

**NATIONWIDE
PERSONAL
TRANSPORTATION
STUDY**

Characteristics of Licensed Drivers

REPORT NO. 6

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U.S. Department of Transportation • Federal Highway Administration

NATIONWIDE PERSONAL TRANSPORTATION SURVEY

Characteristics of Licensed Drivers

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INTRODUCTION

Data relating to the characteristics of the Nation's drivers are important to the analyses of accident exposures and rates, and to the development and direction of highway safety programs. Data on drivers are also useful in social and economic analyses and to business in market studies and forecasts.

This report represents data compiled from the "Nationwide Personal Transportation Study" concerning the characteristics of licensed motor-vehicle drivers.

DESCRIPTION OF DATA

Data collected in this study for motor-vehicle drivers are examined within three parameters. These parameters are (1) geographic distribution of the resident non-institutionalized driving-age population 16 years of age and older with driver licenses in unincorporated areas, and by population size-group of place of residence in incorporated places and Standard Metropolitan Statistical Areas (SMSA's); (2) population distribution of licensed drivers by age-groups and sex; and (3) travel distribution of licensed drivers by age-groups, sex and estimated annual miles of driving.

The population data shown in this report are based on the 1970 census and include members of the Armed Forces in the United States living off post or with their families on post. Population data for all other reports in this series were based on estimates of 1969 population expanded from the 1960 census and excluded members of the Armed Forces. The percentage contribution of the Armed Forces to the different age-sex population levels necessitated this revision.

HIGHLIGHTS

- . Driver licenses are held by 73.6 percent of the population 16 years of age and over.
- . Driver licenses are held by 87.0 percent of the males and 61.5 percent of the females 16 years of age and older.
- . Almost 56.3 percent of all licensed drivers are male.
- . About 73 percent of the annual miles driven are by males.
- . Licensed motor vehicle drivers average an estimated 8,685 miles annually.
- . Male drivers average 11,352 miles of driving per year, or more than twice the 5,411 miles per year averaged by females.

BACKGROUND AND PROCEDURES

Background

The Nationwide Personal Transportation Survey was designed to obtain up-to-date information on national patterns of travel. Earlier surveys, limited primarily to automobile and truck travel, were conducted in a number of States between 1930-1940 and more recently between 1951-1959. In April 1961 a national survey was conducted to estimate characteristics of travel and ownership and use of automobiles. In this national survey, family income data were available which could be related to travel patterns.

Survey procedures

Data for the Nationwide Personal Transportation Survey were collected in 1969-1970 by the Bureau of the Census of the Department of Commerce for the Federal Highway Administration of the Department of Transportation.

The survey was based on a multi-stage probability sample of housing units located in 235 sample areas, comprising 485 counties and independent cities, representing every State and the District of Columbia. The 235 sample areas were selected by grouping all the Nation's counties and independent cities into about 1,900 primary sample units (PSU's) and further forming 235 strata containing one or more PSU's that was relatively homogeneous according to socio-economic characteristics. Within each of the strata, a single PSU was selected to represent the stratum. Within each PSU, a probability sample of housing units was selected to represent the civilian non-institutionalized population.

The households in the Nationwide Personal Transportation Survey comprised two outgoing panels in the Quarterly Housing Survey (QHS) conducted by the Bureau of the Census. One panel was interviewed in April, July, and October 1969 and January 1970; the second panel was interviewed only once in August, 1969.

Experienced field staff of the Bureau of the Census were assigned to the survey. Training consisted of a one-day session for field supervisors by Washington office personnel, and a one-day session of training of the interviewers by field supervisors. In addition, interviewers were assigned home-study exercises to be turned in before each interview period. The interviewers were also observed periodically by field office supervisory personnel.

The completed questionnaires were edited first in the Census regional field offices to clear up inconsistencies and omissions and

later in the Washington office. The data were then coded, put on tapes and mechanically edited. An edited tape for each of the months of the survey was furnished to the Federal Highway Administration for processing.

At the first visit to a selected household, in panel 1 during April 1969, and in panel 2 during August 1969, Sections I through VII of the household questionnaire were completed as well as a control card. On the control card were entered data on characteristics of the household such as income, automobile ownership, and age and sex of persons in the households. Only Section VI and VII of the questionnaire were completed at subsequent interviews at the households in panel 1.

Each of the tables in this report will indicate a reference source to a particular table from which the sample base can be determined. These sample bases are identified in Appendix A. A copy of the questionnaire is also found in the Appendix.

Sampling Variability

The Nationwide Personal Transportation Survey is based on a probability sample and the estimates are subject to sampling variability. The term "sampling variability" refers to the expected differences between the results of the survey and those that would have been obtained had a complete census been taken.

Some items such as person or household characteristics or number of vehicles were collected only during the first visit to a household in April or August. Standard errors of estimates, measures of sampling variability, were calculated from data collected those two months. Estimates of the standard errors for characteristics of vehicle trips and vehicle-miles were determined from variance functions fitted to the data collected during the five months of interviewing.

Most of the data are presented as percentage distributions. The base value of each 100 percent figure is also indicated. Tables I.A.-1 and I.-A.2 in Appendix B give the standard errors for specified percentages and base values. The appropriate standard error may be determined by interpolation. In general, the chances are about two out of three that the difference due to sampling variability between the estimated value and the figure that would have been obtained from a complete census does not exceed the standard error.

Other possible sources of error

In addition to variability arising from the use of samples and household responses, errors may have been made by interviewers or by other personnel involved in the collection and processing of data. Quality controls at all levels of data collection, coding, and editing were exercised by the Bureau of the Census.

CHARACTERISTICS OF LICENSED DRIVERS

I. Distribution by place of residence

Unincorporated areas and incorporated places

As shown in table 1, 73.6 percent of all persons 16 years of age and older were licensed motor-vehicle drivers in 1970. The highest incidence of drivers was 79.2 percent in unincorporated areas. The incidence of drivers in incorporated places decreased as the size of the incorporated place increased. The number of licensed drivers decreased gradually from 78.8 percent of the driving-age population in the smallest incorporated places of under 5,000 population to 68.3 percent in incorporated places of 100,000-999,999 and then dropped sharply to a low of 48.8 percent in the largest incorporated places of 1,000,000 and over (figure 1). In all incorporated places, about 70.9 percent of persons 16 years of age and older had driver licenses.

Approximately 87.0 percent of all males 16 years of age and older were licensed drivers, and the ratio did not vary by more than 4.0 percentage points from this average for unincorporated areas and incorporated places of less than 1,000,000 population. Specifically, 90.0 percent of the males in unincorporated areas, 90.9 percent of the males in places under 5,000 and 90.5, 87.8, 86.2 and 84.5 percent of males in places of 5,000-24,999, 25,000-49,999, 50,000-99,999 and 100,000-999,999 respectively, were licensed drivers. In places of 1,000,000 and over population, the percent of licensed male drivers dropped to a low of 68.2 percent. For all incorporated places, 85.4 percent of the males 16 years of age and older had driver licenses.

The incidence of drivers in the female population was significantly lower than in the male population; approximately 61.5 percent of all females 16 years of age and older were licensed drivers. The incidence of licensed female drivers was highest in unincorporated areas (68.8 percent), and remained at about that level, dropping by only 2.4 percentage points in incorporated places under 50,000. The percentage of licensed female drivers in incorporated places decreased with increasing population from 59.5 percent in places of 50,000-99,999 to 32.5 percent in places of 1,000,000 and over. For all incorporated places, 58.1 percent of the females 16 years of age and older had driver licenses.

SMSA population size-groups

Table 2 shows the percentage of persons 16 years of age and older with driver licenses in SMSA's by population size-groups. The SMSA's of 100,000-249,999 population showed the highest proportion of licensed drivers at 78.7 percent of those persons 16 years and older. SMSA's of 3,000,000 and over had the lowest proportion of licensed drivers 16 years and older at 65.1 percent. For all SMSA's, the percentage of licensed drivers was 72.2 percent of all persons 16 years of age and older. Unlike the distribution

Table 1.--Percent of persons 16 years of age and older with driver licenses by place of residence.

Place of residence	Percent with driver licenses			Total drivers (000)
	Males	Females	Total	
Unincorporated areas	90.0	68.8	79.2	35,961
Incorporated places				
Under 5,000	90.9	67.4	78.8	10,755
5,000 - 24,999	90.5	66.9	78.2	18,280
25,000 - 49,999	87.8	66.4	76.6	7,286
50,000 - 99,999	86.2	59.5	71.8	7,962
100,000 - 999,999	84.5	54.5	68.3	16,652
1,000,000 and over	68.2	32.5	48.8	6,090
All incorporated places	85.4	58.1	70.9	67,025
All areas and places	87.0	61.5	73.6	102,986*

* Does not include 53 (000) persons for whom information was not available.

SOURCE: Based upon unpublished table H-1 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration.

FIGURE 1 - PERCENT OF DRIVING-AGE POPULATION WITH DRIVER LICENSES BY SEX AND PLACE OF RESIDENCE

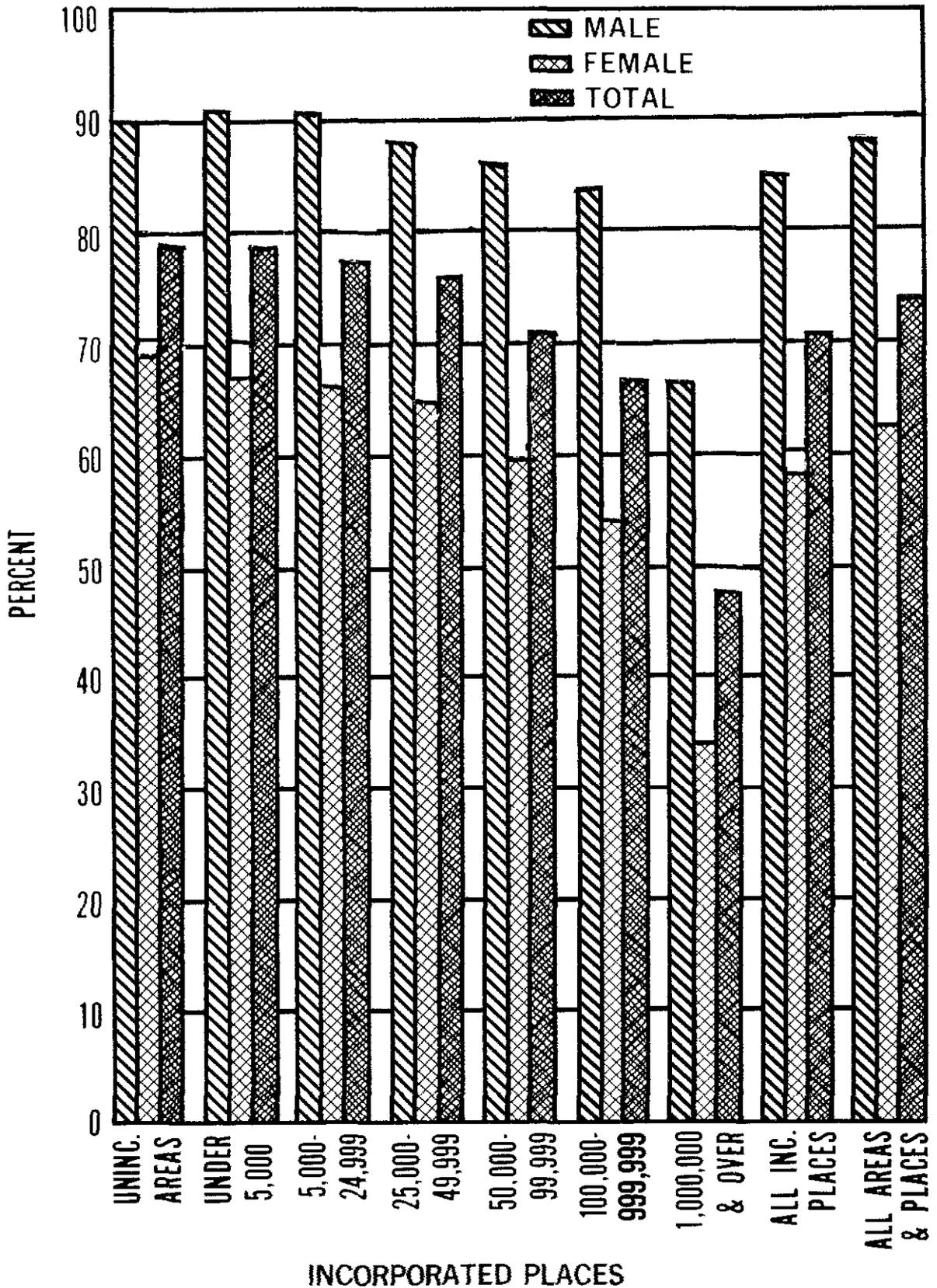


Table 2.--Percent of persons 16 years of age and older with driver licenses in SMSA's by population size-groups.

SMSA population size-group	Percent of persons with driver licenses
Under 100,000	72.9
100,000 - 249,999	78.7
250,000 - 499,999	75.0
500,000 - 999,999	72.0
1,000,000 - 1,999,999	76.1
2,000,000 - 2,999,999	71.5
3,000,000 and over	65.1
All SMSA's	72.2*

* Percentage based on 92,395,824 persons.

SOURCE: Based upon unpublished table H-1.1 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

of drivers for incorporated places, the distribution for SMSA's showed no clear pattern of licensed drivers by SMSA size, except for SMSA's 3,000,000 and over. This may be due to the fact that SMSA's generally follow county lines rather than, for example, urban limits, and therefore usually include areas with suburban and rural as well as urban characteristics.

II. Distribution by age-groups and sex

Table 3 shows the percentage of drivers by age-groups and sex. Figure 2 shows the number of licensed drivers of each sex in each age-group. The total number of licensed drivers in 1970 was estimated at 102,986,000. This figure was based on an expanded sample of persons who indicated that they had a driver's license and differed by about 8,557,000^{1/} from the total number of driver licenses reported by and in the files of the 50 States and the District of Columbia. The disparity in the two estimates may be due to (1) drivers having licenses in two or more States, (2) a large number of licenses which were no longer valid (i.e., deaths) but were not removed from the State files, and (3) the expansion of the sample may have produced too low a total.

The 20-24 year age-group had the largest number of licensed drivers, totalling 13,504,000 or 13.1 percent of all persons with driver licenses; the second largest group of licensed drivers was in the 25-29 year age-group, totalling 11,689,000 or 11.3 percent of all persons with driver licenses. These two age-groups combined accounted for almost one-fourth (24.4 percent) of all drivers. The 65-69 year age group had the fewest number of drivers, 3,777,000 or 3.7 percent of the total.

As shown in table 3, approximately 56.3 percent of all licensed drivers were males and 43.7 percent were females. This represents an increase in the proportion of licensed female drivers since 1963, when the ratio was 60.2 percent male to 39.8 female.^{2/} The proportion of female drivers in each age-group decreased with increasing age until the 65-69 year age-group where it increased slightly and then dropped again in the 70-and-over age-group.

Table 4, which shows the age distribution of licensed drivers indicates that more than half (51.8 percent) of the licensed motor-vehicle drivers were under 40 years of age. The highest percentage of male drivers (23.1 percent) was between the ages of 20-29; female drivers in the same age-groups constituted 26.2 percent of their total. The 65-69 year age-group had the fewest number of drivers with male drivers representing 3.9 percent of all licensed male drivers and female drivers representing 3.3 percent of all licensed female drivers (figure 3).

^{1/} Highway Statistics, 1970. DL-1 indicates the total numbers of driver licenses to be 111,543,000 in 1970.

^{2/} Cope, E. M. and Mundy, Arlene R., 139 Million Drivers in 1980, Public Roads, Volume 33, October 1964, pp. 68-79.

Table 3.--Percent of drivers
by age-groups

Age	Distribution within age-group		Distribution by age-group	Number of drivers (000)
	Males	Females		
16 - 19	57.1	42.9	9.0	9,220
20 - 24	52.6	47.4	13.1	13,504
25 - 29	53.9	46.1	11.3	11,689
30 - 34	53.6	46.4	9.3	9,634
35 - 39	54.3	45.7	9.1	9,358
40 - 44	54.5	45.5	9.7	9,994
45 - 49	54.6	45.4	9.7	9,966
50 - 54	57.9	42.1	8.2	8,470
55 - 59	60.8	39.2	6.8	7,023
60 - 64	62.7	37.3	5.4	5,556
65 - 69	60.6	39.4	3.7	3,777
70 and over	67.5	32.5	4.7	4,795
Total	56.3	43.7	100.0	102,986

SOURCE: Based upon unpublished table H-1 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

FIGURE 2. NUMBER OF LICENSED DRIVERS BY AGE AND SEX

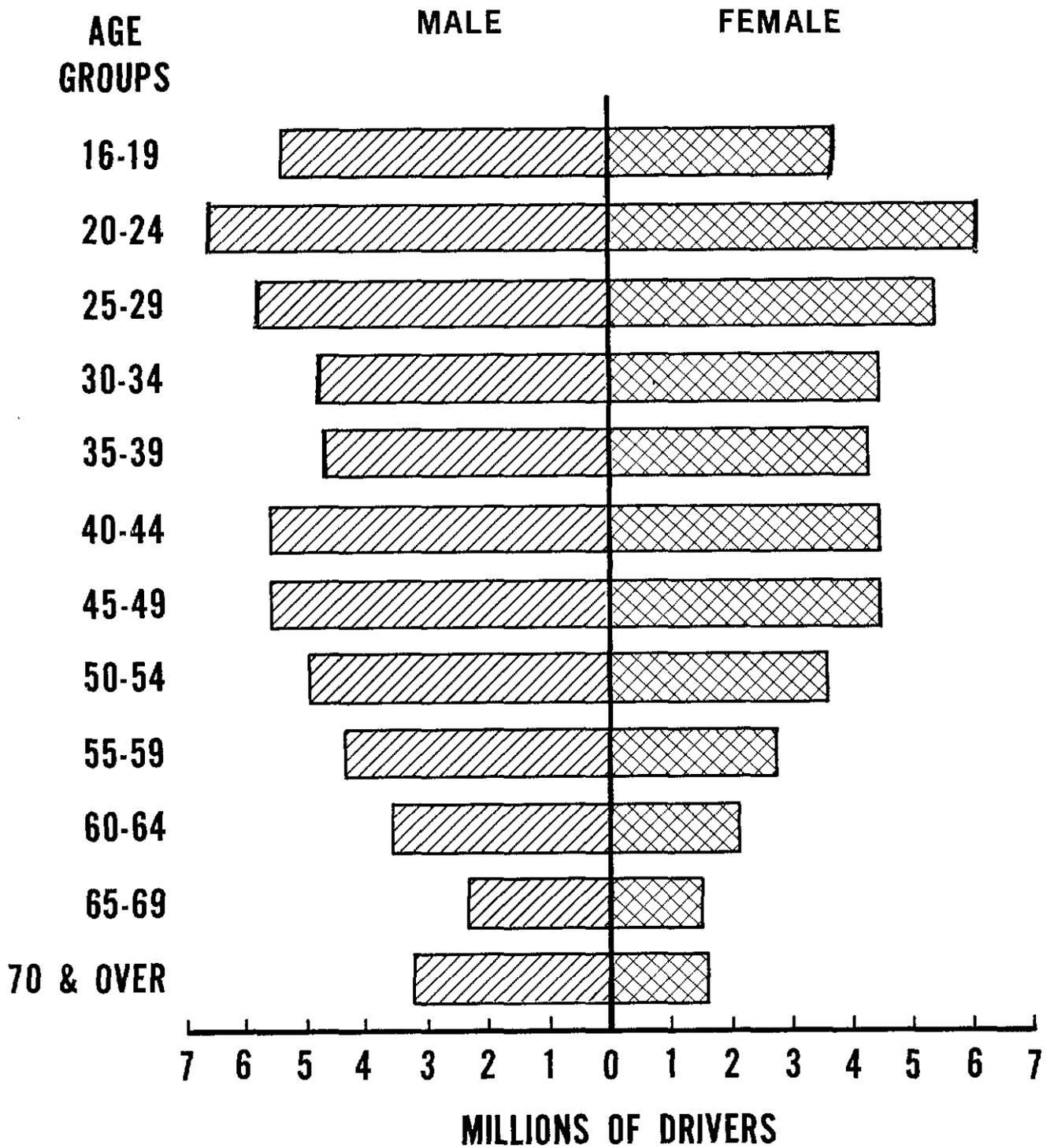


Table 4.--Distribution of licensed drivers by age
and their proportion of total population.

Age	Licensed drivers			Proportion of total population in each age-sex group licensed as drivers		
	Male	Female	Total	Male	Female	Total
	Percent					
16 - 19	9.0	8.8	9.0	70.1	53.6	61.9
20 - 24	12.2	14.2	13.1	90.6	76.5	83.3
25 - 29	10.9	12.0	11.3	96.1	79.4	87.6
30 - 34	8.9	9.9	9.3	93.2	77.4	85.1
35 - 39	8.8	9.5	9.1	94.9	75.8	85.1
40 - 44	9.4	10.1	9.7	94.6	74.5	84.3
45 - 49	9.4	10.1	9.7	94.0	72.9	83.1
50 - 54	8.5	7.9	8.2	92.6	62.6	77.0
55 - 59	7.4	6.1	6.8	90.5	53.4	71.1
60 - 64	6.0	4.6	5.4	87.4	45.6	65.1
65 - 69	3.9	3.3	3.7	74.0	38.9	54.6
70 and over	5.6	3.5	4.7	61.8	20.2	37.0
Total	100.0	100.0	100.0	87.0	61.5	73.6
Number of licensed drivers	57,987,494	44,998,820	102,986,314	57,987,494	44,998,820	102,986,314

SOURCE: Based on unpublished table H-1 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

FIGURE 3. PERCENT OF LICENSED DRIVERS BY AGE AND SEX

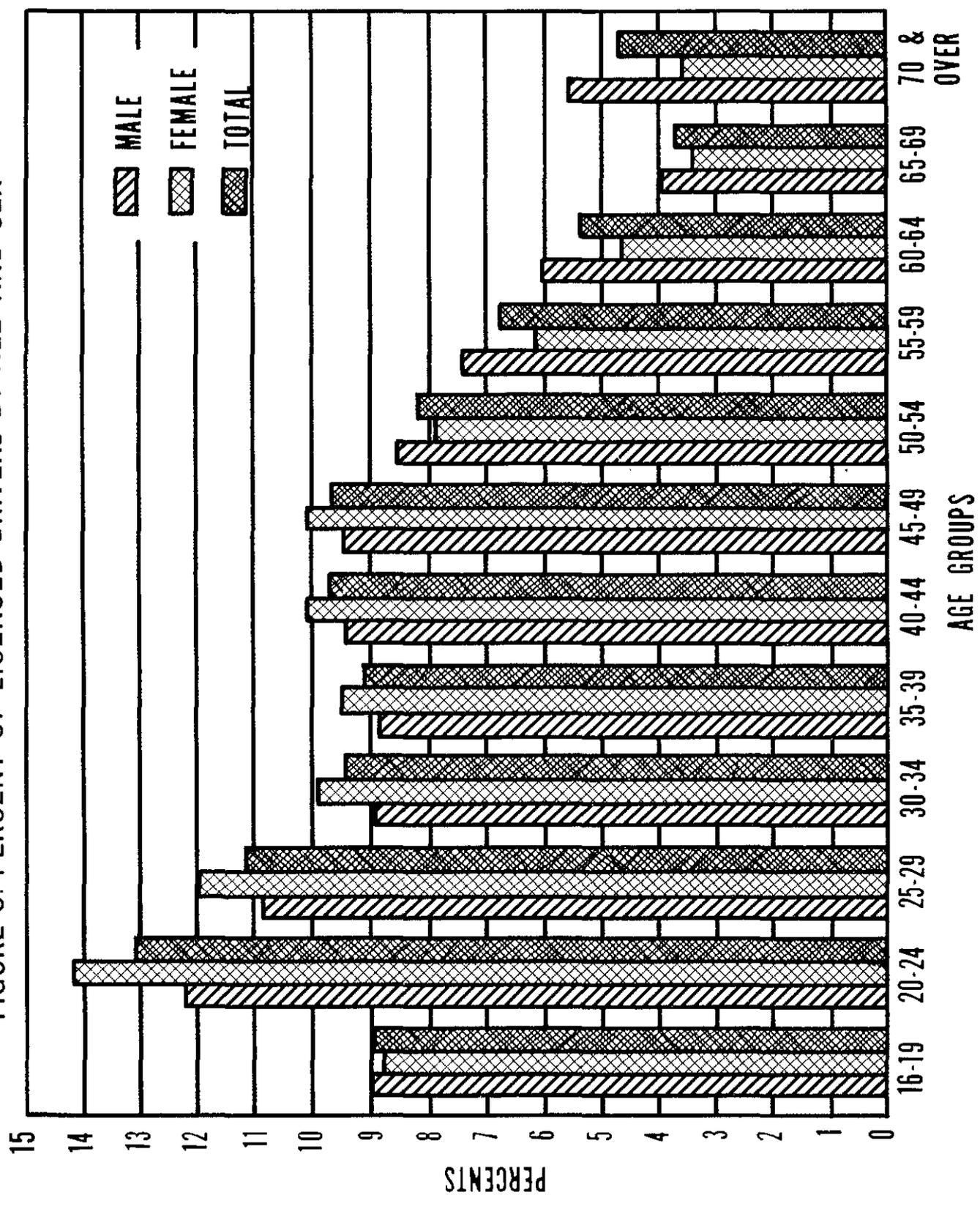


Figure 4 and table 4 show the proportion of total population in each age-sex group licensed as motor-vehicle drivers. Nationally, for the total driving-age population, 73.6 percent were licensed drivers: 87.0 percent of the males and 61.5 percent of the females. The highest proportion of licensed drivers in both sexes was in the 25-29 age-groups with 87.6 percent licensed drivers: 96.1 percent of the males and 79.4 percent of the females. The lowest proportion for both sexes was in the 70-and-over age-group with only 37.0 percent holding licenses: 61.8 percent of the males and 20.2 percent of the females; this was the only age-group where drivers constituted less than half of the population of the age-group.

As figure 4 indicates, the retention of driver licenses by males remained fairly constant from ages 20-64 and then declined significantly. For females, licensing was nearly constant from ages 20-49 but declined sharply after age 50, since many women in the higher age-groups had never learned to drive. However, the increased dependency on the automobile during the last two decades, and the availability of driver education and training at an early age has already begun to increase the relative proportions of female licensed drivers in the younger and older age-groups.

The changes in the proportions of driver licenses by age-group and sex between 1951-1956^{4/} and 1970 are shown in table 5. Driving-age males with driver licenses increased by 8.7 percent during this period, from 78.3 percent in 1951-1956 to 87.0 percent in 1970. The percent of females 16 years of age and older with driver licenses increased by 22.3 percent, from 39.2 in 1951-1956 to 61.5 percent in 1970. Although the proportion of licensed drivers increased in all age groups, the increase in the proportion of female drivers is particularly evident. The proportion of female drivers increased by more than 20 percent in all age-groups, except 70-and-over.

^{4/} Highway Transportation, Office of Research, Bureau of Public Roads, U.S. Department of Commerce, August 1960. Unpublished motor-vehicle use studies conducted in 1951-1956 in 19 States.

FIGURE 4. PERCENT OF TOTAL POPULATION LICENSED AS DRIVERS
BY AGE AND SEX

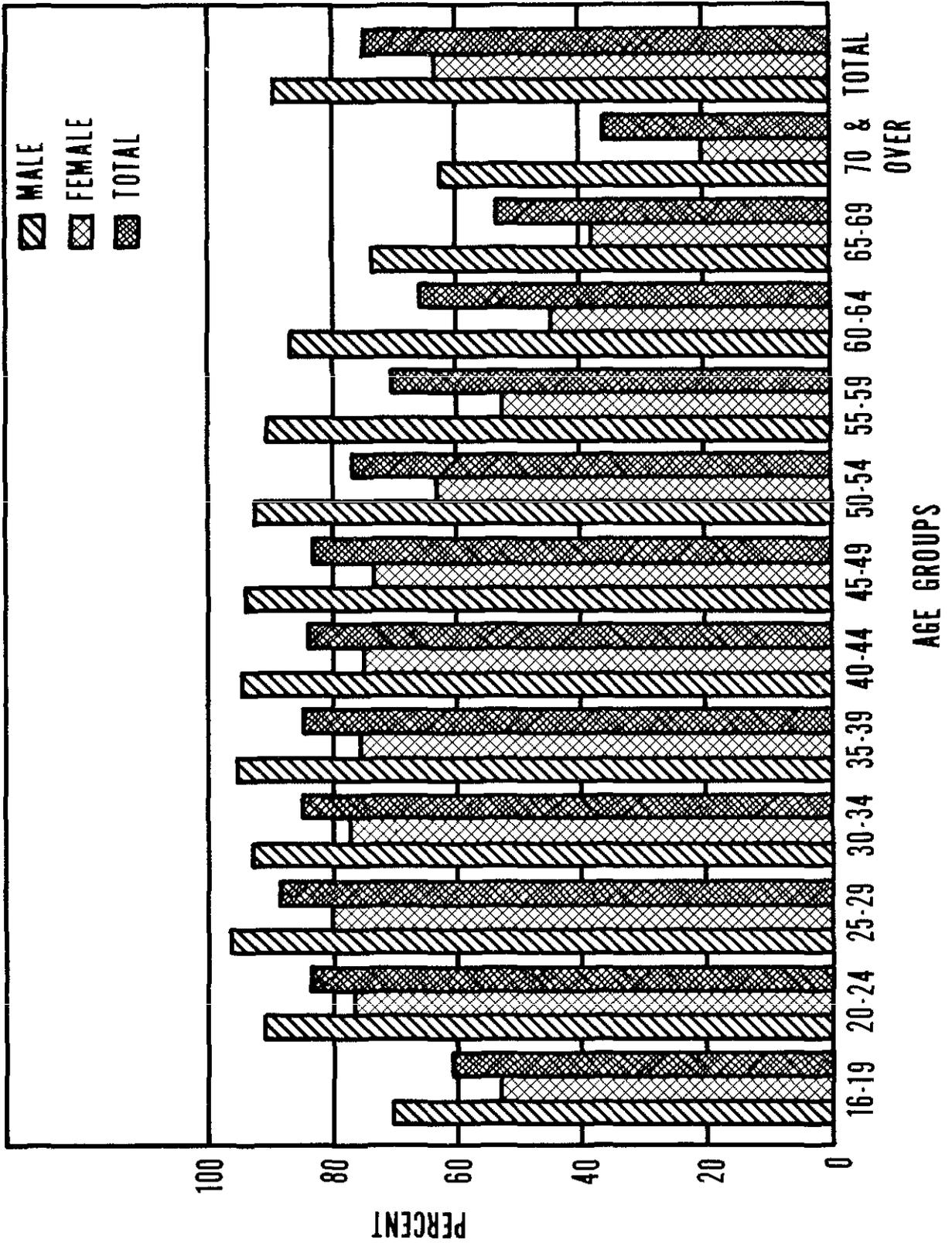


Table 5.--Percent of population licensed as drivers by age and sex for 1951-1956^{1/} and 1970.

Age	Percent of drivers					
	Males			Females		
	1951 - 1956	1970	Percent difference	1951 - 1956	1970	Percent difference
16 - 20	65.8	72.3	+ 6.5	31.6	57.9	+26.3
21 - 29	89.0	93.5	+ 4.5	50.6	77.1	+26.5
30 - 39	90.8	93.8	+ 3.0	53.8	75.9	+22.1
40 - 49	87.4	94.3	+ 6.9	46.8	73.4	+26.6
50 - 59	80.9	91.4	+10.5	32.3	58.0	+25.7
60 - 69	65.6	81.6	+16.0	18.2	42.4	+24.2
70 & over	37.8	61.8	+24.0	7.0	20.2	+13.2
All ages	78.3	87.0	+ 8.7	39.2	61.5	+22.3

^{1/} Highway Transportation, Office of Research, Bureau of Public Roads, U.S. Department of Commerce, August 1960. Unpublished motor-vehicle use studies conducted in 1951 - 1956 in 19 States.

Travel distribution by sex, age and estimated annual miles of driving

For this portion of the survey, licensed drivers were asked to give their age and sex and an estimate of the number of miles driven in the 12 months preceding the interview. The number of miles driven was grouped into 8 categories: none; less than 5,000; 5,000 - 9,999; 10,000 - 14,999; 15,000 - 19,999; 20,000 - 24,999; 25,000 - 29,999; and 30,000 and-over.

Table 6 shows the distribution of mileage driven by licensed drivers within age-groups. Less than three percent (2.6) of all persons with drivers licenses reported that they did no driving. Almost two-thirds (64.1 percent) of all licensed drivers reported driving less than 10,000 miles a year, while 9.0 percent reported driving 20,000 or more miles per year. About three-fourths (74.1 percent) of all licensed drivers in the 16-19 age-group, almost half (48.9 percent) of the drivers in the 65-69 year age-group and 58.2 percent of the 70-and-over age-group reported driving less than 5,000 miles per year. Approximately 11.7 percent of licensed drivers 70 years and over reported that they did no driving.

Table 7 shows the distribution of mileage driven by licensed male drivers within age-groups. About 9.4 percent of all licensed male drivers age 70-and-over reported that they did no driving, while 2.1 percent of all males with drivers licenses reported that they did no driving. Approximately one-half of all licensed male drivers reported driving less than 10,000 miles a year, and about one-third (34.0 percent) reported driving from 10,000 to 19,999 miles per year. Nearly 15 percent (14.9) of the male drivers indicated that they drove 20,000 or more miles per year. Over two-thirds (68.5 percent) of the licensed male drivers in the 16-19 age-group reported driving less than 5,000 miles per year, and more than one-half (53.5 percent) of those in the 70-and-over age-group reported that they drove less than 5,000 miles per year. About 61.0 percent of all licensed male drivers between the ages of 25-29 indicated that they drive 10,000 or more miles per year.

Table 8 shows the distribution of mileage driven by licensed female drivers within age-groups. About 16.7 percent of all licensed female drivers age 70-and-over reported that they did no driving, while slightly over three (3.2) percent of all females with drivers licenses said that they did no driving. Almost 60 percent (58.3) of all females with drivers licenses drove less than 5,000 miles per year and 82.5 percent drove less than 10,000 miles per year. Less than two (1.7) percent of all licensed female drivers reported driving 20,000 or more miles per year. Fewer than one-half (38.5 percent) of the licensed female drivers in all age-groups drove 5,000 miles or more per year.

Table 9 shows that approximately 900,419 million miles were driven in 1970. This figure is 170,156 million miles or about 19.7 percent less than estimates made by FHWA* and would seem to indicate that most drivers

*Highway Statistics 1970, Table VM-1: Estimated Motor Vehicle Travel in the United States and Related Data, Calendar year 1970.

Table 6.---Distribution of mileage driven within age-groups.

Age	Mileage classes							Number of drivers (000)		
	Zero	Less than 5,000	5,000 to 9,999	10,000 to 14,999	15,000 to 19,999	20,000 to 24,999	25,000 to 29,999		30,000 and over	Total
Years	P E R C E N T									
16 - 19	2.2	74.1	13.3	5.4	2.2	1.9	0.2	0.7	100.0	8,560
20 - 24	2.1	44.2	22.7	17.3	5.6	3.3	1.6	3.2	100.0	12,746
25 - 29	2.3	35.6	23.7	18.3	6.9	6.3	2.5	4.4	100.0	11,271
30 - 34	1.5	32.4	24.6	20.6	7.7	6.4	1.7	5.1	100.0	9,290
35 - 39	1.3	31.0	26.8	23.0	6.9	5.7	1.6	3.7	100.0	9,072
40 - 44	2.3	31.8	27.8	19.7	7.4	4.5	1.5	5.0	100.0	9,662
45 - 49	1.5	31.7	27.8	20.0	7.7	5.3	1.9	4.1	100.0	9,675
50 - 54	2.7	30.7	27.6	21.3	9.1	3.8	2.6	2.2	100.0	7,985
55 - 59	2.0	33.5	26.8	22.8	6.9	4.6	1.4	2.0	100.0	6,713
60 - 64	2.7	37.6	28.4	21.5	3.6	2.9	1.3	2.0	100.0	5,351
65 - 69	5.7	48.9	27.8	13.8	2.6	0.4	-	0.8	100.0	3,569
70 and over	11.7	58.2	17.9	7.8	3.2	0.9	-	0.3	100.0	4,603
All ages	2.6	39.5	24.6	18.1	6.2	4.3	1.5	3.2	100.0	98,497*

* Does not include 4,489(000) licensed drivers who were unable to estimate mileage.

SOURCE: Based upon unpublished table H-2 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

Table 7.--- Distribution of mileage driven by licensed male drivers within age-groups

Age	Mileage classes										Total	Number of drivers (000)
	Zero	Less than 5,000	5,000 to 9,999	10,000 to 14,999	15,000 to 19,999	20,000 to 24,999	25,000 to 29,999	30,000 and over				
Years	P E R C E N T											
16 - 19	1.2	68.5	15.1	7.6	3.6	2.8	0.3	0.9	100.0	4,902		
20 - 24	1.7	25.2	24.1	24.9	9.1	5.8	3.3	5.9	100.0	6,743		
25 - 29	1.8	14.6	22.6	25.8	11.1	11.3	4.4	8.4	100.0	6,021		
30 - 34	0.9	10.4	23.9	28.8	12.8	10.6	2.7	9.9	100.0	4,983		
35 - 39	1.1	14.9	23.6	30.8	11.3	9.0	2.7	6.6	100.0	4,946		
40 - 44	2.1	15.4	25.8	26.3	11.4	7.6	2.3	9.1	100.0	5,285		
45 - 49	1.6	15.2	27.2	27.6	9.6	8.7	3.2	6.9	100.0	5,305		
50 - 54	0.6	14.2	28.0	29.6	13.8	5.9	4.0	3.9	100.0	4,637		
55 - 59	1.9	15.6	29.9	30.2	9.6	7.2	2.3	3.3	100.0	4,076		
60 - 64	2.1	26.1	30.6	27.4	4.5	4.5	2.1	2.7	100.0	3,404		
65 - 69	4.9	38.5	33.2	17.9	3.6	0.6	-	1.3	100.0	2,207		
70 and over	9.4	53.5	20.8	11.4	3.7	0.8	-	0.4	100.0	3,126		
All ages	2.1	24.1	24.9	24.7	9.3	6.9	2.5	5.5	100.0	55,635*		

* Does not include 2,352(000) licensed male drivers who were unable to estimate mileage.

SOURCE: Based upon unpublished table H-2 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census of the Federal Highway Administration, 1969-70.

Table 8.--Distribution of mileage driven by licensed female drivers within age-groups.

Age	Mileage classes								Number of drivers (000)	
	Zero	Less than 5,000	5,000 to 9,999	10,000 to 14,999	15,000 to 19,999	20,000 to 24,999	25,000 to 29,999	30,000 and over		Total
Years	PERCENT									
16 - 19	3.4	81.4	11.0	2.5	0.5	0.8	-	0.4	100.0	3,658
20 - 24	2.4	61.9	21.4	10.2	2.5	0.9	-	0.7	100.0	6,003
25 - 29	2.8	57.4	24.9	10.6	2.6	1.0	0.5	0.2	100.0	5,250
30 - 34	2.2	55.9	25.4	11.8	2.2	1.9	0.6	-	100.0	4,307
35 - 39	1.5	49.7	30.5	13.9	1.9	1.9	0.3	0.3	100.0	4,126
40 - 44	2.5	51.1	30.1	11.9	2.6	0.9	0.6	0.3	100.0	4,377
45 - 49	1.3	52.0	28.6	10.6	5.4	1.2	0.3	0.6	100.0	4,370
50 - 54	5.5	53.3	27.0	9.8	2.8	0.8	0.8	-	100.0	3,348
55 - 59	2.2	59.2	22.4	12.1	3.1	1.0	-	-	100.0	2,637
60 - 64	3.8	57.8	24.5	11.1	2.1	-	-	0.7	100.0	1,947
65 - 69	6.9	65.4	19.4	7.3	1.0	-	-	-	100.0	1,362
70 and over	16.7	68.7	11.4	-	2.2	1.0	-	-	100.0	1,477
All ages	3.2	58.3	24.2	10.1	2.5	1.1	0.3	0.3	100.0	42,862

* Does not include 2,137(000) licensed female drivers who were unable to estimate mileage.

SOURCE: Based upon unpublished table H-2 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

tend to underestimate the amount of driving they do. Other factors that may contribute to the disparity in the two estimates are (1) the mileage driven by non-licensed drivers was presumably excluded from the survey; and (2) it is possible that high mileage drivers such as truck drivers and traveling salesmen were underrepresented in the sample. Males drove 73.0 percent of the total annual miles and did two-thirds or more of the driving in every age-group.

Table 10 and figure 5 show the estimated average annual miles per licensed driver by age-group and sex. The average mileage for all drivers was 8,685 miles per year and varied from a high of 10,274 miles per year for the 30-34 age group to lows of 4,633 miles per year for the 16-19 age-group, and 4,644 miles per year for the 70-and-over age-group. The average mileage for males was 11,352 miles per year or more than double the 5,411 miles per year for the average female driver. For male drivers, the average estimated annual miles per driver by age-group varied from a high of 14,496 miles in the 30-34 age-group to a low of 5,302 for the 70-and-over age-group. For female drivers, the estimated average annual miles per driver varied from a high of 6,271 miles for 45-49 age-group to a low of 3,183 miles for the 70-and-over group. As shown in figure 5, men did more driving than women at all age levels, and there was greater mileage variation among male drivers. For male drivers the average estimated annual miles per year more than doubled from 5,461 miles in the 16-19 age group to 11,425 miles in the 20-24 age group. Males drove more than twice as many miles as females in all age groups from 20-59.

Table 9.--Percent of estimated annual miles driven
in each age-sex group.

Age	Percent of estimated annual miles driven			Estimated number of annual miles driven
	Male	Female	Total	
Years				(000,000)
16 - 19	67.1	32.9	100.0	39,888
20 - 24	70.7	29.3	100.0	108,987
25 - 29	74.3	25.7	100.0	112,959
30 - 34	74.5	25.5	100.0	97,008
35 - 39	71.5	28.5	100.0	90,184
40 - 44	72.7	27.3	100.0	95,451
45 - 49	71.3	28.7	100.0	95,403
50 - 54	75.8	24.2	100.0	75,504
55 - 59	76.6	23.4	100.0	61,197
60 - 64	76.2	23.8	100.0	43,355
65 - 69	72.9	27.1	100.0	20,945
70 and over	77.9	22.1	100.0	21,275
All ages	73.2	26.8	100.0	862,155
Unknown mileages	69.8	30.2	100.0	38,264*
Total	73.0	27.0	100.0	900,419

*Total miles driven for this group was estimated by using the average miles per year per driver for each sex and multiplying by the number of unknowns of each sex.

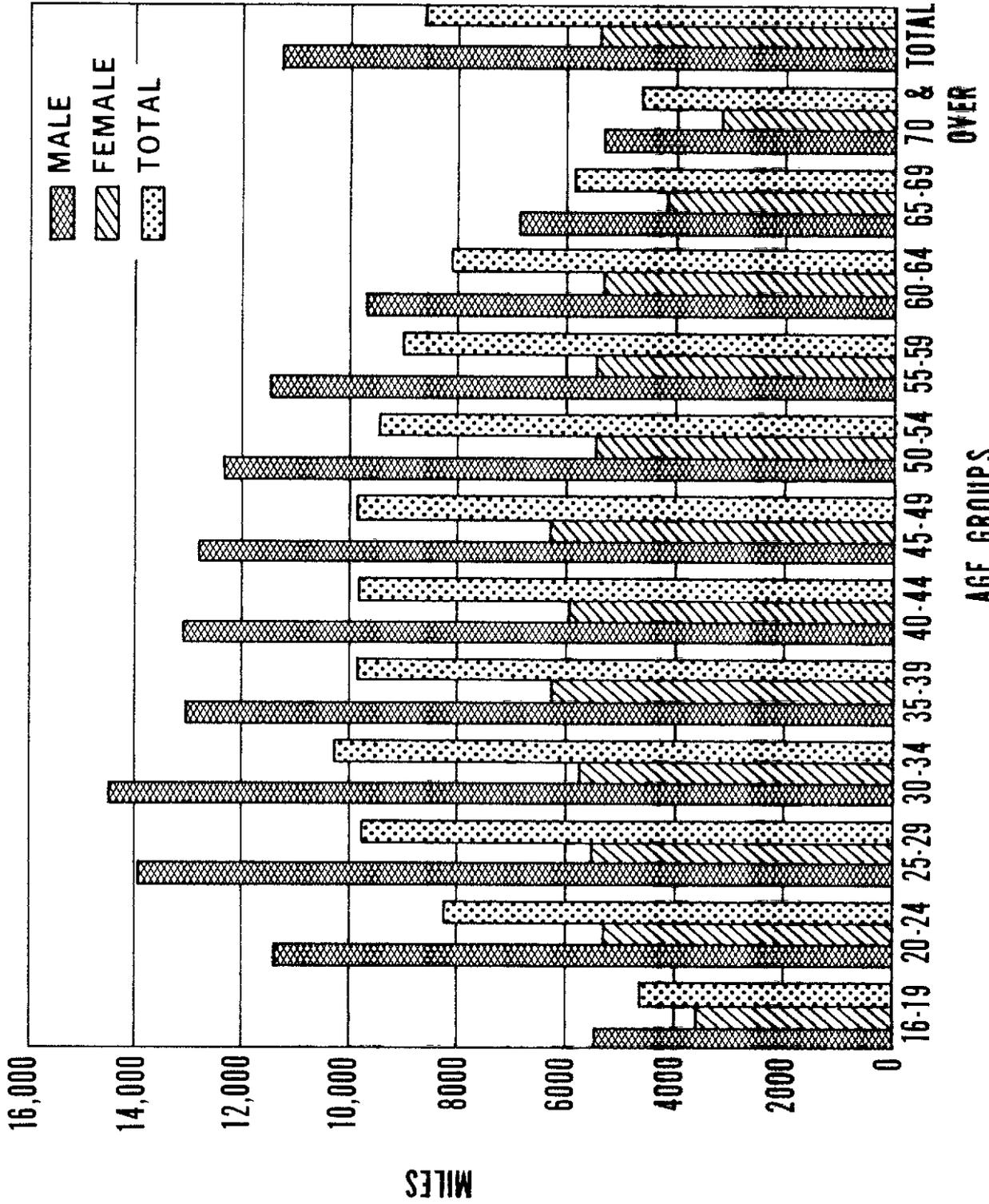
SOURCE: Based upon unpublished table H-2 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

Table 10.--Estimated average annual miles driven per licensed driver classified by age and sex groups

Age	Drivers		
	Males	Females	All
Years		Miles	
16 - 19	5,461	3,586	4,633
20 - 24	11,425	5,322	8,260
25 - 29	13,931	5,539	9,814
30 - 34	14,496	5,752	10,274
35 - 39	13,035	6,232	9,878
40 - 44	13,133	5,950	9,833
45 - 49	12,818	6,271	9,875
50 - 54	12,345	5,454	9,447
55 - 59	11,495	5,439	9,009
60 - 64	9,710	5,291	8,112
65 - 69	6,915	4,173	5,850
70 and over	5,302	3,183	4,644
All ages	11,352	5,411	8,685

SOURCE: Based upon unpublished table H-2 from the Nationwide Personal Transportation Survey conducted by the Bureau of the Census for the Federal Highway Administration, 1969-70.

FIGURE 5. ESTIMATED AVERAGE ANNUAL MILES DRIVEN PER LICENSED DRIVER BY AGE AND SEX



SUMMARY

Approximately 56.3 percent of all licensed drivers in 1970 were males and they drove about 73 percent of the total annual mileage. The average male drove more than twice as many miles per year as the average female driver. The peak driving-age for males was in the 30-34 age-group and for females it was in the 45-49 age-group, although the mileage per year for females was nearly constant from 35 to 49. Although men drive more than women at all age levels, the number of miles per year varied more than it did for females.

The proportion of population 16 years and older with driver licenses was about the same in unincorporated areas and in incorporated places of less than 25,000 population; for incorporated places with over 25,000 population, the proportion of drivers gradually decreased as place size increased up to 1,000,000 and over. There was no clear relationship between the proportion of licensed drivers and the size of the SMSA except for places 3,000,000 and over which had the smallest percentage of drivers.

APPENDIX A

Sample base for Nationwide Personal Transportation Survey

The following are the major series of tables and the sample base for tables developed from the survey. Each of the tables in any of these reports will indicate a reference source from which the sample base can be determined.

1. H-series, E-series, and T-9 through T16

These tables relate to data collected in Sections I through V of the questionnaire. The tables are based upon a sample of approximately 6,000 households, approximately 3,000 from panel 1 interviewed in April, 1969 and approximately 3,000 from panel 2 interviewed in August, 1969. Each of these panels were expanded to national estimates. For purposes of all tables referred to in any of these reports the expanded data from the two panels were averaged.

2. P-series and T-1 through T-8

These tables relate to data collected in Section VI. Data from four interviews at the identical households in panel 1, (approximately 3,000 households were interviewed in April, July, October, 1969 and January, 1970) were combined and expanded to represent annual estimates of trips and travel by automobile or other forms of public transportation.

APPENDIX A

Major sections of questionnaire

The following are the main sections of the questionnaire:

1. The data reported in items a through t above Section I of the questionnaire form were transcribed from the control card.
2. Section I - Automobile Record.
3. Section II - Shopping and nearness to public transportation to main business district by residents of Standard Metropolitan Statistical Areas.
4. Section III - Travel to work for all employed persons 16 years or older.
5. Section IV - Driver information or estimated annual miles driven by licensed drivers.
6. Section V - Travel to school for persons between 5 and 18 years of age and attending school. For panel 2 of the households interviewed in August 1969, the interviewer asked for the travel to school information for the preceding May.
7. Section VI - Travel day report. All one-way trips by motor vehicle or some form of public transportation taken by persons 5 years of age or older were reported for a pre-assigned reference day. The reference days were all in a one-week period in each of the months of interviewing and all weekdays and weekends were represented. Generally, the interviewer visited all households the first weekday after the reference day in order to minimize memory errors.
8. Section VII - Overnight travel record of all trips lasting one or more nights during the 7 days ending the day before the preassigned travel day. Insufficient data were collected in this section to permit detailed analyses.

APPENDIX A

NOTICE - All information which would permit identification of the individual will be held in strict confidence, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any purposes.

BUDGET BUREAU NO. 41-S69011
APPROVAL EXPIRES DECEMBER 1970

Form NPT-2
(7-15-69)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. DEPARTMENT OF TRANSPORTATION

HOUSEHOLD QUESTIONNAIRE - AUGUST 1969
NATIONWIDE PERSONAL TRANSPORTATION SURVEY

a. Ident. Code b. Household No. c. Control No.
PSU Rot. Segment Serial Str.

d. Type of structure e. Race f. SMSA g. Place h. State

i. Subsample j. Designated travel day
Day of week Mo./day k. No. of hhhd. members (all ages) l. Number of automobiles

m. Automobile

Auto No.	Year	Make	Office use	n. Principal user Line No.	o. (If no automobile) 1 <input type="checkbox"/> Auto available 2 <input type="checkbox"/> Not available	p. Income	q. Interviewer's code	r. OFFICE USE

s. Date of interview t. Noninterview reason 1 NOH 2 TA 3 Ref. 4 Other Type A 5 Other type - Specify

(Fill in a, b, c, f, g, h, i, j, q.)

Section I - AUTOMOBILE RECORD

Now I have some questions about your - - (first, second, etc., automobile)

Auto No. Auto No. (2) Auto No.

1. Is it owned by somebody living here?
1 Yes 2 No (Go to Q. 3)

2a. Was it purchased new or used?
1 New 2 Used

b. In what month and year was it bought? (Examples: 10/67, 04/68)
Month Year Month Year Month Year

3. About how many thousand miles was it driven during the past 12 months?
Miles (Thousands) Miles (Thousands) Miles (Thousands)

4. Is it used at least once a week in going from home to work?
1 Yes - Entire trip 2 Yes - Part-way 3 No (Go to next auto or Sec. II)

5. How many people are usually in the automobile going to work, including the driver?
Number Number Number

CODE KEY →
1 - Commercial parking garage or lot 5 - On the street
2 - Employer provided space 6 - No all day parking used
3 - Fringe parking 7 - Other
4 - Other lot or garage

6a. What type of parking facility is usually used for the trip to work - the employer's lot, a commercial lot, on the street, or what?

b. Is there a cost for parking?
1 Yes 2 No (Go to next auto or Sec. II)

c. How much?
\$ 1 Day 2 Week 3 Month

d. Does . . . pay by putting coins into a meter?
1 Yes 2 No

Section II - SHOPPING

ASK for SMSA residents only - 1 or 2 as second digit of identification code

Now we are interested in where people shop - (Ask 1 and 2 for (1) wife or (2) female head or (3) male head)

1. During the past 3 months has . . . gone to the main business district of . . . principally to shop?
1 Yes → How many times? . . . (Go to Q. 3)
2 No

2. What were the reasons for not shopping there? (Mark all boxes that apply)
1 Goods available locally 4 Difficulty of driving in congested area
2 Too far away 5 No automobile
3 Difficulty of parking 6 Other - Specify

3. How far is it from home to the nearest public transportation line to go to the main business district of . . . ?
1 Less than one block 4 Over 6 blocks (over 1/2 mile)
2 1-2 blocks (less than 1/4 mile) 5 No public transportation available
3 3-6 blocks (1/4 - 1/2 mile) 6 Lives in main business district

Note: Fill remaining pages for household members 5 years old or over.

APPENDIX A

Section III - TRAVEL TO WORK	
1. Line No. 3	2. CHECK ITEM <input type="checkbox"/> This person is 16 years old or older and has an entry in Control Card question 16h <i>(Fill in Sec. III, IV, and V as applicable)</i> <input checked="" type="checkbox"/> All others <i>(Fill in Sec. IV and V as applicable)</i>
We are interested in where people work and how they get to work. 3. Is the place where . . . works located in a city?	1 <input type="checkbox"/> Yes → What city? _____ 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Don't know State? _____
4. How far is it from home to the place where . . . works? (Actual travel distance)	Miles 1x <input type="checkbox"/> No fixed place } Go to Sec. VI 2x <input type="checkbox"/> At home } 3x <input type="checkbox"/> Less than 1/4 mile (5 blocks)
5. How much time is usually required for . . . to get to work from the time he leaves until he arrives at work?	Minutes
6. How does . . . usually get to work? <i>(Mark all appropriate boxes)</i>	1 <input type="checkbox"/> Bus or street car 2 <input type="checkbox"/> Commuter train, subway, elevated, etc. 3 <input type="checkbox"/> Automobile - with other persons 4 <input type="checkbox"/> Automobile - alone 5 <input type="checkbox"/> Truck 6 <input type="checkbox"/> Motorcycle 7 <input type="checkbox"/> Walk only <i>(Go to Q. 10a)</i> 8 <input type="checkbox"/> Other - including bicycle - Specify →
7. How far is it from home to the nearest public transportation line that . . . uses (could use) to get to his place of work?	1 <input type="checkbox"/> Less than 1 block 2 <input type="checkbox"/> 1 to 2 blocks (less than 1/4 mile) 3 <input type="checkbox"/> 3 to 6 blocks (1/4 to 1/2 mile) 4 <input type="checkbox"/> Over 6 blocks (over 1/2 mile) 5 <input type="checkbox"/> None available } <i>(Go to Q. 10a)</i>
8. What is the reason . . . does not use public transportation to go to work? Anything else? <i>(Mark all boxes that apply)</i>	1 <input type="checkbox"/> None available 2 <input type="checkbox"/> Not convenient to get to 3 <input type="checkbox"/> Not convenient to place of work 4 <input type="checkbox"/> Too many transfers 5 <input type="checkbox"/> Too expensive <i>(Go to 10a)</i> 6 <input type="checkbox"/> Too crowded or uncomfortable 7 <input type="checkbox"/> Takes too long 8 <input type="checkbox"/> Need auto for work 9 <input type="checkbox"/> Other - Specify →
9. What is the reason . . . uses public transportation to get to work? Anything else? <i>(Mark all boxes that apply)</i>	1 <input type="checkbox"/> No driver's license 2 <input type="checkbox"/> No car available 3 <input type="checkbox"/> No car pool available 4 <input type="checkbox"/> Cheaper than auto 5 <input type="checkbox"/> Safer than auto 6 <input type="checkbox"/> No parking problems 7 <input type="checkbox"/> No driving strain 8 <input type="checkbox"/> Faster 9 <input type="checkbox"/> Other - Specify →
10a. Does . . . work at same location as 5 years ago? b. Does . . . live at same location as 5 years ago? c. Compared with the time it took . . . to get to work 5 years ago, is the time to work:	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Not working 5 years ago <i>(Go to Sec. IV)</i> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 1 <input type="checkbox"/> About the same as 5 years ago 2 <input type="checkbox"/> At least 10 minutes more 3 <input type="checkbox"/> At least 10 minutes less
Section IV - DRIVER INFORMATION	
1. About how many thousands of miles did . . . drive during the past 12 months, including driving as part of work?	1 <input type="checkbox"/> None 2 <input type="checkbox"/> Under 5,000 3 <input type="checkbox"/> 5,000 - 9,999 4 <input type="checkbox"/> 10,000 - 14,999 5 <input type="checkbox"/> 5,000 - 19,999 6 <input type="checkbox"/> 20,000 - 24,999 7 <input type="checkbox"/> 25,000 - 29,999 8 <input type="checkbox"/> 30,000 and over
Section V - TRAVEL TO SCHOOL	
<i>(Ask Sec. V for persons 5-18 years old)</i> Now I would like to ask some questions about transportation to school.	
1. Last May was . . . attending or enrolled in school?	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No <i>(Go to Sec. VI)</i>
2. Was it a public or private school?	1 <input type="checkbox"/> Public 2 <input type="checkbox"/> Private
3. What grade was . . . attending?	Grade _____ <i>Enter "00" for kindergarten or 1-12, etc.</i>
4. About how many miles was it from home to . . . 's school? <i>(If less than one mile enter "0")</i>	Miles
5. About how long did it take . . . to get from home to school?	Minutes
6. How did . . . usually get to school? <i>(Mark only one box)</i>	1 <input type="checkbox"/> School bus - No charge 2 <input type="checkbox"/> Public transportation - No charge } <i>(Go to Sec. VI)</i> 3 <input type="checkbox"/> School bus - Charge 4 <input type="checkbox"/> Public transportation - Charge 5 <input type="checkbox"/> Walk, bicycle 6 <input type="checkbox"/> Automobile - Driver 7 <input type="checkbox"/> Automobile - Passenger 8 <input type="checkbox"/> Motorcycle 9 <input type="checkbox"/> Other } <i>(Go to Q. 7)</i>
7. Was free school bus or free public transportation available?	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No

APPENDIX A

Section VI - TRAVEL DAY REPORT						
a. Line No.	b. Age	c. Sex 1 <input type="checkbox"/> Male 2 <input type="checkbox"/> Female	d. Employment status (C.C. 16a) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	e. Occupation (C.C. 16b)	f. Retired Code (C.C. 17)	g. Licensed driver (C.C. 18) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
<p>Now I have some questions about the trips taken on _____. A trip is anytime you went from one place to another by motor vehicle or some form of public transportation. For example, going to work by automobile would be one trip, going to lunch by automobile would be a second trip, returning to work from lunch would be a third trip.</p> <p>Reference day is from 4:00 a.m. to 3:59 a.m. the following day</p>						
1. Did ... go any place at anytime on _____?			1 <input type="checkbox"/> Yes - One or more trips not previously reported (Fill columns) 2 <input type="checkbox"/> Yes - All previously reported (Go to Q. 14a) 3 <input type="checkbox"/> No			
2. At what time did ... start the (1st, next) trip he took on _____?			Trip 1	Trip 2	Trip 3	Trip 4
			1 <input type="checkbox"/> a.m. 2 <input type="checkbox"/> p.m.	1 <input type="checkbox"/> a.m. 2 <input type="checkbox"/> p.m.	1 <input type="checkbox"/> a.m. 2 <input type="checkbox"/> p.m.	1 <input type="checkbox"/> a.m. 2 <input type="checkbox"/> p.m.
3. How far is it from where ... started to where he went?			Miles 0 <input type="checkbox"/> Less than 1/2 mile (5 blocks)	Miles 0 <input type="checkbox"/> Less than 1/2 mile (5 blocks)	Miles 0 <input type="checkbox"/> Less than 1/2 mile (5 blocks)	Miles 0 <input type="checkbox"/> Less than 1/2 mile (5 blocks)
4. How long did it take to get there?			1 <input type="checkbox"/> 15 min. or less 2 <input type="checkbox"/> 16-30 min. 3 <input type="checkbox"/> 31-45 min. 4 <input type="checkbox"/> 46 min.-1 hr. 5 <input type="checkbox"/> Bet. 1 and 2 hrs. 6 <input type="checkbox"/> 2 hrs. or more	1 <input type="checkbox"/> 15 min. or less 2 <input type="checkbox"/> 16-30 min. 3 <input type="checkbox"/> 31-45 min. 4 <input type="checkbox"/> 46 min.-1 hr. 5 <input type="checkbox"/> Bet. 1 and 2 hrs. 6 <input type="checkbox"/> 2 hrs. or more	1 <input type="checkbox"/> 15 min. or less 2 <input type="checkbox"/> 16-30 min. 3 <input type="checkbox"/> 31-45 min. 4 <input type="checkbox"/> 46 min.-1 hr. 5 <input type="checkbox"/> Bet. 1 and 2 hrs. 6 <input type="checkbox"/> 2 hrs. or more	1 <input type="checkbox"/> 15 min. or less 2 <input type="checkbox"/> 16-30 min. 3 <input type="checkbox"/> 31-45 min. 4 <input type="checkbox"/> 46 min.-1 hr. 5 <input type="checkbox"/> Bet. 1 and 2 hrs. 6 <input type="checkbox"/> 2 hrs. or more
5. What was the main reason for this trip? <i>(If "return home" enter the main purpose of the outgoing trip(s), plus "R.H.") (Enter one code.)</i>			CODE KEY → 1. To work 2. Business, other than to work 3. Shopping 4. Other family or personal business 5. To school or church 6. To doctor or dentist 7. Vacation 8. Visit friends or relatives 9. Pleasure driving 10. Other social or recreational 11. Other Return home (reclassification required)			
			Trip 1	Trip 2	Trip 3	Trip 4
			Code	Code	Code	Code
6. In addition to ... did anyone else living here go on this trip? (List line numbers of other household members 5 years old or older who went on this trip.)			0 <input type="checkbox"/> No others	0 <input type="checkbox"/> No others	0 <input type="checkbox"/> No others	0 <input type="checkbox"/> No others
			Line numbers	Line numbers	Line numbers	Line numbers
7. What means of transportation were used for this trip? <i>(If more than one, circle major mode.)</i>			CODE KEY → 1. School bus 2. Other bus and/or street car 3. Elevated or subway 4. Other train 5. Airplane 6. Taxi 7. Automobile - Driver 8. Automobile - Passenger 9. Motorcycle or motor bike 10. Truck (including pick-up) 11. Other			
			Trip 1	Trip 2	Trip 3	Trip 4
			Code <i>(If code 1-5 only go to Q. 13)</i>	Code <i>(If code 1-5 only go to Q. 13)</i>	Code <i>(If code 1-5 only go to Q. 13)</i>	Code <i>(If code 1-5 only go to Q. 13)</i>
8. Was public transportation for this trip available within 6 blocks (1/2 mile)?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Don't know
9. What automobile was used? <i>(Transcribe automobile number from C.C.)</i>			Automobile No.	Automobile No.	Automobile No.	Automobile No.
			9 <input type="checkbox"/> Not an auto listed on the C.C.	9 <input type="checkbox"/> Not an auto listed on the C.C.	9 <input type="checkbox"/> Not an auto listed on the C.C.	9 <input type="checkbox"/> Not an auto listed on the C.C.
10. Who drove the automobile for this trip?			Line No. _____ 99 <input type="checkbox"/> Not a household member	Line No. _____ 99 <input type="checkbox"/> Not a household member	Line No. _____ 99 <input type="checkbox"/> Not a household member	Line No. _____ 99 <input type="checkbox"/> Not a household member
11. Was parking free for this trip?			1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Did not park 4 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Did not park 4 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Did not park 4 <input type="checkbox"/> Don't know	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 3 <input type="checkbox"/> Did not park 4 <input type="checkbox"/> Don't know
12. How many people were in the automobile including the driver? <i>(Include children under 5 and non-household members.)</i>			____ Number 0 <input type="checkbox"/> Don't know	____ Number 0 <input type="checkbox"/> Don't know	____ Number 0 <input type="checkbox"/> Don't know	____ Number 0 <input type="checkbox"/> Don't know
13. Did ... go anywhere else on _____?			1 <input type="checkbox"/> Yes - One or more trips not recorded (Go to next column) 2 <input type="checkbox"/> Yes - All trips recorded } Go to Q. 14a 3 <input type="checkbox"/> No	1 <input type="checkbox"/> Yes - One or more trips not recorded (Go to next column) 2 <input type="checkbox"/> Yes - All trips recorded } Go to Q. 14a 3 <input type="checkbox"/> No	1 <input type="checkbox"/> Yes - One or more trips not recorded (Go to next column) 2 <input type="checkbox"/> Yes - All trips recorded } Go to Q. 14a 3 <input type="checkbox"/> No	1 <input type="checkbox"/> Yes - One or more trips not recorded (Go to next column) 2 <input type="checkbox"/> Yes - All trips recorded } Go to Q. 14a 3 <input type="checkbox"/> No
14a. During the 7 days ending (the day before travel day) ... did ... return home from a trip after being away from home one or more nights?			1 <input type="checkbox"/> Yes - One or more trips not previously reported (Go to 14b) 2 <input type="checkbox"/> Yes - All trips previously reported } Fill Sections III-VI for next person 5 years old or older 3 <input type="checkbox"/> No			
b. How many such trips ended during the 7 days?			Number _____ (Go to Sec. VII)			

APPENDIX A

Section VII - OVERNIGHT TRAVEL			
OUTBOUND TRIP	Trip 1	Trip 2	Trip 3
	Line No. 9	Line No. 10	Line No. 11
1. How many miles is it from home to where . . . went? (To farthest point)	Miles	Miles	Miles
2. How much time did . . . spend getting there? (Total time from home to farthest point, not just travel time) (Enter nearest full hour or day)	1 <input type="checkbox"/> Hours	1 <input type="checkbox"/> Hours	1 <input type="checkbox"/> Hours
	2 <input type="checkbox"/> Days	2 <input type="checkbox"/> Days	2 <input type="checkbox"/> Days
3. What time of day did the trip start?	1 <input type="checkbox"/> a.m.	1 <input type="checkbox"/> a.m.	1 <input type="checkbox"/> a.m.
	2 <input type="checkbox"/> p.m.	2 <input type="checkbox"/> p.m.	2 <input type="checkbox"/> p.m.
4. On what day of the week did the trip start?	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.
	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.
	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.
	4 <input type="checkbox"/> Wed.	4 <input type="checkbox"/> Wed.	4 <input type="checkbox"/> Wed.
Code Key →	1. To work		7. Vacation
	2. Business - Other than to work		8. Visit friends or relatives
5. What was the main reason for the trip? (Enter code)	3. Shopping		9. Pleasure driving
	4. Other family or personal business		10. Other social or recreational
	5. To school or church		11. Other
	6. To doctor or dentist		
	Trip 1	Trip 2	Trip 3
Code Key →	1. School bus		7. Automobile - Driver
	2. Other bus and/or street car		8. Automobile - Passenger
6. What means of transportation were used? (Enter codes)	3. Elevated or subway		9. Motorcycle or motorbikes
	4. Other train		10. Truck (including pick-up)
	5. Airplane		11. Other
	6. Taxi		
	Trip 1	Trip 2	Trip 3
(If either code 7 or 8 has been entered in Q. 6 complete questions 7-9)	Auto No.	Auto No.	Auto No.
	or	or	or
7. What automobile was used? (Transcribe automobile number from C.C.)	9 <input type="checkbox"/> Not an auto listed on the C.C.	9 <input type="checkbox"/> Not an auto listed on the C.C.	9 <input type="checkbox"/> Not an auto listed on the C.C.
8. Who drove the automobile? (If more than one driver, enter the line number of the person who drove the most miles)	Driver Line No.	Driver Line No.	Driver Line No.
	or	or	or
	99 <input type="checkbox"/> Not a household member	99 <input type="checkbox"/> Not a household member	99 <input type="checkbox"/> Not a household member
9. How many people were in the automobile, including the driver? (Include children under 5 and non-household members)	Number	Number	Number
RETURN TRIP	Trip 1	Trip 2	Trip 3
10. How many nights were you away from home?	Number	Number	Number
11. How much time did . . . spend on the return trip? (Enter nearest full hour or day)	1 <input type="checkbox"/> Hours	1 <input type="checkbox"/> Hours	1 <input type="checkbox"/> Hours
	2 <input type="checkbox"/> Days	2 <input type="checkbox"/> Days	2 <input type="checkbox"/> Days
12. What time of day did . . . start on the return trip?	1 <input type="checkbox"/> a.m.	1 <input type="checkbox"/> a.m.	1 <input type="checkbox"/> a.m.
	2 <input type="checkbox"/> p.m.	2 <input type="checkbox"/> p.m.	2 <input type="checkbox"/> p.m.
13. On what day of the week did . . . start on the return trip?	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.	1 <input type="checkbox"/> Sun. 5 <input type="checkbox"/> Thurs.
	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.	2 <input type="checkbox"/> Mon. 6 <input type="checkbox"/> Fri.
	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.	3 <input type="checkbox"/> Tues. 7 <input type="checkbox"/> Sat.
	4 <input type="checkbox"/> Wed.	4 <input type="checkbox"/> Wed.	4 <input type="checkbox"/> Wed.
Code Key →	1. School bus		7. Automobile - Driver
	2. Other bus and/or street car		8. Automobile - Passenger
14. What means of transportation were used? (Enter codes)	3. Elevated or subway		9. Motorcycle or motorbike
	4. Other train		10. Truck (including pick-up)
	5. Airplane		11. Other
	6. Taxi		
	Trip 1	Trip 2	Trip 3
(If either code 7 or 8 has been entered in Q. 14 complete questions 15 and 16)	Driver Line No.	Driver Line No.	Driver Line No.
	or	or	or
15. Who drove the automobile? (If more than one driver, enter the line No. of the person who drove the most miles)	9 <input type="checkbox"/> Not a household member	9 <input type="checkbox"/> Not a household member	9 <input type="checkbox"/> Not a household member
16. How many people were in the automobile on the return trip, including the driver? (Include children under 5 and nonhousehold members)	Number	Number	Number
17. In addition to . . . did anyone else living here go on this trip both outbound and return? (If outbound or return only, enter the trip in a separate column) (List line numbers of other household members 5 years old or older who went on this round trip)	0 <input type="checkbox"/> No others	0 <input type="checkbox"/> No others	0 <input type="checkbox"/> No others
	Line Numbers	Line Numbers	Line Numbers

APPENDIX B

Table I.A. 2. — Estimated Standard Errors For Percentages For All Persons or White Persons 5 years or Older

Base of Percentage (000)	Estimated Percentage					
	1 or 99%	5 or 95%	10 or 90%	20 or 80%	25 or 75%	50%
300	-	-	-	15.7	17.0	19.6
500	-	-	9.1	12.2	13.2	15.2
750	-	5.4	7.4	9.9	10.7	12.4
1,000	-	4.7	6.4	8.6	9.3	10.7
1,500	1.7	3.8	5.3	7.0	7.6	8.8
2,000	1.5	3.3	4.6	6.1	6.6	7.8
4,000	1.1	2.3	3.2	4.3	4.7	5.4
5,000	1.0	2.1	2.9	3.8	4.2	4.8
6,000	.9	1.9	2.6	3.5	3.8	4.4
7,500	.8	1.7	2.4	3.1	3.4	3.9
10,000	.7	1.5	2.0	2.7	2.9	3.4
12,500	.6	1.3	1.8	2.4	2.6	3.0
15,000	.6	1.2	1.7	2.2	2.1	2.8
20,000	.5	1.0	1.4	1.9	1.9	2.4
25,000	.4	.9	1.3	1.7	1.3	2.1
50,000	.3	.7	.9	1.2	1.1	1.5
75,000	.2	.5	.7	1.0	.9	1.2
100,000	.2	.5	.6	.9	.8	1.1
125,000	.2	.4	.6	.8	.8	1.0
150,000	.2	.4	.5	.7	.7	.9
179,000	.2	.4	.5	.6		.8

APPENDIX B

NATIONWIDE PERSONNEL TRAVEL SURVEY

Table I.A. 1. -- Estimated Standard Errors for Estimates for All Persons or White Persons 5 Years or Older

Estimated Total (000)	Estimated Standard Error (1 sigma) (000)
100	68
150	83
200	96
250	107
300	118
500	152
750	185
1,000	214
1,500	261
2,000	300
4,000	420
5,000	466
6,000	507
7,500	562
10,000	638
12,500	702
15,000	755
20,000	840
25,000	903
35,000	975
50,000	976