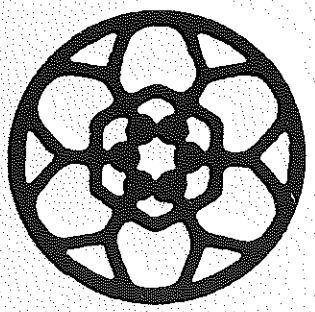
MICHIGAN PUBLIC TRANSIT ATTITUDE AND AWARENESS SURVEY

Initial and Follow-up Report for the:



Grand Rapids Area Transit Authority

By
Marketing and Consumer Services Section
Governmental Relations and Consumer Affairs Division
Bureau of Urban and Public Transportation
Michigan Department of Transportation

September, 1982

MICHIGAN DEPARTMENT OF TRANSPORTATION

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This report is one of five available reports. Companion reports summarize results from four other urbanized areas as follows: Ann Arbor, Kalamazoo, Lansing, and Saginaw.

16. Abstract

This report summarizes the results of an initial and follow-up telephone survey of the general public in GRAND RAPIDS, Michigan. The purpose of the initial survey was to determine public attitudes toward, and awareness of, the Grand Rapids Area Transit Authority (GRATA). The purpose of the follow-up survey was to evaluate the effectiveness of GRATA marketing efforts during the time from the initial survey to the follow-up survey. This report compares the results from the follow-up survey conducted in 1981 with those of the initial survey conducted in 1980. The comparison indicates which marketing efforts have been most successful and highlights significant changes in attitude and awareness levels.

The major objectives of this research were threefold:

1. To develop and implement a methodology that could be used by other state transportation departments to survey public attitudes and awareness levels regarding transit systems in their states.

2. To provide relevant market data to GRATA for use in developing effective marketing efforts for public transportation services.

3. To assist the Michigan Department of Transportation in determining the type of marketing efforts which might be appropriate at the state level.

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If you desire additional information regarding this project, please write or call:

Governmental Relations and Consumer Affairs Division
Bureau of Urban and Public Transportation
Michigan Department of Transportation
P.O. Box 30050
Lansing, Michigan 48909
Telephone: (517) 373-6572

INTRODUCTION

The major objective of this research was to develop and implement a methodology that could be used by other state transportation departments to measure public attitudes toward, and awareness of, fixed-route public transit systems. The information gathered would be used to assist these systems in developing effective marketing efforts for public transportation services, as well as determine the type of marketing efforts which might be appropriate at the state level. This project involved five selected Michigan communities with transit systems receiving assistance under terms of Section 5 of the Urban Mass Transportation Act.

In order to design public transportation services to better meet the public's needs, it was necessary first to collect market data which identified these needs. With this information it would then be possible to design service to meet these needs and to prepare promotional material to inform and persuade the public about existing service. A methodology was necessary to collect this information.

The initial survey results on a particular community were provided to the transit system in that community. The transit system was encouraged to use these results in planning and developing its marketing efforts, e.g., the definition of target markets and formulation of goals and strategies for each target segment. Each system was encouraged to develop marketing projects based on this information. The effectiveness of these projects was evaluated by a follow-up survey conducted approximately 21 months after the initial survey to determine the extent to which attitudes and awareness had changed.

The intent of the methodology developed and employed in this project is that it will be adaptable to other state transportation departments' marketing efforts throughout the country. Special Report 181 of the Transportation Research Board suggests that "some agency with an overview capability" develop "a common set of survey questions." It states that "some uniformity along these lines would help develop a common data base that could be used by all systems in further research." It suggests that a state department of transportation is one of the "most likely collection centers."

While some Michigan transit systems already are doing some type of telephone marketing research, the value of this type of research conducted at the state level is primarily that of standardization, similar to that developed for what is now the Federal Highway Administration in highway travel surveys during the 1940s. Current efforts to compare marketing research conducted in different communities throughout the country have been severely hampered by the fact that each urbanized area used different questionnaires and techniques. This approach ensures that questions are uniform, that the administration of the survey is consistent in its quality, and that other factors remain stable from community to community.

The approach taken in this research project, to the best of our knowledge, has not been undertaken to date. It is, thus, intended to contribute to the development of a research methodology which is applicable to other state transportation departments throughout the country, as well as provide information which will benefit the State of Michigan and the marketing efforts of Michigan transit systems. Further, this procedure should be relatively easy to implement, given the existence of similar transportation departments throughout the United States.

SURVEY METHODOLOGY

In preparing for this project, several alternative survey methods were considered. One of the most direct surveys would have been to conduct a home interview of residents in the study areas. However, setting up offices in five different cities, training personnel, and incurring travel-related expenses made this option impractical for the time allotted. Instead, it was decided that a telephone interview survey would be best.

The goal for each community was to collect 1,000 interviews. It was estimated that meeting this goal would require about twice as many telephone calls to account for number changes, no answers, interview refusals, etc. Each interview solicited responses to a 38-item questionnaire (Appendix A) regarding attitudes and awareness of local public transportation services. In order to ensure that the interviews were adequately distributed throughout the transit service area, a systematic sample selection process was used. This process established a sample universe made up of those telephone exchanges that correspond geographically with the existing transit service area. A copy of the telephone exchanges used for drawing the sample for Grand Rapids is provided in Appendix B of this report.

The actual telephone numbers were selected by using a separate ratio developed for each city. This ratio was determined by counting the total number of directory pages containing the universe exchanges and then multiplying this amount by the average number of residential telephone numbers per page (businesses, governmental agencies, and other nonresidential services were excluded). This latter figure was then divided by 2,000 and produced the ratio of 1:59 for Grand Rapids.

This ratio meant that one telephone number was selected for each of 59 numbers on the telephone directory page. The results of this selection process produced both an alphabetical and geographical distribution of samples. Results of this selection process, indicating how many telephone numbers were called for each exchange prefix, are shown for Grand Rapids in Appendix B. Appendix C provides a breakdown of the actual number of interviews completed versus the number attempted.

All interviews were conducted from the Lansing office over state leased lines. Additional telephone lines were installed with special headset attachments to aid the interviewer in recording citizen responses. Because the questionnaire was quite extensive, experimental interviews were conducted prior to starting the initial survey. Modifications were made and interviewing commenced January 23, 1980, and ended June 6, 1980. The interviews were conducted during the hours of 12 noon - 8 p.m., Monday through Thursday. Post-survey interviewing started October 12, 1981, and ended December 8, 1981, during the hours of 9 a.m. to 6 p.m., Monday through Thursday and 9 a.m. to 4:30 p.m. on Friday. Each interview took about five minutes to complete and, in general, the public was very cooperative with this effort.

Data from completed questionnaires were edited and coded on to special coding forms designed especially for this survey. Data from the coding forms were keydisked onto a magnetic tape. Quantitative data, read from the magnetic tape, were entered onto a disk file. The editing program was run and data were read to determine if any data were invalid. Corrections were made to invalid data in an effort to obtain as many valid interviews as possible. The report program was run on validated data, and frequency distributions were established for the total sample. The frequency distributions indicate the number and percentage of respondents answering in each specific way to a specific question. (Computer printouts of data are available for inspection at the Bureau of Urban and Public Transportation, Michigan Department of Transportation, Transportation Building, Lansing, Michigan.)

The data in this report are analyzed by demographic factors and frequency of bus usage. As used in this report, the terms heavy user, moderate user, light user, other user, and nonriders are defined as follows:

Heavy user	- Daily or almost every day
Moderate user	- Once a week
Light user	- Once a month or once a year
Other user	- A frequency mentioned other than the above frequencies
Nonriders	- Respondents who have not used the bus service during the past year

The Statistical Package for the Social Sciences (SPSS) was used for the analysis of the quantitative data. This statistical computer package was used in conjunction with the Burroughs 7700 computer. The data were crosstabulated into contingency tables and subsequently statistically analyzed by means of the chi-square test. Crosstabulation provides a joint frequency distribution of cases according to two or more classificatory variables. The chi-square test determines the significance of deviations from the expected frequencies. Given the nature of a pre- and post-survey, and because the number of interviews taken differed, pre to post, this type of statistical analysis was deemed appropriate to test the data.

Throughout this report many tables summarize the crosstabulations, basically by ridership groups. Only in areas of significant crosstabulations are the findings discussed in detail.

SUMMARY OF MAJOR FINDINGS

The major findings of the study are summarized below. Each is discussed more fully in the body of the report and is accompanied by tables displaying the relevant data.

Transit Awareness

Awareness of a bus system in the Grand Rapids area among respondents was at 88 percent in the pre-survey and 92 percent in the post-survey.

Twenty-seven percent (27%) of the pre-survey respondents and 54 percent of the post-survey respondents correctly identified the Grand Rapids Area Transit Authority (GRATA) name. Recognition increased 100 percent from pre- to post-survey.

The majority of bus riders were aware of the cost to ride the bus. Most nonriders, however, did not know the cost for a ride on the bus.

The majority of bus riders knew how often the bus came by. Most nonriders, though, indicated "no" or "don't know" to this question.

Both bus riders and nonriders reported they knew how to obtain bus information.

The majority of bus riders and nonriders were aware of special bus services for elderly people and handicapped people.

Transportation Patterns

Most respondents, pre and post, had not used the bus service during the preceding year.

Of those who had used the bus service, light users comprised 46 percent of pre-survey riders and 42 percent in the post-survey.

Heavy users rode the bus mainly for work and shopping purposes, whereas moderate and other users reversed this trend and rode for shopping purposes, followed by work. Light users mentioned shopping as their primary purpose.

Other household members of bus riders and nonriders rode basically for shopping, work, and school purposes.

Most bus riders and nonriders live within one or two blocks of the nearest bus route.

"Car" was cited as the usual means of transportation except for heavy users who primarily rely on the bus for their transportation needs. The highest percentage occurred for nonriders, followed by light, other, moderate, and heavy users.

The number of automobiles in a household varied by bus rider groups:

- -Most pre- and post-survey heavy users were about evenly split between those who reported only one auto and those who reported two or more.
- -Most pre- and post-survey moderate users reported only one auto.
- -Most light and other users and nonriders cited two or more cars.

The majority of bus riders and nonriders normally have a vehicle available to them. (Post-survey heavy users were the only exception.)

Transportation Attitudes

The most frequently mentioned reason nonriders cited for not riding the bus was "don't need to, I have a car."

Overall, most bus riders and nonriders believed the bus fare was just right.

The majority of bus riders and nonriders indicated they would not use the bus more if the bus routes were closer or if the bus came by more frequently.

Bus riders, and to a lesser extent, nonriders, believed the bus system serves the areas to which they most frequently travel.

Most pre- and post-survey bus riders had considered riding the bus more because of rising gasoline prices. The reverse was true for nonriders.

Most bus riders and nonriders indicated they had not considered getting in a carpool because of rising gasoline prices.

Most bus riders and nonriders had considered driving less with the rising gasoline prices.

Gasoline prices apparently affected both bus riders and nonriders.

An overwhelming majority of pre- and post-survey bus riders and nonriders view the bus service as a viable, valuable energy conservation measure.

The opinion of most bus riders and nonriders toward improvements in GRATA's bus service is that no changes were needed.

Demographics

Sex:

In general, female bus riders and nonriders outnumbered males in both surveys.

Pre-survey males traveled by bus, primarily for work, followed by shopping purposes. Post-survey males and pre-survey females reversed this trend and mentioned shopping first, followed by work. Post-survey females reported shopping first, followed by equal reporting of personal business and visits or recreation.

Age:

-16-20 year-old riders used the bus primarily for shopping purposes.

-21-39 year-old riders rode for work and shopping needs.

-Pre-survey 40-60 year-old riders rode for work and shopping needs, but post-survey riders were nearly equal between shopping and visits or recreation.

-Older than 60 years riders used the bus primarily for shopping purposes.

As the age groups increased in years, the percentage of males comprising each age group tended to decrease. The reverse was true for females; as the age groups increased in years, so did the percentage of females comprising each age group.

Following are "key" age groups with the percentages of various bus rider groups and nonriders comprising them:

21-39 years - 35 percent, pre-survey heavy users
38 percent, post-survey heavy users
41 percent, pre-survey light users
37 percent, post-survey light users
49 percent, pre-survey nonriders
42 percent, post-survey nonriders

Older than 60 years - 44 percent, pre-survey moderate users
50 percent, post-survey moderate users

Occupation:

Pre-survey males were about evenly distributed between the professional (15%), skilled/semi-skilled (14%), and retired (16%) categories. Twenty-three percent (23%) of the post-survey males were retired; 16 percent, skilled/semi-skilled; and 10 percent, professional.

Pre- and post-survey females reported an identical ranking of homemakers (33 percent/41 percent); retired (22 percent/24 percent); and professional (10 percent/7 percent).

-Students comprised most of the respondents between the ages of 16-20.

-Homemakers comprised the following age groups:

25 percent, pre-survey 21-39 years old
41 percent, post-survey 21-39 years old
36 percent, pre-survey 40-60 years old
45 percent, post-survey 40-60 years old

-Retirees were reflected more in the older than 60 age group.

-Student, homemaker, and retired were the three most frequently mentioned occupations by bus riders. Nonriders were mainly comprised of professionals, homemakers, and retirees.

Advertising Awareness

Note: Please see specific sections on "Advertising Awareness" (pg. 45) and "Conclusions" (pg. 56) for more detailed findings.

Radio - Even though the majority of bus riders and nonriders indicated they regularly listen to the radio, most reported that they had not heard any GRATA radio announcements.

Those bus riders and nonriders who did hear GRATA radio announcements were noted more in the post-survey than in the pre-survey. WOOD, WLAV, WCUZ, and WGRD were the stations most frequently mentioned.

Television - Even though the majority of bus riders and nonriders indicated they regularly watch TV, most reported that they had not seen any GRATA television announcements. (Post-survey heavy users were the only exception).

Those bus riders and nonriders who did see GRATA TV announcements were noted more in the post-survey than in the pre-survey. WZZM-TV and WOTV-TV were the stations most frequently mentioned.

Newspapers - Even though the majority of bus riders and nonriders indicated they regularly read a local newspaper, most reported that they had not seen any GRATA newspaper ads. (Post-survey heavy and light users were the only exceptions).

Most bus riders and nonriders who did see GRATA newspaper ads were noted more in the post-survey than in the pre-survey. The Grand Rapids Press was reported more often than any other newspaper.

Other Media

Exposure - When respondents were asked if there were any other places they had seen, heard or read advertisements or otherwise obtained information about GRATA, billboards were the most common source given. Displays and "other" media and news articles were also cited. All ridership groups reported a percentage increase, pre to post, for displays.

Significant increases in recognition were noted for radio, television, and newspaper advertising. Significantly more respondents reported these mediums in the post-survey than in the pre-survey, which may be attributed to an extensive six-week advertising campaign, "Thinkaboutabus," which was implemented during October and November 1981. (Post-survey interviewing was conducted from October 23 to November 3). Newspaper, television, radio, and outdoor advertising was directed to commuters and shoppers to increase awareness and ridership for GRATA. Both objectives were realized. An overall 4.5 percent increase in ridership was achieved, in addition to increased awareness of GRATA. Both GRATA and its advertising agency received a number of favorable comments about the campaign.

TRANSIT AWARENESS

Bus System Awareness

The first question in the survey asked respondents, "Is there a city bus system in the Grand Rapids Area?" An overwhelming majority of respondents in both the initial and follow-up survey were aware of the existence of a bus system in the Grand Rapids area. Responses are summarized below:

City Bus System?	Total Respondents	%
Yes or think so	Pre	88
	Post	92
No	Pre	11
	Post	5*
Don't Know	Pre	1
	Post	3*
Totals	Pre	100% (N = 1,151)
	Post	100% (N = 1,000)

*There is a significant difference at the .001 level between the two surveys regarding the "no" and "don't know" responses. Post-survey results show an increased awareness of the Grand Rapids Area Transit Authority over pre-survey results.

Bus System Name

The second question asked respondents to name the bus system in the Grand Rapids area. Summarized below are the responses to this question:

Response	Total Respondents*	
		%
GRATA	Pre	27
	Post	54
Grand Rapids Transit Authority	Pre	13
	Post	-
Grand Rapids Transit	Pre	8
	Post	2
Other Responses (included names which sound similar to GRATA, route destination names and incorrect responses)	Pre	14
	Post	3
Don't know	Pre	38
	Post	41
Totals	Pre	100% (N = 1,021)
	Post	100% (N = 922)

*There is a significant difference at the .001 level between the two surveys due to a change in the distribution of responses. Post-survey recognition of GRATA was double that of pre-survey results.

Cost for Bus Ride

The following table summarizes responses to the question, "How much does it cost for a ride on the bus?" The results indicate the majority of bus riders were aware of the cost to ride the bus. Most nonriders, however, replied "don't know." At the time of the initial survey, February 1980, the cash fare was 35 cents. In October 1980, the fare was raised to 50 cents. This was also the cash fare when the follow-up survey was conducted in October and November 1981. The post-survey results show a larger percentage of heavy and light bus riders who knew the current cash fare as compared to pre-survey results:

		Bus Rider Usage					
Cost		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
More than 35¢ / More than 50¢	Pre	0	0	1	0	4	3
	Post	0	0	0	1	1	1
35¢ / 50¢	Pre	49	48	52	61	26	34
	Post	59	39	58	53	39*	45
Less than 35¢ / Less than 50¢	Pre	6	8	7	10	6	6
	Post	0	11	13	9	7	8
Senior Citizen Rate	Pre	25	29	20	7	6	10
	Post	29	39	20	24	4	12
Pass/Punch Card	Pre	15	13	4	18	2	4
	Post	9	4	1	2	0	1
Don't know	Pre	4	0	12	4	56	42
	Post	2	7	8	11	49	33
Other	Pre	1	2	4	0	0	1
	Post	1	0	0	0	0	0
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 558)	100% (N = 908)

*Among nonriders there is a significant difference at the .05 level concerning the current cash fare response. Post-survey results show a higher awareness of the 50 cents cash fare compared to pre-survey cash fare (35 cents) awareness.

Bus Frequency

Respondents were asked if they knew how often the bus came by. The majority of bus riders indicated "yes" to this question. Most nonriders, though, indicated "no" or "don't know," as the following table shows:

		Bus Rider Usage					
Bus Frequency		Heavy %	Moderate* %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	84	77	54	71	21	35
	Post	81	61	53	67	19	36
No	Pre	6	10	24	29	48	39
	Post	4	2	3*	1	6*	4
Don't know	Pre	6	11	18	0	30	25
	Post	12	32	43*	29*	73*	58
Doesn't seem to follow schedule/it varies	Pre	3	2	4	0	0	1
	Post	3	5	1	3	2	2
Others	Pre	1	0	0	0	1	0
	Post	0	0	0	0	0	0
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 710)	100% (N = 1,012)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of moderate user responses. The pre to post change for the "no" response is significant at the .001 level for both light users and nonriders. The significant difference for the "don't know" response is at the .005 level for light users, .05 level for other users, and .001 level for nonriders.

Post-survey results indicate a slight decrease in bus frequency awareness.

Bus Information

The item "Do you know how to obtain bus information?" produced the following results:

Bus Information		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	91	92	91	93	70	76
	Post	91	89	85	93	71	78
No	Pre	7	8	7	7	27	21
	Post	9	11	13	5	23	18
Don't know	Pre	2	0	2	0	3	3
	Post	0	0	2	2	6	4
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 558)	100% (N = 908)

The majority of the bus rider groups indicated they knew how to obtain bus information with the amount of usage not an issue. Interestingly, 70 percent of the initial survey nonriders and 71 percent of the follow-up survey nonriders also replied "yes" to this question, yet chose not to use their local bus service.

Special Services for the Elderly

Respondents were asked if GRATA had special bus services for elderly people. The majority of bus riders and nonriders were aware of these services as the following table indicates:

		Bus Rider Usage					
Elderly Services		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes or think so	Pre	90	94	89	82	83	81
	Post	81	84	74	82	71	70
No	Pre	7	4	3	11	7	7
	Post	2	5	4	2	5	6
Don't know	Pre	3	2	8	7	10	12
	Post	17*	11	22*	16	24*	24
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference between the pre and post "don't know" response for heavy users (.05 level), light users (.05 level), and nonriders (.001 level). Post-survey results indicate a slight decrease in awareness of services for elderly people.

Special Services for Handicappers

As with elderly services, respondents were asked if GRATA had special bus services for handicapped people. The pattern of responses is about the same as the previous question. The majority of bus riders and nonriders were aware of these services as the following table indicates:

Handicapper Services		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes or think so	Pre	89	83	83	75	78	77
	Post	86	77	78	85	72	72
No	Pre	7	4	4	14	9	8
	Post	0	5	3	2	5	5
Don't know	Pre	4	13	13	11	13	15
	Post	14	18	19	13	23*	23
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*Among nonriders, there is a significant difference at the .001 level concerning the "don't know" response. Fewer post-survey nonriders were aware of special bus services for handicapped people, compared to pre-survey results.

TRANSPORTATION PATTERNS

Transit Usage

In response to the statement, "Have you personally used the bus service during the past year?" the majority of respondents said "no" in both the pre- and post- surveys.

Used Bus Service?	Total Respondents %	
Yes	Pre	30
	Post	38*
No	Pre	70
	Post	62
Totals	Pre	100% (N = 1,020)
	Post	100% (N = 910)

*There is a significant difference at the .01 level between the two surveys regarding the "yes" response. Post-survey results show an increase in bus service usage over pre-survey results.

Those respondents who indicated they had used the bus service during the past year were characterized as heavy, moderate, light, or other users based upon their frequency of using bus services. Following is a breakdown of bus usage patterns:

Usage		%
Heavy - daily or almost every day	Pre	29
	Post	16*
Moderate - once a week	Pre	16
	Post	13
Light - once a month or once a year	Pre	46
	Post	42
Other - a frequency mentioned other than the above frequencies	Pre	9
	Post	29*
Totals	Pre	100% (N = 302)
	Post	100% (N = 350)

*Differences between the pre- and post-survey results for heavy users is significant at the .05 level, and for other users at the .001 level.

Trip Purpose

Question No. 6, "For what purpose(s) do you use the bus service?" provided for four choices. The major (first choice) trip categories for travel by public transit bus are shown in the following table. Heavy users rode the bus for work purposes, followed by shopping. Moderate and other users reversed this trend and rode for shopping purposes, followed by work. Light users mentioned shopping as their primary purpose; second ranking for the pre-survey was when I don't have a car/when car is in garage and post-survey was visits or recreation.

(First Choice) Purpose		Bus Rider Usage: Heavy* %	Moderate %	Light* %	Other %	Total Respondents %
Work	Pre	43	17	11	26	23
	Post	33	25	6	15	15
Personal Business	Pre	3	6	11	4	7
	Post	17	23	18	10	16
Shopping	Pre	30	60	41	33	39
	Post	24	39	38	52	39
School	Pre	16	6	5	4	9
	Post	12	2	2	3	4
Visits or Recreation	Pre	2	5	11	15	7
	Post	9	7	25	10	16
Dining	Pre	0	0	0	0	0
	Post	0	0	1	1	1
Medical	Pre	3	2	2	4	3
	Post	3	2	2	4	3
When I don't have a car/ when car is in garage	Pre	1	0	15	7	8
	Post	2	0	7	3	4
Other	Pre	2	4	4	7	4
	Post	0	2	1	2	2
Totals	Pre	100% (N = 88)	100% (N = 47)	100% (N = 134)	100% (N = 27)	100% (N = 296)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 146)	100% (N = 99)	100% (N = 347)

*There is a significant difference between the two surveys due to a change in the distribution of responses for heavy users (.05 level) and light users (.005 level).

Other Household Members Transit Usage

Given that a respondent rides the bus, is it likely that other household members also ride? Most bus riders and nonriders reported a higher percentage of "no" responses in both the pre- and post-surveys. Post-survey light users were the only exception (see Appendix D).

Those respondents who indicated that other members of their household had used the bus service during the past year were asked "who" this member was. The most frequently mentioned responses were children and spouses (see Appendix E).

Respondents were then asked: "How often do other members use the bus service?" Heavy users indicated in both pre- and post-surveys a higher percentage of heavy usage by other household members. Moderate users indicated primarily moderate usage by other household members, and light users light usage by other household members (see Appendix F).

Question No. 9, "For what purpose(s) do the other members use the bus service?" provide for four choices. Appendix G shows the major (first choice) trip categories for travel by public transit bus. Other household members of bus riders and nonriders rode basically for shopping, work, and school purposes in both pre- and post-surveys.

Nearness of Bus Route

The item, "How far do you live from the nearest bus route?" revealed that the majority of bus riders live within one or two blocks of the nearest bus route. Despite the fact that most nonriders also live within one or two blocks of the nearest bus route, they had not used the bus service during the previous year.

Distance		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
1 or 2 blocks	Pre	82	83	76	64	54	61
	Post	85	75	67	77	54	62
3 or 4 blocks	Pre	13	4	8	11	10	10
	Post	7	9	11	11	11	11
1/4 to 1/2 mile	Pre	2	9	5	11	7	6
	Post	3	9	5	7	7	6
1/2 - 1 mile	Pre	3	2	4	7	4	4
	Post	2	5	5	1	4	4
1 mile or more	Pre	0	0	6	7	16	12
	Post	2	2	10	4	14	11
Don't know	Pre	0	2	1	0	9	7
	Post	1	0	2	0	10	6
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 559)	100% (N = 909)

Usual Transportation Mode

Question No. 34, "What is your usual means of transportation?" provided for two choices. The major (first choice) responses are shown below:

(First Choice) Usual Mode		Bus Rider Usage				Non-riders %	Total Respondents %
		Heavy %	Moderate %	Light %	Other %		
Car	Pre	43	54	80	75	93	84
	Post	38	55	86	80	95	86
Bus	Pre	47	23	4	4	0	5
	Post	57	36	3	12	0	7
DART	Pre	0	0	0	3	0	0
	Post	0	0	0	0	0	0
Friends or relatives take me	Pre	5	10	10	4	4	6
	Post	2	2	7	4	4	5
Bike, motor-cycle	Pre	0	0	1	0	0	0
	Post	0	2	0	0	0	0
Senior Citizen or Handicapper Van	Pre	0	2	1	0	1	1
	Post	0	0	0	0	0	0
Usually walk	Pre	2	11	3	14	1	2
	Post	3	5	4	4	1	2
I go a Variety of Ways	Pre	3	0	1	0	0	1
	Post	0	0	0	0	0	0
Other	Pre	0	0	0	0	1	1
	Post	0	0	0	0	0	0
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

"Car" was cited as the usual means of transportation except for heavy users who primarily rely on the bus for their transportation needs. The highest percentage occurred for nonriders, followed by light, other, moderate, and heavy users. Also, in general, post-survey results show a higher percentage of "car" responses over pre-survey results. The only exception was for heavy users.

Number of Automobiles

The item, "How many automobiles does your household have?" resulted in the following breakdown:

Heavy users were about evenly split in both the pre- and post-surveys between those who reported only one automobile and those who had two or more cars in their household. Pre- and post-moderate users, however, basically reported only one automobile. Light and other users and nonriders primarily reported two or more cars.

		Bus Rider Usage					
Number of Automobiles		Heavy %	Moderate %	Light* %	Other %	Non-riders %	Total Respondents %
1	Pre	39	42	44	43	32	36
	Post	31	41	39	35	34	35
2	Pre	29	17	28	43	48	41
	Post	19	23	45	39	47	42
3	Pre	6	6	14	7	9	9
	Post	7	2	6	7	11	9
4 or more	Pre	3	10	4	3	7	6
	Post	5	2	4	4	5	5
0	Pre	23	25	10	4	4	8
	Post	38	32	6	15	3	9
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of light users responses. More light users in the post-survey reported two or more cars than was recorded in the pre-survey.

Availability of Vehicle

The question, "Is a vehicle normally available for your use?" produced the following results:

Vehicle Available		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	50	46	77	61	90	81
	Post	41	50	79	72	90	80
No	Pre	41	40	16	21	7	14
	Post	55	45	14	22	8	16
Sometimes	Pre	6	8	4	11	2	3
	Post	4	5	7	4	2	3
Other	Pre	3	6	3	7	1	2
	Post	0	0	0	2	0	1
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

Fifty percent (50%) of the pre-survey heavy users replied "yes," while 55 percent in the post-survey said "no." Moderate users were about equal between the "yes" and "no" responses. Most light and other users and nonriders indicated they did normally have a vehicle available for their use.

TRANSPORTATION ATTITUDES

Reasons for Not Riding the Bus

The respondents classified as nonriders, i.e., those who had not used the bus service during the previous year, were asked, "Is there any particular reason why you don't ride the bus?" Pre- and post-survey results indicate "don't need to, have a car" as the primary reason for not riding the bus by nonriders. Pre-survey second ranking was "Doesn't stop near me or I live in the country," followed by "no reason." Post-survey results were reversed; second ranking was "no reason," followed by "doesn't stop near me or I live in the country."

This question provided for four choices. The following table summarizes the responses for nonriders first choice:

(First Choice) Reasons for Not Riding the Bus	Pre %*	Post %*
Don't need to, have a car	46	46
Doesn't stop near me or I live in the country	14	10
No reason	13	19
Doesn't go where I want to go	12	9
It's inconvenient	7	4
Other	5	7
Takes too long	1	1
I don't like buses	1	0
Just never thought about it or got around to it	1	1
Doesn't go when I want to go	0	3
Totals	100% (N = 712)	100% (N = 552)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of responses. Post-survey results show an increase in "no reason" responses, and a decrease in "doesn't stop near me or I live in the country" and "doesn't go where I want to go" responses.

Fairness of Cost

The following results are from the question asking respondents their opinions regarding the cost for a bus ride. Overall, most bus riders and nonriders believed the fare was "just right."

		Bus Rider Usage					
You Think this Fare is:		Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Too Much	Pre	2	2	2	0	2	2
	Post	13	10	8	9	5	7
Not Enough	Pre	2	6	1	4	6	4
	Post	2	0	0	1	1	1
Just Right	Pre	94	92	95	96	87	90
	Post	85	85	89	83	86	86
Don't Know	Pre	2	0	2	0	4	3
	Post	0	0	3	6	6	4
Other	Pre	0	0	0	0	1	1
	Post	0	5	0	1	2	2
Totals	Pre	100% (N = 83)	100% (N = 47)	100% (N = 116)	100% (N = 27)	100% (N = 309)	100% (N = 582)
	Post	100% (N = 56)	100% (N = 41)	100% (N = 136)	100% (N = 89)	100% (N = 278)	100% (N = 600)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of nonrider responses.

Closer Routes

Question 13 asked respondents, "Would you use the bus more if the bus routes were closer?" Considering the response categories of "no" and "probably not" together, the majority of bus riders and nonriders indicated that closer bus routes would not induce them to use the bus more. The table below highlights the results:

		Bus Rider Usage					
Closer Routes		Heavy* %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Yes	Pre	13	11	12	7	11	11
	Post	5	14	11	7	9	9
No	Pre	63	64	62	75	62	62
	Post	84	66	67	64	68	68
Don't Know	Pre	0	0	0	0	1	1
	Post	0	0	1	1	2	2
Maybe	Pre	3	4	3	7	4	4
	Post	2	2	6	5	5	5
Probably Not	Pre	20	21	22	7	19	20
	Post	2	16	14	17	15	14
Other	Pre	1	0	1	4	3	2
	Post	7	2	1	6	1	2
Totals	Pre	100% (N = 88)	100% (N = 47)	100% (N = 136)	100% (N = 28)	100% (N = 649)	100% (N = 948)
	Post	100% (N = 57)	100% (N = 44)	100% (N = 146)	100% (N = 100)	100% (N = 502)	100% (N = 849)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of heavy user and nonrider responses.

Frequency of Service

Respondents were asked if they would use the bus more if it came by more frequently. The results, as shown below, indicate that bus riders and nonriders would not use the bus more if it came by more frequently:

More Frequent Service		Bus Rider Usage: Heavy %	Moderate %	Light* %	Other %	Non-riders %	Total Respondents %
Yes	Pre	22	8	11	25	6	12
	Post	20	14	6	11	9	11
No	Pre	47	68	48	55	66	57
	Post	66	52	72	60	69	66
Don't Know	Pre	2	0	0	0	1	1
	Post	0	3	4	3	2	2
Maybe	Pre	4	3	9	10	5	6
	Post	4	14	1	4	3	4
Probably Not	Pre	25	18	31	5	21	23
	Post	2	17	17	20	15	15
Other	Pre	0	3	1	5	1	1
	Post	8	0	0	2	2	2
Totals	Pre	100% (N = 77)	100% (N = 38)	100% (N = 81)	100% (N = 20)	100% (N = 154)	100% (N = 370)
	Post	100% (N = 50)	100% (N = 29)	100% (N = 83)	100% (N = 70)	100% (N = 120)	100% (N = 352)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of light users responses. Pre- to post-survey results indicate an decrease in the percentage of light users who would use the bus more if it came by more frequently.

Travel Areas Served

The item, "Does the bus system serve the areas to which you most frequently travel?" revealed the following results. There is a difference in response between riders and nonriders. The majority of riders replied that the bus system served the areas they frequently traveled (pre = 64% - 95%; post = 80% - 93%), whereas this was only true for 47 percent of the pre-survey nonriders and 51 percent of the post-survey nonriders.

		Bus Rider Usage					
Serve Areas		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	95	92	79	64	47	58
	Post	93	91	72	80	51	63
No	Pre	5	8	18	32	38	31
	Post	4	7	19	12*	26*	21
Don't Know	Pre	0	0	3	4	15*	11
	Post	3	2	9	8	23	16
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference between the pre and post "no" response for other users (.05 level) and nonriders (.005 level). Nonriders also recorded a significant difference at the .01 level between the pre and post "don't know" response. Significantly more post-survey respondents indicated that the bus system served the areas they frequently traveled.

Effects of Gasoline Prices

Question 18 was a four-part question relating to the rising gasoline prices of the last few weeks before each survey. Respondents were asked if they had considered: a) riding the bus, b) getting in a carpool, c) driving less, or d) if gas prices affect them?

The attitude of most pre- and post-survey bus riders was that they had considered riding the bus more because of rising gasoline prices. (Those bus riders who indicated "no" to this question had evidently not considered riding the bus more than their current riding patterns.) Most nonriders, however, replied "no" to this question (see Appendix H).

Most bus riders and nonriders indicated they had not considered getting in a carpool because of rising gasoline prices (see Appendix I).

In general, bus riders and nonriders had considered driving less with the rising gasoline prices. Post-survey moderate users were the only exception (see Appendix J).

The results indicate that gasoline prices apparently affected both bus riders and nonriders. Those bus riders who indicated "no" to this question may depend on GRATA for their primary transportation needs (see Appendix K).

Energy Conservation Measure

Respondents were asked if they thought of the bus service as a viable, valuable energy conservation measure. The table, as shown in Appendix L, indicates an overwhelming majority of bus riders and nonriders view the bus service as a viable, valuable energy conservation measure.

Improvements

Question 20 asked respondents what improvements they would like to see in the city bus system that would cause them to use the bus more often. This question provided for four choices. The results, as shown below, indicate:

Most bus riders and nonriders, pre and post, replied "no changes needed."

Overall, improvements in GRATA since the initial survey appear to be meeting the needs of Grand Rapids residents. Opinions regarding closer stops, faster service, expanded service hours, better transfer system, and better route and schedule information declined slightly in the follow-up survey. More convenient routes, more bus shelters, more courteous drivers, and "other" improvements were the only areas showing an increased need among Grand Rapids residents.

(First Choice) Improvements		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Lower fares	Pre	0	0	0	0	0	0
	Post	0	2	2	0	0	0
More convenient routes	Pre	2	2	14	0	8	8
	Post	9	5	18	11	9	10
Closer Stops	Pre	3	2	7	0	9	8
	Post	2	9	3	1	6	5
More frequent service	Pre	14	4	8	7	2	4
	Post	12	0	3	4	3	4
More bus shelters	Pre	1	0	0	0	0	0
	Post	2	2	0	1	0	1
Faster service	Pre	1	2	0	0	2	1
	Post	0	0	0	0	1	0
More courteous drivers	Pre	2	0	0	0	0	0
	Post	3	2	0	2	0	1
Expanded service hours	Pre	13	12	8	11	5	7
	Post	10	5	5	8	5	6
Available change	Pre	1	0	1	3	0	0
	Post	0	0	0	0	0	0
Better transfer system	Pre	3	2	4	0	1	2
	Post	2	0	1	0	0	0
Better route and schedule information	Pre	6	0	1	4	2	2
	Post	4	0	1	1	1	1
Other	Pre	16	13	8	36	8	9
	Post	9	14	7	15	10	10
No changes needed	Pre	38	63	49	39	62	58
	Post	47	61	59	57	56	56
I would not use the bus in any case	Pre	0	0	0	0	1	1
	Post	0	0	1	0	9*	6
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 710)	100% (N = 1,012)
	Post	100% (N = 57)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 559)	100% (N = 908)

*There is a significant difference at the .001 level between the nonrider pre and post "I would not use the bus in any case" response. Compared to pre-survey results, significantly more post-survey nonriders would not use the bus in any case.

DEMOGRAPHICS

Sex

In general, female bus riders and nonriders outnumbered males in both surveys. The table, as shown in Appendix M, illustrates the percentage of male and female respondents across ridership and nonrider groups.

The table below shows the percentage of male and female bus riders and their first choice for purpose of using the bus service:

	Bus Riders			
	Male		Female	
(First Choice) Purpose	Pre (%)	Post (%)	Pre (%)	Post (%)
Work	34	25	18	12
Shopping	25	26	46	44
When I don't have a car/ when car is in garage	12	7	6	3
Personal Business	11	15	6	17
School	10	6	8	3
Visits or Recreation	5	15	9	17
Other	2	2	4	1
Medical	1	4	3	2
Dining	0	0	0	1
Totals	100% (N = 89)	100% (N = 88)	100% (N = 208)	100% (N = 260)

Males, pre to post, reported an increase in "personal business," "shopping," "visits or recreation," and "medical" purposes. Females, pre to post, reported an increase in "personal business," visits or recreation," and "dining."

First and second ranking for pre-survey males was "work," followed by "shopping." Post-survey males and pre-survey females reversed this trend, and mentioned "shopping" first, followed by "work." Post-survey females reported "shopping" first, followed by equal reporting of "personal business" and "visits or recreation."

Age

By purpose, the following distribution of age groups was found for all respondents in the surveys:

(First Choice) Purpose		Age Groups 16-20 Years %	21-39 Years %	40-60 Years %	Older Than 60 Years %	No Response %
Work	Pre	26	31	37	4	0
	Post	12	25	13	7	0
Personal Business	Pre	2	8	2	13	0
	Post	5	8	17	28	0
Shopping	Pre	33	27	33	61	33
	Post	51	35	25	49	0
School	Pre	23	8	4	3	33
	Post	21	3	3	0	0
Visits or recreation	Pre	9	7	8	8	0
	Post	9	18	26	9	100
Dining	Pre	0	0	0	0	0
	Post	0	1	0	2	0
Medical	Pre	2	1	6	3	0
	Post	0	3	6	2	0
When I don't have a car/ when car is in garage	Pre	5	16	6	1	0
	Post	2	5	7	2	0
Other	Pre	0	2	4	7	34
	Post	0	2	3	1	0
Totals	Pre	100% (N = 43)	100% (N = 107)	100% (N = 51)	100% (N = 93)	100% (N = 3)
	Post	100% (N = 43)	100% (N = 122)	100% (N = 69)	100% (N = 113)	100% (N = 1)

Sixteen to 20 year-old riders used the bus primarily for shopping purposes. Twenty-one to thirty-nine (21-39) year-old riders rode for work and shopping needs. Pre-survey 40-60 year-old riders used the bus for work and shopping, but post-survey riders were nearly equal between shopping and visits or recreation. The older than 60 years group used the bus primarily for shopping purposes.

As the age groups increased in years, the percentage of males comprising each age group tended to decrease. For example, 42 percent of the pre-survey males were in the 16-20 year-old age group compared with 24 percent, older than 60 years. The reverse was true for females, i.e., as the age groups increased in years, so did the percentage of females comprising each age group. Fifty-eight percent (58%) of the pre-survey females were in the 16-20 year-old group compared with 76 percent, older than 60 years (see Appendix N).

Appendix O lists the various age groups with the percentage of bus riders and nonriders comprising each age group.

More than a third of the pre and post-survey heavy users were between the ages of 21-39, closely followed by the older than 60 years age group.

Most moderate users were older than 60 years. Light users and nonriders were noted more heavily in the 21-39 age group.

Occupation

By sex, distribution of occupations is shown in Appendix P.

In rank order, 16 percent of the pre-survey males were retired; 15 percent, professional; and 14 percent, skilled/semi-skilled. Twenty-three percent (23%) of the post-survey males were retired; 16 percent, skilled/semi-skilled; and 10 percent, professional. Pre- and post-survey females reported an identical ranking of homemaker (33 percent/41 percent); retired (22 percent/24 percent); and professional (10 percent/7 percent).

By age groups, the distribution of occupations is shown in Appendix Q.

As expected, the majority of respondents between the ages of 16-20 were students. One out of four pre-survey 21-39 years-old respondents were homemakers, increasing to 41 percent during the post-survey.

Thirty-six percent (36%) of the pre-survey 40-60 year-old respondents were also homemakers, increasing to 45 percent during the post-survey.

An overwhelming majority of retirees comprised the older than 60 age group.

Based upon ridership groups, the distribution of occupations is shown in the following table. Student, homemaker, and retired were the three most frequently mentioned occupations by bus riders. Nonriders were mainly comprised of professionals, homemakers and retirees.

(First Choice) Occupations		Bus Rider Usage				Non-riders*	Total Respondents
		Heavy %	Moderate %	Light %	Other %	%	%
General office/ clerical	Pre	11	0	4	7	7	6
	Post	4	2	4	2	4	4
Management	Pre	2	4	3	0	3	3
	Post	4	3	1	2	2	2
Government	Pre	0	2	2	0	1	1
	Post	0	0	0	0	1	0
University	Pre	1	0	0	0	0	0
	Post	0	0	0	0	0	0
Proprietor	Pre	0	0	0	0	0	0
	Post	0	2	1	1	2	2
Professional	Pre	8	4	12	11	14	12
	Post	5	7	11	10	8	8
Sales	Pre	2	0	3	11	7	6
	Post	3	5	3	3	6	5
Skilled/semi-skilled	Pre	7	4	4	3	6	6
	Post	7	2	2	3	6	5
Technical	Pre	0	4	2	3	4	3
	Post	2	2	0	2	1	1
Service worker	Pre	11	4	5	11	5	5
	Post	5	5	4	3	5	5
Unskilled labor	Pre	2	2	7	4	6	6
	Post	5	0	5	3	4	4
High school or college student	Pre	21	25	10	11	4	7
	Post	11	12	7	9	3	5
Homemaker	Pre	7	9	18	25	25	23
	Post	11	10	35	30	37	32
Retired	Pre	23	40	26	14	15	19
	Post	34	45	22	28	18	23
Not employed	Pre	5	2	4	0	3	3
	Post	9	5	5	4	3	4
Totals	Pre	100% (N = 86)	100% (N = 48)	100% (N = 137)	100% (N = 28)	100% (N = 701)	100% (N = 1,000)
	Post	100% (N = 56)	100% (N = 42)	100% (N = 144)	100% (N = 97)	100% (N = 547)	100% (N = 886)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of nonrider responses. Compared to pre-survey results, post-survey nonriders reported fewer general office/clerical and professional occupations, and an increase in the percentage of homemakers.

ADVERTISING AWARENESS

Radio Station Listening

Respondents were asked if they had heard any GRATA radio announcements. The majority of bus riders and nonriders indicated they had not heard any GRATA radio announcements. Those who did hear announcements were noted more in the post-survey than in the pre-survey.

The following table shows the results to the question:

Heard Announcements?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes or think so	Pre	18	17	18	25	22	21
	Post	40*	23	40*	41	34*	36
No	Pre	80	83	81	71	76	77
	Post	58	73	55*	54	60*	59
Don't know	Pre	2	0	1	4	2	2
	Post	2	4	5	5	6*	5
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 559)	100% (N = 909)

*There is a significant difference between the pre and post "yes or think so" response for heavy users (.05 level), light users (.005 level), and nonriders (.005 level). Differences between the pre and post "no" response for light users was significant at the .05 level, and for nonriders at the .01 level. Nonriders' significance for the "don't know" response was at the .005 level. The results indicate a significant increase, pre to post, in the percentage of respondents who heard GRATA radio announcements.

Listed below are Grand Rapids radio stations with the percentages of respondents who heard announcements on specific radio stations. The most frequently mentioned stations by bus riders and nonriders were WOOD, WCUZ, WLAV, and WGRD.

Radio Stations		Bus Rider Usage				Non-riders	Total Respondents
		Heavy %	Moderate %	Light %	Other %	%	%
WCUZ	Pre	0	12	12	0	7	7
	Post	5	11	10	7	10	10
WFFX	Pre	6	0	0	0	3	3
	Post	0	0	0	0	1	0
WFUR	Pre	0	0	0	0	1	1
	Post	0	0	0	0	0	0
WCSG	Pre	0	0	0	0	0	0
	Post	0	0	2	0	0	0
WGRD	Pre	6	12	8	0	6	6
	Post	9	11	10	7	7	8
WJBL	Pre	0	0	0	14	0	1
	Post	0	0	0	0	0	0
WJFM	Pre	0	0	4	0	0	1
	Post	0	0	0	0	3	2
WKWM	Pre	6	0	0	0	0	1
	Post	9	11	0	3	2	2
WLAV	Pre	13	0	4	14	6	6
	Post	24	0	10	5	9	10
WMAX	Pre	6	0	8	0	3	3
	Post	0	11	0	0	0	0
WOOD	Pre	25	25	24	15	30	28
	Post	10	0	29	20	19	20
WZZR	Pre	0	0	0	0	0	0
	Post	5	0	0	5	3	3
Other	Pre	13	13	4	0	2	3
	Post	0	11	2	0	2	2
Don't know	Pre	25	38	36	57	42	40
	Post	38	45	37	53	44	43
Totals	Pre	100% (N = 16)	100% (N = 8)	100% (N = 25)	100% (N = 7)	100% (N = 160)	100% (N = 216)
	Post	100% (N = 21)	100% (N = 9)	100% (N = 49)	100% (N = 40)	100% (N = 171)	100% (N = 290)

Respondents were asked if they regularly listen to the radio. The majority of bus riders and nonriders replied "yes," as indicated in the table below:

Regularly Listen?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Yes	Pre	73	69	75	75	69	70
	Post	55	64	62	55	58	58
No	Pre	26	31	25	25	30	29
	Post	38	34	34	38	39	38
Radio is broken or don't have radio	Pre	0	0	0	0	0	0
	Post	2	0	0	1	0	0
Other	Pre	1	0	0	0	1	1
	Post	5	2	4	6	3	4
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 711)	100% (N = 1,013)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 560)	100% (N = 910)

*There is a significant difference at the .001 level between the two surveys due to a change in the distribution of nonrider responses. The results indicate that fewer post-survey nonriders were regular radio listeners, compared to pre-survey findings.

Television Station Viewing

As with radio, respondents were asked if they had seen any GRATA television announcements. Most bus riders and nonriders had not seen any GRATA television announcements. (Post-survey heavy users were the only exception.)

Those respondents who did see TV announcements were noted more in the post-survey than in the pre-survey. The following table lists the responses to this question:

		Bus Rider Usage					
Seen Announcements?		Heavy* %	Moderate %	Light* %	Other* %	Non-riders %	Total Respondents %
Yes or think so	Pre	21	31	23	14	20	21
	Post	55	43	37	40	40*	40
No	Pre	75	67	75	86	77	77
	Post	43	48	57	53	54*	54
Don't know	Pre	4	2	2	0	3	2
	Post	2	9	6	7	6*	6
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 560)	100% (N = 910)

*There is a significant difference between the two surveys due to a change in the distribution of responses for heavy users (.001 level), light users (.05 level), and other users (.05 level). Differences for nonriders' "yes or think so" response were significant at the .001 level; "no" response, .001 level; and "don't know" response, .05 level.

The results indicate that significantly more post-survey respondents saw GRATA TV announcements. This increase in recognition appears to be due to the 1981 Fall Promotion Campaign, "Thinkaboutabus." This campaign, which included other media besides TV, was implemented during October and November 1981--which also was when post-survey interviewing was conducted.

Listed below are Grand Rapids TV stations with the percentage of respondents who saw announcements on specific TV stations.

TV Stations		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
WOTV Ch. 8	Pre	22	46	41	25	36	36
	Post	40	18	42	28	32	33
WKZO Ch. 3	Pre	6	7	3	0	1	2
	Post	0	6	2	0	0	1
WUHQ Ch. 41	Pre	0	0	0	0	2	1
	Post	0	0	0	0	1	0
WZZM Ch. 13	Pre	33	20	12	25	18	19
	Post	28	17	9	22	12	14
Other	Pre	0	0	0	0	0	0
	Post	0	0	0	3	1	1
Don't know	Pre	39	27	44	50	43	42
	Post	32	59	47	47	54	51
Totals	Pre	100% (N = 18)	100% (N = 15)	100% (N = 32)	100% (N = 4)	100% (N = 141)	100% (N = 210)
	Post	100% (N = 25)	100% (N = 17)	100% (N = 45)	100% (N = 36)	100% (N = 179)	100% (N = 302)

One-third of the pre-survey heavy users reported WZZM-TV as the TV station where they saw GRATA announcements. Forty percent (40%) of the post-survey heavy users mentioned WOTV-TV.

Pre- and post-survey moderate and light users and nonriders basically reported WOTV-TV.

Respondents were asked if they regularly watch television. As with radio, the majority of bus riders and nonriders indicated they regularly watch TV. The responses to this question are tabulated as follows:

Regularly Watch?		Bus Rider Usage: Heavy %	Moderate %	Light* %	Other %	Non-riders %	Total Respondents %
Yes	Pre	75	73	79	79	76	76
	Post	59	64	60	69	62*	62
No	Pre	24	27	20	21	23	23
	Post	27	32	34	26	29	30
TV is broken or don't have TV	Pre	1	0	1	0	0	0
	Post	0	0	1	1	1	0
Other	Pre	0	0	0	0	1	1
	Post	14	4	5	4	8*	8
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of light user responses. Nonriders also recorded significant differences between the pre and post "yes" response (.05 level) and "other" response (.001 level).

The results indicate that fewer post-survey light users and nonriders watched TV on a regular basis.

Newspaper Readership

Respondents were asked if they had seen any GRATA newspaper ads. Most of the bus riders and nonriders said "no." Post-survey heavy and light users were the only exceptions.

Those respondents who did see newspaper ads were noted more in the post-survey than in the pre-survey. The only exception was for other users. The following table shows the responses to this question.

		Bus Rider Usage					
Seen Ads?		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes or think so	Pre	42	33	31	46	28	30
	Post	52	39	52*	44	37*	42
No	Pre	56	67	67	54	70	68
	Post	46	57	45*	48	55*	52
Don't know	Pre	2	0	2	0	2	2
	Post	2	4	3	8	8*	6
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 147)	100% (N = 100)	100% (N = 560)	100% (N = 909)

*There is a significant difference between the pre and post "yes or think so" response for light users (.05 level) and nonriders (.05 level). Differences between the pre and post "no" response for light users is significant at the .05 level, and for nonriders at the .01 level. Nonriders' differences between the "don't know" response is significant at the .001 level.

Significantly more post-survey light users and nonriders saw GRATA newspaper ads than was recorded during the pre-survey.

Listed below are Grand Rapids area newspapers with the percentages of respondents who saw ads in specific newspapers. Bus riders and nonriders saw GRATA newspaper ads more often in The Grand Rapids Press than in any other newspaper.

Newspapers		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
The Grand Rapids Press	Pre	100	81	91	100	95	94
	Post	100	94	100	100	97	98
Grand Rapids Times	Pre	0	0	2	0	0	0
	Post	0	6	0	0	0	0
The Reporter	Pre	0	0	2	0	0	0
	Post	0	0	0	0	0	0
Other	Pre	0	0	5	0	1	2
	Post	0	0	0	0	0	1
Don't know	Pre	0	19	0	0	4	4
	Post	0	0	0	0	3	1
Totals	Pre	100% (N = 37)	100% (N = 16)	100% (N = 43)	100% (N = 13)	100% (N = 199)	100% (N = 308)
	Post	100% (N = 30)	100% (N = 17)	100% (N = 75)	100% (N = 44)	100% (N = 196)	100% (N = 362)

Respondents were asked if they regularly read a local newspaper. The majority of bus riders and nonriders replied "yes" to this question. Moderate users and nonriders reported a pre to post increase in newspaper readership, as indicated in the table below:

		Bus Rider Usage					
Regularly Read?		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	66	69	74	86	68	69
	Post	64	77	72	73	70	71
No	Pre	21	21	17	14	20	20
	Post	21	14	19	17	19	19
Sometimes	Pre	12	10	8	0	10	9
	Post	15	9	9	10	11	10
Other	Pre	1	0	1	0	2	2
	Post	0	0	0	0	0	0
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 559)	100% (N = 909)

Other Media Exposure

Respondents were asked if there were any other places they had seen, heard, or read advertisements or otherwise obtained information about GRATA. Most of the bus riders and nonriders indicated they had not obtained information about GRATA from any other source than those previously listed.

The following table shows the responses to this question:

		Bus Rider Usage					
Other Places?		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes or think so	Pre	34	27	33	29	31	31
	Post	33	23	33	36	29	31
No	Pre	65	73	64	68	66	66
	Post	60	63	53	55	57	56
Don't know	Pre	1	0	3	0	3	3
	Post	7	14	14*	8	14*	13
Other	Pre	0	0	0	3	0	0
	Post	0	0	0	1	0	0
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 57)	100% (N = 43)	100% (N = 147)	100% (N = 100)	100% (N = 561)	100% (N = 908)

*There is a significant difference between the pre and post "don't know" response for light users (.01 level) and nonriders (.001 level).

Of those who had obtained information from another place, the particular medium varied depending on the ridership group reporting. "Billboards, "displays," "other" media, and "news articles" were the four most frequently mentioned mediums. All ridership groups reported a percentage increase, pre to post, for "displays."

The specific breakdown is as follows:

		Bus Rider Usage					
Places?		Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Billboards	Pre	47	23	45	33	42	41
	Post	21	30	40	41	37	37
Bulletin boards	Pre	3	0	2	0	3	3
	Post	5	0	8	0	2	3
Displays	Pre	7	16	7	0	6	6
	Post	58*	40	31	35	36*	36
News Articles	Pre	3	15	13	0	11	11
	Post	5	10	6	0	8	7
Other	Pre	27	46	24	45	31	31
	Post	0	10	15	21	13*	13
Ad for stores/ institutions which mention that they can be reached by bus	Pre	13	0	9	22	7	8
	Post	11	10	0	3	4	4
Totals	Pre	100% (N = 30)	100% (N = 13)	100% (N = 45)	100% (N = 9)	100% (N = 219)	100% (N = 316)
	Post	100% (N = 19)	100% (N = 10)	100% (N = 48)	100% (N = 34)	100% (N = 155)	100% (N = 266)

*There is a significant difference between the pre and post "displays" response for heavy users (.005 level) and nonriders (.001 level). Nonriders' differences between the pre and post "other" response is significant at the .05 level.

CONCLUSIONS

The main purpose of the follow-up survey was to evaluate the effectiveness of GRATA marketing efforts during the time from the initial survey to the follow-up survey. The section on "Advertising Awareness" clearly shows that television received the most overall increase in recognition, pre to post, followed by radio, newspapers, and "other" media. Inspection of the Total Respondents column in the table below, shows that pre-survey recall of television spots was 21 percent, increasing to 40 percent in the post-survey. Radio followed with 21 percent recall in the pre-survey, increasing to 36 percent in the post-survey. Newspapers increased in recognition from 30 percent to 42 percent. And "other" media remained the same at 31 percent for both surveys.

The medium which received the most increase in recognition, pre to post, varied, depending on the ridership group reporting. Follow-up results for television show a higher percentage of recall over initial survey results for heavy, moderate, and other users and nonriders. For heavy users there was a 34 percent increase; moderate users, 12 percent; other users, 26 percent; and nonriders, 20 percent. Follow-up results for radio show a higher percentage of recall over initial survey results for light users wtih a 22 percent increase.

The table below highlights these findings and summarizes parts from four tables in the section on "Advertising Awareness:"

Medium Respondents Who Heard, Saw, or Read Ads		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
RADIO							
"Yes or think so"	Pre	18	17	18	25	22	21
	Post	40	23	40	41	34	36
TELEVISION							
"Yes or think so"	Pre	21	31	23	14	20	21
	Post	55	43	37	40	40	40
NEWSPAPER							
"Yes or think so"	Pre	42	33	31	46	28	30
	Post	52	39	52	44	37	42
"OTHER"							
"Yes or think so"	Pre	34	27	33	29	31	31
	Post	33	23	33	36	29	31

Television may have received more recognition, pre to post, by the ridership groups mentioned above, because it was used extensively as part of GRATA's marketing efforts. Since February 1980 television (along with other media) was used to promote a new Crosstown Route; lift bus service; fare increase; transit forum; new downtown shuttle bus service, "Gus" Bus; "Thinkaboutabus" campaign; and use of public transit for Christmas shopping.

One campaign, in particular, "Thinkaboutabus," was a six-week advertising blitz implemented during October and November, 1981. Newspaper, television, radio, and outdoor advertising was directed to commuters and shoppers to increase awareness and ridership for GRATA. Since post-survey interviewing was conducted from October 23 to November 3, it appears that use of television in the "Thinkaboutabus" campaign was effective, given the increase in television recognition for heavy, moderate, and other users and nonriders. Television advertising can create drama, suspense, and emotion. Because it combines visual and auditory stimuli with movement, it has the power to arrest attention, generate interest, inform, and teach by illustration and example.

GRATA implemented an aggressive marketing program during the interim from pre-survey to post-survey interviewing. In addition to radio, television and, newspapers, they also made use of a variety of other mediums. These include the following:

Outdoor (billboards and posters)
Interior and exterior bus cards
Brochures
Bus schedules
System route map
Transitron message signs
Bus stop signs
Displays
Schedule racks (in lobbies of major downtown buildings and at shopping malls)
Slide presentation
Group demonstrations
Public meetings
Magazine ads
Grand Rapids Area Telephone Directory advertising

IMPLICATIONS FOR FUTURE RESEARCH

The first objective of this research was to develop and implement a methodology that could be used by other state transportation departments to survey public attitude and awareness levels regarding transit systems in their states. In light of this, it appears appropriate to identify the following limitations of this marketing research survey in an effort to assist these departments, should they attempt to replicate this study:

1. It is suggested that the follow-up survey be conducted during the same time of year as the initial survey. This would prevent any seasonal fluctuation from affecting the results, such as a heavier expenditure of advertising dollars in one part of the year over another.

   The original intention of this study was that the follow-up survey be conducted one year after the initial survey; however, a lapse of approximately 21 months occurred. This was due to departmental personnel cuts in the Surveys Section and the longer than expected lead time to install additional temporary telephone lines.

2. The initial and follow-up telephoning should be conducted on the same days, and during the same time of day, i.e., consistent interviewing days and hours from pre-survey to post-survey. Interviews for the initial survey were conducted during the hours of 12 noon - 8 p.m., Monday through Thursday. Post-survey interviewing was conducted during the hours of 9 a.m. to 6 p.m., Monday through Thursday and 9 a.m. to 4:30 p.m. on Friday. Again, this was due to scheduling problems in the Surveys Section.

3. Use of a closed-end questionnaire, one in which the possible answers are prescribed for the respondents, limits valuable information that could be gained if an open-end questionnaire had been used. An open-end questionnaire is one to which the respondent is free to answer in his own words. (Question 2., which asks for the specific

name of the transit system in each city, was the only open-end question; all other questions were closed-end.) The sheer size of the sample and scope of the study precluded the use of an open-end questionnaire.

4. The marketing efforts from the initial survey to the follow-up survey were not consistent among the five transit systems. This also was due to personnel cuts, budget cutbacks and the independent marketing efforts of each transit system. If the marketing efforts had been consistent, a comparison could be made among the transit systems in an attempt to obtain insights about transit marketing effectiveness. Nevertheless, each transit system was provided with the reports of the other four systems. In this way, an exchange of information took place, which led to a sharing of strengths and weaknesses among the systems. Improvement in awareness, image, and ridership are goals shared by all transit systems.

APPENDICES

APPENDIX A

2nd 3rd 4th PUBLIC TRANSIT "ATTITUDE AND AWARENESS" SURVEY

RESPONDENT: _____

ADDRESS: _____ REFUSAL:

PHONE NUMBER: _____ COMPLETION:

INTERVIEWER INITIALS:

** INSTRUCTIONS TO INTERVIEWERS **
ALL INSTRUCTIONS TO INTERVIEWERS ARE CAPITALIZED. DO NOT READ THESE THINGS TO THE RESPONDENT. EVERYTHING PRINTED IN this typeface IS TO BE READ TO THE RESPONDENT. BELOW THE RESPONDENT IS INDICATED BY "R."

RESCHEDULE:
1.
2.
3.

* * * * * * * * * * * * * * * * * * *

EACH TIME YOU TRY A PHONE NUMBER, NOTE IN THE BOXES (UPPER LEFT) THE DAY AND THE HOUR OF THE DAY. IF NO ONE ANSWERS, GO ON TO THE NEXT PERSON TO BE CALLED. IF THE PHONE IS ANSWERED, BUT NO "R" WHO IS OLD ENOUGH (I.E., OLDER THAN 16) IS THERE, ATTEMPT TO FIND OUT THE BEST TIME TO CALL AGAIN AND NOTE THAT TIME AND DAY DOWN IN THE RESCHEDULE BOX (MID-RIGHT).

IF AN APPROPRIATE "R" DOES ANSWER, INTRODUCE YOURSELF AS A REPRESENTATIVE OF THE STATE OF MICHIGAN - AND SAY . . .

Hello, my name is _____, with the Department of Transportation. The Department of Transportation is conducting a survey to help in planning bus service in the _____ area. Your assistance will be greatly appreciated. The questions will take a few minutes of your time. Is this a convenient time for me to speak with you? IF "YES," CONTINUE. IF "NO," ASK FOR RESCHEDULE TIME AND NOTE ABOVE. My first question is: (DETERMINE WITHOUT ASKING) "R" is ___ MALE, ___ FEMALE):

1. Is there a city bus system in the _____ area?

A_____ YES OR THINK SO
B_____ NO (IF NO, GO TO QUESTION 32)
C_____ DON'T KNOW (GO TO QUESTION 32)

2. What is the name of it?

_____

3. Have you personally used the bus service in _____ during the past year?

A_____ YES (IF YES, GO TO 5)
B_____ NO (IF NO, GO TO 4 THEN 7)
C_____ DON'T KNOW (GO TO 4 THEN 7)

4. Is there any particular reason why you don't ride the bus?

A_____ NO
B_____ DON'T NEED TO, HAVE A CAR
C_____ DOESN'T STOP NEAR ME, (OR) I LIVE IN THE COUNTRY
D_____ DOESN'T GO WHERE I WANT TO GO
E_____ DOESN'T GO WHEN I WANT TO GO
F_____ TAKES TOO LONG
G_____ COSTS TOO MUCH
H_____ IT'S INCONVENIENT
I_____ IT'S UNRELIABLE
J_____ IT'S UNCOMFORTABLE
K_____ IT'S NOT SAFE
L_____ I DON'T LIKE BUSES
M_____ I DON'T LIKE THE PEOPLE WHO RIDE BUSES
N_____ JUST NEVER THOUGHT ABOUT IT OR GOT AROUND TO IT
O_____ OTHER

5. How often do you use the bus service? (MENTION THE 5 OPTIONS)

A_____ ONCE A YEAR
B_____ ONCE A MONTH
C_____ ONCE A WEEK
D_____ ALMOST EVERY DAY
E_____ DAILY
F_____ OTHER

6. For what purpose(s) do you use the bus service?

A_____ WORK
B_____ PERSONAL BUSINESS
C_____ SHOPPING
D_____ SCHOOL
E_____ VISITS OR RECREATION
F_____ DINING
G_____ MEDICAL
H_____ WHEN I DON'T HAVE A CAR/WHEN CAR IS IN GARAGE
I_____ OTHER (SPECIFY _____)

7. Have any other members of your household used the bus service during the past year?

A_____ YES
B_____ NO (IF NO, GO TO 10)
C_____ DON'T KNOW (GO TO 10)

IF THEY MENTION WHO, CHECK:

7a. A_____ HUSBAND/WIFE
B_____ SON/DAUGHTER/CHILDREN
C_____ MOTHER/FATHER
D_____ ROOMMATE
E_____ OTHER (SPECIFY _____)

8. How often do other members use the bus service? (MENTION THE 5 OPTIONS)

A_____ ONCE A YEAR
B_____ ONCE A MONTH
C_____ ONCE A WEEK
D_____ ALMOST EVERY DAY
E_____ DAILY
F_____ OTHER

9. For what purpose(s) do the other members use the bus service?

A_____ WORK
B_____ PERSONAL BUSINESS
C_____ SHOPPING
D_____ SCHOOL
E_____ VISITS OR RECREATION
F_____ DINING
G_____ MEDICAL
H_____ WHEN I DON'T HAVE A CAR/WHEN CAR IS IN GARAGE
I_____ OTHER (SPECIFY _____)

10. How much does it cost for a ride on the bus?

A_____ MORE THAN ___¢
B_____ ___¢
C_____ LESS THAN ___¢
D_____ SENIOR CITIZEN RATE
E_____ PASS/PUNCH CARD
F_____ DON'T KNOW (GO TO 12)
G_____ OTHER (GO TO 12)

11. Do you think this fare is:

A_____ TOO MUCH
B_____ NOT ENOUGH

C_____ JUST RIGHT
D_____ DON'T KNOW
E_____ OTHER

12. How far do you live from the nearest bus route?

A_____ ONE OR TWO BLOCKS
B_____ THREE OR FOUR BLOCKS
C_____ QUARTER MILE TO HALF MILE
D_____ HALF MILE TO ONE MILE
E_____ ONE MILE OR MORE
F_____ DON'T KNOW (GO TO 14)

13. Would you use the bus more if the bus routes were closer?

A_____ YES
B_____ NO
C_____ DON'T KNOW
D_____ MAYBE
E_____ PROBABLY NOT
F_____ OTHER

14. Do you know how often the bus comes by?

A_____ YES
B_____ NO
C_____ DON'T KNOW (GO TO 16)
D_____ DOESN'T SEEM TO FOLLOW SCHEDULE/IT VARIES
E_____ OTHER (GO TO 16)

15. Would you use the bus more if it came by more frequently?

A_____ YES
B_____ NO
C_____ DON'T KNOW
D_____ MAYBE

E_____ PROBABLY NOT
F_____ OTHER

16. Does the bus system serve the areas to which you most frequently travel?

A_____ YES
B_____ NO
C_____ DON'T KNOW

17. Do you know how to obtain bus information?

A_____ YES
B_____ NO
C_____ DON'T KNOW

18. With the rising gas prices of the last few weeks, have you considered:

A_____ RIDING THE BUS?
B_____ GETTING IN A CARPOOL?
C_____ DRIVING LESS?
D_____ DO GAS PRICES AFFECT YOU?

Response:

A_____ DON'T KNOW
B_____ HAVEN'T THOUGHT ABOUT IT
C_____ OTHER
D_____ YES
E_____ NO

19. Do you think of the bus service as a viable, valuable energy conservation measure?

A_____ YES
B_____ NO
C_____ DON'T KNOW

20. What improvements would you like to see in the city bus system that would cause you to use the bus more often?

A_____ LOWER FARES
B_____ MORE CONVENIENT ROUTES
C_____ CLOSER STOPS
D_____ MORE FREQUENT SERVICE
E_____ MORE BUS SHELTERS
F_____ FASTER SERVICE
G_____ MORE COURTEOUS DRIVERS
H_____ EXPANDED SERVICE HOURS
I_____ AVAILABLE CHANGE
J_____ BETTER TRANSFER SYSTEM
K_____ BETTER ROUTE AND SCHEDULE INFORMATION
L_____ OTHER
M_____ NO CHANGES NEEDED
N_____ I WOULD NOT USE THE BUS IN ANY CASE

21. During the past year the transit authority has advertised its service in local newspapers and on radio stations:

Have you heard any _____ radio announcements?

A_____ YES (GO TO QUESTION 22) OR THINK SO
B_____ NO (GO TO QUESTION 23)
C_____ DON'T KNOW (GO TO QUESTION 23)
D_____ OTHER

("R" MAY ALSO ANSWER Q.23 HERE. IF SO, COMPLETE 23 AND GO TO Q.24.)

22. On which station(s) did you hear the announcements? (CHECK ALL THAT APPLY)

LANSING	GR	KZOO	AA	SAGINAW
A_____ WCER	A_____ WCUZ	A_____ WAOP	A_____ WAAM	A_____ W106
B_____ WFMK	B_____ WFFX	B_____ WBUK	B_____ WCBN	B_____ WGER
C_____ WILS	C_____ WFUR	C_____ WIDR	C_____ WEMU	C_____ WHNN
D_____ WITL	D_____ WCSG	D_____ WKMI	D_____ WIQB	D_____ WKCQ
E_____ WJIM	E_____ WEHB	E_____ WKPR	E_____ WNRS	E_____ WKNX
F_____ WKAR	F_____ WGRD	F_____ WKZO	F_____ WPAG	F_____ WMPX
G_____ WUNN	G_____ WJBL	G_____ WMUK	G_____ WRCN	G_____ WRCI
H_____ WVIC	H_____ WJFM	H_____ WQLR	H_____ WSDS	H_____ WRDD
I_____ OTHER	I_____ WJPW	I_____ WYYY	I_____ WYFC	I_____ WSAM
J_____ DON'T KNOW	J_____ WKWM	J_____ OTHER	J_____ OTHER	J_____ WSGW
	K_____ WLAV	K_____ DON'T KNOW	K_____ DON'T KNOW	K_____ WWWS
	L_____ WMAX			L_____ WXOX
	M_____ WOOD			M_____ OTHER
	N_____ WVGR			N_____ DON'T KNOW
	O_____ WYGR			
	P_____ WZZM			
	Q_____ OTHER			
	R_____ DON'T KNOW			

23. Do you regularly listen to the radio?

A_____ YES
B_____ NO
C_____ RADIO IS BROKEN OR DON'T HAVE RADIO
D_____ OTHER

24. Have you seen any _____ TV announcements?

A_____ YES (GO TO QUESTION 25) OR THINK SO
B_____ NO (GO TO QUESTION 26)
C_____ DON'T KNOW (GO TO QUESTION 26)

("R" MAY ALSO ANSWER Q.26 HERE. IF SO, COMPLETE 26 AND GO TO Q.27.)

25. On which station(s) did you see the announcements? (CHECK ALL THAT APPLY)

LANSING

A__ WILX (Ch.10)
B__ WJIM (Ch.6)
C__ WJRT (Ch.12)
D__ WKAR (Ch. 23)
E__ WUHQ (Ch. 41)
F__ OTHER
G__ DON'T KNOW

GR

A__ WOTV (Ch.8)
B__ WKZO (Ch. 3)
C__ WUHQ (Ch.41)
D__ WZZM (Ch. 13)
E__ OTHER
F__ DON'T KNOW

KZOO

A__ WKZO (Ch.3)
B__ WUHQ (Ch.41)
C__ WOTV (Ch.8)
D__ WZZM (Ch.13)
E__ OTHER
F__ DON'T KNOW

AA

A__ WTVS (Ch. 56)
B__ WJIM (Ch. 6)
C__ WILX (Ch. 10)
D__ WJBK (Ch. 2)
E__ WDIV (Ch. 4)
F__ WXYZ (Ch. 7)
G__ OTHER
H__ DON'T KNOW

SAGINAW

A__ WEYI (Ch.25)
B__ WJRT (Ch.12)
C__ WUCM (Ch.19)
D__ WNEM (Ch.5)
E__ OTHER
F__ DON'T KNOW

26. Do you regularly watch TV?

A_____ YES
B_____ NO
C_____ TV IS BROKEN OR DON'T HAVE TV
D_____ OTHER

27. Have you seen any _____ newspaper ads?

A_____ YES (GO TO QUESTION 28) OR THINK SO
B_____ NO (GO TO QUESTION 29)
C_____ DON'T KNOW (GO TO QUESTION 29)
D_____ OTHER

("R" MAY ALSO ANSWER Q.29 HERE. IF SO, COMPLETE 29 AND GO TO Q.30.)

28. In which of the papers did you see the ads? (CHECK ALL THAT APPLY)

LANSING

A_____ STATE JOURNAL
B_____ MSU STATE NEWS
C_____ E.L. TOWNE COURIER
D_____ LANSING STAR
E_____ WHEELER DEELER
F_____ OTHER
G_____ DON'T KNOW

GR

A_____ GRAND RAPIDS PRESS
B_____ GRAND RAPIDS TIMES
C_____ GRAND VALLEY SHOPPERS' GUIDE
D_____ NORTH KENT LEADER
E_____ THE PHOTO REPORTER
F_____ OTHER
G_____ DON'T KNOW

KZOO

A_____ KZOO GAZETTE
B_____ PORTAGE HERALD-HEADLINER
C_____ THREE RIVERS COMMERCIAL
D_____ OTHER
E_____ DON'T KNOW

AA

A_____ A.A. NEWS
B_____ E.M.U. EASTERN ECHO
C_____ MICHIGAN DAILY
D_____ YPSILANTI PRESS
E_____ OTHER
F_____ DON'T KNOW

SAGINAW

A_____ SAGINAW NEWS
B_____ OTHER
C_____ DON'T KNOW

29. Do you regularly read a local newspaper?

A_____ YES
B_____ NO
C_____ SOMETIMES
D_____ OTHER

30. Are there any other places that you have seen, heard or read advertisements or information about the transit system?

A_____ YES (GO TO QUESTION 31) OR THINK SO
B_____ NO (GO TO QUESTION 32)
C_____ DON'T KNOW (GO TO QUESTION 32)
D_____ OTHER

31. Where?

A_____ BILLBOARDS
B_____ BULLETIN BOARDS
C_____ DISPLAYS
D_____ NEWS ARTICLES
E_____ OTHER _____
F_____ AD FOR STORES/INSTITUTIONS WHICH MENTION THAT THEY CAN BE REACHED BY BUS

32. Does _____ have special bus services for elderly people?

A_____ YES
B_____ NO
C_____ THINK SO
D_____ DON'T KNOW

33. Does _____ have special bus services for handicapped people?

A_____ YES
B_____ NO
C_____ THINK SO
D_____ DON'T KNOW

34. What is your usual means of transportation?

A_____ CAR
B_____ BUS
C_____ DART
D_____ TAXI
E_____ FRIENDS OR RELATIVES TAKE ME
F_____ BIKE, MOTORCYCLE
G_____ SENIOR CITIZEN'S OR HANDICAPPER VAN
H_____ USUALLY WALK
I_____ HITCHHIKE
J_____ OTHER _____
K_____ I GO A VARIETY OF WAYS

35. How many automobiles does your household have?

A_____ 1
B_____ 2
C_____ 3
D_____ 4 or more
E_____ 0

36. Is a vehicle normally available for your use?

A_____ YES
B_____ NO
C_____ SOMETIMES
D_____ OTHER

37. Which of these age groups are you in?

A_____ OLDER THAN 60 YEARS
B_____ BETWEEN 40 AND 60 YEARS
C_____ BETWEEN 21 AND 39 YEARS
D_____ BETWEEN 16 AND 20 YEARS
E_____ NO RESPONSE

38. What is your occupation?

A_____ GENERAL OFFICE/CLERICAL
B_____ MANAGEMENT
C_____ GOVERNMENT
D_____ UNIVERSITY
E_____ PROPRIETOR
F_____ PROFESSIONAL
G_____ SALES
H_____ SKILLED/SEMI-SKILLED
I_____ TECHNICAL
J_____ SERVICE WORKER
K_____ UNSKILLED LABOR
L_____ HIGH SCHOOL OR COLLEGE STUDENT
M_____ HOMEMAKER
N_____ RETIRED
O_____ NOT EMPLOYED
P_____ OTHER
Q_____ REFUSED

That was my last question . . . thank you so much for your time! Good-bye!

APPENDIX B

GRAND RAPIDS
TELEPHONE EXCHANGES SURVEYED

Exchange Prefix	Numbers Called	
	Pre-Survey	Post-Survey
241	194	110
243	203	140
245	185	159
247	92	48
361	265	166
363	150	186
451	24	87
452	40	141
454	66	142
455	36	106
456	34	74
457	75	94
458	101	72
459	53	45
531	40	112
532	73	118
534	54	160
538	53	93
774	93	50
784	150	-0-
942	106	106
	2,087	2,209

APPENDIX C

GRAND RAPIDS
INTERVIEW SAMPLING RESULTS

	Pre-Survey	Post-Survey
Start Date	February 11, 1980	October 23, 1981
Finish Date	February 21, 1980	November 3, 1981
Ratio	1:59	1:59
Interviews Taken	1,196	1,000
Disconnected or Changed	80	168
Refusals	313	302
Businesses*	44	77
No Answer**	454	662
Numbers Called	2,087	2,209

*Businesses were not included in the surveys.
**Numbers tried three times with no answer.

APPENDIX D

OTHER MEMBERS' TRANSIT USAGE

Other Members' Transit Usage		Bus Rider Usage					
		Heavy %	Moderate %	Light* %	Other %	Non-riders %	Total Respondents %
Yes	Pre	38	29	36	36	13	20
	Post	44	48	52	41	16	28
No	Pre	61	71	62	64	86	80
	Post	56	52	45	57	82	70
Don't know	Pre	1	0	2	0	1	0
	Post	0	0	3	2	2	2
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 57)	100% (N = 44)	100% (N = 146)	100% (N = 100)	100% (N = 560)	100% (N = 907)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of responses for light users. Sixteen percent (16%) more household members of light users rode during the post-survey, compared to pre-survey results.

APPENDIX E

WHO OTHER MEMBER?

Who Other Member?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Husband/wife	Pre	33	22	34	70	30	33
	Post	32	42	35	40	23	33
Son/daughter/ children	Pre	37	43	42	0	51	44
	Post	27	26	55	43	64	51
Mother/father	Pre	6	7	6	0	3	4
	Post	18	16	2	6	4	6
Roommate	Pre	9	7	4	0	7	6
	Post	5	0	0	0	0	0
Other	Pre	15	21	14	30	9	13
	Post	18	16	8	11	9	10
Totals	Pre	100% (N = 33)	100% (N = 14)	100% (N = 50)	100% (N = 10)	100% (N = 92)	100% (N = 199)
	Post	100% (N = 22)	100% (N = 19)	100% (N = 75)	100% (N = 35)	100% (N = 77)	100% (N = 228)

APPENDIX F

OFTEN OTHER MEMBERS?

Often Other Members?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Heavy usage	Pre	70	22	32	40	28	37
	Post	73	25	20	13	34	30
Moderate usage	Pre	18	57	14	10	24	22
	Post	12	35	13	7	11	13
Light usage	Pre	6	14	50	10	44	35
	Post	7	30	57	22	33	35
Other usage	Pre	6	7	4	40	4	6
	Post	8	10	10	58	22	22
Totals	Pre	100% (N = 33)	100% (N = 14)	100% (N = 50)	100% (N = 10)	100% (N = 92)	100% (N = 199)
	Post	100% (N = 26)	100% (N = 20)	100% (N = 77)	100% (N = 40)	100% (N = 88)	100% (N = 251)

*Among nonriders there is a significant difference at the .001 level between the two surveys due to a change in the distribution of responses. Compared to the pre-survey, post-survey nonriders reported a lower percentage of moderate and light usage and a higher percentage of heavy and other usage by other household members.

APPENDIX G

OTHER MEMBER'S TRIP PURPOSE

(First Choice) Other Member's Trip Purpose		Bus Rider Usage				Non-riders	Total Respondents
		Heavy %	Moderate %	Light* %	Other %	%	%
Work	Pre	27	29	28	20	21	25
	Post	19	24	21	20	25	22
Personal business	Pre	0	7	8	0	2	3
	Post	12	14	8	7	1	7
Shopping	Pre	31	36	28	40	39	35
	Post	39	38	31	41	34	35
School	Pre	27	14	24	10	26	24
	Post	19	10	13	10	24	17
Visits or recreation	Pre	9	14	2	20	7	7
	Post	7	9	23	10	7	12
Medical	Pre	0	0	2	10	0	1
	Post	0	0	3	7	2	3
When I don't have a car/ When car is in garage	Pre	3	0	8	0	4	4
	Post	4	0	1	0	7	3
Other	Pre	3	0	0	0	1	1
	Post	0	5	0	5	0	1
Totals	Pre	100% (N = 33)	100% (N = 14)	100% (N = 50)	100% (N = 10)	100% (N = 92)	100% (N = 199)
	Post	100% (N = 26)	100% (N = 21)	100% (N = 77)	100% (N = 41)	100% (N = 88)	100% (N = 253)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of light users responses. Pre to post changes were recorded for the "work," "school," and "visits or recreation" responses.

APPENDIX H
CONSIDERED RIDING THE BUS?

Considered Riding the Bus?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Don't know	Pre	0	0	1	0	1	1
	Post	0	4	3	0	1	1
Haven't thought about it	Pre	0	0	3	0	2	2
	Post	17	14	6	10	6	7
Other	Pre	2	2	0	3	1	1
	Post	7	5	3	4	2	3
Yes	Pre	82	83	64	36	32	43
	Post	67	59	47	51	26	37
No	Pre	16	15	32	61	64	53
	Post	9	18	41	35	65	52
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of nonrider responses. Fewer post-survey nonriders have considered riding the bus more because of rising gasoline prices.

APPENDIX I

CONSIDERED GETTING IN A CARPOOL

Considered Getting in a Carpool?		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Don't know	Pre	1	2	0	0	0	0
	Post	0	0	1	0	0	0
Haven't thought about it	Pre	1	0	2	0	2	2
	Post	28*	14	5	16	6	9
Other	Pre	2	4	1	4	1	1
	Post	2	7	1	3	1	2
Yes	Pre	26	19	37	21	37	35
	Post	15	9	27	25	29	26
No	Pre	70	75	60	75	60	62
	Post	55	70	66	56	64	63
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .001 level between the pre and post "haven't thought about it" response for heavy users. Among nonriders there is a significant difference at the .05 level between the two surveys due to a change in the distribution of responses. Pre to post results indicate a declining interest in carpools.

APPENDIX J

CONSIDERED DRIVING LESS

Considered Driving Less?		Bus Rider Usage: Heavy* %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Don't Know	Pre	0	0	0	0	0	0
	Post	0	0	0	0	1	1
Haven't thought about it	Pre	0	0	0	0	1	0
	Post	24	11	4	9	2	5
Other	Pre	1	8	2	0	1	2
	Post	5	5	4	6	2	3
Yes	Pre	72	54	77	64	74	73
	Post	40	41	72	52	66	63
No	Pre	27	38	21	36	24	25
	Post	31	43	20	33	29	28
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference between the two surveys due to a change in the distribution of heavy user responses (.001 level) and nonrider responses (.05 level). Significant responses for heavy users include: "haven't thought about it" and "yes;" for nonriders, "yes" and "no." Given the decrease in the percentage of "yes" responses, it appears that fewer post-survey respondents had considered driving less with the rising gasoline prices.

APPENDIX K

DO GAS PRICES AFFECT YOU?

Do Gas Prices Affect You?		Bus Rider Usage: Heavy* %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
Haven't thought about it	Pre	0	0	1	0	3	2
	Post	19	4	1	7	1	3
Other	Pre	0	0	0	0	0	0
	Post	3	4	4	1	2	2
Yes	Pre	72	65	82	79	81	80
	Post	47	55	75	72	77	74
No	Pre	28	35	17	21	16	18
	Post	31	37	20	20	20	21
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 560)	100% (N = 910)

*There is a significant difference between the two surveys due to a change in the distribution of heavy user (.05 level) responses and nonrider responses (.01) level). Significant responses for heavy users include: "haven't thought about it" and "yes;" for nonriders, "yes" and "no."

Given the decrease in the percentage of "yes" responses, it appears that fewer post-survey respondents were affected by gasoline prices.

APPENDIX L

ENERGY CONSERVATION MEASURE

Energy Measure		Bus Rider Usage: Heavy %	Moderate %	Light %	Other %	Non-riders %	Total Respondents %
Yes	Pre	99	96	94	96	96	96
	Post	95	96	94	92	91	92
No	Pre	0	0	4	4	2	2
	Post	2	0	1	1	1	1
Don't know	Pre	1	4	2	0	2	2
	Post	3	4	5	7	8*	7
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 56)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 558)	100% (N = 906)

*Nonriders reported a significant difference at the .001 level between the pre and post "Don't know" response. The results indicate a slight decrease in the percentage of post-survey nonriders who view the bus service as a viable, valuable energy conservation measure.

APPENDIX M

SEX BY USAGE

Sex		Bus Rider Usage: Heavy %	Moderate %	Light* %	Other %	Non-riders %	Total Respondents %
Male	Pre	33	19	31	29	33	32
	Post	33	29	20	25	22*	23
Female	Pre	67	81	69	71	67	68
	Post	67	71	80	75	78*	77
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 711)	100% (N = 1,013)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of males and females among light riders. Nonriders also recorded a change in the distribution of males (.001 level) and females (.05 level). In both cases, significantly fewer males and more females were interviewed during the post-survey than were recorded during the pre-survey.

APPENDIX N

SEX BY AGE

(Sex)		Age Groups 16-20 Years %	21-39 Years %	40-60 Years %	Older Than 60 Years %	No Response %
Male	Pre	42	36	29	24	13
	Post	42	25	20	20	30
Female	Pre	58	64	71	76	87
	Post	58	75	80	80	70
Totals	Pre	100% (N = 81)	100% (N = 503)	100% (N = 287)	100% (N = 272)	100% (N = 8)
	Post	100% (N = 69)	100% (N = 382)	100% (N = 261)	100% (N = 278)	100% (N = 10)

APPENDIX O

AGE BY USAGE

Age Groups		Heavy %	Moderate %	Light %	Other %	Non-riders* %	Total Respondents %
16-20 years	Pre	20	25	9	7	4	7
	Post	14	16	9	14	4	7
21-39 years	Pre	35	17	41	43	49	44
	Post	38	25	37	34	42	38
40-60 years	Pre	18	12	17	25	28	25
	Post	12	9	28	17	31	26
Older than 60 years	Pre	26	44	33	21	18	23
	Post	36	50	26	34	22	28
No response	Pre	1	2	0	4	1	1
	Post	0	0	0	1	1	1
Totals	Pre	100% (N = 88)	100% (N = 48)	100% (N = 138)	100% (N = 28)	100% (N = 712)	100% (N = 1,014)
	Post	100% (N = 58)	100% (N = 44)	100% (N = 148)	100% (N = 100)	100% (N = 561)	100% (N = 911)

*There is a significant difference at the .05 level between the two surveys due to a change in the distribution of age groups for nonriders. Compared to pre-survey results, fewer post-survey nonriders were between the ages of 21-39, while more were noted between 40-60 years and older than 60 years.

APPENDIX P

OCCUPATION BY SEX

(First Choice) Occupations	Sex: Male Pre (%)	Male Post (%)	Female Pre (%)	Female Post (%)
General office/clerical	1	0	9	5
Management	6	4	1	1
Government	1	1	1	0
University	0	0	0	0
Proprietor	0	3	1	1
Professional	15	10	10	7
Sales	9	9	4	4
Skilled/Semi-skilled	14	16	2	2
Technical	7	4	1	1
Service worker	5	4	5	5
Unskilled labor	10	8	3	2
High school or college student	10	8	6	4
Homemaker	1	1	33	41
Retired	16	23	22	24
Not employed	5	9	2	3
Totals	100% (N = 359)	100% (N = 227)	100% (N = 775)	100% (N = 745)

APPENDIX Q

OCCUPATION BY AGE

(First Choice) Occupations		Age Groups 16-20 Years %	21-39 Years %	40-60 Years %	Older Than 60 Years %	No Response %
General office/ clerical	Pre	4	9	9	1	0
	Post	4	5	5	0	17
Management	Pre	0	3	4	1	0
	Post	3	3	1	0	0
Government	Pre	0	1	1	0	0
	Post	0	1	1	0	0
Proprietor	Pre	0	0	1	0	0
	Post	0	3	3	0	0
Professional	Pre	3	18	13	2	0
	Post	0	14	8	0	0
Sales	Pre	7	7	7	1	0
	Post	6	7	7	0	0
Skilled/semi-skilled	Pre	2	9	7	1	0
	Post	4	8	6	1	17
Technical	Pre	1	5	2	0	0
	Post	1	3	2	0	0
Service worker	Pre	3	7	6	2	0
	Post	12	4	8	1	0
Unskilled labor	Pre	7	8	6	0	0
	Post	6	5	6	0	0
High school or college student	Pre	64	4	1	0	50
	Post	54	2	0	0	50
Homemaker	Pre	3	25	36	11	33
	Post	1	41	45	17	0
Retired	Pre	0	0	3	80	17
	Post	0	0	5	78	16
Not employed	Pre	6	4	4	1	0
	Post	9	4	3	3	0
Totals	Pre	100% (N = 81)	100% (N = 495)	100% (N = 282)	100% (N = 271)	100% (N = 6)
	Post	100% (N = 69)	100% (N = 371)	100% (N = 251)	100% (N = 275)	100% (N = 6)