PERSONAL TRAVEL IN THE U.S.
1983-1984 Nationwide Personal Transportation Survey

Volume II, Part 1

Contains:

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Weighting Procedures and Estimates of Variance

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16. Abstract

Volume II of a two-part report presents supplemental tables relating to data on drivers, vehicle and person trips and travel, workers and their home-to-work journey, vehicle occupancy, characteristics of travel period trips and travel, and the use of vehicle safety devices published in Volume I. In addition, weighting procedures and estimates of variance are also presented.

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PERSONAL TRAVEL IN THE U.S.

Volume II

A REPORT ON
FINDINGS FROM THE

1983 – 1984
NATIONWIDE PERSONAL
TRANSPORTATION STUDY

November, 1986

PREFACE

The Nationwide Personal Transportation Study (NPTS) is an investigation of the characteristics and personal travel patterns of the U.S. population. The NPTS derives its information from a nationwide home interview survey of households. The NPTS is a unique source of information on personal travel, both as a reference on key travel measures such as trip rates and vehicle occupancy levels, as well as being a source for linking the characteristics of households with their travel by all modes of transportation.

This is Volume II of a report that presents summary findings from the 1983 NPTS Survey conducted between February 1983 and January 1984. The 1983 survey obtained data from a national sample of 6,438 households. The survey sample was selected and the results presented in such a manner as to be representative of the nation as a whole. Previous NPTS surveys were conducted in 1977 and 1969. Comparing results from these three surveys provides a good picture of how the country's population and travel habits have changed over time.

This volume contains additional tabulations from the 1983 NPTS dataset. The tabulations were performed in the same manner as those presented in Volume I. However, some of the tabulations on travel day characteristics excluded data from trips that were part of longer trips reported on the travel period. This was done to allow comparison of tavel day and travel period and to obtain a more accurate estimate of total travel in the U.S.

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SAMPLE DESIGN

The 1983 Nationwide Personal Transportation Study (NPTS) estimates are based on data collected from interviews conducted in February 1983 through January 1984 by the Bureau of the Census, acting as collection agent for the Department of Transportation. The sample of this survey was spread over 239 sample areas (called primary sampling units).

Approximately 6,900 sample households were eligible for interview in the 1983 NPTS. In addition, 1,000 units were found to be vacant, demolished, converted to nonresidential use, or otherwise ineligible for the survey. Of the households eligible for interviewing, 450 households were not interviewed because the occupants were not at home after repeated calls, refused to participate in the survey, or were unavailable for other reasons.

The NPTS sample was equally divided into 12 monthly samples. Sample units assigned to a month of interview were divided into 14 equal parts, each assigned to one of the first 14 days in the month, termed the Travel Day. Interviewers visited the sample units to complete the interview on the day after Travel Day if possible, but in any event within four days after Travel Day. Households were asked to report information for all trips taken by household members on Travel Day and all trips over 75 miles, one way, ending in the 13-day period immediately preceding Travel Day or on Travel Day. This 14-day period was termed the Travel Period.

Almost all of the NPTS sample units had previously been interviewed for the Current Population Survey (CPS), the survey conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics, to measure the change in the unemployment rate.

The CPS is a stratified multistage cluster sample. In the first stage, the United States was divided into primary sampling units (PSU's) consisting of counties, groups of counties, or independent cities. Approximately 1,930 PSU's were formed and grouped into 376 strata. Among these strata, 156 consisted of a single PSU and thus came into th sample with certainty. These strata, designated self-representing (SR) areas, generally contained the larger metropolitan areas. The remaining 220 were formed by combining PSU's that possessed similar characteristics, such as geographic region, population density, population growth rate, and proportion of Black and Other races in the population. From each stratum, one PSU was selected for the sample with a probability proportionate to its 1970 Census population. These PSU's are referred to as nonself-representing (NSR). Fifty-four of the smaller self-representing CPS PSU's were made nonself-representing for NPTS. These 54 designated NSR PSU's along with 220 CPS NSR PSU's were then paired based on their 1970 Census population and other geographic characteristics. One PSU from each pair was selected for NPTS. The 102 larger NSR PSU's from CPS were included in the NPTS sample with certainty.

Within the sample PSU's, a sample of housing units enumerated in the 1970 Census of Population was selected for the CPS in several states. The first step was the selection of a sample of census enumeration districts (ED's)--administrative units used in the 1970 Census. The probability of selection of an ED was proportionate to its population.

The next step was to select clusters of about four neighboring housing units, known as segments, within each sample ED. Most segments were selected from the list of addresses for the ED compiled in the 1970 Census. However, in those ED's where addresses were incomplete or inadequate (mostly rural areas), the selection process was accomplished using area sampling methods. These ED's were divided into small land areas with well-defined boundaries, having an expected size of four, or a multiple of four, housing units. Those segments with an expected size of a multiple of four were further subsampled at the time of enumeration so that an expected four housing units were chosen for interview.

In addition, a sample of new construction units was selected from building permits issued since January 1970. Within each sample PSU, the building permits were chronologically ordered by month issued,. and compact clusters of approximately four housing units were created. These clusters were then sampled using the appropriate sampling rate. Housing units constructed since the 1970 Census in areas which do not issue building permits were brought into the sample as a result of the area sampling described above.

All CPS segments, except special places, were subsampled at a rate of about 1 in 3.5 in order to further reduce the sample size. So, from a CPS segment with an expected size of four housing units, one or sometimes two housing units were selected for NPTS.

Since the NPTS sample consists of households previously interviewed for CPS, additional updating was done to represent units built since the time of the CPS. However, this updating was only done in permit-issuing areas. New construction from non-permit-issuing areas was not represented for about 2 to 3 1/2 years for the CPS sample (see section on nonsampling errors).

ESTIMATION PROCEDURE

The 1983 NPTS estimation procedure consisted of two major components--the Basic Weighting Process, which consisted of the application of weighting factors to account for various aspects of the NPTS sample design and for the noninterviews encountered in NPTS, and the Final Weighting Process, which consisted of the application of weighting factors needed to make estimates of NPTS characteristics for different time periods from both travel day data and travel period data. The factors used in the Basic Weighting Process are described in detail in this section and consisted of the following:

1. Basic Weight
2. Household Noninterview Factor
3. Within Household Noninterview Factor
4. First-Stage Ratio Estimate Factor
5. Second-Stage Ratio Estimate Factor
6. Third-Stage Ratio Estimate Factor

The factors included in the Final Weighting Process are described in detail in Section V, "Weighting Specifications for Data from the 1983 NPTS," of the 1983 NPTS Users Guide for the Public Use Tapes.

Basic Weighting Process Factors

o **Basic Weight** - The basic weight was equal to the inverse of the probability of selection associated with the sample units, and was equal to about 1,880,000 for housing units for CPS and between 1,500,000 and 2,100,00 for units in special places (dwelling places that have neither a separate entrance nor cooking facilities for the exclusive use of the residents) or new construction from permits issued since the last CPS interview.

o **Household Noninterview Factor** - The household noninterview factor was used to account for the 450 households that were eligible to be interviewed for NPTS but were not. The factor was computed separately for different household characteristics (i.e., size of household at the time of the CPS interview and SMSA status), and also day of the week of Travel Day. The factor was equal to:

$$\frac{\text{Weighted estimate of interviewed households} + \text{Weighted estimate of noninterviewed households}}{\text{Weighted estimate of interviewed households}}$$

The household noninterview factor was applied to all characteristics from interviewed households.

o **Within-Household Noninterview Factors** - About 6.0 percent of persons in interviewed households were not interviewed. The within-household noninterview factor was used to account for those persons who were not interviewed for NPTS, from households in which at least one person was interviewed. These factors were computed separately for different person and household characteristics (i.e., sex and age categories, family income, and household vehicle ownership categories based on the NPTS interview) and also for day of the week of Travel Day. The factor was equal to:

$$\frac{\text{Weighted estimate of interviewed persons} + \text{households in which at least one person was interviewed}}{\text{Weighted estimate of interviewed persons}}$$

It was assumed that trips involving more than one person would have been included even if there were persons not interviewed for Travel Day or Travel Period information in an interviewed household. Trips involving one person would be missed if that person were a noninterview for the Travel Day or Travel Period section of the questionnaire. Therefore, this factor was applied only to person characteristics and to characteristics of trips involving one person. Separate factors were derived to apply to travel day information, travel period information, and other information, based on the interview status of the person for each section of the questionnaire.

o **Ratio estimation** - Ordinarily, the distribution of a sample differs somewhat from the distribution of the total population from which the sample was drawn in terms of such characteristics as age, race, sex, or residence. Because of this, various stages of ratio estimate factors were applied to bring the distribution of the sample into closer agreement with the total population, thereby reducing the variability of the sample estimates. Some of these ratio estimate factors were also applied to correct for known deficiencies in the NPTS sample with regard to household coverage and within-household coverage of persons (see section on nonsampling errors).

o **First-stage ratio estimate factor** - The first-stage ratio estimate factor was used to reduce the sampling variability resulting from the sampling of PSU's. The factor took into account the differences that existed at the time of the 1980 Census between the distribution of the sample NSR PSU's and all the NSR PSU's within employment status-sex-residence categories in a census region of the country. The factor was equal to:

$$\frac{1980 \text{ Census employment status-sex-residence population counts for all NSR PSU's in a region}}{\text{Estimate of the employment status-sex-residence population using 1980 Census counts for the sample NSR PSU's in a region}}$$

The numerator was calculated by taking the 1980 Census counts for each employment status-sex-residence category and summing them across all NSR PSU's in a region. The denominator was calculated by taking the 1980 Census counts for each employment status-sex-residence category for each sample NSR PSU, weighting these counts by the inverse of the probability of selecting that PSU, and summing these weighted counts across the sample NSR PSU's in a region. The first-stage ratio estimate factor was applied to all characteristics for sample units in NSR PSU's only.

o **Second-stage ratio estimate factor** - The second-stage ratio estimate factor was used to reduce sampling variability and to correct for household coverage problems. The factor was computed separately for different reference person characteristics: sex-residence-employment-education for each quarter and was equal to:

$$\frac{\text{Independent estimate of households for a specific sex-residence employment-education category for a specific quarter}}{\text{Weighted sample estimate of households or a specific sex-residence-employment-education category for a specific quarter}}$$

These independent estimates were derived from CPS data and the resulting second-stage ratio estimate factors were applied to household characteristics and to household trip characteristics for trips involving more than one person from a household.

o **Third-stage ratio estimate factor** - The third-stage ratio estimate factor was used to reduce sampling variability and to correct for both household and within-household coverage problems. The factor was computed separately for different age-race-sex categories for each quarter and was equal to:

$$\frac{\text{Independent estimate of persons in a specific age-race-sex category for a specific quarter}}{\text{Weighted sample estimate of persons in a specific age-race-sex category for a specific quarter}}$$

The third-stage ratio estimate factor was calculated using independent estimates of the civilian noninstitutional population of the United States by age, race, and sex. These independent estimates were based on statistics from the 1980 Census; statistics on births, deaths, immigration and emigration; and statistics on the strength of the Armed Forces. These factors were applied to person characteristics, household trip characteristics for trips involving only one person from a household, and person-trip characteristics. Household trips for trips involving only one person from a household received a third-stage factor instead of a second-stage factor because these characteristics would be affected by both household and within-household coverage problems.

Separate factors were derived that apply to one-person travel day information, one-person travel period information, individual worker and driver information, and all other person information.

RELIABILITY OF THE ESTIMATES

Sampling Errors

The particular sample used for this survey is one of a large number of possible samples of the same size that could have been selected using the sample sample design. Estimates derived from the different samples would differ from each other. The variability between estimates from all possible samples is defined as the sampling error. A common measure of this sampling error is the standard error which measures the precision with which an estimate from a sample approximates the average result of all possible samples.

The standard error also partially reflects the variation in the estimates due to some nonsampling errors but it does not measure any systematic biases. Therefore, the accuracy of the estimates depends on both the sampling and nonsampling errors measured by the standard error and biases and some additional nonsampling errors not measured by the standard error.

The sample estimate and the standard error estimate enable one with prescribed confidence to construct an interval that includes the average result of all possible samples. If all possible samples were selected and surveyed under essentially the sample conditions, and an estimate and its standard error estimate were calculated from each sample, then:

1. About 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate, would include the average result of all possible samples;

2. About 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples; and

3. About 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all possible samples.

The average of all possible samples either is or is not contained in any specific computed interval. However, for a specific sample one can say with specified confidence that the average of all possible samples is included in the computed interval. The figures presented in the attached tables are approximations to the standard errors of various estimates. To derive standard errors that would be applicable to a wide variety of items and also could be prepared at a moderate cost, a number of approximations were required. Thus, the standard error tables indicate the order of magnitude of the standard errors rather than the precise standard errors for specific items. In general, approximations to the actual standard errors were more precise for categories containing large numbers of characteristics, such as "clustering items." Narrowly defined categories, such as public transportation, were not as precise. The quality of the standard error approximations was much better for Travel Day estimates than for Travel Period and combined estimates. This generally held true for estimated numbers, percentages, and means.

The approximations to the standard errors for the NPTS estimates can be found in Tables A-1 through A-14. Tables A-1 through A-6 contain the standard errors for Travel Day estimates, Tables A-7, 8, 11, and 12 contain standard errors of Travel Period estimates, and Tables A-9, 10, 13, and 14 contain standard errors for estimates of combined Travel Day and Travel Period estimates.

Standard errors of percentages can be found in Tables B-1 through B-20, with Tables B-1 through B-13 containing Travel Day standard errors, B-14 through B-16 containing Travel Period standard errors, and Tables B-17 through B-20 contain standard errors of percentages for combined estimates. If the numerator and the denominator are from different tables, the table the numerator is from should be used to determine which percentage table to use. Two-way interpolation should be used to determine standard errors for percentages not specifically shown in these tables.

The reliability of an estimated percentage depends upon the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. An approximation to the standard error of a percentage may be obtained by using the standard error of percent tables included in this text or the following formula:

Let x = numerator
    y = denominator
    σ_x = standard error of numerator
    σ_y = standard error of denominator

The standard error of the percentage (i.e., 100 x/y) is approximately equal to:

$$\sigma_{100x/y} = 100 \left(\frac{x}{y}\right) \sqrt{\left(\frac{\sigma_x}{x}\right)^2 - \left(\frac{\sigma_y}{y}\right)^2}$$

The standard errors of x and y can be obtained from the standard error tables included in this text.

The standard errors of means can be found in Tables C-1 through C-17. The reliability of an estimated mean depends on the size of the mean and the size of the total upon which the mean is based (the denominator). Two-way interpolation should be used to determine standard errors for estimated means not specifically shown in these tables.

Included in these tables are estimates of standard errors for zero and zero percent. These are considered to be overestimates of the true standard errors and should be used primarily for construction of confidence intervals for characteristics when an estimate of zero is obtained.

Illustration of the Use of Standard Error Tables

The examples used in this section are not actual data figures. They are numbers fabricated solely for the use of showing how to use the standard error tables.

Suppose there were 145,000,000,000 total vehicle Travel Day trips taken in urbanized areas between February 1983 and January 1984. Interpolation in Table A-2 shows that after rounding, the standard error on an estimate of this size is approximately

1,785,000,000. Consequently, the 68 percent of confidence interval shown by this data is from 143,215,000,000 to 146,785,000,000 vehicle Travel Day trips. Therefore, a conclusion that the average estimate derived from all possible samples of total household Travel Day trips between February 1983 and January 1984 lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we would conclude that the average estimate derived from all possible samples lies within the interval from 141,430,000,000 to 148,570,000,000 household Travel Day trips with 90 percent confidence and that the average estimate derived from all possible samples lies within the interval from 139,645,000,000 to 150,355,000,000 household Travel Day trips with 95 percent confidence.

Suppose there were 72,000,000,000 person Travel Day trips taken by persons aged 18-24 and 15,000,000,000 or 20.83 percent of the trips taken were to the person's place of work. Two-way interpolation in Table B-8 shows that the standard error of 20.83 percent for a base of 72,000,000,000 is approximately 0.83 percentage points. This is arrived at by using the following two-way interpolation procedure:

A. First interpolate between 15 percent and 25 percent for bases of 70,000,000,000 and 100,000,000,000.

	15	20.83	25
70,000,000,000	.75	.84	.90
100,000,000,000	.65	.73	.79

B. Then interpolate between 70,000,000,000 and 100,000,000,000 for 20.83 percent.

	20.83
70,000,000,000	.84
72,000,000,000	.83
100,000,000,000	.73

Consequently, the 68-percent confidence interval as shown by this data is from 20.00 to 21.66 percent; the 90-percent confidence interval is from 19.50 to 22.16 percent; and the 95-percent confidence interval is from 19.17 to 22.49 percent.

Standard errors for a specific mean having a specific base can be found using two-way interpolation in Tables C-1 through C-17. The sample steps that were used for finding the standard error of a percent should also be applied for finding the standard error of a mean.

Differences

The standard errors shown are not directly applicable to differences between two sample estimates. The standard error of a difference between estimates is approximately equal to the square root of the sum of the squares of the standard errors of each estimate considered separately. In formula notation:

$$\sigma_{x-y} = \sqrt{\sigma_x^2 + \sigma_y^2}$$

The formula is quite accurate for differences between estimates of the same characteristics in two different areas or the difference between separate and uncor-

related characteristics in the same area. If, however, there is a high positive correlation between the two characteristics, the formula will over-estimate the true error. Also, if there is a high negative correlation the formula will underestimate the true error.

Suppose there were 18,000,000,000 person Travel Day trips taken by persons aged 18-24 in the United States between February 1983 and January 1984 for social or recreational reasons. The difference between social or recreational trips and trips to work for persons aged 18-24 is 3,000,000,000 trips. Since age is not a clustering item, and since we are not concerned specifically with small SMSA's, outside SMSA, or rural areas, we use the column in Table A-5 labeled "all other non-clustering items." Table A-5 shows that the standard error on an estimate of 15,000,000,000 is approximately 656,000,000 and the standard error on an estimate of 18,000,000,000 is approximately 732,000,000 after rounding. Therefore, the standard error of the estimated difference of 3,000,000,000 is approximately

$$983,000,000 = \sqrt{(656,000,000)^2 + (732,000,000)^2}$$

Consequently, the 68-percent confidence interval for the 3,000,000,000 difference is from 2,017,000,000 to 3,983,000,000 person Travel Day trips. Therefore, a conclusion that the average estimated difference, derived from all possible samples, lies within a range computed this way would be correct for roughly 68 percent of all possible samples. Similarly, a 95-percent confidence interval would be from 1,034,000,000 to 4,966,000,000. Since zero is not included in this 95-percent confidence interval, we can conclude that the number of person Travel Day trips to work by persons aged 18-24. The same method should be used for finding the standard error of a difference between percentages and the difference between means.

Medians

For medians, the sample error depends on the size of the base and the distribution upon which the median is based. The following procedure may be used to estimate confidence limits of a median based on sample data:

1. From Tables B-1 through B-20, determine the standard error of a 50-percent characteristic on the base of the median.

2. Add to and subtract from 50 percent the standard error determined in step 1. This will give you a lower percentage limit (50 percent - standard error of 50 percent) and an upper percentage limit (50 percent + standard error of 50 percent).

3. Then find the lower limit of the confidence interval, add to the lower bound of the interval containing the lower percentage limit the product of the range of the interval containing the lower percentage limit and the following factor:

lower percentage limit - percentage of cases below the
interval containing the lower
percentage limit
_____
percentage of cases within the interval containing the
lower percentage limit

To find the upper limit of the confidence interval, add to the lower bound of the interval containing the upper percentage limit the product of the range of the interval containing the the upper percentage limit and the following factor:

$$\frac{\text{upper percentage limit} - \text{percentage of cases below the interval containing the upper percentage limit}}{\text{percentage of cases within the interval containing the upper percentage limit}}$$

Note that the interval containing the lower percentage limit need not be the same as the interval containing the median or the interval containing the upper percentage limit and vice versa. If, in step 2 you add and subtract twice the standard error determined in step 1, then a 95-percent confidence interval is obtained for the median.

If the median income of a household taking a trip were $18,500 and there were 85,000,000 total household, the 95-percent confidence interval for this median would be calculated as follows:

1. From Table B-5, the standard error of 50 percent on a base of 85,000,000 is approximately 0.62 percentage points.

2. Adding and subtracting twice the standard error to 50 percent for a 95-percent confidence interval gives 48.76 and 51.24 as the lower and upper percentage limits, respectively.

3. If 42 percent of the cases fell below the interval containing 48.76 percent (i.e., - below $15,000) and 23 percent of the cases fell within the same interval (i.e., $15,000-$24,999), then the lower limit to the 95-percent confidence interval would be:

$$\$15,000 + (\$25,000-\$15,000) \frac{48.76-42}{23} = \$17,900$$

Since the interval containing 51.24 is the same as that containing 48.76, the same percentages as above apply and thus the upper limit to the confidence interval would be:

$$\$15,000 + (\$25,000-\$15,000) \frac{51.24-42}{23} = \$19,000$$

Thus, the 95-percent confidence interval ranges from $71,900 to $19,000.

Nonsampling Errors

In addition to sampling errors, the NPTS estimates are subject to nonsampling errors. In general, non-sampling errors can be attributed to many sources: inability to obtain information about all cases, definitional difficulties, differences in the interpretation of questions, inability or unwillingness to provide correct information on the part of respondents, mistakes in recording or coding the data, and other errors of collection, response, processing, coverage, or estimation for missing data.

These can be narrowed down into four major categories encompassing all types of nonsampling error: coverage error, response error, errors due to noninterview and errors in the processing of the data.

Coverage Error

There were three major coverage problems. The first was related to the interview period. Only the first 14 days of each month were covered for Travel Day because of survey cost considerations. It was assumed the rest of the month would be accurately reflected in these 14 days. For Travel Period this was not quite as serious although there were still some days in each month that were not actually covered by the interview.

The second coverage problem had to do with the completeness of the sample frame. The NPTS new construction sample had deficiencies with regard to the representation of conventional new construction in permit-issuing areas. The new construction updating of the NPTS sample from CPS only included permits issued through August 1983, and always possessed a five month lag. As a result, it is estimated that the 1983 NPTS sample missed about 1.0 percent (about 225,000) of all conventional new construction because the permits for these units, which were built before interview month, were issued after the last month of updating.[1]

NPTS did not include any of a census coverage improvement frame used by CPS. This frame included units missed by the 1970 Census and represented 0.9 percent (about 760,000 units) of all housing units. These sample units could not be used by NPTS, since they were recycled, and thus still being used by CPS.

As previously mentioned (in the section on sample design), no updating was done for new construction in nonpermit-issuing area segments. Even though the number of units that would be picked up by updating in area segments was estimated to be quite small, this still introduces another source of error in the data with respect to coverage.

It is also felt that deficiencies exist in ED's where area sampling methods are used. It has been assumed that all units located inside these ED's would be presented in the sample. However, it has been estimated that the 1983 NPTS sample missed as much as 2 percent (i.e., as much as 400,000 units) of all housing units in ED's where area sampling methods were used because these units were not listed during the canvassing.[1]

The second-stage and third-stage ratio estimates were employed to reduce the effect of these household coverage deficiencies, although some bias in the NPTS sample estimates may still exist.

The third coverage problem had to do with the within household coverage of persons. This occurred whenever the household respondents failed to account for all persons residing in the household at the time of interview. The third-stage ratio estimate was employed to reduce the effect of this deficiency, although some bias in the NPTS sample estimates may still exist.[1]

Response Error

The second major category of nonsampling error is response error. A major source of response error results from the inability of the respondents to accurately recall all of the trips or all of the details about the trips they had taken on their Travel Day or within their Travel Period. As was mentioned in the sample design, interviews were attempted on the

[1] These problems are present in other sample surveys utilizing the same frame.

day after the household's Travel Day to increase the accuracy of their recall. This was not always possible and the more days that elapsed between the Travel Day and the actual day of interview, the greater the chance of recall problems.

Another type of response error is known as "telescoping." For NPTS, the term telescoping refers to the inclusion of trips that should be excluded. The respondent may incorrectly include a Travel Period trip that was actually taken before their Travel Period.

Response error also occurs in the estimation of trip mileage. For both Travel Day and Travel Period trips, the respondent was asked the length of the trip and his/her response was used as the estimate. These distances were probably accurate for Travel Day trips since most of these trips were taken quite often, so distances were usually known. Travel Period trips, however, were generally not taken too often, and so the distances were usually not known, thus decreasing the response's accuracy.

Another possible source of response error was the effect of proxy interviewing. If anyone 14 or older was not interviewed, then the household respondent was asked to respond for them in the occupation and driver information sections (Sections III and IV of the questionnaire). The household respondent was also asked to respond for children 5-13 years of age in all sections of the questionnaire.

An additional source of response error arises from the fact that most of the NPTS sample units had previously been interviewed for the Current Population Survey (CPS), which could have affected the respondent's answers as well.

Noninterviews

The third major type of nonsampling error was due to the noninterviews encountered in NPTS. In adjusting for noninterviews in the NPTS weighting procedure, it was assumed that noninterviewed households and persons would answer the questions similarly to interviewed households and persons within the same noninterview adjustment category. The extent to which this was not true would fail to eliminate the bias due to those noninterviews.

Additional nonsampling errors arise for noninterviewed persons in interviewed households. In adjusting for these persons, it was assumed that trips involving more than one person from a household would have been reported even if they involved a noninterviewed person within an interviewed household. As a result, for estimates of household trips, the within-household noninterview factors were only applied to trips involving one member of a household. Thus, household trips involving two-or-more people who were both noninterviews in an interviewed household would not be represented as trips involving two-or-more persons if their trips did not include other interviewed persons in the household.

Processing

The fourth, and last, major type of error occurs in the processing of the data. One type of processing error occurs in the keying and coding of data. The rounding of estimates is another source of processing error, the severity of which depends on the statistic being measured. The effect of rounding is significant

relative to the sampling error only for small percentages. This means that confidence intervals formed from the standard errors may be distorted, and this should be taken into account when considering the results of this survey.

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Person Trips	A-5 B-8,9,10 C-5,6,7,8	A-12 B-16 C-14	A-14 B-19,20 C-16,17
Persons	A-6 B-11,12,13	--	--

Notes: Table A's are for totals. Table B's are for percentages. Table C's are for means.

TABLE A-1

STANDARD ERRORS OF ESTIMATED NUMBERS OF VEHICLE MILES

FOR TRAVEL DAY

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	Purpose of trip: school/church, shopping STANDARD ERROR (000,000)	All other characteristics STANDARD ERROR (000,000)
0	235	319
200	235	319
500	342	407
1,000	481	594
1,500	588	740
2,000	678	865
3,000	829	1,078
5,000	1,067	1,423
7,000	1,261	1,709
10,000	1,504	2,074
15,000	1,838	2,585
20,000	2,119	3,022
30,000	2,590	3,767
50,000	3,335	4,972
70,000	3,940	5,969
100,000	4,700	7,245
150,000	5,745	9,030
200,000	---	10,558
300,000	---	13,158
350,000	---	13,900
500,000	---	15,779
700,000	---	17,784
1,000,000	---	20,189
1,200,000	---	21,541

TABLE A-2

STANDARD ERRORS OF ESTIMATED NUMBERS OF VEHICLE TRIPS

FOR TRAVEL DAY

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	Characteristics tabulated by purpose of trip STANDARD ERROR (000,000)	All other characteristics STANDARD ERROR (000,000)
0	10	30
20	15	30
50	24	39
100	36	56
150	45	70
200	52	81
300	65	100
500	86	131
700	103	156
1,000	126	188
1,500	157	233
2,000	184	271
3,000	229	335
5,000	303	438
7,000	364	523
10,000	443	631
15,000	553	780
20,000	647	907
30,000	807	1,123
50,000	1,068	1,468
60,000	1,180	1,518
75,000	----	1,582
100,000	----	1,668
150,000	----	1,798

TABLE A-3

STANDARD ERRORS OF ESTIMATED NUMBERS OF HOUSEHOLDS

(68 chances out of 100)

SIZE OF ESTIMATE (000)	STANDARD ERROR (000)
0	18
10	18
20	19
50	29
100	41
150	49
200	57
300	69
500	88
700	103
1,000	122
1,500	148
2,000	170
3,000	206
5,000	262
10,000	365
15,000	443
20,000	508
30,000	616
35,000	663
40,000	610
50,000	530
75,000	411
90,000	367

TABLE A-4

STANDARD ERRORS OF ESTIMATED NUMBERS OF PERSON MILES

FOR TRAVEL DAY

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	Public transportation other than to or from work and household clustering items*	Non-clustering items, and public transportation to or from work
	STANDARD ERROR (000,000)	STANDARD ERROR (000,000)
0	347	23
100	347	66
200	347	108
500	436	208
1,000	674	341
1,500	868	456
2,000	1,040	559
3,000	1,340	747
5,000	1,845	1,076
7,000	2,278	1,369
10,000	2,848	1,766
15,000	3,671	2,359
20,000	4,396	2,893
30,000	5,666	3,871
50,000	12,238	5,575
70,000	14,243	7,090
100,000	16,727	9,147
150,000	20,083	12,220
200,000	22,864	15,007
350,000	29,425	22,382
500,000	34,558	28,872
650,000	38,897	33,643
1,000,000	47,235	43,247
1,500,000	56,709	54,777
2,000,000	64,562	64,779

* Household clustering items are items for which most or all members of a household would have the same characteristic. Examples are household income, residence, and age of reference person.

TABLE A-5

STANDARD ERRORS OF ESTIMATED NUMBERS OF PERSON TRIPS

FOR TRAVEL DAY

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	All items tabulated by outside SMSA, rural areas, SMSAs of size less than 500,000 STANDARD ERROR (000,000)	All other household clustering items* STANDARD ERROR (000,000)	All other non-clustering items STANDARD ERROR (000,000)
0	9	15	5
10	10	15	7
20	16	18	11
50	29	31	20
100	46	47	30
150	60	60	39
200	73	72	46
300	95	92	59
500	134	125	81
700	168	153	100
1,000	213	190	125
1,500	279	243	160
2,000	339	289	191
3,000	444	369	244
5,000	625	502	334
7,000	783	615	411
10,000	993	763	512
15,000	1,303	975	656
20,000	1,579	1,160	783
30,000	2,071	1,482	1,004
50,000	2,913	2,018	1,374
70,000	3,648	2,209	1,640
100,000	4,631	2,432	1,978
150,000	---	2,712	2,447
200,000	---	2,930	2,846
230,000	---	3,042	3,063

* Household clustering items are items for which most or all
   members of a household would be expected to have the same
   characteristic. Examples are place of residence, household
   income, and age of reference person.

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TABLE A-6

STANDARD ERRORS OF ESTIMATED NUMBERS OF PERSONS

(68 chances out of 100)

	Tabulations by age, race, sex only	Place of residence: outside SMSA, rural areas, SMSAs of size less than 500,000	All other items
SIZE OF ESTIMATE (000)	STANDARD ERROR (000)	STANDARD ERROR (000)	STANDARD ERROR (000)
0	32	25	15
10	32	25	15
20	32	25	18
50	37	38	29
100	47	58	42
150	54	74	53
200	60	88	61
300	69	113	77
500	82	154	101
700	92	190	121
1,000	104	236	147
1,500	120	302	183
2,000	132	360	214
3,000	152	461	267
5,000	181	629	353
7,000	203	772	423
10,000	229	960	514
15,000	264	1,230	640
20,000	291	1,466	748
35,000	352	1,776	1,014
50,000	398	2,007	1,231
80,000	468	2,358	893
100,000	505	----	766
150,000	580	----	581
200,000	477	----	477
230,000	0	----	0

TABLE A-7

STANDARD ERRORS OF ESTIMATED NUMBERS OF VEHICLE MILES
FOR TRAVEL PERIOD
(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	STANDARD ERROR (000,000)
0	137
200	174
500	308
1,000	475
1,500	612
2,000	733
3,000	945
5,000	1,301
7,000	1,605
10,000	2,007
15,000	2,586
20,000	3,096
30,000	3,990
50,000	5,492
70,000	6,779
100,000	8,473
150,000	10,920
200,000	13,073
225,000	14,073

TABLE A-8

STANDARD ERRORS OF ESTIMATED NUMBERS OF VEHICLE TRIPS
FOR TRAVEL PERIOD
(68 chances out of 100)

SIZE OF ESTIMATE (000)		STANDARD ERROR (000)
0	1	1,071
2,000	1	1,515
5,000	1	2,519
10,000	1	3,701
15,000	1	4,635
20,000	1	5,437
30,000	1	6,809
50,000	1	9,041
100,000	1	13,283
150,000	1	16,636
200,000	1	19,516
300,000	1	24,441
500,000	1	32,452
700,000	1	39,115
1,000,000	1	47,678
1,100,000	1	50,268

TABLE A-9

STANDARD ERRORS OF ESTIMATED NUMBERS OF
COMBINED VEHICLE MILES
(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	STANDARD ERROR (000,000)
0	384
200	384
500	441
1,000	636
1,500	788
2,000	917
3,000	1,137
5,000	1,488
7,000	1,778
10,000	2,146
15,000	2,659
20,000	3,095
30,000	3,834
50,000	5,021
70,000	5,998
100,000	7,241
150,000	8,969
200,000	10,441
300,000	12,934
500,000	16,939
700,000	20,233
1,000,000	24,426
1,350,000	28,621

TABLE A-10

STANDARD ERRORS OF ESTIMATED NUMBERS OF COMBINED VEHICLE TRIPS

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)		STANDARD ERROR (000,000)
0	1	15
20	1	17
50	1	29
70	1	35
100	1	42
150	1	52
200	1	61
300	1	77
500	1	101
700	1	122
1,000	1	148
1,500	1	185
2,000	1	216
3,000	1	270
5,000	1	357
10,000	1	522
15,000	1	652
20,000	1	764
30,000	1	953
50,000	1	1,261
70,000	1	1,516
100,000	1	1,843
150,000	1	2,302

TABLE A-11

STANDARD ERRORS OF ESTIMATED NUMBERS OF PERSON MILES
FOR TRAVEL PERIOD
(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	STANDARD ERROR (000,000)
0	746
200	746
500	746
1,000	881
1,500	1,110
2,000	1,308
3,000	1,647
5,000	2,202
7,000	2,667
10,000	3,267
15,000	4,116
20,000	4,848
30,000	6,106
50,000	8,165
70,000	9,889
100,000	12,114
150,000	15,258
200,000	17,972
300,000	22,637
450,000	28,512

TABLE A-12

STANDARD ERRORS OF ESTIMATED NUMBERS OF PERSON TRIPS

FOR TRAVEL PERIOD

(68 chances out of 100)

SIZE OF ESTIMATE (000)		STANDARD ERROR (000)
0	1	1,898
2,000	1	1,949
5,000	1	3,095
10,000	1	4,392
15,000	1	5,389
20,000	1	6,232
30,000	1	7,648
50,000	1	9,898
70,000	1	11,730
100,000	1	14,045
150,000	1	17,235
200,000	1	19,929
300,000	1	24,456
500,000	1	31,651
700,000	1	37,512
1,000,000	1	44,913
1,350,000	1	52,260

TABLE A-13

STANDARD ERRORS OF ESTIMATED NUMBERS OF
COMBINED PERSON MILES
(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	Household clustering items* STANDARD ERROR (000,000)	Non-clustering items STANDARD ERROR (000,000)
0	5,662	373
100	5,662	373
200	5,662	373
500	5,662	441
1,000	5,662	654
1,500	5,662	824
2,000	5,662	971
3,000	5,662	1,223
5,000	5,662	1,636
7,000	6,158	1,982
10,000	7,092	2,429
15,000	8,327	3,060
20,000	9,332	3,605
30,000	10,958	4,542
50,000	23,965	6,077
70,000	25,650	7,361
100,000	27,565	9,021
150,000	29,917	11,365
200,000	31,706	13,390
350,000	35,499	18,419
500,000	38,150	22,570
650,000	40,226	26,210
1,000,000	43,881	33,503
1,500,000	47,625	42,211
2,000,000	50,474	49,731
2,300,000	53,853	53,853

* Household clustering items are items for which most or all
    members of a household would have the same characteristic.
    Examples are household income, residence, and age of
    reference person.

TABLE A-14

STANDARD ERRORS OF ESTIMATED NUMBERS OF

COMBINED PERSON TRIPS

(68 chances out of 100)

SIZE OF ESTIMATE (000,000)	Household clustering items* STANDARD ERROR (000,000)	Non-clustering items STANDARD ERROR (000,000)
0	62	10
50	62	25
100	79	36
150	97	45
200	112	53
300	138	66
500	179	87
700	212	105
1,000	254	128
1,500	312	160
2,000	361	187
3,000	444	234
5,000	576	309
7,000	683	372
10,000	819	453
15,000	1,006	566
20,000	1,165	663
30,000	1,431	828
50,000	1,856	1,097
65,000	2,120	1,267
100,000	2,640	1,605
150,000	2,808	2,193
200,000	2,934	2,737
230,000	2,998	3,048

* Household clustering items are items for which most or all
   members of a household would have the same characteristic.
   Examples are household income, residence, and age of
   reference person.

TABLE B-1

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF TRAVEL DAY VEHICLE MILES

(ALL CHARACTERISTICS OTHER THAN PURPOSE OF TRIP: SCHOOL/CHURCH/SHOPPING)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	36.58	36.58	36.58	36.58	36.58	36.58	36.58	38.30
700	29.52	29.52	29.52	29.52	29.52	29.52	29.52	32.84
1,000	22.95	22.95	22.95	22.95	22.95	22.95	24.41	27.90
1,500	16.77	16.77	16.77	16.77	16.77	16.78	20.28	23.19
2,000	13.23	13.23	13.23	13.23	13.23	14.71	17.79	20.33
3,000	9.32	9.32	9.32	9.32	10.28	12.22	14.78	16.89
5,000	5.86	5.86	5.86	5.92	8.14	9.68	11.70	13.38
7,000	4.28	4.28	4.28	5.08	6.98	8.30	10.04	11.47
10,000	3.05	3.05	3.05	4.32	5.93	7.05	8.53	9.75
15,000	2.06	2.06	2.30	3.59	4.93	5.86	7.09	8.10
20,000	1.56	1.56	2.02	3.14	4.32	5.14	6.21	7.10
30,000	1.05	1.19	1.68	2.61	3.59	4.27	5.16	5.90
50,000	0.63	0.95	1.33	2.07	2.84	3.38	4.09	4.67
70,000	0.45	0.81	1.14	1.77	2.44	2.90	3.51	4.01
100,000	0.32	0.69	0.97	1.51	2.07	2.46	2.98	3.41
150,000	0.21	0.57	0.81	1.25	1.72	2.05	2.48	2.83
200,000	0.16	0.50	0.71	1.10	1.51	1.80	2.17	2.48
300,000	0.11	0.42	0.59	0.91	1.25	1.49	1.80	2.06
500,000	0.06	0.33	0.46	0.72	0.99	1.18	1.43	1.63
1,000,000	0.03	0.24	0.34	0.53	0.72	0.86	1.04	1.19
1,200,000	0.03	0.22	0.31	0.48	0.67	0.79	0.96	1.09

TABLE B-2

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF TRAVEL DAY VEHICLE MILES
(CHARACTERISTICS PERTAINING TO PURPOSE OF TRIP: SCHOOL/CHURCH/SHOPPING)
(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	32.18	32.18	32.18	32.18	32.18	32.18	32.18	34.39
700	25.28	25.28	25.28	25.28	25.28	25.28	25.28	29.02
1,000	19.13	19.13	19.13	19.13	19.13	19.13	21.04	24.23
1,500	13.60	13.60	13.60	13.60	13.60	14.16	17.14	19.75
2,000	10.55	10.55	10.55	10.55	10.55	12.25	14.82	17.08
3,000	7.29	7.29	7.29	7.29	8.40	9.98	12.08	13.91
5,000	4.50	4.50	4.50	4.73	6.49	7.71	9.33	10.75
7,000	3.25	3.25	3.25	3.99	5.47	6.50	7.87	9.07
10,000	2.30	2.30	2.30	3.33	4.57	5.43	6.57	7.57
15,000	1.54	1.54	1.75	2.71	3.72	4.43	5.36	6.17
20,000	1.16	1.16	1.51	2.35	3.22	3.83	4.63	5.34
30,000	0.78	0.88	1.23	1.91	2.62	3.12	3.77	4.35
50,000	0.47	0.68	0.95	1.48	2.03	2.41	2.92	3.36
70,000	0.33	0.57	0.80	1.25	1.71	2.03	2.46	2.83
100,000	0.23	0.48	0.67	1.04	1.43	1.70	2.05	2.37
150,000	0.16	0.39	0.55	0.85	1.16	1.38	1.67	1.93

TABLE B-3

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF TRAVEL DAY VEHICLE TRIPS

(ALL CHARACTERISTICS NOT TABULATED BY PURPOSE OF TRIP)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	22.34	22.34	22.34	22.34	22.34	22.34	23.67	27.18
150	16.20	16.20	16.20	16.20	16.20	16.20	19.52	22.41
200	12.72	12.72	12.72	12.72	12.72	14.06	17.03	19.55
300	8.90	8.90	8.90	8.90	9.75	11.60	14.04	16.12
500	5.56	5.56	5.56	5.56	7.65	9.10	11.02	12.65
700	4.05	4.05	4.05	4.74	6.52	7.75	9.39	10.78
1,000	2.88	2.88	2.88	4.00	5.50	6.55	7.92	9.10
1,500	1.94	1.94	2.12	3.30	4.54	5.40	6.54	7.50
2,000	1.46	1.46	1.85	2.88	3.96	4.71	5.70	6.54
3,000	0.98	1.08	1.53	2.37	3.26	3.88	4.70	5.40
5,000	0.59	0.85	1.20	1.86	2.56	3.05	3.69	4.23
7,000	0.42	0.72	1.02	1.59	2.18	2.60	3.14	3.61
10,000	0.30	0.61	0.86	1.34	1.84	2.19	2.65	3.05
15,000	0.20	0.50	0.71	1.10	1.52	1.81	2.19	2.51
20,000	0.15	0.44	0.62	0.96	1.33	1.58	1.91	2.19
30,000	0.10	0.36	0.51	0.79	1.09	1.30	1.57	1.81
50,000	0.06	0.28	0.40	0.62	0.86	1.02	1.23	1.42
60,000	0.05	0.26	0.37	0.57	0.79	0.94	1.13	1.30
80,000	0.04	0.23	0.32	0.50	0.69	0.82	0.99	1.13
100,000	0.03	0.20	0.29	0.45	0.62	0.73	0.89	1.02
150,000	0.02	0.17	0.24	0.37	0.51	0.60	0.73	0.84

TABLE B-4

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF TRAVEL DAY VEHICLE TRIPS

(ALL CHARACTERISTICS TABULATED BY PURPOSE OF TRIP)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	8.99	8.99	8.99	8.99	10.16	12.07	14.59	16.66
150	6.23	6.23	6.23	6.23	8.45	10.05	12.14	13.87
200	4.77	4.77	4.77	5.40	7.42	8.82	10.66	12.17
300	3.25	3.25	3.25	4.49	6.17	7.34	8.87	10.13
500	1.99	1.99	2.29	3.56	4.90	5.82	7.04	8.04
700	1.43	1.43	1.97	3.06	4.21	5.00	6.04	6.90
1,000	1.01	1.19	1.67	2.60	3.58	4.25	5.14	5.87
1,500	0.68	0.99	1.39	2.17	2.98	3.54	4.28	4.89
2,000	0.51	0.87	1.22	1.90	2.61	3.11	3.76	4.29
3,000	0.34	0.72	1.02	1.58	2.18	2.59	3.13	3.57
5,000	0.20	0.57	0.81	1.26	1.73	2.05	2.48	2.83
7,000	0.15	0.49	0.69	1.08	1.48	1.76	2.13	2.43
10,000	0.10	0.42	0.59	0.92	1.26	1.50	1.81	2.07
15,000	0.07	0.35	0.49	0.76	1.05	1.25	1.51	1.72
20,000	0.05	0.31	0.43	0.67	0.92	1.09	1.32	1.51
30,000	0.03	0.25	0.36	0.56	0.77	0.91	1.10	1.26
50,000	0.02	0.20	0.28	0.44	0.61	0.72	0.87	1.00
60,000	0.02	0.19	0.26	0.41	0.56	0.67	0.80	0.92

TABLE B-5

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF HOUSEHOLDS

(ALL CHARACTERISTICS)

(68 chances out of 100)

BASE OF PERCENTAGE (000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	15.51	15.51	15.51	15.51	15.51	15.51	18.39	21.01
150	10.85	10.85	10.85	10.85	10.85	12.38	14.87	16.99
200	8.34	8.34	8.34	8.34	9.02	10.65	12.79	14.61
300	5.70	5.70	5.70	5.70	7.29	8.61	10.35	11.82
500	3.49	3.49	3.49	4.11	5.58	6.59	7.92	9.04
700	2.51	2.51	2.51	3.45	4.68	5.53	6.64	7.58
1,000	1.77	1.77	1.87	2.86	3.88	4.58	5.51	6.29
1,500	1.19	1.19	1.52	2.31	3.14	3.71	4.45	5.09
2,000	0.89	0.94	1.30	1.99	2.70	3.19	3.83	4.38
3,000	0.60	0.76	1.05	1.61	2.18	2.58	3.10	3.54
5,000	0.36	0.58	0.81	1.23	1.67	1.97	2.37	2.71
7,000	0.26	0.49	0.68	1.03	1.40	1.65	1.99	2.27
10,000	0.18	0.41	0.56	0.86	1.16	1.37	1.65	1.88
15,000	0.12	0.33	0.45	0.69	0.94	1.11	1.33	1.52
20,000	0.09	0.28	0.39	0.60	0.81	0.96	1.15	1.31
35,000	0.05	0.21	0.29	0.44	0.60	0.71	0.86	0.98
50,000	0.04	0.17	0.24	0.37	0.50	0.59	0.71	0.81
75,000	0.02	0.14	0.20	0.30	0.40	0.48	0.57	0.66
90,000	0.02	0.13	0.18	0.27	0.37	0.43	0.52	0.60

TABLE B-6

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS TRAVEL DAY PERSON MILES
(NON-CLUSTERING ITEMS*, AND MODE OF TRAVEL:
PUBLIC TRANSPORTATION TABULATED BY PURPOSE OF TRIP: TO OR FROM WORK)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	3.50	3.50	4.39	6.81	9.32	11.02	13.18	14.49
700	2.62	2.84	3.99	6.19	8.46	10.01	11.97	13.16
1,000	1.91	2.56	3.60	5.59	7.64	9.04	10.81	11.89
1,500	1.32	2.28	3.21	4.98	6.81	8.05	9.63	10.59
2,000	1.01	2.10	2.95	4.58	6.27	7.42	8.87	9.75
3,000	0.69	1.87	2.63	4.08	5.59	6.61	7.90	8.68
5,000	0.43	1.62	2.27	3.53	4.83	5.71	6.83	7.50
7,000	0.31	1.47	2.07	3.20	4.38	5.19	6.20	6.82
10,000	0.22	1.33	1.86	2.89	3.96	4.68	5.60	6.16
15,000	0.15	1.18	1.66	2.58	3.53	4.17	4.99	5.48
20,000	0.11	1.09	1.53	2.37	3.25	3.84	4.59	5.05
30,000	0.07	0.97	1.36	2.11	2.89	3.42	4.09	4.50
50,000	0.05	0.84	1.18	1.83	2.50	2.96	3.54	3.89
70,000	0.03	0.76	1.07	1.66	2.27	2.69	3.21	3.53
100,000	0.02	0.69	0.97	1.50	2.05	2.43	2.90	3.19
150,000	0.02	0.61	0.86	1.33	1.83	2.16	2.58	2.84
200,000	0.01	0.56	0.79	1.23	1.68	1.99	2.38	2.62
300,000	0.01	0.50	0.71	1.09	1.50	1.77	2.12	2.33
500,000	0.01	0.43	0.61	0.95	1.29	1.53	1.83	2.01
700,000	0.01	0.39	0.55	0.86	1.18	1.39	1.66	1.83
1,000,000	0.01	0.36	0.50	0.78	1.06	1.26	1.50	1.65
1,500,000	0.01	0.32	0.45	0.69	0.95	1.12	1.34	1.47
2,000,000	0.01	0.29	0.41	0.64	0.87	1.03	1.23	1.35

*Household clustering items are items for which most or all members of a household would have the same characteristic. Examples are household income, residence, and age of reference person.

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS TRAVEL, DAY PERSON MILES

(HOUSEHOLD ITEMS* AND MODE OF TRANSPORTATION:

PUBLIC TRANSPORTATION NOT TABULATED BY PURPOSE OF TRIP: TO OR FROM WORK)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	32.58	32.58	32.58	32.58	32.58	32.58	32.58	35.96
700	26.64	26.64	26.64	26.64	26.64	26.64	28.28	31.71
1,000	21.07	21.07	21.07	21.07	21.07	21.07	24.75	27.75
1,500	15.74	15.74	15.74	15.74	15.74	17.68	21.27	23.85
2,000	12.62	12.62	12.62	12.62	13.39	15.88	19.10	21.42
3,000	9.08	9.08	9.08	9.08	11.51	13.65	16.41	18.40
5,000	5.86	5.86	5.86	6.93	9.51	11.27	13.56	15.21
7,000	4.34	4.34	4.34	6.11	8.38	9.94	11.96	13.41
-10,000	3.13	3.13	3.44	5.35	7.34	8.70	10.46	11.73
15,000	2.14	2.14	2.96	4.60	6.31	7.48	8.99	10.08
20,000	1.63	1.89	2.66	4.13	5.66	6.71	8.07	9.06
30,000	1.11	1.62	2.28	3.55	4.87	5.77	6.94	7.78
50,000	0.67	1.34	1.89	2.93	4.02	4.77	5.73	6.43
70,000	0.48	1.18	1.66	2.58	3.55	4.20	5.06	5.67
100,000	0.34	1.04	1.46	2.26	3.10	3.68	4.42	4.96
150,000	0.23	0.89	1.25	1.94	2.67	3.16	3.80	4.26
200,000	0.17	0.80	1.12	1.75	2.39	2.84	3.41	3.83
350,000	0.10	0.65	0.91	1.42	1.94	2.30	2.77	3.11
500,000	0.07	0.57	0.80	1.24	1.70	2.02	2.42	2.72
650,000	0.05	0.51	0.72	1.12	1.54	1.83	2.20	2.46
1,000,000	0.03	0.44	0.62	0.96	1.31	1.56	1.87	2.10
1,500,000	0.02	0.39	0.53	0.82	1.13	1.34	1.61	1.80
2,000,000	0.02	0.34	0.48	0.74	1.01	1.20	1.44	1.62

*Household clustering items are items for which most or all members of a household would have the same characteristic. Examples are household income, residence, and age of reference person.

TABLE B-8

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS TRAVEL DAY PERSON TRIPS
(ALL NON-CLUSTERING ITEMS*, EXCEPT THOSE TABULATED BY PLACE OF RESIDENCE:
OUTSIDE SMSA, RURAL AREAS, SMSA'S OF SIZE LESS THAN 500,000)
(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	7.54	7.54	7.54	7.57	10.38	12.32	14.83	16.67
70	5.61	5.61	5.61	6.65	9.12	10.82	13.02	14.64
100	4.06	4.06	4.06	5.79	7.95	9.42	11.34	12.76
150	2.79	2.79	3.19	4.95	6.79	8.06	9.70	10.91
200	2.13	2.13	2.85	4.43	6.08	7.21	8.68	9.76
300	1.44	1.73	2.44	3.79	5.20	6.17	7.42	8.34
500	0.88	1.42	2.00	3.11	4.27	5.06	6.09	6.85
700	0.63	1.25	1.76	2.73	3.75	4.44	5.35	6.02
1,000	0.45	1.09	1.53	2.38	3.26	3.87	4.66	5.24
1,500	0.30	0.93	1.31	2.03	2.79	3.31	3.98	4.48
2,000	0.22	0.83	1.17	1.82	2.50	2.96	3.57	4.01
3,000	0.15	0.71	1.00	1.56	2.14	2.53	3.05	3.43
5,000	0.09	0.58	0.82	1.28	1.75	2.08	2.50	2.81
7,000	0.06	0.51	0.72	1.12	1.54	1.83	2.20	2.47
10,000	0.05	0.45	0.63	0.98	1.34	1.59	1.91	2.15
15,000	0.03	0.38	0.54	0.84	1.15	1.36	1.64	1.84
20,000	0.02	0.34	0.48	0.75	1.03	1.22	1.47	1.65
30,000	0.02	0.29	0.41	0.64	0.88	1.04	1.25	1.41
50,000	0.01	0.24	0.34	0.52	0.72	0.85	1.03	1.16
70,000	0.01	0.21	0.30	0.46	0.63	0.75	0.90	1.02
100,000	0.01	0.18	0.26	0.40	0.55	0.65	0.79	0.88
150,000	0.01	0.16	0.22	0.34	0.47	0.56	0.67	0.76
200,000	0.01	0.14	0.20	0.31	0.42	0.50	0.60	0.68
230,000	0.01	0.13	0.19	0.29	0.40	0.47	0.57	0.64

*Household clustering items refer to items for which most or all members of a household would be expected to have the same chacteristic. Examples are household income, residence, and age of reference person.

TABLE B-9

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS TRAVEL DAY PERSON TRIPS

(ALL HOUSEHOLD CLUSTERING ITEMS* EXCEPT THOSE TABULATED BY PLACE OF RESIDENCE:

OUTSIDE SMSA, RURAL AREAS, SMSA'S OF SIZE LESS THAN 500,000)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	19.93	19.93	19.93	19.93	19.93	19.93	23.58	26.58
70	15.50	15.50	15.50	15.50	15.50	17.14	20.64	23.27
100	11.67	11.67	11.67	11.67	12.54	14.88	17.92	20.20
150	8.30	8.30	8.30	8.30	10.68	12.68	15.27	17.21
200	6.46	6.46	6.46	6.95	9.53	11.31	13.62	15.35
300	4.48	4.48	4.48	5.92	8.12	9.63	11.60	13.08
500	2.79	2.79	3.11	4.83	6.63	7.87	9.48	10.68
700	2.03	2.03	2.72	4.23	5.81	6.89	8.30	9.35
1,000	1.44	1.68	2.36	3.67	5.04	5.98	7.20	8.12
1,500	0.97	1.43	2.01	3.13	4.29	5.09	6.13	6.91
2,000	0.73	1.28	1.80	2.79	3.83	4.55	5.47	6.17
3,000	0.49	1.09	1.53	2.38	3.26	3.87	4.66	5.26
5,000	0.30	0.89	1.25	1.94	2.67	3.16	3.81	4.29
7,000	0.21	0.78	1.09	1.70	2.33	2.77	3.33	3.76
10,000	0.15	0.68	0.95	1.48	2.03	2.40	2.89	3.26
15,000	0.10	0.58	0.81	1.26	1.73	2.05	2.47	2.78
20,000	0.07	0.51	0.72	1.12	1.54	1.83	2.20	2.48
30,000	0.05	0.44	0.61	0.96	1.31	1.56	1.87	2.11
50,000	0.03	0.36	0.50	0.78	1.07	1.27	1.53	1.73
70,000	0.02	0.31	0.44	0.68	0.94	1.11	1.34	1.51
100,000	0.02	0.27	0.38	0.59	0.81	0.97	1.16	1.31
150,000	0.01	0.23	0.33	0.51	0.69	0.82	0.99	1.12
200,000	0.01	0.21	0.29	0.45	0.62	0.73	0.88	1.00
230,000	0.01	0.20	0.27	0.43	0.59	0.69	0.84	0.94

*Household clustering items refer to items for which most or all members of a household would be expected to have the same chacteristic. Examples are household income, residence, and age of reference person.

TABLE B-10

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS TRAVEL DAY PERSON TRIPS

(ALL ITEMS TABULATED BY PLACE OF RESIDENCE:

OUTSIDE SMSA, RURAL AREAS, AND SMSA'S OF SIZE LESS THAN 500,000)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	12.26	12.26	12.26	12.26	13.93	16.49	19.78	21.97
70	9.45	9.45	9.45	9.45	12.46	14.75	17.69	19.65
100	7.08	7.08	7.08	8.09	11.07	13.11	15.72	17.46
150	5.03	5.03	5.03	7.06	9.68	11.46	13.74	15.26
200	3.91	3.91	4.13	6.42	8.80	10.42	12.49	13.87
300	2.72	2.72	3.61	5.61	7.69	9.11	10.92	12.13
500	1.70	2.17	3.05	4.74	6.49	7.69	9.22	10.24
700	1.24	1.94	2.73	4.24	5.81	6.88	8.25	9.16
1,000	0.88	1.73	2.43	3.77	5.16	6.11	7.33	8.14
1,500	0.60	1.51	2.12	3.29	4.51	5.34	6.41	7.11
2,000	0.45	1.37	1.93	2.99	4.10	4.86	5.82	6.47
3,000	0.30	1.20	1.68	2.62	3.58	4.24	5.09	5.65
5,000	0.18	1.01	1.42	2.21	3.03	3.58	4.30	4.77
7,000	0.13	0.91	1.27	1.98	2.71	3.21	3.84	4.27
10,000	0.09	0.80	1.13	1.76	2.40	2.85	3.42	3.79
15,000	0.06	0.70	0.99	1.53	2.10	2.49	2.99	3.32
20,000	0.05	0.64	0.90	1.39	1.91	2.26	2.71	3.01
30,000	0.03	0.56	0.79	1.22	1.67	1.98	2.37	2.64
50,000	0.02	0.47	0.66	1.03	1.41	1.67	2.00	2.23
70,000	0.01	0.42	0.59	0.92	1.26	1.49	1.79	1.99
100,000	0.01	0.37	0.53	0.82	1.12	1.33	1.59	1.77

TABLE B-11

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF PERSONS

(ALL CHARACTERISTICS EXCEPT PLACE OF RESIDENCE:

OUTSIDE SMSA, RURAL AREAS, SMSA'S OF SIZE LESS THAN 500,000,

AND TABULATIONS BY AGE, RACE, AND SEX ONLY)

(68 chances out of 100)

BASE OF PERCENTAGE (000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	12.65	12.65	12.65	12.65	12.65	14.35	17.35	19.83
150	8.89	8.89	8.89	8.89	10.03	11.92	14.41	16.48
200	6.85	6.85	6.85	6.85	8.79	10.45	12.64	14.45
300	4.71	4.71	4.71	5.31	7.30	8.68	10.50	12.00
500	2.90	2.90	2.90	4.21	5.78	6.87	8.31	9.50
700	2.09	2.09	2.32	3.61	4.96	5.89	7.13	8.15
1,000	1.48	1.48	1.97	3.06	4.21	5.01	6.06	6.92
1,500	0.99	1.16	1.64	2.55	3.50	4.16	5.03	5.75
2,000	0.75	1.02	1.43	2.23	3.07	3.65	4.41	5.04
3,000	0.50	0.85	1.19	1.85	2.55	3.03	3.66	4.19
5,000	0.30	0.67	0.94	1.47	2.02	2.40	2.90	3.32
7,000	0.22	0.58	0.81	1.26	1.73	2.06	2.49	2.84
10,000	0.15	0.49	0.69	1.07	1.47	1.75	2.11	2.42
15,000	0.10	0.41	0.57	0.89	1.22	1.45	1.76	2.01
20,000	0.08	0.36	0.50	0.78	1.07	1.27	1.54	1.76
35,000	0.04	0.28	0.39	0.60	0.83	0.99	1.19	1.36
50,000	0.03	0.23	0.33	0.51	0.70	0.84	1.01	1.16
80,000	0.02	0.19	0.27	0.41	0.57	0.68	0.82	0.93
100,000	0.02	0.17	0.24	0.37	0.51	0.61	0.74	0.84
150,000	0.01	0.14	0.20	0.31	0.43	0.51	0.61	0.70
200,000	0.01	0.12	0.17	0.27	0.37	0.44	0.54	0.61
230,000	0.01	0.12	0.16	0.26	0.35	0.42	0.50	0.58

TABLE B-12

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF PERSONS

(CHARACTERISTICS PERTAINING TO PLACE OF RESIDENCE: OUTSIDE SMSA, RURAL AREAS, SMSA'S OF SIZE LESS THAN 500,000)

(68 chances out of 100)

BASE OF PERCENTAGE (000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	16.98	16.98	16.98	16.98	16.98	18.08	21.76	24.50
150	12.39	12.39	12.39	12.39	13.01	15.44	18.58	20.91
200	9.78	9.78	9.78	9.78	11.63	13.80	16.61	18.70
300	6.91	6.91	6.91	7.24	9.93	11.78	14.18	15.96
500	4.37	4.37	4.37	5.93	8.14	9.65	11.62	13.08
700	3.21	3.21	3.35	5.20	7.13	8.46	10.19	11.47
1,000	2.29	2.29	2.91	4.52	6.21	7.37	8.87	9.98
1,500	1.56	1.77	2.49	3.86	5.30	6.29	7.57	8.52
2,000	1.18	1.58	2.22	3.45	4.74	5.62	6.77	7.62
3,000	0.80	1.35	1.90	2.95	4.04	4.80	5.78	6.50
5,000	0.48	1.11	1.55	2.42	3.31	3.93	4.73	5.33
7,000	0.35	0.97	1.36	2.12	2.91	3.45	4.15	4.67
10,000	0.24	0.84	1.19	1.84	2.53	3.00	3.61	4.07
15,000	0.16	0.72	1.01	1.57	2.16	2.56	3.08	3.47
20,000	0.12	0.64	0.91	1.41	1.93	2.29	2.76	3.10
30,000	0.07	0.52	0.73	1.13	1.55	1.84	2.22	2.49
50,000	0.05	0.45	0.63	0.98	1.35	1.60	1.93	2.17
80,000	0.03	0.37	0.53	0.82	1.12	1.33	1.61	1.81

TABLE B-13

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF PERSONS

(CHARACTERISTICS TABULATED BY AGE, RACE, AND SEX ONLY)

(68 chances out of 100)

BASE OF PERCENTAGE (000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
100	27.46	27.46	27.46	27.46	27.46	27.46	27.46	28.85
150	19.43	19.43	19.43	19.43	19.43	19.43	20.63	22.10
200	15.00	15.00	15.00	15.00	15.00	15.00	17.08	18.29
300	10.26	10.26	10.26	10.26	10.26	11.49	13.08	14.01
500	6.28	6.28	6.28	6.28	7.28	8.21	9.35	10.02
700	4.52	4.52	4.52	4.67	5.83	6.58	7.50	8.03
1,000	3.18	3.18	3.18	3.69	4.62	5.21	5.93	6.35
1,500	2.12	2.12	2.12	2.83	3.54	3.99	4.54	4.87
2,000	1.60	1.60	1.72	2.34	2.93	3.30	3.76	4.03
3,000	1.07	1.07	1.32	1.79	2.24	2.53	2.88	3.09
5,000	0.64	0.75	0.94	1.28	1.60	1.81	2.06	2.21
7,000	0.46	0.60	0.76	1.03	1.28	1.45	1.65	1.77
10,000	0.32	0.47	0.60	0.81	1.02	1.15	1.31	1.40
15,000	0.21	0.36	0.46	0.62	0.78	0.88	1.00	1.07
20,000	0.16	0.30	0.38	0.52	0.64	0.73	0.83	0.89
35,000	0.09	0.21	0.26	0.36	0.45	0.50	0.57	0.61
50,000	0.06	0.16	0.21	0.28	0.35	0.40	0.45	0.49
80,000	0.04	0.12	0.15	0.21	0.26	0.29	0.33	0.36
100,000	0.03	0.10	0.13	0.18	0.22	0.25	0.29	0.31
150,000	0.02	0.08	0.10	0.14	0.17	0.19	0.22	0.24
200,000	0.02	0.07	0.08	0.11	0.14	0.16	0.18	0.20
230,000	0.01	0.06	0.08	0.10	0.13	0.15	0.17	0.18

TABLE B-14

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF

TRAVEL PERIOD VEHICLE MILES

(ALL CHARACTERISTICS)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE									
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	17.84	17.84	17.84	17.84	17.84	18.83	22.65	25.40
700	13.86	13.86	13.86	13.86	14.00	16.60	19.97	22.40
1,000	10.44	10.44	10.44	10.44	12.25	14.53	17.47	19.60
1,500	7.44	7.44	7.44	7.67	10.53	12.48	15.01	16.84
2,000	5.79	5.79	5.79	6.89	9.45	11.21	13.48	15.12
3,000	4.03	4.03	4.03	5.92	8.12	9.63	11.58	12.99
5,000	2.51	2.51	3.15	4.89	6.71	7.95	9.56	10.73
7,000	1.83	1.97	2.77	4.31	5.91	7.01	8.43	9.46
10,000	1.30	1.73	2.43	3.77	5.17	6.14	7.38	8.28
15,000	0.86	1.48	2.09	3.24	4.45	5.27	6.34	7.11
20,000	0.66	1.33	1.87	2.91	3.99	4.73	5.69	6.38
30,000	0.45	1.14	1.61	2.50	3.43	4.07	4.89	5.48
50,000	0.27	0.95	1.33	2.06	2.83	3.36	4.04	4.53
70,000	0.19	0.83	1.17	1.82	2.50	2.96	3.56	3.99
100,000	0.14	0.73	1.03	1.59	2.18	2.59	3.12	3.49
150,000	0.09	0.63	0.88	1.37	1.88	2.23	2.68	3.00
200,000	0.07	0.56	0.79	1.23	1.69	2.00	2.40	2.70
225,000	0.06	0.54	0.76	1.18	1.61	1.91	2.30	2.58

TABLE B-15

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF

TRAVEL PERIOD PERSON MILES

(ALL CHARACTERISTICS)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	53.72	53.72	53.72	53.72	53.72	53.72	53.72	50.00
700	46.17	46.17	46.17	46.17	46.17	46.17	46.17	46.46
1,000	38.29	38.29	38.29	38.29	38.29	38.29	38.29	39.84
1,500	29.96	29.96	29.96	29.96	29.96	29.96	29.96	33.45
2,000	24.68	24.68	24.68	24.68	24.68	24.68	26.01	29.55
3,000	18.32	18.32	18.32	18.32	18.32	18.32	21.84	24.81
5,000	12.14	12.14	12.14	12.14	12.22	14.52	17.52	19.91
7,000	9.10	9.10	9.10	9.10	10.57	12.56	15.16	17.22
10,000	6.63	6.63	6.63	6.63	9.07	10.77	13.00	14.77
15,000	4.57	4.57	4.57	5.54	7.61	9.04	10.92	12.40
20,000	3.49	3.49	3.49	4.90	6.73	7.99	9.64	10.96
30,000	2.37	2.37	2.64	4.11	5.65	6.71	8.10	9.20
50,000	1.45	1.51	2.12	3.30	4.53	5.38	6.50	7.38
70,000	1.04	1.30	1.83	2.85	3.92	4.66	5.62	6.39
100,000	0.73	1.12	1.57	2.45	3.36	3.99	4.82	5.48
150,000	0.49	0.94	1.32	2.05	2.82	3.35	4.05	4.60
200,000	0.37	0.83	1.17	1.81	2.49	2.96	3.58	4.06
300,000	0.25	0.70	0.98	1.52	2.09	2.49	3.00	3.41
450,000	0.16	0.59	0.82	1.28	1.76	2.09	2.52	2.86

TABLE B-16

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF

TRAVEL PERIOD PERSON TRIPS

(ALL CHARACTERISTICS)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	27.36	27.36	27.36	27.36	27.36	27.36	27.36	30.74
7	21.22	21.22	21.22	21.22	21.22	21.22	22.56	26.02
10	15.88	15.88	15.88	15.88	15.88	15.88	18.91	21.81
15	11.19	11.19	11.19	11.19	11.19	12.76	15.47	17.84
20	8.64	8.64	8.64	8.64	9.30	11.07	13.42	15.47
30	5.94	5.94	5.94	5.94	7.61	9.05	10.98	12.66
50	3.65	3.65	3.65	4.29	5.91	7.03	8.52	9.83
70	2.64	2.64	2.64	3.63	5.00	5.95	7.22	8.32
100	1.86	1.86	1.96	3.05	4.19	4.99	6.05	6.97
150	1.25	1.25	1.60	2.49	3.43	4.08	4.95	5.71
200	0.94	0.99	1.39	2.16	2.97	3.54	4.29	4.95
300	0.63	0.81	1.14	1.77	2.43	2.90	3.51	4.05
500	0.38	0.63	0.88	1.37	1.89	2.25	2.73	3.14
700	0.27	0.53	0.75	1.16	1.60	1.90	2.31	2.66
1,000	0.19	0.44	0.63	0.97	1.34	1.60	1.93	2.23
1,350	0.14	0.30	0.54	0.84	1.16	1.37	1.67	1.92

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF COMBINED PERSON MILES

(NON-CLUSTERING ITEMS*)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	38.21	38.21	38.21	38.21	38.21	38.21	38.21	39.78
700	31.24	31.24	31.24	31.24	31.24	31.24	31.24	34.42
1,000	24.63	24.63	24.63	24.63	24.63	24.63	25.99	29.52
1,500	18.28	18.28	18.28	18.28	18.28	18.28	21.83	24.80
2,000	14.57	14.57	14.57	14.57	14.57	15.98	19.29	21.91
3,000	10.39	10.39	10.39	10.39	11.30	13.42	16.20	18.41
5,000	6.62	6.62	6.62	6.62	9.07	10.78	13.01	14.78
7,000	4.87	4.87	4.87	5.71	7.85	9.32	11.25	12.78
10,000	3.49	3.49	3.49	4.90	6.73	8.00	9.65	10.97
15,000	2.37	2.37	2.65	4.12	5.66	6.72	8.11	9.21
20,000	1.79	1.79	2.34	3.64	5.00	5.94	7.16	8.14
30,000	1.21	1.40	1.96	3.06	4.20	4.99	6.02	6.84
50,000	0.73	1.12	1.58	2.45	3.37	4.00	4.83	5.49
70,000	0.53	0.97	1.36	2.12	2.92	3.46	4.18	4.75
100,000	0.37	0.83	1.17	1.82	2.50	2.97	3.59	4.07
150,000	0.25	0.70	0.98	1.53	2.10	2.49	3.01	3.42
200,000	0.19	0.62	0.87	1.35	1.86	2.20	2.66	3.02
300,000	0.12	0.52	0.73	1.13	1.56	1.85	2.23	2.54
500,000	0.07	0.42	0.59	0.91	1.25	1.49	1.79	2.04
700,000	0.05	0.36	0.51	0.79	1.08	1.29	1.55	1.76
1,000,000	0.04	0.31	0.43	0.68	0.93	1.10	1.33	1.51
1,500,000	0.02	0.26	0.37	0.57	0.78	0.93	1.12	1.27
2,000,000	0.02	0.23	0.32	0.50	0.69	0.82	0.99	1.12
2,300,000	0.02	0.22	0.30	0.47	0.65	0.77	0.93	1.06

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are household income, residence, and age of reference person.

TABLE B-18

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF COMBINED PERSON MILES

(HOUSEHOLD CLUSTERING ITEMS*)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
500	95.79	95.79	95.79	95.00	90.00	85.00	75.00	50.00
700	93.83	93.83	93.83	93.83	90.00	85.00	75.00	50.00
1,000	90.83	90.83	90.83	90.83	90.00	85.00	75.00	50.00
1,500	85.93	85.93	85.93	85.93	85.93	85.00	75.00	50.00
2,000	81.28	81.28	81.28	81.28	81.28	81.28	75.00	50.00
3,000	72.93	72.93	72.93	72.93	72.93	72.93	72.93	50.00
5,000	59.81	59.81	59.81	59.81	59.81	59.81	59.81	50.00
7,000	50.33	50.33	50.33	50.33	50.33	50.33	50.33	50.00
10,000	40.41	40.41	40.41	40.41	40.41	40.41	40.41	40.59
15,000	30.22	30.22	30.22	30.22	30.22	30.22	30.22	31.77
20,000	24.05	24.05	24.05	24.05	24.05	24.05	24.05	26.71
30,000	17.01	17.01	17.01	17.01	17.01	17.01	17.66	20.90
50,000	10.69	10.69	10.69	10.69	10.69	10.69	12.97	15.35
70,000	7.78	7.78	7.78	7.78	7.78	8.67	10.59	12.53
100,000	5.52	5.52	5.52	5.52	5.85	6.99	8.53	10.10
150,000	3.72	3.72	3.72	3.72	4.58	5.47	6.68	7.91
200,000	2.80	2.80	2.80	2.80	3.85	4.60	5.61	6.65
350,000	1.61	1.61	1.61	1.99	2.75	3.28	4.00	4.74
500,000	1.13	1.13	1.13	1.60	2.21	2.64	3.23	3.82
650,000	0.87	0.87	0.88	1.37	1.89	2.26	2.76	3.26
1,000,000	0.57	0.57	0.68	1.06	1.46	1.74	2.12	2.51
1,500,000	0.38	0.38	0.53	0.83	1.14	1.36	1.66	1.97
2,000,000	0.28	0.32	0.45	0.69	0.96	1.14	1.40	1.65
2,300,000	0.25	0.29	0.41	0.64	0.88	1.05	1.28	1.52

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are household income, residence, and age of reference person.

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TABLE B-19

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF COMBINED PERSON TRIPS

(ALL NON-CLUSTERING ITEMS*)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	16.28	16.28	16.28	16.28	16.28	16.61	20.07	22.91
70	12.32	12.32	12.32	12.32	12.32	14.27	17.25	19.69
100	9.04	9.04	9.04	9.04	10.23	12.16	14.69	16.77
150	6.27	6.27	6.27	6.27	8.52	10.13	12.24	13.97
200	4.81	4.81	4.81	5.45	7.49	8.90	10.75	12.27
300	3.28	3.28	3.28	4.54	6.24	7.41	8.96	10.22
500	2.00	2.00	2.32	3.60	4.95	5.89	7.12	8.12
700	1.44	1.44	1.99	3.10	4.26	5.06	6.12	6.98
1,000	1.02	1.21	1.70	2.64	3.63	4.31	5.21	5.95
1,500	0.68	1.00	1.41	2.20	3.02	3.59	4.34	4.95
2,000	0.51	0.88	1.24	1.93	2.65	3.15	3.81	4.35
3,000	0.34	0.74	1.03	1.61	2.21	2.63	3.18	3.63
5,000	0.21	0.58	0.82	1.28	1.76	2.09	2.52	2.88
7,000	0.15	0.50	0.71	1.10	1.51	1.79	2.17	2.48
10,000	0.10	0.43	0.60	0.94	1.29	1.53	1.85	2.11
15,000	0.07	0.36	0.50	0.78	1.07	1.27	1.54	1.76
20,000	0.05	0.31	0.44	0.68	0.94	1.12	1.35	1.54
30,000	0.03	0.26	0.37	0.57	0.78	0.93	1.13	1.29
50,000	0.02	0.21	0.29	0.45	0.62	0.74	0.89	1.02
65,000	0.02	0.18	0.26	0.40	0.55	0.66	0.79	0.91
100,000	0.01	0.15	0.21	0.33	0.46	0.54	0.65	0.75
150,000	0.01	0.13	0.18	0.28	0.38	0.45	0.55	0.62
200,000	0.01	0.11	0.16	0.24	0.33	0.40	0.48	0.55
230,000	0.01	0.10	0.15	0.23	0.31	0.37	0.45	0.51

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are household income, residence, and age of reference person.

TABLE B-20

STANDARD ERRORS OF PERCENTAGES OF ESTIMATED NUMBERS OF COMBINED PERSON TRIPS

(HOUSEHOLD CLUSTERING ITEMS*)

(68 chances out of 100)

BASE OF PERCENTAGE (000,000)	ESTIMATED PERCENTAGE							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	54.54	54.54	54.54	54.54	54.54	54.54	54.54	50.00
70	46.24	46.24	46.24	46.24	46.24	46.24	46.24	46.39
100	37.67	37.67	37.67	37.67	37.67	37.67	37.67	38.93
150	28.80	28.80	28.80	28.80	28.80	28.80	28.80	31.90
200	23.32	23.32	23.32	23.32	23.32	23.32	24.03	27.69
300	16.89	16.89	16.89	16.89	16.89	16.89	19.68	22.69
500	10.90	10.90	10.90	10.90	10.90	12.63	15.31	17.65
700	8.04	8.04	8.04	8.04	9.00	10.71	12.98	14.96
1,000	5.78	5.78	5.78	5.78	7.55	8.99	10.89	12.55
1,500	3.93	3.93	3.93	4.50	6.19	7.36	8.92	10.28
2,000	2.98	2.98	2.98	3.90	5.37	6.39	7.75	8.93
3,000	2.01	2.01	2.05	3.20	4.40	5.24	6.35	7.31
5,000	1.21	1.21	1.60	2.49	3.42	4.07	4.94	5.69
7,000	0.87	0.96	1.35	2.11	2.90	3.45	4.18	4.82
10,000	0.61	0.81	1.14	1.77	2.43	2.90	3.51	4.05
15,000	0.41	0.66	0.93	1.45	1.99	2.37	2.88	3.32
20,000	0.31	0.57	0.81	1.26	1.73	2.06	2.50	2.88
30,000	0.20	0.47	0.66	1.03	1.42	1.69	2.05	2.36
50,000	0.12	0.37	0.52	0.80	1.10	1.31	1.59	1.83
70,000	0.09	0.32	0.45	0.70	0.97	1.15	1.40	1.61
100,000	0.06	0.26	0.37	0.57	0.78	0.93	1.13	1.30
150,000	0.04	0.21	0.30	0.47	0.64	0.77	0.93	1.07
200,000	0.03	0.19	0.26	0.41	0.56	0.66	0.81	0.93
230,000	0.03	0.17	0.24	0.38	0.52	0.62	0.75	0.87

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are household income, residence, and age of reference person.

TABLE C-1

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE MILES FOR TRAVEL DAY

Estimated means

Base of means	2,000	4,000	6,000	8,000	10,000	12,000	15,000	20,000	30,000
100,000	1,433.2	2,422.1	3,292.2	4,093.2	4,846.5	5,563.8	6,587.6	8,190.4	11,132.9
150,000	1,183.3	1,999.7	2,718.1	3,379.5	4,001.4	4,593.5	5,438.9	6,762.2	9,191.5
200,000	1,032.9	1,745.5	2,372.6	2,949.9	3,492.7	4,009.6	4,747.5	5,902.6	8,023.1
300,000	852.8	1,441.1	1,958.9	2,435.5	2,883.7	3,310.4	3,919.6	4,873.3	6,624.0
500,000	669.9	1,132.0	1,538.7	1,913.1	2,265.2	2,600.4	3,078.9	3,828.0	5,203.3
700,000	571.4	965.6	1,312.5	1,631.8	1,932.1	2,218.1	2,626.3	3,265.3	4,438.3
1,000,000	482.7	815.8	1,108.9	1,378.7	1,632.4	1,874.0	2,218.9	2,758.7	3,749.8
1,500,000	398.6	673.6	915.5	1,138.3	1,347.8	1,547.2	1,831.9	2,277.7	3,095.9
2,000,000	347.9	587.9	799.1	993.6	1,176.4	1,350.5	1,599.1	1,988.1	2,702.4
3,000,000	287.2	485.4	659.8	820.3	971.3	1,115.0	1,320.2	1,641.4	2,231.1
5,000,000	225.6	381.3	518.3	644.4	763.0	875.9	1,037.1	1,289.4	1,752.6
7,000,000	192.5	325.2	442.1	549.6	650.8	747.1	884.6	1,099.8	1,494.9
10,000,000	162.6	274.8	373.5	464.4	549.8	631.2	747.4	929.2	1,263.0
15,000,000	134.2	226.9	308.4	383.4	454.0	521.1	617.0	767.2	1,042.8
20,000,000	117.2	198.0	269.2	334.7	396.3	454.9	538.6	669.7	910.2
35,000,000	89.9	152.0	206.6	256.9	304.2	349.2	413.4	514.0	698.7
50,000,000	76.0	128.4	174.6	217.0	257.0	295.0	349.3	434.3	590.3
75,000,000	62.7	106.0	144.1	179.2	212.2	243.6	288.4	358.6	487.4
90,000,000	57.6	97.3	132.2	164.4	194.7	223.5	264.6	329.0	447.1

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TABLE C-2

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE TRIPS FOR TRAVEL DAY

Estimated means

Base of means	200	500	600	1,000	1,200	1,500	2,000	3,000	4,000
100,000	34.1	98.2	168.9	218.5	269.6	348.8	486.1	776.1	1081.7
150,000	28.3	81.5	140.1	181.2	223.7	289.4	403.3	643.8	897.3
200,000	24.8	71.3	122.7	158.7	195.9	253.4	353.2	563.9	765.8
300,000	20.6	59.2	101.8	131.7	162.5	210.2	293.0	467.7	651.9
500,000	16.2	46.8	80.4	104.0	128.4	166.1	231.5	369.6	515.1
700,000	13.9	40.0	68.9	89.1	110.0	142.2	198.2	316.5	441.1
1,000,000	11.8	34.0	58.4	75.6	93.3	120.7	168.2	268.5	374.2
1,500,000	9.8	28.2	48.5	62.7	77.4	100.1	139.5	222.7	310.4
2,000,000	8.6	24.7	42.4	54.9	67.8	87.7	122.2	195.1	271.9
3,000,000	7.1	20.5	35.2	45.6	56.2	72.7	101.4	161.8	225.5
5,000,000	5.6	16.2	27.8	36.0	44.4	57.5	80.1	127.9	178.2
7,000,000	4.8	13.9	23.8	30.8	38.0	49.2	68.6	109.5	152.6
10,000,000	4.1	11.8	20.2	26.1	32.3	41.7	58.2	92.9	129.5
15,000,000	3.4	9.7	16.8	21.7	26.8	34.6	48.3	77.1	107.4
20,000,000	3.0	8.5	14.7	19.0	23.4	30.3	42.3	67.5	94.1
35,000,000	2.3	6.6	11.3	14.7	18.1	23.4	32.7	52.1	72.7
50,000,000	1.9	5.6	9.6	12.5	15.4	19.9	27.7	44.2	61.7
75,000,000	1.6	4.6	8.0	10.3	12.7	16.5	23.0	36.7	51.1
90,000,000	1.5	4.3	7.3	9.5	11.7	15.2	21.1	33.7	47.0

TABLE C-3

STANDARD ERRORS OF AVERAGE ANNUAL PERSON MILES FOR TRAVEL DAY

(ALL ITEMS EXCEPT HOUSEHOLD CLUSTERING ITEMS* AND PURPOSE OF TRIP:
SOCIAL AND RECREATIONAL)

Estimated means

Base of means	2,000	4,000	6,000	8,000	10,000	12,000	15,000	20,000	30,000
100,000	1,742.0	3,894.5	6,235.1	8,706.9	11,281.0	13,939.8	18,060.9	25,220.8	40,378.6
150,000	1,391.9	3,111.9	4,982.2	6,957.3	9,014.1	11,138.6	14,431.6	20,152.8	32,264.6
200,000	1,187.1	2,654.0	4,249.1	5,933.6	7,687.8	9,499.6	12,308.1	17,187.4	27,517.1
300,000	948.6	2,120.7	3,395.3	4,741.2	6,142.9	7,590.7	9,834.9	13,733.7	21,987.7
500,000	715.0	1,598.6	2,559.4	3,574.0	4,630.6	5,721.9	7,413.6	10,352.5	16,574.4
700,000	593.6	1,327.1	2,124.6	2,966.9	3,844.1	4,750.0	6,154.3	8,594.1	13,759.2
1,000,000	487.3	1,089.4	1,744.2	2,435.6	3,155.6	3,899.4	5,052.2	7,055.0	11,295.1
1,500,000	389.4	870.5	1,393.7	1,946.2	2,521.5	3,115.8	4,037.0	5,637.3	9,025.4
2,000,000	332.1	742.4	1,188.6	1,659.8	2,150.5	2,657.3	3,443.0	4,807.9	7,697.4
3,000,000	265.3	593.2	949.8	1,326.3	1,718.4	2,123.4	2,751.1	3,841.7	6,150.6
5,000,000	200.0	447.2	715.9	999.7	1,295.3	1,600.6	2,073.8	2,895.9	4,636.4
7,000,000	166.0	371.2	594.3	829.9	1,075.3	1,328.7	1,721.6	2,404.0	3,848.9
10,000,000	136.3	304.7	487.9	681.3	882.7	1,090.8	1,413.3	1,973.5	3,159.6
15,000,000	108.9	243.5	389.9	544.4	705.3	871.6	1,129.3	1,576.9	2,524.7
20,000,000	92.9	207.7	332.5	464.3	601.6	743.3	963.1	1,344.9	2,153.2
35,000,000	68.2	152.4	244.0	340.7	441.4	545.4	706.7	986.8	1,579.9
50,000,000	56.0	125.1	200.3	279.7	362.3	447.7	580.1	810.1	1,296.9
75,000,000	44.7	100.0	160.0	223.5	289.5	357.8	463.5	647.3	1,036.3
100,000,000	38.1	85.2	136.5	190.6	246.9	305.1	395.3	552.1	883.8
150,000,000	30.5	68.1	109.1	152.3	197.3	243.8	315.9	441.1	706.2
200,000,000	26.0	58.1	93.0	129.9	168.3	207.9	269.4	376.2	602.3
230,000,000	24.1	53.8	86.1	120.2	155.8	192.5	249.4	348.2	557.5

* Household clustering items are items for which most or all members of
a household would be expected to have the same characteristic.
Examples are family income, race, or place of residence.

TABLE C-4

STANDARD ERRORS OF AVERAGE ANNUAL PERSON MILES FOR TRAVEL DAY

(HOUSEHOLD CLUSTERING ITEMS* AND ITEMS TABULATED BY PURPOSE OF TRIP: SOCIAL AND RECREATIONAL)

Base of means	Estimated means								
	2,000	4,000	6,000	8,000	10,000	12,000	15,000	20,000	30,000
100,000	5,557.7	12,501.7	20,087.1	28,121.7	36,507.6	45,184.6	58,658.7	82,121.3	131,948.7
150,000	4,250.9	9,562.1	15,363.9	21,509.2	27,923.3	34,560.0	44,865.8	62,811.5	100,922.5
200,000	3,514.6	7,905.9	12,702.9	17,783.8	23,087.0	28,574.2	37,095.1	51,932.5	83,442.8
300,000	2,688.2	6,046.9	9,715.9	13,602.2	17,658.4	21,855.3	28,372.6	39,721.2	63,822.2
500,000	1,917.8	4,313.9	6,931.3	9,703.8	12,597.4	15,591.6	20,241.0	28,337.0	45,530.6
700,000	1,535.3	3,453.5	5,549.9	7,768.4	10,085.0	12,481.9	16,204.0	22,685.4	36,449.9
1,000,000	1,212.8	2,728.0	4,385.3	6,136.5	7,966.5	9,859.9	12,800.2	17,920.0	28,793.0
1,500,000	927.6	2,086.6	3,352.6	4,693.6	6,093.2	7,541.5	9,790.3	13,706.3	22,022.7
2,000,000	766.9	1,725.2	2,771.9	3,880.7	5,037.9	6,235.3	8,094.7	11,332.4	18,208.4
3,000,000	586.6	1,319.5	2,120.2	2,968.2	3,853.3	4,769.1	6,191.3	8,667.7	13,926.9
5,000,000	418.5	941.3	1,512.5	2,117.5	2,748.9	3,402.3	4,416.9	6,183.5	9,935.4
7,000,000	335.0	753.6	1,210.9	1,695.2	2,200.7	2,723.7	3,535.9	4,950.3	7,953.9
10,000,000	264.6	595.3	956.5	1,339.1	1,738.4	2,151.6	2,793.2	3,910.4	6,283.0
15,000,000	202.4	455.3	731.6	1,024.2	1,329.6	1,645.7	2,136.4	2,990.9	4,805.7
20,000,000	167.4	376.5	604.9	846.8	1,099.3	1,360.6	1,766.4	2,472.9	3,973.3
35,000,000	115.6	260.0	417.8	584.9	759.4	939.9	1,220.1	1,708.2	2,744.6
50,000,000	91.3	205.4	330.1	462.1	599.9	742.4	963.8	1,349.3	2,168.0
75,000,000	69.8	157.1	252.4	353.4	458.8	567.9	737.2	1,032.1	1,658.3
100,000,000	57.7	129.9	208.7	292.2	379.3	469.5	609.5	853.3	1,371.0
150,000,000	44.2	99.4	159.6	223.5	290.1	359.1	466.2	652.7	1,048.7
200,000,000	36.5	82.1	132.0	184.8	239.9	296.9	385.4	539.6	867.0
230,000,000	33.3	74.9	120.3	168.5	218.7	270.7	351.4	492.0	790.5

*Household clustering items are items for which most or all members of a household would have the same characteristic. Examples are household income, place of residence, and occupation of the reference person.

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TABLE C-5

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR TRAVEL DAY

(HOUSEHOLD CLUSTERING ITEMS)

Estimated means

Base of means	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	128.3	205.2	270.2	328.3	382.0	432.2	479.8	547.3	611.0
150,000	107.3	171.7	226.0	274.7	319.5	361.5	401.4	457.8	511.1
200,000	94.6	151.3	199.1	242.0	281.5	318.5	353.6	403.4	450.3
300,000	79.1	126.5	166.6	202.4	235.5	266.5	295.8	337.4	376.7
500,000	63.2	101.0	133.0	161.7	188.0	212.8	236.2	269.5	300.8
700,000	54.5	87.1	114.7	139.4	162.2	183.5	203.7	232.3	259.4
1,000,000	46.6	74.5	98.0	119.1	138.6	156.8	174.1	198.6	221.7
1,500,000	38.9	62.3	82.0	99.7	115.9	131.2	145.6	166.1	185.5
2,000,000	34.3	54.9	72.2	87.8	102.1	115.6	128.3	146.4	163.4
3,000,000	28.7	45.9	60.4	73.4	85.4	96.7	107.3	122.4	136.7
5,000,000	22.9	36.7	48.3	58.7	68.2	77.2	85.7	97.8	109.2
7,000,000	19.8	31.6	41.6	50.6	58.8	66.6	73.9	84.3	94.1
10,000,000	16.9	27.0	35.6	43.2	50.3	56.9	63.2	72.1	80.4
15,000,000	14.1	22.6	29.8	36.2	42.1	47.6	52.8	60.3	67.3
20,000,000	12.4	19.9	26.2	31.9	37.1	41.9	46.6	53.1	59.3
35,000,000	9.7	15.6	20.5	24.9	29.0	32.8	36.4	41.5	46.3
50,000,000	8.3	13.3	17.5	21.3	24.8	28.0	31.1	35.5	39.6
75,000,000	7.0	11.1	14.6	17.8	20.7	23.4	26.0	29.7	33.1
100,000,000	6.1	9.8	12.9	15.7	18.2	20.6	22.9	26.1	29.2
150,000,000	5.1	8.2	10.8	13.1	15.3	17.3	19.2	21.9	24.4
200,000,000	4.5	7.2	9.5	11.6	13.4	15.2	16.9	19.3	21.5
230,000,000	4.2	6.8	8.9	10.9	12.6	14.3	15.9	18.1	20.2

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are place of residence, household income, and occupation of the reference person.

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TABLE C-6

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR TRAVEL DAY

(ALL ITEMS EXCEPT HOUSEHOLD CLUSTERING ITEMS,* PURPOSE OF TRIP: WORK RELATED OR SCHOOL/CHURCH, OR MODE: PUBLIC TRANSPORTATION)

Base of means	Estimated means								
	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	38.1	81.1	126.1	172.4	219.8	268.0	317.0	391.6	467.4
150,000	31.8	67.5	105.0	143.6	183.0	223.2	264.0	326.1	389.2
200,000	27.9	59.3	92.2	126.1	160.7	196.0	231.8	286.4	341.8
300,000	23.2	49.4	76.8	105.0	133.8	163.2	193.0	238.5	284.6
500,000	18.4	39.2	60.9	83.4	106.3	129.6	153.3	189.3	226.0
700,000	15.8	33.7	52.4	71.6	91.3	111.3	131.7	162.7	194.1
1,000,000	13.5	28.7	44.6	61.0	77.7	94.8	112.1	138.5	165.3
1,500,000	11.2	23.9	37.1	50.8	64.7	78.9	93.3	115.3	137.6
2,000,000	9.9	21.0	32.6	44.6	56.8	69.3	82.0	101.3	120.8
3,000,000	8.2	17.5	27.1	37.1	47.3	57.7	68.3	84.3	100.6
5,000,000	6.5	13.9	21.6	29.5	37.6	45.8	54.2	66.9	79.9
7,000,000	5.6	11.9	18.5	25.3	32.3	39.4	46.6	57.5	68.6
10,000,000	4.8	10.1	15.8	21.6	27.5	33.5	39.6	49.0	58.4
15,000,000	4.0	8.4	13.1	17.9	22.9	27.9	33.0	40.8	48.7
20,000,000	3.5	7.4	11.5	15.8	20.1	24.5	29.0	35.8	42.7
35,000,000	2.7	5.8	9.0	12.2	15.6	19.0	22.5	27.8	33.2
50,000,000	2.3	4.9	7.6	10.4	13.3	16.2	19.2	23.7	28.3
75,000,000	1.9	4.1	6.3	8.7	11.1	13.5	16.0	19.7	23.5
100,000,000	1.7	3.6	5.6	7.6	9.7	11.8	14.0	17.3	20.7
150,000,000	1.4	3.0	4.6	6.3	8.1	9.9	11.7	14.4	17.2
200,000,000	1.2	2.6	4.1	5.6	7.1	8.7	10.2	12.7	15.1
230,000,000	1.2	2.5	3.8	5.2	6.7	8.1	9.6	11.9	14.2

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are place of residence, household income, and occupation of the reference person.

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TABLE C-7

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR TRAVEL DAY

(ALL ITEMS PERTAINING TO PURPOSE OF TRIP:

WORK RELATED OR SCHOOL/CHURCH)

Estimated means

Base of means	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	33.0	60.0	85.2	109.2	132.5	155.1	177.1	209.5	241.1
150,000	27.5	50.1	71.0	91.1	110.5	129.3	147.7	174.7	201.0
200,000	24.2	44.0	62.5	80.1	97.1	113.7	129.9	153.6	176.7
300,000	20.2	36.7	52.1	66.8	81.0	94.8	108.3	128.1	147.4
500,000	16.0	29.2	41.4	53.1	64.4	75.4	86.1	101.9	117.2
700,000	13.8	25.1	35.6	45.7	55.4	64.8	74.1	87.6	100.8
1,000,000	11.8	21.4	30.4	38.9	47.2	55.3	63.1	74.7	85.9
1,500,000	9.8	17.8	25.3	32.5	39.4	46.1	52.6	62.3	71.6
2,000,000	8.6	15.7	22.3	28.5	34.6	40.5	46.3	54.7	63.0
3,000,000	7.2	13.1	18.6	23.8	28.9	33.8	38.6	45.6	52.5
5,000,000	5.7	10.4	14.8	18.9	23.0	26.9	30.7	36.3	41.8
7,000,000	4.9	8.9	12.7	16.3	19.7	23.1	26.4	31.2	35.9
10,000,000	4.2	7.6	10.8	13.9	16.8	19.7	22.5	26.6	30.6
15,000,000	3.5	6.4	9.0	11.6	14.0	16.4	18.8	22.2	25.5
20,000,000	3.1	5.6	7.9	10.2	12.3	14.4	16.5	19.5	22.4
35,000,000	2.4	4.4	6.2	7.9	9.6	11.2	12.8	15.2	17.5
50,000,000	2.0	3.7	5.3	6.7	8.2	9.6	10.9	12.9	14.9
75,000,000	1.7	3.1	4.4	5.6	6.8	8.0	9.1	10.8	12.4
100,000,000	1.5	2.7	3.9	4.9	6.0	7.0	8.0	9.5	10.9
150,000,000	1.2	2.3	3.2	4.1	5.0	5.9	6.7	7.9	9.1
200,000,000	1.1	2.0	2.8	3.6	4.4	5.1	5.9	7.0	8.0
230,000,000	1.0	1.9	2.7	3.4	4.1	4.8	5.5	6.5	7.5

TABLE C-8

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR TRAVEL DAY

(ALL ITEMS PERTAINING TO MODE OF TRANSPORTATION: PUBLIC TRANSPORTATION)

Base of means	Estimated means								
	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	13.5	36.2	64.3	96.7	132.7	172.0	214.0	281.9	355.0
150,000	11.3	30.1	53.5	80.5	110.5	143.2	178.2	234.7	295.6
200,000	9.9	26.4	47.0	70.7	97.1	125.7	156.5	206.1	259.6
300,000	8.2	22.0	39.1	58.9	80.8	104.7	130.3	171.6	216.2
500,000	6.5	17.5	31.1	46.7	64.2	83.1	103.4	136.3	171.6
700,000	5.6	15.0	26.7	40.2	55.1	71.4	88.9	117.1	147.4
1,000,000	4.8	12.8	22.7	34.2	46.9	60.8	75.6	99.6	125.5
1,500,000	4.0	10.6	18.9	28.5	39.1	50.6	63.0	83.0	104.5
2,000,000	3.5	9.3	16.6	25.0	34.3	44.4	55.3	72.9	91.8
3,000,000	2.9	7.8	13.8	20.8	28.6	37.0	46.1	60.7	76.4
5,000,000	2.3	6.2	11.0	16.5	22.7	29.4	36.6	48.2	60.7
7,000,000	2.0	5.3	9.4	14.2	19.5	25.2	31.4	41.4	52.1
10,000,000	1.7	4.5	8.0	12.1	16.6	21.5	26.7	35.2	44.4
15,000,000	1.4	3.8	6.7	10.1	13.8	17.9	22.3	29.3	36.9
20,000,000	1.2	3.3	5.9	8.8	12.1	15.7	19.5	25.8	32.4
35,000,000	1.0	2.6	4.6	6.9	9.4	12.2	15.2	20.0	25.2
50,000,000	0.8	2.2	3.9	5.8	8.0	10.4	12.9	17.0	21.4
75,000,000	0.7	1.8	3.2	4.9	6.7	8.6	10.8	14.2	17.9
100,000,000	0.6	1.6	2.8	4.3	5.9	7.6	9.5	12.4	15.7
150,000,000	0.5	1.3	2.4	3.6	4.9	6.3	7.9	10.4	13.1
200,000,000	0.4	1.2	2.1	3.1	4.3	5.6	6.9	9.1	11.5
230,000,000	0.4	1.1	1.9	2.9	4.0	5.2	6.5	8.5	10.8

TABLE C-9

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE MILES FOR TRAVEL PERIOD

Estimated means

Base of means	500	1,000	2,000	3,000	4,000	6,000	10,000	15,000	25,000
100,000	605.9	934.8	1,442.1	1,858.4	2,224.8	2,867.1	3,946.4	5,085.7	7,000.2
150,000	525.1	810.1	1,249.8	1,610.5	1,928.1	2,484.6	3,420.0	4,407.3	6,066.4
200,000	474.4	731.8	1,129.0	1,455.0	1,741.8	2,244.6	3,089.6	3,981.5	5,480.4
300,000	411.1	634.2	978.4	1,260.9	1,509.5	1,945.2	2,677.5	3,450.4	4,749.4
500,000	343.3	529.5	816.9	1,052.8	1,260.3	1,624.2	2,235.6	2,880.9	3,965.5
700,000	304.8	470.2	725.4	934.8	1,119.1	1,442.2	1,985.1	2,558.2	3,521.3
1,000,000	268.7	414.6	639.6	824.2	986.7	1,271.5	1,750.2	2,255.5	3,104.6
1,500,000	232.9	359.3	554.3	714.3	855.1	1,101.9	1,516.8	1,954.6	2,690.4
2,000,000	210.4	324.6	500.7	645.3	772.5	995.5	1,370.2	1,765.8	2,430.6
3,000,000	182.3	281.3	433.9	559.2	669.4	862.7	1,187.5	1,530.2	2,106.3
5,000,000	152.2	234.9	362.5	466.9	559.0	720.3	991.5	1,277.7	1,758.7
7,000,000	135.2	208.5	321.7	414.6	496.3	639.6	880.4	1,134.6	1,561.7
10,000,000	119.2	183.9	283.7	365.5	437.6	563.9	776.2	1,000.3	1,376.9
15,000,000	103.3	159.3	245.8	316.8	379.2	488.7	672.7	866.9	1,193.2
20,000,000	93.3	143.9	222.1	286.2	342.6	441.5	607.7	783.1	1,077.9
35,000,000	76.6	118.1	182.3	234.9	281.2	362.3	498.7	642.7	884.7
50,000,000	67.5	104.2	160.7	207.1	247.9	319.5	439.7	566.7	780.0
75,000,000	58.5	90.3	139.2	179.4	214.8	276.8	381.1	491.1	675.9
90,000,000	54.9	84.6	130.6	168.3	201.4	259.6	357.3	460.4	633.8

TABLE C-10

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE TRIPS FOR TRAVEL PERIOD

Estimated means

Base of means	2	6	10	12	15	25	50	100	150
100,000	3.6	6.4	8.4	9.3	10.4	13.6	19.6	28.2	34.9
150,000	3.0	5.4	7.1	7.8	8.8	11.4	16.5	23.7	29.4
200,000	2.7	4.8	6.3	6.9	7.7	10.1	14.6	21.0	26.0
300,000	2.3	4.0	5.3	5.8	6.5	8.5	12.3	17.7	21.9
500,000	1.8	3.2	4.2	4.7	5.2	6.9	9.9	14.2	17.6
700,000	1.6	2.8	3.7	4.0	4.5	5.9	8.5	12.3	15.2
1,000,000	1.4	2.4	3.1	3.5	3.9	5.1	7.3	10.6	13.1
1,500,000	1.1	2.0	2.6	2.9	3.3	4.3	6.2	8.9	11.0
2,000,000	1.0	1.8	2.3	2.6	2.9	3.8	5.5	7.9	9.7
3,000,000	0.8	1.5	2.0	2.2	2.4	3.2	4.6	6.6	8.2
5,000,000	0.7	1.2	1.6	1.7	2.0	2.6	3.7	5.3	6.6
7,000,000	0.6	1.0	1.4	1.5	1.7	2.2	3.2	4.6	5.7
10,000,000	0.5	0.9	1.2	1.3	1.5	1.9	2.7	4.0	4.9
15,000,000	0.4	0.8	1.0	1.1	1.2	1.6	2.3	3.3	4.1
20,000,000	0.4	0.7	0.9	1.0	1.1	1.4	2.0	2.9	3.6
35,000,000	0.3	0.5	0.7	0.8	0.9	1.1	1.6	2.3	2.9
50,000,000	0.3	0.5	0.6	0.7	0.7	1.0	1.4	2.0	2.5
75,000,000	0.2	0.4	0.5	0.5	0.6	0.8	1.2	1.7	2.1
90,000,000	0.2	0.4	0.5	0.5	0.6	0.7	1.1	1.6	1.9

TABLE C-11

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE MILES FOR COMBINED ESTIMATES

Estimated means

Base of means	3,000	6,000	9,000	12,000	15,000	20,000	25,000	30,000	40,000
100,000	2,557.4	3,998.4	5,193.1	6,251.4	7,218.8	8,690.0	10,034.7	11,286.5	13,586.7
150,000	2,107.9	3,295.7	4,280.4	5,152.8	5,950.1	7,162.8	8,271.2	9,302.9	11,198.9
200,000	1,837.8	2,873.4	3,731.9	4,492.5	5,187.7	6,244.9	7,211.3	8,110.8	9,763.8
300,000	1,514.8	2,368.4	3,076.0	3,703.0	4,276.0	5,147.4	5,943.9	6,685.4	8,047.9
500,000	1,187.4	1,856.5	2,411.3	2,902.7	3,351.8	4,035.0	4,659.3	5,240.5	6,308.6
700,000	1,011.5	1,581.4	2,053.9	2,472.5	2,855.1	3,437.0	3,968.9	4,464.0	5,373.7
1,000,000	853.3	1,334.2	1,732.8	2,086.0	2,408.7	2,899.7	3,348.3	3,766.0	4,533.6
1,500,000	703.4	1,099.7	1,428.3	1,719.4	1,985.4	2,390.1	2,759.9	3,104.2	3,736.8
2,000,000	613.2	958.8	1,245.2	1,499.0	1,731.0	2,083.8	2,406.2	2,706.4	3,258.0
3,000,000	505.5	790.3	1,026.4	1,235.6	1,426.8	1,717.6	1,983.3	2,230.8	2,685.4
5,000,000	396.2	619.5	804.6	968.6	1,118.4	1,346.4	1,554.7	1,748.6	2,105.0
7,000,000	337.5	527.7	685.4	825.0	952.7	1,146.9	1,324.3	1,489.5	1,793.1
10,000,000	284.7	445.2	578.2	696.0	803.7	967.5	1,117.3	1,256.6	1,512.7
15,000,000	234.7	366.9	476.6	573.7	662.5	797.5	920.9	1,035.8	1,246.9
20,000,000	204.6	319.9	415.5	500.2	577.6	695.3	802.9	903.1	1,087.1
35,000,000	156.7	245.0	318.2	383.1	442.4	532.5	614.9	691.6	832.6
50,000,000	132.2	206.7	268.5	323.2	373.2	449.3	518.8	583.5	702.4
75,000,000	109.0	170.4	221.3	266.4	307.6	370.3	427.6	480.9	579.0
90,000,000	99.9	156.2	202.9	244.2	282.0	339.5	392.0	440.9	530.8

TABLE C-12

STANDARD ERRORS OF AVERAGE ANNUAL VEHICLE TRIPS FOR COMBINED ESTIMATES

Estimated means

Base of means	200	500	800	1,000	1,200	1,500	2,000	3,000	4,000
100,000	76.8	164.5	243.0	292.5	340.3	409.6	520.2	728.6	925.2
150,000	63.4	135.8	200.6	241.4	290.9	338.1	429.4	601.4	763.7
200,000	55.3	118.5	175.1	210.7	245.2	295.1	374.8	524.9	666.5
300,000	45.7	97.8	144.5	173.9	202.4	243.6	309.4	433.2	550.2
500,000	35.9	76.8	113.5	136.6	158.9	191.3	242.9	340.2	432.1
700,000	30.6	65.5	96.8	116.5	135.5	163.1	207.2	290.2	368.5
1,000,000	25.8	55.3	81.8	98.4	114.5	137.8	175.0	245.1	311.3
1,500,000	21.3	45.7	67.5	81.2	94.5	113.8	144.5	202.3	256.9
2,000,000	18.6	39.9	58.9	70.9	82.5	99.3	126.1	176.6	224.2
3,000,000	15.4	32.9	48.6	58.5	68.1	81.9	104.1	145.7	185.1
5,000,000	12.1	25.8	38.2	46.0	53.5	64.4	81.7	114.5	145.4
7,000,000	10.3	22.0	32.6	39.2	45.6	54.9	69.7	97.6	124.0
10,000,000	8.7	18.6	27.5	33.1	38.5	46.4	58.9	82.5	104.7
15,000,000	7.2	15.4	22.7	27.3	31.8	38.3	48.6	68.1	86.4
20,000,000	6.3	13.4	19.8	23.8	27.7	33.4	42.4	59.4	75.4
35,000,000	4.8	10.3	15.2	18.3	21.3	25.6	32.5	45.6	57.9
50,000,000	4.1	8.7	12.8	15.5	18.0	21.7	27.5	38.5	48.9
75,000,000	3.4	7.2	10.6	12.8	14.8	17.9	22.7	31.8	40.4
90,000,000	3.1	6.6	9.7	11.7	13.6	16.4	20.8	29.2	37.0

TABLE C-13

STANDARD ERRORS OF AVERAGE ANNUAL PERSON MILES FOR TRAVEL PERIOD

Estimated means

Base of means	500	1,000	2,000	3,000	4,000	8,000	16,000	32,000	50,000
100,000	1,928.4	2,845.4	4,198.3	5,271.0	6,194.5	9,139.9	13,485.7	19,897.9	25,560.9
150,000	1,594.2	2,352.2	3,470.6	4,357.4	5,120.8	7,555.6	11,148.2	16,449.0	21,130.4
200,000	1,392.8	2,055.0	3,032.2	3,806.9	4,473.9	6,601.1	9,739.8	14,370.9	18,460.9
300,000	1,151.4	1,698.8	2,506.6	3,147.0	3,698.4	5,456.9	8,051.6	11,880.0	15,261.1
500,000	905.9	1,336.6	1,972.1	2,476.0	2,909.8	4,293.4	6,334.8	9,346.9	12,007.0
700,000	773.5	1,141.3	1,684.0	2,114.2	2,484.6	3,666.0	5,409.2	7,981.1	10,252.6
1,000,000	654.2	965.3	1,424.3	1,788.3	2,101.6	3,100.8	4,575.2	6,750.6	8,671.9
1,500,000	540.8	798.0	1,177.4	1,478.3	1,737.3	2,563.4	3,782.2	5,580.5	7,168.8
2,000,000	472.5	697.2	1,028.7	1,291.5	1,517.8	2,239.5	3,304.4	4,875.5	6,263.1
3,000,000	390.6	576.3	850.4	1,067.7	1,254.7	1,851.3	2,731.6	4,030.4	5,177.5
5,000,000	307.3	453.5	669.1	840.0	987.2	1,456.6	2,149.2	3,171.0	4,073.5
7,000,000	262.4	387.2	571.3	717.3	842.9	1,243.8	1,835.1	2,707.7	3,478.3
10,000,000	222.0	327.5	483.2	606.7	713.0	1,052.0	1,552.2	2,290.2	2,942.0
15,000,000	183.5	270.7	399.5	501.5	589.4	869.7	1,283.2	1,893.3	2,432.1
20,000,000	160.3	236.5	349.0	438.2	514.9	759.8	1,121.0	1,654.1	2,124.8
35,000,000	123.3	181.9	268.4	336.9	396.0	584.2	862.0	1,271.9	1,633.9
50,000,000	104.3	153.8	227.0	285.0	334.9	494.2	729.1	1,075.8	1,382.0
75,000,000	86.2	127.2	187.6	235.6	276.9	408.5	602.7	889.3	1,142.5
100,000,000	75.3	111.1	163.9	205.8	241.9	356.9	526.6	777.0	998.1
150,000,000	62.3	91.9	135.5	170.2	200.0	295.0	435.3	642.3	825.1
200,000,000	54.4	80.2	118.4	148.7	174.7	257.8	380.3	561.2	720.9
230,000,000	50.9	75.2	110.9	139.2	163.6	241.4	356.2	525.5	675.1

TABLE C-14

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR TRAVEL PERIOD

Estimated means

Base of means	2	4	6	10	14	20	40	60	100
100,000	13.9	17.0	19.2	22.4	24.8	27.5	33.9	39.2	44.5
150,000	10.8	13.3	15.0	17.5	19.3	21.5	26.4	29.8	34.7
200,000	9.1	11.1	12.6	14.6	16.2	18.0	22.1	25.0	29.1
300,000	7.1	8.7	9.8	11.4	12.6	14.0	17.3	19.5	22.7
500,000	5.2	6.4	7.2	8.4	9.2	10.3	12.6	14.3	16.6
700,000	4.2	5.2	5.8	6.8	7.5	8.4	10.3	11.6	13.5
1,000,000	3.4	4.2	4.7	5.5	6.0	6.7	8.3	9.3	10.9
1,500,000	2.6	3.2	3.7	4.3	4.7	5.2	6.4	7.3	8.5
2,000,000	2.2	2.7	3.1	3.6	4.0	4.4	5.4	6.1	7.1
3,000,000	1.7	2.1	2.4	2.8	3.1	3.4	4.2	4.8	5.5
5,000,000	1.3	1.6	1.8	2.0	2.3	2.5	3.1	3.5	4.0
7,000,000	1.0	1.3	1.4	1.7	1.8	2.0	2.5	2.8	3.3
10,000,000	0.8	1.0	1.1	1.3	1.5	1.6	2.0	2.3	2.6
15,000,000	0.6	0.8	0.9	1.0	1.1	1.3	1.6	1.8	2.1
20,000,000	0.5	0.7	0.7	0.9	1.0	1.1	1.3	1.5	1.7
35,000,000	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.2
50,000,000	0.3	0.4	0.4	0.5	0.5	0.6	0.8	0.8	1.0
75,000,000	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.7	0.8
100,000,000	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6
150,000,000	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5
200,000,000	0.13	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4
230,000,000	0.12	0.15		0.2	0.2	0.2	0.3	0.3	0.4

TABLE C-15

STANDARD ERRORS OF AVERAGE ANNUAL PER ON MILES FOR COMBINED ESTIMATES

Estimated means

Base of means	2,000	4,000	6,000	8,000	10,000	12,000	15,000	20,000	30,000
100,000	2,038.3	3,797.3	5,464.4	7,074.4	8,643.3	10,180.2	12,437.8	16,102.4	23,171.6
150,000	1,687.7	3,144.1	4,524.5	5,857.5	7,156.5	8,429.0	10,298.3	13,332.6	19,185.7
200,000	1,476.1	2,750.0	3,957.3	5,123.3	6,259.5	7,372.5	9,007.5	11,661.4	16,780.9
300,000	1,222.2	2,277.0	3,276.6	4,242.0	5,182.8	6,104.3	7,458.1	9,655.5	13,894.3
500,000	963.5	1,795.1	2,583.1	3,344.2	4,085.9	4,812.4	5,879.6	7,611.9	10,953.6
700,000	823.8	1,534.8	2,208.6	2,859.3	3,493.4	4,114.6	5,027.1	6,508.3	9,365.5
1,000,000	697.8	1,300.0	1,870.7	2,421.9	2,959.0	3,485.1	4,258.0	5,512.6	7,932.6
1,500,000	577.8	1,076.4	1,548.9	2,005.3	2,450.0	2,885.6	3,525.6	4,564.3	6,568.1
2,000,000	505.3	941.5	1,354.8	1,753.9	2,142.9	2,523.9	3,083.6	3,992.2	5,744.8
3,000,000	418.4	779.5	1,121.7	1,452.2	1,774.3	2,089.8	2,553.2	3,305.5	4,756.6
5,000,000	329.9	614.5	884.3	1,144.9	1,398.8	1,647.5	2,012.8	2,605.9	3,749.9
7,000,000	282.0	525.4	756.1	978.9	1,196.0	1,408.6	1,721.0	2,228.1	3,206.2
10,000,000	238.9	445.0	640.4	829.1	1,013.0	1,193.1	1,457.7	1,887.2	2,715.7
15,000,000	197.8	368.5	530.3	686.5	838.7	987.9	1,207.0	1,562.6	2,249.5
20,000,000	173.0	322.3	463.8	600.4	733.6	864.0	1,055.7	1,366.7	1,966.7
35,000,000	133.3	248.4	357.4	462.7	565.4	665.9	813.5	1,053.2	1,515.6
50,000,000	112.9	210.4	302.7	391.9	478.9	564.0	689.1	892.1	1,283.8
75,000,000	93.5	174.2	250.7	324.5	396.5	467.0	570.5	738.7	1,062.9
100,000,000	81.8	152.4	219.2	283.8	346.8	408.5	499.0	646.1	929.7
150,000,000	67.7	126.1	181.5	235.0	287.1	338.2	413.2	534.9	769.8
200,000,000	59.2	110.3	158.8	205.6	251.1	295.8	361.4	467.9	673.3
230,000,000	55.5	103.4	148.8	192.6	235.3	277.2	338.6	438.4	630.9

TABLE C-16

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR COMBINED ESTIMATES

(HOUSEHOLD CLUSTERING ITEMS*)

Base of means	Estimated means								
	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	71.5	142.9	214.4	285.9	357.3	428.8	500.3	607.5	714.7
150,000	60.1	120.2	180.3	240.4	300.4	360.5	420.6	510.7	600.9
200,000	53.1	106.3	159.4	212.5	265.6	318.8	371.9	451.6	531.3
300,000	44.7	89.3	134.0	178.7	223.3	268.0	312.7	379.7	446.7
500,000	35.9	71.8	107.7	143.6	179.5	215.4	251.3	305.2	359.0
700,000	31.1	62.2	93.3	124.3	155.4	186.5	217.6	264.2	310.9
1,000,000	26.7	53.4	80.1	106.8	133.4	160.1	186.8	226.8	266.9
1,500,000	22.4	44.9	67.3	89.8	112.2	134.6	157.1	190.7	224.4
2,000,000	19.8	39.7	59.5	79.4	99.2	119.0	138.9	168.6	198.4
3,000,000	16.7	33.4	50.0	66.7	83.4	100.1	116.8	141.8	166.8
5,000,000	13.4	26.8	40.2	53.6	67.0	80.4	93.8	113.9	134.1
7,000,000	11.6	23.2	34.8	46.4	58.0	69.7	81.3	98.7	116.1
10,000,000	10.0	19.9	29.9	39.9	49.8	59.8	69.8	84.7	99.7
15,000,000	8.4	16.8	25.1	33.5	41.9	50.3	58.7	71.2	83.8
20,000,000	7.4	14.8	22.2	29.6	37.0	44.5	51.9	63.0	74.1
35,000,000	5.8	11.7	17.5	23.3	29.2	35.0	40.8	49.6	58.3
50,000,000	5.0	10.0	15.0	20.0	25.0	30.0	35.0	42.6	50.1
75,000,000	4.2	8.4	12.6	16.8	21.0	25.3	29.5	35.8	42.1
100,000,000	3.7	7.4	11.2	14.9	18.6	22.3	26.1	31.6	37.2
150,000,000	3.1	6.3	9.4	12.5	15.6	18.8	21.9	26.6	31.3
200,000,000	2.8	5.5	8.3	11.1	13.8	16.6	19.4	23.5	27.7
230,000,000	2.6	5.2	7.8	10.4	13.0	15.6	18.2	22.2	26.1

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are place of residence, household income, and occupation of the reference person.

TABLE C-17

STANDARD ERRORS OF AVERAGE ANNUAL PERSON TRIPS FOR COMBINED ESTIMATES

(ALL ITEMS EXCEPT HOUSEHOLD CLUSTERING ITEMS*)

Estimated means

Base of means	200	400	600	800	1,000	1,200	1,400	1,700	2,000
100,000	22.7	46.1	69.6	93.4	117.2	141.2	165.2	201.4	237.7
150,000	19.7	40.0	60.5	81.1	101.8	122.6	143.5	174.9	206.5
200,000	17.8	36.2	54.7	73.4	92.1	111.0	129.9	158.3	186.8
300,000	15.5	31.4	47.5	63.7	80.0	96.4	112.8	137.5	162.3
500,000	13.0	26.3	39.8	53.4	67.0	80.7	94.4	115.1	135.9
700,000	11.5	23.4	35.4	47.5	59.6	71.8	84.0	102.4	120.9
1,000,000	10.2	20.7	31.3	41.9	52.7	63.4	74.2	90.5	106.8
1,500,000	8.9	18.0	27.2	36.4	45.7	55.1	64.5	78.6	92.8
2,000,000	8.0	16.3	24.6	33.0	41.4	49.9	58.3	71.1	83.9
3,000,000	7.0	14.1	21.4	28.6	36.0	43.3	50.7	61.8	72.9
5,000,000	5.8	11.8	17.9	24.0	30.1	36.3	42.4	51.7	61.0
7,000,000	5.2	10.5	15.9	21.3	26.8	32.3	37.7	46.0	54.3
10,000,000	4.6	9.3	14.1	18.8	23.7	28.5	33.3	40.6	48.0
15,000,000	4.0	8.1	12.2	16.4	20.6	24.7	29.0	35.3	41.7
20,000,000	3.6	7.3	11.0	14.8	18.6	22.4	26.2	31.9	37.7
35,000,000	3.0	6.0	9.1	12.2	15.3	18.4	21.6	26.3	31.0
50,000,000	2.6	5.3	8.0	10.8	13.5	16.3	19.1	23.2	27.4
75,000,000	2.3	4.6	7.0	9.4	11.7	14.1	16.6	20.2	23.8
100,000,000	2.1	4.2	6.3	8.5	10.6	12.8	15.0	18.3	21.6
150,000,000	1.8	3.6	5.5	7.4	9.2	11.1	13.0	15.9	18.7
200,000,000	1.6	3.3	5.0	6.7	8.4	10.1	11.8	14.4	16.9
230,000,000	1.5	3.1	4.7	6.3	8.0	9.6	11.2	13.7	16.1

*Household clustering items are items for which most or all members of a household would be expected to have the same characteristic. Examples are place of residence, household income, and occupation of the reference person.