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Michigan Department of Transportation

MICHIGAN PUBLIC TRANSIT  
ATTITUDE AND AWARENESS SURVEY



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

September, 1980

1. Report No. UMTA - MI - 80 - 3		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle MICHIGAN PUBLIC TRANSIT ATTITUDE AND AWARENESS SURVEY				5. Report Date September, 1980	
				6. Performing Organization Code	
7. Author(s) Fredricks, Nancy L.				8. Performing Organization Report No.	
9. Performing Organization Name and Address Michigan Department of Transportation P.O. Box 30050 Lansing, Michigan 48909				10. Work Unit No. (TRIS)	
				11. Contract or Grant No. MI - 09-8003	
12. Sponsoring Agency Name and Address U. S. Department of Transportation Urban Mass Transportation Administration 400 Seventh Street, S.W. Washington, D.C. 20590				13. Type of Report and Period Covered Final Report	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract  <p>This report summarizes the results from a telephone survey of the general public in five Michigan urbanized areas. The purpose of the survey was to determine public attitudes towards and awareness of the local transit system. Telephone interviewing was conducted during the January to June, 1980, time period.</p> <p>The major objective of this research was to develop and implement a methodology that could be used by other states or regions throughout the United States. The information gathered would also be used to assist transit 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.</p>					
17. Key Words Attitudes Awareness Marketing Questionnaire			18. Distribution Statement Research Survey Target Market		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 63	22. Price

## DISCLAIMER AND ACKNOWLEDGEMENT

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## ACKNOWLEDGEMENTS

This report was prepared by the Marketing and Consumer Services Section, Governmental Relations and Consumer Affairs Division, Bureau of Urban and Public Transportation. The Project Manager and principal author was Nancy L. Fredricks, Marketing Coordinator for the Bureau of Urban and Public Transportation. This major statewide marketing research project would not have been possible without the cooperation and assistance of the five transit systems involved in this survey, namely the Ann Arbor Transportation Authority, Capital Area Transportation Authority of Lansing, Grand Rapids Area Transit Authority, Metro Transit System of Kalamazoo, and the Saginaw Transit System. The Michigan Public Transit Association of Lansing provided its support and cooperation from the inception of this project. Laura Price helped develop the format for the report text during her college internship with the Bureau of Urban and Public Transportation.

Since this project was conducted within the Michigan Department of Transportation, personnel from many sections, divisions and bureaus in the Department provided invaluable assistance in the preparation of this report. These include the Transportation Surveys Section and the Federal Planning Programs Section of the Bureau of Transportation Planning; the Computer Services Division of the Bureau of Administration; the Word Processing Center of the Bureau of Urban and Public Transportation; and the Public Information Section of the Executive Bureau.

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## INTRODUCTION

The major objective of this research was to develop and implement a methodology that could be used by other state level public transportation agencies to measure public attitudes towards 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. 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.

State personnel used this data to compare public attitude/awareness information from each system with ridership data which was currently available from each system in order to evaluate possible correlations between ridership and awareness levels. Evaluation also was made of existing ridership data collection procedures. Data also was used by state personnel to determine the type of marketing efforts which might be appropriate at the state level.

The market data on a particular community was provided to the transit system in that community. The transit system was encouraged to utilize this data 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 will be evaluated by a follow-up survey to be conducted approximately a year after the initial survey to determine the extent to which attitudes/awareness have changed.

The intent of the methodology developed and employed in this project is that it will be adaptable to other state level public transportation 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 1940's. 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 states or regions 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 agencies 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 utilized. This process established a sample universe made up of those telephone exchanges that correspond geographically with the existing transit service area. Copies of the telephone exchanges used for drawing samples for each community are provided in Appendix B through Appendix F 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 following ratios:

<u>Community</u>	<u>Ratio</u>
Ann Arbor	1:20
Grand Rapids	1:59
Kalamazoo	1:34
Lansing	1:47
Saginaw	1:20

This ratio meant that one telephone number was selected for interview out of a range of 20 to 59 numbers listed. The results of this selection process produced both an alphabetical and geographic distribution of samples. Results of this selection process, indicating how many telephone numbers were called for each exchange prefix, are shown for each city in Appendix B through Appendix F. Appendix G provides a breakdown of the actual number of interviews completed versus the number attempted.

All interviews were conducted out of 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 survey. Modifications were made and interviewing commenced January 23, 1980 and ended June 6, 1980. The interviews were conducted during the hours of 12:00 noon - 8:00 p.m., Monday through Thursday. Earlier hours and Fridays were not considered appropriate times for this type of survey. 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 (see Appendix H) 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 raw data from this survey is the property of the State of Michigan. Any requests for that data will be considered.) 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.

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. "Crosstabulation," a type of statistical analysis, was performed in this survey.

Crosstabulation is a joint frequency distribution of cases according to two or more classificatory variables. Throughout this report many crosstabulation analyses were performed. These analyses, along with data from the frequency distributions, are summarized in tables throughout the body of the report.

SUMMARY OF  
MAJOR  
STATEWIDE  
FINDINGS

## TRANSIT AWARENESS

Respondents' awareness of various aspects of the transit services varied. Most people were aware of the existence of a bus system in their area. However, responses to naming the bus system varied within each transit system involved in the survey. Overall, most respondents were unaware of the cost to ride the bus. Frequency of bus service, i.e., how often the bus comes by, is also not known by the majority of total respondents. However, knowing how to obtain bus information is high. Most respondents were aware of special bus services for elderly people and handicapped people.

### Bus System Awareness

The first question in the survey asked respondents, "Is there a city bus system in your area?" Overall, 87 percent of the respondents (N = 4,905) indicated "yes or think so," 11 percent (N = 633) replied "no," and 2 percent (N = 108) indicated "don't know."

### Bus System Name

The second question asked respondents to name the bus system in their area. Summarized below are the responses to this question for each of the five transit systems.

<u>Transit Area</u>	<u>Response</u>	<u>Total Respondents</u>	
		<u>No.</u>	<u>%</u>
Ann Arbor	Ann Arbor Transportation Authority	600	60
	*Other responses	106	11
	Don't know	284	29
	Totals	990	100
Grand Rapids	Grand Rapids Area Transit Authority	280	27
	Grand Rapids Transit Authority	136	13
	Grand Rapids Transit	81	8
	*Other responses	141	14
	Don't know	383	38
Totals	1,021	100	

<u>Transit Area</u>	<u>Response</u>	<u>Total Respondents</u>	
		<u>No.</u>	<u>%</u>
Kalamazoo	Metro	208	20
	Metro Transit	183	18
	Metro Transit System	172	17
	MT	53	5
	*Other responses	138	14
	Don't know	265	26
	Totals	1,019	100
Lansing	CATA	970	91
	*Other responses	7	1
	Don't know	92	8
	Totals	1,069	100
Saginaw	Saginaw Transit System	256	32
	*Other responses	144	18
	Don't know	403	50
	Totals	803	100

\*Other Responses include names which sound similar to the correct transit company names, and route destination names, as well as incorrect responses.

The results indicate that, of the five areas, Lansing area residents had the highest percentage of respondents giving the correct name of their transit company (91 percent). The area with the largest percentage of respondents not knowing the correct name was Saginaw, with 50 percent responding "don't know" to this question.

#### Cost for Bus Ride

The following table summarizes responses to the question, "How much does it cost for a ride on the bus?" Respondents were categorized into four separate bus rider groups and a nonrider group, based on the following classifications of transit usage . . .

Heavy Usage - Daily or almost every day

Moderate Usage- Once a week

Light Usage - Once a month or once a year

Other Usage - A frequency other than the above frequencies

Nonriders - Respondents who have not used the bus service during the past year.

(Throughout the report this classification will be referred to when describing the four rider groups and the nonrider group).

Since not all transit systems involved in the survey charge the same basic cash fare, the cash fare response category is shown as "Current cash fare." As expected, the majority of riders knew the current cash fare. The degree of usage did not make a difference, except in the case of nonriders. Also expected, 61 percent of the nonriders do not know the cost for a ride on the bus (see table below).

Bus Rider Usage

	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-Riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Cost												
More than current cash fare	14	3	11	5	53	7	2	2	132	4	213	4
Current cash fare	221	54	111	47	368	49	68	61	772	23	1,538	31
Less than current cash fare	51	12	40	17	135	18	17	15	287	9	531	11
Senior citizen rate	52	13	47	20	69	9	5	4	82	2	260	5
Pass/Punch card	55	13	14	6	18	2	9	8	34	1	129	3
Don't know	7	2	8	3	105	14	11	10	2,058	61	2,196	45
Other	11	3	5	2	11	1	0	0	11	0	36	1
Totals	<u>411</u>	<u>100</u>	<u>236</u>	<u>100</u>	<u>759</u>	<u>100</u>	<u>112</u>	<u>100</u>	<u>3,376</u>	<u>100</u>	<u>4,903</u>	<u>100</u>

Bus Frequency

Respondents were asked if they knew how often the bus came by. The majority of bus riders indicated "yes," they knew how often the bus came by (see table below). Considering the response categories of "no" and "don't know" together, the majority of nonriders (78 percent) are unaware of the frequency of bus service in their area.

<u>Bus Frequency</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	363	88	188	80	451	59	78	70	711	21	1,788	37
No	21	5	22	9	165	22	25	22	1,467	44	1,704	35
Don't know	21	5	22	9	126	16	8	7	1,153	34	1,339	27
Doesn't seem to follow Schedule/it varies	4	1	2	1	13	2	1	1	31	1	50	1
Other	2	1	2	1	4	1	0	0	9	0	17	0
Totals	411	100	236	100	759	100	112	100	3,371	100	4,898	100

Bus Information

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

<u>Bus Information</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	387	94	216	92	669	88	97	86	2,240	66	3,622	74
No	19	5	17	7	77	10	13	12	975	29	1,103	22
Don't know	5	1	2	1	12	2	2	2	158	5	178	4
Totals	411	100	235	100	758	100	112	100	3,373	100	4,903	100

The majority of the bus rider groups indicated they knew how to obtain bus information, with amount of usage not an issue. Interestingly, 66 percent of the nonriders also replied "yes" to this question, yet chose to not use their local bus service.

### Special Services for the Elderly

Respondents were asked if their local bus system had special bus services for elderly people. The responses are as follows.

	Bus Rider Usage												
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-</u>	<u>Total</u>			
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>riders</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
<u>Elderly Services</u>													
Yes or think so	364	89	196	83	632	83	91	81	2,624	78	4,259	75	
No	19	5	13	5	50	7	7	6	281	8	538	10	
Don't know	<u>26</u>	<u>6</u>	<u>27</u>	<u>12</u>	<u>77</u>	<u>10</u>	<u>14</u>	<u>13</u>	<u>466</u>	<u>14</u>	<u>848</u>	<u>15</u>	
Totals	409	100	236	100	759	100	112	100	3,371	100	5,645	100	

The majority of respondents (75 percent) were aware of the availability of special bus services for the elderly. However, awareness is slightly related to the degree of usage; the more a person rides the bus, the more likely the person would be aware of the services available to the elderly.

### Special Services for Handicappers

As with elderly services, respondents were asked if their local bus system had special bus services for handicapped people. The following table highlights the results:

Bus Rider Usage

<u>Handicapper Services</u>	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes or think so	372	91	198	84	643	85	86	77	2,641	79	4,296	76
No	16	4	14	6	46	6	9	8	281	8	530	9
Don't know	23	5	24	10	70	9	17	15	454	13	826	15
Totals	411	100	236	100	759	100	112	100	3,376	100	5,652	100

The pattern of responses is about the same as the previous question. The majority of respondents (76 percent) were aware of the availability of services for handicappers. There is also a relationship between amount of transit usage and the degree of awareness of the services available.

In general, the respondent who uses the transit system often is more likely to be aware of such things as fare, scheduling, bus information and awareness of special services for the elderly and handicappers, than the person who uses the system infrequently or not at all. Approximately three out of four respondents knew how to obtain bus information. Even though their responses indicate they don't use the transit system, two-thirds of the nonriders still know how to obtain bus information. Overall, transit system usage is directly related to transit system awareness.

## TRANSPORTATION PATTERNS

Most respondents had not used the bus service during the preceding year. However, the majority of respondents who had used the bus service rode mainly to go shopping and to go to work. Similar results were found for other household members. Overall, most respondents lived within one or two blocks of the nearest bus route, cited "car" more than any other mode as their usual means of transportation and had two or more automobiles in their household; thus they normally had a vehicle available for their use.

### Transit Usage

In response to the statement, "Have you personally used the bus service during the past year?" the majority of respondents (69 percent) who answered the question said "no." More than 30 percent of the individuals said "yes," and nearly 1 percent indicated they did not know.

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 current bus usage patterns:

<u>Respondents</u>	<u>No.</u>	<u>%</u>
Heavy usage	410	28
Moderate usage	232	15
Light usage	749	50
Other usage	112	7
Totals	1,503	100

### 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:

Bus Rider Usage

<u>First Choice Purpose</u>	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Work	184	46	37	16	89	12	23	21	332	23
Personal business	23	6	19	8	70	10	2	2	112	8
Shopping	83	21	113	49	339	46	37	34	570	39
School	82	20	26	12	40	6	9	8	156	11
Visits or recreation	15	4	14	6	39	5	9	8	75	5
Dining	0	0	0	0	1	0	1	1	2	0
Medical	6	0	9	4	17	2	4	4	36	2
When I don't have a car/ When car is in garage	4	1	4	2	113	15	20	18	139	9
Other	<u>6</u>	<u>2</u>	<u>7</u>	<u>3</u>	<u>27</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>44</u>	<u>3</u>
Totals	403	100	229	100	735	100	109	100	1,466	100

Overall, most respondents (39 percent) indicated "shopping" as their main purpose for using the bus. The second most frequently mentioned reason for bus travel was "work" (23 percent), followed by "school" (11 percent), "car unavailable" (9 percent), and personal business (8 percent). When analyzed by amount of usage, the heavy users did so predominantly for work (46 percent), while the other three groups used the bus mainly for shopping.

Other Members Transit Usage

Given that a respondent rides the bus, is it likely that other household members also ride? Responses to the question relating to transit usage by other members of the household are summarized on the following table:

Bus Rider Usage

<u>Other Members Transit Usage</u>	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non- riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	183	45	95	40	287	40	36	32	418	12	1,020	21
No	224	54	134	57	455	57	76	68	2,920	87	3,819	78
Don't know	<u>4</u>	<u>1</u>	<u>7</u>	<u>3</u>	<u>12</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>27</u>	<u>1</u>	<u>51</u>	<u>1</u>
Totals	411	100	236	100	754	100	112	100	3,365	100	4,890	100

More than three out of four respondents said "no," other family members had not used the bus service during the past year. Within the four bus rider groups, 54 percent of the heavy users replied "no" to this question, followed by 57 percent each for moderate and light users, and 68 percent of other riders. As expected, nonriders reported the highest percentage (87 percent) of "no" responses.

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. In rank order, 41 percent (N = 414) were children, 30 percent (N = 298) were spouses, 13 percent (N = 128) other, 12 percent (N = 121) were roommates, and 4 percent (N = 42) were parents.

Responses to the question, "How often do other members use the bus service?" are summarized below, based upon frequency of use:

<u>Household Members</u>	<u>No.</u>	<u>%</u>
Heavy usage	355	35
Moderate usage	214	21
Light usage	378	37
Other usage	<u>67</u>	<u>7</u>
Totals	1,014	100

These figures were compared with those recorded for the respondents who rode the bus. Household members who ride the bus have a higher percentage of heavy users and moderate users, and a lower percentage of light riders than respondents who ride the bus.

Other Members' Trip Purpose

Question No. 9, "For what purposes(s) do the other members use the bus service?" provided for four choices. The major (first choice) trip categories for travel by public transit bus are shown below:

<u>First Choice Purpose</u>	<u>Other Members' Trip Purpose</u>	
	<u>No.</u>	<u>%</u>
Work	259	26
Personal business	55	5
Shopping	369	36
School	196	19
Visits or recreation	70	7
Dining	0	0
Medical	18	2
When I don't have a car/ When car is in garage	35	4
Other	13	1
Totals	1,015	100

Comparing this information with total respondents' trip purpose reveals an identical ranking, with the exception of the fourth purpose. "Other household members" fourth ranking was "visits or recreation," as compared to "car unavailable" for all respondents.

Nearness of Bus Route

The item, "How far do you live from the nearest bus route?" revealed the following distances:

<u>Distance</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
1 or 2 blocks	323	79	186	79	523	70	80	71	1,486	44	2,597	53
3 or 4 blocks	47	11	21	9	107	14	12	11	357	10	546	11
1/4 to 1/2 mile	21	5	18	7	46	6	9	8	225	7	318	6
1/2 - 1 mile	6	1	4	2	25	3	4	4	134	4	177	4
1 mile or more	7	2	4	2	40	5	6	5	662	20	726	15
Don't know	7	2	3	1	18	2	1	1	512	15	539	11
Totals	411	100	236	100	759	100	112	100	3,376	100	4,903	100

Overall, the majority of respondents live within one or two blocks of the nearest bus route. This is regardless of the amount of usage.

Despite the fact that 44 percent of the nonriders also live within one to two blocks of the nearest bus route, they have not used the bus service during the past year. One-fifth (20 percent of the nonriders) reported a distance of a mile or more.

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:

<u>First Choice Usual Mode</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Car	173	42	139	59	585	77	88	78	3,055	93	4,699	83
Bus	179	44	43	18	25	3	4	4	11	0	265	5
DART	1	0	0	0	1	0	1	1	0	0	3	0
Taxi	0	0	0	0	4	1	0	0	7	0	13	0
Friends or relatives take me	11	2	17	7	46	6	6	5	125	4	277	5
Bike, motorcycle	5	1	2	1	11	1	1	1	8	0	29	1
Senior citizen's or handicapper van	3	1	4	2	2	0	1	1	9	0	28	0
Usually walk	16	4	25	11	75	10	10	9	21	1	250	4
Hitchhike	0	0	0	0	0	0	0	0	1	0	1	0
Other	3	1	0	0	1	0	1	1	23	1	35	1
I go a variety of ways	<u>20</u>	<u>5</u>	<u>6</u>	<u>2</u>	<u>9</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>14</u>	<u>1</u>	<u>52</u>	<u>1</u>
Totals	411	100	236	100	759	100	112	100	3,274	100	5,652	100

The majority of total respondents (83 percent) cited "car" as their usual means of transportation. As expected, the nonrider group reported the highest percentage (93 percent) of "car" responses as their usual mode.

Forty-four percent (44%) of the heavy riders reported "bus," followed by 42 percent indicating "car." This pattern of responding was reversed for moderate riders with 59 percent citing "car," followed by 18 percent reporting "bus." Light riders (77 percent) and other riders (78 percent) responded almost equally with "car" as their usual means of transportation. Second ranking for light riders (10 percent) and other riders (9 percent) was "usually walk."

Number of Automobiles

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

<u>Number of Automobiles</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
1	170	42	102	43	304	40	52	46	1,118	33	2,032	36
2	108	26	55	23	259	34	42	38	1,545	46	2,312	41
3	27	7	14	6	71	9	10	9	385	11	577	10
4 or more	14	3	15	7	43	6	2	2	192	6	293	5
0	89	22	50	21	80	11	6	5	135	4	432	8
Totals	408	100	236	100	757	100	112	100	3,375	100	5,646	100

The preceding table shows that 56 percent of the respondents reported having two or more automobiles. The majority of nonriders (63 percent) also have two or more cars.

Within the bus rider groups, heavy users (42 percent) and moderate users (43 percent) reported only one automobile in their household. However, light users and other users indicated two or more cars (49 percent each).

## Availability of Vehicle

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

<u>Vehicle Available</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	230	56	135	57	583	77	86	77	3,045	90	4,697	83
No	144	35	76	32	118	16	15	13	220	7	678	12
Sometimes	26	6	16	7	31	4	6	5	83	2	179	3
Other	11	3	9	4	25	3	5	5	28	1	95	2
Totals	411	100	236	100	757	100	112	100	3,376	100	5,649	100

Even though the majority of the four bus rider groups indicated they did normally have a vehicle available for their use, the percentage was lower for heavy users (56 percent) and moderate users (57 percent), compared to light users and other users (77 percent each). As expected, most nonriders (90 percent) normally have a vehicle available to them.

Thirty-five percent (35 percent) of the heavy users and 32 percent of the moderate users do not normally have a vehicle available to them. These percentages for "no" responses were more than those recorded for light users or other users.

Crosstabulations were also performed between responses to the number of automobiles in a household and the availability of a vehicle to respondents. More than nine out of ten respondents (94 percent) who reported having two, three or four automobiles normally had a vehicle available for their use. However, the percentage was slightly lower for respondents who had only one auto in their household (82 percent). Those respondents with no automobile in their household (87 percent) do not normally have access to a vehicle.

## TRANSPORTATION ATTITUDES

The most frequently mentioned reason nonriders cited for not riding the bus was "don't need to, I have a car." Most respondents believed the bus fare was just right, even though their responses for the cost of a bus ride varied. The majority of respondents indicated they would not use the bus more if the bus routes were closer, or if the bus came by more frequently. However, most respondents believe the bus system serves the areas to which they most frequently travel.

The effect of rising gasoline prices on respondents, overall, is varied. One-half of the total sample indicated they had not considered riding the bus, and nearly six out of ten respondents said they had not contemplated joining a carpool. Most respondents, though, considered driving less and indicated that gas prices did affect them.

A favorable attitude was held by more than nine out of ten respondents towards the bus service as being a valuable energy conservation measure. The opinion of most respondents towards improvements in the local bus system is that no changes were needed.

### Reasons for Not Riding the Bus

The respondents classified as nonriders, i.e., those who have not used the bus service during the previous year, were asked: "Is there any particular reason you don't ride the bus?" This question provided for four choices. The following table summarizes the responses for nonriders' first choice:

<u>First Choice</u> <u>Reasons for Not Riding the Bus</u>	<u>No.</u>	<u>%</u>
Don't need to, have a car	1,541	45.90
Doesn't stop near me, (or) I live in the country	622	18.50
No reason	559	16.60
Doesn't go where I want to go	220	6.50
It's inconvenient	186	5.50
Other	134	4.00
Just never thought about it or got around to it	46	1.40
Takes too long	28	.80
I don't like buses	13	.40
It's unreliable	8	.20
It's uncomfortable	3	.08
It's not safe	2	.05
I don't like the people who ride buses	2	.05
Doesn't go when I want to go	1	.02
Totals	3,365	100.00

The primary reason for not riding the bus given by approximately 46 percent of the nonriders was "don't need to, have a car." The second reason was "doesn't stop near me, (or) I live in the country," indicated by more than 18 percent of the nonriders. Nearly 17 percent of this group did not give a reason.

### Fairness of Cost

The following results are from the question asking respondents their opinions regarding the cost for a bus ride:

<u>Do You Think This Fare Is:</u>	<u>No.</u>	<u>%</u>
Just right	2,279	86
Too much	167	6
Not enough	92	3
Don't know	73	3
Other	40	2
Totals	2,651	100

Eighty-six percent (86%) of the respondents believed the fare was "just right."

### Closer Routes

Question 13 asked respondents: "Would you use the bus more if the bus routes were closer?" The table below highlights the results:

<u>Closer Routes</u>	<u>No.</u>	<u>%</u>
Yes	596	14
No	2,690	62
Don't know	69	2
Maybe	308	7
Probably not	626	14
Other	57	1
Totals	4,346	100

Considering the response categories of "no" and "probably not" together, the majority of respondents (76 percent) indicated they would not use the bus more if the bus routes were closer. Further analysis revealed that most of the bus riders who responded this way live within one or two blocks of the nearest bus route. This was true even for the nonrider group. Thus, it would appear that closer bus routes would not induce respondents to use the bus more.

However, 21 percent of the respondents indicated "yes" or "maybe" closer bus routes might lead them to use bus services more. With further analysis, the distance from the bus route was not differentiated by how heavily the respondent uses the bus system. Most nonriders (60 percent), however, who live a mile or more away, replied they might use the bus more if the bus routes were closer.

### Frequency of Service

Respondents were asked if they would use the bus more if it came by more frequently. The results are shown below:

More Frequent Service	Bus Rider Usage											
	Heavy		Moderate		Light		Other		Non-riders		Total Respondents	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	58	16	15	8	40	9	9	12	53	7	175	10
No	200	54	121	64	284	62	57	72	530	70	1,191	64
Don't know	14	4	6	3	7	2	0	0	15	2	43	2
Maybe	23	6	19	10	32	7	4	5	42	5	119	6
Probably not	66	18	28	15	93	20	8	10	111	15	308	17
Other	6	2	1	0	3	0	1	1	7	1	19	1
Totals	367	100	190	100	459	100	79	100	758	100	1,855	100

The majority of respondents indicated they would not use the bus more if it came by more frequently. There were no significant differences between the bus rider groups and the nonrider group.

### Travel Areas Served

The item, "Does the bus system serve the areas to which you most frequently travel?" revealed the following results:

<u>Serve Areas</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	389	95	215	91	608	82	89	80	1,696	50	3,007	61
No	16	4	18	8	101	13	18	16	1,041	31	1,201	25
Don't know	4	1	3	1	37	5	4	4	635	19	689	14
Totals	409	100	236	100	746	100	111	100	3,372	100	4,897	100

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 (80 percent - 95 percent), whereas this was only true for half of the nonriders (50 percent).

### Effect of Gasoline Prices

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

Bus Rider Usage

Considered Riding the Bus?	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Don't know	2	0	3	1	7	1	0	0	30	1	41	1
Haven't thought about it	2	0	4	2	14	2	1	1	92	3	115	2
Other	35	9	11	5	23	3	4	4	90	3	164	3
Yes	308	76	177	75	470	63	60	54	1,120	33	2,133	44
No	<u>62</u>	<u>15</u>	<u>41</u>	<u>17</u>	<u>235</u>	<u>31</u>	<u>46</u>	<u>41</u>	<u>2,040</u>	<u>60</u>	<u>2,447</u>	<u>50</u>
Totals	409	100	236	100	749	100	111	100	3,372	100	4,900	100

Apparently the attitude of most bus riders was that they have considered riding the bus more because of rising gasoline prices. The majority of nonriders, however, indicated "no," they have not considered riding the bus. Those bus riders who also indicated "no" to this question, have evidently not considered riding the bus more than their current riding patterns. This was reflected more for light users and other users than for either heavy or moderate users.

Bus Rider Usage

Considered Getting in a Carpool?	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Don't know	3	1	2	1	5	1	0	0	17	0	27	1
Haven't thought about it	10	2	5	2	21	3	1	1	61	2	102	2
Other	30	7	18	8	34	4	7	6	99	3	193	4
Yes	88	22	56	24	254	34	29	26	1,246	37	1,670	34
No	<u>278</u>	<u>68</u>	<u>154</u>	<u>65</u>	<u>435</u>	<u>58</u>	<u>74</u>	<u>67</u>	<u>1,953</u>	<u>58</u>	<u>2,911</u>	<u>59</u>
Totals	409	100	235	100	749	100	111	100	3,376	100	4,903	100

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

Bus Rider Usage												
Considered Driving Less?	Heavy		Moderate		Light		Other		Non-riders		Total Respondents	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Don't know	0	0	1	0	0	0	0	0	10	0	10	0
Haven't thought about it	5	1	1	0	4	1	1	1	34	1	46	1
Other	36	9	21	9	40	5	7	6	88	3	195	4
Yes	259	63	149	63	525	70	58	52	2,474	73	3,476	71
No	<u>109</u>	<u>27</u>	<u>64</u>	<u>28</u>	<u>180</u>	<u>24</u>	<u>45</u>	<u>41</u>	<u>771</u>	<u>23</u>	<u>1,177</u>	<u>24</u>
Totals	409	100	236	100	749	100	111	100	3,377	100	4,904	100

Most respondents have considered driving less with the rising gasoline prices.

Bus Rider Usage												
Do Gas Prices Affect You?	Heavy		Moderate		Light		Other		Non-riders		Total Respondents	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Don't know	1	0	1	0	0	0	0	0	10	0	10	0
Haven't thought about it	3	1	1	0	8	1	0	0	47	1	59	1
Other	14	3	9	4	16	2	3	3	50	2	92	2
Yes	291	71	162	69	622	83	87	78	2,864	85	4,048	83
No	<u>100</u>	<u>25</u>	<u>63</u>	<u>27</u>	<u>103</u>	<u>14</u>	<u>21</u>	<u>19</u>	<u>405</u>	<u>12</u>	<u>695</u>	<u>14</u>
Totals	409	100	236	100	749	100	111	100	3,376	100	4,904	100

The results indicate that gasoline prices apparently affect both bus riders and nonriders, although less so for moderate users and heavy users. Approximately one out of four of the heavy users and moderate users are not affected by gasoline prices. This may be due to the fact that they depend on the local transit system for their primary transportation needs.

Included in the section on Transportation Patterns was a summary of the results relating to the question which asked respondents if a vehicle was normally available to them for their use. Of the respondents who answered "yes" or "sometimes," 64 percent had nevertheless considered riding the bus. Seventy-six percent (76%) had considered getting in a carpool, and 49 percent had considered driving less as gas prices escalate.

### Energy Conservation Measure

Respondents were asked if they thought of the bus service as a viable, valuable energy conservation measure. The table below shows the results:

<u>Energy Measure</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Yes	392	96	226	97	718	96	105	94	3,151	93	4,623	94
No	4	1	2	1	13	2	4	4	98	3	121	3
Don't know	13	3	5	2	18	2	2	2	121	4	158	3
Totals	409	100	233	100	749	100	111	100	3,370	100	4,902	100

An overwhelming majority of bus riders and nonriders alike 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 are shown as follows for respondents' first choice:

Bus Rider Usage

First Choice Improvements	Heavy		Moderate		Light		Other		Non-riders		Total Respondents	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Lower fares	5	1	1	0	7	1	0	0	11	0	23	0
More convenient routes	12	3	9	4	61	8	4	4	201	6	289	6
Closer stops	14	3	8	4	45	6	1	1	271	8	344	7
More frequent service	32	8	10	4	26	4	4	4	53	2	125	3
More bus shelters	7	2	1	0	0	0	1	1	17	0	27	1
Faster service	6	1	3	1	9	1	2	2	31	1	51	1
More courteous drivers	5	1	1	0	1	0	0	0	3	0	10	0
Expanded service hours	50	12	23	10	47	6	9	8	107	3	237	5
Available change	2	1	1	0	4	1	1	1	2	0	10	0
Better transfer system	11	3	6	3	17	2	2	2	37	1	73	1
Better route and schedule information	15	4	8	4	31	4	4	4	100	3	159	3
Other	71	17	35	15	71	10	29	25	320	10	528	11
No changes needed	177	44	128	55	426	57	54	48	2,118	63	2,915	60
I would not use the bus in any case	0	0	1	0	2	0	0	0	91	3	96	2
Totals	407	100	235	100	747	100	111	100	3,362	100	4,887	100

Within the bus rider groups most respondents indicated no changes were needed in the city bus system. However, second ranking was "other" improvements, which included responses other than the options provided. The next most frequently mentioned improvement was "expanded service hours." The only exception to the third ranking was for light users who indicated "more convenient routes."

Nonriders agreed with bus riders in general that no changes were needed, followed by "other" improvements. However, their third ranking was "closer stops." This response supports the earlier finding that 60 percent of the nonriders who live a mile or more from the nearest bus route indicated they might use the bus more if the bus routes were closer.

Generally, people have favorable attitudes toward the transit systems. They believe the bus service is a viable conservation measure, the fares are reasonable, the location of routes and frequency of service are adequate. Use of an automobile is the main reason for not riding the bus. Most people believe improvements are not needed. Nonriders may be nonriders because they do not live near enough to have access to the transit system.

## DEMOGRAPHICS

About twice as many females as males comprised the total sample in this survey. Males and females traveled by bus, first of all to go shopping. The second purpose was to travel to and from work. The majority of respondents were 21 to 39 years of age.

Overall, about a third (32 percent) of the females indicated they were housewives, and nearly one in five (19 percent) of the males reported they were high school or college students. Approximately three times as many bus riders were students, compared with nonriders. About one in four of the nonriders reported they were housewives.

### Sex

The following table illustrates the percentage of male and female respondents across ridership and nonrider groups:

<u>Sex</u>	<u>Bus Rider Usage</u>											
	<u>Heavy</u>		<u>Moderate</u>		<u>Light</u>		<u>Other</u>		<u>Non-riders</u>		<u>Total Respondents</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Male	157	38	69	29	272	36	36	32	1,141	34	1,675	35
Female	254	62	167	71	487	64	76	68	2,231	66	3,215	65
Totals	411	100	236	100	759	100	112	100	3,372	100	4,890	100

In total, 35 percent of the respondents were male, 65 percent female. This proportion was about the same, across the rider and nonrider groups, except for moderate users, with 29 percent male and 71 percent female.

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

First Choice Purpose	Bus Riders			
	Male		Female	
	No.	%	No.	%
Work	135	26	198	21
Personal business	49	9	66	7
Shopping	153	29	420	44
School	74	14	84	9
Visits or recreation	27	5	50	5
Dining	0	0	2	0
Medical	8	2	28	3
When I don't have a car/ When car is in garage	63	12	78	8
Other	17	3	27	3
Totals	526	100	953	100

The results show that females traveled by bus to go shopping almost one and a half times as often as males (44 percent versus 29 percent, respectively). Travel to or from work by bus is slightly higher for males (26 percent) than females (21 percent).

### Age

By sex, the following distribution of age groups was found for all respondents in the survey:

Sex	Age Groups									
	16-20 Years		21-39 Years		40-60 Years		Older Than 60 Years		No Response	
	No.	%	No.	%	No.	%	No.	%	No.	%
Male	202	45	998	38	387	27	299	26	7	21
Female	246	55	1,639	62	1,035	73	843	74	26	79
Totals	448	100	2,637	100	1,422	100	1,142	100	33	100

As the age groups increased in years, so did the percentage of females comprising each age group. For example, 55 percent of the respondents were female in the 16-20-year-old age group, compared with 74 percent females older than 60 years. The reverse was true for males, i.e., as the age groups increased in years, the percentage of males comprising each age group decreased.

The table below lists the age groups and shows the percentage of bus riders and nonriders comprising each age group:

<u>Bus Rider Usage</u>						
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Age Groups</u>	N= 409 <u>%</u>	236 <u>%</u>	749 <u>%</u>	111 <u>%</u>	3,376 <u>%</u>	4,881 <u>%</u>
16-20 years	15	22	13	10	5	8
21-39 years	52	33	49	50	50	46
40-60 years	15	13	19	22	27	25
Older than 60 years	18	31	19	16	18	20
No response	<u>0</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>
Totals	100	100	100	100	100	100

The majority of respondents were between 21 and 39 years old (46 percent). This is true for both riders and nonriders, and is not differentiated by the amount of usage. However, riders who use the bus system moderately have almost similar percentages in the 21-39-year old group and the older than 60 years group.

### Occupation

By sex, the following distribution of occupations was found for all respondents in the survey:

<u>First Choice Occupations</u>	<u>Male</u>		<u>Female</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
General office/clerical	23	1	321	9
Management	84	4	61	2
Government	54	3	50	1
University	33	2	32	1
Proprietor	27	1	26	1
Professional	268	14	432	11
Sales	108	6	116	3
Skilled/Semi-Skilled	206	11	60	2
Technical	105	6	51	1
Service worker	77	4	178	5
Unskilled labor	142	8	90	2
High school or college student	354	19	338	9
Housewife	13	1	1,183	32
Retired	264	14	649	17
Not employed	80	4	98	3
Other	41	2	47	1
Refused	<u>2</u>	<u>0</u>	<u>15</u>	<u>0</u>
Totals	1,881	100	3,747	100

More than three out of ten females were housewives, followed by 17 percent who indicated they were retired. Nineteen percent (19%) of the males were students, followed by 14 percent each for the professional and retirement categories.

By age groups, the following distribution of occupations was found for all respondents in the survey:

	Age Groups				
	<u>16-20</u> <u>Years</u>	<u>21-39</u> <u>Years</u>	<u>40-60</u> <u>Years</u>	<u>Older Than</u> <u>60 Years</u>	<u>No</u> <u>Response</u>
<u>First Choice</u>	<u>N= 223</u>	<u>710</u>	<u>258</u>	<u>310</u>	<u>6</u>
<u>Occupations</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
General office/clerical	2	8	10	1	0
Management	1	3	3	1	0
Government	1	3	5	1	0
University	0	2	2	1	16
Proprietor	0	1	0	0	0
Professional	1	16	15	2	0
Sales	4	3	4	0	0
Skilled/Semi-Skilled	1	5	4	1	0
Technical	0	3	3	0	0
Service worker	2	7	6	3	0
Unskilled labor	4	4	2	0	0
High school or college student	75	28	2	1	50
Housewife	3	13	33	8	17
Retired	0	0	4	80	0
Not employed	5	3	4	0	0
Other	1	1	3	1	17
Refused	0	0	0	0	0
Totals	100	100	100	100	100

As might be expected, the table indicates that 75 percent of the respondents between the ages of 16 and 20 were students. However, the percentage of students decreased to 28 percent in the 21 to 39-year-old age group. One out of three respondents were housewives in the 40 to 60 age bracket, and 80 percent of the respondents older than 60 years were retired.

Based upon ridership groups the distribution of occupations was found as follows:

First Choice Occupations	Bus Rider Usage					Total Respondents
	Heavy	Moderate	Light	Other	Non-riders	
	N= <u>409</u>	<u>236</u>	<u>746</u>	<u>111</u>	<u>3,330</u>	<u>4,832</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
General office/clerical	8	4	6	7	7	6
Management	2	3	2	2	3	3
Government	2	2	2	4	2	2
University	2	0	1	1	1	1
Proprietor	0	0	1	0	1	1
Professional	10	6	13	11	14	12
Sales	3	2	3	4	5	4
Skilled/Semi-Skilled	4	3	3	4	5	5
Technical	1	1	2	3	3	3
Service worker	7	4	4	7	5	5
Unskilled labor	2	2	4	3	4	4
High school or college student	27	29	22	24	8	12
Housewife	8	15	17	16	23	21
Retired	16	27	16	12	14	16
Not employed	5	1	3	1	3	3
Other	3	1	1	1	2	2
Refused	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	100	100	100	100	100	100

The results show that approximately one in four of the bus riders were high school or college students, while only 8 percent of the nonriders fell into this category. More moderate users (27 percent) indicated they were retired than did the other ridership groups. Nearly one in four (23 percent) of the nonriders reported they were housewives.

It appears that the majority of bus riders are high school or college students. The majority of nonriders are housewives. Since the nonrider group is the dominating group, 21 percent of the total respondents are housewives, also.

The typical respondent in this survey was female, whose occupation was housewife, and who used the bus system for shopping or work purposes. The males of the survey use the bus system for shopping and work also, and are predominantly high school or college students, professionals, or are retired.

## ADVERTISING AWARENESS

Respondents were asked if they had been exposed to any local transit system advertising. Of those who had been exposed, most respondents cited newspapers, followed by "other" places, radio and television. The particular radio station, television station, or newspaper most frequently mentioned varied, depending on the community surveyed. Most respondents reported they regularly watch TV, followed by listen to the radio and read newspapers.

### Radio Station Listening

Respondents were asked if they had heard any local transit system radio announcements. The following table shows the percentage of respondents and their reply to each response category:

	Bus Rider Usage					
Heard Announcements	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
	N= <u>409</u>	<u>236</u>	<u>749</u>	<u>111</u>	<u>3,374</u>	<u>4,903</u>
	%	%	%	%	%	%
Yes or think so	23	20	29	36	28	27
No	74	78	69	63	70	71
Don't know	<u>3</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>2</u>
Totals	100%	100%	100%	100%	100%	100%

The majority of bus riders and nonriders alike indicated they had not heard any local transit system radio announcements. There were no major differences between the rider and nonrider groups. However, within the rider groups, heavy and moderate users (74 percent and 78 percent, respectively) were more likely not to have heard any radio announcements than light and other users (69 percent and 63 percent, respectively). This may be due to the fact that the majority of announcements are aired during the morning hours of 7-9 a.m. Thus, heavy and moderate users would not hear the announcements because they are traveling to work by bus during these hours.

Listed below are tables for each community indicating the percentages of respondents who heard announcements on specific radio stations:

#### ANN ARBOR

<u>Radio Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WAAM	35%	34%	34%
WIQB	12	4	5
WNRS	0	1	1
WPAG	2	6	7
WYFC	5	2	3
Other	7	7	7
Don't know	<u>39</u>	<u>46</u>	<u>43</u>
Totals	100% (N=57)	100% (N=106)	100% (N=163)

The radio station on which most respondents heard Ann Arbor Transportation Authority (AATA) announcements was WAAM. There were no major differences between the bus rider and nonrider groups.

#### GRAND RAPIDS

<u>Radio Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WCUZ	7%	7%	7%
WFFX	2	3	3
WFUR	0	1	1
WGRD	9	6	6
WJFM	2	0	0
WKWM	2	0	0
WLAV	7	6	7
WMAX	5	2	3
WOOD	23	30	29
WYGR	0	1	0
Other	7	2	3
Don't know	<u>36</u>	<u>42</u>	<u>41</u>
Totals	100% (N=56)	100% (N=160)	100% (N=216)

Grand Rapids Area Transit Authority (GRATA) radio announcements were heard on WOOD by approximately one out of four bus riders, and three out of ten nonriders.

### KALAMAZOO

<u>Radio Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WBUK	1%	0%	0%
WKMI	28	29	30
WKPR	2	1	1
WKZO	35	35	35
WMUK	1	0	0
WQLR	2	2	2
WYYY	0	2	0
Other	2	2	2
Don't know	<u>29</u>	<u>29</u>	<u>30</u>
Totals	100% (N=131)	100% (N=255)	100% (N=382)

WKZO was more frequently cited by bus riders and nonriders as the radio station where they heard Metro Transit System announcements. This was followed by radio station WKMI.

### LANSING

<u>Radio Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WFMK	24%	19%	21%
WILS	13	10	11
WITL	12	13	13
WJIM	11	15	13
WKAR	2	1	2
WVIC	11	11	11
Don't know	<u>27</u>	<u>31</u>	<u>29</u>
Totals	100% (N=132)	100% (N=239)	100% (N=371)

Bus riders and nonriders heard Capital Area Transportation Authority (CATA) radio announcements more often on WFMK than on any other station. The second most frequently reported station for bus riders was WILS, and WJIM for nonriders.

SAGINAW

<u>Radio Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
W106	0%	4%	3%
WGER	0	1	1
WHNN	5	5	5
WKCQ	0	3	2
WKNX	10	3	4
WRDD	5	0	1
WSAM	0	13	11
WSGW	0	12	11
WWWS	30	5	8
Other	10	6	7
Don't know	<u>40</u>	<u>48</u>	<u>47</u>
Totals	100% (N=20)	100% (N=155)	100% (N=175)

Three out of ten of the bus riders indicated WWWS as the radio station where they heard Saginaw Transit System announcements. One out of ten bus riders heard announcements on WKNX. Thirteen percent of the nonriders reported WSAM as the station, followed by 12 percent citing WSGW.

Respondents were asked if they regularly listen to the radio. The responses to this question are tabulated below:

	<u>Bus Rider Usage</u>					
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Regularly listen</u>	N= <u>408</u> <u>%</u>	<u>236</u> <u>%</u>	<u>748</u> <u>%</u>	<u>111</u> <u>%</u>	<u>3,373</u> <u>%</u>	<u>4,900</u> <u>%</u>
Yes	69	69	75	78	72	72
No	30	31	25	22	27	27
Other	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Totals	100%	100%	100%	100%	100%	100%

The majority of bus riders and nonriders indicated they regularly listen to the radio. Within the bus rider groups light and other users listen somewhat more frequently than either heavy or moderate users.

Television Station Viewing

As with radio, respondents were asked if they had seen any local transit system television announcements. The following table lists the responses to this question:

<u>Seen Announcements?</u>	<u>Bus Rider Usage</u>					<u>Total Respondents</u>
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	
N=	409	236	749	111	3,370	4,899
	%	%	%	%	%	%
Yes or think so	20	23	21	15	20	20
No	77	74	76	85	77	77
Don't know	3	3	3	0	3	3
Totals	100%	100%	100%	100%	100%	100%

Most respondents had not seen any local transit system television announcements. There were no major differences between bus rider groups and nonriders.

Listed below are tables for each community, indicating the percentages of respondents who saw announcements on specific television stations:

ANN ARBOR

<u>TV Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WJIM-TV	9%	4%	6%
WDIV-TV	0	4	2
WXYZ-TV	9	4	6
Other	9	4	6
Don't know	73	84	80
Totals	100% (N=11)	100% (N=25)	100% (N=36)

The majority of respondents reported they did not know where they saw the AATA TV announcements. There were no major differences between the bus rider and nonrider groups.

GRAND RAPIDS

<u>TV Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WOTV-TV	36%	36%	36%
WKZO-TV	5	1	2
WUHQ-TV	0	2	1
WZZM-TV	20	18	19
Don't know	<u>39</u>	<u>43</u>	<u>42</u>
Totals	100% (N=69)	100% (N=141)	100% (N=210)

GRATA TV announcements were reportedly seen on WOTV Television by 36 percent of both bus riders and nonriders. WZZM-TV was indicated by one out of five bus riders and 18 percent of the nonriders.

KALAMAZOO

<u>TV Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WKZO-TV	74%	74%	73%
WUHQ-TV	1	2	2
WOTV-TV	2	4	3
Don't know	<u>23</u>	<u>20</u>	<u>22</u>
Totals	100% (N=92)	100% (N=197)	100% (N=289)

Television station WKZO-TV was reported by approximately three out of four respondents as the TV station where they saw Metro Transit System announcements. There were no major differences between the bus rider and nonrider groups.

### LANSING

<u>TV Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WILX-TV	16%	17%	17%
WJIM-TV	62	59	61
WJRT-TV	0	1	1
WKAR-TV	0	1	0
WUHQ-TV	1	0	0
Other	1	1	1
Don't know	<u>20</u>	<u>21</u>	<u>20</u>
Totals	100% (N=127)	100% (N=218)	100% (N=345)

The majority of respondents reported WJIM-TV as the TV station where they saw CATA announcements. WILX-TV was the second most frequently mentioned station. There were no major differences between the bus rider and nonrider groups.

### SAGINAW

<u>TV Stations</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
WEYI-TV	25%	12%	13%
WJRT-TV	0	15	14
WNEM-TV	50	28	29
Other	0	1	1
Don't know	<u>25</u>	<u>44</u>	<u>43</u>
Totals	100% (N=4)	100% (N=68)	100% (N=72)

Twenty-nine percent of the respondents reported WNEM-TV as the TV station where they saw Saginaw Transit System announcements. WJRT-TV was the second most frequently mentioned station (14 percent), closely followed by WEYI-TV (13 percent).

Respondents were asked if they regularly watch television. The responses to this question are tabulated as follows:

Bus Rider Usage

	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Regularly Watch</u>	N= $\frac{408}{\%}$	$\frac{236}{\%}$	$\frac{748}{\%}$	$\frac{111}{\%}$	$\frac{3,375}{\%}$	$\frac{4,900}{\%}$
Yes	69	76	73	78	76	75
No	29	23	25	22	22	23
TV is broken or don't have TV	1	1	1	0	0	1
Other	1	0	1	0	2	1
Totals	100%	100%	100%	100%	100%	100%

As with radio, the majority of bus riders and nonriders indicated they regularly watch TV. There were no significant differences between bus rider groups and nonriders.

Newspaper Readership

Respondents were asked if they had seen any local transit system newspaper ads. The following table shows the responses to this question:

Bus Rider Usage

	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Seen Ads</u>	N= $\frac{409}{\%}$	$\frac{236}{\%}$	$\frac{748}{\%}$	$\frac{111}{\%}$	$\frac{3,374}{\%}$	$\frac{4,901}{\%}$
Yes	52	45	46	46	38	41
No	47	51	52	50	59	56
Don't know	1	3	2	4	3	3
Other	0	1	0	0	0	0
Totals	100%	100%	100%	100%	100%	100%

Most of the bus rider groups and nonriders said "no" they had not seen any local transit system newspaper ads. Within the ridership groups, however, the percentage of users (45-52 percent) who reported they had seen ads was greater than for nonriders (38 percent).

Listed below are tables for each community indicating the percentage of respondents who saw advertisements in specific newspapers:

ANN ARBOR

<u>Newspapers</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
Ann Arbor News	94%	92%	93%
Michigan Daily	2	2	2
Ypsilanti Press	0	4	2
Other	3	1	2
Don't know	<u>1</u>	<u>1</u>	<u>1</u>
Totals	100% (N=186)	100% (N=267)	100% (N=453)

The majority of respondents indicated the Ann Arbor News as the newspaper where they saw the AATA advertisements. There were no major differences between bus riders and nonriders.

GRAND RAPIDS

<u>Newspapers</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
Grand Rapids Press	94%	95%	94%
Grand Rapids Times	1	0	0
Other	1	1	2
Don't know	<u>4</u>	<u>4</u>	<u>4</u>
Totals	100% (N=109)	100% (N=199)	100% (N=308)

GRATA newspaper advertisements were seen in the Grand Rapids Press by most respondents. There were no major differences between the bus riders and nonriders.

### KALAMAZOO

<u>Newspapers</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
Kalamazoo Gazette	97%	95%	96%
Other	1	1	1
Don't know	<u>2</u>	<u>4</u>	<u>3</u>
Totals	100% (N=207)	100% (N=348)	100% (N=555)

The Kalamazoo Gazette was most frequently reported by bus riders and nonriders as the newspaper where they saw Metro Transit System advertisements.

### LANSING

<u>Newspapers</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
State Journal	80%	93%	88%
MSU State News	12	6	8
E.L. Towne Courier	2	0	1
Lansing Star	1	0	0
Other	2	0	1
Don't know	<u>3</u>	<u>1</u>	<u>2</u>
Totals	100% (N=184)	100% (N=281)	100% (N=465)

Respondents saw CATA newspaper ads more often in the State Journal than any other newspaper. Nonriders saw the ads more frequently than bus riders (93 percent versus 80 percent).

SAGINAW

<u>Newspapers</u>	<u>Bus Riders</u>	<u>Nonriders</u>	<u>Total Respondents</u>
Saginaw News	96%	97%	97%
Other	0	1	1
Don't know	<u>4</u>	<u>2</u>	<u>2</u>
Totals	100% (N=25)	100% (N=175)	100% (N=200)

The Saginaw News was the leading newspaper where respondents reported they saw Saginaw Transit System advertisements. There were no major differences between bus riders and nonriders.

Respondents were asked if they regularly read a local newspaper. The responses to this question are tabulated below:

<u>Bus Rider Usage</u>						
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Regularly Read</u>	N= <u>408</u> <u>%</u>	<u>235</u> <u>%</u>	<u>749</u> <u>%</u>	<u>111</u> <u>%</u>	<u>3,375</u> <u>%</u>	<u>4,900</u> <u>%</u>
Yes	65	67	66	72	69	68
No	23	20	23	23	21	21
Sometimes	11	11	9	5	9	10
Other	<u>1</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>
Totals	100%	100%	100%	100%	100%	100%

The majority of bus riders and nonriders regularly read a local newspaper. The results indicate no major differences between bus rider groups and nonriders.

Other Media Exposure

Respondents were asked if there were any other places that they had seen, heard, or read advertisements, or otherwise obtained information about the local transit system. The following table shows the responses to this question:

Bus Rider Usage						
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Other Places</u>	N= $\frac{407}{\%}$	$\frac{236}{\%}$	$\frac{475}{\%}$	$\frac{111}{\%}$	$\frac{3,367}{\%}$	$\frac{4,890}{\%}$
Yes or think so	35	29	32	33	27	29
No	59	65	63	60	68	66
Don't know	6	6	5	4	4	5
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>
Totals	100%	100%	100%	100%	100%	100%

Most of the respondents indicated they had not obtained information about the transit system from any other source than those previously listed. Of those who had obtained information from another place, the breakdown is as follows:

Bus Rider Usage						
	<u>Heavy</u>	<u>Moderate</u>	<u>Light</u>	<u>Other</u>	<u>Non-riders</u>	<u>Total Respondents</u>
<u>Places</u>	N= $\frac{142}{\%}$	$\frac{66}{\%}$	$\frac{235}{\%}$	$\frac{39}{\%}$	$\frac{909}{\%}$	$\frac{1,397}{\%}$
Billboards	42	36	34	20	36	36
Bulletin boards	7	8	6	3	4	5
Displays	9	8	11	0	7	8
News articles	7	8	11	8	13	12
Other	27	34	29	49	33	32
Ads for stores/ institutions which mention that they can be reached by bus	<u>8</u>	<u>6</u>	<u>9</u>	<u>20</u>	<u>7</u>	<u>7</u>
Totals	100%	100%	100%	100%	100%	100%

The most common source given was billboards, followed by "other" places. Within the ridership groups "other" users, however, reversed this trend, with a first ranking of "other" places, followed by billboards.

In conclusion, most respondents watch television, listen to the radio and read a newspaper on a regular basis. However, most reported they had not seen, heard or read advertisements through any of these media. This seemed to hold true without much difference between riders and nonriders. The next largest source of information about the transit system was billboards, an outdoor medium.

APPENDICES

APPENDIX A

1st 2nd 3rd 4th

PUBLIC TRANSIT "ATTITUDE AND AWARENESS" SURVEY

RESPONDENT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

REFUSAL:

PHONE NO.: \_\_\_\_\_

COMPLETION:

INTERVIEWER INITIALS:

\* \* \* INSTRUCTIONS TO INTERVIEWERS \* \* \* RE-SCHEDULE:

ALL INSTRUCTIONS TO INTERVIEWERS ARE CAPITALIZED. 1.

DO NOT READ THESE THINGS TO THE RESPONDENT. 2.

EVERYTHING PRINTED IN this typeface IS TO BE READ 3.

TO THE RESPONDENT. BELOW THE RESPONDENT IS INDICATED BY "R".

\* \* \* \* \*

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 Michigan 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 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 ~~WHERE~~ 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  | D _____ ALMOST EVERY DAY |
| B _____ ONCE A MONTH | E _____ DAILY            |
| C _____ ONCE A WEEK  | F _____ OTHER            |

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

- |                           |   |
|---------------------------|---|
| A _____ WORK              | E _____ VISITS OR RECREATION                              |
| B _____ PERSONAL BUSINESS | F _____ DINING  |
| C _____ SHOPPING          | G _____ MEDICAL   |
| D _____ SCHOOL            | H _____ WHEN I DON'T HAVE A CAR/<br>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/KIDS 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      D \_\_\_\_\_ YES  
B \_\_\_\_\_ HAVEN'T THOUGHT ABOUT IT      E \_\_\_\_\_ NO  
C \_\_\_\_\_ OTHER

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      H \_\_\_\_\_ EXPANDED SERVICE HOURS  
B \_\_\_\_\_ MORE CONVENIENT ROUTES      I \_\_\_\_\_ AVAILABLE CHANGE  
C \_\_\_\_\_ CLOSER STOPS      J \_\_\_\_\_ BETTER TRANSFER SYSTEM  
D \_\_\_\_\_ MORE FREQUENT SERVICE      K \_\_\_\_\_ BETTER ROUTE AND  
E \_\_\_\_\_ MORE BUS SHELTERS      L \_\_\_\_\_ SCHEDULE INFORMATION  
F \_\_\_\_\_ FASTER SERVICE      M \_\_\_\_\_ OTHER  
G \_\_\_\_\_ MORE COURTEOUS DRIVERS      N \_\_\_\_\_ NO CHANGES NEEDED  
N \_\_\_\_\_ I WOULD NOT USE THE BUS  
IN ANY CASE

During the past year the Transit Authority has advertised its service in local newspapers and on local radio stations:

21. 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 or stations did you hear the announcements? (CHECK ALL THAT APPLY)

<u>LANSING</u>		<u>GR</u>		<u>KZOO</u>		<u>AA</u>		<u>SAGINAW</u>	
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	___ WKCG
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	___ WWWW
		L	___ WMAX			L	___ WXXO	L	___ WXXO
		M	___ WOOD			M	___ OTHER	M	___ OTHER
		N	___ WVGR			N	___ DON'T KNOW	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 or stations did you see the announcements? (CHECK ALL THAT APPLY)

<u>LANSING</u>		<u>GR</u>		<u>KZOO</u>		<u>AA</u>		<u>SAGINAW</u>	
A	___ WILX (Ch.10)	A	___ WOTV(Ch.8)	A	___ WKZO (Ch.3)	A	___ WTVS (Ch.56)	A	___ WEY1 (Ch.25)
B	___ WJIM (Ch.6)	B	___ WKZO (Ch.3)	B	___ WUHQ (Ch.41)	B	___ WJIM (Ch.6)	B	___ WJRT (Ch.12)
C	___ WJRT (Ch.12)	C	___ WUHQ (Ch.41)	C	___ WOTV (Ch.8)	C	___ WILX (Ch.10)	C	___ WUCM (Ch.19)
D	___ WKAR (Ch.23)	D	___ WZZM (Ch.13)	D	___ WZZM (Ch.13)	D	___ WJBK (Ch.2)	D	___ WNEM (Ch.5)
E	___ WUHQ (Ch.41)	E	___ OTHER	E	___ OTHER	E	___ WDIV (Ch.4)	E	___ OTHER
F	___ OTHER	F	___ DON'T KNOW	F	___ DON'T KNOW	F	___ WXYZ (Ch.7)	F	___ DON'T KNOW
G	___ DON'T KNOW					G	___ OTHER		
						H	___ 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)
  - 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 DEALER
- 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 F \_\_\_\_\_ AD FOR STORES/  
 B \_\_\_\_\_ BULLETIN BOARDS INSTITUTIONS WHICH  
 C \_\_\_\_\_ DISPLAYS MENTION THAT THEY  
 D \_\_\_\_\_ NEWS ARTICLES CAN BE REACHED BY BUS  
 E \_\_\_\_\_ OTHER \_\_\_\_\_
32. Does \_\_\_\_\_ have special bus services for elderly people?  
 A \_\_\_\_\_ YES C \_\_\_\_\_ THINK SO  
 B \_\_\_\_\_ NO D \_\_\_\_\_ DON'T KNOW
33. Does \_\_\_\_\_ have special bus services for handicapped people?  
 A \_\_\_\_\_ YES C \_\_\_\_\_ THINK SO  
 B \_\_\_\_\_ NO D \_\_\_\_\_ DON'T KNOW
34. What is your usual means of transportation?  
 A \_\_\_\_\_ CAR G \_\_\_\_\_ SENIOR CITIZEN'S OR HANDI-  
 B \_\_\_\_\_ BUS CAPPER VAN  
 C \_\_\_\_\_ DART H \_\_\_\_\_ USUALLY WALK  
 D \_\_\_\_\_ TAXI I \_\_\_\_\_ HITCHHIKE  
 E \_\_\_\_\_ FRIENDS OR RELATIVES J \_\_\_\_\_ OTHER  
 TAKE ME K \_\_\_\_\_ I GO A VARIETY OF WAYS  
 F \_\_\_\_\_ BIKE, MOTORCYCLE
35. How many automobiles does your household have?  
 A \_\_\_\_\_ 1 C \_\_\_\_\_ 3  
 B \_\_\_\_\_ 2 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 OLD  
 B \_\_\_\_\_ BETWEEN 40 AND 60 YEARS OLD  
 C \_\_\_\_\_ BETWEEN 21 AND 39 YEARS OLD  
 D \_\_\_\_\_ BETWEEN 16 AND 20 YEARS OLD  
 E \_\_\_\_\_ NO RESPONSE
38. What is your occupation?  
 A \_\_\_\_\_ GENERAL OFFICE/CLERICAL I \_\_\_\_\_ TECHNICAL  
 B \_\_\_\_\_ MANAGEMENT J \_\_\_\_\_ SERVICE WORKER  
 C \_\_\_\_\_ GOVERNMENT K \_\_\_\_\_ UNSKILLED LABOR  
 D \_\_\_\_\_ UNIVERSITY L \_\_\_\_\_ HIGH SCHOOL OR COLLEGE  
 STUDENT  
 E \_\_\_\_\_ PROPRIETOR M \_\_\_\_\_ HOUSEWIFE  
 F \_\_\_\_\_ PROFESSIONAL N \_\_\_\_\_ RETIRED  
 G \_\_\_\_\_ SALES O \_\_\_\_\_ NOT EMPLOYED  
 H \_\_\_\_\_ SKILLED/SEMI-SKILLED P \_\_\_\_\_ OTHER  
 Q \_\_\_\_\_ REFUSED

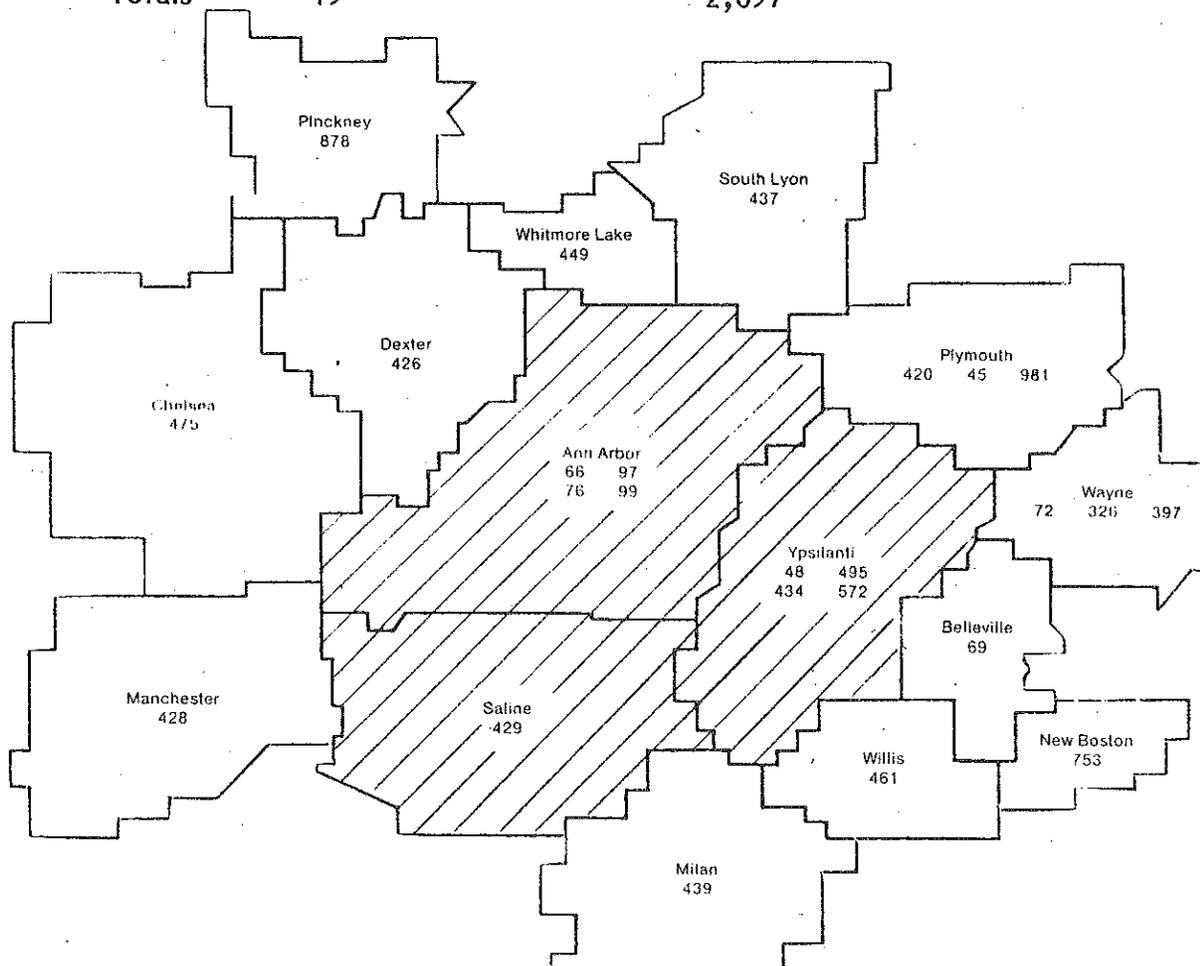
That was my last question . . . Thank you so much for your time! Good bye!

APPENDIX B

ANN ARBOR

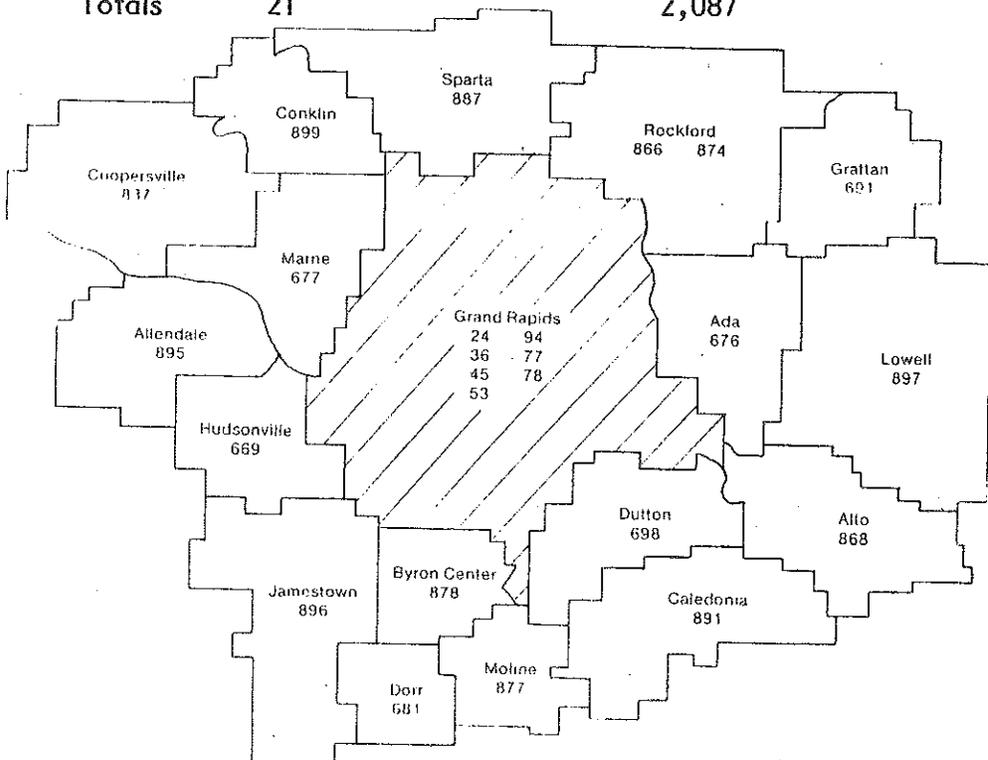
TELEPHONE EXCHANGES SURVEYED

<u>Exchange Prefix</u>	<u>Numbers Called</u>
429	180
434	72
481	14
482	73
483	50
484	10
485	43
487	24
495	7
662	253
663	249
665	155
668	135
761	87
769	132
971	224
973	114
994	181
995	94
<u>Totals</u>	<u>2,097</u>



APPENDIX C  
 GRAND RAPIDS  
 TELEPHONE EXCHANGES SURVEYED

<u>Exchange Prefix</u>	<u>Numbers Called</u>
241	194
243	203
245	185
247	92
361	265
363	150
451	24
452	40
454	66
455	36
456	34
457	75
458	101
459	53
531	40
532	73
534	54
538	53
774	93
784	150
<u>942</u>	<u>106</u>
Totals	21
	<u>2,087</u>

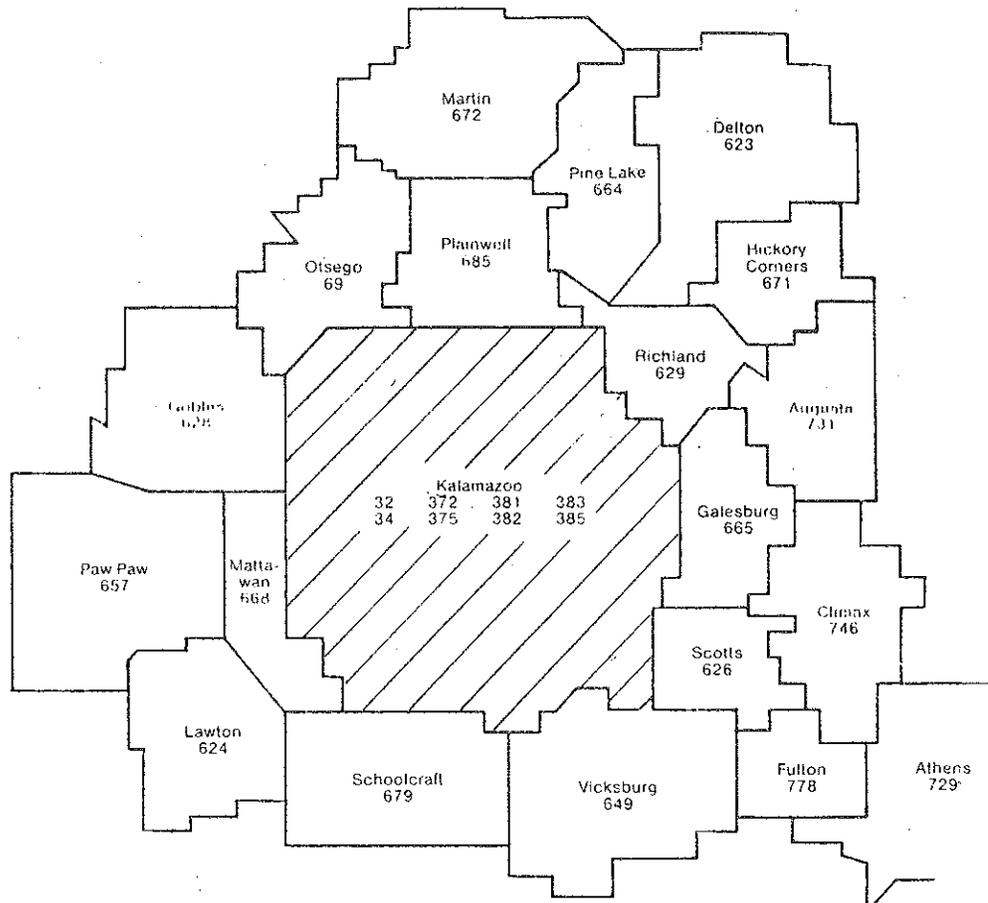


APPENDIX D

KALAMAZOO

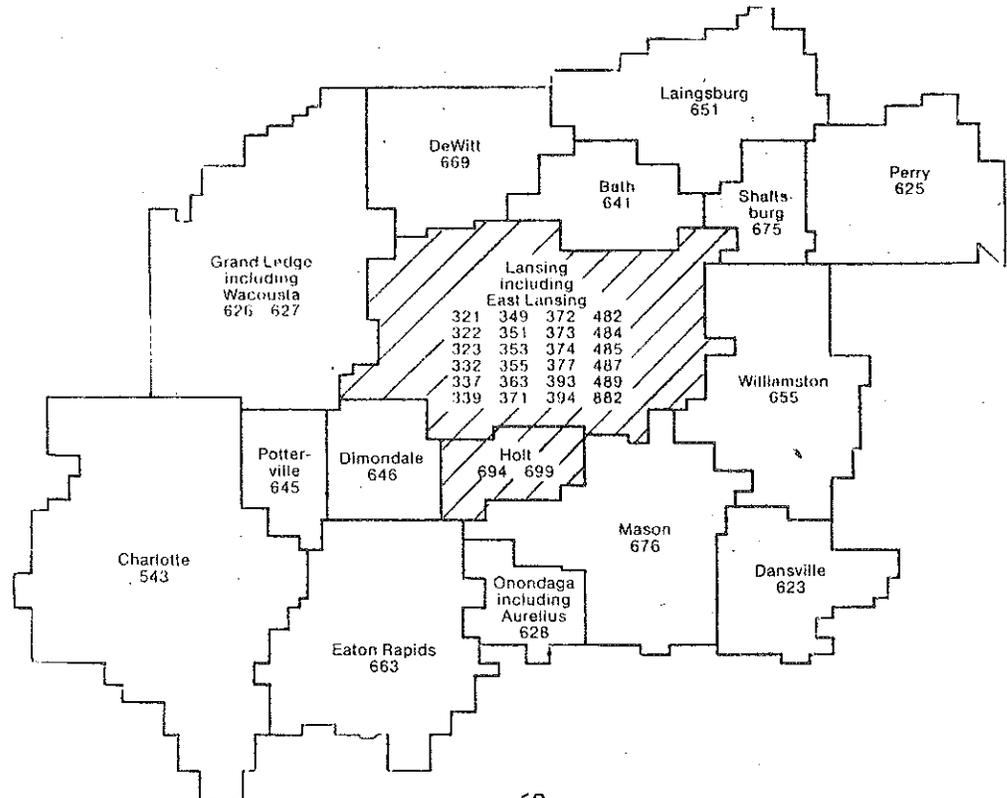
TELEPHONE EXCHANGES SURVEYED

<u>Exchange Prefix</u>	<u>Numbers Called</u>
323	121
327	240
342	160
343	200
344	240
345	200
349	160
372	40
375	239
381	102
382	106
385	80
679	40
Totals	<u>1,928</u>



APPENDIX E  
LANSING  
TELEPHONE EXCHANGES SURVEYED

<u>Exchange Prefix</u>	<u>Numbers Called</u>
321	156
322	8
323	81
332	178
337	102
339	61
349	123
351	137
371	56
372	122
393	150
394	84
482	98
484	110
485	154
487	61
489	89
694	133
699	19
882	151
Totals	<u>20</u> <u>2,073</u>

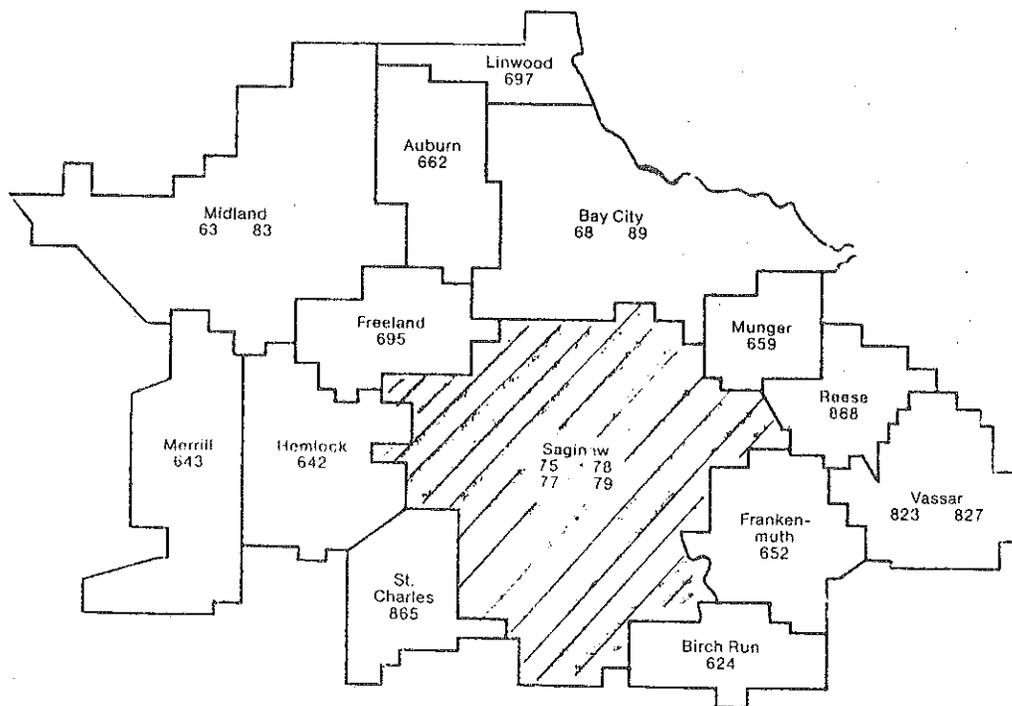


APPENDIX F

SAGINAW

TELEPHONE EXCHANGES SURVEYED

	<u>Exchange Prefix</u>	<u>Numbers Called</u>
	752	140
	753	192
	754	185
	755	183
	770	49
	777	220
	781	215
	790	43
	792	259
	793	207
	799	180
Totals	<u>77</u>	<u>1,873</u>



APPENDIX G

Interview Sampling Results

	<u>Ann Arbor</u>	<u>Grand Rapids</u>	<u>Lansing</u>	<u>Kalamazoo</u>	<u>Saginaw</u>	<u>Totals</u>	<u>Percent</u>
Start Date	3-6-80	2-11-80	1-23-80	2-21-80	4-28-80	1-23-80	
Finish Date	3-18-80	2-21-80	2-11-80	3-6-80	6-6-80	6-6-80	
Ratio	1:20	1:59	1:47	1:34	1:20		
Interviews Taken	1,193	1,196	1,175	1,200	1,098	5,862	58.3
Disconnected or Changed	183	80	242	80	159	744	7.4
Businesses*	21	44	41	32	25	163	1.6
Refusals	180	313	224	176	255	1,148	11.4
No Answer**	<u>520</u>	<u>454</u>	<u>391</u>	<u>440</u>	<u>336</u>	<u>2,141</u>	<u>21.3</u>
Numbers Called	2,097	2,087	2,073	1,928	1,873	10,058	100.0

\*Businesses were not included in survey.

\*\*Numbers tried three times with no answer.

