered	NA	4	NA
N =	-	102	-

Question Number	Den
Pre-Test	-
Post-Test	26f

TABLE F-25

ATTENDANCE AT HOME AND GARDEN SHOW

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Did attend Home and Garden Show	NA	6	NA
Did not attend Home and Garden Show	NA	93	NA
Don't know	NA	0	NA
Question not answered/show not open yet	NA	1	NA
N =	-	506	-

Question Number	Den
Pre-Test	-
Post-Test	27

TABLE F-26

NOTICE OF "ENERGY MACHINE"
AT HOME AND GARDEN SHOW

	(Percent) DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Noticed "Energy Machine"	NA	47	NA
Did not notice "Energy Machine"	NA	44	NA
Don't know	NA	6	NA
Question not answered	NA	3	NA
N =	-	32	-

Question Number	Den
Pre-Test	-
Post-Test	27a

TABLE F-27

REACTION TO "ENERGY MACHINE"

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Great; liked it; good for awareness	NA	47	NA
Didn't examine it; didn't have time to examine it; couldn't get near it	NA	33	NA
Thought it would do more than it did	NA	13	NA
Miscellaneous answer (wasn't impressed; device just for the rich)	NA	13	NA
N =	-	15	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	27b

G. EVALUATION OF THE ENERGY SWEEPSTAKES PROGRAM

1. Recall of Newspaper Sweepstakes Advertisement.

In November 1977, the State Energy Office in Colorado sponsored an energy-conservation sweepstakes, which rewarded the winners by installing energy-conserving products in their homes free of charge. The newspaper ad which promoted the Energy Sweepstakes was shown to the survey respondents in Denver and was recalled by 13 percent of those individuals (Table G-1). The highest recall of that newspaper ad occurred among both opinion leaders and low-income individuals, while the lowest rate of recall took place among the most highly educated and those individuals under the age of 35. Of the people who recalled seeing the ad, eight percent indicated that they had entered the contest (Table G-2). That figure was consistent with the number of entries actually received, 12,400. Within the sample frame of 197,000 owner-occupied households in the survey area, between 11,000 and 20,500 entries would be expected. Failure to enter the contest was due primarily to a lack of interest in such activities (36 percent) and 11 percent stated that they were suspicious of the overall intent of the content.

2. Results of Survey of Energy Sweepstakes Entrants.

Immediately following the close of entries to the Energy Sweepstakes telephone interviews were conducted with 282 randomly selected entrants. The major findings of that survey were as follows:

- Forty-three percent of all entrants noticed the sweepstakes in either one of the two daily newspapers and 39 percent noticed it in a retail store. Fifteen percent noticed the sweepstakes in either a suburban or unspecified newspaper. (Table G-5).

- Nearly half of the entrants who first noticed the sweepstakes in the newspaper visited a participating store in order to submit their entries (Table G-7).

- Fifteen percent of the entrants discussed energy-saving products with a sales clerk and an identical percentage actually purchased such products while there (Tables G-9 and G-10). However, the two groups were not the same, since 57 percent of the purchasers never discussed the products with a clerk prior to purchase.

- The major energy-conserving products purchased were insulation, weatherstripping, and storm windows or doors (Table G-11).

- Retail clerks were not active in calling attention to the sweepstakes material featured in-store (Table G-12). In most instances, the display materials caught the entrant's attention.

- Awareness of television and newspaper advertising (particularly the latter medium) was especially high among entrants who purchased energy-conserving products (Table G-15).

- Entrants were far and away most interested in winning either insulation or storm windows and doors (Table G-18). The median amount of the products which were most covered was $1,180, an amount which a majority of entrants were unable to afford (Tables G-19 and G-20).

- Sweepstakes entrants were more aware of the potential savings in utilities costs which could be realized through energy conservation (an average of 18.3 percent) than was the typical Denver homeowner (an average of 9.0 percent) interviewed in the post-test survey two months later (Table G-21). Much of the perceived savings could be attained through the purchase of new products rather than through increased energy-conserving behavior (Table G-22).

- More than three-fourths of the sweepstakes entrants were convinced of the likelihood of a national energy shortage within the coming decade. (Table G-23.) Among sweepstakes entrants the recognition of a likely energy crisis was key to the purchase of energy-conserving products. For example, those individuals who bought energy-conserving products - or discussed them with a sales clerk - were more convinced of the likelihood of an energy shortage than entrants who were non-purchasers. The greatest concern over a possible energy crisis was expressed by younger people and also by college graduates.

- Sweepstakes entrants were slightly more attuned to both the energy cost of ownership concept and energy conservation in general (Tables G-24, G-25, and G-31).

- The Energy Sweepstakes appeared to attract not only supporters of energy conservation, but also individuals with a predilection towards contests and sweepstakes. Whereas 47 percent of the entrants reported entering contests either "frequently" or "occasionally", only 26 percent of the general public placed themselves in those two categories of behavior (Table G-26).

  Compared with Denver homeowners in general, the sweepstakes entrants were:

  - better educated
  - younger
  - slightly more affluent and
  - contained a higher percentage of men (Tables G-28, G-
  - 29, G-30 and G-32).

TABLE G-1

RECALL OF SWEEPSTAKES AD IN NEWSPAPER

	(Percent) DENVER GENERAL PUBLIC	
	POST-TEST	95 PERCENT CONFIDENCE INTERVAL
Recalled sweepstakes ad	13	10.1 - 15.9
Did not recall sweepstakes ad	84	80.8 - 87.2
Don't know	2	00.8 - 3.2
Question not answered	-	- -
N =	-	506 -

Question Number	Den
Pre-Test	-
Post-Test	20

TABLE G-2

ENTRY IN ENERGY CONSERVATION SWEEPSTAKES

	(Percent) DENVER GENERAL PUBLIC	
	POST-TEST	95 PERCENT CONFIDENCE INTERVAL
Entered contest*	8	5.6 - 10.4
Did not enter contest	89	86.3 - 91.7
Don't know	2	0.8 - 3.2
Question not answered	1	0.1 - 1.9
N =	-	506 -

*One percent of all respondents interviewed reported entering the contest.

Question Number	Den
Pre-Test	-
Post-Test	20

TABLE G-3

REASONS FOR NOT ENTERING
ENERGY CONSERVATION SWEEPSTAKES

	(Percent)* DENVER GENERAL PUBLIC		
	PRE-TEST	POST-TEST	CHANGE
Don't enter contests/too busy/never gave it a thought	NA	36	NA
Suspicious of intent of contest/don't believe in them	NA	11	NA
Missed deadline for depositing coupon	NA	10	NA
Forgot about contest	NA	8	NA
Saw little chance of winning	NA	5	NA
Wasn't convenient to drop coupon off in store	NA	2	NA
Miscellaneous Answer (wasn't clear, didn't know it was a contest, no interest, paid no attention, out of state at the time, too much little print)	NA	7	NA
Don't know	NA	15	NA
Question not answered	NA	-	NA
N =	-	62	-

*Percentages will total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	20c

TABLE G-4 TYPE OF ENTRY

	Percent
In-store coupon	68
Newspaper coupon	25
Facsimile	5
Other coupon	2

N = 282

TABLE G-5 WHERE SWEEPSTAKES WAS NOTICED (Q. 1)

	Percent *
In-store	39
Rocky Mountain News	22
Denver Post	21
Suburban newspaper	9
Newspaper (unspecified)	6
Public Service Co. enclosure	4
Told by someone else	2
Other	2
Energy Fair	1
Radio	1
TV news	-
Doesn't recall	-

N = 282

TABLE G-6 STORE IN WHICH SWEEPSTAKES WAS NOTICED (Q. 1)
(MAJOR STORES ONLY)

	Percent
Hugh M. Woods	7
Sears, Roebuck	6
Montgomery Wards	4
Target	3
K-Mart	2

N = 109

*Percentages total to more than 100 percent due to multiple mentions.

TABLE G-7 HOW ENTRY WAS SUBMITTED (Q. 2)

	Percent
Noticed in newspaper, entered in-store	49
Noticed in newspaper, mailed in	4
Noticed in-store, entered in-store	39
Noticed in other medium	8
	N = 100

TABLE G-8 STORE IN WHICH ENTRY WAS SUBMITTED (Q. 3)

	Total Percent
Sears, Roebuck	8
Montgomery Wards	6
K-Mart	5
Hugh M. Woods	5
Target	2
Other stores	70
	N = 137

TABLE G-9 DID RESPONDENT TALK TO ANYONE IN-STORE ABOUT ENERGY-CONSERVING PRODUCTS (Q. 4 & 8)

	Total Percent	
Did talk to someone	15	
(from newspaper notice)		(7)
(from in-store notice)		(8)
Did not talk to someone	85	
N =	246	

TABLE G-10 PURCHASE OF ENERGY-CONSERVING PRODUCTS WHILE IN-STORE (Q. 5 & 9)

	Total Percent	
Did purchase products	15	
(from newspaper notice)		(7)
(from in-store notice)		(8)
Did not purchase products	85	
N =	246	

TABLE G-11 ENERGY-CONSERVING PRODUCTS PURCHASED (Q. 5a & 9a)

	Total Percent
Insulation	5
Weatherstripping	4
Storm windows/doors	3
Humidifier	1
Hot water restricter on showerhead	1
Energy-saving product for fireplace	1
Energy-saving product for furnace	-
Insulation for hot water heater	-
Siding	-
Other products	3

N = 246

TABLE G-12 HOW SWEEPSTAKES WAS NOTICED IN-STORE (Q. 6)

	Total Percent	PERCENT WHO FIRST NOTICED SWEEPSTAKES IN-STORE
Display caught respondent's eye	33	84
Clerk called attention to it	3	6
Other	3	9
No answer	60	0
	N = 282	N = 109

TABLE G-13 WAS RESPONDENT ACTUALLY SHOPPING THERE OR PASSING THROUGH (Q. 7)

	Total Percent
Actively shopping there	25
Passing through	9
Don't recall	1
Other	3
No answer	61
	N = 282

TABLE G-14 AWARENESS OF OTHER ADVERTISING ABOUT ENERGY-CONSERVATION PROGRAM (Q. 10)

	Total Percent
Were aware	47
Were not aware	47
Don't recall	3
No answer	3
	N = 282

TABLE G-15 MEDIUM IN WHICH ADVERTISING WAS NOTICED (Q. 10a)

	Total Percent *	PERCENT OF THOSE WHO NOTICED*
Newspaper	21	45
Television	16	33
Public Service Co. Enclosure	9	19
Radio	8	17
In-store	6	13
Literature at work	2	4
Posters; displays	1	2
Other	4	8
Don't recall	4	8
No answer	49	0
	N = 282	N = 132

TABLE G-16 RECALL OF ADVERTISING CONTENT (Q. 10b)

	Total Percent*	PERCENT OF THOSE WHO NOTICED ADVERTISING*
Mentioned mechanics of sweepstakes entries	12	26
Mentioned substantive sweepstakes content	7	16
Stressed conservation/energy savings	8	17
Mentioned need for insulation	6	14
Mentioned color	3	6
Can't recall	14	30
No answer	49	8
	N = 282	N = 132

*Percentages total to more than 100 percent due to multiple mentions.

TABLE G-17 CORRECT COMPLETION OF ADVERTISING SLOGANS (Q. 11)

Correct Completion	Total Percent
"Ford has a better idea"	62
"Products you need - for the life you lead"	40
"Products that save energy pay for themselves"	3

N = 282

TABLE G-18 PRODUCTS MOST INTERESTED IN IF SWEEPSTAKES HAD BEEN WON (Q. 12)

	Total Percent *
Insulation	55
Storm windows/doors	53
Thermostat	14
Solar products	7
Furnace products	5
Thermalpane windows	3
Weatherstripping	3
Electric pilot lights	3
Appliances with energy-saving devices	2
Heating system	2
No answer	4

N = 282

*Percentages total to more than 100 percent due to multiple mentions.

TABLE G-19 ESTIMATED COST OF DESIRED PRODUCTS (Q. 13)

	Total Percent
Under $200	5
$200 - $499	13
$500 - $999	21
$1,000 - $1,499	21
$1,500 - $1,999	12
$2,000 - $2,499	9
$2,500 and over	11
Don't know	5
No answer	2

N = 282

Median estimated cost = $1,180

TABLE G-20 RESPONDENT'S ABILITY TO BUY DESIRED PRODUCTS (Q. 14)

	Total Percent
Able to afford	33
Perhaps able to afford	12
Not able to afford	52
Don't know	2

N = 282

TABLE G-21 PERCENTAGE OF PRESENT UTILITY COSTS WHICH COULD BE SAVED BY ENERGY CONSERVATION (Q. 15)

Percent Saved	Total Percent
0 - 5	7
6 - 10	17
11 - 15	16
16 - 20	16
21 - 30	21
31 - 40	8
41 - 50	9
Over 50	4
Don't know	1

Median percent saved = 18.3

N = 282

TABLE G-22

PERCENTAGE OF UTILITIES SAVINGS DUE TO NEW PRODUCTS VS. ENERGY CONSERVING BEHAVIOR (Q. 15a)

Median percent savings due to new products = 14.4

Median percent savings due to energy conserving behavior = 3.9

N = 282

TABLE G-23

LIKELIHOOD OF U.S. FACING ENERGY SHORTAGE IN NEXT DECADE (Q. 16)

	Total Percent
Energy shortage is likely	76
Energy shortage is not likely	19
Don't know	5
N =	282

TABLE G-24

OPTIONS SELECTED UNDER AN ENERGY COST OF OWNERSHIP SCENARIO (Q. 17)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC	1978 WINTER SURVEY OF GENERAL PUBLIC
Would buy more expensive appliances that conserve energy	73	71	71
Would buy cheaper appliances because original cost cannot be recouped	9	11	15
Don't know	18	18	14
N =	282	357	506

TABLE G-25 ATTITUDES TOWARDS CONSERVATION (Q. 18a & 18b)

Statement		Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC	1978 WINTER SURVEY OF GENERAL PUBLIC
Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living.				
	Agree	46	38	49
	Disagree	50	57	48
	Don't know	4	6	2
	N =	282	357	506
There are others in this nation who use a whole lot mote energy than I do. They are the ones who ought to be forced to conserve.				
	Agree	39	40	42
	Disagree	55	49	55
	Don't know	6	11	3
	N =	282	357	506

TABLE G-26 NORMAL CONTEST/SWEEPSTAKES BEHAVIOR (Q. 19)

	Total Percent	1978 WINTER SURVEY OF GENERAL PUBLIC
Enter contests frequently	16	9
Enter contests occasionally	31	17
Enter contests rarely	45	35
Never enter contests	8	39
N =	282	506

TABLE G-27 MARITAL STATUS (Q. 20)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
Married	88	80
Divorced	4	7
Widowed	1	8
Single	7	5
N =	282	357

TABLE G-28

EDUCATION (Q. 21)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
11th grade or less	10	14
High school graduate	24	37
Some college	22	24
College graduate	27	11
Post graduate	18	15
	N = 282	357

TABLE G-29

AGE (Q. 22)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
Under 18	-	-
18 - 24	4	5
25 - 34	37	26
35 - 44	21	23
45 - 54	20	21
55 - 64	12	14
65 and older	6	12
	N = 282	357
Median age:	39.2 years	43.5 years

TABLE G-30

INCOME (Q. 23)

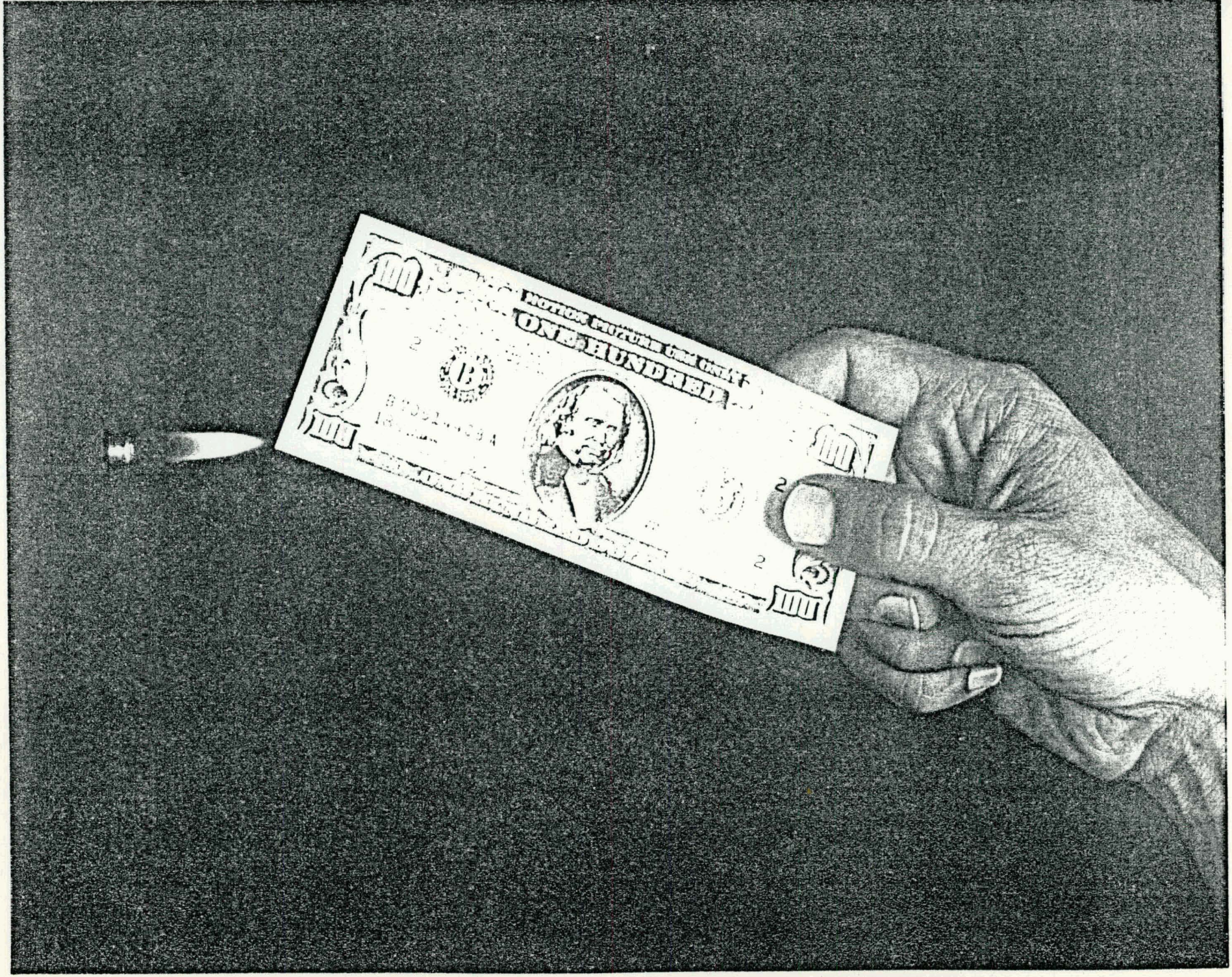
	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
Under $5,000	2	5
$ 5,000 - $9,999	8	11
$10,000 - $14,999	21	18
$15,000 - $19,999	20	22
$20,000 - $24,999	20	16
$25,000 - $29,999	9	7
$30,000 - $34,999	6	6
$35,000 and over	5	7
Refused	9	7
	N = 282	357
Median income:	$18,640	$17,792

TABLE G-31 INTEREST IN MEMBERSHIP IN ENERGY-CONSERVATION-ORIENTED ORGANIZATION (Q.24)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
Would pay to belong	27	22
Interested, but would not pay	15	6
Interested, if respondent were paid	15	14
No interest	43	58
	N = 282	357

TABLE G-32 SEX (Q. 25)

	Total Percent	1977 SUMMER SURVEY OF GENERAL PUBLIC
Men	60	41
Women	39	59
	N = 282	357

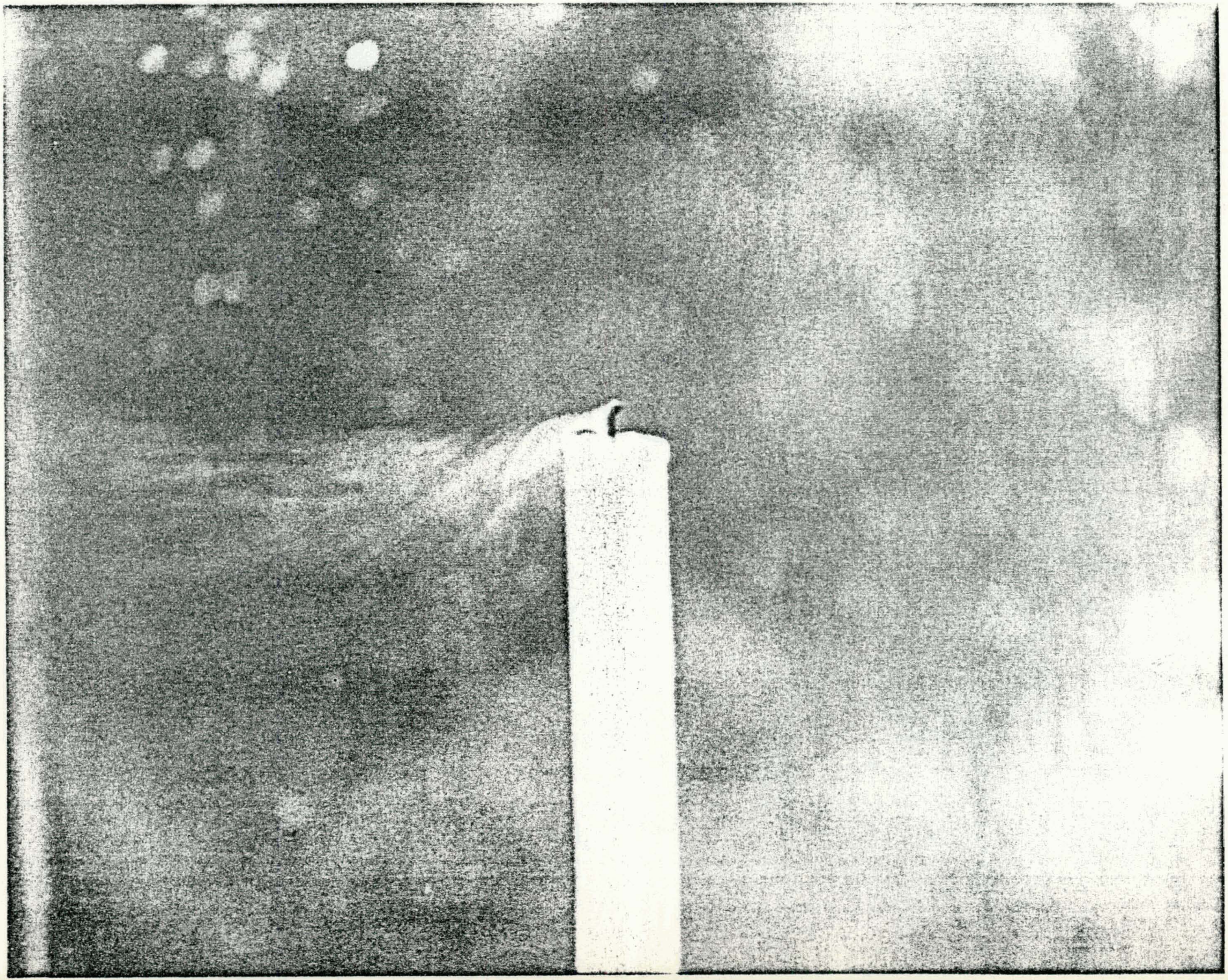

THE FEDERAL RESERVE NOTE
ONE HUNDRED
100
100
100
100

Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Pilot Light"
:30 TV

August 4, 1977

VIDEO		AUDIO
Close up slow motion photo-	SFX:	Mysterious music.
graphy of hand holding a hundred	ANNCR:	You're watching a man being
dollar bill. Camera pans hand.		robbed.
		By a criminal that steals up to
		a hundred dollars from him
Hand is slowly dropping down		every single year.
towards pilot light. Bill	SFX:	Pilot light sound.
ignites.	ANNCR:	The thief. An ordinary pilot
		light.
	SFX:	Bill igniting sound.
Hand holds burning bill.	ANNCR:	Fortunately, there are new
		devices on the market that
		eliminate pilot lights. Sure,
Hand drops bill.		they cost money. But in the
		long run they pay for themselves.
Flaming bill floats to ground		We all need to start asking for
		products that save energy.
Bill burns to ash. Super logo.		If we don't, your money and our
Products that save energy pay		country's fuel will continue
for themselves.		to go up in flames.
	SFX:	End of burning.



Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Insulation"
:30 TV

July 14, 1977

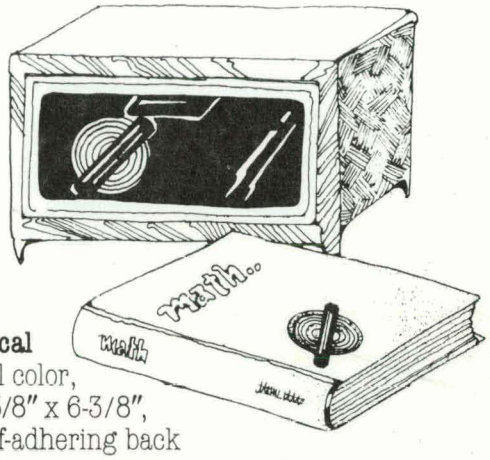
VIDEO		AUDIO
Opening shot master bedroom. A man asleep. Man awakens, leans over to night table to turn on lamp. Power is off. He lights a candle and goes to window. He puts candle on window sill. Camera pans and starts zoom in ECU flame of candle.	SFX: ANNCR:	Thunder and lightening. This man is being robbed. By a criminal that he can't even see. But it's a robbery that can be prevented. And hundreds of dollars saved. All this house needs is storm windows and good insulation. We know it costs money to insulate. But in the long run insulations pays for itself and ends up saving you money. If your house isn't properly insulated it should be Otherwise you're being robbed of your money. And our country is being robbed of its energy.
ECU of flame going out.		
Screen goes to black and super: Products that save energy pay for themselves. ERDA written out.		

We've prepared a brochure and other sales aids that explain in detail "energy cost of ownership." Or "how products that save energy pay for themselves." These materials tie in with the commercials that will be aired in Denver and we think your customers will find them extremely helpful.

If you'd like to order these materials free of charge, just fill out and send in this order form.

Then sit back and think about all the fuel you'll be saving the country. All the money you'll be saving your customers. And all the extra sales you'll be making for yourself.

Poster
full color,
15-1/2" x 24"
☐ _____

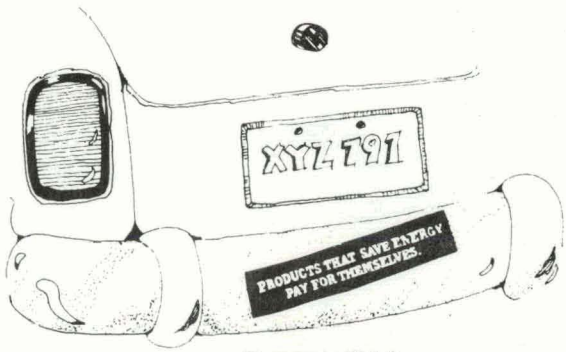


Decal
full color,
4-3/8" x 6-3/8",
self-adhering back
☐ _____

Counter Card
with brochure pocket
full-color,
14" x 16",
easel back
☐ _____

Counter Card Brochure
8-page,
full color,
4" x 8"
☐ _____

Envelope Stuffer
2-page foldout,
2-color,
3-1/2" x 6-1/2"
☐ _____



Bumper Sticker
two-color,
3-1/2" x 16",
self-adhering back
☐ _____

To order any of the materials on this page, check the box and enter quantity needed on the line provided by each product. Fill out information below:

Name _____

Firm's Name _____

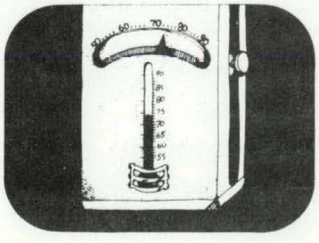
Firm's Address _____

City _____ State _____ Zip _____

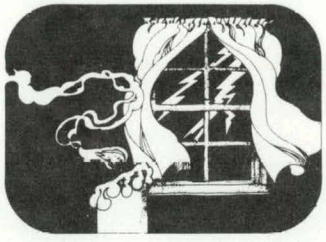
Here is the new radio and television campaign prepared for Denver. These are the first commercials of their kind to run anywhere in the United States.

SOUND EFFECTS:
Mysterious music.
ANNOUNCER:
This man is about to lose his money. To a criminal that steals up to a hundred dollars from him every single year.
SOUND EFFECTS:
Pilot light sound.
ANNOUNCER:
The thief. An ordinary pilot light.
SOUND EFFECTS:
Bill igniting sound.
ANNOUNCER:
Fortunately, there are new devices on the market that eliminate pilot lights. Sure, they cost money. But in the long run they pay for themselves. We all need to start asking for products that save energy. If we don't, your money and our country's fuel will continue to go up in flames.
SOUND EFFECTS:
End of burning.

SOUND EFFECTS:
Snow storm. Wind blowing.
ANNOUNCER:
Watch closely, you're about to witness a robbery.
CHILD:
Mommy, I can't sleep. It's too hot in here.
(dialogue under announcer)
MOM:
It's okay honey, I'll get you some water.
ANNOUNCER:
See that thermostat. It's stealing your money. If it was replaced by a thermostat that automatically turns down the heat at night and back up again in the morning, hundreds of dollars could be saved. Start asking for products that save energy. Otherwise you're being robbed of your money. And our country is being robbed of its energy.



SOUND EFFECTS:
Soft music.
EDITH:
I'm really tired honey.
FRANK:
Yeah, me too. Why don't we just go to sleep.
EDITH:
Did you turn off the lights?
FRANK:
Yeah, I turned off the lights.
EDITH:
Did you lock the back door?
FRANK:
Yeah, I locked the back door, too.
EDITH:
Did you turn down the thermostat?
FRANK:
No, I forgot, I'll just open the window a little.
ANNOUNCER:
This family will be robbed tonight. Because they forgot one little detail before they went to sleep. They forgot to turn down the thermostat. In one winter, their forgetfulness can cost them up to one hundred dollars. Fortunately, there are new kinds of thermostats on the market that automatically turn down the heat in your house at night and back up again in the morning. Sure, they cost more than the old thermostats. But because they conserve fuel they end up paying for themselves and saving you money.
EDITH:
Frank, did you pay the gas bill today?
ANNOUNCER:
Remember, products that save energy pay for themselves. A message from the U.S. Energy Research and Development Administration.



SOUND EFFECTS:
Sound of match lighting a fire.
ANNOUNCER:
There's a fire in your house. And unless you do something about it, it's liable to cost you hundreds of dollars. The fire. It's your pilot light. Fortunately, there are new devices on the market that eliminate pilot lights. They cost money. But in the long run they pay for themselves, and end up saving you money. Start asking for products that save energy. And prevent our country's fuel and your money from going up in flames.
ANNOUNCER:
A message from ERDA.

SOUND EFFECTS:
Creaking doors. Storm blowing.
MUSIC:
Mystery establish and under.
ANNOUNCER:
There's a robber in your house. And he's after your money. You can't see the thief. But you can stop him. From stealing hundreds of dollars from you on your utility bill. All you need to protect you and your house is storm windows and some good insulation. It costs money to insulate. But in the long run insulation pays for itself and ends up saving you money. Have your house insulated. It's your only defense. A message from the U.S. Energy Research and Development Administration.
SOUND EFFECTS:
Music up.

SOUND EFFECTS:
Thunder and lightning.
ANNOUNCER:
This man is being robbed. But it's a robbery that can be prevented. And hundreds of dollars saved. All this house needs is some good insulation and storm windows. Sure these things cost money. But in the long run they pay for themselves and end up saving you money. If your house isn't properly insulated it should be. Otherwise you're being robbed of your money. And our country is being robbed of its energy.

Denver television and radio schedules will run for ten weeks through December 4. Television programs include 60 Minutes every Sunday, NFL games on October 16 and November 6 and 24 plus early morning news, Walter Cronkite at 6 p.m. and late news on Channels 4, 7, and 9. Radio stations include KOA, KLIR and KVOD.

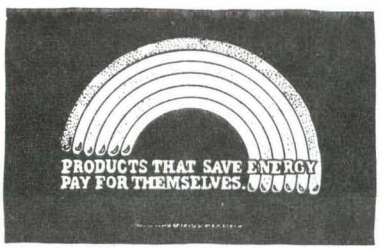
YOU CAN MAKE A FORTUNE BY HELPING YOUR CUSTOMERS SAVE MONEY.

The U.S. Energy Research and Development Administration has just finished preparing an extensive television and radio advertising campaign designed to educate people in Denver about an important new concept. Products that save energy pay for themselves.

The new campaign is not intended to sell any single brand or line of products. Instead it's designed to get your customers to start asking for products that save money.

This advertising program is the first of its kind anywhere in the country. If it works here, and it has to, it will be introduced to the rest of the country.

How can you prepare for your new energy-conscious customers? You can prepare for your energy-conscious customers by reading this folder.



U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

IF EVERYBODY WON THIS CONTEST WE WOULDN'T HAVE AN ENERGY CRISIS

From now until November 30, you can enter a sweepstakes and have a chance at getting your home outfitted from top to bottom with products designed to save energy.

We're giving away ten prizes. Each worth up to $1500. If you're one of the winners, state-approved contractors and architects will come to your home and install products like storm windows, insulation, special set-back thermostats, electronic pilot lights, or anything else that will make your home more energy efficient within the $1500 budget.

If you'd like to enter, just fill out the coupon and take it to one of the stores listed in this ad. Look for the signs that say, "Products That Save Energy Pay for Themselves," and deposit the coupon in the marked boxes. There'll be extra coupons at the stores.

To be eligible to enter, all we ask is that your home be a single-family dwelling and that, if you're a winner, you agree to let us document how much money and fuel you save by having these products in your home.

You see, if the winners of this sweepstakes can convince others to start buying products that save energy, all of us will end up winners.

I want to save energy. Please enter my name in your sweepstakes.
I understand that to be eligible, my home must be a detached single family dwelling. Apartments, condominiums, and townhouses are not eligible.

Name

Address

City State Zip

Winners will be picked by random about December 15, 1977 and will be notified by mail.
The deadline for entering is November 30, 1977.

WE CAN ALL BE WINNERS

Sponsored by the State of Colorado Office of Energy Conservation and the U.S. Department of Energy

NORTHEAST

Adams County Co-Op, 55 West Bromley Lane
Barnett Company, 9400 Wynkoop
East Denver Lumber Co., 4700 Parking House Rd
Fairfax Sentry Hardware, 5225 E. Colfax Ave
Farm & Home Sentry Lumber, 291 1st Ave
Hast Lumber Co., 2401 E. 40th Ave
Hoffman Heights Ace Hardware, 614 Peoria
Hurley Lumber Co., 4540 Wynkoop
J.D. Hardware, 9823 E. Colfax
J.W. Metz Lumber Co., 3751 Fraser
K-Mart, 15300 E. Colfax
Montgomery Ward, 1101 E. 88th Ave
North Avenue Ace Hardware Co., 1030 East Ninth Ave
Patterson Hardware, 10685 Melody Drive
Patterson Hardware, 1500 Peoria
J.C. Penney, 10500 Melody Dr.
Plateau Supply Co., 2301 E. 80th Ave.
Reed Mill & Lumber Co., Inc., 4545 Wynkoop
Ross Hardware, 6420 E. Colfax Ave.
R.W. Sawcrftics, Inc., 5301 Vasquez
Sears, 10696 Melody Drive
Sears, 9401 E. Colfax
Strait Lumber Co., 1124 E. Colfax
Surplus Supply, P.O. Box 1006
Target, 11301 Washington
True Value Hardware, 8851 Washington
United Lumber & Hardware, Inc., 392 Bridge
Hugh M. Woods Co., 13700 E. Colfax Ave

SOUTHEAST

Alpine Lumber, P.O. Box 1113
Belcaro Ace Hardware, 745 S. Colorado Blvd
Big Tool Box, Inc., 2000 S. Havana
Bob's Sentry Hardware, 740 Wilcox
Boulevard Hardware, 1611 S. Colorado Blvd
Chase Lumber Co., 2010 S. Colorado Blvd
Cherry Creek Hardware, 2750 E. 1st Ave
Foster Lumber Co., Inc., 6928 S. Clinton
General Hardware, 600 Broadway
Happy Canyon Hardware, 7686 E. Hampden Ave
House of Plywood, 1095 East Evans
J.D. Hardware, 7375 E. Arapahoe Rd
Jensen Hardware Co., 1700 E. Evans Ave
K-Mart, 2150 S. Monaco Parkway
Kronenberg Lumber Co., 1900 S. Broadway
Englewood Sentry Hardware, 1960 E. Dartmouth Ave
Montgomery Ward, 555 S. Broadway
Montgomery Ward, 1300 S. Havana
Parker Hardware, P.O. Box 103
Patterson Hardware, 2052 E. Arapahoe Rd
J.C. Penney, 2400 S. Colorado Blvd
J.C. Penney, 11301 E. Alameda Ave
Sears, 11200 E. Alameda Ave
Sears, 3001 S. University
Sears, 2375 E. 1st Ave
Target, 1301 E. Virginia Ave
University Hills Ace Hardware, Inc., 2500 So. Co. Blvd
Wheelbarrow True Value Hardware, 2601 Leetsdale Dr.
Hugh M. Woods Co., 1417 So. Holly
Hugh M. Woods Co., 9200 E. Arapahoe Road

Employees of the state and federal governments, Evans and Bartholomew Advertising, participating retailers, and their respective families are not eligible.

NORTHWEST

American Lumber Co., 5930 Lamar
Boulder Lumber Co., 1060 Walnut
Bradfield's Building Supply Center, P.O. Box 801
Clark's Hardware, 1031 Tennyson
Denver Reserve Supply Co., 2555 W. 48th Ave
Dependable Lumber & Supply Co., 1146 6th Street
Foster Lumber Co., Inc., 2960 Walnut
Gateway Lumber Co., 17655 Highway 30
Heights Hardware, 290 Nickel
Hilleret Hardware, 1128 W. 104th
Jerry's Hardware, 1001 Arapahoe
K-Mart, 9980 W. 59th Ave
K-Mart, 1001 W. 88th
S-Mart, 5054 Federal
K-Mart, 7225 W. Colfax
Kopper-Company, Inc., 5601 Fox Street
Kronenberg Lumber Co., 1901 So. U.S. 287
Lakewood Ace Hardware, 2630 W. Colfax
Lake's Hardware, 8345 W. Colfax
J.W. Metz Lumber Co., 6951 W. Colfax
J.W. Metz Lumber Co., 5999 Lamar
Meyer Home Center, Inc., 1301 Arapahoe
Montgomery Ward, 5401 W. 11th Ave
Newman Redwood, 901 W. 52th Ave
J.C. Penney, 6401 W. Colfax
J.C. Penney, 7301 Federal Boulevard
J.C. Penney, 1901 Odkenon
Perl Mack Ace Hardware, 7065 Pecos
RAD Table Mesa Hardware, 6035 Broadway
Ralston Ace Hardware, 9405 Ralston Road
Reddington Lumber Co., 150 W. 90th Place
Ross True Value Hardware, 9417 W. 59th Avenue
Sears, 16585 W. Colfax
Sears, 5015 Pecos
Sears, 8073 Wadsworth
Sterling Lumber & Investment Co., 3900 Jason St
Target, 5699 Wadsworth
Target, 1650 Owens
Hugh M. Woods Co., 2300 W. 104th Ave
Hugh M. Woods Co., 5700 Federal Boulevard
Hugh M. Woods Co., 1430 Oak Street
Woodside Lumber, Inc., 5221 W. 38th Avenue

SOUTHWEST

AHZ Lumber Co., 1095 So. Lipan St.
Bear Valley Ace Hardware, 1001 S. Sheridan Blvd
Buck's Hardware, 6498 S. Broadway
Denver Lumber Co., 1540 So. Santa Fe Dr
Denver Wood Products, 1945 Weld Ave
Evensons Lumber & Hardware Co., Inc., 925 W. Mississippi
Englewood Hardware Co., 3425 S. Acoma
Hartmueller Lumber Co., 1741 So. Wadsworth
Holly Hardware, 2955 W. Hampden
K-Mart, 5750 W. Evans
K-Mart, 200 W. Hebronx Ave
K-Mart, 13989 W. Alameda Parkway
Kellogg Lumber Co., 190 W. Alaska Place
Montgomery Ward, 2500 W. Alameda Ave
J.C. Penney, 2015 N. Hampden Ave
J.C. Penney, 5400 W. Alameda
Rothardt's Ace Hardware, 1975 W. Mississippi
Sears, 3100 S. Sheridan
Stark Lumber Co., 925 W. 1st Avenue
Target, 2155 S. Sheridan
VanHorn's Sentry Hardware, 1955 S. Wadsworth Blvd
Hugh M. Woods Co., 1995 So. Santa Fe Dr


PRODUCTS THAT SAVE ENERGY
PAY FOR THEMSELVES.

Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Thermostat"
:60 Radio

July 19, 1977

SFX: Sound of television on.

EDITH: I'm really tired honey, why don't we go upstairs.

FRANK: Me too.

SFX: Sound of people climbing stairs.

FRANK: I'll be up in a minute, I forgot to turn the TV off.

ANNCR: This family will be robbed tonight. Because they forgot one little detail before they went to sleep. They forgot to turn down the thermostat. In one winter, their forgetfulness can cost them up to one hundred dollars. Fortunately, there are new kinds of thermostats on the market that automatically turn down the heat in your house at night and back up again in the morning. They cost more than the old thermostats. But because they conserve fuel they end up paying for themselves and saving you money.

EDITH: Frank, did you send in the gas bill today?

FRANK: No, I forgot. I'll do it in the morning.

Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Robber in your house"
:30 Radio

July 19, 1977

SFX: Creaking doors. Storm blowing.

MUSIC: Mystery establish and under.

ANNCR: There's a robber in your house. And he's after your your money. You can't see the thief. But you can stop him. From stealing hundreds of dollars from you on your utility bill. All you need to protect you and your house is storm windows and some good insulation. It costs money to insulate. But in the long run insulation pays for itself and ends up saving you money. Have your house insulated. It's your only defense.

SFX: Music up.

Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Fire in your house"
:30 Radio

July 19, 1977

SFX: Sound of match lighting a fire.

ANNCR: There's a fire in your house. And unless you do something about it it's liable to cost you hundreds of dollars. The fire. It's the pilot light on your stove. Fortunately there are new stoves on the market that eliminate pilot lights. They cost a little more. But in the end pay for themselves and wind-up saving you money. Start buying products that save energy. And prevent our country's fuel and your money from going up in flames.

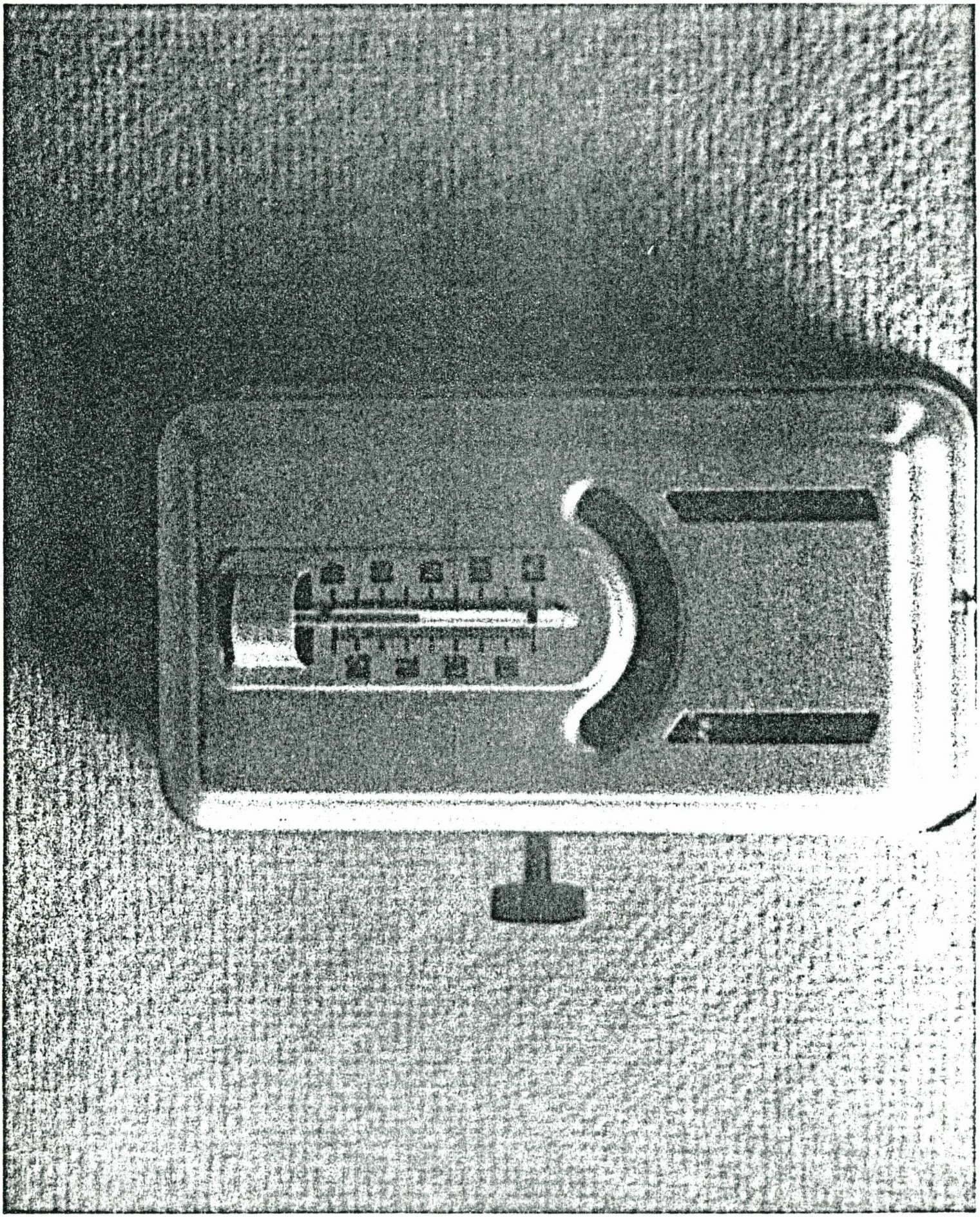
SFX: Sound of large flames.

Evans
& Bartholomew
Advertising
1430 Larimer Square
Denver, Colorado 80202
303-534-2343

ERDA
"Thermostat"
:30 TV

July 27, 1977

VIDEO	AUDIO
Opening shot.	SFX: Snowstorm. Wind blowing.
Mother puts on robe and slippers	CHILD: Child calling from her room. Mommy, I can't sleep. It's too hot in here.
Enters child's room and quiets child. Mother goes to bathroom	ANNCR: A crime is being committed in this house. But the
and gets a glass of water. Camera pans to thermostat. MCU thermostat.	threat to this family goes beyond the stealing of their money. See that thermostat. If it was replaced with an energy saving thermostat that automatically turns down the heat at night, this family could save hundreds of dollars. You have to start asking for products that save energy. Otherwise you're being robbed of your money. And our country is being robbed of its energy.
Extreme close up thermo. Cut back to mother giving water to child. Mother goes to window and opens it. Screen goes to black. Super: Products that save energy pay for themselves. ERDA written out.	



City_____ Questionnaire number _____

Sample Number_____

E R D A S U R V E Y

1. (HAND RESPONDENT CARD A). Imagine for a moment that you were the President of the United States and an advisor handed you that list of things which should be done to solve some of the problems facing the country. Your dilemma is that you've got to assign some priorities to those problems. In other words, some of them have to be considered more important than others.

Each of those cards (HAND SET OF 3 X 5 CARDS) lists one of the priorities on the large sheet. I'd like you to arrange those cards in order so that they reflect the way you view the importance of those priorities. Put the most important priority on top, and so on, so that the least important is on the bottom. (ENTER RANKING FROM CARDS AS 1 TO 12 IN COLUMN A).

CARD 1 OR 5

Priority item:	Rank	(4) Can Do Great Deal	(3) Can Do Something	(2) Can Do Very Little	(1) Can Do Nothing		
a. Reducing the occurrence of violent crimes.	____	____	____	____	____	1____	2____
b. Providing first-rate educational opportunities for young people.	____	____	____	____	____	3____	4____
c. Caring for the elderly.	____	____	____	____	____	5____	6____
d. Reducing the tax burden.	____	____	____	____	____	7____	8____
e. Fighting the problems associated with alcohol and drug abuse.	____	____	____	____	____	9____	10____
f. Reducing air pollution and environmental damage.	____	____	____	____	____	11____	12____
g. Providing jobs for the unemployed.	____	____	____	____	____	13____	14____
h. Making sure there's enough energy to go around.	____	____	____	____	____	15____	16____
i. Reducing corruption in business and government.	____	____	____	____	____	17____	18____
j. Reducing the costs of living and slowing down inflation.	____	____	____	____	____	19____	20____
k. Providing adequate health care.	____	____	____	____	____	21____	22____
l. Reducing racial and religious prejudice.	____	____	____	____	____	23____	24____

ASK Q. 2 ONLY ABOUT THE TOP FOUR PRIORITIES IN Q. 1 AND ITEM "h":

2. Now I'd like to know how much you think that you yourself can contribute to solving each of those top priority problems. As I read each one back to you, I want you to tell me whether you feel you can personally do a great deal, do something, do very little, or do nothing to help solve the problem. (CHECK APPROPRIATE COLUMN ABOVE).

DEPENDING ON ANSWER TO ITEM "h", PREVIOUS PAGE, ASK:

2a. Why do you feel that there's nothing that you can do to help make sure there's enough energy to go around? PROBE. 25___ 26___

OR

2b. What things can you personally do to help make sure there's enough energy to go around? PROBE. 27___ 28___

3. Please tell me if you agree or disagree with the following statements:

	Agree	Disagree	Don't Know	
a. Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living.	___	___	___	29___
b. There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve.	___	___	___	30___
c. The oil companies are doing all they can to help solve the energy problem and should not be criticized so much.	___	___	___	31___

4. Would you favor or oppose each of the following conservation measures being enacted by the government?

	Favor	Don't Know	Oppose	
a. A law prohibiting houses, including existing ones, from being sold unless they had proper levels of insulation.	___	___	___	32___
b. A law prohibiting the sale of new cars that did not meet strict fuel economy standards.	___	___	___	33___
c. A law setting standards for how much energy home appliances could use.	___	___	___	34___
d. A law that set the maximum temperature on home thermostats at 65 so that they could not be adjusted higher.	___	___	___	35___

5. (HAND RESPONDENT CARD SET B.) Listed on those cards are ten energy users commonly found in the home. I'd like you to rank them in order in terms of what you think their average monthly use is. To begin with, what is the biggest energy user? And what is next? (BE SURE THAT RESPONDENT RANKS ALL TEN ITEMS).

		RANK	
a.	Standard refrigerator	____	36____
b.	Color television	____	37____
c.	Average sized water heater	____	38____
d.	Electric blanket	____	39____
e.	Lighting	____	40____
f.	Heating	____	41____
g.	Coffee maker	____	42____
h.	Automatic washer	____	43____
i.	Range	____	44____
j.	Central air conditioning	____	45____

6. The recent upsurge of interest in meeting the present energy problem seems to have led to a whole new technical vocabulary. I'd like to read you some of those terms and I want you to tell me if you've ever heard of the term. (CHECK IN LEFT COLUMN. THEN GO BACK TO THOSE TERMS WHICH ARE FAMILIAR TO RESPONDENT AND ASK: "Can you tell me what (_____) means to you?")

HAVE HEARD OF		DEFINITION:	
_____	a. Retrofitting	_____	46____
_____	b. Life cycle costing	_____	47____
_____	c. Solar energy	_____	48____
_____	d. Blackout	_____	49____
_____	e. R Value	_____	50____
_____	f. Degree day	_____	51____
_____	g. Vanpooling	_____	52____
_____	h. EER	_____	53____
_____	i. Geothermal power	_____	54____
_____	j. Coal gasification	_____	55____
_____	k. Sunshine right of ways	_____	56____
_____	l. Energy cost of ownership	_____	57____

TOTAL: 58,59 ___ ___

7. Some people say that with the cost of energy going up all the time it is better to buy more expensive appliances that conserve energy. Others say that you should buy cheaper appliances because you'll never save enough to pay off the original cost. Which is closer to your opinion? 60____

1_____Buy more expensive appliances
2_____Buy cheaper appliances
3_____Don't know

8. In the past six months or so, have you or your family done anything to increase your own conservation of energy here at home? 61____

1_____Yes 2_____No 3_____Don't know

IF "YES" TO Q. 8:

8a. What have you done?

9. I'd like you to think about this for a moment. Can you tell me four of five ways that an individual or a family can conserve energy at home? (LIST BELOW).

	FEASIBILITY RATING:	
1) _____	_____	62,63___ ___ 64___
2) _____	_____	65,66___ ___ 67___
3) _____	_____	68,69___ ___ 70___
4) _____	_____	71,72___ ___ 73___
5) _____	_____	74,75___ ___ 76___

3-digit respondent number 78,79,80 77____

___ ___ ___

9a. (REPEAT EACH ITEM LISTED IN Q. 9). I'm going to read back all of those means of conserving energy and I'd like you to tell me how practical each of them would be for you or your family. Let's use a 1 to 5 scale, running from 1 = not at all practical, up to 5 = very practical. (ENTER IN RIGHT-HAND COLUMN, ABOVE).

10. (HAND RESPONDENT CARD C). That sheet contains a list of suggested ways that individuals could help conserve energy on a day-to-day basis. Which ones are you (and your family) already doing? Please just tell me the letter of each one. (RECORD IN COLUMN 1 BELOW WITH AN "X").

CARD 2 OR 6

		Doing now (Q. 10) 1.	Would consider (Q. 10a) 2.	Most difficult (Q. 10b) 3.	Most savings (Q. 10d) 4.	Highest first cost (Q. 10e) 5.	Friends have (Q. 10f) 6.	
a.	Turn down the thermostat to 65 in the colder months.	___	___	___	___	___	___	1___
b.	Buy energy conserving appliances and devices which may cost more than conventional items, but which will cost less to operate over the long run.	___	___	___	___	___	___	2___
c.	Drive the car less and use the bus or a carpool.	___	___	___	___	___	___	3___
d.	Install an automatic setback thermostat that automatically lowers the temperature of your house at night.	___	___	___	___	___	___	4___
e.	Install storm windows and storm doors.	___	___	___	___	___	___	5___
f.	Install an automatic light timer that turns your lights on and off.	___	___	___	___	___	___	6___
g.	Install a device which restricts the hot water flow on the head of your shower.	___	___	___	___	___	___	7___
h.	Install weatherstripping.	___	___	___	___	___	___	8___
i.	Install the most efficient insulation.	___	___	___	___	___	___	9___
j.	Install fluorescent light bulbs wherever possible.	___	___	___	___	___	___	10___
k.	Install a chimney flue damper which closes when the furnace is not in use.	___	___	___	___	___	___	11___

		1.	2.	3.	4.	5.	6.	
l.	Install a solar hot water heater.	___	___	___	___	___	___	12___
m.	Install a heat pump.	___	___	___	___	___	___	13___
n.	Next time you purchase a range, get one with an electronic pilot light.	___	___	___	___	___	___	14___
o.	Install an insulating hood for your hot water heater.	___	___	___	___	___	___	15___

FOR THOSE ITEMS ON PREVIOUS LIST WHICH RESPONDENT IS NOT ALREADY USING, ASK Q. 10a THROUGH 10f.:

10a. Which other energy-conserving measures on that list are you and your family most likely to consider? (RECORD WITH AN "X" IN COLUMN 2, PRECEDING PAGE).

10b. Which of all those measures on the list would be the most difficult for you and your family to adopt? (RECORD WITH AN "X" IN COLUMN 3, PRECEDING PAGE).

10c. Why would those measures be difficult for you and your family? (ONLY ASK ABOUT TWO DIFFICULT MEASURES).

(ITEM:_____) 16,17___ ___

_____ 18___

_____

(ITEM:_____) 19,20___ ___

_____ 21___

_____

10d. In your opinion, which of all of those measures would probably result in the greatest savings in both energy consumption and therefore dollars spent on utilities? (RECORD WITH AN "X" IN COLUMN 4, PRECEDING PAGE).

10e. Which of those measures would involve the greatest initial cost to you? (RECORD WITH AN "X" IN COLUMN 5, PRECEDING PAGE).

10f. Do any of your friends use any of the measures listed on that sheet? (RECORD WITH AN "X" IN COLUMN 6, PRECEDING PAGE).

ALL OF QUESTION 11 SHOULD REFER TO THE PRODUCTS IN Q. 10 (ITEMS "d" THROUGH "o" WHICH THE RESPONDENT ALREADY OWNS. ASK THE SERIES OF QUESTIONS (1) THROUGH (7) FOR EACH PRODUCT ALREADY OWNED).

11a. Product owned: (RECORD LETTER FROM Q. 10) _____ 22,23___ ___

(1) How long ago did you buy or install (name of product)? 24____

1____Within last 4 months
2____Within 4-12 months
3____Within 1-2 years
4____Within 3-5 years
5____Over 5 years ago
6____Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 25____

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 26____

1____Yes 2____No 3____Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 27____

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 28____

1____Replacement
2____First time
3____Don't know

FOR ITEMS d, g, j, l and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 29____

1____Yes 2____No 3____Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product). Was it: (READ CHOICES) 30____

1____Up to 1½ times more?
2____1½ times more?
3____Up to 2 times more?
4____More than 2 times more?

11b. Product owned: (RECORD LETTER FROM Q. 10) _____ 31,32___ ___

(1) How long ago did you buy or install (name of product)? 33____

1____Within last 4 months
2____Within 4-12 months
3____Within 1-2 years
4____Within 3-5 years
5____Over 5 years ago
6____Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 34____

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 35____

1____Yes 2____No 3____Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 36____

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 37____

1____Replacement
2____First time
3____Don't know

FOR ITEMS d, g, j, l, and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 38____

1____Yes 2____No 3____Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product)? Was it? (READ CHOICES) 39____

1____Up to 1½ times more?
2____1½ times more?
3____Up to 2 times more?
4____More than 2 times more?

11c. Product owned: (RECORD LETTER FROM Q. 10) _____ 40,41___ ___

(1) How long ago did you buy or install (name of product)? 42____

1____Within last 4 months
2____Within 4-12 months
3____Within 1-2 years
4____Within 3-5 years
5____Over 5 years ago
6____Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 43____

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 44____

1____Yes 2____No 3____Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 45____

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 46____

1____Replacement
2____First time
3____Don't know

FOR ITEMS d, g, j, l, and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 47____

1____Yes 2____No 3____Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product). Was it: (READ CHOICES) 48____

1____Up to 1½ times more?
2____1½ times more?
3____Up to 2 times more?
4____More than 2 times more?

12. I'm going to read you the names of some organizations which might be giving you information on ways that you could effectively help to fight the energy crisis. Then please tell me in each case how much you would tend to believe that organization about information on the energy crisis. That is, would you believe them a lot, some, not much, or not at all? (BEGIN READING LIST AT RED CHECK POINT. BE SURE TO READ THE ENTIRE LIST).

	(3) A Lot	(2) Some	(1) Not Much	(0) Not At All	
1. Business leaders	____	____	____	____	49____
2. The U.S. Energy Research and Development Administration	____	____	____	____	50____
3. The Democratic Party	____	____	____	____	51____
4. Local television stations, such as Channel 2, 4, 7 or 9	____	____	____	____	52____
5. Common Cause	____	____	____	____	53____
6. The Republican Party	____	____	____	____	54____
7. Your favorite radio station	____	____	____	____	55____
8. The major oil companies	____	____	____	____	56____
9. Banks and savings and loans	____	____	____	____	57____
10. The Denver Post	____	____	____	____	58____
11. The Rocky Mountain News	____	____	____	____	59____
12. Public Service Company	____	____	____	____	60____
13. The Chamber of Commerce	____	____	____	____	61____
14. Sears, Roebuck and Company	____	____	____	____	62____
15. Montgomery Ward	____	____	____	____	63____

13. Would you be willing to pay on the average of ten to 15 percent extra to buy appliances that conserve energy and cost less to operate because of lower energy use? 64____

1 ____Yes
2 ____No
3 ____Not sure

14. Would you be willing to pay $200 more the next time you purchase an automobile to get devices that increase gas mileage and, thus, save on gas costs? 65____

1 ____Yes
2 ____No
3 ____Not sure

15. Would you be willing to purchase an automatic set-back thermostat that automatically lowered the temperature of your home at night? 66____

1 ____Yes
2 ____No
3 ____Not sure

16. If you were to equip your house with energy-saving appliances and devices and you were to practice energy conservation (such as lowering the thermostat, turning down lights and so on), what percentage of your present utility costs do you think you could save? (ATTEMPT TO FORCE A GUESS IF RESPONDENT DOESN'T KNOW). _____% 67____

17. Approximately what percentage of your friends and acquaintances actively practice energy conservation in their homes? _____%

68___
69___
70___
BLANK

71-77

3-digit respondent number 78,79,80 ___ ___ ___

---

18. (HAND RESPONDENT CARD D). On that card are a number of products which have come on the market in the last ten years. Which of the products on that list have you or your family purchased? (CHECK IN COLUMN "A", BELOW).

CARD 3 OR 7

	A	(1) When First On The Market	(2) From Friends	(3) Several Years After	
a. A microwave oven	___	___	___	___	1___
b. A C.B. radio	___	___	___	___	2___
c. Automobile seat belts	___	___	___	___	3___
d. Electric lawn clippers	___	___	___	___	4___
e. An FM radio	___	___	___	___	5___
f. A digital watch	___	___	___	___	6___
g. A Polaroid camera	___	___	___	___	7___
h. An automatic drip coffee maker (e.g., Norelco, Mr. Coffee)	___	___	___	___	8___
i. An audio tape recorder (cartridge or cassette)	___	___	___	___	9___
j. A pocket or mini-calculator	___	___	___	___	10___
k. A fish-line "weed eater"	___	___	___	___	11___
l. A food processor	___	___	___	___	12___
m. A refrigerator with an automatic ice maker	___	___	___	___	13___
n. A trash compactor	___	___	___	___	14___
o. A single lens reflex (SLR) camera	___	___	___	___	15___
p. A quadraphonic stereo system	___	___	___	___	16___
q. An electronic video game (e.g., Pong, Odyssey)	___	___	___	___	17___
r. A hot comb	___	___	___	___	18___
s. A video tape recorder	___	___	___	___	19___
t. A diesel engine automobile	___	___	___	___	20___
			Total Score:		21,22___ ___

18a. Now I'm going to back over the products which you have purchased and I'd like you to tell me whether you purchased that product: (READ CHOICES)

(1) when it first came on the market, or
(2) after you had heard about it from friends who owned one, or
(3) several years after it had come on the market.

(CHECK APPROPRIATE COLUMN -- 1, 2 OR 3 -- ABOVE).

19. I'm going to read some more names of individuals and groups which might be giving you information on ways that you could effectively help to fight the energy crisis. Then please tell me in each case how much you would tend to believe that individual or group about information on the energy crisis. That is, would you believe them a lot, some, not much, or not at all? (BEGIN READING LIST AT RED CHECK POINT. BE SURE TO READ THE ENTIRE LIST).

	(3) A Lot	(2) Some	(1) Not Much	(0) Not At All	
1. President Carter	____	____	____	____	23____
2. Your Congressional representative (Pat Schroeder, Tim Wirth, or William Armstrong)	____	____	____	____	24____
3. Senator Gary Hart	____	____	____	____	25____
4. Senator Floyd Haskell	____	____	____	____	26____
5. A group of economists from colleges and universities	____	____	____	____	27____
6. Governor Dick Lamm	____	____	____	____	28____
7. John Love	____	____	____	____	29____
8. A group of scientists and engineers	____	____	____	____	30____
9. Your mayor (Bill McNichols)	____	____	____	____	31____
10. Reynelda Muse	____	____	____	____	32____
11. Gene Amole	____	____	____	____	33____

19a. What public figures or organizations in the Denver area -- either on the list I just read you or any other -- would you tend to have the most faith in, if they were to tell you that you had to make some sacrifices in order to avoid a major energy crisis? PROBE.

_____ 34,35____

_____ 36,37____

_____

Now I'd like to ask you a few questions for statistical purposes only. Remember, your answers will remain completely confidential.

CARD 3 OR 7

20. Are you: (READ CHOICES) 1____Married 3____Widowed 38____
2____Divorced 4____Or single

21. How many people, including yourself, live in your home? _____ 39____

22. What was the last grade you completed in school? 40____

1____Less than 8th grade
2____8th-11th grade
3____12th grade (H.S. graduate)
4____1-3 years of college
5____4 years college (graduate)
6____Post-graduate

23. As I read several age categories, I'd like you to tell me which one best describes your age. 41____

1____Under 18
2____18-24
3____25-34
4____35-44
5____45-54
6____55-64
7____65 and over

24. What type of work does the head of this household do? (PROBE FULLY, FINDING OUT WHAT DUTIES ARE INVOLVED, ETC. IN ORDER TO CATEGORIZE CORRECTLY BELOW). 42,43____

1____Professional (doctor, lawyer, teacher, clergy)
2____Executive, managerial, proprietor (president, vice-president, treasurer, owner)
3____Creative and communications (artists, writers, radio, television, newspapers)
4____Sales (retail sales and small retail store owners)
5____All other sales
6____White collar and civil service (clerical, administrative, supervisory)
7____Transportation (train, car, bus) and service (hotel, restaurant, repairs)
8____Skilled labor, craftsman, foreman (carpenter, machinist, welder, etc.)
9____Semi- and unskilled labor
10____Farmers and farm workers
11____Military
12____Student
13____Retired
14____Other (Specify:_____)

25. (HAND RESPONDENT CARD G). At which of the stores on that card do you have charge accounts? 44____

1____Denver Dry
2____May D&F
3____Montgomery Ward
4____J.C. Penney
5____Sears, Roebuck & Company

26. How many rooms are there in this house? _____ 45____

27. How long have you owned your home here? _____years 46____

28. What would you say is the approximate current market value of your home here -- that is, the amount you would expect to receive if you were to sell it today? 47____

1	Under $15,000	7	$75,000-$99,999
2	$15,000-$24,999	8	$100,000-$149,999
3	$25,000-$34,999	9	$150,000 and over
4	$35,000-$44,999	10	Don't know
5	$45,000-$59,999	11	Refused
6	$60,000-$74,999		

29. What kind of heating system do you have in your home here? 48____

1	Gas	4	Forced air
2	Hot water	5	Natural gas
3	Electric	6	Don't know

30. Do you have air conditioning? 1____Yes 2____No 49____

IF "YES" TO Q. 30: Is it 1____Central, or
2____Window?

31. During this past winter -- say December, January, or February -- what was your average monthly Public Service bill? (INCLUDE THE ADJUSTMENT). 50____

1	Under $20	7	$70-$79
2	$20-$29	8	$80-$89
3	$30-$39	9	$90-$99
4	$40-$49	10	$100 and over
5	$50-$59	11	Don't know
6	$60-$69	12	Refused

32. Do you own an automobile? 1____Yes 2____No

IF "YES" TO Q. 32:

32a. What are the makes and years of your automobiles? (EXCLUDE TRUCKS).

Year	Manufacturer	Make	Check If Compact
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

51____

Foreign Car. . . 52____

Compact. . 53____

(BE CERTAIN TO DETERMINE WHICH CARS, IF ANY, ARE COMPACT AND CHECK IN LAST COLUMN, ABOVE).

33. During the past two years, how many vacations or pleasure trips have you taken in which you traveled by air? 54____

34. Do you belong to any social or civic organizations? 55____

1____Yes 2____No

IF "YES" TO Q. 34:

34a. Which organizations do you belong to? (LIST BELOW).

_____

_____

_____

_____

34b. Have you in the last two or three years served as an officer or director of any of those organizations?

1____Yes 2____No

IF "YES" TO Q. 34b:

34c. How many? _____

35. For statistical purposes only, we need to know your approximate family income for 1976. That is, all money earned from salary or wages or from other sources -- before taxes. I'll read the income categories and you tell me which letter best represents all the money which members of your household earned in 1976. (HAND INCOME CARD). 56____

1	A	Under $5,000	6	F	$25,000-$29,999
2	B	$5,000-$9,999	7	G	$30,000-$34,999
3	C	$10,000-$14,999	8	H	$35,000 and over
4	D	$15,000-$19,999	9		Not sure/refused
5	E	$20,000-$24,999	10		Interviewer estimated income

36. In terms of political affiliation, do you consider yourself to be: 57____

1	A Republican,	4	Refused
2	A Democrat, or	5	Not registered
3	An Independent	6	Don't know

37. Would you be interested in joining a citizen's organization which had as its goal the spreading of energy conserving behavior and attitudes among not only your own family, but among your friends and other families in the neighborhood? 58____

1____Yes 2____No 3____Don't know

IF "YES" TO Q. 37:

37a. Would you be willing to spend $10 a year for membership in such an organization?

1____Yes 2____No 3____Don't know

IF "NO" TO Q. 37a:

37b. How about $5.00 a year?

1____Yes 2____No 3____Don't know

IF "NO" TO Q. 37:

37c. Would you be interested in such an organization if there were financial rewards for energy-conserving behavior? 59____

1____Yes 2____No 3____Don't know

INTERVIEWER SHOULD RECORD, BUT NOT ASK:

38. Sex of respondent: 1____Male 2____Female 60____

39. Ethnic classification: 1____Anglo 3____Hispano 61____
2____Black 4____Other

40. Respondent's name_____ 62____

41. Address_____ Telephone_____ 63____

42. Date of interview_____ 64____

43. Length of interview_____ 65____

44. Name of interviewer_____ 66____

67-76 BLANK

77 ____

3-digit respondent number 78,79,80 ___ ___ ___

City _____ Questionnaire Number _____

Sample Number _____

D O E S U R V E Y

1. (HAND RESPONDENT CARD A). Imagine for a moment that you were the President of the United States and an advisor handed you that list of things which should be done to solve some of the problems facing the country. Your dilemma is that you've got to assign some priorities to those problems. In other words, some of them have to be considered more important than others.

   Each of those cards (HAND SET OF 3 x 5 CARDS) contains one of the priorities listed on the large sheet. I'd like you to arrange those cards in order so that they reflect the way you view the importance of those priorities. Put the most important priority on top, and so on, so that the least important is on the bottom. (ENTER RANKING FROM CARDS AS 1 TO 12 IN COLUMN A).

Priority Item:		Rank	CARD 1 OR 4
a.	Reducing the occurrence of violent crimes.	____	1 ____
b.	Providing first-rate educational opportunities for young people.	____	2 ____
c.	Caring for the elderly.	____	3 ____
d.	Reducing the tax burden.	____	4 ____
e.	Fighting the problems associated with alcohol and drug abuse.	____	5 ____
f.	Reducing air pollution and environmental damage.	____	6 ____
g.	Providing jobs for the unemployed.	____	7 ____
h.	Making sure there's enough energy to go around.	____	8 ____
i.	Reducing corruption in business and government.	____	9 ____
j.	Reducing the costs of living and slowing down inflation.	____	10 ____
k.	Providing adequate health care.	____	11 ____
l.	Reducing racial and religious prejudice.	____	12 ____

2. Let's take the energy priority for a moment. I'd like to know how much you think that you yourself can contribute to solving the problem of "making sure there's enough energy to go around". I want you to tell me whether you feel you can personally do a great deal, do something, do very little, or do nothing to help make sure there's enough energy to go around.

   4 ___ Do a great deal
   3 ___ Can do something
   2 ___ Can do very little
   1 ___ Can do nothing

   13 ____

3. Please tell me if you agree or disagree with the following statements:

	Agree	Disagree	Don't Know	
a. Conservation is not a realistic solution to the energy crisis unelss we are all prepared to accept a much lower standard of living.	____	____	____	14 ____
b. There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve.	____	____	____	15 ____

4. Would you favor or oppose each of the following conservation measures being enacted by the government?

	Favor	Oppose	Don't Know	
a. A law prohibiting houses, including existing ones, from being sold unless they had proper levels of insulation.	____	____	____	16 ____
b. A law setting standards for how much energy home appliances could use.	____	____	____	17 ____

5. (HAND RESPONDENT CARD SET B.) Listed on those cards are ten energy users commonly found in the home. I'd like you to rank them in order in terms of what you think their average monthly use is. To begin with, what is the biggest energy user? And what is next? (BE SURE THAT RESPONDENT RANKS ALL TEN ITEMS).

	Rank	
a. Standard refrigerator	____	18 ____
b. Color television	____	19 ____
c. Average sized water heater	____	20 ____
d. Electric blanket	____	21 ____
e. Lighting	____	22 ____
f. Heating	____	23 ____
g. Coffee maker	____	24 ____
h. Automatic washer	____	25 ____
i. Range	____	26 ____
j. Central air conditioning	____	27 ____

6. The recent upsurge of interest in meeting the present energy problem seems to have led to a whole new technical vocabulary. I'd like to read you some of those terms and I want you to tell me if you've ever heard of the term as it relates to the energy situation. (CHECK IN LEFT COLUMN. THEN GO BACK TO THOSE TERMS WHICH ARE FAMILIAR TO RESPONDENT AND ASK: "Can you tell me what (_____) means to you?")

HAVE HEARD OF		DEFINITION:	
_____	a.	Retrofitting _____	28 ____
_____	b.	Life cycle costing _____	29 ____
_____	c.	Solar energy _____	30 ____
_____	d.	Blackout _____	31 ____
_____	e.	R Value _____	32 ____
_____	f.	Degree day _____	33 ____
_____	g.	Vanpooling _____	34 ____
_____	h.	EER _____	35 ____
_____	i.	Geothermal power _____	36 ____
_____	j.	Coal gasification _____	37 ____
_____	k.	Sunshine right of ways _____	38 ____
_____	l.	Energy cost of ownership _____	39 ____
		TOTAL SCORE:	40, 41 __ __

7. Some people say that with the cost of energy going up all the time it is better to buy more expensive appliances that conserve energy. Others say that you should buy cheaper appliances because you'll never save enough to pay off the original cost. Which is closer to your opinion?

1 _____ Buy more expensive appliances

2 _____ Buy cheaper appliances

3 _____ Don't know 42 _____

IF ALTERNATIVE 1 ("BUY MORE EXPENSIVE APPLIANCES") WAS CHOSEN, ASK Q. 7a AND 7b:

7a. Eventually, the money saved due to lower energy usage should offset the higher initial cost of those energy-saving appliances. How soon would you reasonably expect to recoup the cost -- through lower operating costs -- of an energy-saving appliance which cost 10 percent more than a conventional appliance?

_____ months or _____ years 43 _____

7b. And how soon would you reasonably expect to recoup the cost of an energy-saving appliance which cost 20 percent more than a conventional appliance?

_____ months or _____ years 44 _____

---

8. In the past year or so, have you or your family done anything to increase your own conservation of energy here at home?

1 _____ Yes 2 _____ No 3 _____ Don't know 45 _____

46 _____

IF "YES" TO Q. 8:

8a. What have you done?

---

9. If America conserves energy, do you think your standard of living will go up, will go down or stay about the same?

1 ___ Will go up 2 ___ Stay the same 47 _____

3 ___ Will go down 4 ___ Don't know

48 _____

10. (HAND RESPONDENT CARD C). That sheet contains a list of suggested ways that individuals could help conserve energy on a day-to-day basis. Which ones are you (and your family) already doing? Please just tell me the letter of each one. (RECORD IN COLUMN 1 BELOW WITH AN "X").

	Doing now (Q. 10) 1.	Would consider (Q. 10a) 2.	Most difficult (Q. 10b) 3.	Most savings (Q. 10d) 4.	Highest first cost (Q. 10e) 5.	Friends have (Q. 10f) 6.	
a. Turn down the thermostat to 65 in the colder months.							49
b. Buy energy conserving appliances and devices which may cost more than conventional items, but which will cost less to operate over the long run.							50
c. Drive the car less and use the bus or a carpool.							51
d. Install an automatic setback thermostat that automatically lowers the temperature of your house at night.							52
e. Install storm windows and storm doors.							53
f. Install an automatic light timer that turns your lights on and off.							54
g. Install a device which restricts the hot water flow on the head of your shower.							55
h. Install weatherstripping.							56
i. Install the most efficient insulation.							57
j. Install fluorescent light bulbs wherever possible.							58
k. Install a chimney flue damper which closes when the furnace is not in use.							59

		1.	2.	3.	4.	5.	6.	
l.	Install a solar hot water heater.							60
m.	Install a heat pump.							61
n.	Next time you purchase a range, get one with an electronic pilot light.							62
o.	Install an insulating hood for your hot water heater.							63

FOR THOSE ITEMS ON PREVIOUS LIST WHICH RESPONDENT IS NOT ALREADY USING, ASK Q. 10a THROUGH 10f.:

10a. Which other energy-conserving measures on that list are you and your family most likely to consider? (RECORD WITH AN "X" IN COLUMN 2, PRECEDING PAGE).

10b. Which of all those measures on the list would be the most difficult for you and your family to adopt? (RECORD WITH AN "X" IN COLUMN 3, PRECEDING PAGE).

10c. Why would those measures be difficult for you and your family? (ONLY ASK ABOUT TWO DIFFICULT MEASURES).

(ITEM:_____) 64,65 ___ ___

_____ 66 ___

_____

(ITEM:_____) 67,68 ___ ___

_____ 69 ___

_____

10d. In your opinion, which of all of those measures would probably result in the greatest savings in both energy consumption and therefore dollars spent on utilities? (RECORD WITH AN "X" IN COLUMN 4, PRECEDING PAGE). 70 ___

10e. Which of those measures would involve the greatest initial cost to you? (RECORD WITH AN "X" IN COLUMN 5, PRECEDING PAGE). 71 ___ 72 ___ 73 ___ 74 ___

10f. Do any of your friends use any of the measures listed on that sheet? (RECORD WITH AN "X" IN COLUMN 6, PRECEDING PAGE). 75 ___ 76 ___

77 1

Three-digit Respondent number 78,79,80 ___ ___ ___

HAND RESPONDENT CARD D

CARD 2 OR 5

11. Here is a list of products which have shown up recently in hardware and home maintenance departments in Denver stores. Have you purchased any of the products on that list within the last four or five months? (CHECK IF PURCHASED.)

HAVE PURCHASED			
____	1.	Attic vents	1 ____
____	2.	Ceiling insulation	
____	3.	Weatherstripping/caulking	
____	4.	Storm windows and doors	
____	5.	Pipe and water heater insulation	
____	6.	Double-glazing insulated windows	
____	7.	Reflective film	
____	8.	Set-back thermostat	
____	9.	Pilot light conversion kit	
____	10.	Electronically lit gas stove	
____	11.	Power attic vent	
____	12.	Exhaust fan	

12. FOR EACH PRODUCT PURCHASED IN Q. 11, ASK SERIES a THROUGH i.

NAME OF PRODUCT MENTIONED IN Q. 11: _____ 2,3 __

a. Please think back a moment to the time when you purchased (name of product). What was the name of the store where you bought it? 4 ____

_____ 5 ____

b. Was it a replacement for a worn-out product or was it the first time you had purchased a (name of product)?

1 ___ Replacement 2 ___ First time 3 ___ Don't know 4 ___ Addition 6 ____

c. Did you intend to buy a (name of product) before you went into (name of store) or did you decide to buy it (them) once you were in the store?

1 ___ Previous intent 2 ___ Impulse

3 ___ Other (specify: _____) 4 ___ Don't know 7 ____

d. What made you decide to buy a (name of product) at that time? PROBE

_____ 8 ____

_____ 9 ____

e. Had you seen or heard anything about (name of product) prior to buying it? 1 ___ Yes 2 ___ No 3 ___ Don't know 10 ____

IF YES TO Q. e: f. What had you heard and where had you heard it?

WHAT HEARD: _____ 11 ____

WHERE HEARD: _____ 12 ____

g. Can you tell me how much (name of product) cost you? $_____ 13 ____

h. Will you ever make up the cost of (name of product) in terms of the energy costs you might save? 1 ___ Yes 2 ___ No 3 ___ Don't Know 14 ____

IF YES TO Q.h: i. How long will it take before that (cost of product) is made up in energy savings? _____ 15 ____

NAME OF PRODUCT MENTIONED IN Q. 11: _____ 16,17 ___ ___

a. Please think back a moment to the time when you purchased (name of product). What was the name of the store where you bought it? 18 ___ 19 ___

_____

b. Was it a replacement for a worn-out product or was it the first time you had purchased a (name of product)?

1 ___ Replacement 2 ___ First time 3 ___ Don't know 4 ___ Addition 20 ___

c. Did you intend to buy a (name of product) before you went into (name of store) or did you decide to buy it (them) once you were in the store?

1 ___ Previous intent 2 ___ Impulse

3 ___ Other (specify: _____) 4 ___ Don't know 21 ___

d. What made you decide to buy a (name of product) at that time? PROBE

_____ 22 ___

_____ 23 ___

e. Had you seen or heard anything about (name of product) prior to buying it? 1 ___ Yes 2 ___ No 3 ___ Don't know 24 ___

IF YES TO Q. e: f. What had you heard and where had you heard it?

WHAT HEARD: _____ 25 ___

WHERE HEARD: _____ 26 ___

g. Can you tell me how much (name of product) cost you? $_____ 27 ___

h. Will you ever make up the cost of (name of product) in terms of the energy costs you might save? 1 ___ Yes 2 ___ No 3 ___ Don't Know 28 ___

IF YES TO Q.h: i. How long will it take before that (cost of product) is made up in energy savings? _____ 29 ___

13. Would you be willing to pay on the average of ten to 15 percent extra to buy appliances that conserve energy and cost less to operate because of lower energy use?

1 ___ Yes 2 ___ No 3 ___ Not sure 30 ___

14. Would you be willing to pay $200 more the next time you purchase an automobile to get devices that increase gas mileage and, thus, save on gas costs?

1 ___ Yes 2 ___ No 3 ___ Not sure 31 ___

15. Would you be willing to purchase an automatic set-back thermostat that automatically lowered the temperature of your home at night?

1 ___ Yes 2 ___ No 3 ___ Not sure 32 ____

15a. Let me explain what I mean by an automatic set-back thermostat. This device essentially would help people conserve energy by automatically adjusting the thermostat to pre-selected temperatures, although at all times the automatic adjustments could easily be over-ridden by the consumer if he wanted to do so. Would you be willing to purchase an automatic set-back thermostat that would automatically lower the temperature of your home at night to the temperature which you selected and would then automatically increase the temperature in the morning to your selected temperature?

1 ___ Would purchase 2 ___ Would not 3 ___ Not sure 33 ____

---

16. If you were to equip your house with new energy-saving products and if you were to practice more energy conservation than you presently do, what percentage of your present utility costs do you think you could save? (ATTEMPT TO FORCE A GUESS IF RESPONDENT DOES NOT KNOW)

_____% 34 ____

16a. How much of that (_____%) which you feel you could save would be due to the new products and how much would be due to practicing more energy conservation? (FORCE GUESS)

_____% due to new products 35 ____

____ % due to conservation 36 ____

(THESE PERCENTAGES SHOULD TOTAL TO THE PERCENTAGE RECORDED IN Q. 16 ABOVE)

---

17. Approximately what percentage of your friends and acquaintances actively practice energy conservation in their homes? _____% 37 ____

---

18. I'm going to read you the names of some organizations and individuals which might be giving you information on ways that you could effectively help to fight the energy crisis. Then please tell me in each case how much you would tend to believe that organization or individual's information on the energy crisis. That is, would you believe them a lot, some, not much, or not at all? (BEGIN READING LIST AT RED CHECK POINT. BE SURE TO READ THE ENTIRE LIST).

	(3) A lot	(2) Some	(1) Not much	(0) Not at all	
1. The U.S. Department of Energy	____	____	____	____	38 ____
2. Local television stations, such as Channel 2, 4, 7, or 9	____	____	____	____	39 ____
3. Your Congressional representative (Pat Schroeder, Tim Wirth, or William Armstrong)	____	____	____	____	40 ____
4. Your favorite radio station	____	____	____	____	41 ____
5. Public Service Company	____	____	____	____	42 ____
6. The Denver Post	____	____	____	____	43 ____
7. The Rocky Mountain News	____	____	____	____	44 ____
8. Sears, Roebuck and Company	____	____	____	____	45 ____
9. Montgomery Ward	____	____	____	____	46 ____
10. President Carter	____	____	____	____	47 ____
11. A group of scientists and engineers	____	____	____	____	48 ____
12. A group of economists from colleges and universities	____	____	____	____	49 ____

HAND RESPONDENT CARD E WITH LIST OF ORGANIZATIONS AND INDIVIDUALS.

18a. Which of the organizations or individuals on that list would you tend to believe in most when it came to information on the energy situation? _____ 50 ____

18b. Why would you tend to believe information from that source? PROBE _____ 51 ____

_____ 52 ____

18c. And which on that list would you tend to believe least of all when it came to information on the energy situation? _____ 53 ____

18d. Why is that? PROBE _____ 54 ____

_____ 55 ____

19. Have you noticed or heard -- in the last several months -- any commercials or ads in local newspapers, TV, radio or in stores which stressed energy conservation?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF YES TO Q.19:

19a. Where did you see or hear such advertising?

1 ___ TV 2 ___ radio 3 ___ newspaper

4 ___ in-store 5 ___ Don't know 56 _____

19b. Can you describe any of those ads for me? PROBE

_____ 57 _____

_____ 58 _____

SHOW RESPONDENT NEWSPAPER REPRINT.

20. Do you recall seeing this ad in any of the local papers?

1 ___ Yes 2 ___ No 3 ___ Don't know 59 _____

IF YES TO Q. 20:

20a. Did you enter the contest pictured there?

1 ___ Yes 2 ___ No 3 ___ Don't know 60 _____

20b. Why did you enter? PROBE

_____

_____ 61

20c. Why didn't you enter? PROBE

_____

_____ 62 _____

SHOW RESPONDENT TV STILL #1

21. Do you recall seeing this commercial on television recently?

1 ___ Yes 2 ___ No 3 ___ Don't know 63 _____

IF YES TO Q.21: 21a. Can you tell me something about that commercial -- what it showed, what it said, etc. PROBE

_____ 64 _____

_____ 65 _____

21b. What was your reaction to the commercial -- positive, negative, neutral?

1 __ positive 2 __ negative 3 __ neutral

4 __ don't recall 66 _____

21c. Why did you react that way? PROBE

_____ 67 _____

_____ 68 _____

SHOW RESPONDENT TV STILLS #2 AND 3

22. Do you recall seeing this commercial on television recently?

1 ___ Yes 2 ___ No 3 ___ Don't know 69 _____

IF YES TO Q.22: 22a. Can you tell me something about that commercial -- what it showed, what it said, etc. PROBE

_____ 70 _____

_____ 71 _____

22b. What was your reaction to the commercial -- positive, negative, neutral?

1 __ positive 2 ___ negative 3 __ neutral
4 __ don't recall 72 _____

22c. Why did you react that way? PROBE

_____ 73 _____

_____ 74 _____

75 _____

76 _____

77 2
three-digit resp. number
78,79,80 ___ ___ ___

SHOW RESPONDENT TV STILLS #4 AND 5 CARD 3 OR 6

23. Do you recall seeing this commercial on television recently?

1 ___ Yes 2 ___ No 3 ___ Don't know 1 _____

IF YES TO Q.23: 23a. Can you tell me something about that commercial -- what it showed, what it said, etc. PROBE

_____ 2 _____

_____ 3 _____

23b. What was your reaction to the commercial -- positive, negative, neutral?

1 __ positive 2 __ negative 3 __ neutral

4 __ don't recall 4 _____

23c. Why did you react that way? PROBE

_____ 5 _____

_____ 6 _____

IF RESPONDENT RECALLED SEEING ANY OF THE THREE COMMERCIALS, ASK Q.24 AND 24a IF APPROPRIATE.

24. Was there any slogan or tag-line which was common to those three TV commercials? 1 __ Yes 2 __ No 3 __ Don't know

IF YES TO Q.24: 24a. What did that slogan say? _____

_____ 7 _____

_____

25. Now I'm going to read you some incomplete sentences from commercial messages; that is, part of the sentence is missing. As I read each one, I'd like you to complete it with the first thing that comes to mind. For example:

a. "Ford has a better (BLANK) _____ 8 ____

and next:

b. "Products that save energy (BLANK) _____

_____ 9 ____

25a. The correct slogan is "Products that save energy pay for themselves". What do you interpret that slogan to mean? PROBE

_____ 10 ____

_____ 11 ____

---

26. SHOW RESPONDENT IN-STORE MATERIALS.

Do you recall seeing -- in the last three or four months -- any product displays in local stores which looked like this?

1 ___ Yes 2 ___ No 3 ___ Don't know 12 ____

IF YES TO Q.26:

26a. Do you recall which stores you saw them in? _____ 13 ____

_____ 14 ____

26b. Did you ask anyone in the store what they stood for or meant? 1 ___ Yes 2 ___ No 3 ___ Don't know 15 ____

IF YES TO Q.26b: 26c. Did they tell you?

1 ___ Yes 2 ___ No 3 ___ Don't know 16 ____

26d. Did you end up buying any energy-saving products after seeing those displays?

1 ___ Yes 2 ___ No 3 ___ Don't know 17 ____

IF YES TO Q.26d: 26e. What products did you buy? _____ 18 ____

_____ 19 ____

26f. What is overall reaction to those displays -- positive, negative or neutral?

1 ___ positive 2 ___ neutral 3 ___ negative

4 ___ don't know 20 ____

26g. Why do feel that way? PROBE _____

_____ 21 ____

_____ 22 ____

27. Have you attended the recent Home and Garden show at the Currigan Convention Center? 1 ___ Yes 2 ___ No 3 ___ Don't know 23 _____

IF YES TO Q.27: 27a. Did you notice the energy machine which was displayed there ?

1 ___ Yes 2 ___ No 3 ___ Don't know 24 _____

IF YES TO Q.27a: 27b. What was your reaction to that energy machine? PROBE.

_____

_____

_____ 25 _____

28. In general, how often do you usually enter contests or sweepstakes which appear in newspapers, magazines, or in-store promotions? (READ CHOICES) Do you usually enter them frequently, occasionally, rarely, or not at all?

1 ___ frequently 3 ___ rarely

2 ___ occasionally 4 ___ not at all 26 _____

GO TO THE NEXT PAGE

Now I'd like to ask you a few questions for statistical purposes only. Remember, your answers will remain completely confidential.

29. Are you: (READ CHOICES)
1 ___ Married
2 ___ Divorced/ Separated
3 ___ Widowed
4 ___ Or single
27 _____

30. How many people, including yourself, live in your home? _____ 28 _____

31. What was the last grade you completed in school?

1 ___ Less than 8th grade
2 ___ 8th-11th grade
3 ___ 12th grade (H.S. graduate)
4 ___ 1-3 years of college
5 ___ 4 years college (graduate)
6 ___ Post-graduate
29 _____

32. As I read several age categories, I'd like you to tell me which one best describes your age.

1 ___ Under 18
2 ___ 18-24
3 ___ 25-34
4 ___ 35-44
5 ___ 45-54
6 ___ 55-64
7 ___ 65 and over
30 _____

33. What type of work does the head of this household do? (PROBE FULLY, FINDING OUT WHAT DUTIES ARE INVOLVED, ETC. IN ORDER TO CATEGORIZE CORRECTLY BELOW).

1 _____ Professional (doctor, lawyer, teacher, clergy)
2 _____ Executive, managerial, proprietor (president, vice president, treasurer, owner)
3 _____ Creative and communications (artists, writers, radio, television, newspapers)
4 _____ Sales (retail sales and small retail store owners)
5 _____ All other sales
6 _____ White collar and civil service (clerical, administrative, supervisory)
7 _____ Transportation (train, car, bus) and service (hotel, restaurant, repairs)
8 _____ Skilled labor, craftsman, foreman (carpenter, machinist, welder, etc.)
9 _____ Semi-and unskilled labor
10 _____ Farmers and farm workers
11 _____ Military
12 _____ Student
13 _____ Retired
14 _____ Other (Specify: _____)
31,32 ___ ___

34. (HAND RESPONDENT CARD F). At which of the stores on that card do you have charge accounts?

1 ___ Denver Dry
2 ___ May D&F
3 ___ Montgomery Ward
4 ___ J.C. Penney
5 ___ Sears, Roebuck & Company
6 ___ None
33 _____

35. How long have you owned your home here? _____ years 34 ____

36. What would you say is the approximate current market value of your home here -- that is, the amount you would expect to receive if you were to sell it today?

1 ___	Under $15,000	7 ___	$75,000-$99,999
2 ___	$15,000-$24,999	8 ___	$100,000-$149,999
3 ___	$25,000-$34,999	9 ___	$150,000 and over
4 ___	$35,000-$44,999	10 ___	Don't know
5 ___	$45,000-$59,999	11 ___	Refused
6 ___	$60,000-$74,999	12 ___	Interviewer Estimate

35 ____

37. What kind of heating system do you have in your home here?

1 ____	Gas	4 ___	Forced air
2 ____	Hot water	5 ___	Natural gas
3 ____	Electric	6 ___	Oil
		7 ___	Don't know

36 ____

38. Do you have air conditioning? 1 ___ Yes 3 ___ No

IF YES TO Q.38: Is it 1 ___ Central, or
2 ___ Window (or swamp)?

37 ____

39. During this winter -- say December, January and February -- what has been your average monthly utilities bill?

1 ___	Under $20	7 ___	$70-$79
2 ___	$20-$29	8 ___	$80-$89
3 ___	$30-39	9 ___	$90-$99
4 ___	$40-$49	10 ___	$100 and over
5 ___	$50-$59	11 ___	Don't know
6 ___	$60-$69	12 ___	Refused

38 ____

40. Do you belong to any social or civic organizations? 39 ____

1 ___ Yes 2 ___ No

IF YES TO Q.40: 40a. Have you in the last two or three years served as an officer or director of any of those organizations?

1 ___ Yes 2 ___ No

IF YES TO Q.40a: 40b. How many organizations have you served as an officer or director?

_____

41. For statistical purposes only, we need to know your approximate family income for 1977. That is, all money earned from salary or wages or from other sources -- before taxes. I'll read the income categories and you tell me which letter best represents all the money which members of your household earned in 1977. (HAND INCOME CARD).

1 ___	A Under $5,000	6 ___	F $25,000-$29,999	
2 ___	B $5,000-$9,999	7 ___	G $30,000-$34,999	
3 ___	C $10,000-$14,999	8 ___	H $35,000 and over	
4 ___	D $15,000-$19,999	9 ___	Not sure/refused	
5 ___	E $20,000-$24,999	10 ___	Interviewer estimated income	40 ____

42. In terms of political affiliation, do you consider yourself to be:

1 ___	A Republican	4 ___	Refused	
2 ___	A Democrat, or	5 ___	Not registered	
3 ___	An Independent	6 ___	Don't know	41 ____

43. Would you be interested in joining a citizen's organization which had as its goal the spreading of energy conserving behavior and attitudes among not only your own family, but among your friends and other families in the neighborhood?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF YES TO Q.43:

43a. Would you be willing to spend $10 a year for membership in such an organization?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF NO OR DON'T KNOW TO Q.43a:

43b. How about $5.00 a year?

1 ___ Yes 2 ___ No 3 ___ Don't know 42 ____

IF NO TO Q.43:

43c. Would you be interested in such an organization if there were financial rewards for energy-conserving behavior?

1 ___ Yes 2 ___ No 3 ___ Don't know 43 ____

INTERVIEWER SHOULD RECORD, BUT NOT ASK:

44. Sex of respondent: 1 _____ Male 2 _____ Female 44 ____

45. Ethnic classification: 1 _____ Anglo 3 _____ Hispano
2 _____ Black 4 ___ Other
5 _____ Don't know 45 ____

46. Respondent's name _____ _____ 46 ____

47. Address _____ Telephone _____ 47 ____

48. Date of interview _____ 48 ___

49. Length of interview _____ 49 ____

50. Name of interviewer ___ _____ 50 ____

51-76 BLANK

77 3

3-digit resp. no. 78,79,80 ___ ___ ___

City_____ Questionnaire number _____

Sample Number_____

E R D A S U R V E Y

1. (HAND RESPONDENT CARD A). Imagine for a moment that you were the President of the United States and an advisor handed you that list of things which should be done to solve some of the problems facing the country. Your dilemma is that you've got to assign some priorities to those problems. In other words, some of them have to be considered more important than others.

Each of those cards (HAND SET OF 3 X 5 CARDS) lists one of the priorities on the large sheet. I'd like you to arrange those cards in order so that they reflect the way you view the importance of those priorities. Put the most important priority on top, and so on, so that the least important is on the bottom. (ENTER RANKING FROM CARDS AS 1 TO 12 IN COLUMN A).

CARD 5

Priority item:	Rank	(4) Can Do Great Deal	(3) Can Do Something	(2) Can Do Very Little	(1) Can Do Nothing		
a. Reducing the occurrence of violent crimes.	____	____	____	____	____	1____	2____
b. Providing first-rate educational opportunities for young people.	____	____	____	____	____	3____	4____
c. Caring for the elderly.	____	____	____	____	____	5____	6____
d. Reducing the tax burden.	____	____	____	____	____	7____	8____
e. Fighting the problems associated with alcohol and drug abuse.	____	____	____	____	____	9____	10____
f. Reducing air pollution and environmental damage.	____	____	____	____	____	11____	12____
g. Providing jobs for the unemployed.	____	____	____	____	____	13____	14____
h. Making sure there's enough energy to go around.	____	____	____	____	____	15____	16____
i. Reducing corruption in business and government.	____	____	____	____	____	17____	18____
j. Reducing the costs of living and slowing down inflation.	____	____	____	____	____	19____	20____
k. Providing adequate health care.	____	____	____	____	____	21____	22____
l. Reducing racial and religious prejudice.	____	____	____	____	____	23____	24____

ASK Q. 2 ONLY ABOUT THE TOP FOUR PRIORITIES IN Q. 1 AND ITEM "h":

2. Now I'd like to know how much you think that you yourself can contribute to solving each of those top priority problems. As I read each one back to you, I want you to tell me whether you feel you can personally do a great deal, do something, do very little, or do nothing to help solve the problem. (CHECK APPROPRIATE COLUMN ABOVE).

DEPENDING ON ANSWER TO ITEM "h", PREVIOUS PAGE, ASK:

2a. Why do you feel that there's nothing that you can do to help make sure there's enough energy to go around? PROBE. 25____ 26____

OR

2b. What things can you personally do to help make sure there's enough energy to go around? PROBE. 27____ 28____

3. Please tell me if you agree or disagree with the following statements:

	Agree (1)	Disagree (2)	Don't Know (3)	
a. Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living.	____	____	____	29____
b. There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve.	____	____	____	30____
c. The oil companies are doing all they can to help solve the energy problem and should not be criticized so much.	____	____	____	31____

4. Would you favor or oppose each of the following conservation measures being enacted by the government?

	Favor (1)	Oppose (2)	Don't Know (3)	
a. A law prohibiting houses, including existing ones, from being sold unless they had proper levels of insulation.	____	____	____	32____
b. A law prohibiting the sale of new cars that did not meet strict fuel economy standards.	____	____	____	33____
c. A law setting standards for how much energy home appliances could use.	____	____	____	34____
d. A law that set the maximum temperature on home thermostats at 65 so that they could not be adjusted higher.	____	____	____	35____

5. (HAND RESPONDENT CARD SET B.) Listed on those cards are ten energy users commonly found in the home. I'd like you to rank them in order in terms of what you think their average monthly use is. To begin with, what is the biggest energy user? And what is next? (BE SURE THAT RESPONDENT RANKS ALL TEN ITEMS).

		RANK	
a.	Standard refrigerator	____	36____
b.	Color television	____	37____
c.	Average sized water heater	____	38____
d.	Electric blanket	____	39____
e.	Lighting	____	40____
f.	Heating	____	41____
g.	Coffee maker	____	42____
h.	Automatic washer	____	43____
i.	Range	____	44____
j.	Central air conditioning	____	45____

6. The recent upsurge of interest in meeting the present energy problem seems to have led to a whole new technical vocabulary. I'd like to read you some of those terms and I want you to tell me if you've ever heard of the term. (CHECK IN LEFT COLUMN. THEN GO BACK TO THOSE TERMS WHICH ARE FAMILIAR TO RESPONDENT AND ASK: "Can you tell me what (_____) means to you?")

HAVE HEARD OF		DEFINITION:	
_____	a. Retrofitting	_____	46____
_____	b. Life cycle costing	_____	47____
_____	c. Solar energy	_____	48____
_____	d. Blackout	_____	49____
_____	e. R Value	_____	50____
_____	f. Degree day	_____	51____
_____	g. Vanpooling	_____	52____
_____	h. EER	_____	53____
_____	i. Geothermal power	_____	54____
_____	j. Coal gasification	_____	55____
_____	k. Sunshine right of ways	_____	56____
_____	l. Energy cost of ownership	_____	57____

TOTAL: 58,59 ____ ____

7. Some people say that with the cost of energy going up all the time it is better to buy more expensive appliances that conserve energy. Others say that you should buy cheaper appliances because you'll never save enough to pay off the original cost. Which is closer to your opinion? 60___

1___Buy more expensive appliances
2___Buy cheaper appliances
3___Don't know

8. In the past six months or so, have you or your family done anything to increase your own conservation of energy here at home? 61___

1___Yes 2___No 3___Don't know

IF "YES" TO Q. 8:

8a. What have you done?

9. I'd like you to think about this for a moment. Can you tell me four of five ways that an individual or a family can conserve energy at home? (LIST BELOW).

	FEASIBILITY RATING:	
1)_____	_____	62,63___ ___ 64___
2)_____	_____	65,66___ ___ 67___
3)_____	_____	68,69___ ___ 70___
4)_____	_____	71,72___ ___ 73___
5)_____	_____	74,75___ ___ 76___

77 5___

3-digit respondent number

78,79,80___ ___ ___

9a. (REPEAT EACH ITEM LISTED IN Q. 9). I'm going to read back all of those means of conserving energy and I'd like you to tell me how practical each of them would be for you or your family. Let's use a 1 to 5 scale, running from 1 = not at all practical, up to 5 = very practical. (ENTER IN RIGHT-HAND COLUMN, ABOVE).

10. (HAND RESPONDENT CARD C). That sheet contains a list of suggested ways that individuals could help conserve energy on a day-to-day basis. Which ones are you (and your family) already doing? Please just tell me the letter of each one. (RECORD IN COLUMN 1 BELOW WITH AN "X").

CARD 6

		Doing now (Q. 10) 1.	Would consider (Q. 10a) 2.	Most difficult (Q. 10b) 3.	Most savings (Q. 10d) 4.	Highest first cost (Q. 10e) 5.	Friends have (Q. 10f) 6.	
a.	Turn down the thermostat to 65 in the colder months.	___	___	___	___	___	___	1___
b.	Buy energy conserving appliances and devices which may cost more than conventional items, but which will cost less to operate over the long run.	___	___	___	___	___	___	2___
c.	Drive the car less and use the bus or a carpool.	___	___	___	___	___	___	3___
d.	Install an automatic setback thermostat that automatically lowers the temperature of your house at night.	___	___	___	___	___	___	4___
e.	Install storm windows and storm doors.	___	___	___	___	___	___	5___
f.	Install an automatic light timer that turns your lights on and off.	___	___	___	___	___	___	6___
g.	Install a device which restricts the hot water flow on the head of your shower.	___	___	___	___	___	___	7___
h.	Install weatherstripping.	___	___	___	___	___	___	8___
i.	Install the most efficient insulation.	___	___	___	___	___	___	9___
j.	Install fluorescent light bulbs wherever possible.	___	___	___	___	___	___	10___
k.	Install a chimney flue damper which closes when the furnace is not in use.	___	___	___	___	___	___	11___

		1.	2.	3.	4.	5.	6.	
l.	Install a solar hot water heater.	___	___	___	___	___	___	12___
m.	Install a heat pump.	___	___	___	___	___	___	13___
n.	Next time you purchase a range, get one with an electronic pilot light.	___	___	___	___	___	___	14___
o.	Install an insulating hood for your hot water heater.	___	___	___	___	___	___	15___

FOR THOSE ITEMS ON PREVIOUS LIST WHICH RESPONDENT IS NOT ALREADY USING, ASK Q. 10a THROUGH 10f.:

10a. Which other energy-conserving measures on that list are you and your family most likely to consider? (RECORD WITH AN "X" IN COLUMN 2, PRECEDING PAGE).

10b. Which of all those measures on the list would be the most difficult for you and your family to adopt? (RECORD WITH AN "X" IN COLUMN 3, PRECEDING PAGE).

10c. Why would those measures be difficult for you and your family? (ONLY ASK ABOUT TWO DIFFICULT MEASURES).

(ITEM:_____) 16,17___ ___

_____ 18___

_____

(ITEM:_____) 19,20___ ___

_____ 21___

_____

10d. In your opinion, which of all of those measures would probably result in the greatest savings in both energy consumption and therefore dollars spent on utilities? (RECORD WITH AN "X" IN COLUMN 4, PRECEDING PAGE).

10e. Which of those measures would involve the greatest initial cost to you? (RECORD WITH AN "X" IN COLUMN 5, PRECEDING PAGE).

10f. Do any of your friends use any of the measures listed on that sheet? (RECORD WITH AN "X" IN COLUMN 6, PRECEDING PAGE).

ALL OF QUESTION 11 SHOULD REFER TO THE PRODUCTS IN Q. 10 (ITEMS "d" THROUGH "o" WHICH THE RESPONDENT ALREADY OWNS. ASK THE SERIES OF QUESTIONS (1) THROUGH (7) FOR EACH PRODUCT ALREADY OWNED).

11a. Product owned: (RECORD LETTER FROM Q. 10) _____ 22,23___ ___

(1) How long ago did you buy or install (name of product)? 24____

1____Within last 4 months
2____Within 4-12 months
3____Within 1-2 years
4____Within 3-5 years
5____Over 5 years ago
6____Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 25____

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 26____

1____Yes 2____No 3____Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 27____

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 28____

1____Replacement
2____First time
3____Don't know

FOR ITEMS d, g, j, l and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 29____

1____Yes 2____No 3____Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product). Was it: (READ CHOICES) 30____

1____Up to 1½ times more?
2____1½ times more?
3____Up to 2 times more?
4____More than 2 times more?

11b. Product owned: (RECORD LETTER FROM Q. 10)_____ 31,32___ ___

(1) How long ago did you buy or install (name of product)? 33___

1___Within last 4 months
2___Within 4-12 months
3___Within 1-2 years
4___Within 3-5 years
5___Over 5 years ago
6___Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 34___

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 35___

1___Yes 2___No 3___Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 36___

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 37___

1___Replacement
2___First time
3___Don't know

FOR ITEMS d, g, j, l, and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 38___

1___Yes 2___No 3___Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product)? Was it? (READ CHOICES) 39___

1___Up to 1½ times more?
2___1½ times more?
3___Up to 2 times more?
4___More than 2 times more?

11c. Product owned: (RECORD LETTER FROM Q. 10)_____ 40,41___ ___

(1) How long ago did you buy or install (name of product)? 42____

1____Within last 4 months
2____Within 4-12 months
3____Within 1-2 years
4____Within 3-5 years
5____Over 5 years ago
6____Don't recall

(2) On a scale of 1 to 5, how satisfied have you been with your (name of product) -- where 5 = very satisfied and 1 = very dissatisfied? _____ 43____

(3) Since you've owned a (name of product), have any of your friends or neighbors also bought one on the basis of your recommendation? 44____

1____Yes 2____No 3____Don't know

(4) I'd like you to think back to the time when you decided to purchase a (name of product). Can you recall what led you to install one in your home? PROBE. 45____

(5) Was the product a replacement for a worn-out product or was it the first time you had purchased such a product? 46____

1____Replacement
2____First time
3____Don't know

FOR ITEMS d, g, j, l, and n ONLY:

(6) Was it more expensive than buying a conventional product to do the same thing? 47____

1____Yes 2____No 3____Don't know

IF "YES" TO (6):

(7) How much more expensive was (name of product). Was it: (READ CHOICES) 48____

1____Up to 1½ times more?
2____1½ times more?
3____Up to 2 times more?
4____More than 2 times more?

12. I'm going to read you the names of some organizations and individuals who might be giving you information on ways that you could effectively help to fight the energy crisis. Then please tell me in each case how much you would tend to believe that organization or individual about information on the energy crisis. That is, would you believe them a lot, some, not much, or not at all? (BEGIN READING AT RED CHECK POINT. BE SURE TO READ THE ENTIRE LIST).

	(3) A Lot	(2) Some	(1) Not Much	(0) Not At All	
1. President Carter	____	____	____	____	49____
2. A group of economists from colleges and universities	____	____	____	____	50____
3. Business leaders	____	____	____	____	51____
4. The U.S. Energy Research and Development Administration	____	____	____	____	52____
5. The Democratic Party	____	____	____	____	53____
6. The Republican Party	____	____	____	____	54____
7. A group of scientists and engineers	____	____	____	____	55____
8. The major oil companies	____	____	____	____	56____
9. Banks and savings and loans	____	____	____	____	57____
10. The Chamber of Commerce	____	____	____	____	58____
11. Sears, Roebuck & Company	____	____	____	____	59____
12. Montgomery Ward	____	____	____	____	60____

13. Would you be willing to pay on the average of ten to 15 percent extra to buy appliances that conserve energy and cost less to operate because of lower energy use? 61____

1____Yes
2____No
3____Not sure

14. Would you be willing to pay $200 more the next time you purchase an automobile to get devices that increase gas mileage and, thus, save on gas costs? 62____

1____Yes
2____No
3____Not sure

15. Would you be willing to purchase an automatic set-back thermostat that automatically lowered the temperature of your home at night? 63____

1____Yes
2____No
3____Not sure

16. If you were to equip your house with energy-saving appliances and devices and you were to practice energy conservation (such as lowering the thermostat, turning down lights and so on), what percentage of your present utility costs do you think you could save? (ATTEMPT TO FORCE A GUESS IF RESPONDENT DOESN'T KNOW). _____% 64____

17. Approximately what percentage of your friends and acquaintances actively practice energy conservation in their homes? _____%

68-76

3-digit respondent number 78,79,80

65___
66___
67___
BLANK
77 6___

___ ___ ___

18. (HAND RESPONDENT CARD D). On that card are a number of products which have come on the market in the last ten years. Which of the products on that list have you or your family purchased? (CHECK IN COLUMN "A", BELOW).

CARD 7

	A	(1) When First On The Market	(2) From Friends	(3) Several Years After	
a. A microwave oven	____	____	____	____	1___
b. A C.B. radio	____	____	____	____	2___
c. Automobile seat belts	____	____	____	____	3___
d. Electric lawn clippers	____	____	____	____	4___
e. An FM radio	____	____	____	____	5___
f. A digital watch	____	____	____	____	6___
g. A Polaroid camera	____	____	____	____	7___
h. An automatic drip coffee maker (e.g., Norelco, Mr. Coffee)	____	____	____	____	8___
i. An audio tape recorder (cartridge or cassette)	____	____	____	____	9___
j. A pocket or mini-calculator	____	____	____	____	10___
k. A fish-line "weed eater"	____	____	____	____	11___
l. A food processor	____	____	____	____	12___
m. A refrigerator with an automatic ice maker	____	____	____	____	13___
n. A trash compactor	____	____	____	____	14___
o. A single lens reflex (SLR) camera	____	____	____	____	15___
p. A quadraphonic stereo system	____	____	____	____	16___
q. An electronic video game (e.g., Pong, Odyssey)	____	____	____	____	17___
r. A hot comb	____	____	____	____	18___
s. A video tape recorder	____	____	____	____	19___
t. A diesel engine automobile	____	____	____	____	20___
			Total Score:		21,22___ ___

19. Now I'm going to back over the products which you have purchased and I'd like you to tell me whether you purchased that product: (READ CHOICES)

(1) when it first came on the market, or
(2) after you had heard about it from friends who owned one, or
(3) several years after it had come on the market.

(CHECK APPROPRIATE COLUMN -- 1, 2 OR 3 -- ABOVE).

Now I'd like to ask you a few questions for statistical purposes only. Remember, your answers will remain completely confidential.

20. Are you: (READ CHOICES) 1____Married 3____Widowed 23____
2____Divorced 4____Or single

21. How many people, including yourself, live in your home? _____ 24____

22. What was the last grade you completed in school? 25____

1____Less than 8th grade
2____8th-11th grade
3____12th grade (H.S. graduate)
4____1-3 years of college
5____4 years college (graduate)
6____Post-graduate

23. As I read several age categories, I'd like you to tell me which one best describes your age. 26____

1____Under 18
2____18-24
3____25-34
4____35-44
5____45-54
6____55-64
7____65 and over

24. What type of work does the head of this household do? (PROBE FULLY, FINDING OUT WHAT DUTIES ARE INVOLVED, ETC. IN ORDER TO CATEGORIZE CORRECTLY BELOW). 27,28___ ___

1____Professional (doctor, lawyer, teacher, clergy)
2____Executive, managerial, proprietor (president, vice-president, treasurer, owner)
3____Creative and communications (artists, writers, radio, television, newspapers)
4____Sales (retail sales and small retail store owners)
5____All other sales
6____White collar and civil service (clerical, administrative, supervisory)
7____Transportation (train, car, bus) and service (hotel, restaurant, repairs)
8____Skilled labor, craftsman, foreman (carpenter, machinist, welder, etc.)
9____Semi- and unskilled labor
10____Farmers and farm workers
11____Military
12____Student
13____Retired
14____Other (Specify:_____)

25. (HAND RESPONDENT CARD E). At which of the stores on that card do you have charge accounts? 29____

1____ZCMI
2____Mongomery Ward
3____J.C. Penney
4____Sears, Roebuck & Company

26. How many rooms are there in this house? _____ 30____

27. How long have you owned your home here? _____years 31____

28. What would you say is the approximate current market value of your home here -- that is, the amount you would expect to receive if you were to sell it today? 32____

1	Under $15,000	7	$75,000-$99,999
2	$15,000-$24,999	8	$100,000-$149,999
3	$25,000-$34,999	9	$150,000 and over
4	$35,000-$44,999	10	Don't know
5	$45,000-$59,999	11	Refused
6	$60,000-$74,999		

29. What kind of heating system do you have in your home here? 33____

1	Gas	4	Forced air
2	Hot water	5	Natural gas
3	Electric	6	Don't know

30. Do you have air conditioning? 1____Yes 2____No 34____

IF "YES" TO Q. 30: Is it 1____Central, or
2____Window?

31. During this past winter -- say December, January, or February -- what was your average monthly utilities? 35____

1	Under $20	7	$70-$79
2	$20-$29	8	$80-$89
3	$30-$39	9	$90-$99
4	$40-$49	10	$100 and over
5	$50-$59	11	Don't know
6	$60-$69	12	Refused

32. Do you own an automobile? 1____Yes 2____No

IF "YES" TO Q. 32:

32a. What are the makes and years of your automobiles? (EXCLUDE TRUCKS).

Year	Manufacturer	Make	Check If Compact
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

36____ Foreign Car. . . 37____

Compact. . 38____

(BE CERTAIN TO DETERMINE WHICH CARS, IF ANY, ARE COMPACT AND CHECK IN LAST COLUMN, ABOVE).

33. During the past two years, how many vacations or pleasure trips have you taken in which you traveled by air? 39____

34. Do you belong to any social or civic organizations? 40____

1____Yes 2____No

IF "YES" TO Q. 34:

34a. Which organizations do you belong to? (LIST BELOW).

_____

_____

_____

_____

34b. Have you in the last two or three years served as an officer or director of any of those organizations?

1____Yes 2____No

IF "YES" TO Q. 34b:

34c. How many? _____

35. For statistical purposes only, we need to know your approximate family income for 1976. That is, all money earned from salary or wages or from other sources -- before taxes. I'll read the income categories and you tell me which letter best represents all the money which members of your household earned in 1976. (HAND INCOME CARD). 41____

1____	A	Under $5,000	6____	F	$25,000-$29,999
2____	B	$5,000-$9,999	7____	G	$30,000-$34,999
3____	C	$10,000-$14,999	8____	H	$35,000 and over
4____	D	$15,000-$19,999	9____		Not sure/refused
5____	E	$20,000-$24,999	10____		Interviewer estimated income

36. In terms of political affiliation, do you consider yourself to be: 42____

1____A Republican, 4____Refused
2____A Democrat, or 5____Not registered
3____An Independent 6____Don't know

37. Would you be interested in joining a citizen's organization which had as its goal the spreading of energy conserving behavior and attitudes among not only your own family, but among your friends and other families in the neighborhood? 43____

1____Yes 2____No 3____Don't know

IF "YES" TO Q. 37:

37a. Would you be willing to spend $10 a year for membership in such an organization?

1____Yes 2____No 3____Don't know

IF "NO" TO Q. 37a:

37b. How about $5.00 a year?

1____Yes 2____No 3____Don't know

IF "NO" TO Q. 37:

37c. Would you be interested in such an organization if there were financial rewards for energy-conserving behavior? 44____

1____Yes 2____No 3____Don't know

INTERVIEWER SHOULD RECORD, BUT NOT ASK:

38. Sex of respondent: 1____Male 2____Female 45____

39. Ethnic classification: 1____Anglo 3____Hispano 46____
2____Black 4____Other

40. Respondent's name_____ 47____

41. Address_____ Telephone_____ 48____

42. Date of interview_____ 49____

43. Length of interview_____ 50____

44. Name of interviewer_____ 51____

52-76 BLANK

77 7

3-digit respondent number 78,79,80 ___ ___ ___

City _____ Questionnaire Number _____

Sample Number _____

D O E S U R V E Y

1. (HAND RESPONDENT CARD A). Imagine for a moment that you were the President of the United States and an advisor handed you that list of things which should be done to solve some of the problems facing the country. Your dilemma is that you've got to assign some priorities to those problems. In other words, some of them have to be considered more important than others.

   Each of those cards (HAND SET OF 3 x 5 CARDS) contains one of the priorities listed on the large sheet. I'd like you to arrange those cards in order so that they reflect the way you view the importance of those priorities. Put the most important priority on top, and so on, so that the least important is on the bottom. (ENTER RANKING FROM CARDS AS 1 TO 12 IN COLUMN A).

Priority Item:		Rank	CARD 1 OR 4
a.	Reducing the occurrence of violent crimes.	____	1 ____
b.	Providing first-rate educational opportunities for young people.	____	2 ____
c.	Caring for the elderly.	____	3 ____
d.	Reducing the tax burden.	____	4 ____
e.	Fighting the problems associated with alcohol and drug abuse.	____	5 ____
f.	Reducing air pollution and environmental damage.	____	6 ____
g.	Providing jobs for the unemployed.	____	7 ____
h.	Making sure there's enough energy to go around.	____	8 ____
i.	Reducing corruption in business and government.	____	9 ____
j.	Reducing the costs of living and slowing down inflation.	____	10 ____
k.	Providing adequate health care.	____	11 ____
l.	Reducing racial and religious prejudice.	____	12 ____

2. Let's take the energy priority for a moment. I'd like to know how much you think that you yourself can contribute to solving the problem of "making sure there's enough energy to go around". I want you to tell me whether you feel you can personally do a great deal, do something, do very little, or do nothing to help make sure there's enough energy to go around.

   4 ___ Do a great deal 2 ___ Can do very little

   3 ___ Can do something 1 ___ Can do nothing 13 ____

3. Please tell me if you agree or disagree with the following statements:

	Agree	Disagree	Don't Know	
a. Conservation is not a realistic solution to the energy crisis unelss we are all prepared to accept a much lower standard of living.	____	____	____	14 ____
b. There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve.	____	____	____	15 ____

4. Would you favor or oppose each of the following conservation measures being enacted by the government?

	Favor	Oppose	Don't Know	
a. A law prohibiting houses, including existing ones, from being sold unless they had proper levels of insulation.	____	____	____	16 ____
b. A law setting standards for how much energy home appliances could use.	____	____	____	17 ____

5. (HAND RESPONDENT CARD SET B.) Listed on those cards are ten energy users commonly found in the home. I'd like you to rank them in order in terms of what you think their average monthly use is. To begin with, what is the biggest energy user? And what is next? (BE SURE THAT RESPONDENT RANKS ALL TEN ITEMS).

	Rank	
a. Standard refrigerator	____	18 ____
b. Color television	____	19 ____
c. Average sized water heater	____	20 ____
d. Electric blanket	____	21 ____
e. Lighting	____	22 ____
f. Heating	____	23 ____
g. Coffee maker	____	24 ____
h. Automatic washer	____	25 ____
i. Range	____	26 ____
j. Central air conditioning	____	27 ____

6. The recent upsurge of interest in meeting the present energy problem seems to have led to a whole new technical vocabulary. I'd like to read you some of those terms and I want you to tell me if you've ever heard of the term as it relates to the energy situation. (CHECK IN LEFT COLUMN. THEN GO BACK TO THOSE TERMS WHICH ARE FAMILIAR TO RESPONDENT AND ASK: "Can you tell me what (_____) means to you?")

HAVE HEARD OF		DEFINITION:	
_____	a.	Retrofitting _____	28 _____
_____	b.	Life cycle costing _____	29 _____
_____	c.	Solar energy _____	30 _____
_____	d.	Blackout _____	31 _____
_____	e.	R Value _____	32 _____
_____	f.	Degree day _____	33 _____
_____	g.	Vanpooling _____	34 _____
_____	h.	EER _____	35 _____
_____	i.	Geothermal power _____	36 _____
_____	j.	Coal gasification _____	37 _____
_____	k.	Sunshine right of ways _____	38 _____
_____	l.	Energy cost of ownership _____	39 _____
		TOTAL:	40, 41 ___ ___

7. Some people say that with the cost of energy going up all the time it is better to buy more expensive appliances that conserve energy. Others say that you should buy cheaper appliances because you'll never save enough to pay off the original cost. Which is closer to your opinion?

1 _____ Buy more expensive appliances

2 _____ Buy cheaper appliances

3 _____ Don't know 42 _____

IF ALTERNATIVE 1 ("BUY MORE EXPENSIVE APPLIANCES") WAS CHOSEN, ASK Q. 7a AND 7b:

7a. Eventually, the money saved due to lower energy usage should offset the higher initial cost of those energy-saving appliances. How soon would you reasonably expect to recoup the cost -- through lower operating costs -- of an energy-saving appliance which cost 10 percent more than a conventional appliance?

_____ months or _____ years 43 _____

7b. And how soon would you reasonably expect to recoup the cost of an energy-saving appliance which cost 20 percent more than a conventional appliance?

_____ months or _____ years 44 _____

---

8. In the past year or so, have you or your family done anything to increase your own conservation of energy here at home?

1 _____ Yes 2 _____ No 3 _____ Don't know 45 _____

46 _____

IF "YES" TO Q. 8:

8a. What have you done?

---

9. If America conserves energy, do you think your standard of living will go up, will go down or stay about the same?

1 ___ Will go up 2 ___ Stay the same 47 _____

3 ___ Will go down 4 ___ Don't know

---

48 _____

10. (HAND RESPONDENT CARD C). That sheet contains a list of suggested ways that individuals could help conserve energy on a day-to-day basis. Which ones are you (and your family) already doing? Please just tell me the letter of each one. (RECORD IN COLUMN 1 BELOW WITH AN "X").

	Doing now (Q. 10) 1.	Would consider (Q. 10a) 2.	Most difficult (Q. 10b) 3.	Most savings (Q. 10d) 4.	Highest first cost (Q. 10e) 5.	Friends have (Q. 10f) 6.	
a. Turn down the thermostat to 65 in the colder months.	___	___	___	___	___	___	49 ___
b. Buy energy conserving appliances and devices which may cost more than conventional items, but which will cost less to operate over the long run.	___	___	___	___	___	___	50 ___
c. Drive the car less and use the bus or a carpool.	___	___	___	___	___	___	51 ___
d. Install an automatic setback thermostat that automatically lowers the temperature of your house at night.	___	___	___	___	___	___	52 ___
e. Install storm windows and storm doors.	___	___	___	___	___	___	53 ___
f. Install an automatic light timer that turns your lights on and off.	___	___	___	___	___	___	54 ___
g. Install a device which restricts the hot water flow on the head of your shower.	___	___	___	___	___	___	55 ___
h. Install weatherstripping.	___	___	___	___	___	___	56 ___
i. Install the most efficient insulation.	___	___	___	___	___	___	57 ___
j. Install fluorescent light bulbs wherever possible.	___	___	___	___	___	___	58 ___
k. Install a chimney flue damper which closes when the furnace is not in use.	___	___	___	___	___	___	59 ___

	1.	2.	3.	4.	5.	6.	
l. Install a solar hot water heater.							60
m. Install a heat pump.							61
n. Next time you purchase a range, get one with an electronic pilot light.							62
o. Install an insulating hood for your hot water heater.							63

FOR THOSE ITEMS ON PREVIOUS LIST WHICH RESPONDENT IS NOT ALREADY USING, ASK Q. 10a THROUGH 10f.:

10a. Which other energy-conserving measures on that list are you and your family most likely to consider? (RECORD WITH AN "X" IN COLUMN 2, PRECEDING PAGE).

10b. Which of all those measures on the list would be the most difficult for you and your family to adopt? (RECORD WITH AN "X" IN COLUMN 3, PRECEDING PAGE).

10c. Why would those measures be difficult for you and your family? (ONLY ASK ABOUT TWO DIFFICULT MEASURES).

(ITEM: _____) 64,65 ___

_____ 66 ___

_____

(ITEM: _____) 67,68 ___

_____ 69 ___

_____

10d. In your opinion, which of all of those measures would probably result in the greatest savings in both energy consumption and therefore dollars spent on utilities? (RECORD WITH AN "X" IN COLUMN 4, PRECEDING PAGE). 70 ___ 71 ___ 72 ___

10e. Which of those measures would involve the greatest initial cost to you? (RECORD WITH AN "X" IN COLUMN 5, PRECEDING PAGE). 73 ___ 74 ___

10f. Do any of your friends use any of the measures listed on that sheet? (RECORD WITH AN "X" IN COLUMN 6, PRECEDING PAGE). 75 ___ 76 ___

77 1

Three-digit Respondent number 78,79,80 ___

HAND RESPONDENT CARD D

CARD 2 OR 5

11. Here is a list of products which have shown up recently in hardware and home maintenance departments in Denver stores. Have you purchased any of the products on that list within the last four or five months? (CHECK IF PURCHASED.)

HAVE PURCHASED			
____	1.	Attic vents	1 ____
____	2.	Ceiling insulation	
____	3.	Weatherstripping/caulking	
____	4.	Storm windows and doors	
____	5.	Pipe and water heater insulation	
____	6.	Double-glazing insulated windows	
____	7.	Reflective film	
____	8.	Set-back thermostat	
____	9.	Pilot light conversion kit	
____	10.	Electronically lit gas stove	
____	11.	Power attic vent	
____	12.	Exhaust fan	

12. FOR EACH PRODUCT PURCHASED IN Q. 11, ASK SERIES a THROUGH i.

NAME OF PRODUCT MENTIONED IN Q. 11: _____ 2,3 __ __

a. Please think back a moment to the time when you purchased (name of product). What was the name of the store where you bought it? 4 ____

_____ 5 ____

b. Was it a replacement for a worn-out product or was it the first time you had purchased a (name of product)?

1 ___ Replacement 2 ___ First time 3 ___ Don't know 4 ___ Addition 6 ____

c. Did you intend to buy a (name of product) before you went into (name of store) or did you decide to buy it (them) once you were in the store?

1 ___ Previous intent 2 ___ Impulse

3 ___ Other (specify: _____) 4 ___ Don't know 7 ____

d. What made you decide to buy a (name of product) at that time? PROBE

_____ 8 ____

_____ 9 ____

e. Had you seen or heard anything about (name of product) prior to buying it? 1 ___ Yes 2 ___ No 3 ___ Don't know 10 ____

IF YES TO Q. e: f. What had you heard and where had you heard it?

WHAT HEARD: _____ 11 ____

WHERE HEARD: _____ 12 ____

g. Can you tell me how much (name of product) cost you? $_____ 13 ____

h. Will you ever make up the cost of (name of product) in terms of the energy costs you might save? 1 ___ Yes 2 ___ No 3 ___ Don't Know 14 ____

IF YES TO Q.h: i. How long will it take before that (cost of product) is made up in energy savings? _____ 15 ____

NAME OF PRODUCT MENTIONED IN Q. 11: _____ 16,17

a. Please think back a moment to the time when you purchased (name of product). What was the name of the store where you bought it?

_____ 18 19

b. Was it a replacement for a worn-out product or was it the first time you had purchased a (name of product)?

1 ___ Replacement 2 ___ First time 3 ___ Don't know 4 ___ Addition 20

c. Did you intend to buy a (name of product) before you went into (name of store) or did you decide to buy it (them) once you were in the store?

1 ___ Previous intent 2 ___ Impulse

3 ___ Other (specify:_____) 4 ___ Don't know 21

d. What made you decide to buy a (name of product) at that time? PROBE

_____ 22

_____ 23

e. Had you seen or heard anything about (name of product) prior to buying it? 1 ___ Yes 2 ___ No 3 ___ Don't know 24

IF YES TO Q. e: f. What had you heard and where had you heard it?

WHAT HEARD: _____ 25

WHERE HEARD: _____ 26

g. Can you tell me how much (name of product) cost you? $_____ 27

h. Will you ever make up the cost of (name of product) in terms of the energy costs you might save? 1 ___ Yes 2 ___ No 3 ___ Don't Know 28

IF YES TO Q.h: i. How long will it take before that (cost of product) is made up in energy savings? _____ 29

13. Would you be willing to pay on the average of ten to 15 percent extra to buy appliances that conserve energy and cost less to operate because of lower energy use?

1 ___ Yes 2 ___ No 3 ___ Not sure 30

14. Would you be willing to pay $200 more the next time you purchase an automobile to get devices that increase gas mileage and, thus, save on gas costs?

1 ___ Yes 2 ___ No 3 ___ Not sure 31

15. Would you be willing to purchase an automatic set-back thermostat that automatically lowered the temperature of your home at night?

1 ___ Yes 2 ___ No 3 ___ Not sure 32 ____

15a. Let me explain what I mean by an automatic set-back thermostat. This device essentially would help people conserve energy by automatically adjusting the thermostat to pre-selected temperatures, although at all times the automatic adjustments could easily be over-ridden by the consumer if he wanted to do so. Would you be willing to purchase an automatic set-back thermostat that would automatically lower the temperature of your home at night to the temperature which you selected and would then automatically increase the temperature in the morning to your selected temperature?

1 ___ Would purchase 2 ___ Would not 3 ___ Not sure 33 ____

---

16. If you were to equip your house with new energy-saving products and if you were to practice more energy conservation than you presently do, what percentage of your present utility costs do you think you could save? (ATTEMPT TO FORCE A GUESS IF RESPONDENT DOES NOT KNOW)

_____% 34 ____

16a. How much of that (_____%) which you feel you could save would be due to the new products and how much would be due to practicing more energy conservation? (FORCE GUESS)

_____% due to new products 35 ____

____ % due to conservation 36 ____

(THESE PERCENTAGES SHOULD TOTAL TO THE PERCENTAGE RECORDED IN Q. 16 ABOVE)

---

17. Approximately what percentage of your friends and acquaintances actively practice energy conservation in their homes? _____% 37 ____

---

18. I'm going to read you the names of some organizations and individuals which might be giving you information on ways that you could effectively help to fight the energy crisis. Then please tell me in each case how much you would tend to believe that organization or individual's information on the energy crisis. That is, would you believe them a lot, some, not much, or not at all? (BEGIN READING LIST AT RED CHECK POINT. BE SURE TO READ THE ENTIRE LIST).

	(3) A lot	(2) Some	(1) Not much	(0) Not at all	
1. The U.S. Department of Energy	____	____	____	____	38 ____
2. Local television stations	____	____	____	____	39 ____
3. Your Congressional representative	____	____	____	____	40 ____
4. Your favorite radio station	____	____	____	____	41 ____
5. Sears, Roebuck and Company	____	____	____	____	42 ____
6. Montgomery Ward	____	____	____	____	43 ____
7. President Carter	____	____	____	____	44 ____
8. A group of scientists and engineers	____	____	____	____	45 ____
9. A group of economists from colleges and universities	____	____	____	____	46 ____

HAND RESPONDENT CARD E WITH LIST OF ORGANIZATIONS AND INDIVIDUALS.

18a. Which of the organizations or individuals on that list would you tend to believe in most when it came to information on the energy situation? _____ 47 ____

18b. Why would you tend to believe information from that source? PROBE _____ 48 ____

_____ 49 ____

18c. And which on that list would you tend to believe least of all when it came to information on the energy situation? _____ 50 ____

18d. Why is that? PROBE

_____ 51 ____

_____ 52 ____

19. Have you noticed or heard -- in the last several months -- any commercials or ads in local newspapers, TV, radio or in stores which stressed energy conservation?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF YES TO Q.19: 19a. Where did you see or hear such advertising?

1 ___ TV 2 ___ radio 3 ___ newspaper

4 ___ in-store 5 ___ don't know 53 ____

19b. Can you describe any of those ads for me? PROBE

_____ 54 ____

_____ 55 ____

---

20. Now I'm going to read you some incomplete sentences from commercial messages; that is, part of the sentence is missing. As I read each one, I'd like you to complete it with the first thing that comes to mind. For example:

(1) "Ford has a better (BLANK) _____ 56 ____

and next:

(2) "Products that save energy (BLANK) _____ 57 ____

_____

20a. The correct slogan is "Products that save energy pay for themselves". What do you interpret that slogan to mean? PROBE

_____ 58 ____

_____ 59 ____

---

21. In general, how often do you usually enter contests or sweepstakes which appear in newspapers, magazines, or in-store promotions? (READ CHOICES) Do you usually enter them frequently, occasionally, rarely, or not at all?

1 ___ frequently

2 ___ occasionally

3 ___ rarely

4 ___ not at all 60 ____

Now I'd like to ask you a few questions for statistical purposes only. Remember, your answers will remain completely confidential.

22. Are you: (READ CHOICES) 1 ___ Married 2 ___ Divorced/ Separated 3 ___ Widowed 4 ___ Or single — 61 _____

23. How many people, including yourself, live in your home? _____ — 62 _____

24. What was the last grade you completed in school?

1 ___ Less than 8th grade
2 ___ 8th-11th grade
3 ___ 12th grade (H.S. graduate)
4 ___ 1-3 years of college
5 ___ 4 years college (graduate)
6 ___ Post-graduate

63 _____

25. As I read several age categories, I'd like you to tell me which one best describes your age.

1 ___ Under 18
2 ___ 18-24
3 ___ 25-34
4 ___ 35-44
5 ___ 45-54
6 ___ 55-64
7 ___ 65 and over

64 _____

26. What type of work does the head of this household do? (PROBE FULLY, FINDING OUT WHAT DUTIES ARE INVOLVED, ETC. IN ORDER TO CATEGORIZE CORRECTLY BELOW).

1 _____ Professional (doctor, lawyer, teacher, clergy)
2 _____ Executive, managerial, proprietor (president, vice president, treasurer, owner)
3 _____ Creative and communications (artists, writers, radio, television, newspapers)
4 _____ Sales (retail sales and small retail store owners)
5 _____ All other sales
6 _____ White collar and civil service (clerical, administrative, supervisory)
7 _____ Transportation (train, car, bus) and service (hotel, restaurant, repairs)
8 _____ Skilled labor, craftsman, foreman (carpenter, machinist, welder, etc.)
9 _____ Semi-and unskilled labor
10 _____ Farmers and farm workers
11 _____ Military
12 _____ Student
13 _____ Retired
14 _____ Other (Specify: _____)

65,66 ___ ___

27. (HAND RESPONDENT CARD F). At which of the stores on that card do you have charge accounts?

1 ___ ZCMI
2 ___ Montgomery Ward
3 ___ J.C. Penney
4 ___ Sears, Roebuck & Company
5 ___ None

67 _____

28. How many rooms are there in this house? _____ | 68 ____

29. How long have you owned your home here? _____ years | 69 ____

30. What would you say is the approximate current market value of your home here -- that is, the amount you would expect to receive if you were to sell it today?

1 ___ Under $15,000	7 ___ $75,000-$99,999
2 ___ $15,000-$24,999	8 ___ $100,000-$149,999
3 ___ $25,000-$34,999	9 ___ $150,000 and over
4 ___ $35,000-$44,999	10 ___ Don't know
5 ___ $45,000-$59,999	11 ___ Refused
6 ___ $60,000-$74,999	12 ___ Interviewer Estimate

70 ____

31. What kind of heating system do you have in your home here?

1 ____ Gas	4 ___ Forced air
2 ____ Hot water	5 ___ Natural gas
3 ____ Electric	6 ___ Oil
	7 ___ Don't know

71 ____

32. Do you have air conditioning? 1 ___ Yes 3 ___ No

IF YES TO Q.32: Is it 1 ___ Central, or
2 ___ Window (or swamp)?

72 ____

33. During this winter -- say December, January and February -- what has been your average monthly utilities bill?

1 ___ Under $20	7 ___ $70-$79
2 ___ $20-$29	8 ___ $80-$89
3 ___ $30-39	9 ___ $90-$99
4 ___ $40-$49	10 ___ $100 and over
5 ___ $50-$59	11 ___ Don't know
6 ___ $60-$69	12 ___ Refused

73 ____

74 ____

34. Do you belong to any social or civic organizations?

1 ___ Yes 2 ___ No

75 ____

76 ____

77 5

IF YES TO Q.34: 34a. Have you in the last two or three years served as an officer or director of any of those organizations?

1 ___ Yes 2 ___ No

Three-digit Respondent Number:

78,79,80

___ ___ ___

IF YES TO Q.34a: 34b. How many organizations have you served as an officer or director?

_____

CARD 6

1 ____

35. For statistical purposes only, we need to know your approximate family income for 1977. That is, all money earned from salary or wages or from other sources -- before taxes. I'll read the income categories and you tell me which letter best represents all the money which members of your household earned in 1977. (HAND INCOME CARD).

1 ___	A Under $5,000	6 ___	F $25,000-$29,999
2 ___	B $5,000-$9,999	7 ___	G $30,000-$34,999
3 ___	C $10,000-$14,999	8 ___	H $35,000 and over
4 ___	D $15,000-$19,999	9 ___	Not sure/refused
5 ___	E $20,000-$24,999	10 ___	Interviewer estimated income

2 _____

36. In terms of political affiliation, do you consider yourself to be:

1 ___	A Republican	4 ___	Refused
2 ___	A Democrat, or	5 ___	Not registered
3 ___	An Independent	6 ___	Don't know

3 _____

37. Would you be interested in joining a citizen's organization which had as its goal the spreading of energy conserving behavior and attitudes among not only your own family, but among your friends and other families in the neighborhood?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF YES TO Q.37:

37a. Would you be willing to spend $10 a year for membership in such an organization?

1 ___ Yes 2 ___ No 3 ___ Don't know

IF NO OR DON'T KNOW TO Q. 37a:

37b. How about $5.00 a year?

1 ___ Yes 2 ___ No 3 ___ Don't know

4 _____

IF NO TO Q. 37:

37c. Would you be interested in such an organization if there were financial rewards for energy-conserving behavior?

1 ___ Yes 2 ___ No 3 ___ Don't know

5 _____

INTERVIEWER SHOULD RECORD, BUT NOT ASK:

38. Sex of respondent: 1 _____ Male 2 _____ Female

6 _____

39. Ethnic classification: 1 _____ Anglo 2 _____ Black 3 _____ Hispano 4 _____ Other 5 _____ Don't know

7 _____

40. Respondent's name _____

8 _____

41. Address _____ Telephone _____

9 _____

42. Date of interview _____

10 _____

43. Length of interview _____

11 _____

44. Name of interviewer _____

12 _____

13-76 BLANK

77 6

3-digit resp. no. 78,79,80

___ ___ ___

DEMOGRAPHIC CHARACTERISTICS

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Marital Status:							
Married	80	80	0	85	82	-3	
Divorced	7	9	+2	5	8	+3	
Widowed	8	7	-1	7	8	+1	
Single	5	4	-1	2	2	0	
Mean Size of Household:	3.3	3.2	-.1				
Education:							
11th grade or less	14	13	-1	13	12	-1	
High school graduate	37	33	-4	39	39	0	
Some college	24	27	+3	29	27	-2	
College graduate	11	14	+3	11	12	+1	
Post graduate	15	13	-2	7	9	+2	
Age:							
18-24	5	3	-2	5	4	-1	
25-34	26	25	-1	31	25	-6	
35-44	23	24	+1	22	20	-2	
45-54	21	22	+1	18	19	+1	
55-64	14	15	+1	12	15	+3	
65 and older	12	11	-1	12	15	+3	
Median age:	43.5 yrs.	44.3 yrs.	+0.8	41.4 yrs.	44.8 yrs.		
Major Occupations:							
Skilled labor	22	15	-7	24	21	-3	
White collar	15	12	-3	16	13	-3	
Retired	15	16	+1	13	18	+5	
Professional	14	20	+6	11	16	+5	
Executive/ managerial	8	14	+6	14	12	-2	

	(Percent) DENVER GENERAL PUBLIC			(Percent SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Years Owned Home:							
Less than 1 year	10	6	-4	7	5	-2	
1-2 years	15	16	+1	15	11	-4	
3-5 years	19	23	+4	22	21	-1	
6-10 years	18	18	0	15	18	+3	
11-20 years	18	24	+6	22	23	+1	
More than 20 years	13	13	0	19	22	+3	
Refused	7	0	-7	0	1	+1	
Median No. of Yrs.:	5.9 yrs.	6.9 yrs.	+1.0 yrs.				
Median Home Value:	$44,200	$49,300	+$5,100	$43,200	$48,100	+$4,900	
Air Conditioning System:							
Has central air conditioning	8	8	0	27	16	-11	
Has window air conditioning	21	14	-7	42	52	+10	
Has no air conditioning	71	78	+7	32	29	- 3	

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Number of Automobiles Owned:							
None	1	NA	NA	4	NA	NA	
One	45	NA	NA	51	NA	NA	
Two	40	NA	NA	36	NA	NA	
Three or more	10	NA	NA	9	NA	NA	
Refused to answer	4	NA	NA	1	NA	NA	
Owns Foreign Car:	23	NA	NA	20	NA	NA	
Owns Compact Car:	43	NA	NA	39	NA	NA	
Pleasure Trips Made by Air:							
None	50	NA	NA	63	NA	NA	
One	20	NA	NA	20	NA	NA	
Two	13	NA	NA	6	NA	NA	
Three	3	NA	NA	2	NA	NA	
Four	3	NA	NA	1	NA	NA	
Five - Eight	3	NA	NA	1	NA	NA	
Nine or more	1	NA	NA	5	NA	NA	
Don't know/refused	6	NA	NA	0	NA	NA	
Membership in Organizations:							
Belong to no organizations	62	58	-4	53	65	+12	
Belong, but not an officer	22	25	+3	24	14	-10	
Officer of an organization	14	17	+3	23	20	-3	

	(Percent) DENVER GENERAL PUBLIC			(Percent) SALT LAKE CITY GENERAL PUBLIC			SIGNI-FICANCE
	PRE-TEST	POST-TEST	CHANGE	PRE-TEST	POST-TEST	CHANGE	
Income:							
Under $5,000	5	5	0	8	8	0	
$5,000 - $9,999	11	10	-1	9	11	+2	
$10,000 - $14,999	18	15	-3	23	17	-6	
$15,000 - $19,999	22	16	-6	22	19	-3	
$20,000 - $24,999	16	17	+1	15	18	+3	
$25,000 - $29,999	7	12	+5	10	10	0	
$30,000 - $34,999	6	6	0	4	6	+2	
$35,000 and over	7	13	+6	5	10	+5	
Refused	7	6	-1	5	2	-3	
Median Income:	$17,792	$20,431	+$2,639				
				$16,566	$18,500	+$1,934	
Political Affiliation:							
Democrat	35	34	-1	28	26	-2	
Independent	31	35	+4	32	31	-1	
Republican	26	26	0	33	35	+2	
Not registered	5	3	-2	3	2	-1	
Refused/don't know	3	2	-1	4	6	+2	
Sex:							
Men	41	41	0	28	37	+9	
Women	59	59	0	72	63	-9	
Ethnic Status:							
Anglo	84	91	+7	96	97	+1	
Black	5	3	-2	--	--	--	
Hispano	5	5	0	1	1	0	
Undetermined	6	1	-5	3	2	-1	

DEMOGRAPHIC CHARACTERISTICS

	(Percent) DENVER SEARS/WARDS		
	PRE-TEST	POST-TEST	CHANGE
Marital Status:			
Married	86	87	+ 1
Divorced	6	6	0
Widowed	6	5	- 1
Single	2	2	0
Mean Size of Household:	3.6	3.6	-
Education:			
11th grade or less	10	11	+ 1
High school graduate	36	33	- 3
Some college	27	28	+ 1
College graduate	12	14	+ 2
Post graduate	14	14	0
Age:			
18-24	4	2	- 2
25-34	26	23	- 3
35-44	25	27	+ 2
45-54	22	24	+ 2
55-64	15	17	+ 2
65 and older	9	8	- 1
Median age:	43.2	44.4	-
Major Occupations:			
Skilled labor	21		
White collar	16		
Retired	11		
Professional	18		
Executive/managerial	11		

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Years Owned Home:			
Less than 1 year	7	9	+ 2
1-2 years	18	14	- 4
3-5 years	21	23	+ 2
6-10 years	19	20	+ 1
11-20 years	19	22	+ 3
More than 20 years	12	12	0
Refused	4	0	- 4
Median no. of years:	6.0 yrs.	6.5 yrs.	
Median Home Value:	$45,739	$53,148	-
Air Conditioning System:			
Has central air conditioning	7	10	+ 3
Has window air conditioning	19	13	- 6
Has no air conditioning	74	77	+ 3
Average Winter Utilities Bill:			
Under $30	6	1	- 5
$30 - $39	14	4	-10
$40 - $49	25	13	-12
$50 - $59	25	23	- 2
$60 - $69	13	23	+10
$70 - $79	7	14	+ 7
$80 or more	8	20	+12
Don't know	3	2	- 1
Median Bill:	$51.57	$63.40	-

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Number of Automobiles Owned:			
None	1	NA	NA
One	38	NA	NA
Two	45	NA	NA
Three or more	14	NA	NA
Refused to answer	1	NA	NA
Owns Foreign Car:	25	NA	NA
Owns Compact Car:	48	NA	NA
Pleasure Trips Made by Air:			
None	51	NA	NA
One	22	NA	NA
Two	12	NA	NA
Three	4	NA	NA
Four	3	NA	NA
Five - Eight	4	NA	NA
Nine or more	4	NA	NA
Don't know/refused	0	NA	NA
Membership in Organizations:			
Belong to no organizations	63	58	- 5
Belong, but not an officer	23	26	+ 3
Officer of an organization	13	16	+ 3
Income:			
Under $5,000	3	2	- 1
$ 5,000 - $ 9,999	9	7	- 2
$10,000 - $14,999	16	14	- 2
$15,000 - $19,999	21	16	- 5
$20,000 - $24,999	20	18	- 2
$25,000 - $29,999	10	16	+ 6
$30,000 - $34,999	6	8	+ 2
$35,000 and over	9	15	+ 6
Refused	6	4	- 2
Median Income:	$19,429	$21,043	-

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Political Affiliation:			
Democrat	37	33	- 4
Independent	34	34	0
Republican	24	29	+ 5
Not registered	4	2	- 2
Refused/don't know	1	2	+ 2
Sex:			
Men	39	45	+ 6
Women	61	55	- 6
Ethnic Status:			
Anglo	86	90	+ 4
Black	6	3	- 3
Hispano	5	6	+ 1
Undetermined	3	1	- 2
N =	435	541	-

AVERAGE RANKING
OF NATIONAL PRIORITIES

(Percent)

DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE IN MEAN RANKING*
Reducing the costs of living and slowing down inflation	3.9	4.2	+0.3
Reducing the tax burden	5.1	5.4	+0.3
Making sure there's enough energy to go around	5.3	4.8	-0.5
Reducing corruption in business and government	5.9	6.6	+0.7
Reducing air pollution and environmental damage	6.2	4.7	-1.5
Providing jobs for the unemployed	6.0	6.7	+0.7
Caring for the elderly	6.5	6.8	+0.3
Providing adequate health care	6.9	7.6	+0.7
Reducing the occurrence of violent crimes	6.5	6.2	-0.3
Providing first-rate educational opportunities for young people	7.2	7.0	-0.2
Fighting the problems associated with alcohol and drug abuse	8.8	8.5	-0.3
Reducing racial and religious prejudice	9.5	9.5	0.0
N=	435	541	-

*Priorities were ranked from 1 = top to 12 = bottom. Therefore, a (+) change represents a drop in priority from pre- to post-test.

Question Number	Den
Pre-Test	1
Post-Test	1

ABILITY TO CONTRIBUTE PERSONALLY TO SOLUTION OF THE ENERGY PROBLEM

(Percent)

DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Can do a great deal	15	15	0
Can do something	60	57	-3
Can do very little	20	24	+4
Can do nothing	5	3	-2
N=	435	541	-

Question Number	Den
Pre-Test	2
Post-Test	2

AVERAGE RANKING OF
IN-HOME ENERGY USERS*

(Percent)

DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Heating	2.3	1.8	-0.5
Central air conditioning	3.4	4.0	+0.6
Range	4.6	4.7	+0.1
Lighting	5.0	4.6	-0.4
Average-sized water heater	5.0	4.7	-0.3
Standard refrigerator	5.3	5.3	0.0
Automatic washer	5.9	5.9	0.0
Color television	6.0	6.0	0.0
Electric blanket	8.7	8.8	+0.1
Coffee maker	8.8	9.0	+0.2
N=	435	541	-

*Energy users were ranked by respondents from 1 = high to 10 = low. Therefore, a low ranking indicates high energy use.

Question Number	Den
Pre-Test	5
Post-Test	5

PERCENTAGE OF PRESENT UTILITY COSTS WHICH COULD BE SAVED BY INSTALLING ENERGY EFFICIENT PRODUCTS AND PRACTICING ENERGY CONSERVATION

Percent To Be Saved	(Percent) DENVER SEARS/WARDS PRE-TEST	POST-TEST	CHANGE
0 - 5	26	26	0
6 - 10	20	29	+ 9
11 - 15	12	13	+ 1
16 - 20	11	11	0
21 - 30	15	9	- 6
31 - 40	6	2	- 4
41 - 50	4	3	- 1
Over 50	2	2	0
Don't Know	4	5	+ 1
Median percent saved:	11.0	9.1	-
N=	435	541	-

Question Number	Den
Pre-Test	16
Post-Test	16

OPINIONS REGARDING COSTS OF SPECIFIC ENERGY-CONSERVING MEASURES*

	(Percent) DENVER SEARS/WARDS		
	PRE-TEST	POST-TEST	CHANGE
Install most efficient insulation:			
Greatest energy savings:	48	37	-11
Highest initial cost:	20	17	- 3
Install storm windows/doors:			
Greatest energy savings	35	35	0
Highest initial cost:	25	39	+14
Turn down thermostat to 65° in colder months:			
Greatest energy savings:	20	28	+ 8
Highest initial cost:	0	1	+ 1
Install solar hot water heater:			
Greatest energy savings:	15	13	- 2
Highest initial cost:	52	42	-10
Drive car less; use bus or carpool:			
Greatest energy savings:	15	22	+ 7
Highest initial cost:	1	1	0
Install weatherstripping:			
Greatest energy savings:	7	10	+ 3
Highest initial cost:	-	2	+ 2
Buy energy-conserving appliances and devices:			
Greatest energy savings:	6	6	0
Highest initial cost:	8	12	+ 4
Install automatic set-back thermostat:			
Greatest energy savings:	4	7	+ 3
Highest initial cost:	1	2	+ 1
Install heat pump:			
Greatest energy savings:	5	3	- 2
Highest initial cost:	13	9	- 4
Install device which restricts hot water flow on shower:			
Greatest energy savings:	3	4	+ 1
Highest initial cost:	1	1	0

	PRE-TEST	POST-TEST	CHANGE
Install automatic light timer:			
Greatest energy savings:	1	2	+ 1
Highest initial cost:	1	-	0
Install chimney flue damper:			
Greatest energy savings:	3	5	+ 2
Highest initial cost:	2	2	0
Install fluorescent light bulbs:			
Greatest energy savings:	2	2	0
Highest initial cost:	1	1	0
Get gas range with electronic pilot light:			
Greatest energy savings:	1	1	0
Highest initial cost:	2	2	0
Install insulating hood for hot water heater:			
Greatest energy savings:	1	2	+ 1
Highest initial cost:	1	-	- 1
N=	435	541	-

*Percentages will total more than 100 due to the inclusion of multiple mentions.

Question Number	Den
Pre-Test	10d, 10e
Post-Test	10d, 10e

KNOWLEDGE OF
ENERGY TERMINOLOGY

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
SOLAR ENERGY: Never heard of	1	1	0
Correct definition	94	92	- 2
BLACKOUT: Never heard of	6	3	- 3
Correct definition	86	87	+ 1
GEOTHERMAL POWER: Never heard of	35	29	- 6
Correct definition	30	34	+ 4
COAL GASIFICATION: Never heard of	44	34	-10
Correct definition	43	47	+ 4
VAN POOLING: Never heard of	49	36	-13
Correct definition	44	60	+16
SUNSHINE RIGHT OF WAYS: Never heard of	67	73	+ 6
Correct definition	18	19	+ 1
LIFE CYCLE COSTING: Never heard of	72	70	- 2
Correct definition	14	15	+ 1
ENERGY COST OF OWNERSHIP: Never heard of	73	74	+ 1
Correct definition	12	13	+ 1
R VALUE: Never heard of	75	63	-12
Correct definition	19	30	+11
EER: Never heard of	80	74	- 6
Correct definition	3	4	+ 1
RETROFITTING: Never heard of	82	84	+ 2
Correct definition	7	8	+ 1
DEGREE DAY: Never heard of	87	80	- 7
Correct definition	5	9	+ 4
N+	435	541	-

Question Number	Den
Pre-Test	6
Post-Test	6

PERCEIVED EFFECT OF
NATIONWIDE ENERGY CONSERVATION PROGRAM
ON RESPONDENT'S STANDARD OF LIVING

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Standard of living will go up	NA	15	NA
Standard of living will stay the same	NA	63	NA
Standard of living will go down	NA	21	NA
Don't know	NA	2	NA
N=	-	541	-

Question Number	Den
Pre-Test	9
Post-Test	9

ATTITUDES TOWARD CONSERVATION

(Percent)

DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
"Conservation is not a realistic solution to the energy crisis unless we are all prepared to accept a much lower standard of living."			
AGREE	41	51	+10
DISAGREE	55	47	- 8
DON'T KNOW	4	2	- 2
"There are others in this nation who use a whole lot more energy than I do. They are the ones who ought to be forced to conserve."			
AGREE	42	39	- 3
DISAGREE	49	58	+ 9
DON'T KNOW	9	3	- 6
N=	435	541	-

Question Number	Den
Pre-Test	3a,3b
Post-Test	3a,3b

SUPPORT OF SPECIFIC
CONSERVATION MEASURES

(Percent)

DENVER SEARS/WARDS

Conservation Measure	PRE-TEST	POST-TEST	CHANGE
A law prohibiting houses, including existing ones, from being sold unless they have proper levels of insulation.			
FAVOR	60	65	+5
OPPOSE	37	33	-4
DON'T KNOW	3	2	-1
A law setting standards for how much energy home appliances could use.			
FAVOR	57	62	+5
OPPOSE	33	34	+1
DON'T KNOW	10	3	-7
N=	435	541	-

Question Number	Den
Pre-Test	4a,4b
Post-Test	4a,4b

EXPRESSED WILLINGNESS TO ENGAGE IN SPECIFIC ENERGY-CONSERVING BEHAVIOR

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Willingness to pay 10 to 15 percent extra to buy appliances that conserve energy and cost less to operate due to lower energy use			
Willing	78	81	+ 3
Not Willing	12	10	- 2
Not Sure	10	8	- 2
No Answer	0	1	+ 1
Willingness to pay $200 more on next auto purchase in order to get devices which increase gas mileage			
Willing	78	78	0
Not Willing	16	15	- 1
Not Sure	6	6	0
No Answer	0	1	+ 1
N=	435	541	-

Question Number	Den
Pre-Test	13,14
Post-Test	13,14

WILLINGNESS TO PURCHASE AN AUTOMATIC
SET-BACK THERMOSTAT

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Willing	37	49	+12
Not Willing	56	43	-13
Not Sure	7	7	0
After explanation of what is meant by "automatic set-back thermostat"			
Would Purchase	NA	51	NA
Would Not Purchase	NA	43	NA
Not Sure	NA	5	NA
N=	435	541	-

Question Number	Den
Pre-Test	15
Post-Test	15

SPECIFIC ENERGY-CONSERVING MEASURES WHICH ARE MOST DIFFICULT FOR FAMILY TO ADOPT*

	(Percent) DENVER SEARS/WARDS		
	PRE-TEST	POST-TEST	CHANGE
Install solar hot water heater	52	38	-14
Install heat pump	27	13	-14
Turn down thermostat to 65° in colder months	17	15	- 2
Drive car less; use bus or car pool	15	29	+14
Install chimney flue damper	10	6	- 4
Install storm windows/doors	7	10	+ 3
Install most efficient insulation	6	7	+ 1
Buy energy-conserving appliances and devices	9	9	0
Get gas range with electronic pilot light	11	4	- 7
Install insulating hood for hot water heater	9	2	- 7
Install fluorescent light bulbs wherever possible	10	5	- 5
Install automatic set-back thermostat	6	4	- 2
Install device which restricts hot water flow on shower	6	4	- 2
Install automatic light timer	6	3	- 3
Install weatherstripping	1	1	0
N=	435	541	-

*Percentages will total more than 100 percent due to the inclusion of multiple mentions.

Question Number	Den
Pre-Test	10b
Post-Test	10b

SUPPORT OF ENERGY COST
OF OWNERSHIP CONCEPT

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Would buy more expensive appliances that conserve energy	69	73	+4
Would buy cheaper appliances because original cost cannot be recouped	15	14	-1
Don't know	16	13	-3
N=	435	541	-

Question Number	Den
Pre-Test	7
Post-Test	7

ANTICIPATED TIME FRAME
FOR RECOUPING HIGHER COSTS
OF ENERGY-SAVING APPLIANCES

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
To recoup cost which was 10 percent higher than average:			
Under 6 months	NA	3	NA
6 - 12 months	NA	5	NA
1 - 1.49 years	NA	21	NA
1.5 - 1.9 years	NA	5	NA
2.0 - 2.9 years	NA	14	NA
3.0 - 3.9 years	NA	10	NA
4.0 - 4.9 years	NA	3	NA
5 years or more	NA	27	NA
Will not recoup	NA	3	NA
Miscellaneous	NA	2	NA
Don't know	NA	7	NA
No answer	NA	0	NA
Median time:		2 yrs. 7 mos.	
To recoup cost which was 20 percent higher than average:			
Under 6 months	NA	3	NA
6 - 11.9 months	NA	2	NA
1 - 1.49 years	NA	7	NA
1.5 - 1.9 years	NA	3	NA
2.0 - 2.9 years	NA	17	NA
3.0 - 3.9 years	NA	9	NA
4.0 - 4.9 years	NA	10	NA
5 years or more	NA	34	NA
Will not recoup	NA	3	NA
Miscellaneous	NA	2	NA
Don't know	NA	7	NA
No answer	NA	3	NA
Median time:		4 yrs. 1 mo.	

N= 396

Question Number	Den
Pre-Test	-
Post-Test	7a,7b

INTEREST IN MEMBERSHIP IN ENERGY
CONSERVATION-ORIENTED ORGANIZATION

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Would pay to belong	23	24	+ 1
Interested, but would not pay	5	3	- 2
Interested, if respondent were paid	11	19	+ 8
No interest	61	54	- 7
N=	435	541	-

Question Number	Den
Pre-Test	37
Post-Test	43

WAYS IN WHICH RESPONDENT'S FAMILY HAS CONSERVED ENERGY IN PAST YEAR*

	(Percent) DENVER SEARS/WARDS		
	PRE-TEST	POST-TEST	CHANGE
Conserve heat; regulate thermostat	43	65	+22
Use lights only when needed	39	36	- 3
Save water	22	9	-13
Proper use of/decreased use of appliances	19	13	- 6
Installed insulation or weatherstripping	21	33	+12
Use car less; take mass transit	13	9	- 4
Cut down on washing clothes	12	8	- 4
Cut down use of dishwasher	10	9	- 1
Installed storm windows or doors	8	20	+12
Conserved electricity	6	3	- 3
Drive smaller car; carpool	6	6	0
Use clothes dryer less	5	5	0
Unplug/turn off television when not in use	3	3	0
Use less hot water	7	9	+ 2
Save gas	3	2	- 1
Conserve energy at home	3	1	- 2
Installed energy-conserving appliances	5	10	+ 5
Combine trips to save gas	2	2	0
Investigate alternative energy sources	1	6	+ 5
Promote and teach energy conservation	1	-	- 1
Miscellaneous	15	17	+ 2
Have not conserved	14	7	- 7
Don't know	0	0	0
N=	435	541	-

*Percentages total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	8, 8a
Post-Test	8, 8a

ATTITUDES AND BEHAVIOR REGARDING SPECIFIC ENERGY-CONSERVING MEASURES

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Turn down thermostat to 65° in colder months:			
Doing now	61	67	+ 6
Would consider	8	6	- 2
Friends have	41	49	+ 8
Drive car less; use bus or carpool:			
Doing now	60	57	- 3
Would consider	10	11	+ 1
Friends have	32	38	+ 6
Install storm windows/doors:			
Doing now	55	60	+ 5
Would consider	33	29	- 4
Friends have	46	51	+ 5
Install weatherstripping:			
Doing now	54	58	+ 4
Would consider	21	18	- 3
Friends have	29	33	+ 4
Install most efficient insulation:			
Doing now	54	57	+ 3
Would consider	31	26	- 5
Friends have	48	50	+ 2
Install fluorescent light bulbs wherever possible:			
Doing now	31	31	0
Would consider	16	16	0
Friends have	6	8	+ 2
Buy energy-conserving appliances and devices:			
Doing now	23	25	+ 2
Would consider	28	30	+ 2
Friends have	8	8	0
Install an automatic light timer:			
Doing now	18	18	0
Would consider	11	14	+ 3
Friends have	9	12	+ 3

	PRE-TEST	POST-TEST	CHANGE
Install a chimney flue damper:			
Doing now	15	11	- 4
Would consider	18	22	+ 4
Friends have	4	4	0
Install insulating hood for hot water heater:			
Doing now	8	5	- 3
Would consider	21	23	+ 2
Friends have	1	3	+ 2
Install device which restricts hot water flow on shower:			
Doing now	8	15	+ 7
Would consider	27	24	- 3
Friends have	6	9	+ 3
Install an automatic set-back thermostat:			
Doing now	3	6	+ 3
Would consider	21	28	+ 7
Friends have	4	9	+ 5
Get gas range with electronic pilot light:			
Doing now	2	5	+ 3
Would consider	16	21	+ 5
Friends have	1	2	+ 1
Install a heat pump:			
Doing now	1	-	- 1
Would consider	15	11	- 4
Friends have	2	2	0
Install solar hot water heater:			
Doing now	-	-	0
Would consider	25	20	- 5
Friends have	3	3	0
N=	435	541	-

Question Number	Den
Pre-Test	10,10a,10f
Post-Test	10,10a,10f

INDIVIDUAL OR GROUP WITH HIGHEST CREDIBILITY REGARDING ENERGY INFORMATION*

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
A group of scientists & engineers	NA	39	NA
The U.S. Department of Energy	NA	27	NA
A group of economists from colleges and unversities	NA	9	NA
Public Service Company	NA	9	NA
President Carter	NA	8	NA
Your Congressional representative	NA	4	NA
Local television stations (such as Channel 2, 4, 7, or 9)	NA	4	NA
Your favorite radio station	NA	2	NA
The Denver Post	NA	2	NA
Sears, Roebuck and Company	NA	1	NA
Montgomery Ward	NA	-	NA
The Rocky Mountain News	NA	1	NA
N=	-	541	-

*Percentages total more than 100 percent due to multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	18a

INDIVIDUAL OR GROUP WITH LOWEST
CREDIBILITY REGARDING ENERGY INFORMATION*

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
Montgomery Ward	NA	29	NA
Sears, Roebuck and Company	NA	27	NA
Public Service Company of Colorado	NA	14	NA
President Carter	NA	11	NA
Your Congressional Representative	NA	8	NA
Your favorite Radio Station	NA	8	NA
A group of economists from colleges and universities	NA	8	NA
The Denver Post	NA	7	NA
The Rocky Mountain News	NA	6	NA
Local television stations (such as Channel 2, 4, 7, or 9)	NA	4	NA
The U.S. Department of Energy	NA	5	NA
A group of scientists and engineers	NA	-	NA
N=	-	541	-

*Percentages total to more than 100 percent due to the inclusion of multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	18c

NOTICE OF COMMERCIALS STRESSING
ENERGY CONSERVATION *

	(Percent) DENVER SEARS/WARDS		
	PRE-TEST	POST-TEST	CHANGE
Respondent has seen/heard commercials on television	NA	73	NA
Respondent has heard commercials on radio	NA	32	NA
Respondent has seen ads in newspaper	NA	46	NA
Respondent has seen ads/displays in stores	NA	23	NA
Respondent doesn't know whether he/she has seen/heard commericals or ads	NA	6	NA
Respondent has not seen any commercials or ads	NA	9	NA
Miscellaneous Answer (i.e., Respondent has seen ads in magazines or flyers)	NA	1	NA
Question Not Answered	NA	0	NA
N=	-	541	-

*Percentages total more than 100 percent due to the inclusion of multiple mentions.

Question Number	Den
Pre-Test	-
Post-Test	19,19a

COMPLETION OF SLOGAN:
"FORD HAS A BETTER _____"

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
"Idea"	NA	61	NA
Other answer	NA	23	NA
Don't Know	NA	14	NA
Question Not Answered	NA	2	NA
N=	-	541	-

Question Number	Den
Pre-Test	-
Post-Test	25a

COMPLETION OF SLOGAN:
"PRODUCTS THAT SAVE ENERGY _____"

(Percent)
DENVER SEARS/WARDS

	PRE-TEST	POST-TEST	CHANGE
"Pay For Themselves"	NA	2	NA
Help pay their costs; save money	NA	26	NA
Other Answer	NA	22	NA
Don't Know	NA	44	NA
No Answer	NA	6	NA
N=	-	541	-

Question Number	Den
Pre-Test	-
Post-Test	25b

APPENDIX E

STATISTICAL CONSIDERATIONS

I. SAMPLE DESIGN FOR THE PRE- AND POST-SURVEYS.

A. General Public Surveys.

The objective was to draw a pre- and a post-sample of single-family, owner-occupied units from the Cole's Directories of the Greater Denver and Greater Salt Lake City areas. The 1977 editions of the directories were used in each location. A procedure was developed to identify approximately 1,500 sample units in each location, with a goal of 500 completed interviews in each survey.

1. Procedure for Denver.

The sample frame for Denver consisted of the SMSA as defined on Pages 4a and 5a of Cole's Directory. That directory indicated that there were 393,953 residential units and 51,177 business units for a total 445,130 units in the SMSA.

Estimates were obtained from the Denver Regional Council of Governments, which stated that 53.8 percent of all housing units in the SMSA were single-family, owner-occupied. In order to be conservative, 50 percent was used as the estimate in drawing the sample. In addition, approximately 85 percent of all single-family units were estimated to be owner-occupied.

In order to obtain the necessary 500 interviews, the addresses were over-sampled to obtain 750 units in each sample. From Cole's Directory, the estimate of the number of single-family, owner-occupied units was obtained by utilizing the following formula:

Total units (445,130) minus total business units (51,177) minus 50 percent times the number of total residential units (.50 X 393,953) = number of single-family, owner-occupied units (196,976).

Percent of total = 196,976 ÷ 445,130 = 44 percent.

In order to obtain 1,500 single-family, owner-occupied units, 3,409 addresses (1,500 divided by .44) had to be drawn from the directory. Therefore, the sampling fraction was one in 131 (i.e., 445,130 divided by 3,409).

Beginning with line 58 on Page 2 (identified as the random start point) every 131st entry in the Cole's Directory was selected. Businesses and multi-family units were discarded.

2. Procedure for Salt Lake City.

Page 6a of the Cole's Directory for Greater Salt Lake identified 170,010 residential units and 25,980 business units for a total of 195,990 total units. The Business Research Division of the University of Utah estimated that 61.3 percent of all housing units in the SMSA were single-family, owner-occupied. An estimate of 56 percent was actually used.

The number of single-family, owner-occupied units in Salt Lake City was estimated at:

195,990 minus 25,980 minus (.44) times (170,010) equals 95,205. That figure represents 48.6 percent of the total units.

In order to obtain 1,500 single-family, owner-occupied units for the two samples, 3,086 addresses (1,500 divided by .486) had to be drawn from the directory. That represented a sampling fraction of 1 in 63 (i.e., 195,990 divided by 3,086). Beginning on line 49 of Page 2 (the random start point) of Cole's Directory, every 63rd listing was selected. Businesses and multi-family listings were then discarded.

B. Sears and Wards Customer Sample for Denver

From the regional offices of both of those companies, a random sample of 1,000 customer names and addresses was obtained for Denver, based on the Zip Codes contained in the Cole's Directory definition of the Denver SMSA. Those addresses in the fringe Zip Code areas which did not conform to the general public SMSA definition were discarded. The final sample consisted of 1,008 addresses, which were then randomly distributed into two samples, one for the pre-test situation and one for the post-test procedure.

II. SCREENING PROCEDURE

The screening procedure was identical for both the general public and the Sears/Wards customer sample. Using current telephone directories, the telephone numbers for each name and address in the samples were obtained. An interviewer telephoned each of those addresses to determine if the residence was owner-occupied. Rental units were discarded from the sample. Where telephone numbers could not be obtained, the addresses were visited by interviewers who made the determination regarding home ownership. During the initial contact with the household, information regarding respondent's availability was obtained in order to expedite the contact process for the actual interviewing.

Following the screening procedure, all interviews were conducted in person. In contacting the household, the interviewer determined which adult member of the family was responsible for making decisions about home maintenance. That individual was then interviewed. If more than one adult was responsible for such decisions, a predetermined random selection procedure was provided to each interviewer to expedite the selection of the respondent.

Respondents were not informed as to the specific subject matter of the interview. They were told that the interview had to do with national priorities and that questions regarding the purpose of the interview would be answered by the interviewer following the completion of the interview. This was done in order not to introduce bias into the responses to questions regarding the importance of energy conservation. However, the inability to identify either the sponsor of the study or the specific content of the interview resulted in a higher refusal rate in the pre-surveys as compared with the post-surveys. However, in both instances, the completion rates exceeded 60 percent, rates rarely obtained in survey efforts involving such a lengthy interview.

III. STATISTICAL PROCEDURES USED IN DETERMINING THE SIGNIFICANCE OF CHANGE IN THE EVALUATION PROCESS.

- Let D_1 = Denver pre-test

  D_2 = Denver post-test

  S_1 = Salt Lake pre-test

  S_2 = Salt Lake post-test

- Assume that the responses in each survey are normally distributed. Therefore, the differences should be normally distributed.

STEP 1.

First, test to determine whether the difference $S_2 - S_1$ is significant, using a two-tailed test.

$$Z_S = \frac{S_2 - S_1}{\sqrt{\frac{S_2 (1-S_2)}{n_{S_2}} + \frac{S_1 (1-S_1)}{n_{S_2}}}}$$

If $-1.96 \leq Z_S \leq +1.96$, there was no significant difference in Salt Lake and Step 2 was performed, Otherwise, $S_2 - S_1$ was regarded as a significant change in Salt Lake and Step 3 was performed.

STEP 2.

- No significant change in Salt Lake.
- Null hypothesis is $D_2 = D_1$. Therefore, a significant increase in Denver is represented by $D_2 - D_1 > 0$ (one-tailed test).

$$Z_D = \frac{D_2 - D_1}{\sqrt{\frac{D_2 (1-D_2)}{n_{D_2}} + \frac{D_1 (1-D_1)}{n_{D_1}}}}$$

If $Z_D \geq 1.64$, change in Denver was significant (in the case of an increase).

STEP 3.

- If the change in Salt Lake was significant, the level of change was represented by k; that is, $k = S_2 - S_1$.

Then,

$$Z_D = \frac{(D_2 - D_1) - k}{\sqrt{\frac{D_2 (1-D_2)}{n_{D_2}} + \frac{D_1 (1-D_1)}{n_{D_1}}}}$$

If $Z_D \geq 1.64$, the change in Denver was significant (in the case of an increase). Note: In the case of a decrease, $D_2 < D_1$, $Z_D \geq 1.64$ was tested as a measure of significance.