# TRIP DIARY SURVEY ANALYSIS

prepared for the

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**This report was prepared for the**

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**by Tranplan Associates**

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# 1.0 INTRODUCTION

## 1.1 Trip Diary Survey

The Trip Diary Survey (TDS) used a mail-out, mail-back, self-administered questionnaire to collect socio-demographic and travel behaviour information for a stratified sample of Greater Toronto Area (GTA) households. TDS respondents were asked to provide personal socio-demographic data along with a record of all their travel during the 24-hour period for a preselected weekday. This information was collected for 15 weekdays between February 19, 1987 and March 11, 1987. The TDS survey form is presented in Appendix A, along with a brief history of the TDS Survey.

The TDS sample was selected from those households that had responded to the Transportation Tomorrow Survey (TTS), a travel habits survey of 61,000 GTA households carried out between September and December, 1986, using telephone interviews.

The Trip Diary Survey had three main objectives:

1. To provide data which could be used to validate TTS trip generation estimates.

2. To provide additional socio-economic and travel characteristics data for the Greater Toronto Area (GTA) that could not be collected in the TTS.

3. To provide information which would allow the MTO to assess the effectiveness of mail-back and telephone survey techniques.

Tranplan Associates was engaged by the Ministry of Transportation, Ontario (MTO) to undertake the Trip Diary Survey Analysis project in March 1989. This project was to provide the Ministry with a "clean" TDS data file, to validate both the TTS and TDS data, and to assess the effectiveness of mail-back and telephone survey methods.

## 1.2 This Report

This final report of the Trip Diary Survey project documents the TDS study process, describes the clean Trip Diary Survey (TDS) data file, and assesses the strengths and weaknesses of the data in relation to the original objectives of the survey. The report documents the validation of TTS telephone survey results, based on the analysis of the Trip Diary, evaluates the "Trip Diary" and Telephone survey methods, and presents recommendations for the design of future GTA transportation surveys.

The report in organized as follows:

Chapter 2, Exective Summary, outlines the study process and presents the detailed findings and conclusions discussed in Chapters 4 to 7;

Chapter 3 describes the TDS data files and Trip Diary Analysis Study process;

Chapter 4 documents the TTS validation exercise, which assessed Transportation Tomorrow Survey travel characteristics based on the comparison of matched TDS/TTS persons;

Chapter 5 describes the TDS validation exercise, which compared TDS-based estimates of demographic, socio-economic and travel characteristics with independent estimates in order to assess the validity of the trip diary data, and considered sampling and non-sampling errors (i.e., non-response bias);

Chapter 6 considers the potential research and planning applications of the TDS data base and presents various special tabulations of the trip diary data; and

Chapter 7, "Lessons for Future GTA Travel Surveys", assesses the applicability of both telephone and mail-back "diary" surveys and what changes should be considered in the design of future GTA travel surveys.

## 2.0 EXECUTIVE SUMMARY

### 2.1 INTRODUCTION

The Executive Summary provides an overview of the study process (Chapter 3) and summarizes the findings and conclusions of chapters 4 through 7.

### 2.2 TRIP DIARY SURVEY ANALYSIS PROCESS

Data Clean-Up Process

The clean-up process corrected data entry and logical errors found in TDS Household, Person and Trip files provided by MTO. A series of range and logic checks were used to identify invalid personal and trip information which were then corrected by referring back to the original TDS survey forms. The clean-up process added a total of 236 households to the TDS household file.

The TDS Version 1.0 data base contains 2,868 household records, 6,500 person records and 17,301 trip records.

Matching of TDS and TTS Person Records

In comparing TDS and TTS household and Person records, it was found that a total of 640 persons were missing in the TDS Version 1.0 person and trip files due to non-response. Estimates of GTA household characteristics based on the Version 1.0 data base would be inaccurate. In order to overcome this problem and to validate TTS trip generation estimates, it was necessary to develop a special data base containing only complete and matched households and related person and trip records.

The TDS matched and complete subset, TDS Version 1.1, contains data for 1948 households. This data base was developed using restrictive matching criteria (exact match on sex and age within 4 years). Appendix B documents the procedures and assumptions employed in matching TDS and TTS person records.

Development of Sample Weights

The TDS employed a stratified sample design. From a total sample of 6,010 households, 1,948 matched and complete TDS households distributed over 96 strata or cells, were selected for inclusion in TDS Version 1.1. The cell-specific weights were developed for the Version 1.1 data base by dividing the estimated number of households per strata by the number of valid returns in each strata.

## 2.3 TTS VALIDATION

An important purpose of the TDS survey was to provide information which could be used to validate the larger TTS telephone survey. The trip diary format, which allowed respondents to report their own travel behaviour, was expected to provide more accurate data on trip making than the telephone survey, which relied on one member of a household to report on the travel behaviour of all residents. Chapter 4 documents the TTS validation exercise which compared travel behaviour for matched TTS and TDS persons. The major findings of the TTS validation are presented in the following sections.

Home-Based Work Travel

TTS and TDS reported trip rates are within 1%, overall for full-time employees, with TTS results being marginally higher (1.52 vs. 1.51) and only minimal differences between TTS respondents and non-respondents (Exhibit 4.1).

Home-Based School Travel

The TDS diary survey reported 1.84 home-based school trips per day per full-time student whereas the same persons reponding to the TTS reported 1.74 trips per day (see Exhibit 4.2). While TTS and TDS estimates of school trip rates are within 5% of each other, TTS respondents reported more trips in the telephone survey than in the TDS trip diary survey, probably because of seasonal factors. TTS non-respondents reported marginally higher trip rates in the TDS survey, apparently because they included mid-day lunch trips, which were not reported in the TTS survey.

Respondent and Non-respondent Differences in Other Trip Rates

For respondents, TDS estimates of total trips are generally higher than comparable TTS estimates. TTS non-respondents in all categories reported substantially higher total trip rates in the TDS than in the TTS survey. This is reflected in the total persons trip rates between the two surveys (Exhibit 4.3 to 4.5).

TDS/TTS trip rate comparisons for other home-based trips confirm that overall the TDS reported higher "other home-based" trip rates than the TTS survey. However, seniors reported more "home-based other trips" in the TTS than the TDS, for total persons, respondents and non-respondents.

The TDS "non-home based" trip rates are consistently higher than the comparable TTS rates for both respondent categories. Whereas respondents appear to understate non-home based trips by approximately 30 per cent, non-respondents understate these trips by approximately 60 per cent.

Travel By Time Period

The major differences between the two surveys apply to "other home based" and "non-home based" travel. The TDS provides higher estimates of mid-day travel than the TTS, primarily due to higher non-home based and other home-based trip rates. However, the TDS estimate for the PM peak is somewhat lower and less peaked than the comparable TTS estimate. The TDS presents a more complex (and realistic) picture of PM peak period travel than the TTS, with fewer work-to-home trips and more non-home based and other home based "linked" trips.

## 2.4 TDS VALIDATION

The Trip Diary Analysis project also reviewed the TDS Version 1.1 data to assess its accuracy, compared to other data sources, and to evaluate the usefulness of the data for the intended planning and research applications. The TDS validation exercise is documented in Chapter 5. The principal findings of the TDS validation exercise are presented below.

Demographic/Socio-economic Analysis (Exhibit 5.1 To 5.9)

Based on the analysis of household and demographic characteristics for the TDS survey, compared to 1986 Census and TTS, great care should be taken in using TDS based estimates of persons or trips by Region or any smaller area. The under-representation of larger households and the boundary problems associated with the use of postal codes in defining the sample strata, lead to significant estimation errors for the Regional Municipalities outside Metro. The population count for Metropolitan Toronto is reasonable.

Based on our analysis of age structure characteristics and labour force participation rates, the TDS results are representative and provide relatively accurate estimates of these characteristics. However, the TDS sample tends to be biased in terms of income and occupational characteristics, with higher income groups being over-represented. These socio-economic biases would be expected to influence reported travel behaviour.

It appears that lower income residents are under-represented in the Trip Diary sample. At the same time, Professional, Technical and Managerial occupations are over-represented and lower status occupations, such as clerical and service are under-represented. However, all income groups appear to be well represented in the TDS sample and the Diary appears to give an accurate indication of the relative income levels of the residents of Metropolitan Toronto and the other Regions.

Travel Characteristics Analysis (Exhibit 5.10 To 5.16)

TDS estimates of the number of trips attracted to each region which begin in that region are accurate (within 1%) for Metro, Durham and Hamilton-Wentworth, but low for the other Regional Municipalities. It appears that Durham and York residents who work in Metro were more likely to respond to the TDS trip diary survey than persons who work elsewhere. The TDS results also appear to overstate the work travel orientation of Metro residents to York and Halton.

Despite differences in total trip rates, between the TDS and TTS surveys, with the TDS diary yielding more trips in total, the regional travel patterns appear to be very similar (more similar than the work travel data). The higher estimates of "other home-based" and "non-home based" trip making found in the TDS do not appear to affect the distribution of total travel between the Regions.

Overall GTA modal split estimates are generally similar for the two surveys, with home-based work estimates being within 1% for all modal categories except for auto passengers (which are 8.3% of work trips for TDS versus 9.7% for TTS). Auto mode shares estimated on the basis of TDS data are within 3 percentage points for all purposes while transit mode shares are within 1% for work, shopping/personal business, social recreation and non-home based travel.

## 2.5 ASSESSMENT OF TDS FOR RESEARCH AND PLANNING APPLICATIONS

The TDS survey was designed to provide additional socio-economic and travel characteristics data which could not be collected in the TTS telephone survey. Despite the problems identified in the TDS Validation, the TDS data appear to be ideal for disaggreagate analysis of trip generation and mode split issues.

Work Trip Generation (Exhibit 6.1 To 6.4)

There are definite relationships between occupation and land use, occupation and normal work week and normal work week and land use (at place of work). Regular hours are most prevalent in clerical and professional occupations and, therefore, the same is true for office buildings. Service activities generate fewer work trips on the average weekday, because of an increased incidence of part-time and weekend employment.

Peak Hour Travel Demands (Exhibit 6.5 To 6.9)

It was found that different occupation groups tend to have characteristic start-times and that these effects can be seen for different land uses. For example, compared to the average arrival times for all occupations, factory, construction and transportation

workers arrive earlier. Sales and service workers arrive later, and have distinctive afternoon peaks associated with evening work. Clerical workers, a large group, appear to dominate the AM peak hour. Work and school travel dominates the AM peak hour, but school travel is much more peaked at the Metro and GTA level than for the Central Area during this period.

Modal Choice Behaviour (Exhibit 6.10 to 6.13)

Our analysis of the TDS data confirmed the relationship between occupation and transit use, and illustrated the relatively high transit use by clerical and service occupations within Metro.

The analysis of the TDS data suggests a logical relationship between income and transit use which is evident for home-based work, home-based other and non home-based trips to destinations other than the Central Area. The TDS data also illustrates the role of parking price in explaining mode choice behaviour.

In conclusion, the TDS data base appears to provide an excellent basis for exploring the relationships between land use and trip generation and improving current trip generation and mode choice models.

## 2.6 LESSONS FOR FUTURE GTA TRAVEL SURVEYS

The final objective of TDS was to evaluate the strengths and weaknesses of the two survey methods and assess how the Trip Diary Survey could have been improved, considering design, conduct, coding and data entry/clean-up.

Strengths and Weaknesses of Telephone and Diary Methods

Both telephone and mail-back surveys have characteristic strengths and weaknesses. Self-reporting mail-back surveys which ask for detailed travel data, such as the TDS, are more difficult to respond to than telephone surveys for persons who are not fluent in English and are not used to filling out forms. Therefore, mail-back surveys can under-represent lower income groups and non-English speakers. Also, self-reporting questionnaires, no matter how carefully designed, are subject to respondent errors and omissions.

Telephone surveys appear to be relatively expensive, compared to mail-back surveys, given the need to employ interviewers to call sample households and incur substantial overhead costs. However, the cost differential depends on the nature of the follow-up procedures followed in the two surveys and a full accounting of the coding and editing costs.

## Survey Design Issues

The TDS was designed to up-date TTS travel information and collect additional data for TTS respondents. In retrospect, the cost and time-savings associated with not having a household record attached to the questionnaire (it was assumed that households would not change significantly between the two surveys) appears to have created more costly response and editing/clean-up problems. Generally, the TDS survey form appears to have worked quite well.

## Sample Design Issues

The TDS stratified sample design is discussed at length in this report. Because this design failed to ensure that an adequate number of samples were drawn from each of the 96 strata, the benefits of stratification were not achieved. We feel that the weighting procedure which was employed compensates for the sample design but does not over-come the sample allocation problems inherent in the use of postal codes. The absolute estimates of households, population and trip making are biased as a result of the sample design.

## Execution of TDS

The execution of the TDS showed inadequate follow-up and failure to code some of the information which had been collected. Households which failed to return forms for all household members should have been contacted. Also, an additional mail or telephone follow-up should have been attempted to increase overall response rates and to collect missing data. The coding functions of the TDS were performed by two separate teams: manual coders and geo-coders. This separation created confusion and resulted in errors.

## Future Surveys

The decision as to which survey method (mail-back or telephone) is appropriate for future GTA travel surveys will depend on how well each method serves the objectives of the survey and the relative total costs (considering data collection, coding and editing).
The design of any future mail-back surveys should be carefully considered, based on the experience of the TDS and then thoroughly pre-tested. Careful survey design (with thorough in-field pre-testing) will improve response rates and minimize respondent errors and omissions.

## 3.0 TRIP DIARY SURVEY ANALYSIS PROCESS

This chapter describes the TDS data files and reviews the various tasks carried out in creating the clean Trip Diary Survey data base.

### 3.1 TDS Data Files

The data collected during the TDS were stored in separate Household, Person, and Trip data files. The Household file contains administrative data for each household, as well as data describing household characteristics which were transferred from the TTS Household File. The Person File consists of personal information which the respondents provided on the TDS survey form (see Appendix A). Included in the Trip File are data describing respondents' travel behaviour for a specific weekday.

### 3.2 The TDS Data Clean-up Process

The purpose of the "Clean-Up" phase of this project was to correct both data entry and logical errors which existed in the TDS Household, Person, and Trip files and to produce a clean and consistent database.

The final Household File was to consist of all households who had returned valid and useable survey forms; the Person File was to contain all persons belonging to valid households; and the Trip File was to include all valid trips for persons included in the Person File.

There were two different types of errors in the three TDS data files provided by the MTO:

1. data entry errors (i.e. incorrect numbers or symbols);
2. logical errors, (e.g., conflicting responses to different questions).

The combination of these two types of errors resulted in the original files containing invalid personal and trip information which was corrected during the clean up process. A series of range and logic checks were used to identify errors which were then corrected by referring back to the original TDS survey forms.

The comparison of TDS Household, Person and Trip Files and the TTS files revealed missing households, persons and trips. An important part of the clean up process was the recovery of missing records in all three files. A total of 236 households were added to the TDS Version 1.0 household file, which contains 2,868 records. The

Version 1.0 person file contains 6500 individuals who made 17,301 trips.

Note that there are inconsistencies in the coding of "School Bus" and "Transit" modes in the trip file. TDS Coders used TTS codes ("S" and "B") to differentiate between Subway and other transit modes, whereas "S" was to refer only to school bus in the TDS.

It appears that students who travelled to school in school buses were coded as "B" rather than as "S". The "S" trip mode code was used for people who took the subway as part of their trip.

All "S" codes refer to subway. Trips to or from school with the "B" code refer to either local transit or school bus.

### 3.3 Matching of TDS and TTS Person Records

The TDS and the TTS should contain identical households in the respective Household Files and the same persons in the respective Person Files (except where TTS households moved during the period between the two surveys or there were changes in household composition). However, while the TTS Person File contains data for 7,140 persons in 2,868 households, the TDS Version 1.0 Person File contains only 6,500 persons records for the same 2,868 households. A total of 640 persons are missing in the TDS Version 1.0 person and trip files due to non-response.

In order to assess the characteristics of these "TDS non-respondents" and the effects of their absence on the TDS data it was necessary to match TDS and TTS households and persons, using the procedures and assumptions outlined in Appendix B.

The matching of TDS and TTS records was also necessary to allow the comparison of TDS and TTS trip making characteristics for TTS "respondents" and "non-respondents". TTS respondents are those persons who reported their own behaviour (and the behaviour of the other residents of their household). TTS non-respondents are those persons in responding households <u>who did not report their own travel behaviour</u> in the TTS telephone survey. The comparison of TDS and TTS trip rate and other travel behaviour data was required to validate the TTS trip generation estimates (as discussed in Chapter 4).

Appendix C, the Trip Diary Data Guide, provides a detailed description of the final file layouts (for TDS Version 1.0) and basic tabulations of the TDS Version 1.0 data.

## 3.4 Development of Sample Weights

The TDS employed a stratified sample design rather than the random sample used in the TTS survey. Therefore, it was necessary to develop weighting factors by cell (or strata) to gross-up the sample to represent the socio-demographic and travel characteristics of the GTA population. This task involved estimating the number of households within each cell, based on TTS data, and developing cell-specific weights by dividing the estimated number of households per strata by the number of valid returns in each strata.

The TDS sample was selected from among those households that had completed telephone interviews during the Transportation Tomorrow Survey (TTS), which had been carried out between September and December of 1986.

In order to select the TDS sample, a subsample of 11,827 households was drawn from the 61,000 households who responded to the TTS and these were stratified based on four variables: Household Type; Household Size; Vehicles Per Household; and Geographical Location. A total of 96 strata or cells were defined for sampling purposes, based on these four variables, with the TTS subsample being allocated among strata as shown in Exhibit 3.1.

**Exhibit 3.1** TRIP DIARY - SAMPLE DISTRIBUTION (ORIGINAL)

| | | VEH 0 | | VEH 1 | | VEH 2+ | | |
|---|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP | TOTAL |
| METRO HH | 1 | 177 | 644 | 260 | 557 | 25 | 27 | 1690 |
| | 2 | 141 | 257 | 677 | 589 | 430 | 251 | 2345 |
| | 3 | 60 | 84 | 330 | 216 | 426 | 81 | 1197 |
| | 4 | 65 | 41 | 474 | 172 | 741 | 96 | 1589 |
| HAM HH | 1 | 38 | 101 | 54 | 79 | 6 | 5 | 283 |
| | 2 | 18 | 25 | 157 | 88 | 96 | 32 | 416 |
| | 3 | 7 | 4 | 75 | 16 | 110 | 13 | 225 |
| | 4 | 13 | 4 | 105 | 12 | 163 | 8 | 305 |
| URBAN HH | 1 | 39 | 79 | 120 | 178 | 12 | 10 | 438 |
| | 2 | 25 | 22 | 292 | 164 | 397 | 108 | 1008 |
| | 3 | 11 | 11 | 144 | 58 | 451 | 56 | 731 |
| | 4 | 4 | 5 | 249 | 27 | 845 | 44 | 1174 |
| RURAL HH | 1 | 4 | 3 | 25 | 7 | 3 | 1 | 43 |
| | 2 | 4 | 1 | 36 | 3 | 89 | 6 | 139 |
| | 3 | 0 | 1 | 11 | 0 | 78 | 1 | 91 |
| | 4 | 0 | 1 | 16 | 1 | 131 | 4 | 153 |
| TOTAL | | 606 | 1283 | 3025 | 2167 | 4003 | 743 | 11827 |

* SF - Single Family AP - Apartment VEH - Vehicles HH - Households

The actual TDS sample consisted of 6010 households allocated among the 96 strata as shown in Exhibit 3.2.

Exhibit 3.2 TRIP DIARY - SAMPLE DISTRIBUTION (FINAL)

| | | VEH 0 | | VEH 1 | | VEH 2+ | | |
|---|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP | TOTAL |
| METRO HH | 1 | 130 | 400 | 90 | 170 | 10 | 10 | 810 |
| | 2 | 100 | 180 | 170 | 150 | 100 | 90 | 790 |
| | 3 | 60 | 81 | 90 | 80 | 100 | 80 | 491 |
| | 4 | 65 | 41 | 100 | 80 | 160 | 80 | 526 |
| HAM HH | 1 | 38 | 101 | 54 | 79 | 6 | 5 | 283 |
| | 2 | 18 | 25 | 100 | 88 | 96 | 32 | 359 |
| | 3 | 7 | 4 | 75 | 16 | 100 | 13 | 215 |
| | 4 | 13 | 4 | 100 | 12 | 100 | 8 | 237 |
| URBAN HH | 1 | 39 | 79 | 100 | 120 | 12 | 10 | 360 |
| | 2 | 25 | 22 | 150 | 120 | 180 | 100 | 597 |
| | 3 | 11 | 11 | 100 | 58 | 200 | 56 | 436 |
| | 4 | 4 | 5 | 150 | 27 | 250 | 44 | 480 |
| RURAL HH | 1 | 4 | 3 | 25 | 7 | 3 | 1 | 43 |
| | 2 | 4 | 1 | 36 | 3 | 89 | 6 | 139 |
| | 3 | 0 | 1 | 11 | 0 | 78 | 1 | 91 |
| | 4 | 0 | 1 | 16 | 1 | 131 | 4 | 153 |
| TOTAL | | 518 | 959 | 1367 | 1011 | 1615 | 540 | 6010 |

From the original sample of 6,010 households and 2868 TDS responses distributed over 96 cells, a total of 1,948 matched and complete TDS households were selected. Households with "missing persons" were excluded from the data used to calculate sample weights to prevent the under-estimation of population and related travel characteristics.

In matching TDS and TTS persons to create TDS version 1.1, which contains data for the 1948 matched and complete households, restrictive matching criteria were used (exact match on sex and age within 4 years). This subsample was used to calculate the cell-specific weights which are included in the Version 1.1 data base. The Version 1.1 data set was the basis for the analysis presented in this report.

Exhibits 3.3 a,b,c and d present the initial and final distribution of respondents among cells, estimated households by cell and cell-specific weighting factors.

**Exhibit 3.3a TRIP DIARY - INITIAL SAMPLE RETURNS BY CELL : 2868 HOUSEHOLDS**

| | | VEH 0 | | VEH 1 | | VEH 2+ | | |
|---|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP | TOTAL |
| METRO HH | 1 | 60 | 175 | 46 | 93 | 3 | 5 | 382 |
| | 2 | 36 | 60 | 90 | 66 | 59 | 42 | 353 |
| | 3 | 19 | 24 | 37 | 29 | 48 | 29 | 186 |
| | 4 | 25 | 17 | 48 | 38 | 77 | 33 | 238 |
| HAM HH | 1 | 14 | 37 | 23 | 39 | 4 | 2 | 119 |
| | 2 | 9 | 6 | 56 | 43 | 60 | 14 | 188 |
| | 3 | 6 | 1 | 46 | 4 | 61 | 10 | 128 |
| | 4 | 5 | 1 | 53 | 6 | 47 | 6 | 118 |
| URBAN HH | 1 | 14 | 26 | 58 | 63 | 6 | 5 | 172 |
| | 2 | 11 | 8 | 89 | 59 | 109 | 49 | 325 |
| | 3 | 4 | 4 | 48 | 22 | 111 | 18 | 207 |
| | 4 | 3 | 2 | 75 | 7 | 109 | 14 | 210 |
| RURAL HH | 1 | 2 | 2 | 16 | 4 | 1 | 0 | 25 |
| | 2 | 2 | 0 | 23 | 2 | 56 | 2 | 85 |
| | 3 | 0 | 1 | 9 | 0 | 38 | 0 | 48 |
| | 4 | 0 | 0 | 9 | 0 | 73 | 2 | 84 |
| TOTAL | | 210 | 364 | 726 | 475 | 862 | 231 | 2868 |

**Exhibit 3.3b TRIP DIARY - FINAL SAMPLE RETURNS BY CELL : 1948 HOUSEHOLDS**
**MATCHED AND COMPLETE HOUSEHOLDS**

| | | VEH 0 | | VEH 1 | | VEH 2+ | | |
|---|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP | TOTAL |
| METRO HH | 1 | 47 | 157 | 37 | 83 | 2 | 5 | 331 |
| | 2 | 23 | 36 | 61 | 38 | 41 | 29 | 228 |
| | 3 | 10 | 8 | 22 | 16 | 24 | 15 | 95 |
| | 4 | 11 | 5 | 24 | 23 | 41 | 17 | 121 |
| HAM HH | 1 | 10 | 35 | 20 | 36 | 4 | 2 | 107 |
| | 2 | 5 | 3 | 33 | 21 | 40 | 10 | 112 |
| | 3 | 3 | 1 | 26 | 4 | 43 | 3 | 80 |
| | 4 | 2 | 1 | 37 | 4 | 27 | 5 | 76 |
| URBAN HH | 1 | 9 | 21 | 51 | 53 | 6 | 5 | 145 |
| | 2 | 1 | 1 | 58 | 41 | 78 | 36 | 215 |
| | 3 | 3 | 2 | 28 | 17 | 72 | 12 | 134 |
| | 4 | 2 | 2 | 50 | 4 | 68 | 9 | 135 |
| RURAL HH | 1 | 1 | 1 | 15 | 3 | 1 | 0 | 21 |
| | 2 | 1 | 0 | 13 | 1 | 41 | 2 | 58 |
| | 3 | 0 | 1 | 7 | 0 | 26 | 0 | 34 |
| | 4 | 0 | 0 | 6 | 0 | 49 | 1 | 56 |
| TOTAL | | 128 | 274 | 488 | 344 | 563 | 151 | 1948 |

**Exhibit 3.3c TTS EXPANDED HOUSEHOLDS BY CELL**

| | | VEH 0 | | VEH 1 | | VEH 2+ | | |
|---|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP | TOTAL |
| METRO HH | 1 | 20218 | 72785 | 29356 | 65851 | 2661 | 3543 | 194414 |
| | 2 | 15766 | 31179 | 74723 | 69804 | 47537 | 27307 | 266316 |
| | 3 | 7413 | 10057 | 36861 | 25225 | 54199 | 11596 | 145351 |
| | 4 | 8182 | 6169 | 61043 | 22475 | 105477 | 11038 | 214384 |
| HAM HH | 1 | 4145 | 9499 | 6624 | 10225 | 764 | 562 | 31819 |
| | 2 | 2357 | 3389 | 18920 | 8323 | 13265 | 3720 | 49974 |
| | 3 | 1064 | 941 | 8195 | 2264 | 14107 | 1298 | 27869 |
| | 4 | 1096 | 349 | 14347 | 1914 | 27162 | 1425 | 46293 |
| URBAN HH | 1 | 3978 | 8472 | 14452 | 20605 | 2053 | 1435 | 50995 |
| | 2 | 1643 | 3314 | 33089 | 20389 | 47623 | 12963 | 119021 |
| | 3 | 823 | 1350 | 18914 | 6904 | 56582 | 6673 | 91246 |
| | 4 | 616 | 601 | 34769 | 5731 | 125839 | 5477 | 173033 |
| RURAL HH | 1 | 837 | 364 | 2722 | 924 | 449 | 71 | 5367 |
| | 2 | 340 | 70 | 5130 | 662 | 9571 | 565 | 16338 |
| | 3 | 95 | 27 | 1470 | 99 | 8479 | 423 | 10593 |
| | 4 | 27 | 21 | 2509 | 147 | 18792 | 316 | 21812 |
| TOTAL | | 68600 | 148587 | 363124 | 261542 | 534560 | 88412 | 1464825 |

**Exhibit 3.3d TDS FINAL EXPANSION FACTORS BY CELL**

| | | VEH 0 | | VEH 1 | | VEH 2+ | |
|---|---|---|---|---|---|---|---|
| | | SF | AP | SF | AP | SF | AP |
| METRO HH | 1 | 430.2 | 463.6 | 793.4 | 793.4 | 1330.5 | 708.6 |
| | 2 | 685.5 | 866.1 | 1225.0 | 1836.9 | 1159.4 | 941.6 |
| | 3 | 741.3 | 1257.1 | 1675.5 | 1576.6 | 2258.3 | 773.1 |
| | 4 | 743.8 | 1233.8 | 2543.5 | 977.2 | 2572.6 | 649.3 |
| HAM HH | 1 | 414.5 | 271.4 | 331.2 | 284.0 | 191.0 | 281.0 |
| | 2 | 471.4 | 1129.7 | 573.3 | 396.3 | 331.6 | 372.0 |
| | 3 | 354.7 | 941.0 | 315.2 | 566.0 | 328.1 | 432.7 |
| | 4 | 548.0 | 349.0 | 387.8 | 478.5 | 1006.0 | 285.0 |
| URBAN HH | 1 | 442.0 | 403.4 | 283.4 | 388.8 | 342.2 | 287.0 |
| | 2 | 1643.0 | 3314.0 | 570.5 | 497.3 | 610.6 | 360.1 |
| | 3 | 274.3 | 675.0 | 675.5 | 406.1 | 785.9 | 556.1 |
| | 4 | 308.0 | 300.5 | 695.4 | 1432.8 | 1850.6 | 608.6 |
| RURAL HH | 1 | 837.0 | 364.0 | 181.5 | 308.0 | 449.0 | 0.0 |
| | 2 | 340.0 | 0.0 | 394.6 | 662.0 | 233.4 | 282.5 |
| | 3 | 0.0 | 27.0 | 210.0 | 0.0 | 326.1 | 0.0 |
| | 4 | 0.0 | 0.0 | 418.2 | 0.0 | 383.5 | 316.0 |

## 4.0 TTS Validation

A major objective of the TDS survey was to validate and verify information collected in the "Transportation Tomorrow Survey". The study team investigated apparent TTS telephone survey under-reporting problems by comparing TDS and TTS results for TTS respondents and non-respondents (persons who did not report their own travel behaviour during the TTS telephone survey).

### Background and Approach

The TTS Data Validation Report (August 1988) concluded that the TTS telephone survey accurately reported home-based work and school travel and therefore provides a good record of peak period road and transit demands. However, TTS total daily travel appears to be underestimated by 30 to 40 per cent because of the under-reporting of discretionary travel (basically travel other than to and from work and school).

The TTS Data Validation report (August 1988) suggested that the under-reporting of daily and off-peak travel resulted from the use of a single respondent to report on his or her travel behaviour and the travel characteristics of the other members of the household (non-respondents). The TTS analysis showed that respondents consistently reported higher trip rates for themselves than for non-respondents. However, the actual role of trip under-reporting and other socio-demographic factors in explaining differences in aggregate trip rates for respondents and non-respondents could not be determined.

Because all household members reported their own behaviour in the Trip Diary Survey, this method was expected to more accurately report discretionary trip making than the TTS telephone survey. The diary format also helped respondents to remember their own behaviour. For both these reasons the TDS was expected to provide more accurate travel behaviour data than the TTS and was, therefore, a data source which could be used to validate the TTS results.

The TTS Validation analysis focused on the comparison of the trip making behaviour of matched TTS and TDS persons. The file which was used for this analysis consisted of person and trip information for the 1948 matched and complete TDS/TTS households included in the Version 1.1 data base. The matched files excluded persons under six years of age for whom no travel information was reported in either survey, whereas these persons are included in version 1.1.

The first stage of our analysis was to reassess the conclusions of the TTS Validation Report based on the comparison of TTS and TDS reported trip making, controlling for both respondent status

(respondents versus non-respondents), trip purpose, and relevant personal characteristics. This analysis employed the TTS definitions of employment and student status in assessing variations in trip rates between the two surveys.

Given observed differences in trip rates by purpose, the study also assessed the implications of these differences for travel by time period.

## 4.1 Trip Rate Differences

The results with respect to trip rate differences are summarized below under the following headings: Home-Based Work Travel; Home-Based School Travel; Total and Other Home-Based Travel; Non-Home Based Travel. The trip rate tabulations referred to in the text and exhibits are presented in Appendix D.

### Home-Based Work Travel

The analysis of reported TTS and TDS trip-making for the matched sample confirms the conclusions of the TTS Validation Report with respect to home-based work trip-making. Appendix D, Tables 1 to 6 provide detailed information on trip rates by survey type and respondent status and Table 7 summarizes Home-based work trip rate data for the two surveys.

Home-based work trips per full-time and part-time employee are consistent for TTS (telephone) and TDS (Diary) surveys, as shown in Exhibit 4.1. TTS and TDS reported trip rates are within 1%, overall for full-time employees[1], with TTS results being marginally higher (1.52 vs. 1.51) and only minimal differences between TTS respondents and non-respondents. However, home-based work trips reported for employed persons who work at home are substantially higher for the Trip Diary Survey than for the telephone survey (.63 vs. .4) with even greater differences for those TDS respondents who had reported their own travel behaviour in the TTS telephone survey.

As expected, the use of household representatives to report on the trip making behaviour for other members of the household does not appear to understate home-based work travel for persons who work outside the home. However, the Trip Diary results suggest that telephone surveys may understate home-based work trip making for that relatively small number of persons who work out of their

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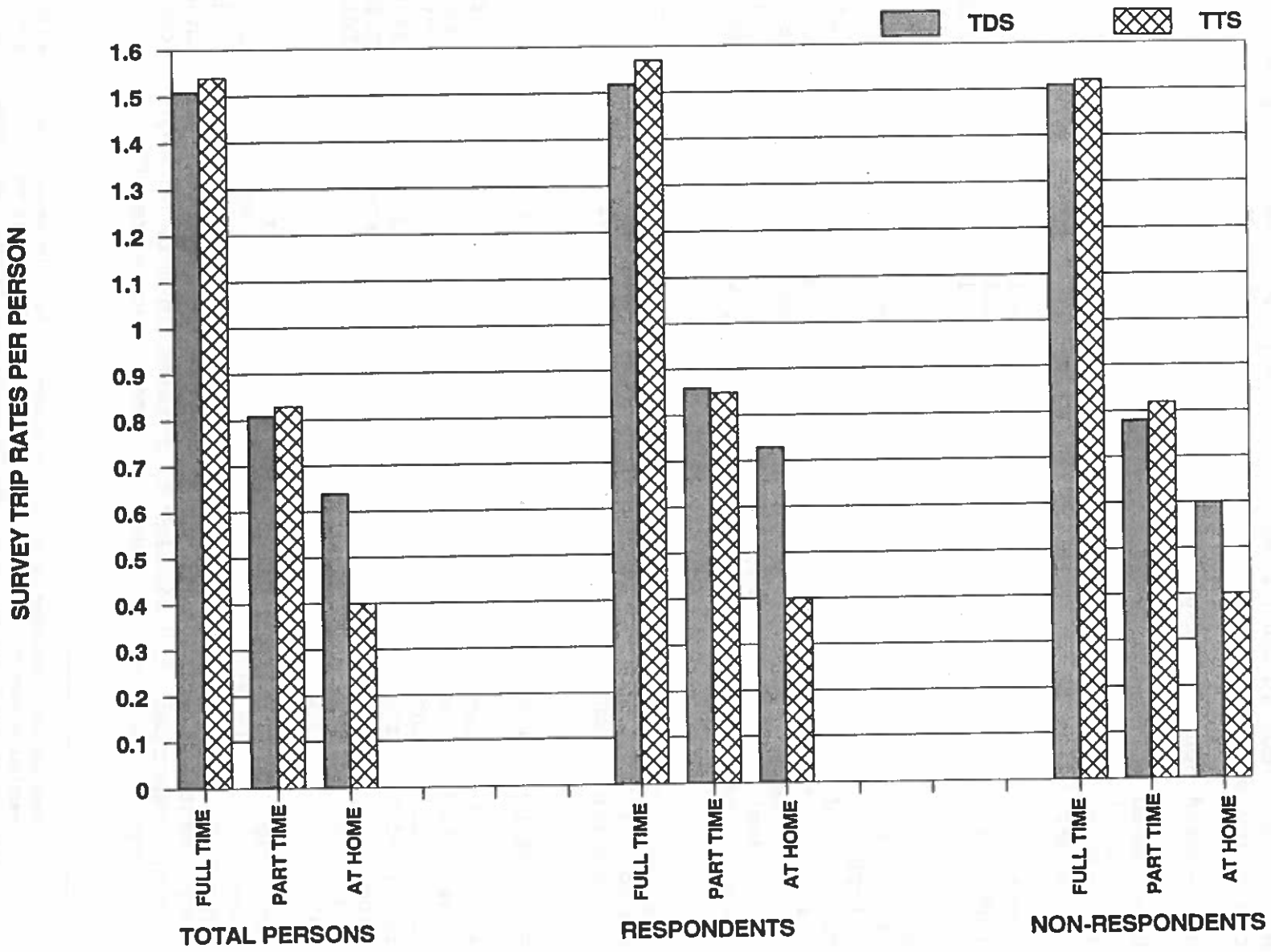
[1] The TDS and TTS surveys provide different estimates of full and part-time employment, due to changes in the employment status between the two surveys and differences in survey methodology. The TTS definition was adopted for this analysis to ensure consistency in comparing trip rates for the two surveys. Only those TDS respondents who were also employed (full-time or part-time) during the TTS were accepted as being employed in calculating comparable trip rates.

## Exhibit 4.1 TDS/TTS Home Based Work Trip Rates Comparison



homes. The Diary method reported higher work rates for "work at home" employees in both respondent categories, which suggests that the diary method may indeed improve respondent recall.

**Home-Based School Travel**

Home-based school trips are comparable to home-based work trips, in that they are repetitive trips to a specific destination. Therefore, one would expect that TDS and TTS home-based school trip rates per full-time student would be very similar.

Exhibit 4.2 summarizes the home-based school trip rate comparisons (Appendix D, Table 8 presents TDS and TTS data on home-based school trips).[2] Overall, the TDS diary survey resulted in 1.84 home-based school trips per day whereas the TTS resulted in 1.74 trips per day. While TTS and TTS estimates of school trip rates are within 5% of each other, TTS respondents reported more trips in the telephone survey than in the TDS trip diary survey, probably because of seasonal factors. The Trip Diary Survey included the March break period, and this would be expected to reduce the average number of school trips per day per student. TTS non-respondents reported marginally higher trip rates in the TDS survey because they included mid-day lunch trips, which were not reported in the TTS survey.

The use of informants in the telephone survey to report on the school trip making by other members of responding households does not appear to understate TTS estimates of school trip rates.

**Respondent and Non-Respondent Differences in Other Trip Rates**

Exhibit 4.3 compares total trip rates for TDS and TTS persons classified by employment/student status, age, sex, license and municipality and respondent status. As expected, the TDS "total reported trip rates" are higher than TTS total trip rates, with one exception. Seniors, persons 65 and over, reported fewer trips in the Diary than in the TTS. Appendix D, Tables 1 to 6 provide the data which is discussed in this section.

For respondents, TDS estimates of total trips are generally higher than comparable TTS estimates, except for the seniors group, who reported more trips over the telephone than in the diary. Respondents who are part-time workers, unemployed or without a license reported very similar trip rates in both surveys. However, both full-time workers and students who were TTS respondents

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[2] TDS asked whether a respondent was a full-time student or a part-time student, whereas the TTS did not differentiate between the full and the part-time students. To be consistent in estimating school trip rates per student in the two surveys, the TTS definition of "Student" was adopted. Only those TDS respondents who were also students in the TTS were accepted in calculating comparable trip rates.

## Exhibit 4.2 TDS/TTS Home Based School Trip Rate Comparison

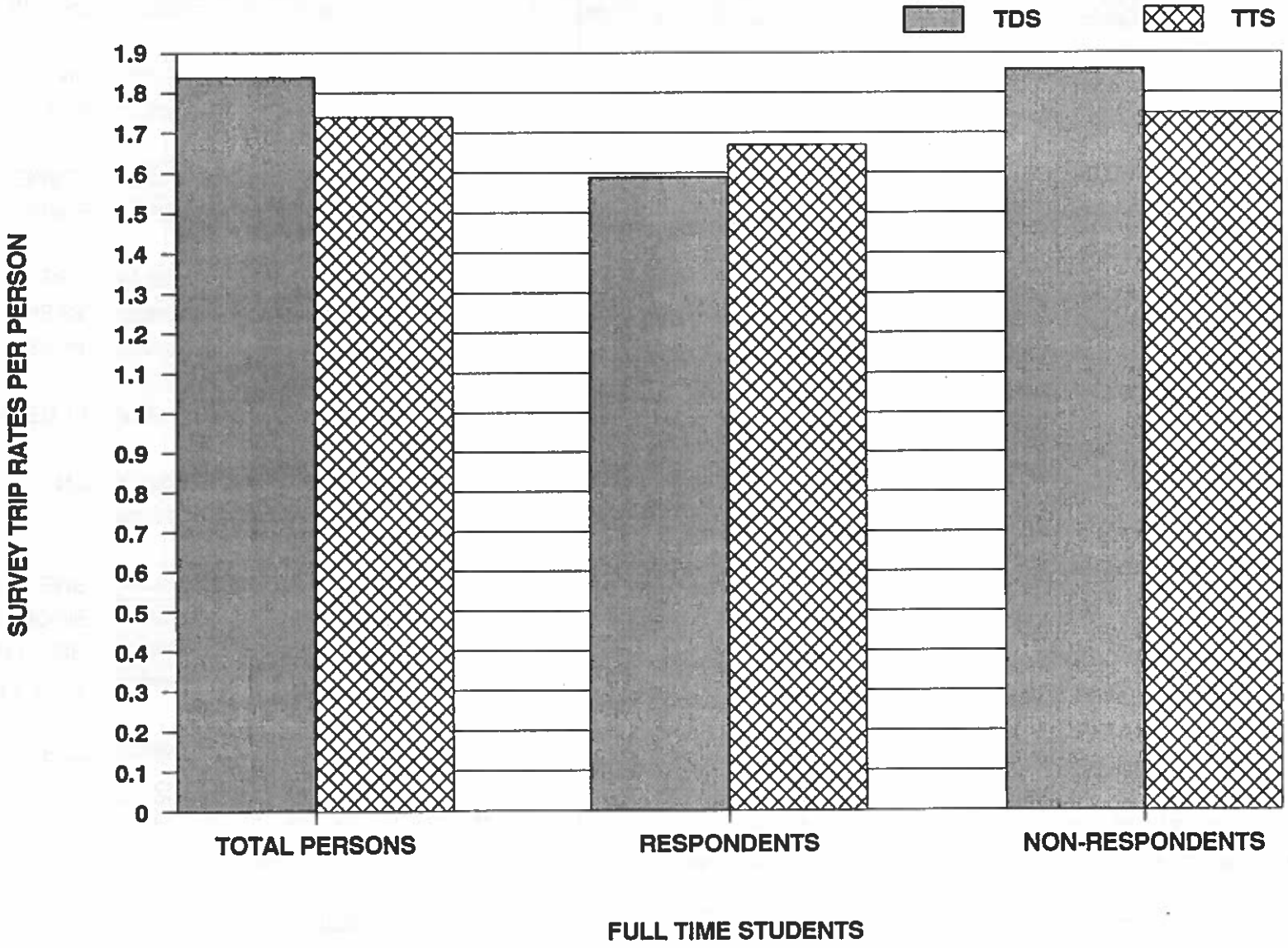
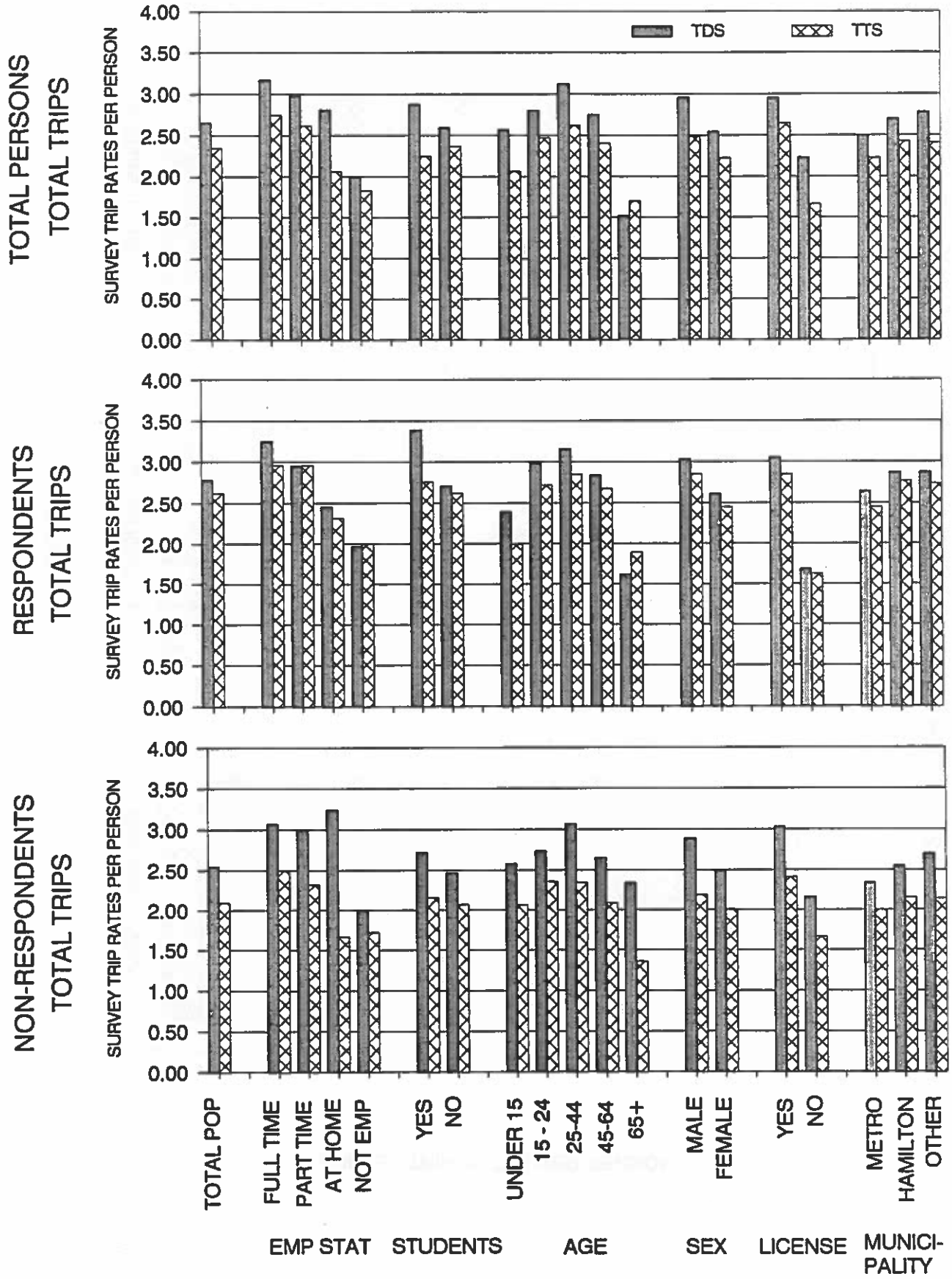


Exhibit 4.3 TDS/TTS Total Person Trip Rates Comparison



reported significantly more trips in the diary study than in the telephone survey.

TTS non-respondents in all categories, including seniors, reported substantially higher total trip rates in the TDS than in the TTS survey and these higher rates are reflected in the comparison of all responses (total persons).

Given that the two survey methods reported similar trip rates for home-based work and school travel, any differences in total trip rates for TTS respondents must reflect survey methodology or seasonal factors which lead to higher non-work/school trip rates for the TDS survey. Exhibits 4.4 and 4.5 summarize home-based "other" and non-home based trip rates by respondent status. TDS/TTS trip rate comparisons for other home-based trips, summarized in Exhibit 4.4, confirm that the TDS generally reported higher "home-based other" trip rates than the TTS survey. However, seniors reported more "home-based other trips" in the TTS than the TDS, for both respondents and non-respondents.

While the TDS survey reported more trips in total than the TTS, TTS respondents reported more "home-based other" trips in the TTS telephone survey than in the TDS diary survey for part-time and at-home workers and non-workers and other categories as well. Seniors who had responded to the TTS themselves reported much higher trip rates in the earlier telephone survey than in the diary.

TTS non-respondents, other than seniors, reported higher "other home-based" trip rates in the TDS. The data on trip rates for other home-based trips confirms the conclusions of the TTS Data Validation report as to the effects of using informants to report trip making data for other household members.

The TDS "non-home based" trip rates presented in Exhibit 4.5 are consistently higher than the comparable TTS rates for both respondent categories. Whereas respondents appear to understate non-home based trips by approximately 30 per cent, non-respondents understate these trips by approximately 60 per cent. The TTS trip under-reporting problem is greater for non-home based travel than for home-based travel and the reasons for under-reporting go beyond the use of informants.

Based on the comparison of reported "non-home based" trip making for TTS respondents, it appears that the trip diary methodology leads to the reporting of more non-home based trips than the telephone survey method. A self-reporting trip diary results in higher reported non-home based trip rates than a self-reporting telephone survey. As expected, the diary method appears to help trip makers remember the non-home based trips that they made and to more accurately report them.

Do seasonal factors account for higher non-work/school trip rates

Exhibit 4.4 TDS/TTS Home Based Other Trip Rates Comparison

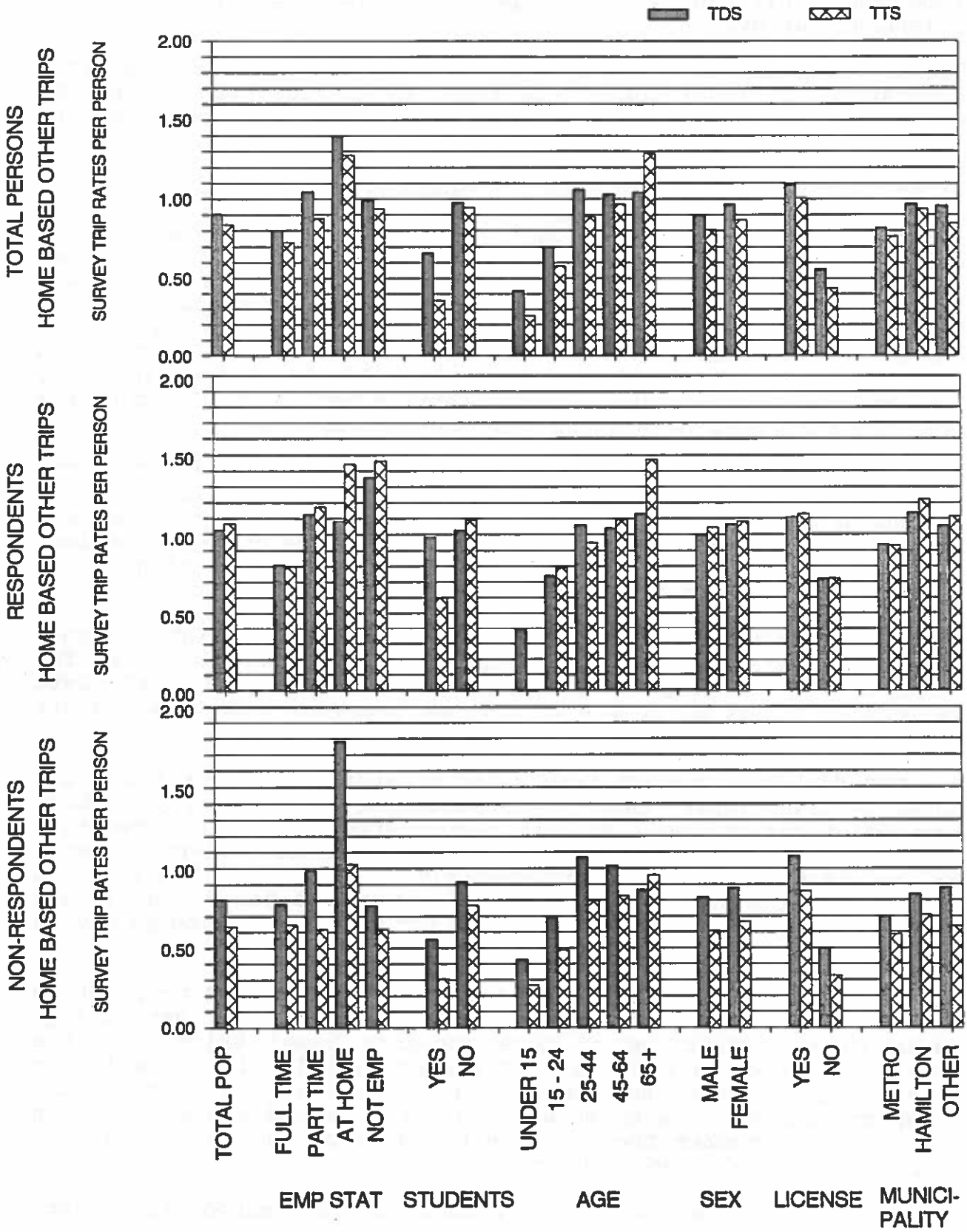
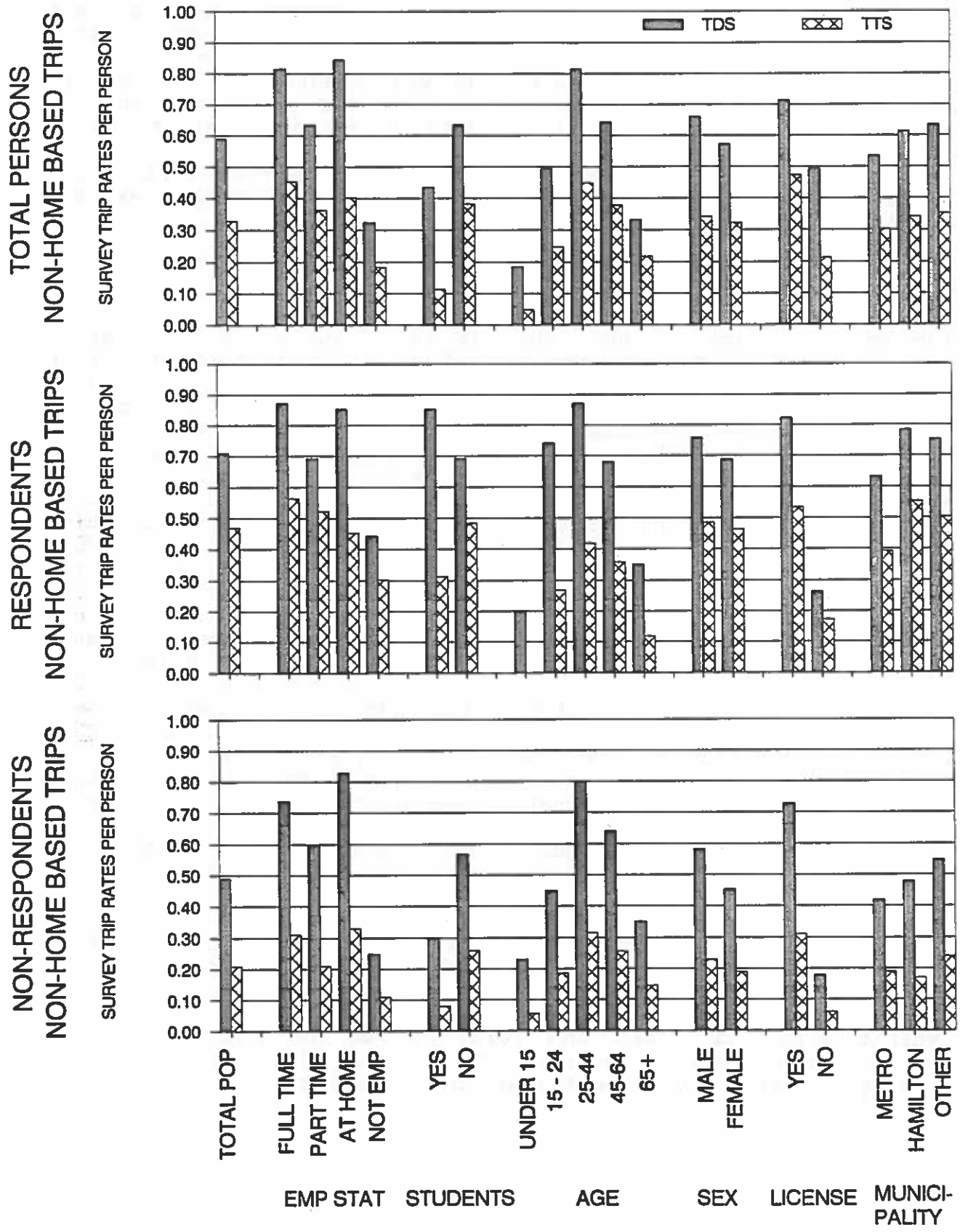


Exhibit 4.5 TDS/TTS Non Home Based Trip Rates Comparison



in the TDS diary survey? The review of September-December 1988 and February-March 1989 variations in TTC ridership and monthly variations in ADT counts for Provincial Highways in the GTA do not indicate that transit and traffic use was measurably higher during the Trip Diary Survey than during the TTS telephone survey. (Appendix E summarizes available data on seasonal variations in road and transit use in the Greater Toronto Area.) Therefore, seasonal factors do not appear to explain trip rate differences between the two surveys, leaving survey methodology as the explanation.

**Trip Rate Analysis Summary**

The analysis suggests that the TTS telephone survey accurately reports home-based work and school trip rates but that trip purposes other than work and school may be substantially under-reported. The TTS method, which relies on a household member to report the travel behaviour of the other members of the household, understates non-home based and other home-based trip rates for the people who did not report their own travel. The telephone survey method also appears to result in lower estimates of non-home based trip making for respondents than the mail-back diary method, which suggests that the Diary format assists respondents in remembering and reporting their behaviour. Seniors who responded to the telephone survey, however, consistently reported fewer trips using the diary than over the telephone. This suggests that seniors found the diary more difficult to answer than the telephone interview and therefore failed to report all of their trips.

Exhibit 4.6 compares TDS and TTS trip rates by purpose and mode. The TDS and TTS estimates of auto and transit use for home-based work and school travel are similar, as expected. While the TDS results suggest higher transit use for home-based work trips than the TTS estimates and somewhat higher auto use for school trips than the TTS, these differences are within the range of expected sampling error (plus or minus 5% for GTA home-based school trip rates).

In relation to other trip purposes, Exhibit 4.6 suggests that TTS under-reporting of non-home based travel is substantial for both the auto and transit modes, but that home-based other trips are accurately reported for transit.

Exhibit 4.6b summarizes the relative TDS and TTS trip rates controlling for trip purpose and mode and considering the effects of sample design (by using the weighting factors).

**Exhibit 4.6 TDS/TTS Total Person Trip Rate By Trip Purpose By Trip Mode Comparison**

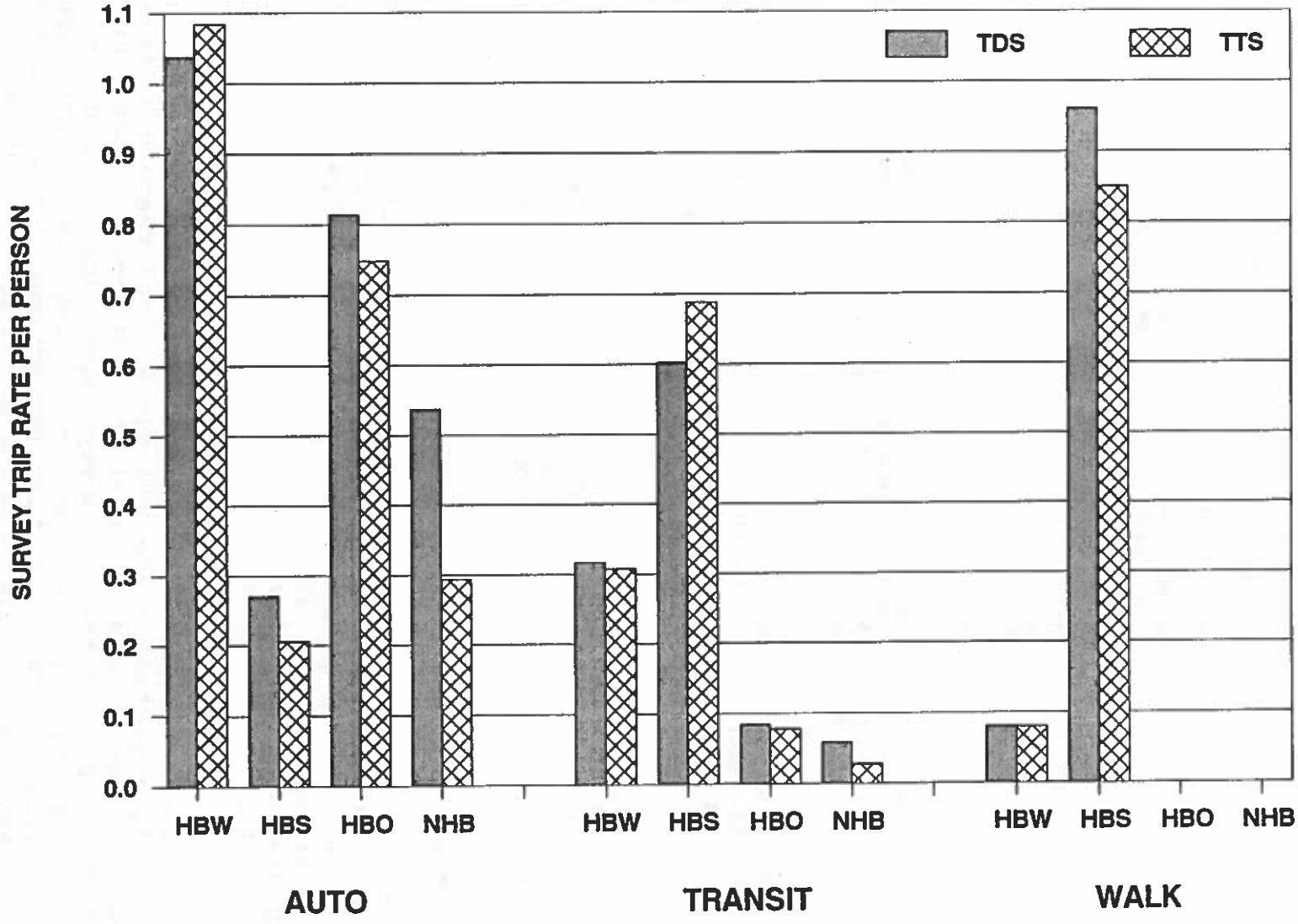


**Exhibit 4.6b Relative Trip Rates (TDS/TTS) By Trip Purpose and Trip Mode (Calculated Using Sample Weighting Factors)**

| TRIP PURPOSE | TDS TRIP RATE/TTS TRIP RATE |
|---|---|
| Home-Based Work | 1.01 |
| Home-Based School | 1.05 |
| Home-Based Other | 1.14 |
| Non-Home Based | 1.98 |
| TRIP MODE | |
| AUTO | 1.19 |
| TRANSIT | 1.10 |
| WALK | 1.14 |
| TOTAL | 1.18 |

NOTE: Home-Based Work and Home-Based School Trip Rates are only for those respondents whose employment and student status were coded consistently in the two surveys. Home-Based Other and Non-Home Based Trip Rates were derived for everyone who reported trips in both surveys.

The TTS and TDS report very similar identical home based work (within 1%) and school (within 5%) trip rates. However, the TDS reports 14% more other home-based trips and 98% more non-home based trips than the TTS. This suggests the relative magnitude of under-reporting in the TTS telephone survey.

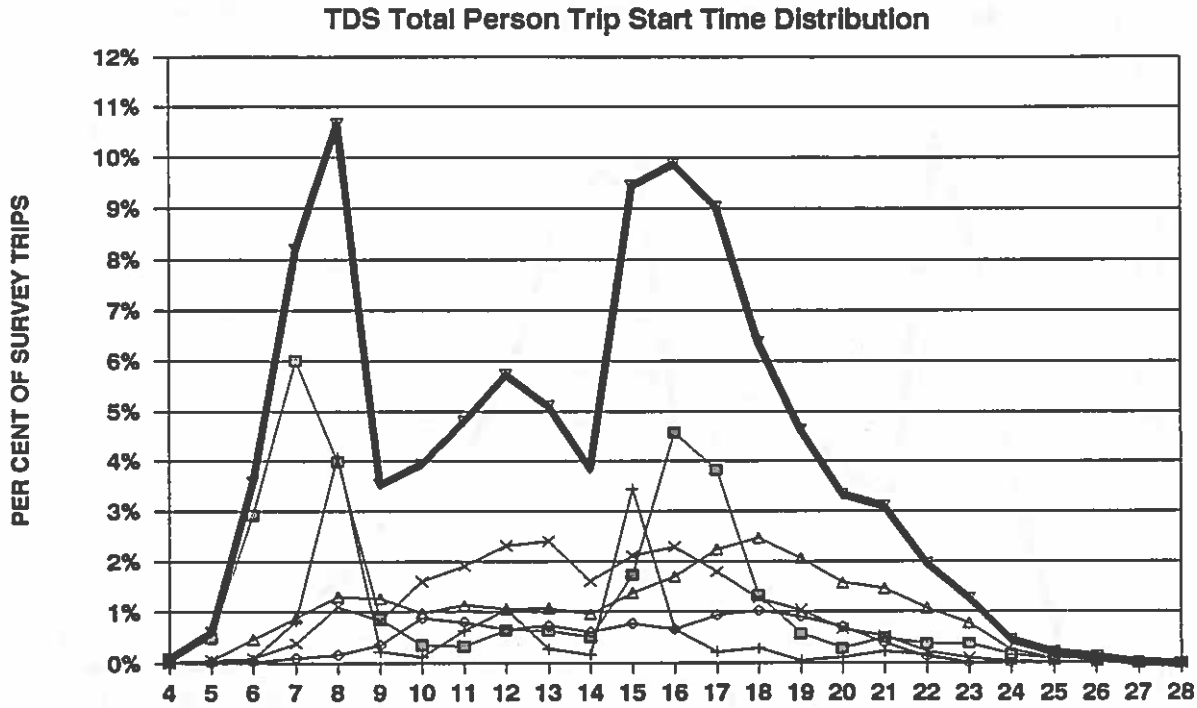
Focusing on mode of travel, the TDS reported 19% more auto trips than the TTS, whereas the Diary reported 10% more transit and 14% more walk trips. This suggests that the TTS telephone survey is more likely to under-report auto travel than transit travel.

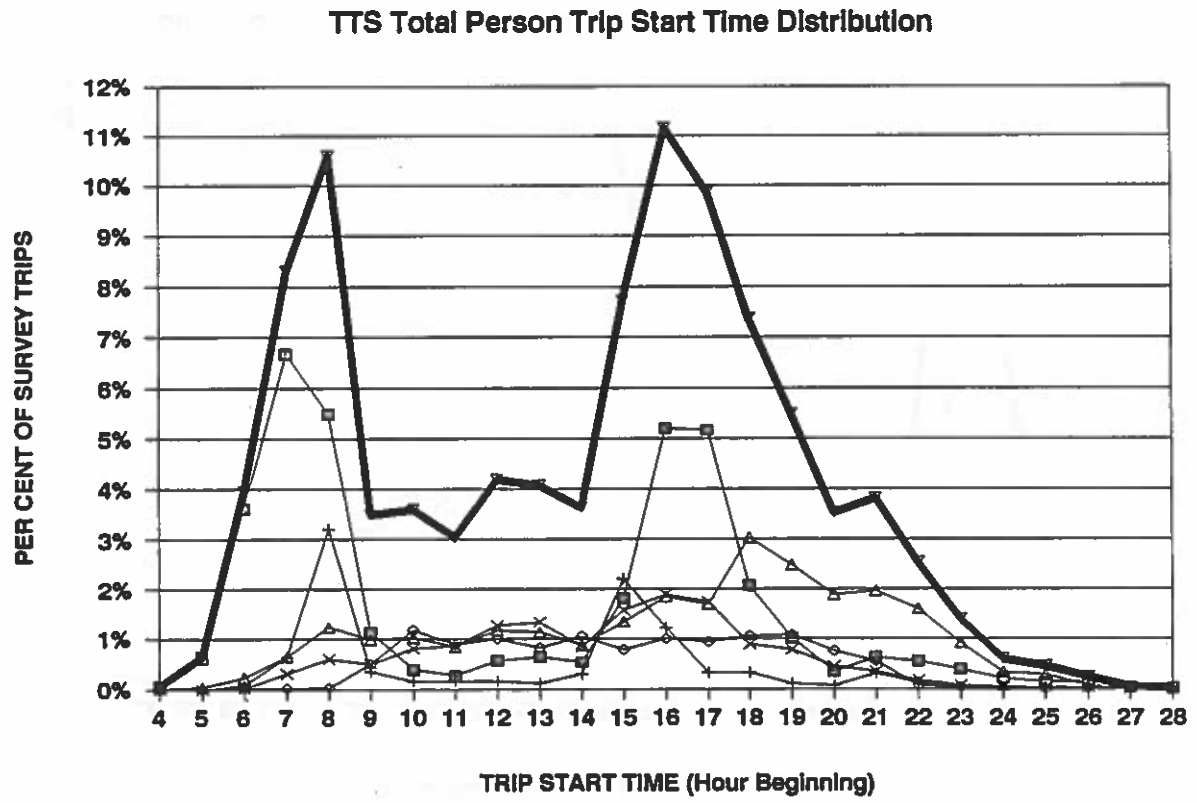
## 4.2 Travel by Time Period

Exhibits 4.7 and 4.8 present trip start time data by trip purpose for matched TDS/TTS persons. Exhibit 4.7 summarizes trip start times in terms of percentage of total daily trips for individual trip purposes while Exhibit 4.8 shows trip start times for accumulated purposes including, home-based work, work plus school, work, school and home-based other trips, and all purposes (including non-home based trips).

Our analysis suggests that work and school trip making is accurately reported in the TTS survey, and therefore, the start time profiles should be similar. However, given the other differences between the two surveys, specifically the higher other-home based and non-home based trip rates, one cannot expect an exact match in the start time percentages for work and school trips. Nevertheless, the work and school profiles are similar with the main difference being the higher "lunch hour" school trip

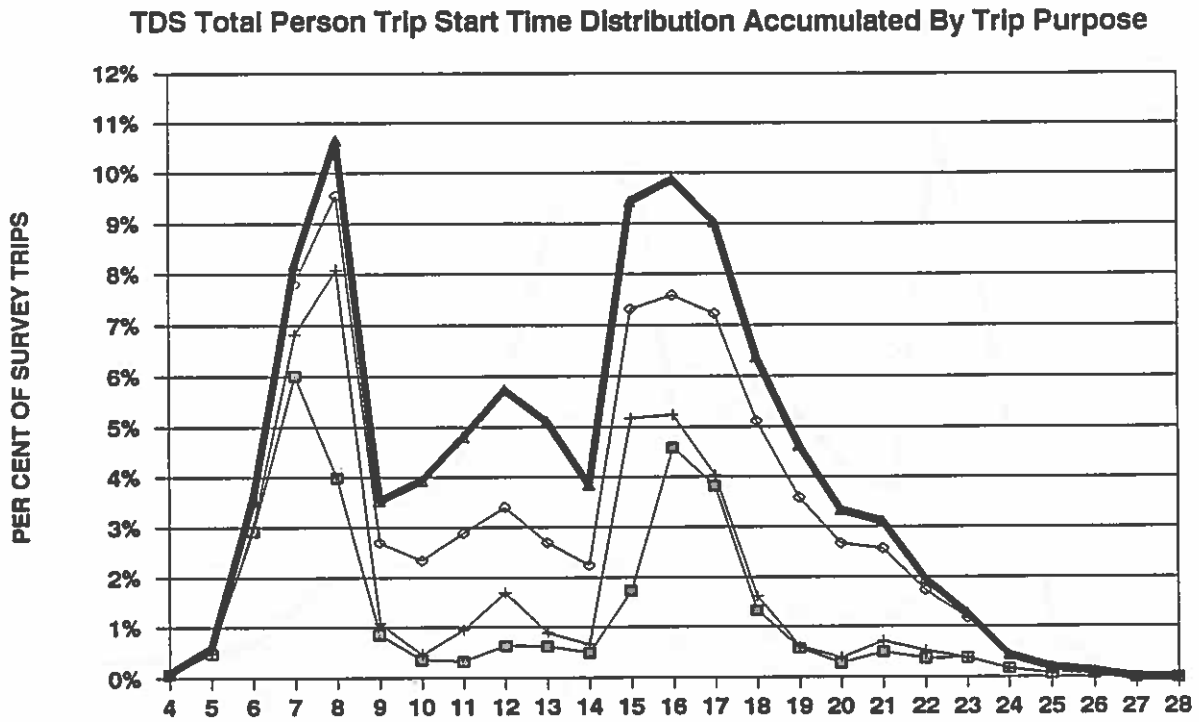
## Exhibit 4.7 TDS/TTS Trip Start Time Distribution By Trip Purpose

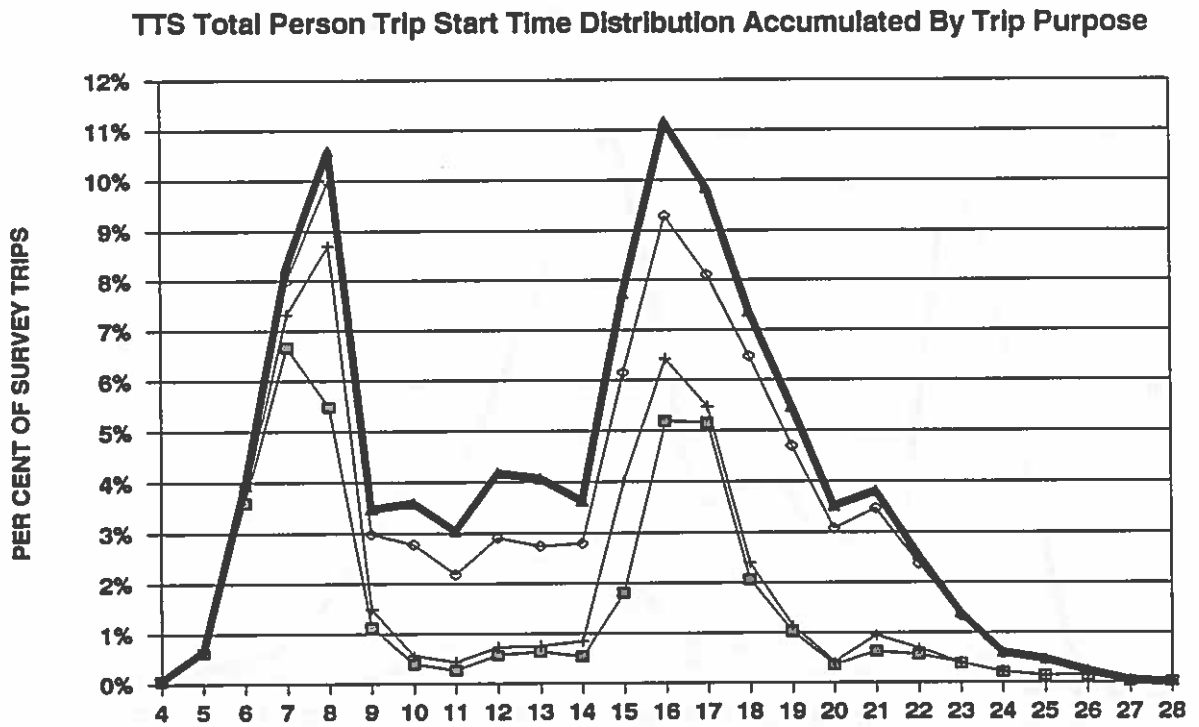



▫ HBW + HBS ◇ HBSHOP △ HBO × NHB ▽ TOT

## Exhibit 4.8 TDS/TTS Trip Start Time Distribution Accumulated By Trip Purpose




▫ HBW + HBW+HBS ◇ HBW+HBS+HBO △ HBW+HBS+HBO+NHB

making reported in the TDS.

The major differences between the two surveys apply to home-based other and non-home based travel. The TDS provides higher estimates of mid-day travel than the TTS, primarily due to higher non-home based and other home-based trip rates. However, the TDS estimate for the PM peak is somewhat lower and less peaked than the comparable TTS estimate.

While the total volume of PM peak period travel is similar for both surveys, the TTS includes more work trips and fewer non-home based trips and is much more peaked. The TTS estimates reflect respondents opinions as to how and when other members of their household came home from work and are likely to overstate the number of direct home to work trips. The TDS presents a more complex (and realistic) picture of PM peak period travel than the TTS, with fewer work to home trips and more non-home based and other home based "linked" trips (see Exhibit 4.8).

### 4.3 Conclusions and Implications

Based on the analysis presented in the preceding sections we feel that the TDS has satisfied the TTS validation objective by providing data which further explains the nature of trip under-reporting in the telephone survey. The comparison of matched TDS and TTS persons confirms many of the findings of the TTS Validation Report with respect to the under-estimation of other home-based and non-home based trip rates. In summary, the TTS and TDS report very similar home-based work and school trip rates (within 5%). However, the TDS reports 14% more other home-based trips and 98% more non-home based trips than the TTS. This suggests the relative magnitude of under-reporting in the TTS telephone survey for other-home based and non-home based travel.

In terms of mode of travel, the TDS reported 19% more auto trips than the TTS, whereas the Diary reported 10% more transit and 14% more walk trips. This suggests that the TTS telephone survey is more likely to under-report auto travel than transit travel.

While the TDS/TTS trip rate ratios presented in Exhibit 4.6b suggest possible adjustment factors which could be used to "correct" the TTS results, the TDS survey cannot necessarily be taken as an accurate representation of total daily travel, as discussed in Chapter 5, TDS Validation.

## 5.0 TDS VALIDATION

This chapter summarizes the comparison of selected TDS, TTS and Census demographic and travel behaviour characteristics and assesses the validity of the TDS data. The objective of this chapter is to identify any obvious inconsistencies and biases in the Trip Diary Survey data.

The TDS data validation exercise considered both sampling errors (which result because we are working with sample data rather than a census) and non-sampling errors (which result from missing data, response or processing errors, or procedural problems).

### Comparison of TDS, Census and TTS Estimates

TTS and 1986 Census figures were compared with the weighted results of the Trip Diary Survey for various demographic, socio-economic and travel behaviour characteristics, to assess the reasonableness of trip diary based estimates and identify any obvious errors or biases. The results of various comparisons are discussed in the following sections.

### 5.1 Demographic and Socio-economic Analysis

#### Household Distributions

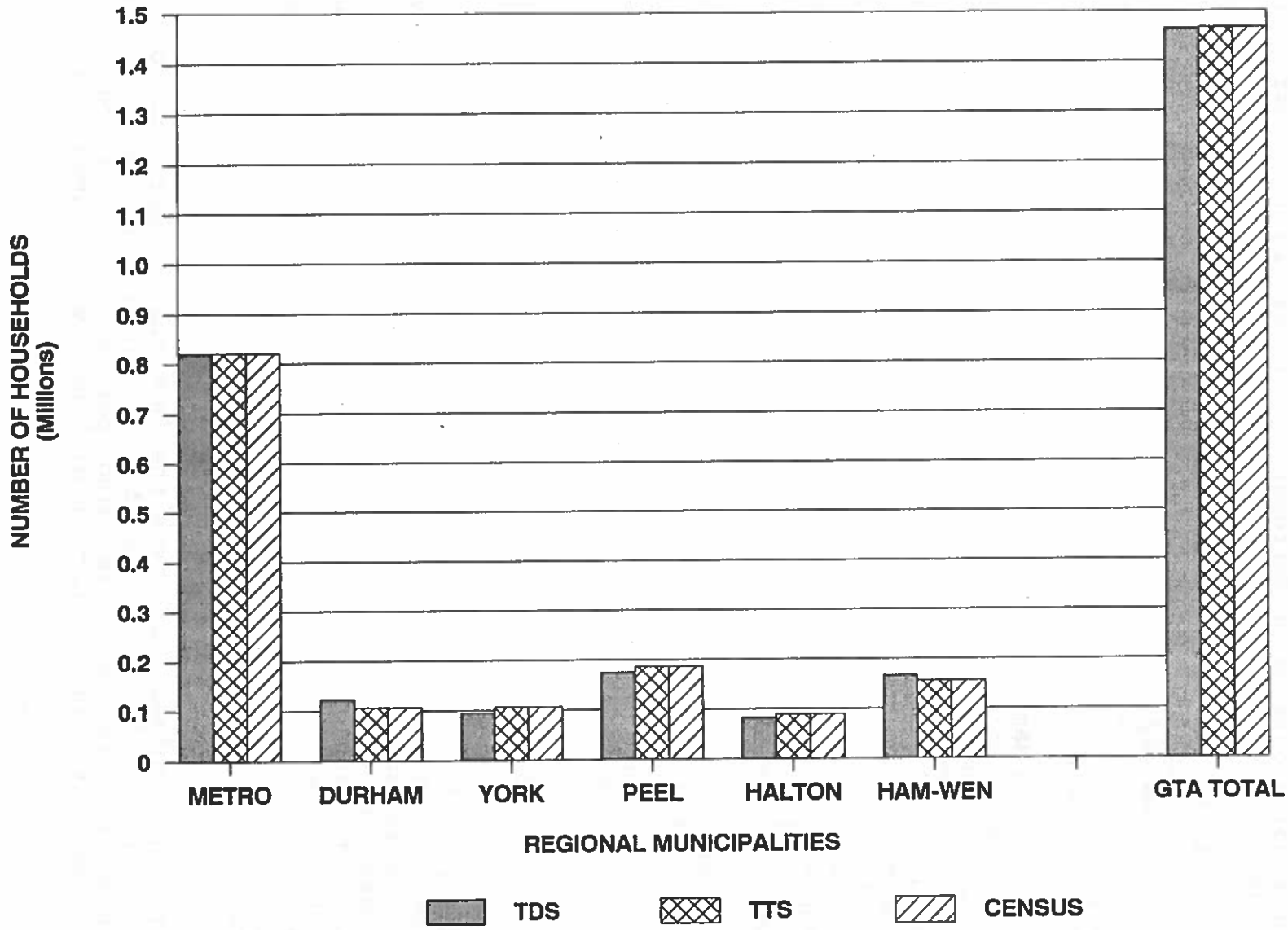
Exhibit 5.1 compares TDS, TTS and Census estimates of the number of households in each Region within the GTA. Appendix F provides the actual numbers used to develop the exhibits discussed in Chapter 5 and indicates percentage differences (TDS in relation to Census and TTS).

The TDS estimate of total GTA households is within .17% of the TTS estimate and .15% of the Census figure, as would be expected given that the TDS weighting procedure made use of TTS-based household controls and some rural strata were not represented in the survey.

In estimating weighting factors, the total number of expanded TTS households by cell was divided by the number of respondent households in each corresponding cell. Eight of the 96 cells were not represented in the TDS sample (or TDS estimates based on this sample) because the original sample frame provided too few potential respondents. The missing strata are rural with specific housing type and size, and vehicle ownership characteristics. Based on the TTS results, the subject strata contain a combined total of less than 1000 households. Therefore, the TDS estimates will undercount GTA households by approximately 1000 and GTA population by approximately 3000.

The estimate of total households for Metropolitan Toronto is also

## Exhibit 5.1 Number of Households By Regional Municipalities



accurate. However, the TDS estimate of the distribution of households outside of Metropolitan Toronto is not consistent with Census and TTS figures.

The largest errors in household estimates apply to the Regional Municipality of Durham, where the TDS results overstate total households by 16%, and York Region, where the TDS results understate total households by 10%. Hamilton-Wentworth households are also overstated in the TDS estimate, whereas Halton and Peel households are understated.

Toronto and Hamilton-Wentworth were identified in the sample design as stratifying variables and, therefore, these estimates should both be accurate. However, it appears that the use of postal codes to define geographic strata and distinguish between urban and rural areas resulted in the misallocation of responses between Regions and resultant errors in estimating the number of households within cells.[3] Postal codes do not respect all Regional and Municipal boundaries. Boundary problems related to the use of postal codes appear to account for the observed overestimates of Hamilton-Wentworth and Durham households and underestimates of York, Halton and Peel households.

The misallocation of sample households and the resulting errors in estimating the number of households by Region are serious concerns. Household estimation errors translate into inaccurate population estimates and errors in the estimation of travel statistics by Region (total trips by purpose, mode etc.).

## Household Size

Exhibit 5.2 presents comparative estimates of household size distributions for the 3 C(M)As in the Greater Toronto area. The TDS estimates of the percentage distribution of households by size class are generally consistent with TTS and Census estimates for households with three people or less, as would be expected given that the sample design was stratified by household size. However, for four person households the TDS estimates are higher than TTS and Census estimates for all areas. For five or more person households the TDS estimates are substantially lower than the corresponding Census and TTS estimates.

Larger households are under-represented in the TDS sample because of higher refusal rates and the fact that larger households were more likely to be excluded from clean data base because of incomplete responses (missing persons). Therefore, the TDS estimate of total population will be low, compared to the Census

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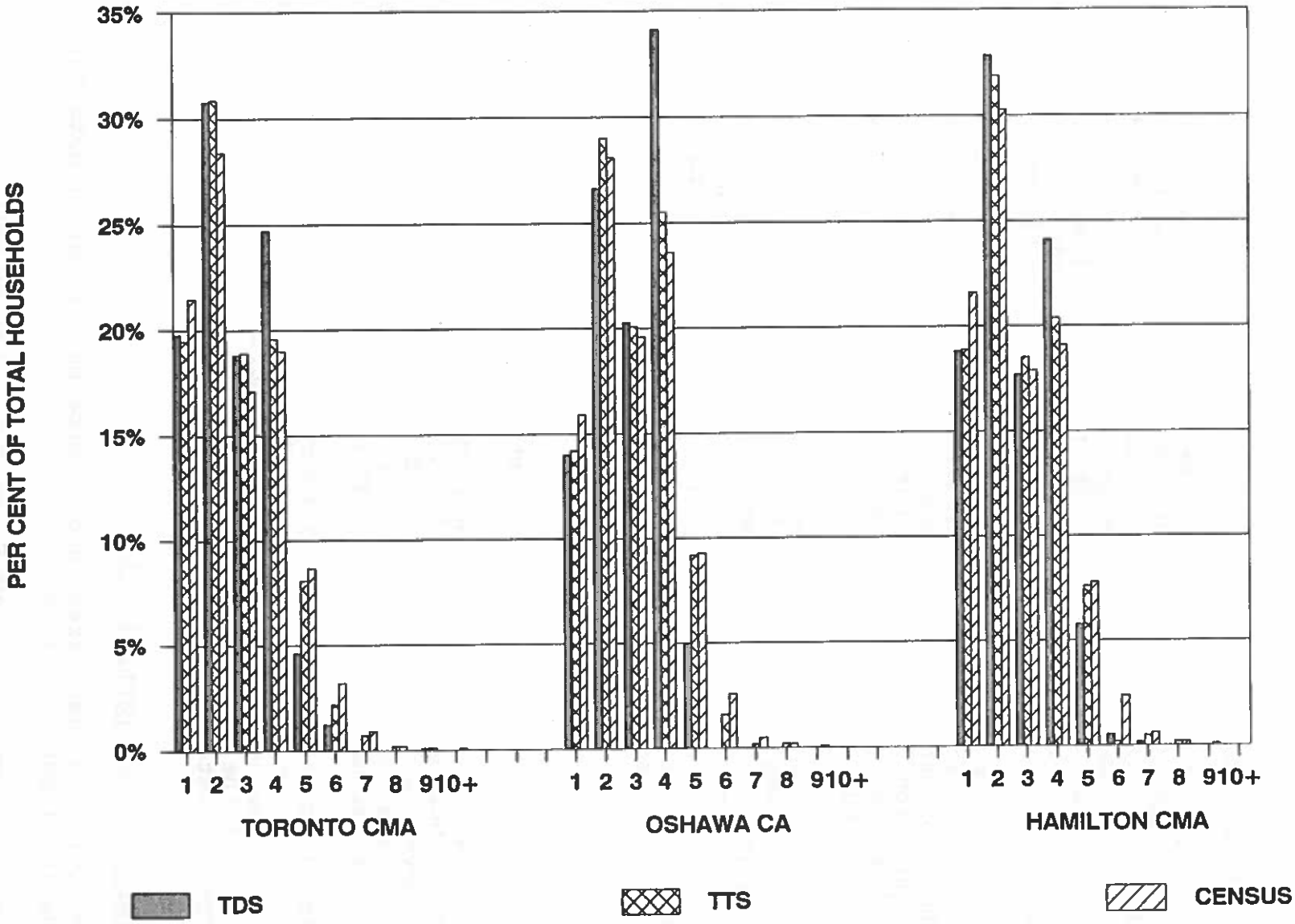
[3] The MTO Demand Research Office provided the estimates of the number of households within each strata which were used to estimate cell-specific weighting factors.

# Exhibit 5.2 Household Size Distribution By C(M)A's



and TTS estimates.

## Population Totals

Exhibit 5.3 presents comparative estimates of population by Region. The expanded TDS population data are 5.3% low compared to Census data and 3.2% low compared to the TTS data, as expected given the underrepresentation of large households. The largest under estimation occurs in York Region with 18% fewer people than were counted in the Census and largest over estimation occurs in Durham Region with 12% more people than the Census figure.

The TDS estimates of population by Region reflect the low total estimate and the poor distribution of households outside of Metropolitan Toronto. However, the distributions of household and population distribution errors are not entirely consistent and, therefore, household size distribution errors are not consistent across the GTA.

Exhibit 5.4 compares Census and TDS estimates of average household size by Region. Overall, TDS estimates of average household size are low compared to TTS estimates, which are low compared to the 1986 Census figures. However, TDS estimates for Peel Region are identical to the comparable TTS estimates, and are similar to TTS estimates for Metro, Durham, and Hamilton-Wentworth. The largest under-estimates are in York and Halton.

## Age Distribution

Exhibit 5.5 summarizes data on population by age group for the Toronto, Hamilton and Oshawa C(M)As. The TDS estimates of population by age group are generally consistent with the age distributions provided by the 1986 Census and the TTS. There is, however, a small but consistent over estimate of the percentage of the total population in the 0 to 14 age group and a comparable under estimate of the 15 to 19 age group for all three C(M)A's.

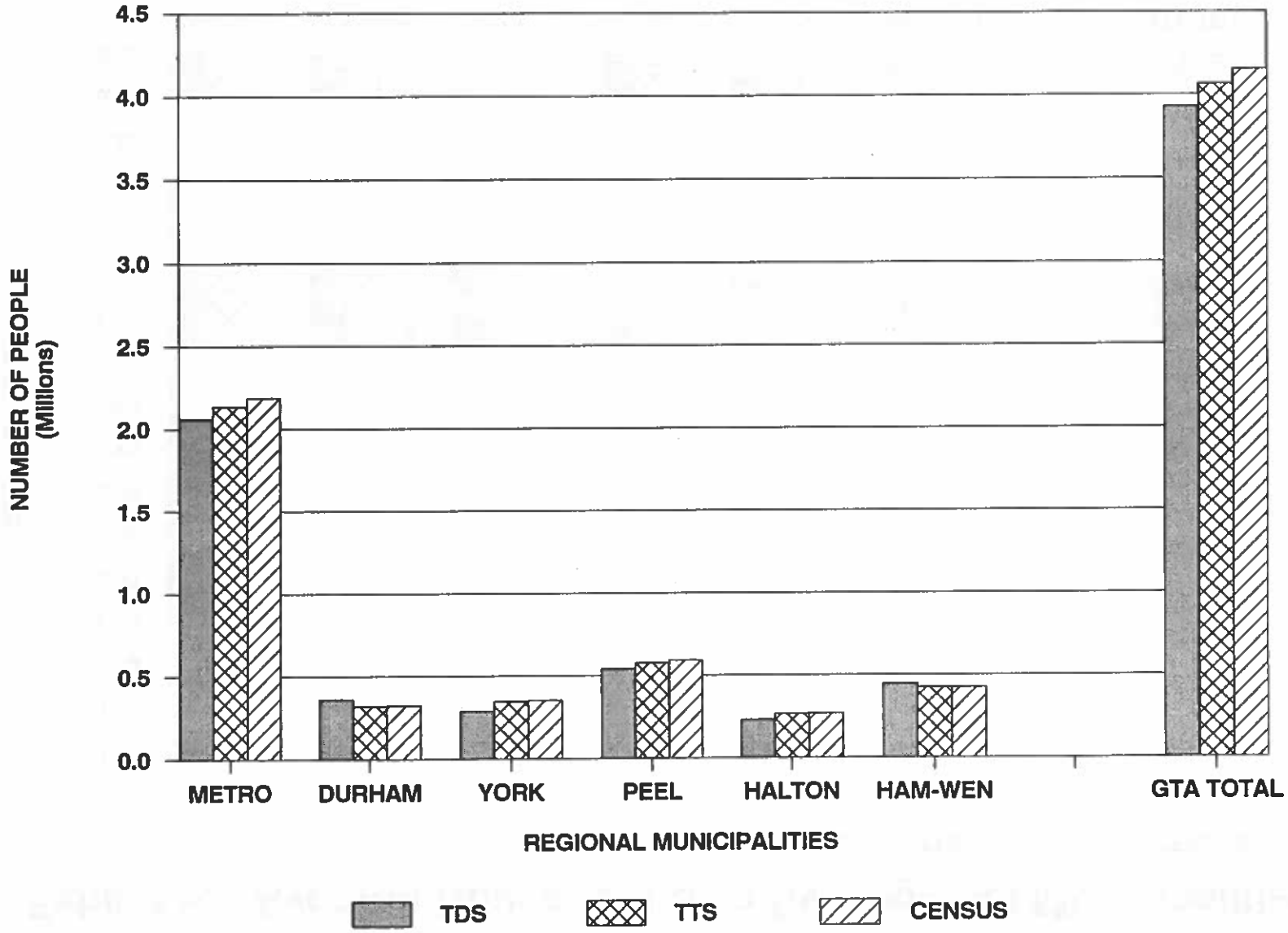
The largest single inconsistency between the TDS results and the 1986 Census figures relates to 20 to 29 age group for the Toronto CMA. Whereas the Census and TTS results suggest that 19 to 20 per cent of the Toronto CMA population is in the 20-29 age group, the TDS estimate is 14.5 per cent.

## Labour Force Participation

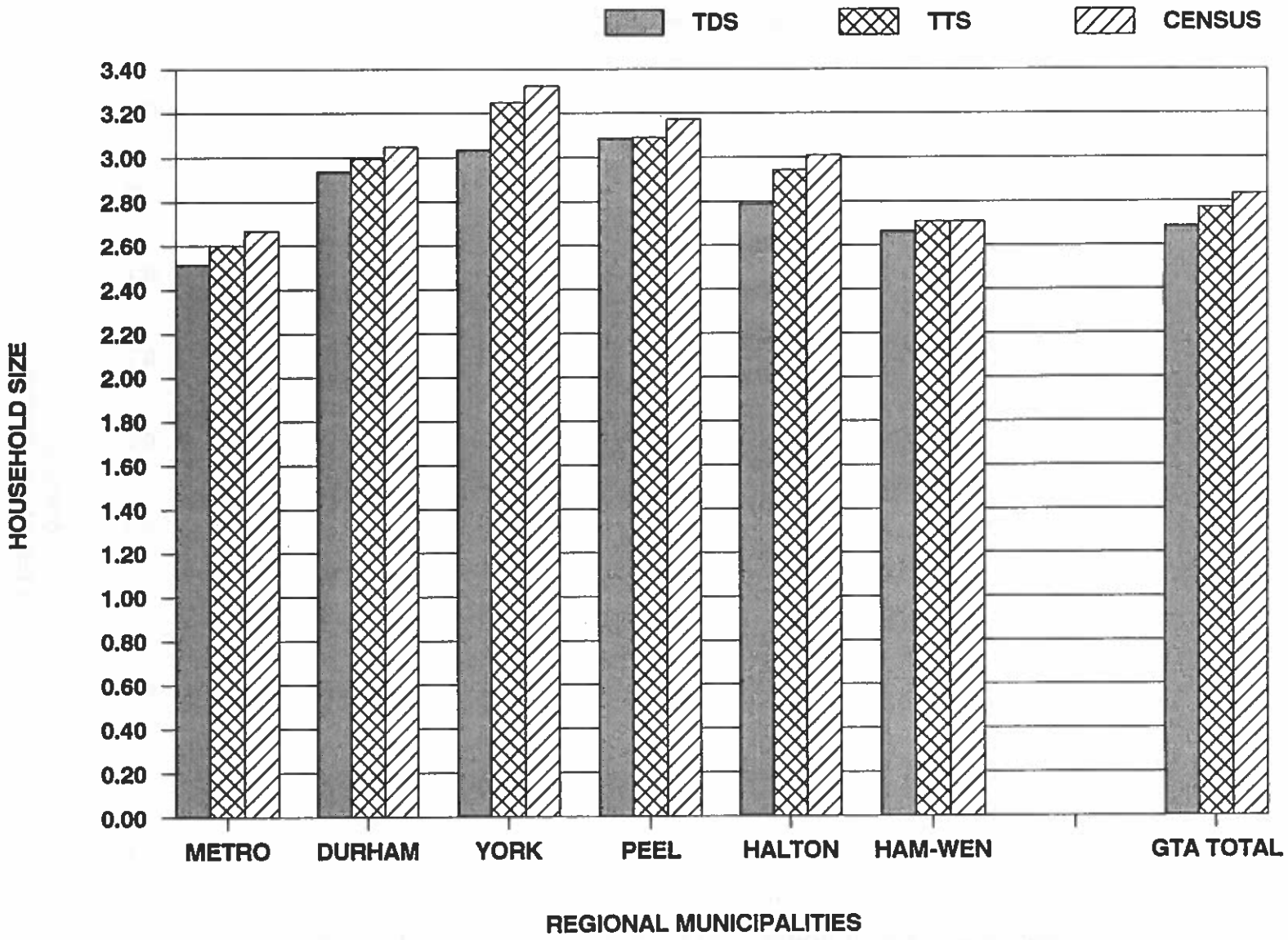
Exhibit 5.6 summarizes labour force participation data for the six Regional Municipalities.

The TDS total GTA Labour Force Participation Rate (54.0%) is closer

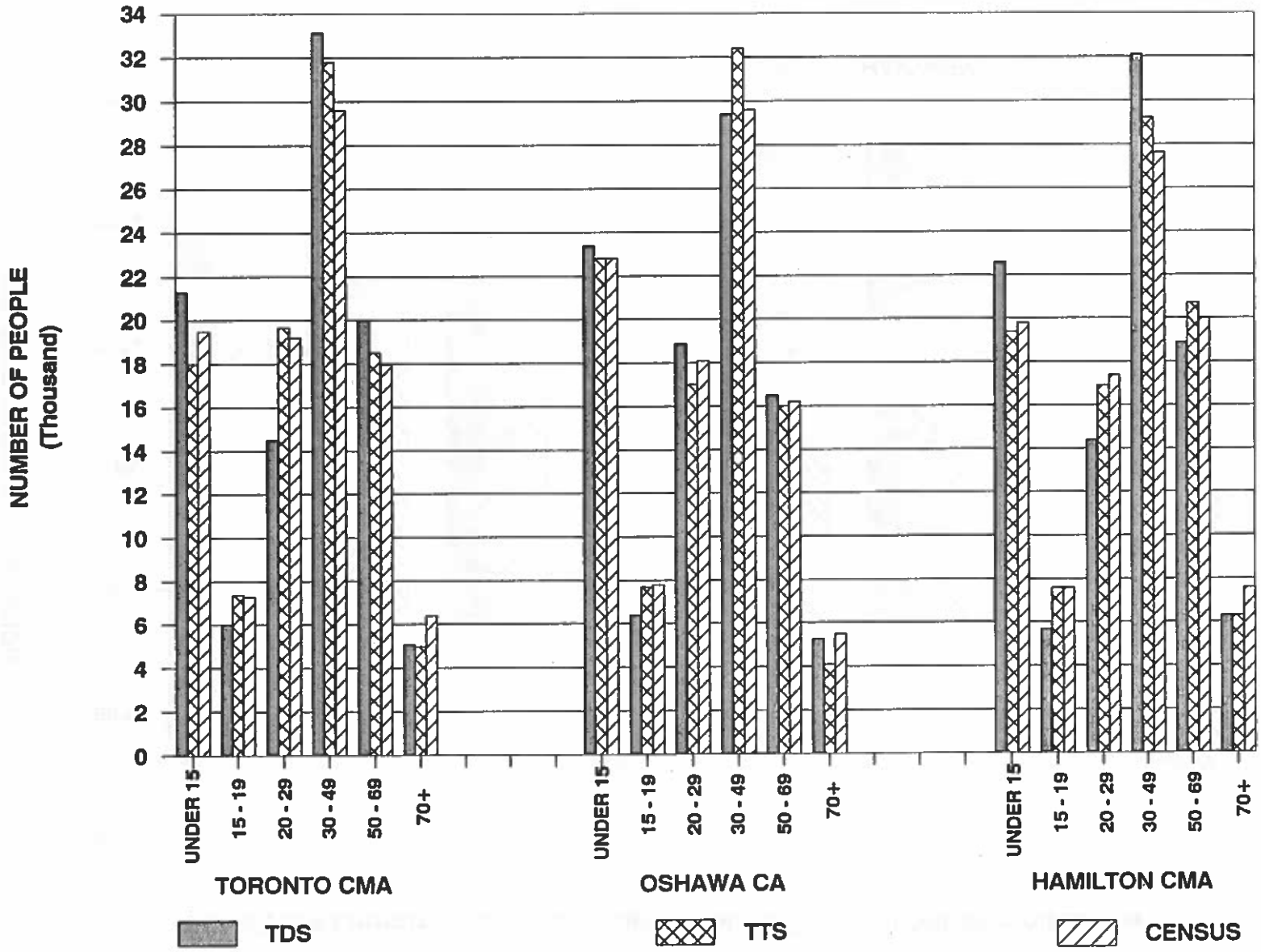
## Exhibit 5.3 Total Population By Regional Municipalities



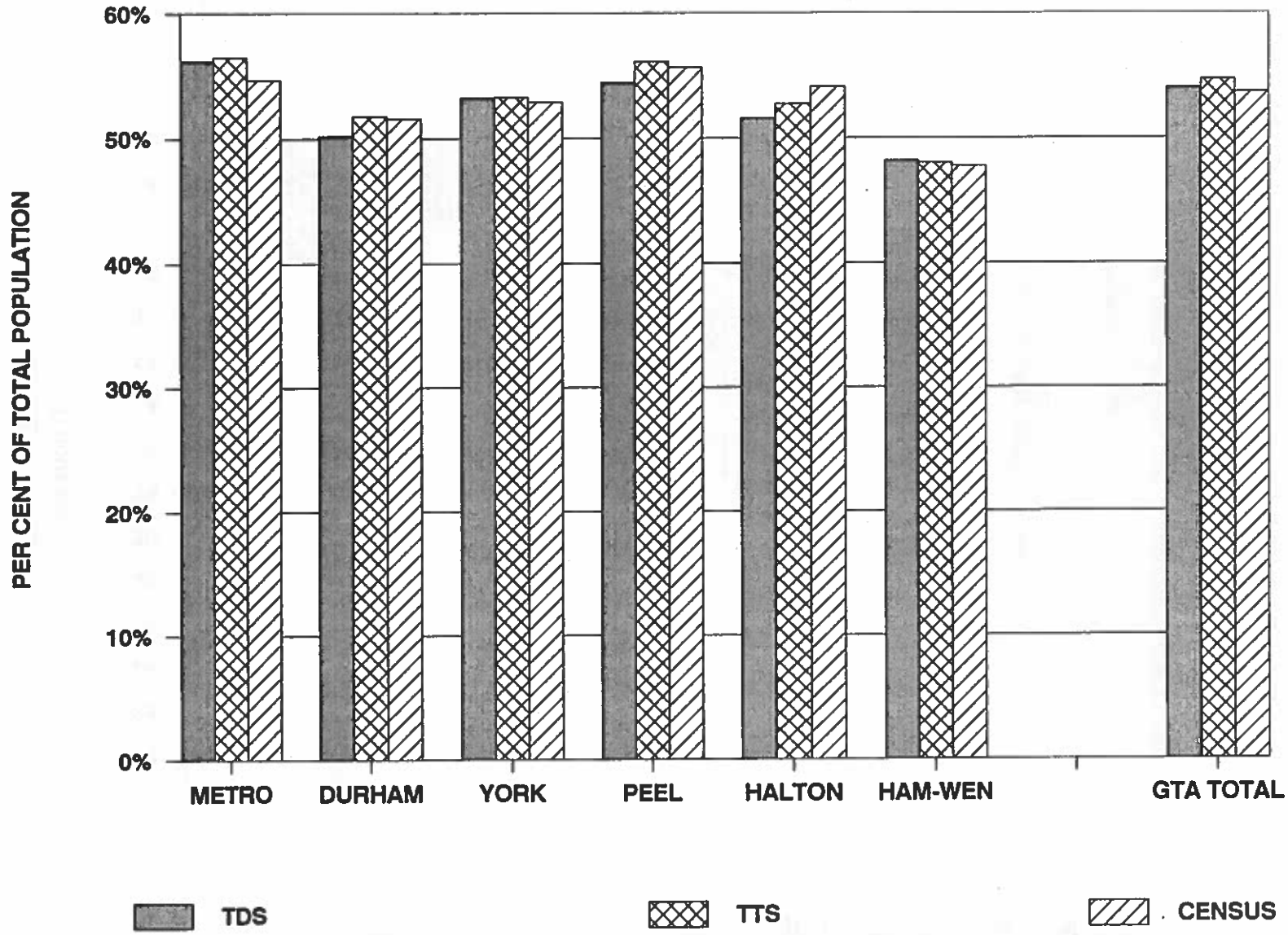
# Exhibit 5.4 Average Household Size By Regional Municipalities



## Exhibit 5.5 Population By Age Group Distribution By C(M)A's



## Exhibit 5.6 Labour Force Participation Rates By Regional Municipalities



to the Census estimate (53.7%) than to the TTS estimate of 54.7%. All three estimates are similar for York and Hamilton-Wentworth. However, both the TDS and TTS appear to overstate labour force participation in Metropolitan Toronto. The TDS appears to understate labour force participation in Durham, Peel and Halton Regions.

Part Time vs. Full Time Employment

Exhibit 5.6B provides comparative data on part-time and full-time employment estimates based on TTS telephone and TDS trip diary surveys. Comparable Census or Statistics Canada Labour Force Survey data were not available. The Census and Labour Force Surveys define part-time employment in terms of both seasonality and hours of work and, therefore, are not consistent with the TTS/TDS definitions which focus on hours of work only.

The TDS estimate consistently exceeds the TTS estimate for the proportion of total labour force which is part-time. This appears to reflect differences in survey methodology. TTS interviewers were told to classify workers as part-time if they worked fewer than 25 hours per week. The TDS results reflect respondents' interpretations of part time/full time status and, therefore, care must be exercised in using the TDS data to assess differences in full-time and part-time travel characteristics. The characteristics and behaviour of TDS part-time workers are not necessarily comparable to those for TTS part-time workers.

Income and Occupation

Exhibit 5.7 presents TDS and Census estimates of 1985 average personal income by sex for each Region with the GTA. The TDS estimates are high, compared to the Census figures, for both males and females, except for Halton, which is accurately reported for both sexes, and Peel, which is accurately reported for Males. Overall, it appears that lower income residents are under-represented in the Trip Diary sample. However, all income groups appear to be well represented in the TDS sample and the Diary appears to give an accurate indication of the relative income levels of the residents of Metropolitan Toronto and the other Regions.

Exhibit 5.8 compares TDS estimates of the distribution of occupational characteristics for the Regions with 1986 Census figures. The comparison of the TDS and Census figures can only be approximate, given that the TDS asked people to classify themselves in terms of major categories while the Census classifies occupations based on detailed questions about what people actually do at work. Not surprisingly, Professional, Technical and Managerial occupations are over-represented in the TDS sample and

# Exhibit 5.6b Percentage of Part and Full Time Workers By Sex

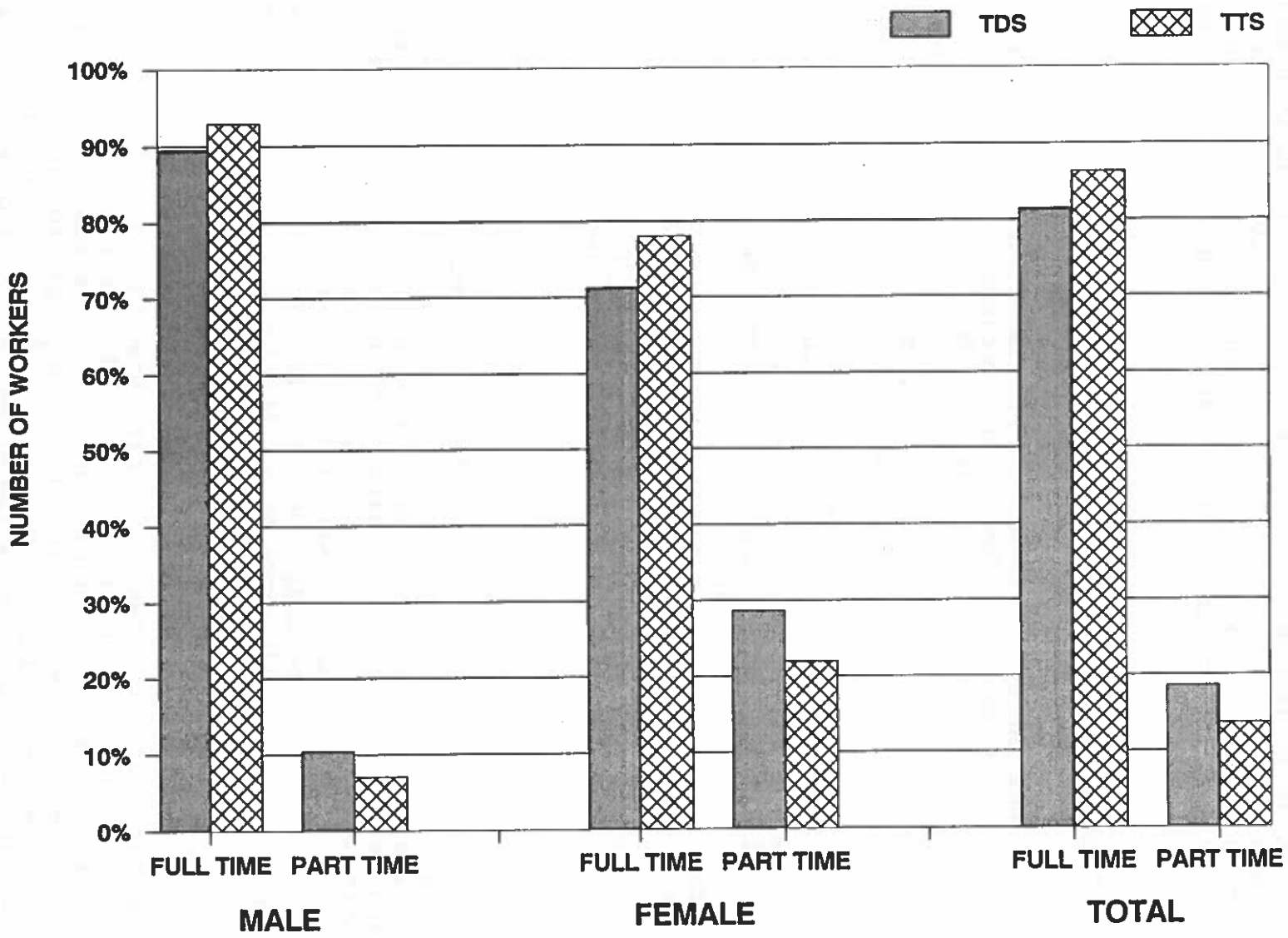
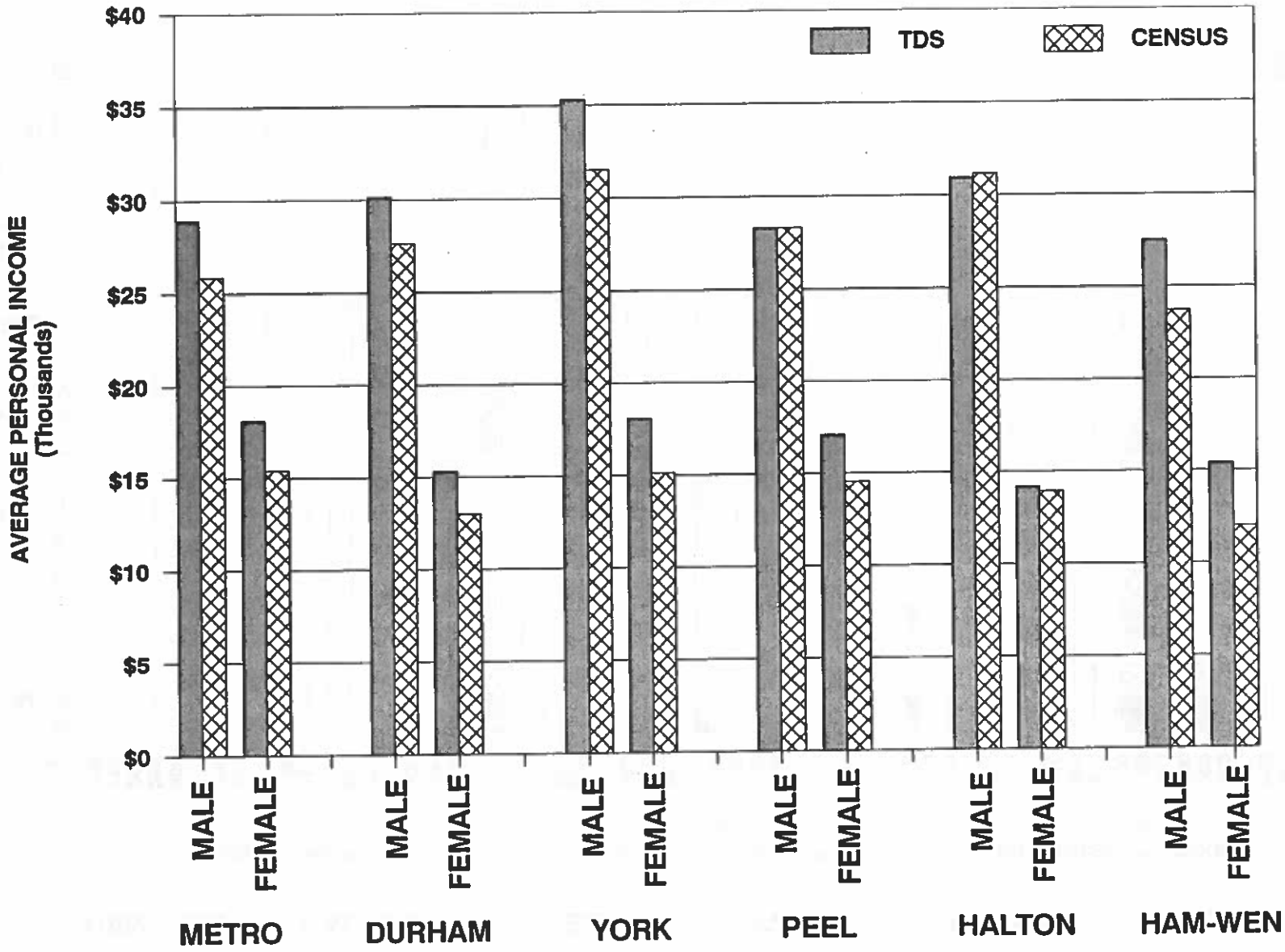
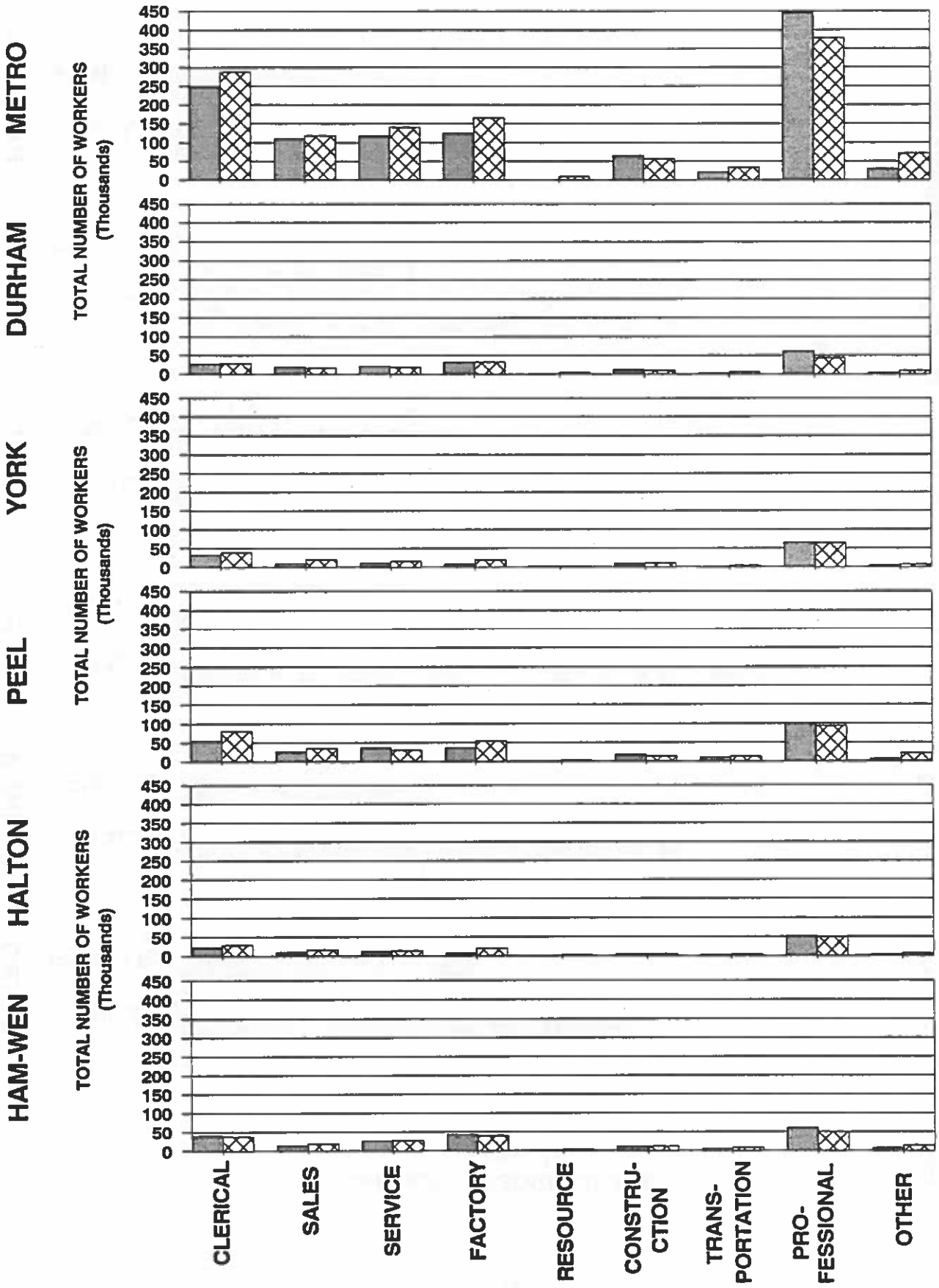


**Exhibit 5.7 TDS/CENSUS Average Personal Income Distribution By Regional Municipalities**



## Exhibit 5.8 TDS/CENSUS Occupation Type Comparison By Region



lower status occupations, such as clerical and service are under-represented. This result is consistent with the higher TDS income estimates.

Note that the occupational match, between TDS and Census, is better in Durham and Hamilton-Wentworth, than in Metro and the other Regions. Also, all major occupational groups are well represented in the TDS sample.

## Land Use at Place of Work

The TDS respondents reported on the land use at their place of work. However, these data were not coded for persons who did not report a work trip and, therefore, we were unable to compare TDS estimates of employment by land use with independent estimates.

Exhibit 5.9 compares TDS-based estimates of work trips ending in Metro by land use category with Metro Planning figures on employment at place of work by comparable land uses. This comparison is necessarily crude because daily work trips per job are not constant for different types of land use. For example, retail/service uses employ high proportions of part-timers and, therefore, would be expected to attract fewer work trips per employee than office uses.

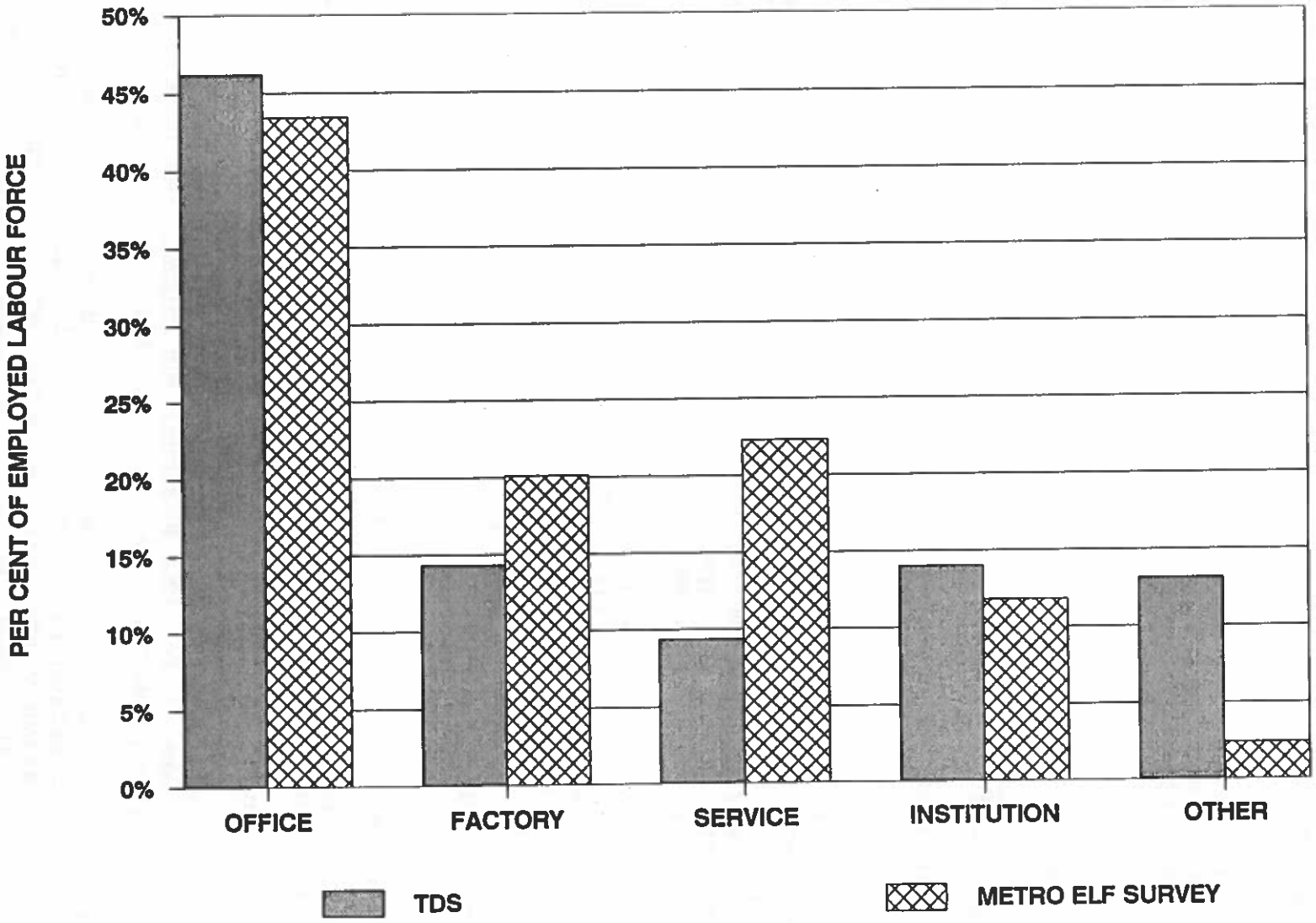
Despite the crudeness of the comparison, it suggests that TDS respondents are more likely to work in offices and institutions than the general population and are less likely to work in factories or service/retail establishments. This result is consistent with the occupational data which suggest that Managerial, Professional and Technical occupations are over-represented in the TDS.

## Demographic/Socio-economic Analysis - Summary

Based on the analysis of household and demographic characteristics for the TDS survey, compared to 1986 Census and TTS, great care should be taken in using TDS based estimates of persons or trips by Region or any smaller area. The under-representation of larger households and the boundary problems associated with the use of postal codes in defining the sample strata, lead to significant estimation errors for the Regional Municipalities outside Metro. The population count for Metropolitan Toronto is reasonable.

Based on our analysis of age structure characteristics and labour force participation rates, the TDS results are representative and provide relatively accurate estimates of these characteristics. However, the TDS sample tends to be biased in terms of income and occupational characteristics, with higher income groups being over-represented and lower income groups being under-represented. These

## Exhibit 5.9 TDS/METRO ELF SURVEY Destination Landuse Comparison Within Metro



socio-economic biases would be expected to influence reported travel behaviour. The possible effects of these biases are considered in the following section.

## 5.2 Travel Characteristics Analysis

TDS estimates of travel behaviour were compared with the best available travel data (the Transportation Tomorrow Survey) to identify possible response biases (which might limit the usefulness of the TDS data). The following sections compare TDS and TTS estimates of trip distribution and mode split by trip purpose, and assess TDS estimates of travel in relation to 1987 cordon count data.

Work Travel Patterns

Exhibit 5.10 illustrates the percentage distribution of home to work trips between the six Regional Municipalities in the GTA, based on the TDS and TTS surveys. Exhibit 5.11 summarizes the same data for travel to and from Metropolitan Toronto.

The TDS appears to accurately estimate the proportion of intra-regional trips made by Metro Toronto, Peel and Hamilton residents, as shown in Exhibit 5.10. However, the TDS estimates of the proportion of intra-regional work trips made by Durham, York and Halton residents are low.

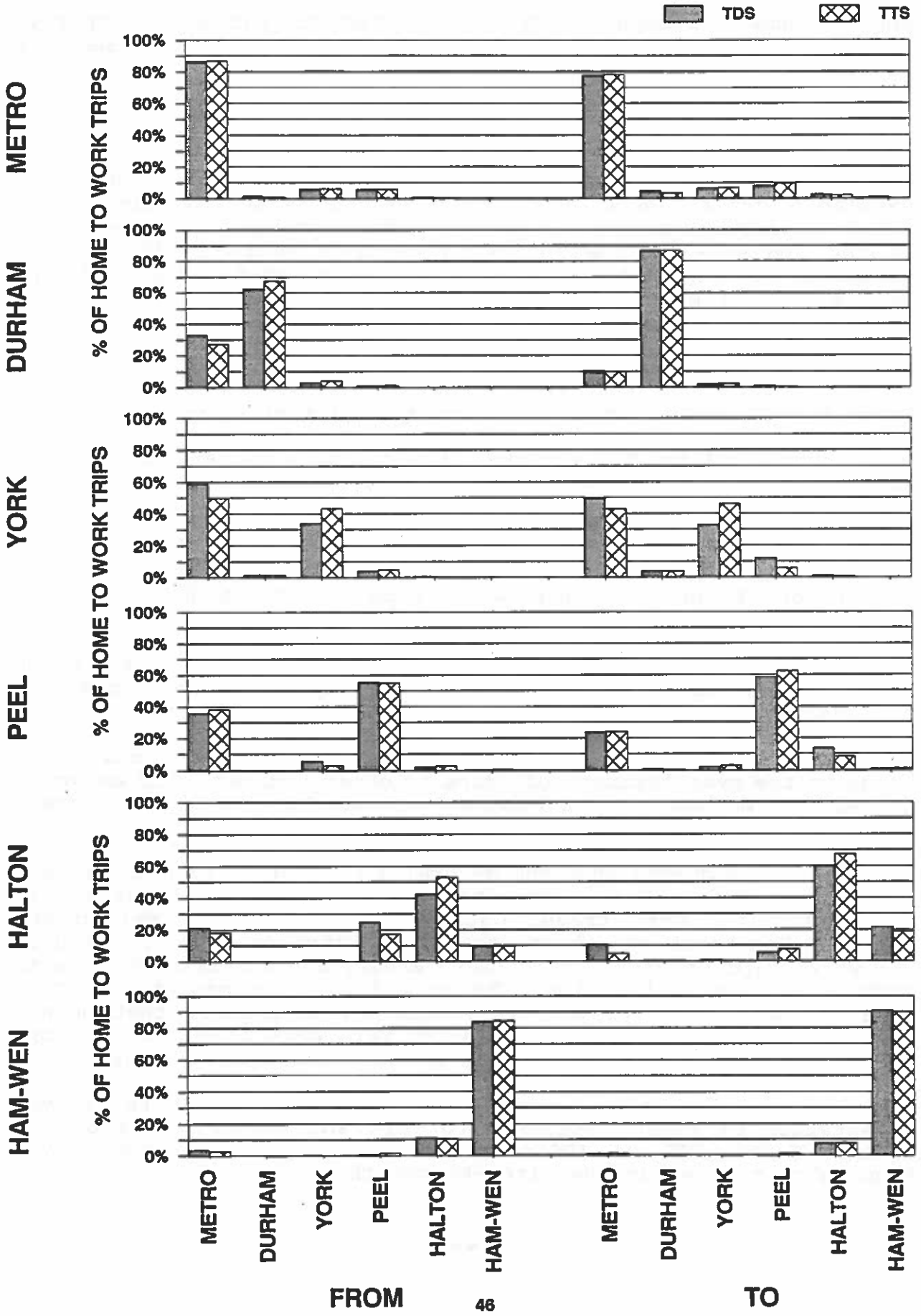
TDS estimates of the number of trips attracted to each region which begin in that region are accurate (within 1%) for Metro, Durham and Hamilton, but low for the other Regional Municipalities.

The above mentioned cases of the understatement of local trips leads to the overstatement of trips to other regions. For example, travel from Durham, York and Halton to Metro Toronto is overstated, as is travel from Halton to Peel.

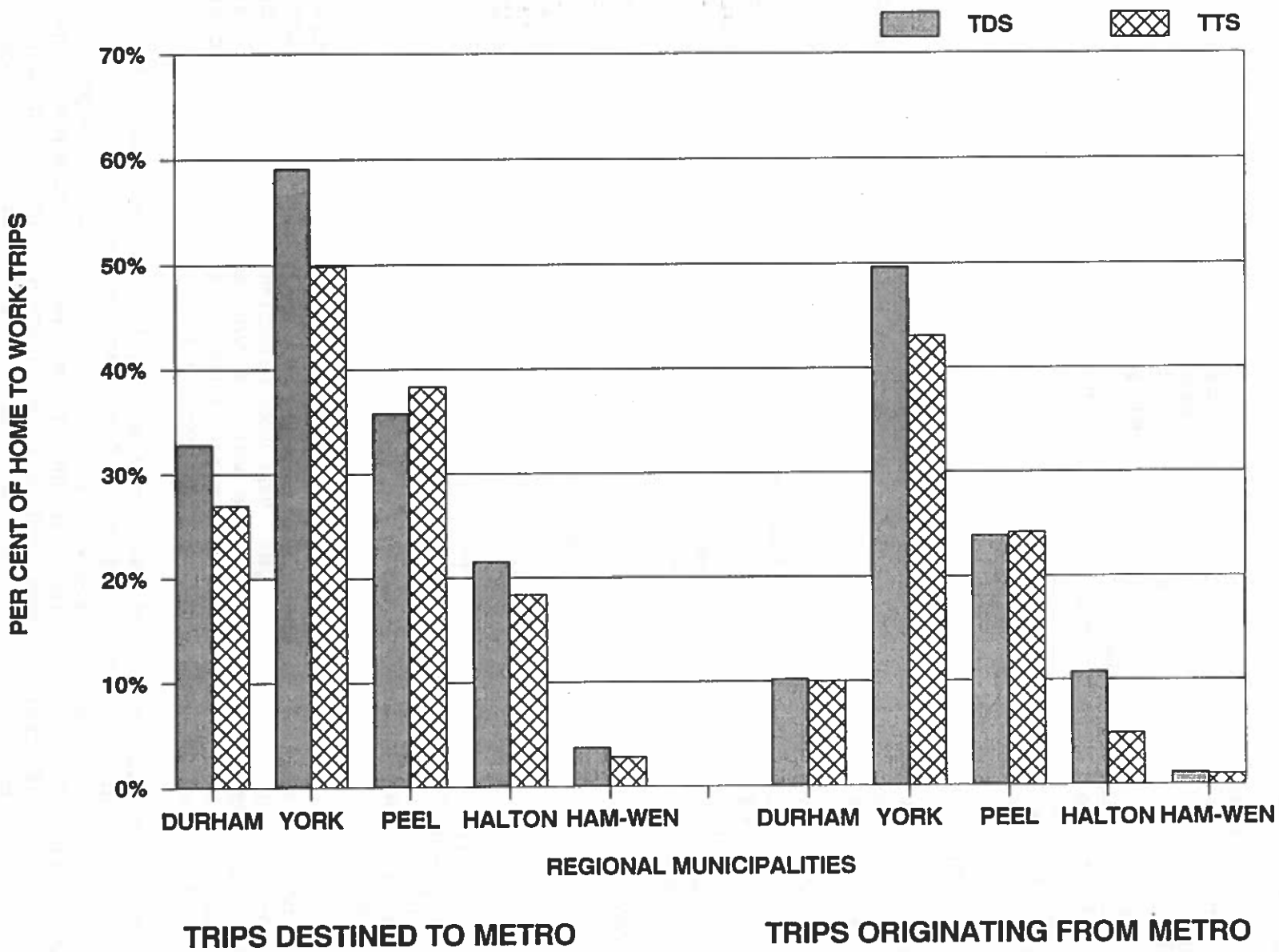
Exhibit 5.10 suggests that the general distribution of home to work travel to and from Metro looks reasonable. However, Exhibit 5.11 shows that TDS work travel data for Durham, York, Halton and Hamilton-Wentworth overstates travel to Metro (as a proportion of all work trips originating in these areas) and understates home to work trips from Peel Region. Durham and York Regions stand out as areas of Metro work travel overstatement. It appears that Durham and York residents who work in Metro were more likely to respond to the TDS trip diary survey than persons who work elsewhere.

The TDS results also appear to overstate the work travel orientation of Metro residents to York and Halton, as shown in Exhibit 5.11. TTS and TDS estimates are very similar for travel from Metro to Peel and Hamilton-Wentworth.

Exhibit 5.10 Percentage of Home To Work Trips From/To Region and To/From Region



## Exhibit 5.11 Proportion of Home To Work Trips Destined To/Originating From Metro



## Total Travel Patterns

Exhibit 5.12 compares the percentage distribution of total daily trips between the six Regional Municipalities in the GTA, based on the TDS and TTS surveys. Despite differences in total trip rates, between the TDS and TTS surveys, with the TDS diary yielding more trips in total, the regional travel patterns appear to be very similar (more similar than the work travel data). The higher estimates of "other home-based" and "non-home based" trip making found in the TDS, as documented in Chapter 4, do not appear to affect the distribution of total travel between the Regions.

## Mode Choice by Trip Purpose and Region

Exhibits 5.13, 5.14 and 5.15 compare TDS and TTS mode split estimates for total GTA travel by purpose, work travel by region, and total travel by region.

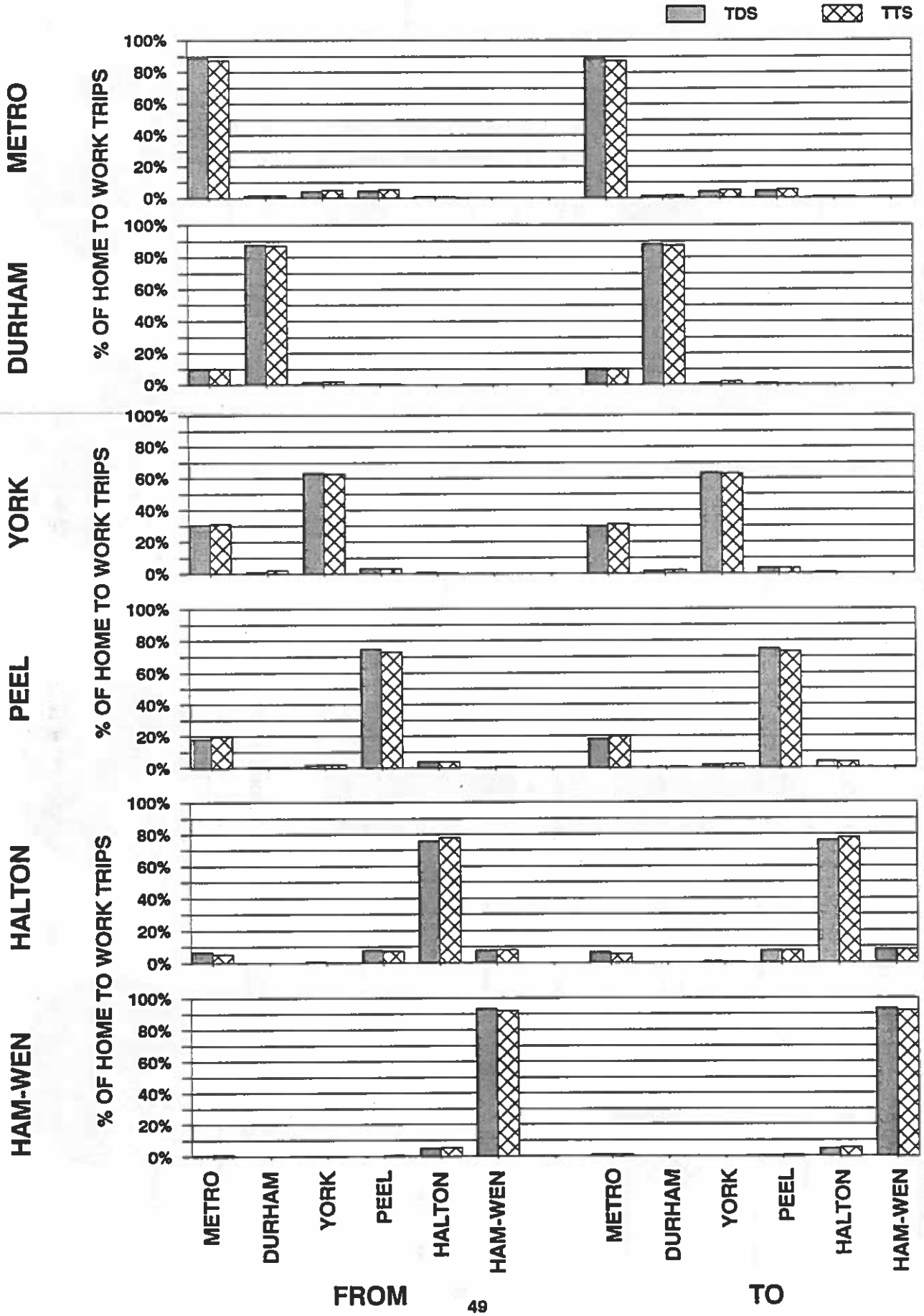
Overall GTA modal split estimates are generally similar for the two surveys, with Home based work estimates being within 1% for all modal categories except for auto passengers (which are 8.3% of work trips for TDS versus 9.7% for TTS). Auto mode shares estimated on the basis of TDS data are within 3 percentage points for all purposes while transit mode shares are within 1% for work, school, shopping/personal business, social recreation and non-home based travel.

The major differences between the two surveys relate to transit and walk trips to/from school. Despite colder winter weather during the time of the TDS survey, which would tend to increase transit use, the diary reports a higher proportion of home-based school walk trips and a lower proportion of transit trips compared to the TTS telephone survey. This lower estimate of school transit use results in the TDS survey providing a marginally lower estimate of overall transit market share for the GTA (16.5% for the TDS versus 18.4% for the TTS).

The differences in walk and transit mode splits for school travel probably relate to the differences in the numbers of students reported in the two surveys. The TDS reported more students, many of whom were full or part-time workers who attended school part-time. However, it is not clear how this difference could account for differences in reported mode choice behaviour.

TDS and TTS estimates of modal shares for home-based work trips are very similar for most regions. For example, as shown in Exhibit 5.14, auto mode splits are within 1% for all Regions except Halton, where the TDS estimate is 4% higher than the TTS estimate. The TDS estimates of transit use and walking between home and work are generally higher than the comparable TTS figures. Given the relatively small sample underlying the Halton estimate (139

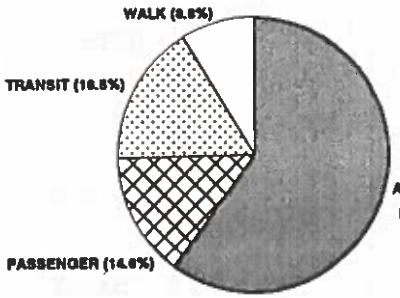
Exhibit 5.12 Percentage of Total Person Trips From/To Region and To/From Region



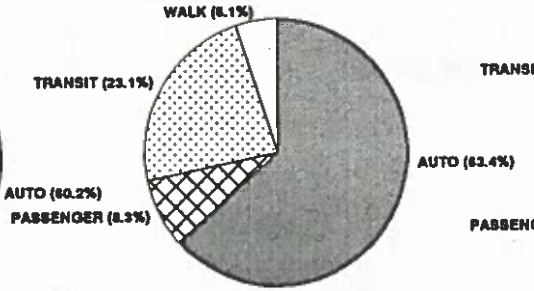
# Exhibit 5.13 TDS/TTS Modal Shares of Total Person Trips in GTA By Trip Purpose

## TDS

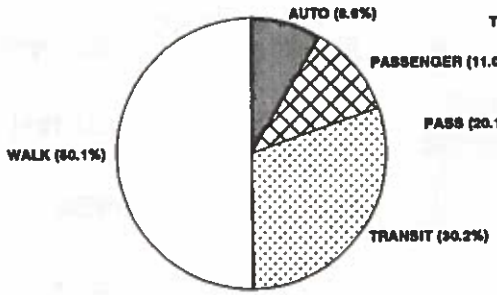
### ALL TRIP PURPOSES



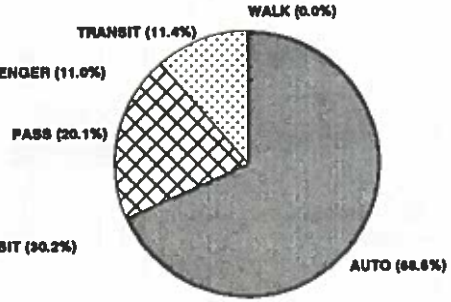

### HOME BASED WORK



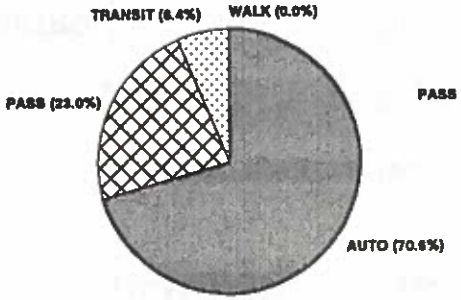

### HOME BASED SCHOOL



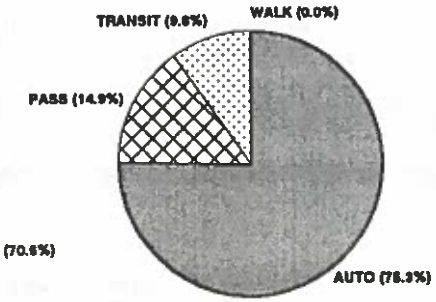

### HOME BASED SHOPPING OR PERSONAL BUSINESS




### HOME BASED SOCIAL, RECREATIONAL, OTHER

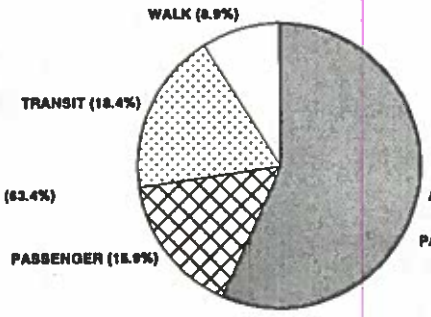



### NON HOME BASED

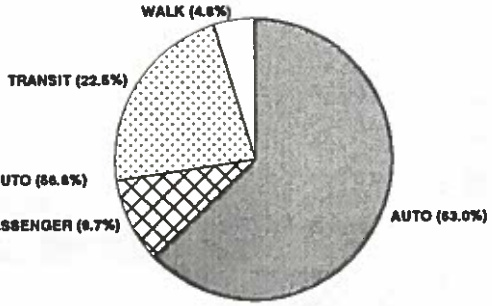



## TTS

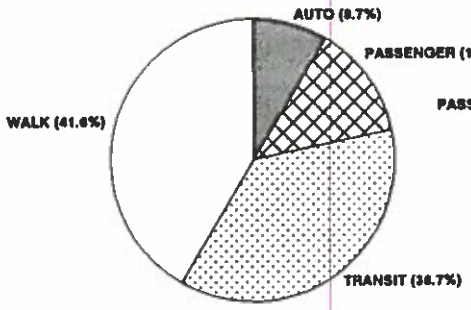
### ALL TRIP PURPOSES



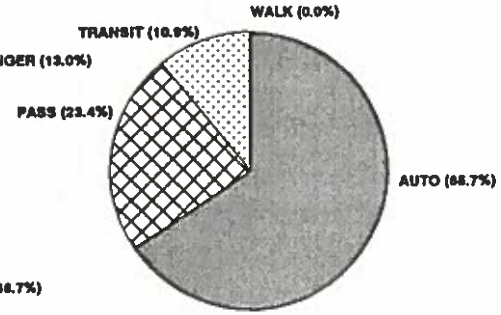

### HOME BASED WORK



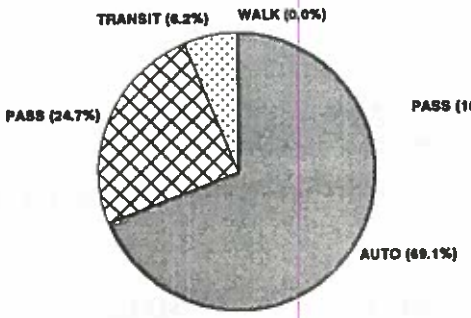

### HOME BASED SCHOOL



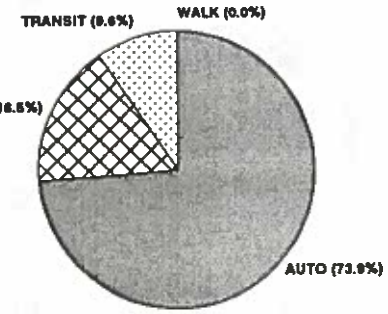

### HOME BASED SHOPPING OR PERSONAL BUSINESS



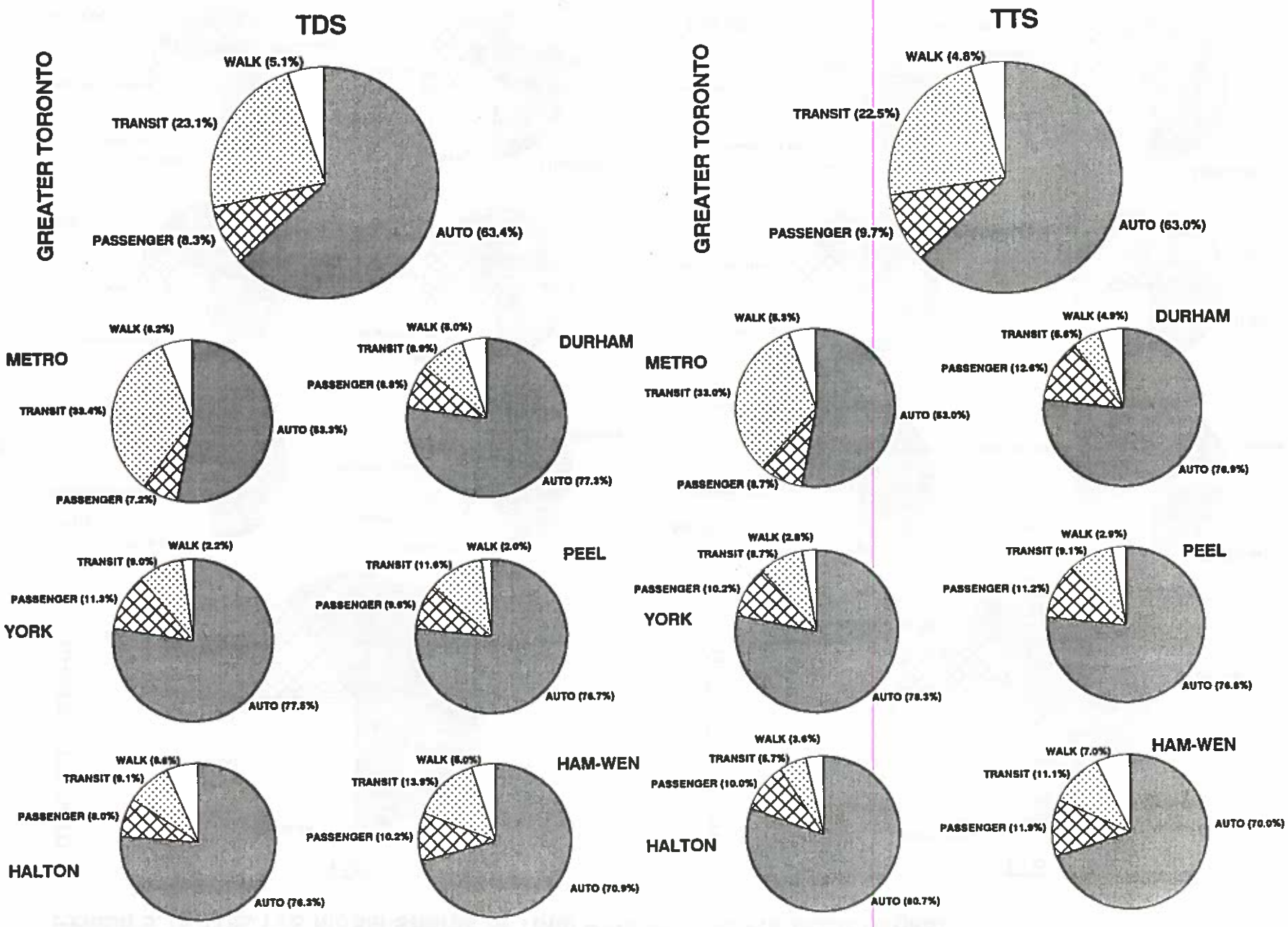

### HOME BASED SOCIAL, RECREATIONAL, OTHER



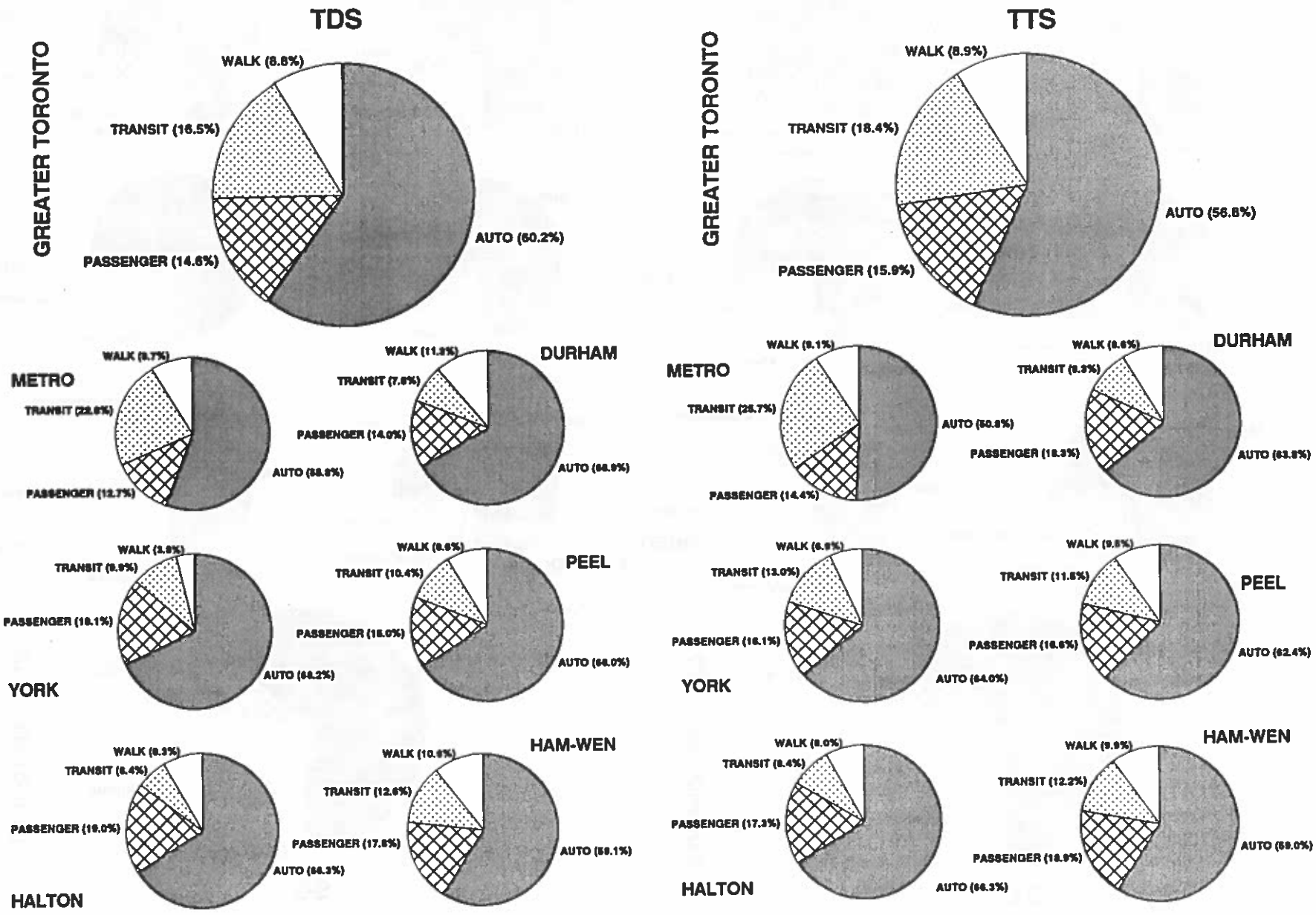

### NON HOME BASED



## Exhibit 5.14 TDS/TTS Modal Shares of Home Based Work Trips By Region of Origin



## Exhibit 5.15 TDS/TTS Modal Shares of Total Person Trips For Each Region



households out of a total of 1948 households), this type of error is not unexpected.

The comparison of TDS and TTS estimates of modal shares for all trips by Region and the GTA (Exhibit 5.15) shows that transit use is lower in the TDS survey for all Regions except Hamilton-Wentworth. The Hamilton-Wentworth estimates of mode split are very similar for all modal categories with both surveys.

## 5.3 Cordon Count Comparisons

In order to assess the effects of non-response bias and sampling errors on the accuracy of TDS based travel estimates we compared TDS estimates of travel at the Metro Boundary and Toronto Central Area Cordons with 1987 cordon count data.

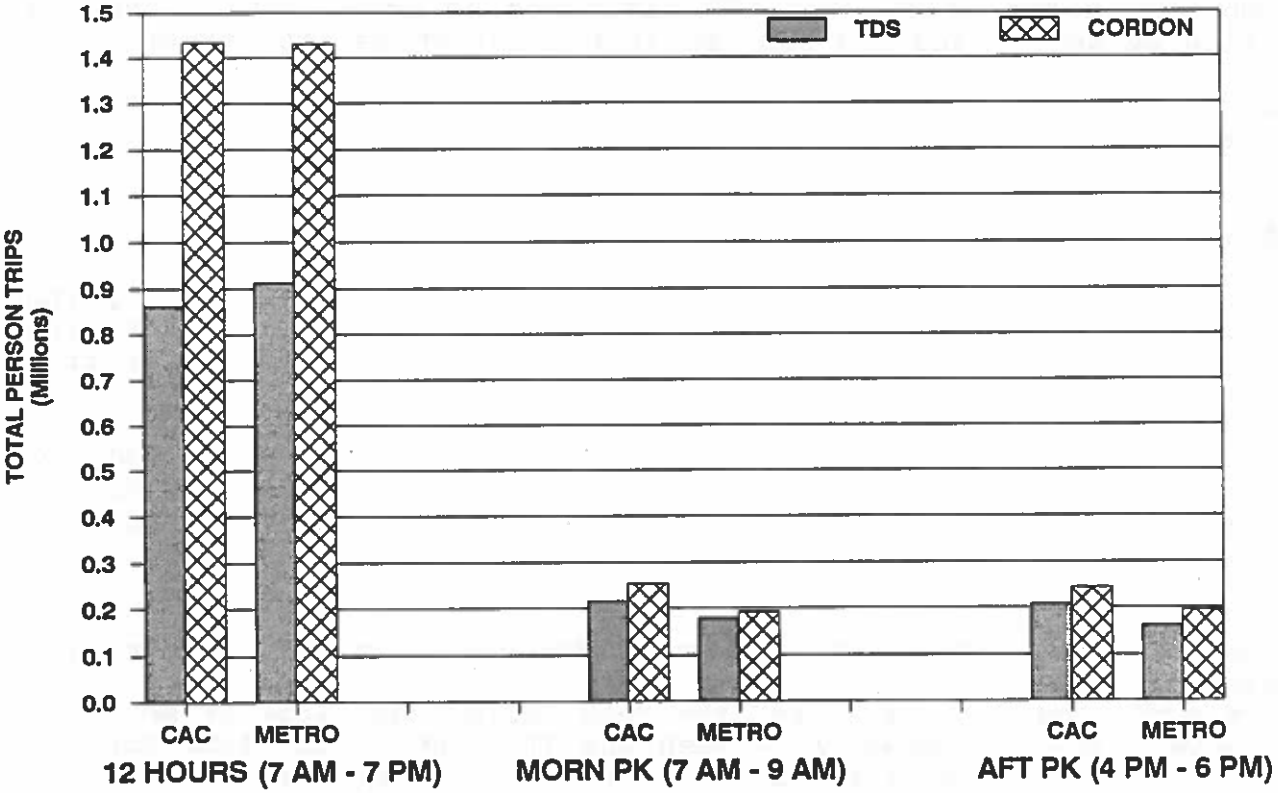
The results, which are summarized in Exhibit 5.16, suggest that TDS estimates are consistent with cordon count data for the AM and PM peak periods at both the Central Area and Metro Boundary cordons but that over the 12 hour period the TDS results are low by 35 to 40 per cent.

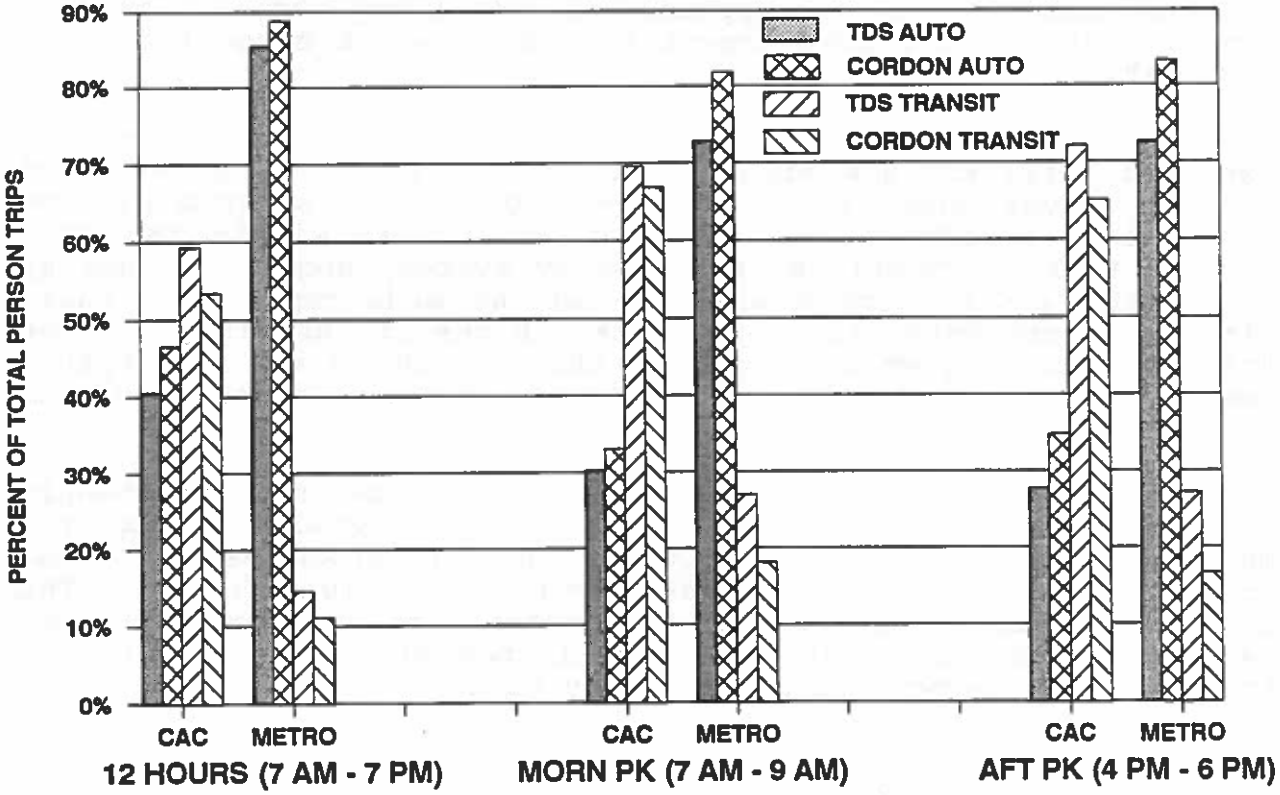
The absolute numbers of trips estimated based on the expanded TDS data exclude through travel and, therefore, should be lower than the cordon data. Therefore, the Peak period data look reasonable. However, the discrepancy between the TDS and Cordon data for the 12 hour period cannot all be explained by through travel. Despite the higher trip rates reported in the TDS for other home-based and non-home based travel, it appears that the Diary also understates total daily and off-peak travel "as measured at screenlines and cordons".

Any "home interview survey", no matter how well designed and executed, will exclude significant numbers of off-peak auto and transit travel which is not "home-based". Such surveys exclude out-of-town residents and tourists who travel within the GTA, through traffic, mostly on the freeway system, and trips made by local sales and service people (who were asked to report only their first and last work trips of the day in the TTS and TDS). These "missed trips" may well account for the majority of the discrepancy between the TDS twelve hour estimate and the cordon count for the same period.

During the AM and PM peaks the TDS estimates consistently understate auto use, as a proportion of total travel, although the mode splits at the Cental Area Cordon, during the AM peak are close to what was reported in the 1987 Cordon Count (within 3%). The under-estimates of auto use at the Central Area and Metro cordons may reflect the fact that the TDS estimates do not include through travel, which is more likely to be by auto.

## Exhibit 5.16 TDS/METRO CORDON Screen Line Comparison
## TOTAL PERSON TRIPS



Considering the methods used in this necessarily crude comparison of Survey and cordon results, the TDS estimates of mode choice during all periods appear to be reasonable. Based on the occupational and income comparisons, which suggest a bias toward higher income groups, one would have expected the TDS results to over-represent auto use at the expense of transit. However, the cordon count comparison suggests that auto users are not over-represented in the TDS sample.

## 5.4 TDS Validation - Findings and Conclusions

The comparison of TDS based estimates of socio-demographic and travel characteristics data with compatible information from the Census suggests that population and average household size are low because of the under-representation of larger households in the final sample. Furthermore, TDS-based estimates of household and population by Region (outside of Metro) are inaccurate due to sample selection and allocation problems. Therefore, care must be taken in using the TDS to estimate absolute numbers of households, persons or trips. However, the TDS appears to provide reasonable estimates of rates and proportions for population characteristics, such as labour force participation, and travel behaviour, such as trip rates and mode splits.

TDS estimates of age distribution and labour force participation are consistent and reasonable, as are data related to total travel distribution and mode choice. The TDS sample appears to be biased in income and occupational terms, with lower status occupations being under-represented, and Toronto oriented commuters appear to be over-represented in all Regions except Peel. However, these apparent socio-economic biases do not translate into obvious mode choice biases.

The following section discusses the implications of sampling and non-sampling errors for the use of trip rate and proportion data provided by the TDS survey.

### Sampling and Non-Sampling Errors and Implications

In assessing the impact of sampling error on TDS estimates we focused on trip rates and estimates of trip distribution proportions. Exhibit 5.17 presents information on sampling errors for trip rates by purpose for the GTA and the individual Regions.

Exhibit 5.17 SAMPLING ERROR FOR TRIP RATES BY PURPOSE

TOTAL TRIPS PER PERSON BY REGION

| | RESPONSES | MEAN | STD * | 95% CONFIDENCE INTERVAL OF THE MEAN LOW | HIGH |
|---|---|---|---|---|---|
| METRO | 1503 | 2.50 | 2.03 | 2.40 | 2.61 |
| DURHAM | 465 | 2.73 | 2.28 | 2.53 | 2.94 |
| YORK | 396 | 2.74 | 2.34 | 2.51 | 2.98 |
| PEEL | 607 | 2.66 | 2.11 | 2.50 | 2.83 |
| HALTON | 307 | 3.13 | 2.42 | 2.86 | 3.40 |
| HAM-WEN | 932 | 2.70 | 2.26 | 2.55 | 2.84 |
| TOTAL | 4210 | 2.66 | 2.19 | 2.60 | 2.73 |

* NOTE : STD = STANDARD DEVIATION

HOME BASED WORK TRIPS PER EMPLOYED PERSON BY REGION

| | RESPONSES | MEAN | STD | 95% CONFIDENCE INTERVAL OF THE MEAN LOW | HIGH |
|---|---|---|---|---|---|
| METRO | 778 | 1.46 | 0.84 | 1.40 | 1.52 |
| DURHAM | 240 | 1.45 | 1.02 | 1.32 | 1.58 |
| YORK | 191 | 1.42 | 0.86 | 1.30 | 1.55 |
| PEEL | 340 | 1.39 | 0.87 | 1.29 | 1.48 |
| HALTON | 155 | 1.65 | 1.02 | 1.48 | 1.81 |
| HAM-WEN | 414 | 1.39 | 0.97 | 1.29 | 1.48 |
| TOTAL | 2118 | 1.44 | 0.91 | 1.41 | 1.48 |

HOME BASED SCHOOL TRIPS PER STUDENT BY REGION

| | RESPONSES | MEAN | STD | 95% CONFIDENCE INTERVAL OF THE MEAN LOW | HIGH |
|---|---|---|---|---|---|
| METRO | 184 | 1.91 | 1.08 | 1.75 | 2.07 |
| DURHAM | 71 | 1.85 | 1.23 | 1.56 | 2.14 |
| YORK | 62 | 1.73 | 0.96 | 1.48 | 1.97 |
| PEEL | 84 | 1.91 | 1.17 | 1.65 | 2.16 |
| HALTON | 44 | 1.84 | 0.99 | 1.54 | 2.14 |
| HAM-WEN | 176 | 1.76 | 1.08 | 1.60 | 1.92 |
| TOTAL | 621 | 1.83 | 1.09 | 1.75 | 1.92 |

HOME BASED OTHER TRIPS PER PERSON BY REGION

| | RESPONSES | MEAN | STD | 95% CONFIDENCE INTERVAL OF THE MEAN LOW | HIGH |
|---|---|---|---|---|---|
| METRO | 1503 | 0.82 | 1.31 | 0.75 | 0.89 |
| DURHAM | 465 | 0.99 | 1.48 | 0.85 | 1.12 |
| YORK | 396 | 1.02 | 1.42 | 0.88 | 1.16 |
| PEEL | 607 | 0.83 | 1.21 | 0.73 | 0.92 |
| HALTON | 307 | 1.09 | 1.36 | 0.94 | 1.24 |
| HAM-WEN | 932 | 0.97 | 1.33 | 0.89 | 1.06 |
| TOTAL | 4210 | 0.91 | 1.34 | 0.87 | 0.95 |

NON-HOME BASED TRIPS PER PERSON BY REGION

| | RESPONSES | MEAN | STD | 95% CONFIDENCE INTERVAL OF THE MEAN LOW | HIGH |
|---|---|---|---|---|---|
| METRO | 1503 | 0.53 | 1.18 | 0.47 | 0.59 |
| DURHAM | 465 | 0.59 | 1.23 | 0.47 | 0.70 |
| YORK | 396 | 0.64 | 1.23 | 0.52 | 0.76 |
| PEEL | 607 | 0.62 | 1.30 | 0.52 | 0.72 |
| HALTON | 307 | 0.76 | 1.49 | 0.59 | 0.93 |
| HAM-WEN | 932 | 0.61 | 1.26 | 0.53 | 0.70 |
| TOTAL | 4210 | 0.59 | 1.25 | 0.56 | 0.63 |

Based on the 95% confidence intervals shown in Exhibit 5.17, TDS estimates of average daily trip rates for the GTA vary from plus or minus 2.5% for total trips to plus or minus 6.3% for Non-home based trips. However, trip rate estimates for individual Regions or smaller geographical areas will be influenced by sample size. For example, the 95% confidence intervals for Halton, the smallest Region, vary from plus or minus 8.7% for total trips to plus or minus 22% for non-home based trips. TDS based estimates of trip rates by purpose for individual Regional Municipalities and smaller geographic areas must be used with caution.

The TDS validation did not suggest any significant biases in the estimation of trip rates. Therefore, the present study did not consider the possible effects of non-response bias in the accuracy of TDS based trip rate estimates. However, the analysis of work travel patterns did reveal apparent biases in trip distribution patterns.

TDS respondents in most Regions outside Metro are more likely to work in Metro than was expected based on the TTS results. Because only 32 per cent of potential TDS respondents are included in the Version 1.1 data base, whereas 68 per cent either refused to participate or provided incomplete information, there is the possibility that the TDS sample is not representative of study area travel patterns. Both sampling and non-sampling error were considered for TDS estimates of inter-regional home to work travel patterns.

Sampling errors for TDS estimates of the proportion of home to work trips to Metro are presented in Exhibit 5.18. Considering only sampling error, at the 95% confidence level, the TDS estimates should be within plus or minus 1.2 percentage points of the true proportion for Metro and within plus or minus 3 percentage points of the true proportion for York Region, which has the highest sampling error for this variable.

**Exhibit 5.18 SAMPLING ERROR : FOR PROPORTIONS OF HOME TO WORK TRIPS DESTINED TO METRO FROM REGIONAL MUNICIPALITIES**

| | RESPONSE | P | Q | t | SAMPLING ERROR (95% confidence) |
|---|---|---|---|---|---|
| METRO | 1136 | 0.781 | 0.219 | 1.96 | 1.2% |
| DURHAM | 349 | 0.328 | 0.672 | 1.96 | 2.5% |
| YORK | 272 | 0.591 | 0.409 | 1.96 | 3.0% |
| PEEL | 471 | 0.358 | 0.642 | 1.96 | 2.2% |
| HALTON | 255 | 0.216 | 0.784 | 1.96 | 2.6% |
| HAM-WEN | 574 | 0.037 | 0.963 | 1.96 | 0.8% |

* P = PROPORTION OF TDS RESPONDENTS WHICH DID ANSWER
Q = 1-P
t = Z-SCORE OF 95% CONFIDENCE INTERVAL FROM THE MEAN

However, bias due to non-response must be considered in evaluating the quality of TDS estimates. Exhibit 5.19 illustrates the total error (the sum of Sampling and Non-sampling errors) for TDS estimates of the proportion of home to work trips to Metro from the six Regions, as well as, the significance of non-response bias on the total error.

In very approximate terms, the total error for the TDS estimate of travel from York to Metro is ± 14% (at the 95% confidence level). This compares to a sampling error of ± 3% for the same estimates. As shown in Exhibit 5.19, non-response bias accounts for 81.5% of the total error for the York to Metro home to work travel estimates. Therefore, non-sampling error is of greater concern with respect to the estimation of work travel patterns than is sampling error. Appendix H illustrates how the estimates of sampling error and total error (including bias) were calculated.

While we were unable to assess the impact of non-response error on other TDS estimates, our analysis of work travel patterns suggests that users should be concerned about the possible effects of non-response in using TDS data for specific Regions and other sub areas.

**Exhibit 5.19 TOTAL ERROR (SAMPLING AND BIAS): FOR PROPORTIONS OF HOME TO WORK TRIPS DESTINED TO METRO FROM REGIONAL MUNICIPALITIES**

| | MEAN SQUARE ERROR (TOTAL ERROR) | BIAS AS A PROPORTION OF MEAN SQUARE ERROR |
|---|---|---|
| METRO | 1.00% | 2.69% |
| DURHAM | 4.58% | 71.12% |
| YORK | 6.93% | 81.50% |
| PEEL | 2.83% | 39.05% |
| HALTON | 3.32% | 41.62% |
| HAM-WEN | 0.96% | 32.28% |

## 6.0 ASSESSMENT OF TDS FOR RESEARCH AND PLANNING APPLICATIONS

The TDS survey was designed to provide additional socio-economic and travel characteristics data which could not be collected in the TTS telephone survey. These additional TDS data were collected to allow GTA planners to better understand present travel behaviour and, based on this understanding, to improve travel forecasting and analysis techniques.

The additional data collected in the TDS relate to socio-economic status (occupation and income), land use (at place of residence and place of work), work and school travel characteristics (normal work week and hours of work by day of the week), car and transit service availability, trip end times and total travel times.

The sections which follow assess the usefulness of the TDS data for the intended research and planning applications. Appendix G presents the various special tabulations referred to in this Chapter.

### 6.1 Data Quality

As discussed in the TTS Validation (Chapter 4), the TDS mailback and diary format generally provides a more complete reporting of trip making than the TTS telephone survey, although Seniors (over 65 years of age) reported more trips over the telephone than in the diary. Also, as discussed in Chapter 5, the TDS appears to accurately report peak period travel. However, off-peak travel appears to be understated in the TDS, in comparison the Cordon Count data, as it was in the TTS survey.

As suggested in Section 5.3, it appears that home interview surveys exclude large components of off-peak travel which are included in cordon counts. Trips made by tourists and other visitors, through travel and business travel are not accounted for in either the TDS or TTS. Therefore, while TDS findings suggest that both the TDS and TTS home interview surveys can be used to estimate peak period trip-making characteristics, we suspect that neither survey provides accurate estimates of off-peak trip making. The 12 hour cordon count comparisons discussed in Section 5.3 suggest that the TDS/TTS "correction factors" presented in Exhibit 4.6b do not overcome the inherent limitations of the home-interview survey with respect to off-peak travel.

The TDS Validation suggests that despite some indication of bias, in terms of household size and population (larger households are under-represented), and socio-economic status (high income and occupational status characteristics are over-represented), the TDS Version 1.1 provides reasonable, and apparently accurate, estimates of trip rates and transit and auto market shares by trip purpose.

Given, the accuracy of TDS estimates of age distribution, labour force participation, and work trip mode splits, we would expect the TDS estimates for other variables to also be reasonably accurate. TDS variables which explain travel habits, including occupation, income, land use at place of work, auto and transit service availability and trip end times, are reasonably accurate, based on the validation exercise documented in Chapter 5. Also, despite some indication of response bias, all income and occupational groups are well represented in the TDS sample, as are destination land uses (for work trips), choice and "passenger captive" transit users. Therefore, the TDS data appear to be ideal for disaggregate analysis of trip generation and mode split issues. The following sections discuss special tabulations of the TDS data which illustrate the potential research and planning applications of the data.

In analysing special tabulations of the TDS data we considered three specific planning/research objectives:

1. To improve daily work trip generation estimates;

2. To improve estimates of peak hour travel demand (to be sensitive to local landuse and occupational characteristics);

3. To improve our understanding of mode choice behaviour considering income/occupation, destination land uses and parking price.

## 6.2 Work Trip Generation

GTA planners currently estimate daily home-based work trip generation using "employed labour force", at place of residence, and "employment", at place of work, as the independent variables and average trip generation factors that reflect the effects of part-time employment and absenteeism on average daily trip rates. While this method is sensitive to local and temporal variations in labour force participation, it does not reflect the effects of spatial variations in part-time employment at place of residence or place of work or any spatial variations in absenteeism by industry, occupation or land use etc.

Daily home to work trip generation should reflect occupational and related land use factors. For example, week-end and part-time work is relatively more prevalent in retail stores and services than in office-buildings and factories. Therefore, we would expect service establishments to have lower average daily trip rates per worker.

Similarly, compressed work weeks may be more prevalent in certain

types of land use than others, with the resultant effects on daily work trips per worker.

The TDS provides information on land use at place of work, and related data on occupation, normal work week and hours of work per weekday and over the weekend. These data provide a unique source of information which can be used to investigate work trip generation issues.

Exhibits 6.1 to 6.3 summarize special tabulations of TDS data on occupation by land use and normal work week. These data show that there are definite relationships between occupation and land use, occupation and normal work week and normal work week and land use (at place of work).

For example, most clerical and professional, technical and managerial workers are employed in office buildings, factory and warehouse workers work primarily in factory/warehouse land uses, and most sales and service occupations are associated with Retail/Service land uses.

The different occupations and land uses have typical working hours characteristics. For example, most sales and service occupations do not work regular weekday hours. Weekend/evening hours and part-time work are most prevalent in these occupations and, therefore, in service establishment land uses, which include retail sales and services. Regular hours are most prevalent in clerical and professional occupations and, therefore, the same is true for office buildings.

Given the relationships between occupation, working hours and land use, land use should logically relate to differences in daily work trip generation.

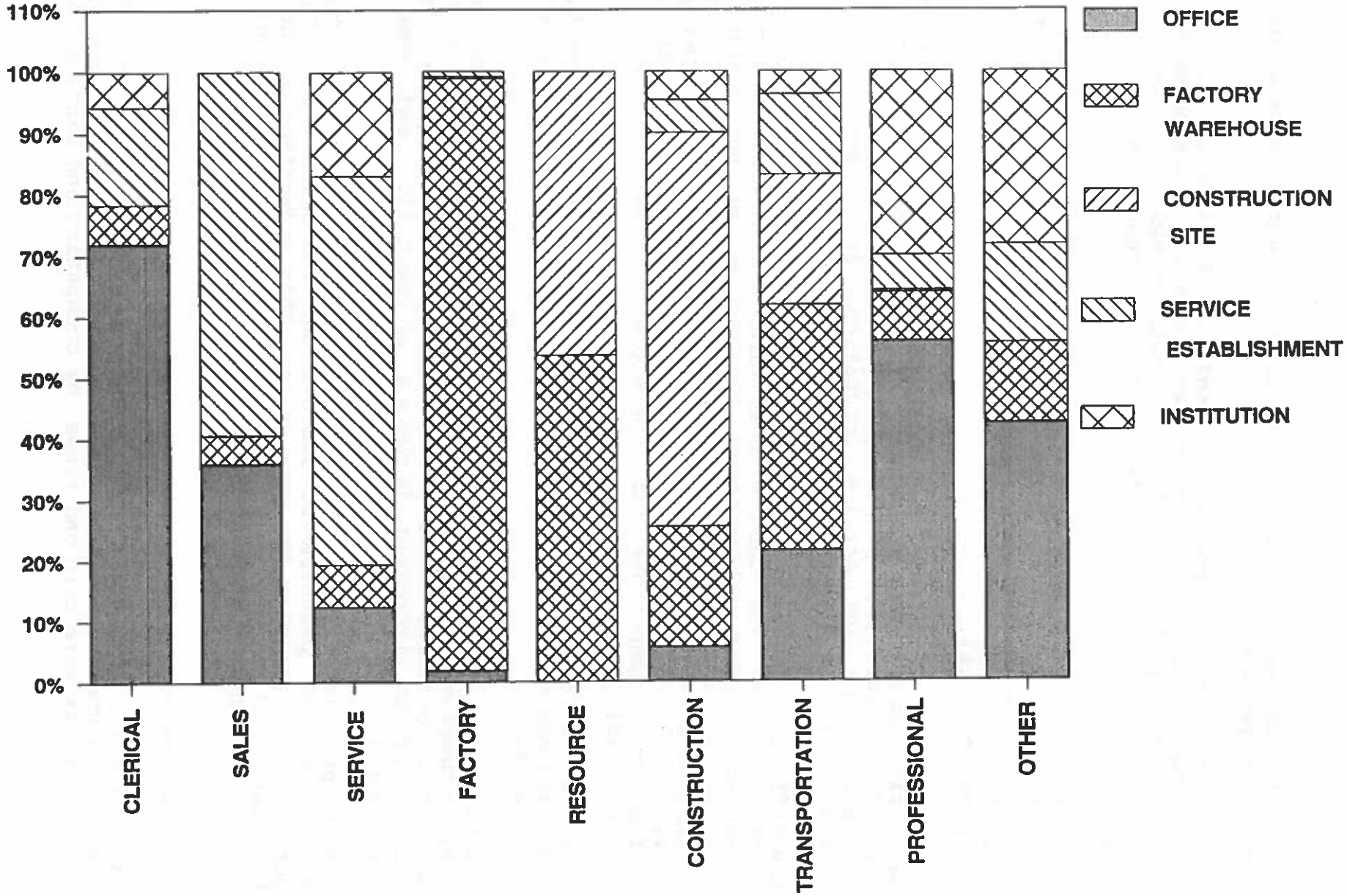
Exhibit 6.4 shows home-based work trip rates per worker by land use, occupation and normal work hours. As expected, service activities generate fewer work trips on the average weekday, because of an increased incidence of part-time and weekend employment.

The TDS provides a wide range of trip generation-related data which will allow GTA planners to improve our understanding of trip generation, especially for work trips. This understanding should translate into improved demand estimates at the "systems planning" and "site planning" levels of analysis.

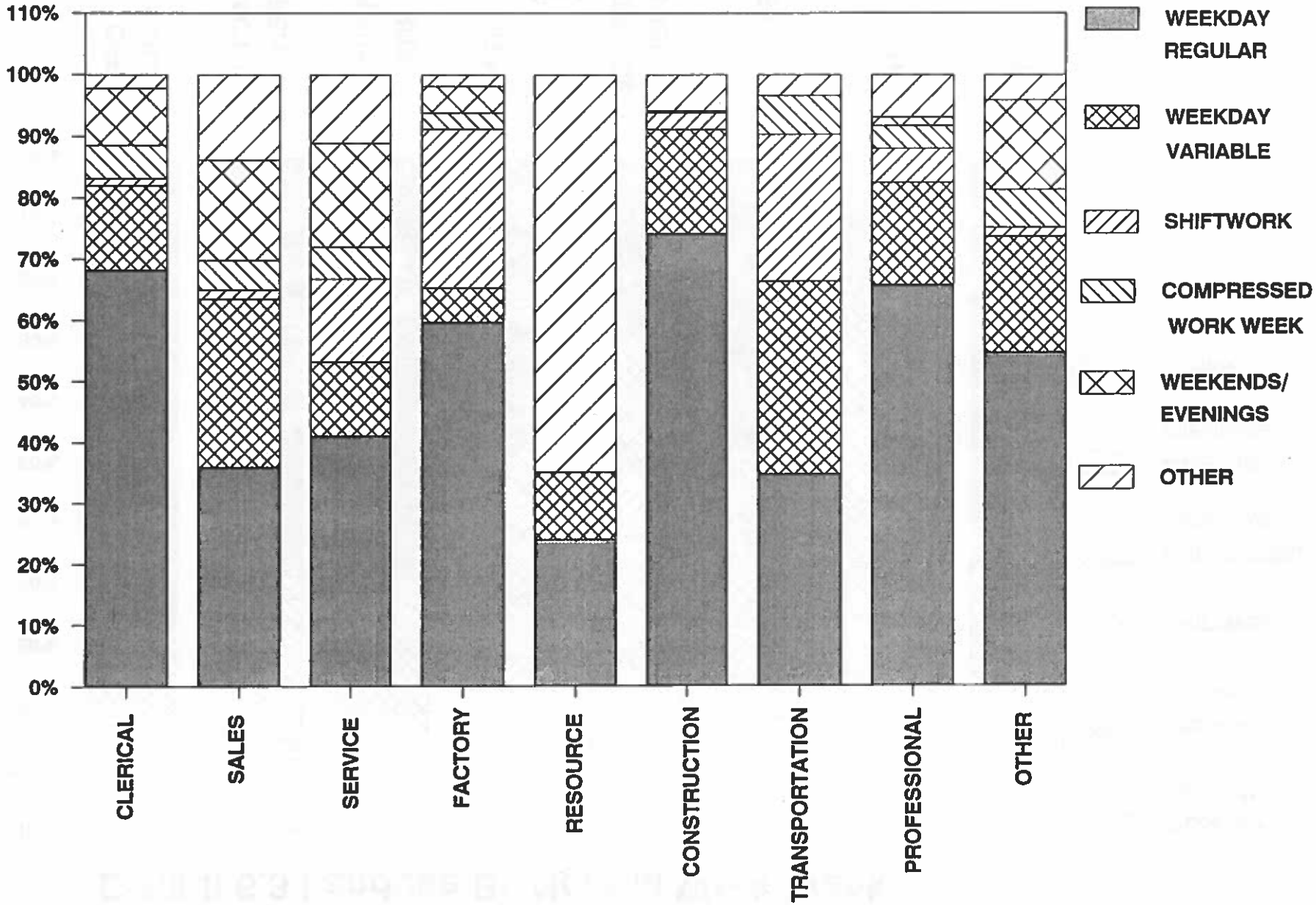
### 6.3 Peak Hour Travel Demands

As with daily trip generation, peak hour demands also vary with land use, because of occupational differences. Exhibits 6.5 and 6.6 illustrate work trip end times, by occupation and land use, for

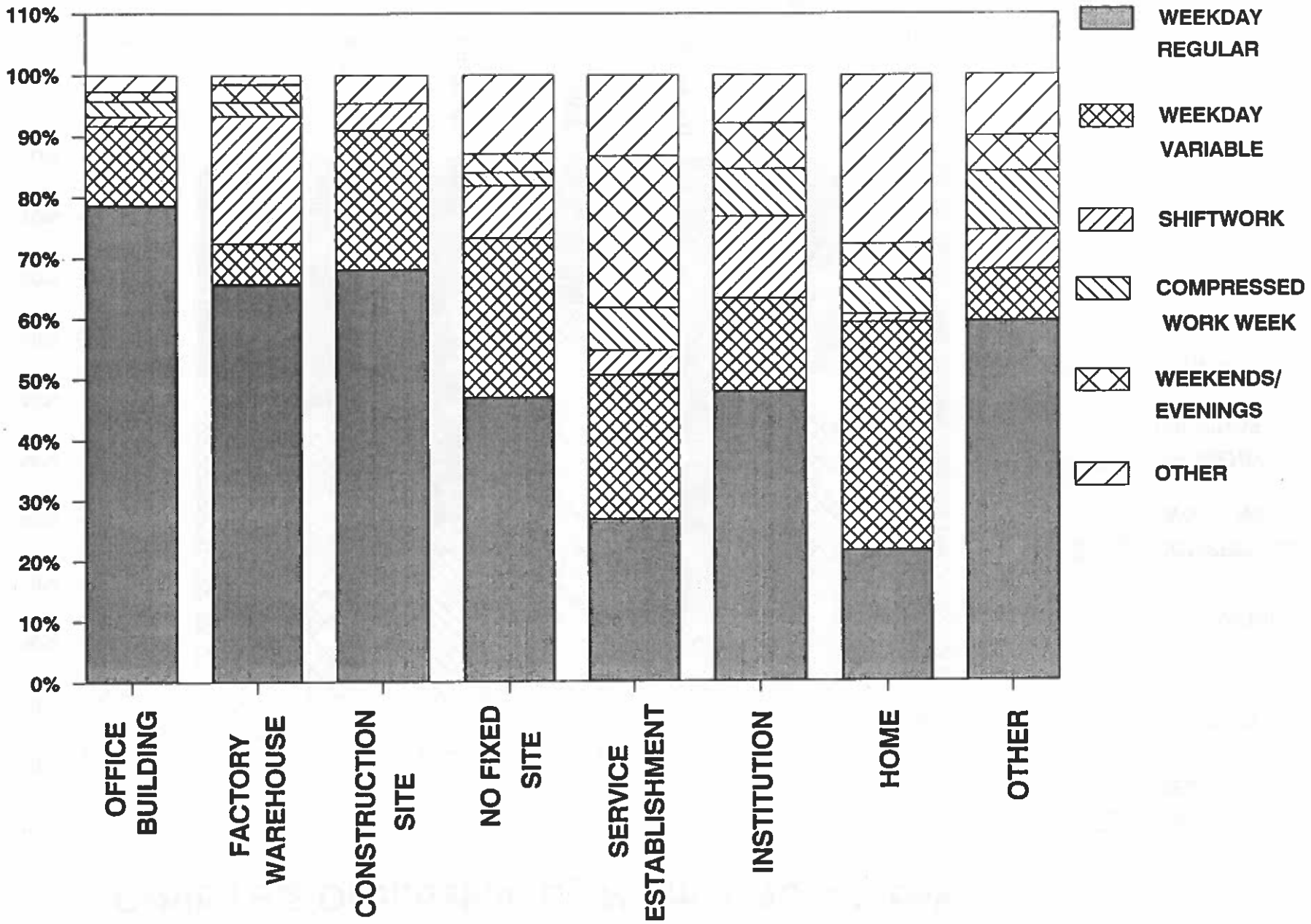
# Exhibit 6.1 Occupation By Landuse



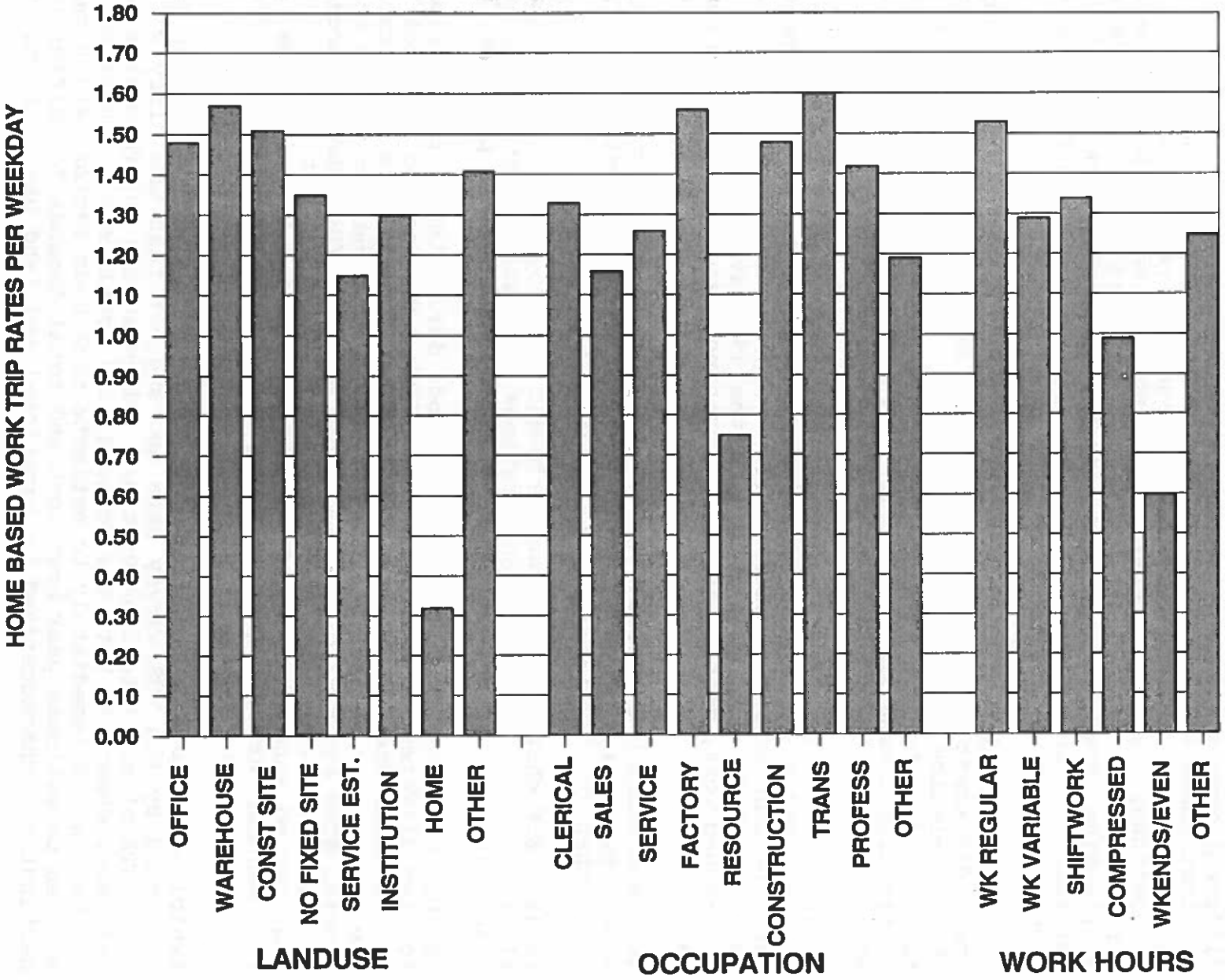
# Exhibit 6.2 Occupation By Normal Work Week



# Exhibit 6.3 Landuse By Normal Work Week



# Exhibit 6.4 Home Based Work Trips per Weekday



three geographic areas (Central Area Cordon, Metro excluding the CAC and the GTA outside Metro). These exhibits demonstrate that different occupation groups tend to have characteristic start-times and that these effects can be seen for different land uses. For example, compared to the average arrival times for all occupations, factory, construction and transportation workers arrive earlier. Sales and service workers arrive later, and have distinctive afternoon peaks associated with evening work. Clerical workers, a large group, dominate the AM peak hour. These conclusions apply for all three geographic areas.

Given the relationship between occupational distributions and land use, different land use categories have different peaking characteristics, as shown in Exhibit 6.6. Construction sites and factories/warehouses attract the early arrivers. Office and Institutional uses dominate the AM peak hour outside of the Central Area.

Exhibits 6.7, 6.8 and 6.9 provide further examples of the types of analysis which the TDS data base can support. Exhibit 6.7 shows total person trip end times by trip purpose, at three geographic levels. This exhibit illustrates the relative significance of home-based work, school, other and non-home based travel during the day.

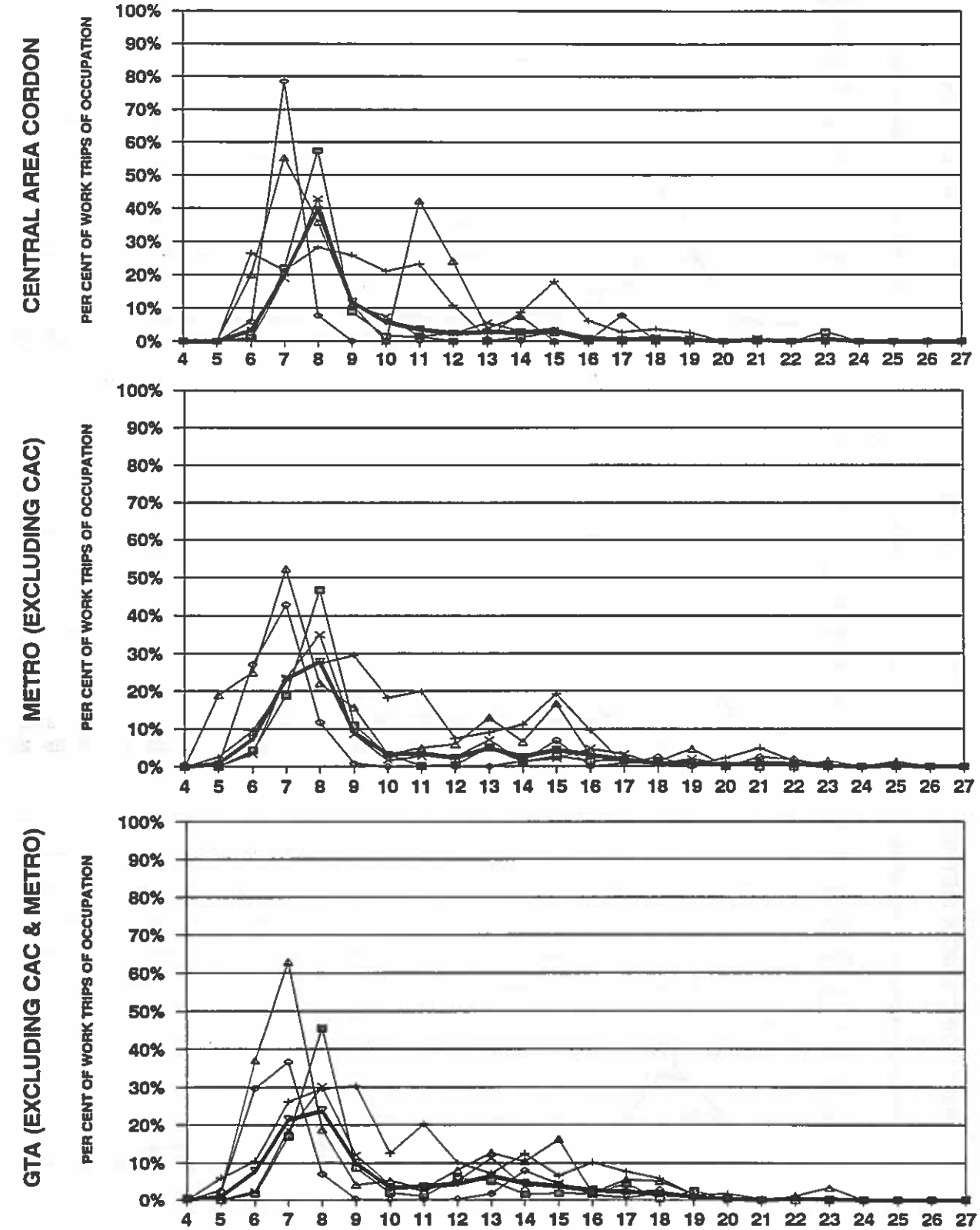
Work and school travel dominates the AM peak hour for all three areas, but school travel is much more peaked at the Metro and GTA level than for the Central Area during the AM peak.

Exhibit 6.8 shows total person trip end times by mode. These data illustrate the relative concentrations of transit, auto and walk trips, in relation to the average timing for all trip purposes.

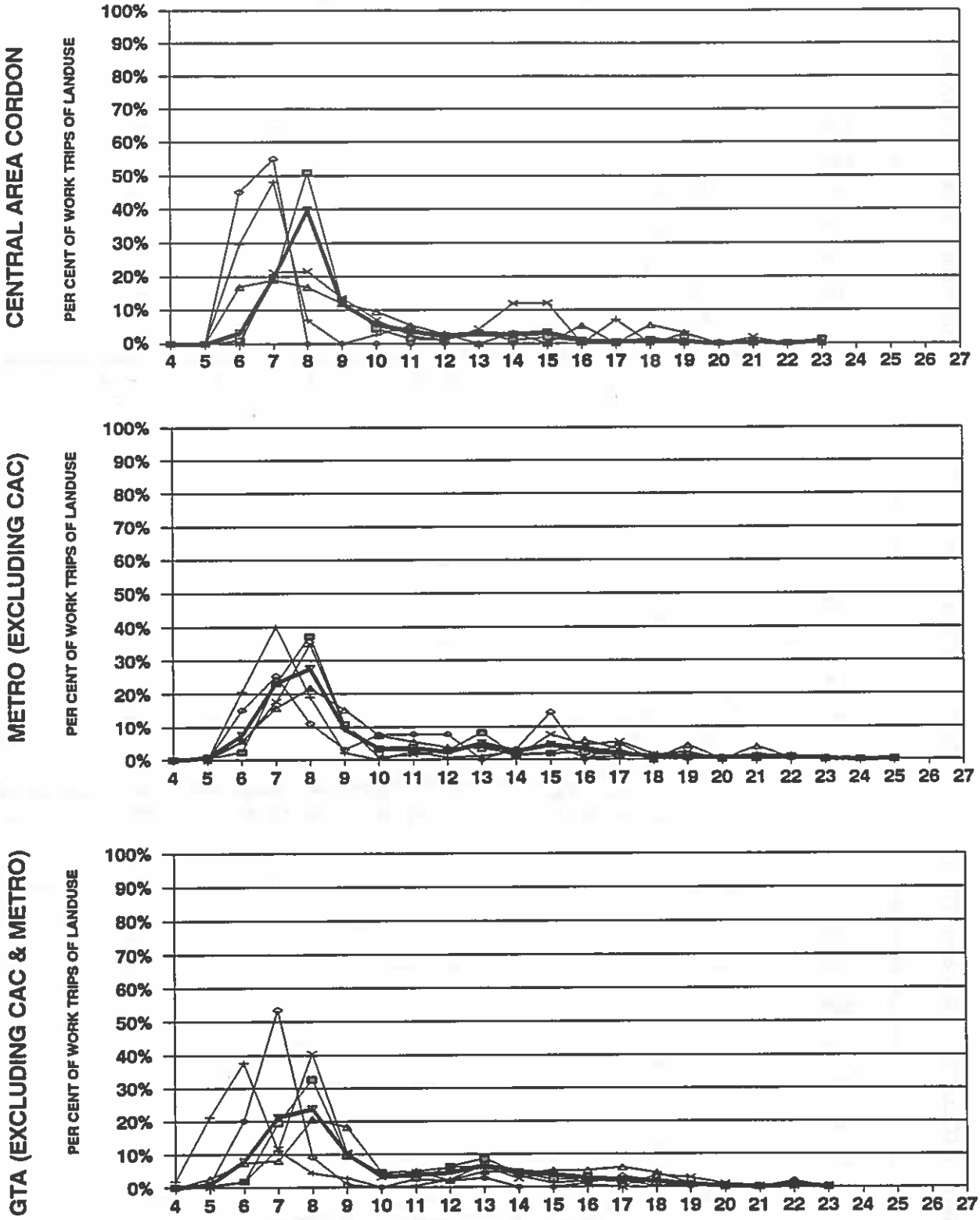
Exhibit 6.9 looks at trip purpose by mode during the AM peak period for two different areas, the Central Area and Planning District 9 (the Rexdale area of Metropolitan Toronto). These data illustrate the differences in auto and transit use by mode and purpose for the Central Area and a major Metropolitan Industrial/Residential area. For example, home-based work trips account for 77 per cent of AM peak period auto trips and 87% of AM peak period transit trips to the Central Area. The percentages by mode are reversed for Rexdale, more or less.

Exhibits 6.5 to 6.9 illustrate the types of analysis which can be supported by the TDS survey data and suggest that the Diary will allow GTA planners to improve their understanding and forecasts of peak hour demand at both the Regional and local level. These data can be applied immediately to estimate peak hour factors which can be used to estimate peak hour work and total demands for different destinations characterized by locational and land use factors.

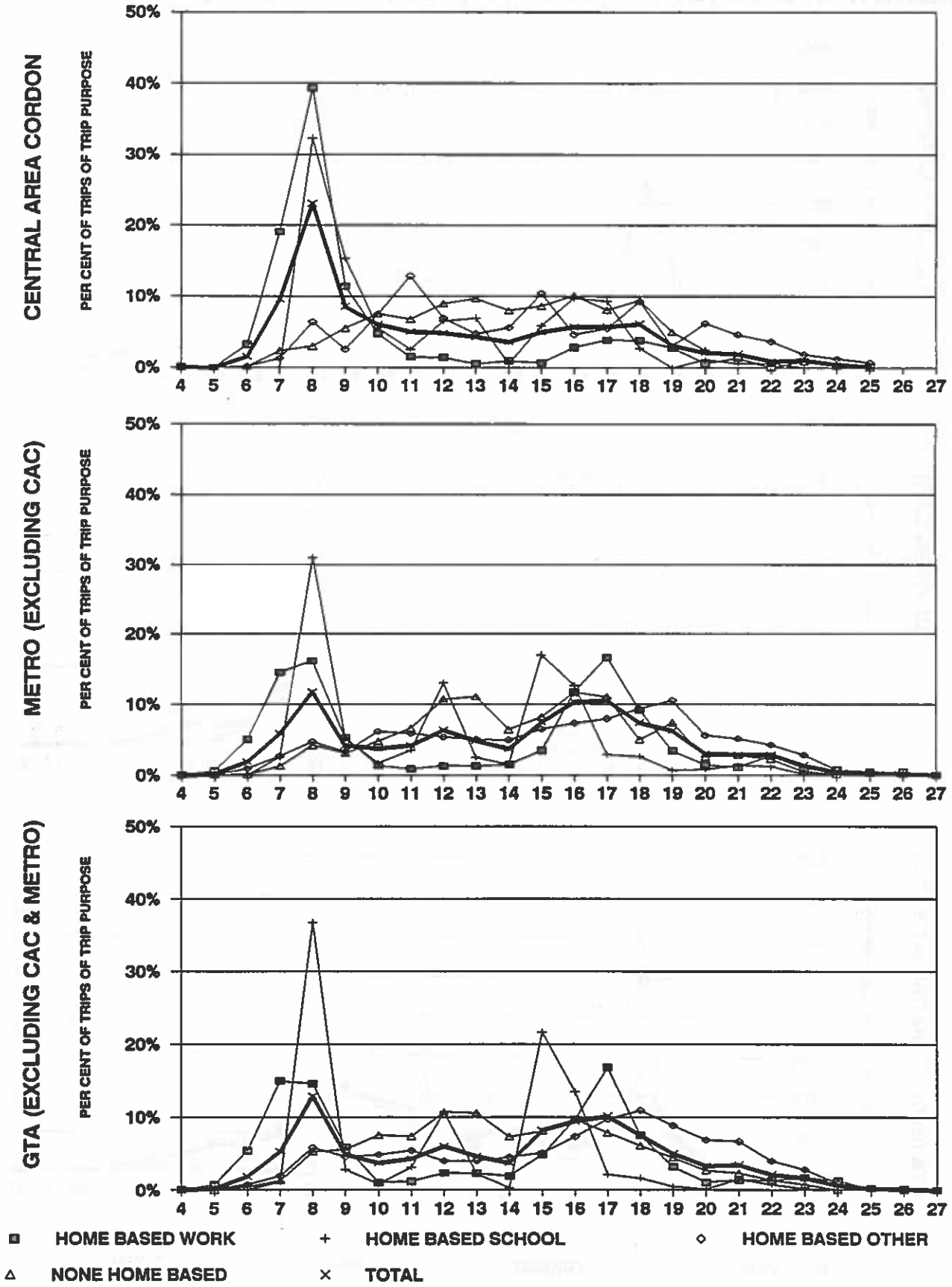
# Exhibit 6.5 Work Trip End Time By Occupation



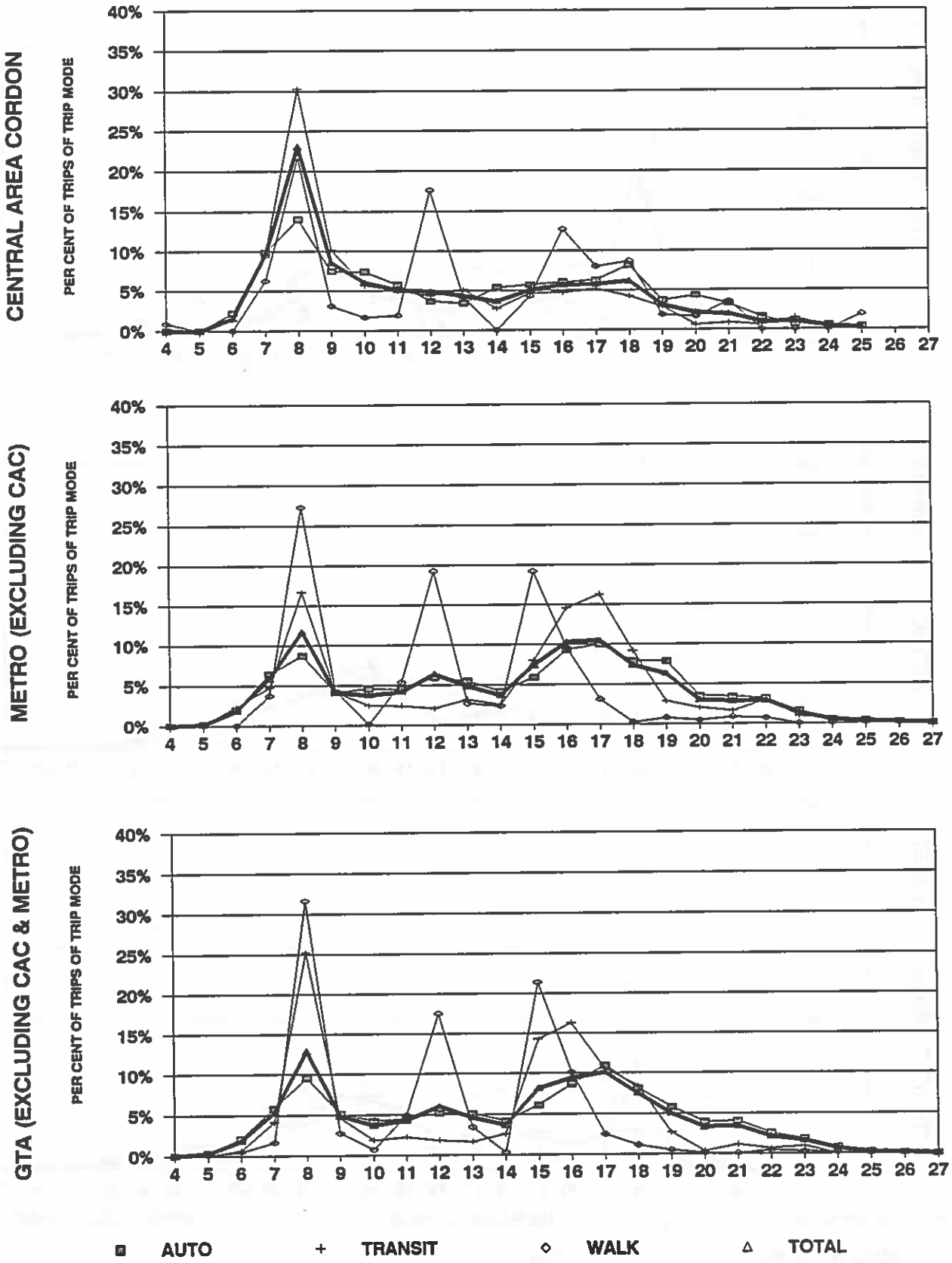
# Exhibit 6.6 Work Trip End Time By Landuse



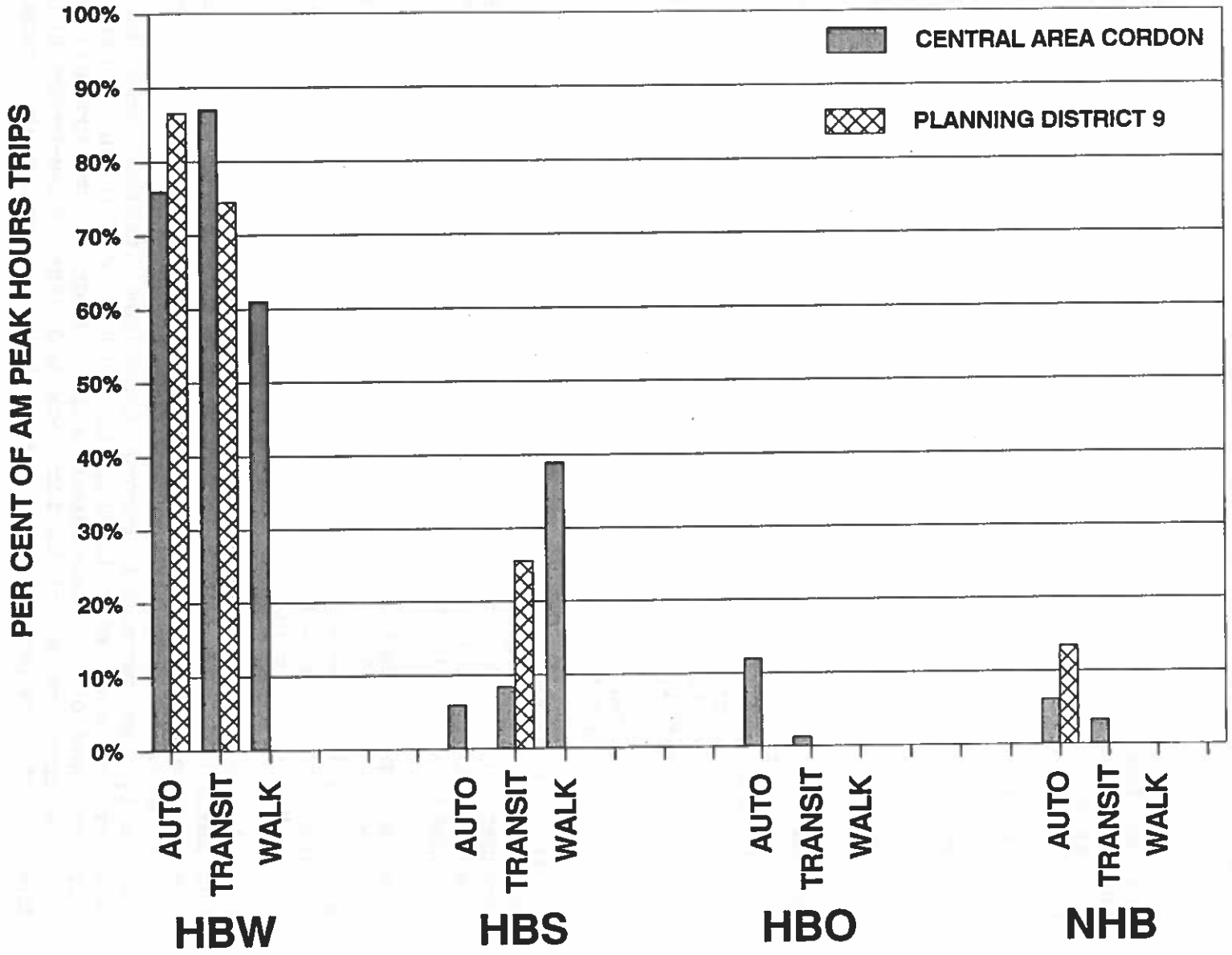
# Exhibit 6.7 Total Person Trip End Time By Trip Purpose



# Exhibit 6.8 Total Person Trip End Time By Trip Mode



# Exhibit 6.9 Trip Purpose By Trip Mode During AM Peak Hours (7 to 9)



## 6.4 Modal Choice Behaviour

The TDS data should be very useful for the study of mode split behaviour and the development of improved mode split forecasting models. Exhibits 6.10 to 6.13 summarize TDS tabulations which are relevant to the study of mode choice behaviour.

Exhibit 6.10 shows mode split by land use for the Central Area cordon, Metro excluding the CAC and GTA excluding Metro. Whereas the average mode split to destinations within the Central Area is 60 per cent, the comparable figures for the rest of Metro and the GTA outside Metro are 17 per cent and 4 per cent, respectively.

Within the Central Area the transit market shares are highest for offices and homes. All other land uses are below the 60 per cent average in terms of transit use despite the lower status of the occupations associated with some of the other uses (particularly service establishments). Outside of the Central Area, factories appear to have the highest transit use (of the employment generating land uses).

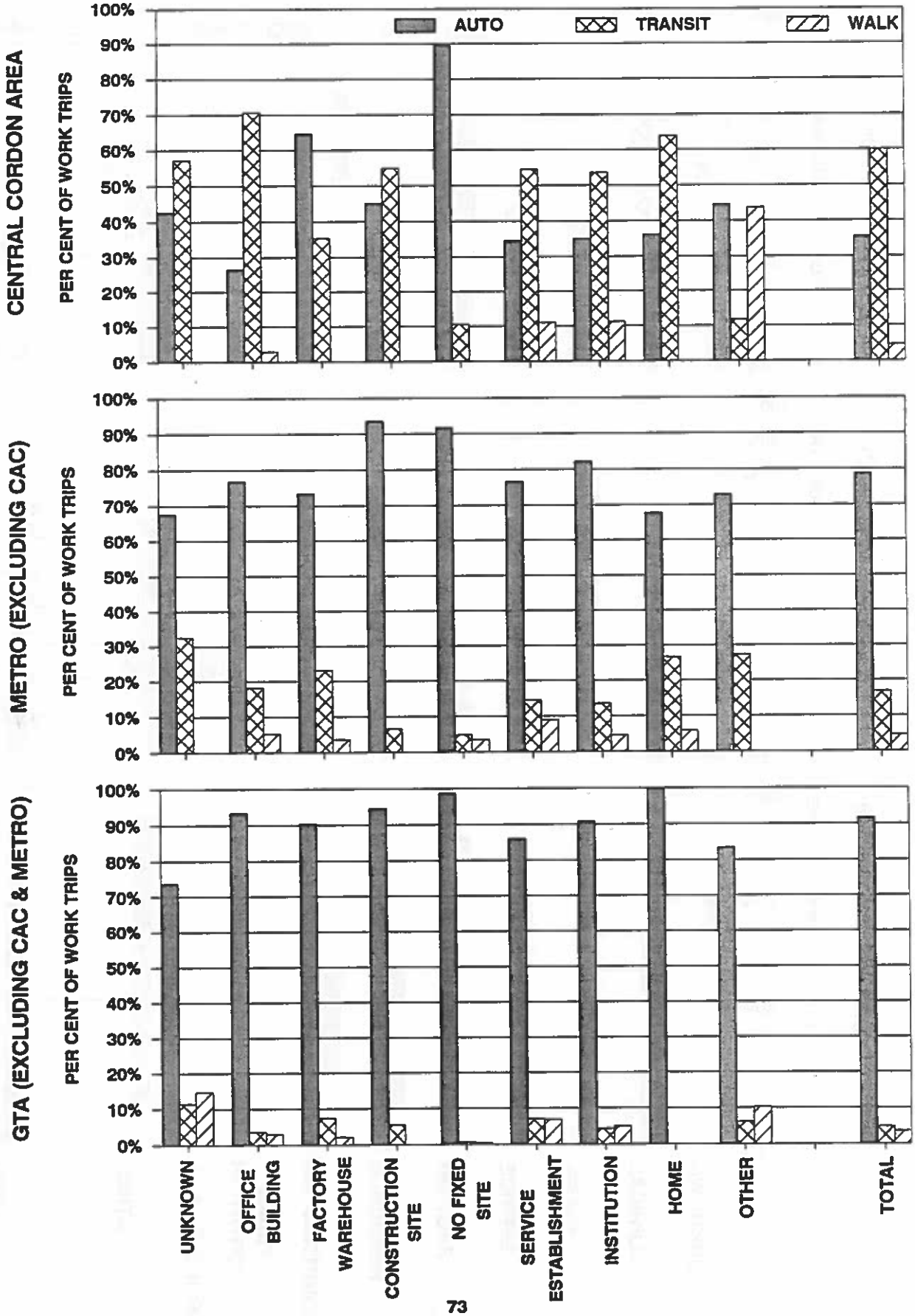
Exhibits 6.11A to 6.12C summarize mode choice data for home-based work, other home-based, and non-home based trips, controlling for occupation and income. As shown in Exhibit 6.11A, 85 per cent of clerical workers employed in the Central Area use transit. All other Central Area occupations are below-average users of transit. Not surprisingly, Construction workers are auto oriented, even for travel to the Central Area, as are Transportation workers. Clerical workers, most of whom are women, are also the largest users of transit for work within Metro and the GTA.

Exhibits 6.11B and C provide similar data for other home-based and non-home based trips. These data confirm the relationship between occupation and transit use, and illustrate the relatively high transit use (for these purposes) by clerical and service occupations within Metro.

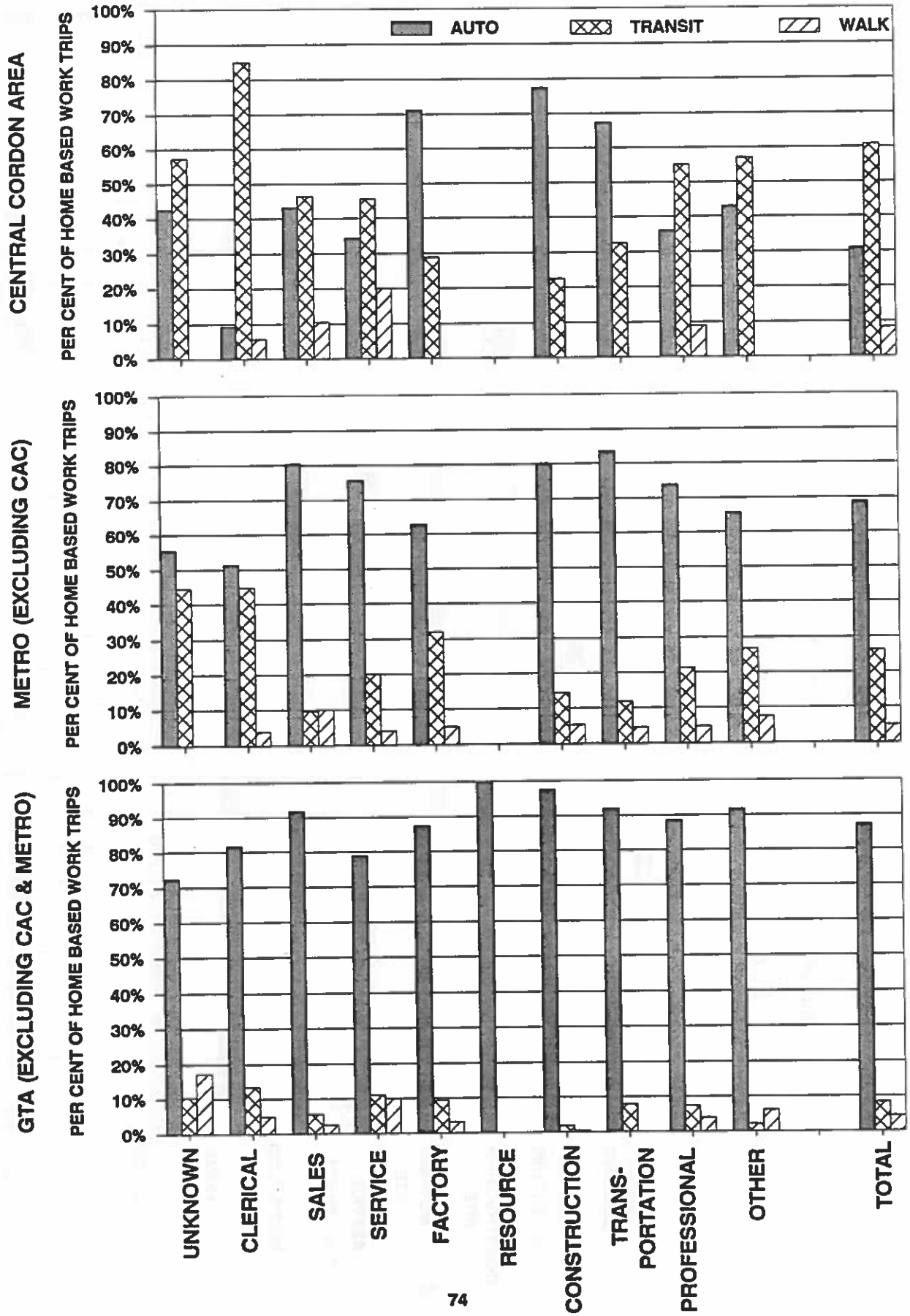
The data presented in Exhibits 6.11A to C suggest that changing occupational trends for women and the changing role of clerical staff may have negative implications for transit ridership in the future, even in the Central Area where planners have assumed current high mode splits will likely increase in the future.

Exhibits 6.12A to C explore the relationship between transit use and personal income. The relationship between income and transit use is clearly evident for home-based work, home-based other and non home-based trips to destinations other than the Central Area. Generally, as personal income increases, transit use declines. However, no such relationship is evident within the Central Area for work and other home-based trips. High income travellers show above average mode splits for work and other home-based trips and the expected negative relationship between income and transit use

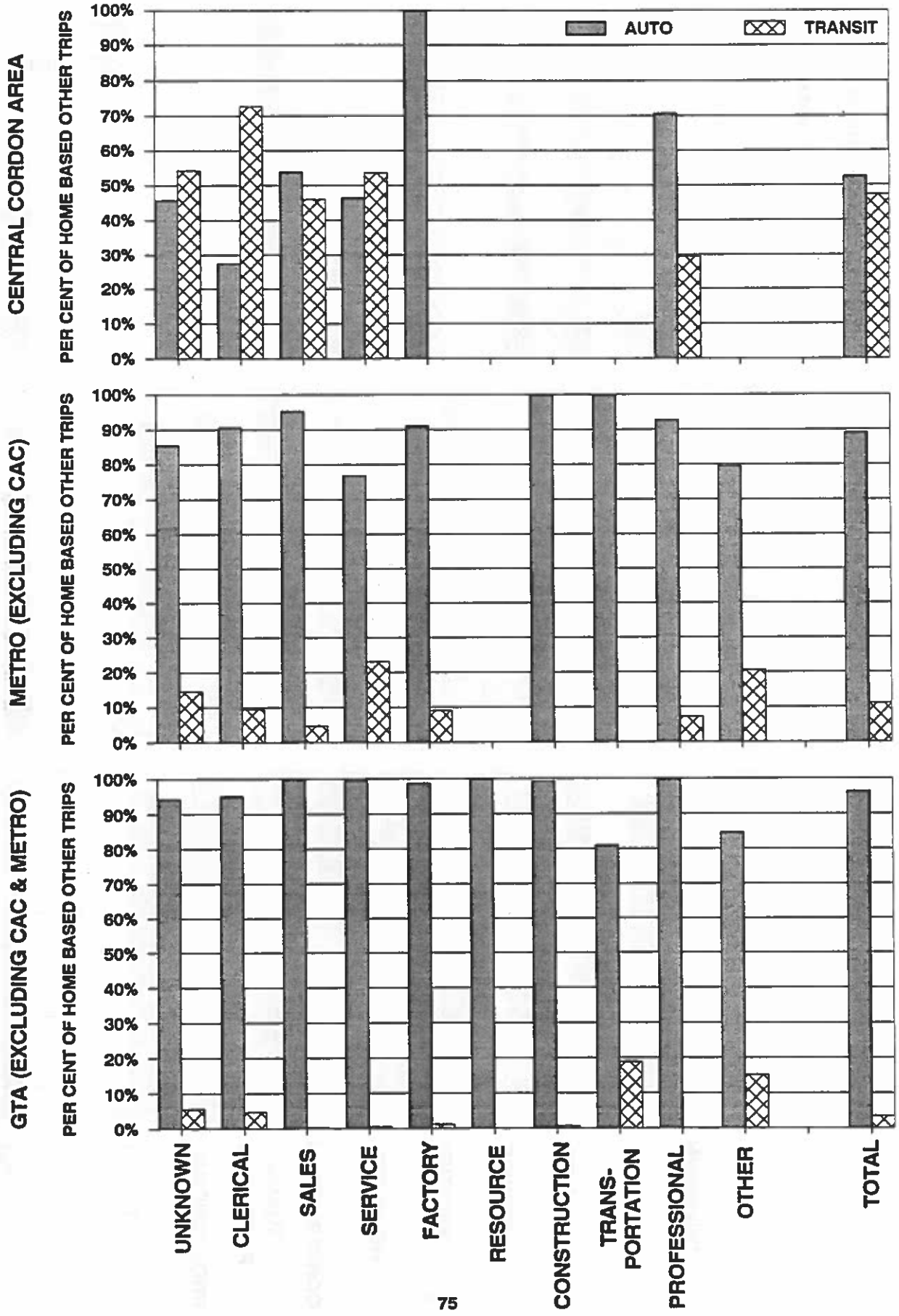
# Exhibit 6.10 Mode Split By Landuse



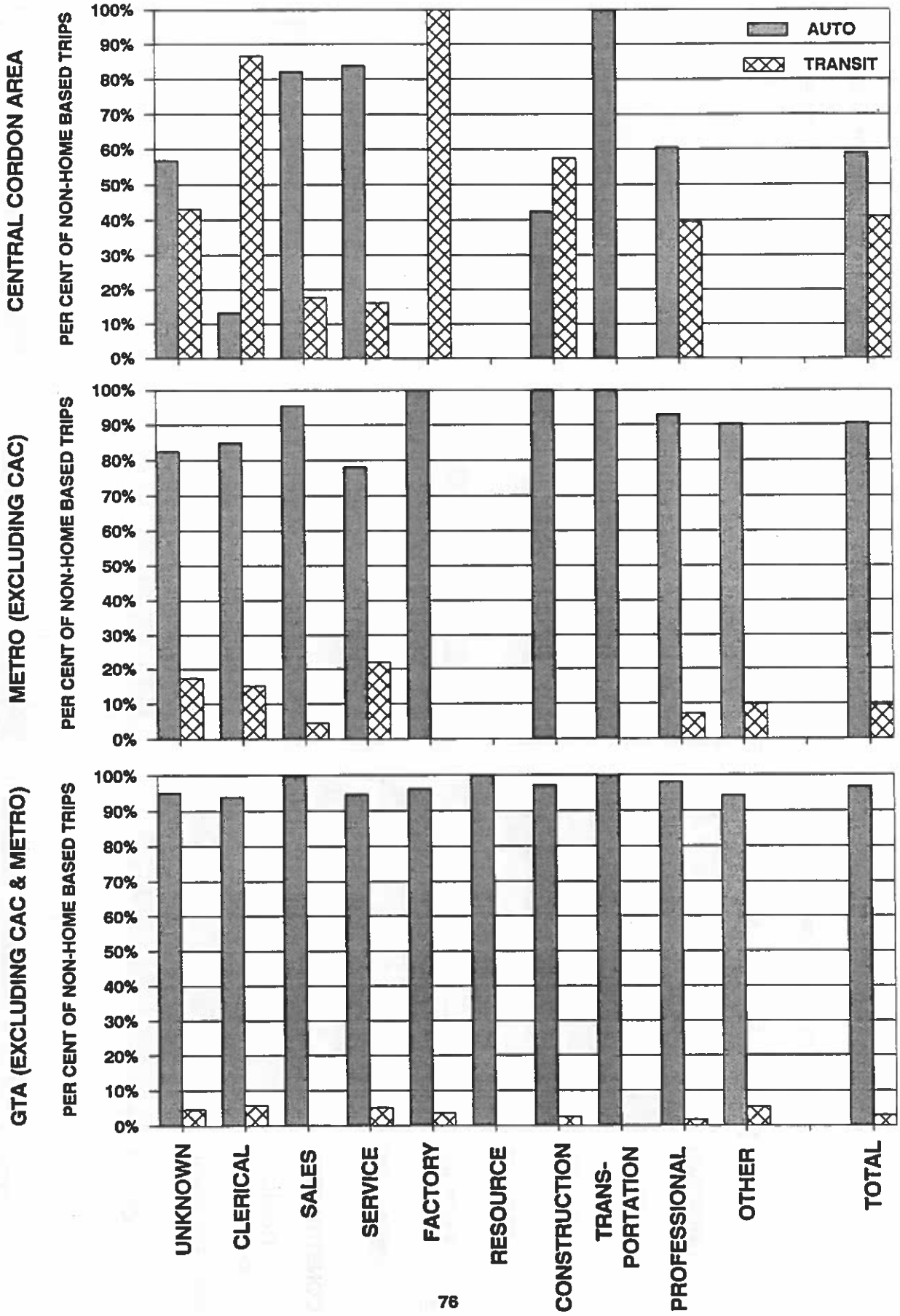
## Exhibit 6.11A Mode Split By Occupation For Home Based Work Trips



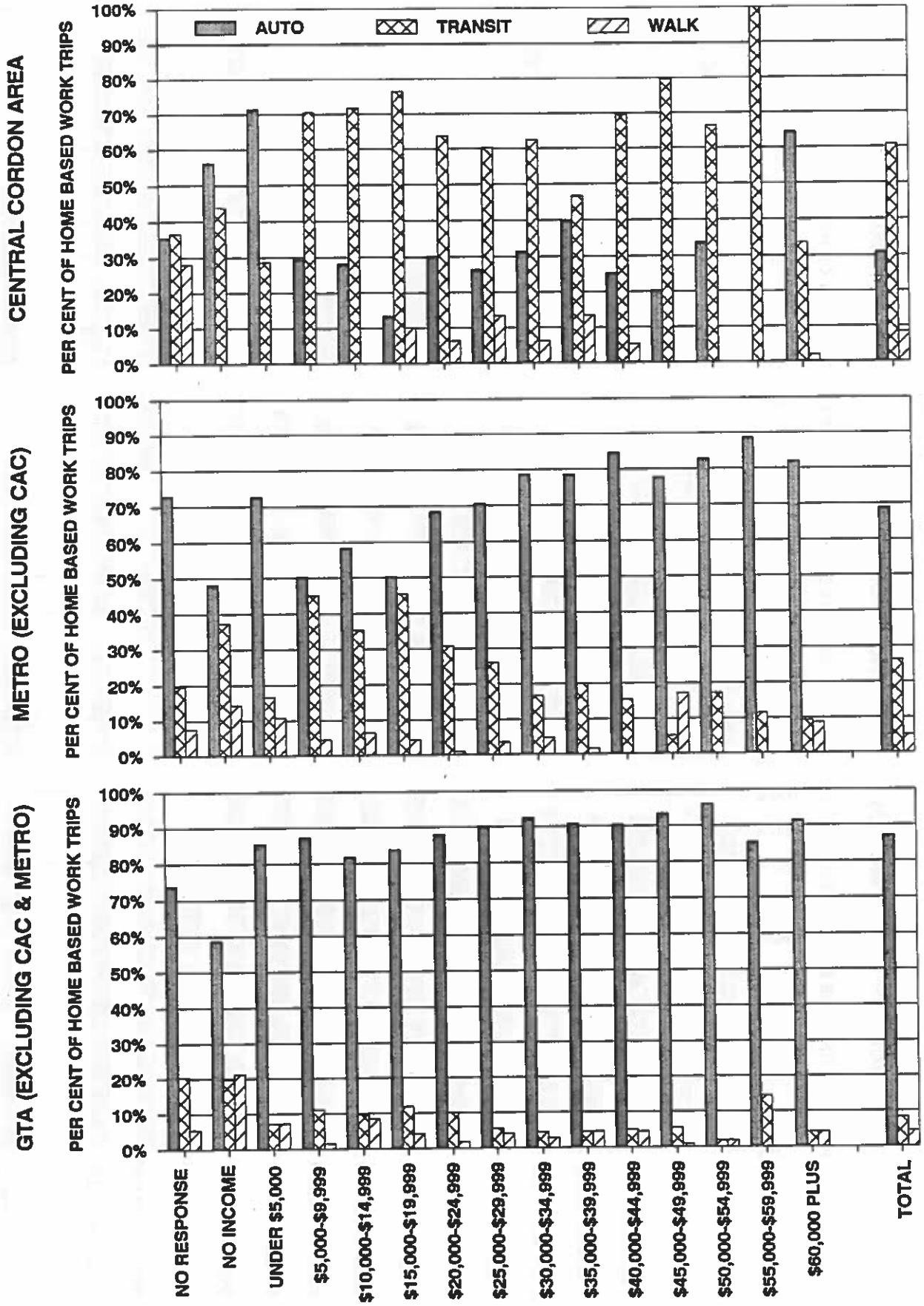
## Exhibit 6.11B Mode Split By Occupation For Home Based Other Trips



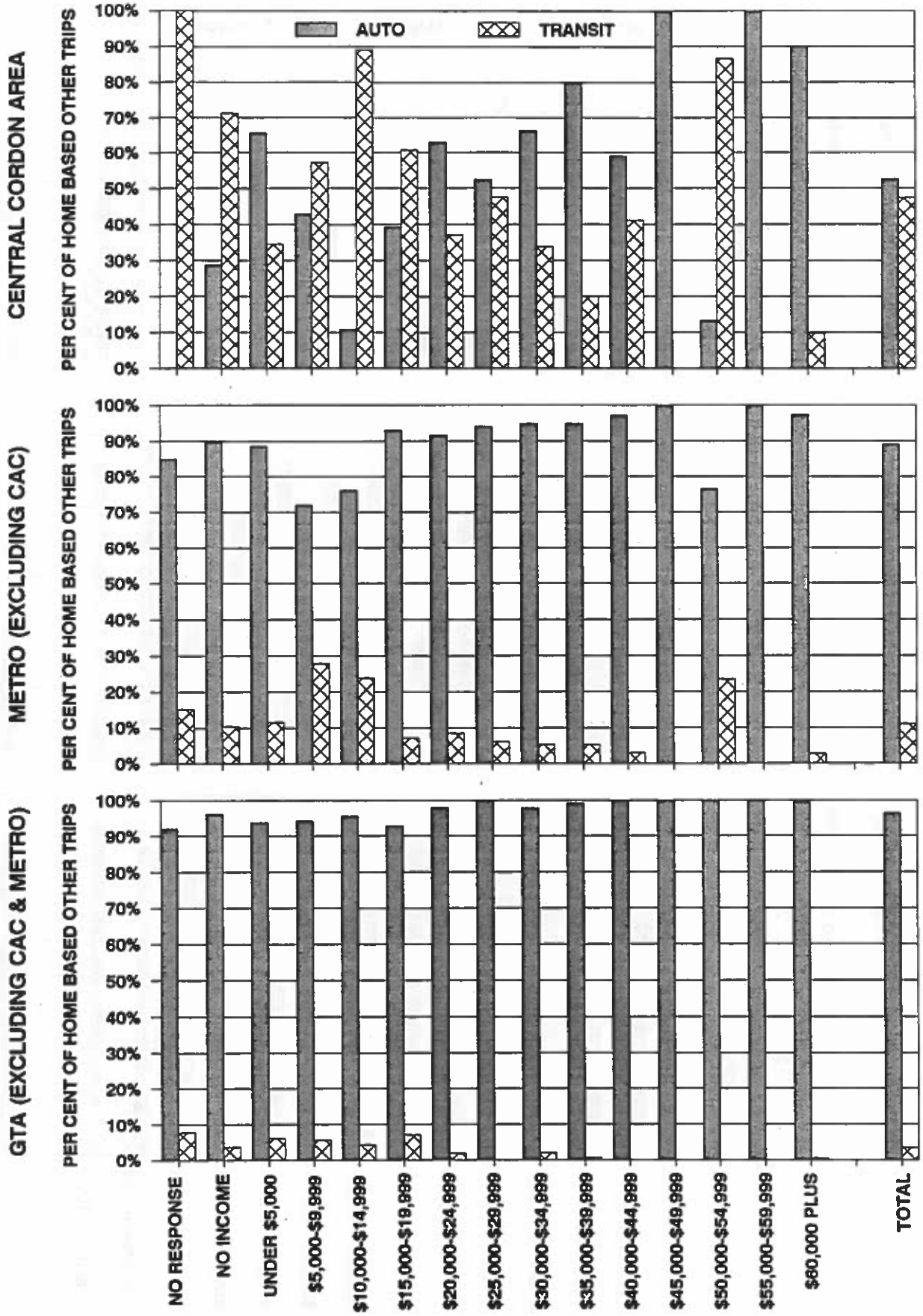
## Exhibit 6.11C Mode Split By Occupation For Non-Home Based Trips



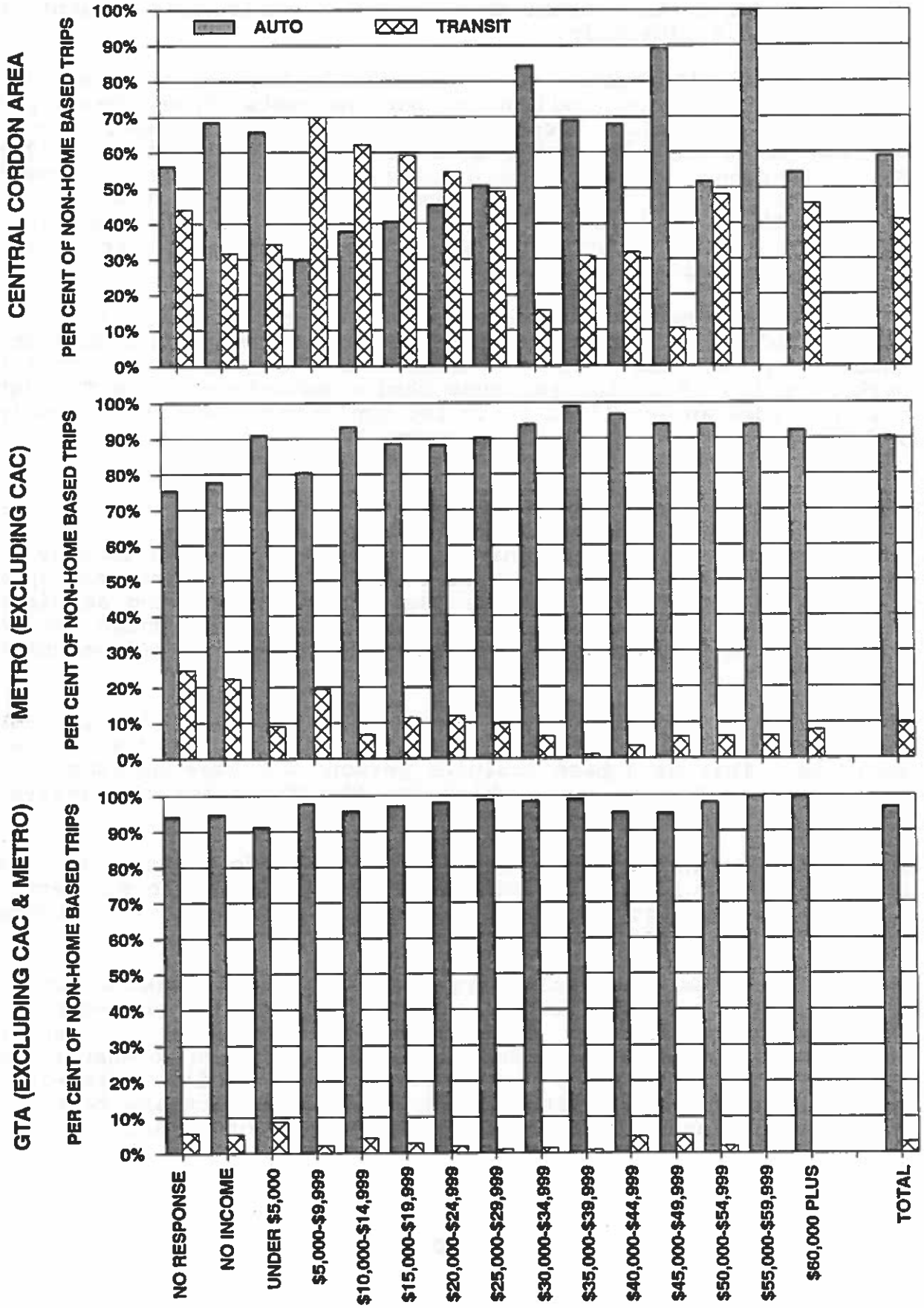
## Exhibit 6.12A Mode Split By Income For Home Based Work Trips



## Exhibit 6.12B Mode Split By Income For Home Based Other Trips



## Exhibit 6.12C Mode Split By Income For Non-Home Based Trips



for non home-based trips is weak. These findings suggest that one must consider factors other than income in explaining present and future transit ridership.

Exhibit 6.13 illustrates the relationship between observed mode choice and income, controlling for parking costs (free, versus paid at various levels). These data demonstrate the importance of parking price in determining mode choice, independent of ability to pay (personal income). Where daily parking costs were estimated to be $10.00 or more, all respondents earning more than $40,000 reported that they normally use transit. Within each income class, increased parking prices (or the perception thereof) relates to increased transit use.

The exhibits discussed in this Chapter demonstrate that there are logical relationships between observed mode choice and occupation, income and land use. The TDS data also demonstrate the role of parking price in explaining mode choice behaviour. The TDS data base provides an excellent basis for exploring these relationships and improving current mode choice models.

## 6.5 Conclusions and Recommendations

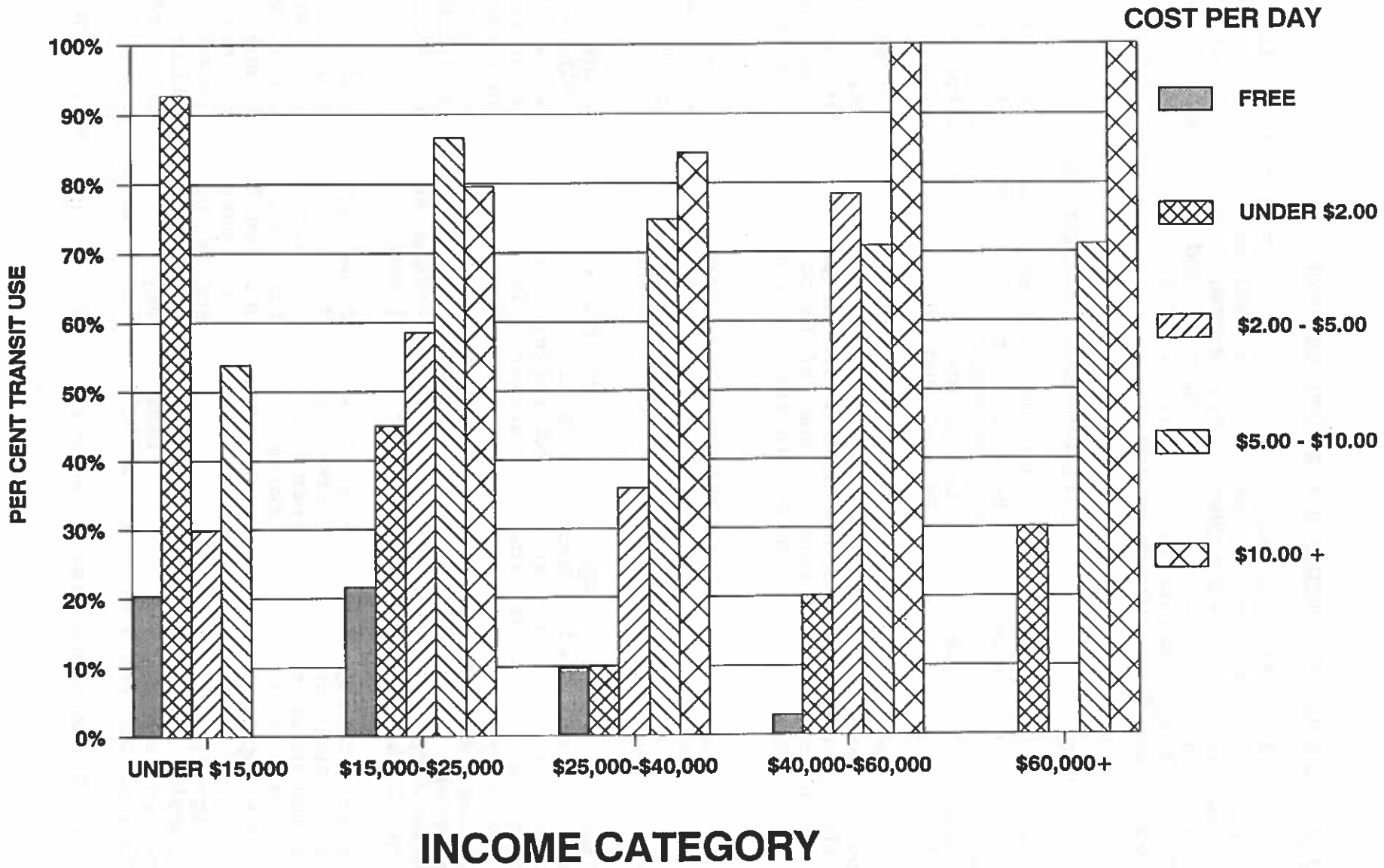
The TDS data base provides information which should be used by GTA planners and researchers to improve trip generation and mode split forecasting techniques. As discussed in the preceding sections, the TDS includes information for GTA travellers which is not available from any other source and which appears to be reasonably accurate and logical.

The TDS Version 1.0 data base, which includes travel data for 2868 households and 6500 persons, is recommended for disaggregate analysis. This data base includes persons who were excluded from the Version 1.1 data base, which was the basis for the analysis presented in this report.

The TDS Version 1.1 data base provides information for 1948 complete households and includes sample weighting factors. Version 1.1 is intended for aggregate analysis of household or sub-area travel characteristics.

The TDS provides relatively large samples of trip makers for the GTA which can be stratified by location, land use or socio-economic and demographic factors to support a wide range of research objectives. In using these data, care must be taken to ensure that sample size limitations are recognized. While multi-level tabulations of GTA, Hamilton and Metro Toronto data are feasible, this will not necessarily be the case for the other Regions.

# Exhibit 6.13 Transit Use For Work To Metro By Income By Parking Cost



## 7.0 LESSONS FOR FUTURE GTA TRAVEL SURVEYS

The third and final objective of the TDS was to provide information which would be used to assess the effectiveness of mailback and telephone survey techniques. This chapter considers the strengths and weaknesses of the two survey methods and assesses how the Trip Diary Survey could have been improved, considering design, conduct, coding and data entry/clean-up.

### Strengths and Weaknesses of Telephone and Diary Methods

The TTS telephone survey and TDS mail-back survey both provide accurate estimates of AM peak hour travel, because both appear to accurately report non-discretionary work and school travel. However, the TDS appears to provide more complete information on discretionary travel and PM peak and off-peak trip making.

The diary did not rely on informants to report the behaviour of other household members and, therefore, more accurately reported other home-based and non-home based trips. However, based on cordon count comparisons for the 7:00AM to 7:00PM period, the TDS survey may also understate discretionary and total daily travel.

In assessing the strengths and weaknesses of the two survey approaches one has to focus on inherent design characteristics, rather than execution issues, and consider the nature of travel habits surveys.

Transportation surveys, such as the TTS and TDS, are intended to collect detailed travel habits information for a single day. Compared to most market research surveys, travel habits surveys are complicated and difficult to answer. Respondent burden is high with transportation questionnaires and, therefore, non sampling errors, such as response errors and non-response bias, can be a problem. Respondents who are not fully literate in English will have difficulty responding to the questions and, therefore, are more likely to be excluded in the final sample.

Self-reporting mail-back surveys which ask for detailed travel data, such as the TDS, are more difficult to respond to than telephone surveys for persons who are not fluent in English and are not used to filling out forms. Therefore, mail-back surveys can under-represent lower income groups and non-English speakers. Also, self-reporting questionnaires, no matter how carefully designed, are subject to respondent errors and omissions. For example, Seniors reported fewer trips in the diary than in the telephone survey, apparently because they found it more difficult to fill out the form than to "talk to" an interviewer.

The TDS and other similar surveys achieved lower overall and item

response rates than the TTS. However, lower response is not an inherent weakness of mail-back surveys. Previous self-reporting mail-back surveys in the GTA (transportation surveys carried out in Halton and Scarborough) achieved 70 per cent plus response rates. Also, the TDS did provide a more complete reporting of total trip rates than the TTS, and the TDS estimates appear to be generally valid. As discussed in Chapter 5, the diary appears to help respondents remember their trips. TDS respondents who also responded to the TTS reported more non-home based trips in the diary.

Telephone surveys appear to be relatively expensive, compared to mail-back surveys, given the need to employ interviewers to call sample households and incur substantial overhead costs for office space and telephones. However, the cost differential depends on the nature of the follow-up procedures followed in the two surveys and a full accounting of the coding and editing costs. The use of first-class postage for mailings and a final telephone follow-up, as recommended for mail-back surveys which require a high response rate[4], can increase costs to the same level as for traditional telephone surveys.

The telephone method offers a number of advantages over the self-reporting trip diary format. As demonstrated in the TTS and the Montreal Urban Community Transit Corporation surveys, the telephone method can, with appropriate follow-up, achieve a relatively high response rate for transportation surveys, with 65 to 70 per cent of potential respondents being included in the final sample. Also, telephone interviewers can clarify confusing questions and encourage high item response, when interviewees register confusion or resistance.

As demonstrated in the TTS, the use of one household member to report on the behaviour of all members, can result in incomplete trip information. However, this is not necessarily an inherent weakness of the telephone method. Additional follow-up calls to those persons whose behaviour could not be accurately reported by the person who answered the telephone can (and do) result in improved trip reporting.

Both the telephone and self-reporting diary survey formats have strengths and weaknesses. Care must be taken in the design and execution of any survey to minimize these effects. For example, in order to achieve acceptable response rates (65 per cent or more), both surveys require follow-up. With the TTS, four call-backs, in addition to the original call, succeeded in completing approximately 65 per cent of all potential interviews. Mail-back

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[4] See for example, Don A. Dillman (1978), Mail and Telephone Surveys - The Total Design Method, John Wiley and Sons, which presents a complete discussion of mail-back survey methods which achieve high response rates.

surveys in the GTA (for Halton and Scarborough) achieved 70 per cent plus response rates with one reminder and two follow-up mailings of the questionnaire to households which had not responded. One additional follow-up letter/questionnaire or, alternatively, a phone call, would have improved the TDS response rate significantly.

Survey Design Issues

The TDS was designed to up-date TTS travel information and collect additional data for TTS respondents. It was assumed that households would not change significantly between the two surveys and that the TTS household information could be used to assign the appropriate number of questionnaires to each household and identify individuals within responding households.

In retrospect, the cost and time-savings associated with not having a household record attached to the questionnaire appears to have created more costly response and editing/clean-up problems. A large proportion of TDS households were incomplete, and it proved to be very difficult to match TTS and TDS persons. The high number of missing persons in TDS households reflects both design and execution problems. Failure to follow-up on incomplete households to encourage complete response contributed to this problem, but this was made difficult because the Survey Team did not know who had not responded.

Based on our experience with previous mail-back surveys which required a household member to report on household characteristics and list individual members, we suspect that this step encourages a higher household response rate. The person who fills out this form and his or her own trip information has a vested interest in seeing the completed form sent in. With the TDS each individual has a separate person form and no one person was responsible for getting the survey completed and returned.

Generally, the TDS survey form appears to have worked quite well. However, respondents were confused by some questions and by survey directions. For example, persons answering question 1 on employment sometimes missed the boxes on "outside of home" and "at home for income". Also, "not employed" persons sometimes failed to follow "the arrows" and filled in non-applicable sections. Others appeared to have difficulty reporting their travel behaviour.

The design of any future mail-back surveys should be carefully reconsidered, based on the experience of the TDS and Niagara, Waterloo, London surveys, and then thoroughly pre-tested.

## Sample Design Issues

The TDS stratified sample design has been discussed at length in this report. Because this design failed to ensure that an adequate number of samples were drawn from each of the 96 strata, the benefits of stratification were not achieved. We were unable to look specifically at the role of the stratifying variables in explaining travel behaviour because of insufficient data. However, the stratification did complicate the sample weighting procedures and created many concerns among GTA planning staff as to the usefulness of the data. It also created estimation problems because of the use of postal codes to distinguish between urban and rural strata. We found samples located within Hamilton-Wentworth which were classified as rural, rather than Hamilton-Wentworth and many other misallocations.

We feel that the weighting procedure which was employed compensates for the sample design but does not over-come the sample allocation problems inherent in the use of postal codes. The absolute estimates of households, population and trip making are biased as a result of the sample design.

## Execution of TDS

The major concerns about the execution of the TDS have already been raised. These relate to inadequate follow-up and failure to code some of the information which had been collected. Households which failed to return forms for all household members should have been telephoned. Also, an additional mail or telephone follow-up should have been attempted to increase overall response rates and to collect missing data.

The coding process should have geocoded work locations for all workers, and not just those persons who made a work trip. This was an unfortunate operational decision which limits the analysis of trip generation relationships.

The coding functions of the TDS were performed by two separate teams: manual coders and geo-coders. This separation created confusion and resulted in errors. Future surveys should ensure that the editing and coding process is more carefully controlled.

## Future Surveys

The decision as to which survey method (mail-back or telephone) is appropriate for future GTA travel surveys will depend on how well each method serves the objectives of the survey and the relative total costs (considering data collection, coding and editing). Therefore, we cannot recommend one method over the other. Both the TTS and TDS could be improved upon and this must be recognized in

any future survey effort. The lessons of the past should not be forgotten, as they were during the 1964 to 1978 period when no major data collection efforts were undertaken by GTA planners and valuable data and experience were lost.

The design of any future mail-back surveys should be carefully considered, based on the experience of the TDS and Niagara, Waterloo, London surveys, and then thoroughly pre-tested. The TDS would have benefitted from more thorough pilot testing of both the instrument and the methodology. Careful design will improve response rates and minimize respondent errors and omissions.

Future GTA surveys must carefully consider sample design issues and ensure that the requirements of the analysis stage are fully recognized. This was not the case with the TDS.

Finally, future surveys should include greater follow-up to ensure complete responses for those households who have mailed back forms, and to encourage a higher response rate.

# APPENDIX A

## TRIP DIARY SURVEY FORM AND HISTORY

THE TRANSPORTATION TOMORROW SURVEY

*Please complete the following questions by either checking the appropriate box or filling in the blank provided.*

## Section I Employment Information

1. Are you currently employed (or self-employed)?

Yes ⇨ 1. ☐ Part time 2. ☐ Full time ⇨ ☐ Outside your home ☐ At home for income ⇨ **Please go to Question 2**

No ⇨ 1. ☐ Homemaker 2. ☐ Retired 3. ☐ Not employed *(includes students not employed)* ⇨ **Please go to Section II**

***Questions 2 to 9 relate to your current employment. If you currently have more than one job, please complete the spaces for "Job #1" and "Job #2". If you have only one job, simply use the spaces for "Job #1". Please also use these labels in Section IV.***

2. What is the address of your normal place of work? Please include name of city or town.

Job #1 _____
*Building Name and/or Street Address* *City or Town*

Job #2 _____
*Building Name and/or Street Address* *City or Town*

3. Which of the following categories most closely describes your present occupation?

| | Job #1 | Job #2 | |
|---|---|---|---|
| 1. | ☐ | ☐ | CLERICAL (Secretary, Typist, Bookkeeper, Cashier, etc.) |
| 2. | ☐ | ☐ | SALES (Sales of goods and services such as cars, insurance, etc.) |
| 3. | ☐ | ☐ | SERVICE (Waiter, Police, Barber, Janitor, Shoe Repair, etc.) |
| 4. | ☐ | ☐ | FACTORY/PROCESSING (Steel Worker, Warehouseman, Assembler, etc.) |
| 5. | ☐ | ☐ | RESOURCE (Farming, Mining, etc.) |
| 6. | ☐ | ☐ | CONSTRUCTION (Labourer, Painter, Plumber, Electrician, Foreman, etc.) |
| 7. | ☐ | ☐ | TRANSPORTATION (Truck or Bus Driver, Pilot, Train Conductor, etc.) |
| 8. | ☐ | ☐ | PROFESSIONAL/TECHNICAL/EXECUTIVE/MANAGERIAL (Engineer, Nurse, Teacher, Lawyer, Doctor, Artist, Business Manager, President, etc.) |
| 9. | ☐ | ☐ | OTHER _____ *Please Describe* |

4. How would you describe your place of work? Do you work...

| | Job #1 | Job #2 | | | Job #1 | Job #2 | |
|---|---|---|---|---|---|---|---|
| 1. | ☐ | ☐ | in an office building | 5. | ☐ | ☐ | in a service establishment (store, hotel, etc.) |
| 2. | ☐ | ☐ | in a factory/warehouse | 6. | ☐ | ☐ | in an institution (school, hospital, etc.) |
| 3. | ☐ | ☐ | on a construction site | 7. | ☐ | ☐ | at home |
| 4. | ☐ | ☐ | no fixed place of work | 8. | ☐ | ☐ | elsewhere _____ *Please Describe* |

5. Which of the following best describes your normal work week?

| | Job #1 | Job #2 | |
|---|---|---|---|
| 1. | ☐ | ☐ | Weekdays – regular hours |
| 2. | ☐ | ☐ | Weekdays – variable hours/flex time |
| 3. | ☐ | ☐ | Shiftwork |
| 4. | ☐ | ☐ | Compressed Work Week (less than 5 days a week) Number of days _____ |
| 5. | ☐ | ☐ | Weekends and/or evenings |
| 6. | ☐ | ☐ | Other _____ *Please Describe* |

6. How many hours did you work last week?

| | Job #1 | Job #2 | | | Job #1 | Job #2 | |
|---|---|---|---|---|---|---|---|
| 1. | ___ | ___ | Monday | 5. | ___ | ___ | Friday |
| 2. | ___ | ___ | Tuesday | 6. | ___ | ___ | Saturday |
| 3. | ___ | ___ | Wednesday | 7. | ___ | ___ | Sunday |
| 4. | ___ | ___ | Thursday | | | | |

PLEASE CONTINUE OVER

7. How do you usually go to and from work?

| | Job #1 | Job #2 | |
|---|---|---|---|
| 1. | ☐ | ☐ | By car or other private vehicle, as driver |
| 2. | ☐ | ☐ | By car or other private vehicle, as passenger |
| 3. | ☐ | ☐ | By public transit |
| 4. | ☐ | ☐ | Combination of private vehicle and public transit *(example: transfer from car to subway)* |
| 5. | ☐ | ☐ | Walk |
| 6. | ☐ | ☐ | Other _____ *Please Specify* |

8. Is there a car or other private vehicle available for you to drive to work?

| | Job #1 | Job #2 | | | Job #1 | Job #2 | |
|---|---|---|---|---|---|---|---|
| 1. | ☐ | ☐ | Always | 4. | ☐ | ☐ | Rarely |
| 2. | ☐ | ☐ | Usually | 5. | ☐ | ☐ | Never |
| 3. | ☐ | ☐ | Sometimes | | | | |

9. How much does it cost you to park your vehicle at your place of work? If you don't drive to work, please indicate how much parking would cost if you did drive.
   1. Free ☐ 2. $ _____ per ☐ day ☐ week ☐ month 3. Don't Know ☐

10. Is there public transit service available within reasonable walking distance for you to use for your entire trip to work?

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. | ☐ | ☐ | Always | 3. | ☐ | ☐ | Never |
| 2. | ☐ | ☐ | Sometimes | 4. | ☐ | ☐ | Don't Know |

## Section II School Information

11. Do you currently attend school or another learning institution?
    Yes ⇨ ☐ Full-time ☐ Part-time
    No ⇨ ☐ ⇨ Please go to Section III

12. What is the name and address of your school? *Please include name of city or town.*

    _____ *Name* _____ *Address* _____ *City or Town*

13. How many hours did you attend school each day last week?
    _____ Monday _____ Tuesday _____ Wednesday _____ Thursday
    _____ Friday _____ Saturday _____ Sunday

14. How do you usually go to and from school?
    1. ☐ By car or other private vehicle, as driver
    2. ☐ By car or other private vehicle, as passenger
    3. ☐ By public transit or school bus
    4. ☐ Combination of private vehicle and public transit *(example: transfer from car to subway)*
    5. ☐ Walk
    6. ☐ Other _____ *Please Describe*

15. Is there a car or other private vehicle available for you to drive to school?
    1. ☐ Always 4. ☐ Rarely
    2. ☐ Usually 5. ☐ Never
    3. ☐ Sometimes

16. Is there public transit service available for you to use for your entire trip to school?
    1. ☐ Always 3. ☐ Never
    2. ☐ Sometimes 4. ☐ Don't Know

## Section III Person Information

Finally, we would like to ask you a few questions about yourself to help interpret the survey results.

17. Sex: ☐ Male ☐ Female

18. Age: _____ Years

19. Do you have a valid driver's licence? ☐ Yes ☐ No

20. What type of building best describes your home?
    1. ☐ Single detached 3. ☐ Town/Row House 5. ☐ Other _____ *Please Specify*
    2. ☐ Semi-detached 4. ☐ Apartment

21. Travel behavior is often influenced by factors related to personal income. Which of the following categories best describes your individual total income before taxes during 1985?

| | | | |
|---|---|---|---|
| 1. ☐ No income | 5. ☐ $15,000 to $19,999 | 9. ☐ $35,000 to $39,999 | 13. ☐ $55,000 to $59,999 |
| 2. ☐ Less than $5,000 | 6. ☐ $20,000 to $24,999 | 10. ☐ $40,000 to $44,999 | 14. ☐ $60,000 and Over |
| 3. ☐ $ 5,000 to $ 9,999 | 7. ☐ $25,000 to $29,999 | 11. ☐ $45,000 to $49,999 | |
| 4. ☐ $10,000 to $14,999 | 8. ☐ $30,000 to $34,999 | 12. ☐ $50,000 to $54,999 | |

CONTINUE ⇨

## Section IV Trip Information

- Please record ALL trips made on FRIDAY MAR 13 1987 between 4 a.m. and 4 a.m. of the next day

  A TRIP is defined as any travel from one place to another (one way) involving the use of a motor vehicle or public transit. Also include all walk trips and bicycle trips.

- When you are writing an address in this section please use one of the following three methods:

  METHOD 1 **THE EXACT STREET ADDRESS** (2377 Fairview St., Burlington)
  METHOD 2 **A NEARBY INTERSECTION** (NW corner of Bloor & Yonge, Toronto)
  METHOD 3 **A MAJOR LANDMARK** (Copp's Coliseum, Hamilton)
  **NOTE: Make sure you include the town or city name.**

- If we need to clarify any of this information, we should call _____ (phone number) at _____ (time of day) and ask to speak to _____ (name)

**I STARTED MY FIRST TRIP AFTER 4 A.M. FROM**
- ☐ HOME
- ☐ ELSEWHERE _____ Street address/Intersection/Landmark City/Town
- ☐ DID NOT MAKE ANY TRIPS.

| | TRIP # | TRAVEL TIME: START TIME | TRAVEL TIME: ARRIVAL TIME | METHOD(S) OF TRAVEL | MAIN TRIP PURPOSE | END OF TRIP LOCATION | |
|---|---|---|---|---|---|---|---|
| | | Specify appropriate times (nearest 5 minutes please) | | Choose from: Car Driver, Car Passenger, Bus, Train, Subway, Taxi, Motorcycle, Bicycle, Walk all the way, Other (please describe). If more than one, list in order of use. | Choose one: Work, School, Shopping, Social/recreational, Personal Business, Going Home, Pick up/Drop off a Passenger, Other (please describe) | If your trip ended at home, normal place of work, or school, write Home, Job #1 or #2, School; otherwise give precise location *and* municipality | |
| EXAMPLES | 1 | AT 7:35 ☑AM ☐PM | AT 8:55 ☑AM ☐PM | TRAVELLED BY — 1. Car passenger 2. Train 3. Subway | TO GO — Work | TO — Job #1 Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 2 |
| EXAMPLES | 2 | AT 5:05 ☐AM ☑PM | AT 7:00 ☐AM ☑PM | TRAVELLED BY — 1. Subway 2. Train 3. Bus | TO GO — Social/Recreational | TO — 2377 Fairview St. Street address/Intersection/Landmark Burlington City/Town | CONTINUE TO TRIP 3 |
| EXAMPLES | 3 | AT 10:20 ☐AM ☑PM | AT 10:30 ☐AM ☑PM | TRAVELLED BY — Car passenger | TO GO — Home | TO — Home Street address/Intersection/Landmark City/Town | |
| | 1 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 2 |
| | 2 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 3 |
| | 3 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 4 |
| | 4 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 5 |

PLEASE CONTINUE OVER

| TRIP # | TRAVEL TIME | | METHOD(S) OF TRAVEL | MAIN TRIP PURPOSE | END OF TRIP LOCATION | |
|---|---|---|---|---|---|---|
| | Specify appropriate times (nearest 5 minutes please) | | Choose from: Car Driver, Car Passenger, Bus, Train, Subway, Taxi, Motorcycle, Bicycle, Walk all the way, Other (please describe). If more than one, list in order of use. | Choose one: Work, School, Shopping, Social/recreational, Personal Business, Going Home, Pick up/Drop off a Passenger, Other (please describe) | If your trip ended at home, normal place of work, or school, write Home, Job #1 or #2, School, otherwise give precise location *and* municipality | |
| | START TIME | ARRIVAL TIME | | | | |
| 5 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 6 |
| 6 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 7 |
| 7 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 8 |
| 8 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 9 |
| 9 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 10 |
| 10 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 11 |
| 11 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | CONTINUE TO TRIP 12 |
| 12 | AT ☐AM ☐PM | AT ☐AM ☐PM | TRAVELLED BY — | TO GO — | TO — Street address/Intersection/Landmark City/Town | IF YOU HAVE ANY FURTHER TRIPS PLEASE LIST THEM SEPARATELY. |

We would like to know what you regard as the most important transportation issues in your area. Please use the space below to comment on existing facilities and to make suggestions for improvements.

*Thank you for your assistance.*

## TRIP DIARY SURVEY - HISTORY

During discussions concerning the design of the 1986 Transportation Tomorrow Survey (TTS) members of the interagency coordinating committee considered a range of approaches. It was finally determined that a telephone interview of a single spokesperson for each household should be adopted, and that this approach should be validated with a separate test using a mail back household trip diary survey.

While it was recognized that interviewing every member of a household directly by telephone would produce the most complete statistical record of trips made by each household, it was also recognized that this would increase the length of interviews, the number of call backs and cost as well as substantially increasing the number of incomplete samples due to impatience with the length of time that the survey took. Similarly, the problems and costs involved in full one day, three days or one week mail back survey of the scale required made that option unfeasible. Consequently, the survey was based upon interviewing a single household spokesperson since it was felt that would allow the collection of the most information at the best cost (both in terms of household inconvenience as well as survey staff time).

It was known that by adopting this approach some information on the trips of other members of the household would be lost. it was therefore determined that a limited mail back trip diary survey should be sent to selected households to test the accuracy and completeness of information obtained by interviews of a single household spokesperson questioned as part of the main survey. Testing of the degree of difference between responses by these spokesperson and by each individual reporting his or her own trips was done by selecting a sample of households already interviewed by telephone and sending them a follow up trip diary mail back survey form.

# APPENDIX B

## TDS AND TTS PERSON MATCHING PROCESS

## TDS and TTS Person Matching Procedure

A dBASE III+ program was written to match the persons in the two person files. There were five comparative variables which were employed to identify the same person within the matched households: age, sex, employment status, student status, and ownership of a valid driver license.

A person was matched using a series of increasingly less restrictive criteria. The matching program assigned one of seven different "matching status" codes to each person in the TDS and the TTS person files depending on the stage at which TDS and TTS persons were successfully matched.

The breakdown of the status codes and the number of matched persons are as follows:

Status 1 - 2,959 records

The status 1 code refers to those persons matched by having identical household number, age, and sex in both TDS and TTS person files.

Status 2 - 2,406 records

It was evident from examining the TDS and TTS survey responses that people often do not report their exact age. Persons who had identical responses to sex, employment status, and driver license questions would report similar, but, not exactly the same age for two surveys. With status 2, persons were matched if they were the same sex and their ages were within four years, comparing the reported figures in the TDS and the TTS.

Status 3 - 493 records

TDS respondents under 5 years of age were asked not to complete the survey. For under 5's the survey form was to be returned indicating that this person was indeed under 5 years of age. In TDS these persons were given a code "U".

The TTS, in contrast, collected person information for those who were under 5 years of age. When it came to matching TTS persons under 5 with TDS "U"'s, sex, along with variables other than age were not relevant. The code "U" was matched with anyone under the age of 5 in TTS. For matching persons, the TTS age was increased to anyone under 6 years of age to allow for the aging of 5 year olds.

Status 4 - 415 records

At this stage, the other variables, namely, employment status, student status, and, ownership of driver license were introduced as the basis for matching remaining records. These records could not be matched based on reported age and sex because of non-response to one or both of these variables in one or both surveys. Given the fact that TTS responses were more complete, the TDS "non-response" records having one or more of the variables mentioned above, were matched with TTS file. The status 4 was assigned to a record if a match was found in one or more of the three variables and their age was within ten years, comparing reported age for both surveys.

Since the under 5's were asked not to complete the survey, an assumption was made to treat the code "X"s as "U"s. If there were under 6 persons in TTS who have yet to be matched, and the same household contained "X"s in TDS, a match was granted and status 4 was assigned.

Status 5 - 136 records

These records were matched manually rather than through an automated matching procedure. A total of 227 TDS leftover records were unmatched after stage four. The two files were compared visually, using a computer print out, to match these remaining records manually.

Majority of these unmatched records were code "X"s in TDS. A respondent has returned the survey form without providing any information. Since these records contain no usable data, it was determined that if a single person was left in TDS household with code "X" and consequently, a single person was left in TTS with all the person information, then the match was granted. The reasoning behind granting the match to an unknown person was to separate those households with the same number of responded people in both surveys from those households which contain missing persons.

Status 6 - 53 records

A a final attempt to match the respondents was also a manual procedure. This was all matched through a judgement call on a record by record basis.

Status 0 - 41 records

These represent unmatched records.

* The status codes 1 and 2 was used to create the working file (Version 1.1) for this report.

# APPENDIX C

# TDS VERSION 1.0 DATA GUIDE

# TRIP DIARY SURVEY HOUSEHOLD FILE LAYOUT VERSION 1.0

| COLUMNS | DESCRIPTION | CODES |
|---|---|---|
| 1-6 (6) | HOUSEHOLD NUMBER | SIX DIGIT UNIQUE IDENTIFIER |
| 7-10 (4) | SURVEY DATE | DATE FOR WHICH RESPONDENT WAS ASKED TO COMPLETE THE DIARY |
| 11-12 (2) | NUMBER OF PEOPLE IN HOUSEHOLD | 1-99 |
| 13 (1) | NUMBER OF VEHICLES IN HOUSEHOLD (AVAILABLE FOR PERSONAL USE) | 0-8<br>9- DK/INVALID |
| 14-23 (10) | HOME MUNICIPALITY | |
| 24-71 (48) | HOME ADDRESS | |
| 72 (1) | LANGUAGE | E - ENGLISH<br>I - ITALIAN<br>P - PORTUGUESE<br>S - SPANISH<br>G- GREEK<br>C - CANTONESE<br>F - FRENCH<br>U - UKRAINIAN<br>M - GERMAN<br>L - POLISH<br>9 - DK/INVALID |
| 73 (1) | DWELLING TYPE | 1 - HOUSE<br>(SINGLE-DETACHED, SEMI-DETACHED, LINK, ROW OR TOWNHOUSE)<br>2 - OTHER<br>(APARTMENT, DUPLEX, MOBILE HOME, HOTEL)<br>9 - DK/INVALID |
| 74 (1) | HOME MUNICIPALITY CODE | 1 - METRO<br>2 - DURHAM<br>3 - YORK<br>4 - PEEL<br>5 - HALTON<br>6 - H/W<br>9 - DK/INVALID |
| 75-80 (6) | UTMS x CO-ORDINATE OF BLOCKFACE MEASURED FROM 500,000 METRES WEST OF 78 DEGREES LONGITUDE | DISTANCE EAST IN METRES |

| | | |
|---|---|---|
| 81-87 (7) | UTMS y CO-ORDINATE OF BLOCKFACE | DISTANCE NORTH OF THE EQUATOR IN METRES |
| 88 (1) | GEOCODE FOUND | Y - YES<br>N - NO |
| 89-94 (6) | MAILING DAY | DATE FORMS MAILED |
| 95-100 (6) | TRIP DAY | DATE FOR WHICH TRIPS WERE RECORDED |
| 101-102 (2) | NUMBER OF SURVEYS | NUMBER OF SURVEYS SENT TO HOUSEHOLD |
| 103-108 (6) | DATE SURVEYS RECEIVED | DATE SURVEYS RECEIVED BY MTO |
| 109 (1) | REFUSED TO COMPLETE DIARY | Y - YES<br>N - NO |
| 110-111 (2) | DAY BEFORE STATUS | HOUSEHOLD CONTACTED DAY BEFORE DIARY COMPLETION DATE |
| 112-113 (2) | DAY AFTER STATUS | HOUSEHOLD CONTACTED DAY AFTER DIARY COMPLETION DATE |
| 114-115 (2) | WEEK AFTER STATUS | HOUSEHOLD CONTACTED WEEK AFTER DIARY COMPLETION DATE |
| 116 (1) | COMPLETED | NUMBER OF DIARIES COMPLETED BY HOUSEHOLD |
| 117 (1) | EDIT CALLBACK | PHONED HOUSEHOLD TO OBTAIN MORE INFORMATION |
| 118-123 (6) | EDIT DATE | DATE HOUSEHOLD CONTACTED FOR FURTHER INFORMATION |
| 124-129 (6) | EDIT DATE RETURNED | DATE OF RETURN OF FURTHER FORMS SENT TO HOUSEHOLD |
| 130 (1) | EDIT COMPLETE | Y - YES<br>N - NO |
| 131-133 (3) | CELL NUMBER | CELL NUMBER OF HOUSEHOLD |
| 134-136 (3) | RECORDS IN CELL | NUMBER OF HOUSEHOLD IN CELL |
| 137 (1) | UNDELIVERABLE | Y - YES<br>N - NO |
| 138-139 (2) | DAY OF STATUS | CALLED DAY OF TRIP DIARY |

| | | |
|---|---|---|
| 140-147 (8) | EXPANSION | EXPANSION FACTOR,<br>FROM TRIP DIARY TO TTS BASED ON CELL PROPORTIONS |
| 148-152 (5) | TARMS ZONE OF HOUSEHOLD | |

# TRIP DIARY SURVEY PERSON FILE LAYOUT VERSION 1.0

| COLUMNS | DESCRIPTION | CODES |
|---|---|---|
| 1-6 (6) | HOUSEHOLD NUMBER | SIX DIGIT UNIQUE IDENTIFIER |
| 7-8 (2) | PERSON NUMBER | 2 DIGIT IDENTIFIER UNIQUE WITHIN HOUSEHOLD |
| 9 (1) | EMPLOYMENT STATUS | U - UNDER 5 YEARS (REST OF FORM BLANK)<br>X - DK/INVALID (REST OF FORM BLANK)<br>1 - PART-TIME<br>2 - FULL-TIME<br>BLANK - NOT EMPLOYED |
| 10 (1) | EMPLOYED OUTSIDE HOME OR AT HOME | 1 - OUTSIDE HOME<br>2 - AT HOME<br>BLANK - NOT EMPLOYED |
| 11 (1) | NOT EMPLOYED STATUS | BLANK - EMPLOYED<br>1 - HOMEMAKER<br>2 - RETIRED<br>3 - UNEMPLOYED |
| 12 (1) | JOB 1 OCCUPATION | BLANK - NO JOB 1<br>1 - CLERICAL<br>2 - SALES<br>3 - SERVICE<br>4 - FACTORY/PROCESSING<br>5 - RESOURCE<br>6 - CONSTRUCTION<br>7 - TRANSPORTATION<br>8 - PROFESSIONAL/TECHNICAL/EXECUTIVE/MANAGERIAL<br>9 - OTHER |
| 13 (1) | JOB 2 OCCUPATION | SAME AS JOB 1 |
| 14 (1) | DESCRIPTION OF JOB 1 WORK SITE | BLANK - NO JOB 1<br>1 - OFFICE BUILDING<br>2 - FACTORY/WAREHOUSE<br>3 - CONSTRUCTION SITE<br>4 - NO FIXED SITE<br>5 - SERVICE ESTABLISHMENT<br>6 - INSTITUTION<br>7 - HOME<br>8 - OTHER |
| 15 (1) | DESCRIPTION OF JOB 2 WORK SITE | SAME AS JOB 1 |

| | | |
|---|---|---|
| 16 (1) | DESCRIPTION OF JOB 1 WORK HOURS | BLANK - NO JOB1<br>1 - WEEKDAYS, REGULAR HOURS<br>2 - WEEKDAYS, VARIABLE HOURS<br>3 - SHIFTWORK<br>4 - COMPRESSED WORK WEEK (LESS THAN 5 DAYS)<br>5 - WEEKENDS/EVENINGS<br>6 - OTHER |
| 17 (1) | DESCRIPTION OF JOB 2 WORK HOURS | SAME AS JOB 1 |
| 18 (1) | NUMBER OF DAYS IN COMPRESSED WORK WEEK FOR JOB 1 | NUMBER OF DAYS (LESS THAN 5) |
| 19 (1) | NUMBER OF DAYS IN COMPRESSED WORK WEEK FOR JOB 2 | NUMBER OF DAYS (LESS THAN 5) |
| 20-24 (5) | NUMBER OF HOURS WORKED ON MONDAY JOB 1 | 2 DIGITS RIGHT AND LEFT OF DECIMAL (i.e. 08.00) |
| 25-29 (5) | NUMBER OF HOURS WORKED ON TUESDAY JOB 1 | |
| 30-34 (5) | NUMBER OF HOURS WORKED ON WEDNESDAY JOB 1 | |
| 35-39 (5) | NUMBER OF HOURS WORKED ON THURSDAY JOB 1 | |
| 40-44 (5) | NUMBER OF HOURS WORKED ON FRIDAY JOB 1 | |
| 45-49 (5) | NUMBER OF HOURS WORKED ON SATURDAY JOB 1 | |
| 50-54 (5) | NUMBER OF HOURS WORKED ON SUNDAY JOB 1 | |
| 55-59 (5) | NUMBER OF HOURS WORKED ON MONDAY JOB 2 | 2 DIGITS RIGHT AND LEFT OF DECIMAL (i.e. 08.00) |
| 60-64 (5) | NUMBER OF HOURS WORKED ON TUESDAY JOB 2 | |
| 65-69 (5) | NUMBER OF HOURS WORKED ON WEDNESDAY JOB 2 | |

| | | |
|---|---|---|
| 70-74 (5) | NUMBER OF HOURS WORKED ON THURSDAY JOB 2 | |
| 75-79 (5) | NUMBER OF HOURS WORKED ON FRIDAY JOB 2 | |
| 80-84 (5) | NUMBER OF HOURS WORKED ON SATURDAY JOB 2 | |
| 85-89 (5) | NUMBER OF HOURS WORKED ON SUNDAY JOB 2 | |
| 90 (1) | TRAVEL MODE TO JOB 1 | BLANK - NO RESPONSE<br>1 - DRIVER OF PRIVATE VEHICLE<br>2 - PRIVATE VEHICLE PASSENGER<br>3 - PUBLIC TRANSIT<br>4 - COMBINATION OF PUBLIC TRANSIT AND PRIVATE VEHICLE<br>5 - WALK<br>6 - OTHER |
| 91 (1) | TRAVEL MODE TO JOB 2 | SAME AS JOB 1 |
| 92 (1) | AVAILABILITY OF PRIVATE VEHICLE FOR RESPONDENT TO DRIVE TO JOB 1 | BLANK - NO RESPONSE<br>1 - ALWAYS AVAILABLE<br>2 - USUALLY AVAILABLE<br>3 - SOMETIMES AVAILABLE<br>4 - RARELY AVAILABLE<br>5 - NEVER AVAILABLE |
| 93 (1) | AVAILABILITY OF PRIVATE VEHICLE FOR RESPONDENT TO DRIVE TO JOB 2 | SAME AS JOB 1 |
| 94-98 (5) | PARKING COST AT PLACE OF WORK | DOLLARS - 2 DIGITS RIGHT AND LEFT OF DECIMAL |
| 99 (1) | QUALIFIER FOR PARKING COST | BLANK - NO RESPONSE<br>1 - FREE PARKING<br>3 - DON'T KNOW<br>D - COST PER DAY<br>W - COST PER WEEK<br>M - COST PER MONTH |
| 100 (1) | AVAILABILITY OF TRANSIT FOR TRAVEL TO JOB 1 | BLANK - NO RESPONSE<br>1 - ALWAYS AVAILABLE<br>2 - SOMETIMES AVAILABLE<br>3 - NEVER AVAILABLE<br>4 - DON'T KNOW |
| 101 (1) | AVAILABILITY OF TRANSIT FOR TRAVEL TO JOB 2 | SAME AS JOB 1 |

| | | |
|---|---|---|
| 102 (1) | STUDENT STATUS | BLANK - NOT A STUDENT<br>F- FULL TIME<br>P - PART TIME |
| 103-107 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON MONDAY | 2 DIGITS RIGHT AND LEFT OF DECIMAL (i.e. 08.00) |
| 108-112 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON TUESDAY | |
| 113-117 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON WEDNESDAY | |
| 118-122 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON THURSDAY | |
| 123-127 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON FRIDAY | |
| 128-132 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON SATURDAY | |
| 133-137 (5) | NUMBER OF HOURS OF SCHOOL ATTENDED ON SUNDAY | |
| 138 (1) | MODE OF TRAVEL TO SCHOOL | BLANK - NO MODE<br>1 - DRIVER OF PRIVATE VEHICLE<br>2 - PRIVATE VEHICLE PASSENGER<br>3 - PUBLIC TRANSIT<br>4 - COMBINATION OF PUBLIC TRANSIT AND PRIVATE VEHICLE<br>5 - WALK<br>6 - OTHER |
| 139 (1) | AVAILABILITY OF PRIVATE VEHICLE FOR RESPONDENT TO DRIVE TO SCHOOL | BLANK - NO RESPONSE<br>1 - ALWAYS AVAILABLE<br>2 - USUALLY AVAILABLE<br>3 - SOMETIMES AVAILABLE<br>4 - RARELY AVAILABLE<br>5 - NEVER AVAILABLE |
| 140 (1) | AVAILABILITY OF TRANSIT FOR TRAVEL TO SCHOOL | BLANK - NO RESPONSE<br>1 - ALWAYS AVAILABLE<br>2 - SOMETIMES AVAILABLE<br>3 - NEVER AVAILABLE<br>4 - DON'T KNOW |
| 141 (1) | SEX | BLANK - NO RESPONSE<br>M - MALE<br>F - FEMALE |
| 142-143 (2) | AGE | YEARS |

| | | |
|---|---|---|
| 144 (1) | DRIVER'S LICENSE | BLANK - NO RESPONSE<br>Y - YES<br>N - NO |
| 145 (1) | DWELLING TYPE | BLANK - NO RESPONSE<br>1 - SINGLE DETACHED<br>2 - SEMI DETACHED<br>3 - TOWN/ROW HOUSE<br>4 - APARTMENT<br>5 - OTHER |
| 146-147 (2) | PERSONAL INCOME | BLANK - NO RESPONSE<br>1 - NO INCOME<br>2 - UNDER $5,000<br>3 - $5,000-9,999<br>4 - $10,000-14,999<br>5 - $15,000-19,999<br>6 - $20,000-24,999<br>7 - $25,000-29,999<br>8 - $30,000-34,999<br>9 - $35,000-39,999<br>10 - $40,000-44,999<br>11 - $45,000-49,999<br>12 - $50,000-54,999<br>13 - $55,000-59,999<br>14 - $60,000 PLUS |
| 148-150 (3) | DATE FOR WHICH TRIPS WERE RECORDED | 148 - FIRST LETTER OF THE MONTH<br>149-150 - DAY OF THE MONTH |
| 151-152 (2) | NUMBER OF TRIPS | INTEGER, RIGHT JUSTIFIED |
| 153-161 (9) | COMMENTS | SEE ATTACHMENT FOR LIST OF CODES |
| 162-163 (2) | TTS MATCHED PERSON NUMBER | |
| 164 (1) | TTS PERSON MATCHING STATUS CODE | |
| 165 (1) | RESPONDENT/NON-RESPONDENT | |

# TRIP DIARY SURVEY TRIP FILE LAYOUT VERSION 1.0

| COLUMNS | DESCRIPTION | CODES |
|---|---|---|
| 1-6 (6) | HOUSEHOLD NUMBER | SIX DIGIT UNIQUE IDENTIFIER |
| 7-8 (2) | PERSON NUMBER | 2 DIGIT IDENTIFIER UNIQUE WITHIN HOUSEHOLD |
| 9-10 (2) | TRIP NUMBER | 01-99 - TRIP NUMBER |
| 11-14 (4) | TRIP START TIME | 0400 - 2800 (4 AM ON TRIP DAY TO 4 AM ON THE FOLLOWING DAY) |
| 15-18 (4) | TRIP END TIME | SAME AS START TIME |
| 19 (1) | MODE 1 | B - TRANSIT and SCHOOL BUS<br>S - SUBWAY<br>D - DRIVE<br>P - PASSENGER<br>T - TAXI<br>C - BICYCLE<br>W - WALK<br>M - MOTORCYCLE<br>V - VIA RAIL<br>G - GO TRANSIT<br>O - OTHER |
| 20 (1) | MODE 2 | SAME AS MODE 1 |
| 21 (1) | MODE 3 | SAME AS MODE 1 |
| 22 (1) | MODE 4 | SAME AS MODE 1 |
| 23 (1) | TRIP DESTINATION PURPOSE | W- WORK<br>S - SCHOOL<br>E - ENTERTAINMENT, SOCIAL, RECREATION<br>P - PERSONAL BUSINESS<br>H - HOME<br>F - FACILITATE PASSENGER (PICK UP OR DROP OFF)<br>M - MARKET (SHOPPING)<br>O - OTHER |
| 24-25 (2) | PREVIOUS ADDRESS (USED TO LOOK UP LOCATION PREVIOUSLY GEOCODED) | SAME AS TRIP NUMBER |
| 26-35 (10) | DESTINATION MUNICIPALITY | |

| | | |
|---|---|---|
| 36-83 (48) | DESTINATION ADDRESS | |
| 84-89 (6) | UTMS x CO-ORDINATE OF DESTINATION | |
| 90-96 (7) | UTMS y CO-ORDINATE OF DESTINATION | |
| 97-98 (2) | MUNICIPALITY RETURNED BY GEOCODING PROCESS | |
| 99 (1) | GEOCODE FOUND | Y - YES<br>N - NO |
| 100 (1) | FILLER | |
| 101-104 (4) | DESTINATION TARMS ZONES | |
| 105-108 (4) | TRAVEL TIME | |
| 109 (1) | ORIGIN TRIP PURPOSE | SAME AS DESTINATION TRIP PURPOSE |
| 110-113 | ORIGIN TARMS ZONES | |
| 114-119 (6) | UTMS x CO-ORDINATE OF ORIGIN | |
| 120-126 (7) | UTMS y CO-ORDINATE OF ORIGIN | |

## SELECTED TABS FOR TDS VERSION 1.0 DATABASE

## TDS HOUSEHOLD TABULATIONS

The following tabulations are "Number of Households" stratified by various household characteristics. The "Value" represents the survey responses. The frequency figures are the actual (unexpanded) number of Household records in the TDS Version 1.0 Household file.

**(1) HOUSEHOLD SIZE**

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| 01 | 695 | 24.2 | 24.2 | 24.2 |
| 02 | 952 | 33.2 | 33.2 | 57.4 |
| 03 | 570 | 19.9 | 19.9 | 77.3 |
| 04 | 478 | 16.7 | 16.7 | 94.0 |
| 05 | 131 | 4.6 | 4.6 | 98.5 |
| 06 | 31 | 1.1 | 1.1 | 99.6 |
| 07 | 8 | .3 | .3 | 99.9 |
| 08 | 2 | .1 | .1 | 100.0 |
| 09 | 1 | .0 | .0 | 100.0 |
| TOTAL | 2868 | 100.0 | 100.0 | |

**(2) VEHICLE AVAILABILITY**

| Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| 0 | 560 | 19.5 | 19.5 | 19.5 |
| 1 | 1212 | 42.3 | 42.3 | 61.8 |
| 2 | 865 | 30.2 | 30.2 | 91.9 |
| 3 | 183 | 6.4 | 6.4 | 98.3 |
| 4 | 38 | 1.3 | 1.3 | 99.7 |
| 5 | 6 | .2 | .2 | 99.9 |
| 6 | 3 | .1 | .1 | 100.0 |
| 7 | 1 | .0 | .0 | 100.0 |
| TOTAL | 2868 | 100.0 | 100.0 | |

**(3) DWELLING TYPE**

| | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| HOUSE | 1 | 1802 | 62.8 | 62.8 | 62.8 |
| OTHER | 2 | 1065 | 37.1 | 37.1 | 100.0 |
| INVALID | 9 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 2868 | 100.0 | 100.0 | |

(4) REGIONAL MUNICIPALITY OF RESIDENCE

| | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| METRO TORONTO | 1 | 1161 | 40.5 | 40.5 | 40.5 |
| DURHAM | 2 | 268 | 9.3 | 9.3 | 49.8 |
| YORK | 3 | 229 | 8.0 | 8.0 | 57.8 |
| PEEL | 4 | 401 | 14.0 | 14.0 | 71.8 |
| HALTON | 5 | 203 | 7.1 | 7.1 | 78.9 |
| HAMILTON-WENTWORTH | 6 | 606 | 21.1 | 21.1 | 100.0 |
| | TOTAL | 2868 | 100.0 | 100.0 | |

(5) STRATIFIED CELL NUMBER OF RESPONDENTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 60 | 2.1 | 2.1 | 2.1 |
| | 2 | 36 | 1.3 | 1.3 | 3.3 |
| | 3 | 19 | .7 | .7 | 4.0 |
| | 4 | 25 | .9 | .9 | 4.9 |
| | 5 | 14 | .5 | .5 | 5.4 |
| | 6 | 9 | .3 | .3 | 5.7 |
| | 7 | 6 | .2 | .2 | 5.9 |
| | 8 | 5 | .2 | .2 | 6.1 |
| | 9 | 14 | .5 | .5 | 6.6 |
| | 10 | 11 | .4 | .4 | 6.9 |
| | 11 | 4 | .1 | .1 | 7.1 |
| | 12 | 3 | .1 | .1 | 7.2 |
| | 13 | 2 | .1 | .1 | 7.3 |
| | 14 | 2 | .1 | .1 | 7.3 |
| | 17 | 175 | 6.1 | 6.1 | 13.4 |
| | 18 | 60 | 2.1 | 2.1 | 15.5 |
| | 19 | 22 | .8 | .8 | 16.3 |
| | 20 | 17 | .6 | .6 | 16.9 |
| | 21 | 37 | 1.3 | 1.3 | 18.2 |
| | 22 | 6 | .2 | .2 | 18.4 |
| | 23 | 1 | .0 | .0 | 18.4 |
| | 24 | 1 | .0 | .0 | 18.4 |
| | 25 | 26 | .9 | .9 | 19.4 |
| | 26 | 8 | .3 | .3 | 19.6 |
| | 27 | 4 | .1 | .1 | 19.8 |
| | 28 | 2 | .1 | .1 | 19.8 |
| | 29 | 2 | .1 | .1 | 19.9 |
| | 31 | 4 | .1 | .1 | 20.0 |
| | 33 | 46 | 1.6 | 1.6 | 21.7 |
| | 34 | 90 | 3.1 | 3.1 | 24.8 |
| | 35 | 37 | 1.3 | 1.3 | 26.1 |
| | 36 | 48 | 1.7 | 1.7 | 27.8 |
| | 37 | 23 | .8 | .8 | 28.6 |
| | 38 | 56 | 2.0 | 2.0 | 30.5 |
| | 39 | 46 | 1.6 | 1.6 | 32.1 |
| | 40 | 53 | 1.8 | 1.8 | 34.0 |
| | 41 | 58 | 2.0 | 2.0 | 36.0 |
| | 42 | 89 | 3.1 | 3.1 | 39.1 |
| | 43 | 48 | 1.7 | 1.7 | 40.8 |
| | 44 | 75 | 2.6 | 2.6 | 43.4 |
| | 45 | 16 | .6 | .6 | 43.9 |
| | 46 | 23 | .8 | .8 | 44.7 |
| | 47 | 9 | .3 | .3 | 45.0 |
| | 48 | 9 | .3 | .3 | 45.4 |
| | 49 | 93 | 3.2 | 3.2 | 48.6 |

(5) STRATIFIED CELL NUMBER OF RESPONDENTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 50 | 65 | 2.3 | 2.3 | 50.9 |
| | 51 | 29 | 1.0 | 1.0 | 51.9 |
| | 52 | 38 | 1.3 | 1.3 | 53.2 |
| | 53 | 39 | 1.4 | 1.4 | 54.6 |
| | 54 | 43 | 1.5 | 1.5 | 56.1 |
| | 55 | 4 | .1 | .1 | 56.2 |
| | 56 | 6 | .2 | .2 | 56.4 |
| | 57 | 63 | 2.2 | 2.2 | 58.6 |
| | 58 | 59 | 2.1 | 2.1 | 60.7 |
| | 59 | 22 | .8 | .8 | 61.4 |
| | 60 | 7 | .2 | .2 | 61.7 |
| | 61 | 4 | .1 | .1 | 61.8 |
| | 62 | 2 | .1 | .1 | 61.9 |
| | 65 | 3 | .1 | .1 | 62.0 |
| | 66 | 59 | 2.1 | 2.1 | 64.1 |
| | 67 | 48 | 1.7 | 1.7 | 65.7 |
| | 68 | 77 | 2.7 | 2.7 | 68.4 |
| | 69 | 4 | .1 | .1 | 68.5 |
| | 70 | 60 | 2.1 | 2.1 | 70.6 |
| | 71 | 61 | 2.1 | 2.1 | 72.8 |
| | 72 | 47 | 1.6 | 1.6 | 74.4 |
| | 73 | 6 | .2 | .2 | 74.6 |
| | 74 | 109 | 3.8 | 3.8 | 78.4 |
| | 75 | 111 | 3.9 | 3.9 | 82.3 |
| | 76 | 109 | 3.8 | 3.8 | 86.1 |
| | 77 | 1 | .0 | .0 | 86.1 |
| | 78 | 56 | 2.0 | 2.0 | 88.1 |
| | 79 | 38 | 1.3 | 1.3 | 89.4 |
| | 80 | 73 | 2.5 | 2.5 | 91.9 |
| | 81 | 5 | .2 | .2 | 92.1 |
| | 82 | 42 | 1.5 | 1.5 | 93.6 |
| | 83 | 29 | 1.0 | 1.0 | 94.6 |
| | 84 | 33 | 1.2 | 1.2 | 95.7 |
| | 85 | 2 | .1 | .1 | 95.8 |
| | 86 | 14 | .5 | .5 | 96.3 |
| | 87 | 10 | .3 | .3 | 96.7 |
| | 88 | 6 | .2 | .2 | 96.9 |
| | 89 | 5 | .2 | .2 | 97.0 |
| | 90 | 49 | 1.7 | 1.7 | 98.7 |
| | 91 | 18 | .6 | .6 | 99.4 |
| | 92 | 14 | .5 | .5 | 99.9 |
| | 94 | 2 | .1 | .1 | 99.9 |
| | 96 | 2 | .1 | .1 | 100.0 |
| | TOTAL | 2868 | 100.0 | 100.0 | |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 4 | .1 | .1 | .1 |
| | 2 | 6 | .2 | .2 | .3 |
| | 3 | 2 | .1 | .1 | .4 |
| | 4 | 1 | .0 | .0 | .5 |
| | 5 | 1 | .0 | .0 | .5 |
| | 6 | 5 | .2 | .2 | .7 |
| | 7 | 12 | .4 | .4 | 1.1 |
| | 8 | 6 | .2 | .2 | 1.3 |
| | 9 | 18 | .6 | .6 | 1.9 |
| | 10 | 1 | .0 | .0 | 2.0 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 11 | 1 | .0 | .0 | 2.0 |
| | 12 | 3 | .1 | .1 | 2.1 |
| | 14 | 1 | .0 | .0 | 2.1 |
| | 15 | 1 | .0 | .0 | 2.2 |
| | 16 | 5 | .2 | .2 | 2.3 |
| | 19 | 4 | .1 | .1 | 2.5 |
| | 20 | 5 | .2 | .2 | 2.6 |
| | 21 | 5 | .2 | .2 | 2.8 |
| | 23 | 2 | .1 | .1 | 2.9 |
| | 24 | 7 | .2 | .2 | 3.1 |
| | 25 | 1 | .0 | .0 | 3.2 |
| | 28 | 1 | .0 | .0 | 3.2 |
| | 29 | 4 | .1 | .1 | 3.3 |
| | 30 | 1 | .0 | .0 | 3.4 |
| | 31 | 2 | .1 | .1 | 3.5 |
| | 34 | 1 | .0 | .0 | 3.5 |
| | 35 | 3 | .1 | .1 | 3.6 |
| | 36 | 3 | .1 | .1 | 3.7 |
| | 37 | 3 | .1 | .1 | 3.8 |
| | 39 | 1 | .0 | .0 | 3.8 |
| | 41 | 1 | .0 | .0 | 3.9 |
| | 43 | 2 | .1 | .1 | 3.9 |
| | 47 | 4 | .1 | .1 | 4.1 |
| | 49 | 2 | .1 | .1 | 4.1 |
| | 51 | 3 | .1 | .1 | 4.3 |
| | 52 | 1 | .0 | .0 | 4.3 |
| | 53 | 4 | .1 | .1 | 4.4 |
| | 55 | 3 | .1 | .1 | 4.5 |
| | 56 | 5 | .2 | .2 | 4.7 |
| | 57 | 4 | .1 | .1 | 4.8 |
| | 58 | 2 | .1 | .1 | 4.9 |
| | 60 | 1 | .0 | .0 | 5.0 |
| | 61 | 3 | .1 | .1 | 5.1 |
| | 62 | 3 | .1 | .1 | 5.2 |
| | 63 | 4 | .1 | .1 | 5.3 |
| | 64 | 5 | .2 | .2 | 5.5 |
| | 65 | 9 | .3 | .3 | 5.8 |
| | 66 | 5 | .2 | .2 | 6.0 |
| | 67 | 6 | .2 | .2 | 6.2 |
| | 69 | 8 | .3 | .3 | 6.5 |
| | 71 | 1 | .0 | .0 | 6.5 |
| | 72 | 4 | .1 | .1 | 6.6 |
| | 73 | 2 | .1 | .1 | 6.7 |
| | 74 | 1 | .0 | .0 | 6.7 |
| | 76 | 3 | .1 | .1 | 6.8 |
| | 77 | 2 | .1 | .1 | 6.9 |
| | 78 | 1 | .0 | .0 | 6.9 |
| | 79 | 2 | .1 | .1 | 7.0 |
| | 81 | 9 | .3 | .3 | 7.3 |
| | 83 | 3 | .1 | .1 | 7.4 |
| | 84 | 6 | .2 | .2 | 7.6 |
| | 85 | 1 | .0 | .0 | 7.7 |
| | 87 | 1 | .0 | .0 | 7.7 |
| | 88 | 2 | .1 | .1 | 7.8 |
| | 89 | 7 | .2 | .2 | 8.0 |
| | 91 | 6 | .2 | .2 | 8.2 |
| | 92 | 5 | .2 | .2 | 8.4 |
| | 93 | 1 | .0 | .0 | 8.4 |
| | 94 | 9 | .3 | .3 | 8.8 |
| | 95 | 2 | .1 | .1 | 8.8 |
| | 97 | 3 | .1 | .1 | 8.9 |
| | 98 | 1 | .0 | .0 | 9.0 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 99 | 1 | .0 | .0 | 9.0 |
| | 100 | 1 | .0 | .0 | 9.0 |
| | 101 | 3 | .1 | .1 | 9.1 |
| | 102 | 1 | .0 | .0 | 9.2 |
| | 103 | 1 | .0 | .0 | 9.2 |
| | 104 | 2 | .1 | .1 | 9.3 |
| | 105 | 1 | .0 | .0 | 9.3 |
| | 106 | 5 | .2 | .2 | 9.5 |
| | 107 | 1 | .0 | .0 | 9.5 |
| | 109 | 6 | .2 | .2 | 9.7 |
| | 110 | 7 | .2 | .2 | 10.0 |
| | 111 | 3 | .1 | .1 | 10.1 |
| | 112 | 1 | .0 | .0 | 10.1 |
| | 113 | 1 | .0 | .0 | 10.1 |
| | 114 | 2 | .1 | .1 | 10.2 |
| | 115 | 2 | .1 | .1 | 10.3 |
| | 116 | 4 | .1 | .1 | 10.4 |
| | 117 | 9 | .3 | .3 | 10.7 |
| | 118 | 5 | .2 | .2 | 10.9 |
| | 119 | 4 | .1 | .1 | 11.1 |
| | 120 | 1 | .0 | .0 | 11.1 |
| | 121 | 2 | .1 | .1 | 11.2 |
| | 122 | 1 | .0 | .0 | 11.2 |
| | 123 | 3 | .1 | .1 | 11.3 |
| | 125 | 4 | .1 | .1 | 11.4 |
| | 126 | 4 | .1 | .1 | 11.6 |
| | 127 | 9 | .3 | .3 | 11.9 |
| | 128 | 2 | .1 | .1 | 12.0 |
| | 129 | 11 | .4 | .4 | 12.3 |
| | 130 | 6 | .2 | .2 | 12.6 |
| | 131 | 1 | .0 | .0 | 12.6 |
| | 132 | 1 | .0 | .0 | 12.6 |
| | 133 | 2 | .1 | .1 | 12.7 |
| | 136 | 2 | .1 | .1 | 12.8 |
| | 137 | 3 | .1 | .1 | 12.9 |
| | 138 | 2 | .1 | .1 | 12.9 |
| | 139 | 4 | .1 | .1 | 13.1 |
| | 140 | 16 | .6 | .6 | 13.6 |
| | 141 | 7 | .2 | .2 | 13.9 |
| | 142 | 6 | .2 | .2 | 14.1 |
| | 144 | 6 | .2 | .2 | 14.3 |
| | 145 | 7 | .2 | .2 | 14.5 |
| | 146 | 5 | .2 | .2 | 14.7 |
| | 147 | 17 | .6 | .6 | 15.3 |
| | 148 | 4 | .1 | .1 | 15.4 |
| | 149 | 1 | .0 | .0 | 15.5 |
| | 150 | 5 | .2 | .2 | 15.7 |
| | 151 | 7 | .2 | .2 | 15.9 |
| | 153 | 2 | .1 | .1 | 16.0 |
| | 154 | 1 | .0 | .0 | 16.0 |
| | 155 | 6 | .2 | .2 | 16.2 |
| | 156 | 3 | .1 | .1 | 16.3 |
| | 157 | 4 | .1 | .1 | 16.5 |
| | 158 | 3 | .1 | .1 | 16.6 |
| | 160 | 1 | .0 | .0 | 16.6 |
| | 161 | 2 | .1 | .1 | 16.7 |
| | 162 | 2 | .1 | .1 | 16.7 |
| | 164 | 6 | .2 | .2 | 16.9 |
| | 165 | 1 | .0 | .0 | 17.0 |
| | 166 | 6 | .2 | .2 | 17.2 |
| | 167 | 4 | .1 | .1 | 17.3 |
| | 168 | 10 | .3 | .3 | 17.7 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 169 | 1 | .0 | .0 | 17.7 |
| | 171 | 2 | .1 | .1 | 17.8 |
| | 173 | 2 | .1 | .1 | 17.9 |
| | 174 | 6 | .2 | .2 | 18.1 |
| | 175 | 7 | .2 | .2 | 18.3 |
| | 176 | 2 | .1 | .1 | 18.4 |
| | 177 | 8 | .3 | .3 | 18.7 |
| | 178 | 2 | .1 | .1 | 18.7 |
| | 179 | 12 | .4 | .4 | 19.1 |
| | 180 | 5 | .2 | .2 | 19.3 |
| | 181 | 3 | .1 | .1 | 19.4 |
| | 183 | 5 | .2 | .2 | 19.6 |
| | 184 | 2 | .1 | .1 | 19.7 |
| | 186 | 5 | .2 | .2 | 19.8 |
| | 187 | 12 | .4 | .4 | 20.3 |
| | 188 | 3 | .1 | .1 | 20.4 |
| | 189 | 4 | .1 | .1 | 20.5 |
| | 190 | 5 | .2 | .2 | 20.7 |
| | 191 | 2 | .1 | .1 | 20.7 |
| | 192 | 3 | .1 | .1 | 20.9 |
| | 193 | 6 | .2 | .2 | 21.1 |
| | 195 | 3 | .1 | .1 | 21.2 |
| | 196 | 2 | .1 | .1 | 21.2 |
| | 197 | 3 | .1 | .1 | 21.3 |
| | 198 | 3 | .1 | .1 | 21.4 |
| | 200 | 3 | .1 | .1 | 21.5 |
| | 201 | 1 | .0 | .0 | 21.6 |
| | 202 | 8 | .3 | .3 | 21.9 |
| | 203 | 1 | .0 | .0 | 21.9 |
| | 204 | 2 | .1 | .1 | 22.0 |
| | 205 | 5 | .2 | .2 | 22.1 |
| | 207 | 3 | .1 | .1 | 22.2 |
| | 208 | 5 | .2 | .2 | 22.4 |
| | 209 | 2 | .1 | .1 | 22.5 |
| | 210 | 3 | .1 | .1 | 22.6 |
| | 211 | 3 | .1 | .1 | 22.7 |
| | 212 | 1 | .0 | .0 | 22.7 |
| | 213 | 3 | .1 | .1 | 22.8 |
| | 215 | 4 | .1 | .1 | 23.0 |
| | 216 | 2 | .1 | .1 | 23.0 |
| | 217 | 2 | .1 | .1 | 23.1 |
| | 219 | 3 | .1 | .1 | 23.2 |
| | 221 | 2 | .1 | .1 | 23.3 |
| | 222 | 2 | .1 | .1 | 23.4 |
| | 223 | 1 | .0 | .0 | 23.4 |
| | 224 | 6 | .2 | .2 | 23.6 |
| | 225 | 4 | .1 | .1 | 23.7 |
| | 226 | 5 | .2 | .2 | 23.9 |
| | 228 | 2 | .1 | .1 | 24.0 |
| | 229 | 2 | .1 | .1 | 24.1 |
| | 231 | 1 | .0 | .0 | 24.1 |
| | 233 | 9 | .3 | .3 | 24.4 |
| | 234 | 5 | .2 | .2 | 24.6 |
| | 236 | 2 | .1 | .1 | 24.7 |
| | 237 | 5 | .2 | .2 | 24.8 |
| | 238 | 12 | .4 | .4 | 25.2 |
| | 239 | 9 | .3 | .3 | 25.6 |
| | 241 | 7 | .2 | .2 | 25.8 |
| | 243 | 1 | .0 | .0 | 25.8 |
| | 245 | 2 | .1 | .1 | 25.9 |
| | 246 | 1 | .0 | .0 | 25.9 |
| | 247 | 3 | .1 | .1 | 26.0 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 252 | 1 | .0 | .0 | 26.1 |
| | 253 | 2 | .1 | .1 | 26.2 |
| | 254 | 4 | .1 | .1 | 26.3 |
| | 255 | 1 | .0 | .0 | 26.3 |
| | 256 | 1 | .0 | .0 | 26.4 |
| | 258 | 4 | .1 | .1 | 26.5 |
| | 259 | 1 | .0 | .0 | 26.5 |
| | 260 | 1 | .0 | .0 | 26.6 |
| | 261 | 3 | .1 | .1 | 26.7 |
| | 262 | 2 | .1 | .1 | 26.7 |
| | 264 | 3 | .1 | .1 | 26.8 |
| | 265 | 1 | .0 | .0 | 26.9 |
| | 266 | 3 | .1 | .1 | 27.0 |
| | 276 | 5 | .2 | .2 | 27.2 |
| | 279 | 3 | .1 | .1 | 27.3 |
| | 280 | 3 | .1 | .1 | 27.4 |
| | 281 | 10 | .3 | .3 | 27.7 |
| | 286 | 3 | .1 | .1 | 27.8 |
| | 287 | 6 | .2 | .2 | 28.0 |
| | 288 | 4 | .1 | .1 | 28.2 |
| | 289 | 3 | .1 | .1 | 28.3 |
| | 290 | 5 | .2 | .2 | 28.5 |
| | 291 | 1 | .0 | .0 | 28.5 |
| | 293 | 4 | .1 | .1 | 28.6 |
| | 294 | 2 | .1 | .1 | 28.7 |
| | 298 | 2 | .1 | .1 | 28.8 |
| | 299 | 3 | .1 | .1 | 28.9 |
| | 300 | 3 | .1 | .1 | 29.0 |
| | 301 | 8 | .3 | .3 | 29.3 |
| | 302 | 10 | .3 | .3 | 29.6 |
| | 303 | 8 | .3 | .3 | 29.9 |
| | 304 | 4 | .1 | .1 | 30.0 |
| | 305 | 8 | .3 | .3 | 30.3 |
| | 306 | 8 | .3 | .3 | 30.6 |
| | 307 | 7 | .2 | .2 | 30.8 |
| | 308 | 3 | .1 | .1 | 30.9 |
| | 309 | 3 | .1 | .1 | 31.0 |
| | 310 | 4 | .1 | .1 | 31.2 |
| | 311 | 1 | .0 | .0 | 31.2 |
| | 312 | 3 | .1 | .1 | 31.3 |
| | 313 | 1 | .0 | .0 | 31.3 |
| | 314 | 3 | .1 | .1 | 31.5 |
| | 315 | 3 | .1 | .1 | 31.6 |
| | 317 | 4 | .1 | .1 | 31.7 |
| | 318 | 5 | .2 | .2 | 31.9 |
| | 319 | 1 | .0 | .0 | 31.9 |
| | 320 | 9 | .3 | .3 | 32.2 |
| | 321 | 6 | .2 | .2 | 32.4 |
| | 322 | 14 | .5 | .5 | 32.9 |
| | 323 | 10 | .3 | .3 | 33.3 |
| | 326 | 2 | .1 | .1 | 33.3 |
| | 327 | 3 | .1 | .1 | 33.4 |
| | 328 | 4 | .1 | .1 | 33.6 |
| | 329 | 5 | .2 | .2 | 33.8 |
| | 331 | 5 | .2 | .2 | 33.9 |
| | 332 | 3 | .1 | .1 | 34.0 |
| | 334 | 2 | .1 | .1 | 34.1 |
| | 335 | 3 | .1 | .1 | 34.2 |
| | 336 | 3 | .1 | .1 | 34.3 |
| | 337 | 8 | .3 | .3 | 34.6 |
| | 338 | 5 | .2 | .2 | 34.8 |
| | 339 | 4 | .1 | .1 | 34.9 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 340 | 2 | .1 | .1 | 35.0 |
| | 341 | 4 | .1 | .1 | 35.1 |
| | 342 | 4 | .1 | .1 | 35.3 |
| | 343 | 3 | .1 | .1 | 35.4 |
| | 345 | 5 | .2 | .2 | 35.5 |
| | 346 | 7 | .2 | .2 | 35.8 |
| | 347 | 2 | .1 | .1 | 35.8 |
| | 349 | 3 | .1 | .1 | 35.9 |
| | 350 | 2 | .1 | .1 | 36.0 |
| | 351 | 1 | .0 | .0 | 36.1 |
| | 352 | 3 | .1 | .1 | 36.2 |
| | 353 | 5 | .2 | .2 | 36.3 |
| | 355 | 1 | .0 | .0 | 36.4 |
| | 356 | 4 | .1 | .1 | 36.5 |
| | 358 | 4 | .1 | .1 | 36.6 |
| | 359 | 7 | .2 | .2 | 36.9 |
| | 360 | 2 | .1 | .1 | 37.0 |
| | 361 | 3 | .1 | .1 | 37.1 |
| | 362 | 1 | .0 | .0 | 37.1 |
| | 363 | 1 | .0 | .0 | 37.1 |
| | 364 | 5 | .2 | .2 | 37.3 |
| | 366 | 1 | .0 | .0 | 37.3 |
| | 368 | 2 | .1 | .1 | 37.4 |
| | 369 | 5 | .2 | .2 | 37.6 |
| | 370 | 1 | .0 | .0 | 37.6 |
| | 371 | 2 | .1 | .1 | 37.7 |
| | 372 | 1 | .0 | .0 | 37.7 |
| | 373 | 4 | .1 | .1 | 37.9 |
| | 376 | 8 | .3 | .3 | 38.1 |
| | 377 | 9 | .3 | .3 | 38.5 |
| | 379 | 2 | .1 | .1 | 38.5 |
| | 380 | 7 | .2 | .2 | 38.8 |
| | 390 | 7 | .2 | .2 | 39.0 |
| | 392 | 3 | .1 | .1 | 39.1 |
| | 394 | 1 | .0 | .0 | 39.2 |
| | 395 | 2 | .1 | .1 | 39.2 |
| | 396 | 4 | .1 | .1 | 39.4 |
| | 397 | 8 | .3 | .3 | 39.6 |
| | 398 | 8 | .3 | .3 | 39.9 |
| | 399 | 14 | .5 | .5 | 40.4 |
| | 400 | 2 | .1 | .1 | 40.5 |
| | 412 | 1 | .0 | .0 | 40.5 |
| | 414 | 1 | .0 | .0 | 40.6 |
| | 417 | 7 | .2 | .2 | 40.8 |
| | 418 | 2 | .1 | .1 | 40.9 |
| | 419 | 2 | .1 | .1 | 40.9 |
| | 420 | 3 | .1 | .1 | 41.0 |
| | 421 | 8 | .3 | .3 | 41.3 |
| | 427 | 4 | .1 | .1 | 41.5 |
| | 428 | 7 | .2 | .2 | 41.7 |
| | 430 | 2 | .1 | .1 | 41.8 |
| | 442 | 1 | .0 | .0 | 41.8 |
| | 449 | 4 | .1 | .1 | 41.9 |
| | 452 | 3 | .1 | .1 | 42.1 |
| | 453 | 4 | .1 | .1 | 42.2 |
| | 454 | 1 | .0 | .0 | 42.2 |
| | 457 | 2 | .1 | .1 | 42.3 |
| | 460 | 2 | .1 | .1 | 42.4 |
| | 461 | 2 | .1 | .1 | 42.4 |
| | 462 | 2 | .1 | .1 | 42.5 |
| | 465 | 1 | .0 | .0 | 42.5 |
| | 466 | 1 | .0 | .0 | 42.6 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 473 | 3 | .1 | .1 | 42.7 |
| | 475 | 2 | .1 | .1 | 42.7 |
| | 477 | 4 | .1 | .1 | 42.9 |
| | 478 | 1 | .0 | .0 | 42.9 |
| | 479 | 3 | .1 | .1 | 43.0 |
| | 480 | 2 | .1 | .1 | 43.1 |
| | 481 | 9 | .3 | .3 | 43.4 |
| | 482 | 1 | .0 | .0 | 43.4 |
| | 484 | 1 | .0 | .0 | 43.5 |
| | 485 | 1 | .0 | .0 | 43.5 |
| | 486 | 3 | .1 | .1 | 43.6 |
| | 488 | 2 | .1 | .1 | 43.7 |
| | 490 | 2 | .1 | .1 | 43.8 |
| | 492 | 3 | .1 | .1 | 43.9 |
| | 494 | 2 | .1 | .1 | 43.9 |
| | 496 | 1 | .0 | .0 | 44.0 |
| | 500 | 2 | .1 | .1 | 44.0 |
| | 504 | 1 | .0 | .0 | 44.1 |
| | 506 | 4 | .1 | .1 | 44.2 |
| | 507 | 3 | .1 | .1 | 44.3 |
| | 508 | 8 | .3 | .3 | 44.6 |
| | 509 | 7 | .2 | .2 | 44.8 |
| | 513 | 1 | .0 | .0 | 44.9 |
| | 514 | 1 | .0 | .0 | 44.9 |
| | 515 | 2 | .1 | .1 | 45.0 |
| | 516 | 7 | .2 | .2 | 45.2 |
| | 517 | 3 | .1 | .1 | 45.3 |
| | 518 | 5 | .2 | .2 | 45.5 |
| | 519 | 2 | .1 | .1 | 45.6 |
| | 521 | 2 | .1 | .1 | 45.6 |
| | 522 | 2 | .1 | .1 | 45.7 |
| | 523 | 1 | .0 | .0 | 45.7 |
| | 524 | 3 | .1 | .1 | 45.9 |
| | 525 | 1 | .0 | .0 | 45.9 |
| | 526 | 4 | .1 | .1 | 46.0 |
| | 527 | 5 | .2 | .2 | 46.2 |
| | 528 | 2 | .1 | .1 | 46.3 |
| | 529 | 8 | .3 | .3 | 46.5 |
| | 530 | 2 | .1 | .1 | 46.6 |
| | 531 | 1 | .0 | .0 | 46.7 |
| | 532 | 4 | .1 | .1 | 46.8 |
| | 534 | 3 | .1 | .1 | 46.9 |
| | 536 | 1 | .0 | .0 | 46.9 |
| | 538 | 1 | .0 | .0 | 47.0 |
| | 539 | 3 | .1 | .1 | 47.1 |
| | 541 | 4 | .1 | .1 | 47.2 |
| | 547 | 3 | .1 | .1 | 47.3 |
| | 548 | 2 | .1 | .1 | 47.4 |
| | 555 | 1 | .0 | .0 | 47.4 |
| | 559 | 1 | .0 | .0 | 47.5 |
| | 565 | 1 | .0 | .0 | 47.5 |
| | 570 | 2 | .1 | .1 | 47.6 |
| | 571 | 2 | .1 | .1 | 47.6 |
| | 573 | 2 | .1 | .1 | 47.7 |
| | 574 | 2 | .1 | .1 | 47.8 |
| | 575 | 4 | .1 | .1 | 47.9 |
| | 580 | 1 | .0 | .0 | 47.9 |
| | 583 | 1 | .0 | .0 | 48.0 |
| | 585 | 1 | .0 | .0 | 48.0 |
| | 588 | 1 | .0 | .0 | 48.0 |
| | 589 | 2 | .1 | .1 | 48.1 |
| | 590 | 5 | .2 | .2 | 48.3 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 591 | 1 | .0 | .0 | 48.3 |
| | 593 | 1 | .0 | .0 | 48.4 |
| | 596 | 6 | .2 | .2 | 48.6 |
| | 597 | 1 | .0 | .0 | 48.6 |
| | 598 | 1 | .0 | .0 | 48.6 |
| | 600 | 6 | .2 | .2 | 48.8 |
| | 601 | 3 | .1 | .1 | 49.0 |
| | 603 | 1 | .0 | .0 | 49.0 |
| | 604 | 3 | .1 | .1 | 49.1 |
| | 606 | 3 | .1 | .1 | 49.2 |
| | 607 | 1 | .0 | .0 | 49.2 |
| | 608 | 3 | .1 | .1 | 49.3 |
| | 609 | 9 | .3 | .3 | 49.7 |
| | 610 | 1 | .0 | .0 | 49.7 |
| | 613 | 1 | .0 | .0 | 49.7 |
| | 614 | 1 | .0 | .0 | 49.8 |
| | 616 | 1 | .0 | .0 | 49.8 |
| | 617 | 1 | .0 | .0 | 49.8 |
| | 632 | 5 | .2 | .2 | 50.0 |
| | 633 | 3 | .1 | .1 | 50.1 |
| | 635 | 1 | .0 | .0 | 50.1 |
| | 636 | 8 | .3 | .3 | 50.4 |
| | 641 | 3 | .1 | .1 | 50.5 |
| | 642 | 1 | .0 | .0 | 50.6 |
| | 644 | 14 | .5 | .5 | 51.0 |
| | 645 | 4 | .1 | .1 | 51.2 |
| | 650 | 2 | .1 | .1 | 51.3 |
| | 657 | 5 | .2 | .2 | 51.4 |
| | 658 | 1 | .0 | .0 | 51.5 |
| | 659 | 3 | .1 | .1 | 51.6 |
| | 661 | 7 | .2 | .2 | 51.8 |
| | 662 | 1 | .0 | .0 | 51.8 |
| | 663 | 2 | .1 | .1 | 51.9 |
| | 665 | 1 | .0 | .0 | 52.0 |
| | 670 | 10 | .3 | .3 | 52.3 |
| | 671 | 10 | .3 | .3 | 52.6 |
| | 672 | 4 | .1 | .1 | 52.8 |
| | 674 | 2 | .1 | .1 | 52.9 |
| | 675 | 1 | .0 | .0 | 52.9 |
| | 679 | 2 | .1 | .1 | 53.0 |
| | 680 | 1 | .0 | .0 | 53.0 |
| | 682 | 1 | .0 | .0 | 53.0 |
| | 683 | 3 | .1 | .1 | 53.1 |
| | 687 | 8 | .3 | .3 | 53.4 |
| | 688 | 2 | .1 | .1 | 53.5 |
| | 689 | 7 | .2 | .2 | 53.7 |
| | 690 | 3 | .1 | .1 | 53.8 |
| | 694 | 2 | .1 | .1 | 53.9 |
| | 695 | 4 | .1 | .1 | 54.0 |
| | 696 | 1 | .0 | .0 | 54.1 |
| | 697 | 13 | .5 | .5 | 54.5 |
| | 698 | 3 | .1 | .1 | 54.6 |
| | 699 | 1 | .0 | .0 | 54.7 |
| | 700 | 1 | .0 | .0 | 54.7 |
| | 701 | 4 | .1 | .1 | 54.8 |
| | 702 | 4 | .1 | .1 | 55.0 |
| | 704 | 4 | .1 | .1 | 55.1 |
| | 705 | 5 | .2 | .2 | 55.3 |
| | 706 | 2 | .1 | .1 | 55.4 |
| | 707 | 5 | .2 | .2 | 55.5 |
| | 708 | 1 | .0 | .0 | 55.6 |
| | 712 | 1 | .0 | .0 | 55.6 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 713 | 4 | .1 | .1 | 55.8 |
| | 715 | 8 | .3 | .3 | 56.0 |
| | 716 | 2 | .1 | .1 | 56.1 |
| | 717 | 1 | .0 | .0 | 56.1 |
| | 718 | 3 | .1 | .1 | 56.2 |
| | 719 | 2 | .1 | .1 | 56.3 |
| | 720 | 1 | .0 | .0 | 56.3 |
| | 721 | 4 | .1 | .1 | 56.5 |
| | 722 | 3 | .1 | .1 | 56.6 |
| | 725 | 1 | .0 | .0 | 56.6 |
| | 728 | 4 | .1 | .1 | 56.8 |
| | 730 | 2 | .1 | .1 | 56.8 |
| | 734 | 1 | .0 | .0 | 56.9 |
| | 745 | 7 | .2 | .2 | 57.1 |
| | 747 | 2 | .1 | .1 | 57.2 |
| | 750 | 3 | .1 | .1 | 57.3 |
| | 751 | 6 | .2 | .2 | 57.5 |
| | 752 | 3 | .1 | .1 | 57.6 |
| | 754 | 6 | .2 | .2 | 57.8 |
| | 771 | 1 | .0 | .0 | 57.8 |
| | 773 | 6 | .2 | .2 | 58.1 |
| | 776 | 8 | .3 | .3 | 58.3 |
| | 777 | 5 | .2 | .2 | 58.5 |
| | 778 | 13 | .5 | .5 | 59.0 |
| | 779 | 3 | .1 | .1 | 59.1 |
| | 780 | 9 | .3 | .3 | 59.4 |
| | 781 | 5 | .2 | .2 | 59.6 |
| | 782 | 6 | .2 | .2 | 59.8 |
| | 783 | 5 | .2 | .2 | 59.9 |
| | 784 | 3 | .1 | .1 | 60.0 |
| | 785 | 2 | .1 | .1 | 60.1 |
| | 786 | 8 | .3 | .3 | 60.4 |
| | 787 | 3 | .1 | .1 | 60.5 |
| | 788 | 1 | .0 | .0 | 60.5 |
| | 789 | 8 | .3 | .3 | 60.8 |
| | 790 | 2 | .1 | .1 | 60.9 |
| | 791 | 2 | .1 | .1 | 60.9 |
| | 792 | 2 | .1 | .1 | 61.0 |
| | 793 | 5 | .2 | .2 | 61.2 |
| | 794 | 1 | .0 | .0 | 61.2 |
| | 798 | 8 | .3 | .3 | 61.5 |
| | 799 | 3 | .1 | .1 | 61.6 |
| | 800 | 4 | .1 | .1 | 61.8 |
| | 802 | 2 | .1 | .1 | 61.8 |
| | 803 | 5 | .2 | .2 | 62.0 |
| | 804 | 7 | .2 | .2 | 62.2 |
| | 805 | 12 | .4 | .4 | 62.7 |
| | 806 | 4 | .1 | .1 | 62.8 |
| | 808 | 2 | .1 | .1 | 62.9 |
| | 809 | 11 | .4 | .4 | 63.2 |
| | 810 | 9 | .3 | .3 | 63.6 |
| | 811 | 8 | .3 | .3 | 63.8 |
| | 812 | 3 | .1 | .1 | 63.9 |
| | 813 | 3 | .1 | .1 | 64.1 |
| | 814 | 6 | .2 | .2 | 64.3 |
| | 816 | 6 | .2 | .2 | 64.5 |
| | 817 | 2 | .1 | .1 | 64.5 |
| | 818 | 6 | .2 | .2 | 64.7 |
| | 820 | 1 | .0 | .0 | 64.8 |
| | 822 | 2 | .1 | .1 | 64.9 |
| | 823 | 1 | .0 | .0 | 64.9 |
| | 832 | 1 | .0 | .0 | 64.9 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 839 | 1 | .0 | .0 | 65.0 |
| | 843 | 1 | .0 | .0 | 65.0 |
| | 846 | 1 | .0 | .0 | 65.0 |
| | 848 | 14 | .5 | .5 | 65.5 |
| | 851 | 8 | .3 | .3 | 65.8 |
| | 852 | 6 | .2 | .2 | 66.0 |
| | 854 | 3 | .1 | .1 | 66.1 |
| | 855 | 8 | .3 | .3 | 66.4 |
| | 876 | 1 | .0 | .0 | 66.4 |
| | 880 | 4 | .1 | .1 | 66.6 |
| | 881 | 8 | .3 | .3 | 66.8 |
| | 882 | 8 | .3 | .3 | 67.1 |
| | 883 | 3 | .1 | .1 | 67.2 |
| | 884 | 6 | .2 | .2 | 67.4 |
| | 887 | 2 | .1 | .1 | 67.5 |
| | 888 | 3 | .1 | .1 | 67.6 |
| | 889 | 1 | .0 | .0 | 67.6 |
| | 890 | 1 | .0 | .0 | 67.7 |
| | 891 | 6 | .2 | .2 | 67.9 |
| | 892 | 8 | .3 | .3 | 68.2 |
| | 893 | 4 | .1 | .1 | 68.3 |
| | 894 | 3 | .1 | .1 | 68.4 |
| | 895 | 4 | .1 | .1 | 68.5 |
| | 896 | 8 | .3 | .3 | 68.8 |
| | 897 | 7 | .2 | .2 | 69.1 |
| | 898 | 2 | .1 | .1 | 69.1 |
| | 899 | 5 | .2 | .2 | 69.3 |
| | 900 | 4 | .1 | .1 | 69.5 |
| | 902 | 3 | .1 | .1 | 69.6 |
| | 903 | 3 | .1 | .1 | 69.7 |
| | 904 | 9 | .3 | .3 | 70.0 |
| | 906 | 2 | .1 | .1 | 70.0 |
| | 908 | 1 | .0 | .0 | 70.1 |
| | 909 | 7 | .2 | .2 | 70.3 |
| | 910 | 6 | .2 | .2 | 70.5 |
| | 913 | 5 | .2 | .2 | 70.7 |
| | 914 | 1 | .0 | .0 | 70.7 |
| | 918 | 1 | .0 | .0 | 70.8 |
| | 923 | 1 | .0 | .0 | 70.8 |
| | 927 | 1 | .0 | .0 | 70.9 |
| | 928 | 2 | .1 | .1 | 70.9 |
| | 929 | 4 | .1 | .1 | 71.1 |
| | 930 | 3 | .1 | .1 | 71.2 |
| | 931 | 1 | .0 | .0 | 71.2 |
| | 932 | 4 | .1 | .1 | 71.3 |
| | 933 | 4 | .1 | .1 | 71.5 |
| | 934 | 1 | .0 | .0 | 71.5 |
| | 935 | 1 | .0 | .0 | 71.5 |
| | 938 | 1 | .0 | .0 | 71.6 |
| | 940 | 1 | .0 | .0 | 71.6 |
| | 941 | 1 | .0 | .0 | 71.7 |
| | 942 | 1 | .0 | .0 | 71.7 |
| | 943 | 1 | .0 | .0 | 71.7 |
| | 944 | 2 | .1 | .1 | 71.8 |
| | 960 | 7 | .2 | .2 | 72.0 |
| | 963 | 3 | .1 | .1 | 72.1 |
| | 964 | 7 | .2 | .2 | 72.4 |
| | 965 | 1 | .0 | .0 | 72.4 |
| | 966 | 5 | .2 | .2 | 72.6 |
| | 969 | 1 | .0 | .0 | 72.6 |
| | 970 | 2 | .1 | .1 | 72.7 |
| | 971 | 1 | .0 | .0 | 72.7 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 972 | 1 | .0 | .0 | 72.8 |
| | 975 | 4 | .1 | .1 | 72.9 |
| | 976 | 1 | .0 | .0 | 72.9 |
| | 977 | 1 | .0 | .0 | 73.0 |
| | 979 | 3 | .1 | .1 | 73.1 |
| | 985 | 2 | .1 | .1 | 73.2 |
| | 987 | 5 | .2 | .2 | 73.3 |
| | 988 | 6 | .2 | .2 | 73.5 |
| | 989 | 3 | .1 | .1 | 73.6 |
| | 990 | 2 | .1 | .1 | 73.7 |
| | 991 | 5 | .2 | .2 | 73.9 |
| | 993 | 4 | .1 | .1 | 74.0 |
| | 1001 | 3 | .1 | .1 | 74.1 |
| | 1003 | 1 | .0 | .0 | 74.2 |
| | 1004 | 3 | .1 | .1 | 74.3 |
| | 1005 | 10 | .3 | .3 | 74.6 |
| | 1007 | 5 | .2 | .2 | 74.8 |
| | 1008 | 1 | .0 | .0 | 74.8 |
| | 1009 | 8 | .3 | .3 | 75.1 |
| | 1010 | 10 | .3 | .3 | 75.5 |
| | 1011 | 6 | .2 | .2 | 75.7 |
| | 1012 | 2 | .1 | .1 | 75.7 |
| | 1014 | 9 | .3 | .3 | 76.0 |
| | 1015 | 2 | .1 | .1 | 76.1 |
| | 1022 | 2 | .1 | .1 | 76.2 |
| | 1023 | 2 | .1 | .1 | 76.3 |
| | 1024 | 2 | .1 | .1 | 76.3 |
| | 1025 | 4 | .1 | .1 | 76.5 |
| | 1026 | 3 | .1 | .1 | 76.6 |
| | 1033 | 3 | .1 | .1 | 76.7 |
| | 1034 | 5 | .2 | .2 | 76.8 |
| | 1035 | 1 | .0 | .0 | 76.9 |
| | 1037 | 5 | .2 | .2 | 77.1 |
| | 1038 | 1 | .0 | .0 | 77.1 |
| | 1039 | 5 | .2 | .2 | 77.3 |
| | 1040 | 2 | .1 | .1 | 77.3 |
| | 1041 | 1 | .0 | .0 | 77.4 |
| | 1043 | 1 | .0 | .0 | 77.4 |
| | 1047 | 2 | .1 | .1 | 77.5 |
| | 1048 | 1 | .0 | .0 | 77.5 |
| | 1049 | 1 | .0 | .0 | 77.5 |
| | 1050 | 1 | .0 | .0 | 77.6 |
| | 1060 | 2 | .1 | .1 | 77.6 |
| | 1061 | 3 | .1 | .1 | 77.8 |
| | 1062 | 7 | .2 | .2 | 78.0 |
| | 1063 | 1 | .0 | .0 | 78.0 |
| | 1066 | 1 | .0 | .0 | 78.1 |
| | 1071 | 1 | .0 | .0 | 78.1 |
| | 1075 | 1 | .0 | .0 | 78.1 |
| | 1079 | 1 | .0 | .0 | 78.2 |
| | 1080 | 2 | .1 | .1 | 78.2 |
| | 1081 | 1 | .0 | .0 | 78.3 |
| | 1083 | 6 | .2 | .2 | 78.5 |
| | 1084 | 3 | .1 | .1 | 78.6 |
| | 1085 | 3 | .1 | .1 | 78.7 |
| | 1086 | 1 | .0 | .0 | 78.7 |
| | 1087 | 2 | .1 | .1 | 78.8 |
| | 1092 | 2 | .1 | .1 | 78.9 |
| | 1133 | 2 | .1 | .1 | 78.9 |
| | 1136 | 2 | .1 | .1 | 79.0 |
| | 1138 | 1 | .0 | .0 | 79.0 |
| | 1139 | 6 | .2 | .2 | 79.3 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1140 | 4 | .1 | .1 | 79.4 |
| | 1141 | 2 | .1 | .1 | 79.5 |
| | 1142 | 1 | .0 | .0 | 79.5 |
| | 1143 | 6 | .2 | .2 | 79.7 |
| | 1145 | 1 | .0 | .0 | 79.7 |
| | 1146 | 1 | .0 | .0 | 79.8 |
| | 1147 | 1 | .0 | .0 | 79.8 |
| | 1148 | 2 | .1 | .1 | 79.9 |
| | 1149 | 3 | .1 | .1 | 80.0 |
| | 1150 | 7 | .2 | .2 | 80.2 |
| | 1151 | 6 | .2 | .2 | 80.4 |
| | 1152 | 5 | .2 | .2 | 80.6 |
| | 1153 | 5 | .2 | .2 | 80.8 |
| | 1154 | 20 | .7 | .7 | 81.5 |
| | 1156 | 6 | .2 | .2 | 81.7 |
| | 1157 | 7 | .2 | .2 | 81.9 |
| | 1158 | 5 | .2 | .2 | 82.1 |
| | 1159 | 3 | .1 | .1 | 82.2 |
| | 1162 | 2 | .1 | .1 | 82.3 |
| | 1165 | 1 | .0 | .0 | 82.3 |
| | 1166 | 2 | .1 | .1 | 82.4 |
| | 1168 | 1 | .0 | .0 | 82.4 |
| | 1172 | 2 | .1 | .1 | 82.5 |
| | 1174 | 2 | .1 | .1 | 82.6 |
| | 1175 | 3 | .1 | .1 | 82.7 |
| | 1177 | 2 | .1 | .1 | 82.7 |
| | 1178 | 2 | .1 | .1 | 82.8 |
| | 1179 | 1 | .0 | .0 | 82.8 |
| | 1180 | 8 | .3 | .3 | 83.1 |
| | 1181 | 1 | .0 | .0 | 83.2 |
| | 1182 | 2 | .1 | .1 | 83.2 |
| | 1183 | 7 | .2 | .2 | 83.5 |
| | 1184 | 3 | .1 | .1 | 83.6 |
| | 1185 | 1 | .0 | .0 | 83.6 |
| | 1186 | 8 | .3 | .3 | 83.9 |
| | 1187 | 9 | .3 | .3 | 84.2 |
| | 1188 | 8 | .3 | .3 | 84.5 |
| | 1189 | 2 | .1 | .1 | 84.6 |
| | 1190 | 4 | .1 | .1 | 84.7 |
| | 1191 | 13 | .5 | .5 | 85.1 |
| | 1192 | 14 | .5 | .5 | 85.6 |
| | 1193 | 17 | .6 | .6 | 86.2 |
| | 1195 | 10 | .3 | .3 | 86.6 |
| | 1196 | 12 | .4 | .4 | 87.0 |
| | 1197 | 6 | .2 | .2 | 87.2 |
| | 1198 | 21 | .7 | .7 | 87.9 |
| | 1199 | 6 | .2 | .2 | 88.1 |
| | 1200 | 2 | .1 | .1 | 88.2 |
| | 1201 | 10 | .3 | .3 | 88.6 |
| | 1202 | 1 | .0 | .0 | 88.6 |
| | 1205 | 1 | .0 | .0 | 88.6 |
| | 1206 | 7 | .2 | .2 | 88.9 |
| | 1207 | 1 | .0 | .0 | 88.9 |
| | 1208 | 1 | .0 | .0 | 88.9 |
| | 1210 | 1 | .0 | .0 | 89.0 |
| | 1212 | 2 | .1 | .1 | 89.1 |
| | 1214 | 1 | .0 | .0 | 89.1 |
| | 1215 | 12 | .4 | .4 | 89.5 |
| | 1216 | 5 | .2 | .2 | 89.7 |
| | 1217 | 10 | .3 | .3 | 90.0 |
| | 1218 | 6 | .2 | .2 | 90.2 |
| | 1219 | 7 | .2 | .2 | 90.5 |

(6) T.A.R.M.S. ZONES OF RESIDENCE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1220 | 3 | .1 | .1 | 90.6 |
| | 1221 | 7 | .2 | .2 | 90.8 |
| | 1222 | 5 | .2 | .2 | 91.0 |
| | 1223 | 10 | .3 | .3 | 91.4 |
| | 1224 | 10 | .3 | .3 | 91.7 |
| | 1225 | 5 | .2 | .2 | 91.9 |
| | 1226 | 8 | .3 | .3 | 92.2 |
| | 1227 | 2 | .1 | .1 | 92.2 |
| | 1229 | 3 | .1 | .1 | 92.3 |
| | 1230 | 1 | .0 | .0 | 92.4 |
| | 1231 | 8 | .3 | .3 | 92.6 |
| | 1233 | 9 | .3 | .3 | 93.0 |
| | 1235 | 11 | .4 | .4 | 93.3 |
| | 1236 | 11 | .4 | .4 | 93.7 |
| | 1237 | 6 | .2 | .2 | 93.9 |
| | 1238 | 9 | .3 | .3 | 94.2 |
| | 1240 | 1 | .0 | .0 | 94.3 |
| | 1242 | 6 | .2 | .2 | 94.5 |
| | 1243 | 11 | .4 | .4 | 94.9 |
| | 1244 | 1 | .0 | .0 | 94.9 |
| | 1245 | 11 | .4 | .4 | 95.3 |
| | 1246 | 7 | .2 | .2 | 95.5 |
| | 1247 | 11 | .4 | .4 | 95.9 |
| | 1248 | 14 | .5 | .5 | 96.4 |
| | 1249 | 8 | .3 | .3 | 96.7 |
| | 1250 | 6 | .2 | .2 | 96.9 |
| | 1251 | 7 | .2 | .2 | 97.1 |
| | 1252 | 19 | .7 | .7 | 97.8 |
| | 1253 | 7 | .2 | .2 | 98.0 |
| | 1254 | 15 | .5 | .5 | 98.6 |
| | 1255 | 13 | .5 | .5 | 99.0 |
| | 1256 | 8 | .3 | .3 | 99.3 |
| | 1257 | 3 | .1 | .1 | 99.4 |
| | 1259 | 4 | .1 | .1 | 99.5 |
| | 1262 | 2 | .1 | .1 | 99.6 |
| | 1263 | 2 | .1 | .1 | 99.7 |
| | 1264 | 6 | .2 | .2 | 99.9 |
| | 1265 | 3 | .1 | .1 | 100.0 |
| | TOTAL | 2868 | 100.0 | 100.0 | |

## TDS PERSON TABULATIONS

The following tabulations are "Number of Persons" stratified by various person characteristics. The value represents the survey responses. The frequency figures are the actual (unexpanded) number of Person records in the TDS Person file.

**(1) EMPLOYMENT STATUS**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NOT EMPLOYED | | 2392 | 36.8 | 36.8 | 36.8 |
| EMPLOYED PART-TIME | 1 | 650 | 10.0 | 10.0 | 46.8 |
| EMPLOYED FULL-TIME | 2 | 2948 | 45.4 | 45.4 | 92.2 |
| UNDER 5 | U | 321 | 4.9 | 4.9 | 97.1 |
| INVALID | X | 189 | 2.9 | 2.9 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

**(2) EMPLOYMENT LOCATION**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NOT EMPLOYED | | 2902 | 44.6 | 44.6 | 44.6 |
| OUTSIDE HOME | 1 | 3506 | 53.9 | 53.9 | 98.6 |
| AT HOME | 2 | 92 | 1.4 | 1.4 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

**(3) NON-EMPLOYMENT STATUS**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| EMPLOYED/NO RESPONSE | | 4108 | 63.2 | 63.2 | 63.2 |
| HOMEMAKER | 1 | 596 | 9.2 | 9.2 | 72.4 |
| RETIRED | 2 | 741 | 11.4 | 11.4 | 83.8 |
| NOT EMPLOYED | 3 | 1055 | 16.2 | 16.2 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

**(4) JOB 1 OCCUPATION TYPE**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| CLERICAL | 1 | 722 | 20.1 | 20.1 | 20.1 |
| SALES | 2 | 295 | 8.2 | 8.2 | 28.3 |
| SERVICE | 3 | 414 | 11.5 | 11.5 | 39.8 |
| FACTORY/PROCESSING | 4 | 501 | 13.9 | 13.9 | 53.7 |
| RESOURCE/FARMING | 5 | 28 | .8 | .8 | 54.5 |
| CONSTRUCTION | 6 | 206 | 5.7 | 5.7 | 60.2 |
| TRANSPORTATION | 7 | 88 | 2.4 | 2.4 | 62.6 |
| PROFESSIONAL | 8 | 1222 | 34.0 | 34.0 | 96.6 |
| OTHER | 9 | 122 | 3.4 | 3.4 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(5) JOB 2 OCCUPATION TYPE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| CLERICAL | 1 | 24 | 14.0 | 14.0 | 14.0 |
| SALES | 2 | 24 | 14.0 | 14.0 | 28.1 |
| SERVICE | 3 | 21 | 12.3 | 12.3 | 40.4 |
| FACTOR/PROCESSING | 4 | 8 | 4.7 | 4.7 | 45.0 |
| RESOURCE/FARMING | 5 | 9 | 5.3 | 5.3 | 50.3 |
| CONSTRUCTION | 6 | 7 | 4.1 | 4.1 | 54.4 |
| TRANSPORTATION | 7 | 4 | 2.3 | 2.3 | 56.7 |
| PROFESSIONAL | 8 | 60 | 35.1 | 35.1 | 91.8 |
| OTHER | 9 | 14 | 8.2 | 8.2 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(6) JOB 1 WORK SITE DESCRIPTION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| OFFICE BUILDING | 1 | 1291 | 35.9 | 35.9 | 35.9 |
| FACTORY/WAREHOUSE | 2 | 727 | 20.2 | 20.2 | 56.1 |
| CONSTRUCTION SITE | 3 | 109 | 3.0 | 3.0 | 59.1 |
| NO FIXED SITE | 4 | 229 | 6.4 | 6.4 | 65.5 |
| SERVICE ESTABLISHMENT | 5 | 539 | 15.0 | 15.0 | 80.5 |
| INSTITUTION | 6 | 473 | 13.1 | 13.1 | 93.6 |
| HOME | 7 | 96 | 2.7 | 2.7 | 96.3 |
| OTHER | 8 | 119 | 3.3 | 3.3 | 99.6 |
| INVALID | 9 | 15 | .4 | .4 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(7) JOB 2 WORK SITE DESCRIPTION

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| OFFICE BUILDING | 1 | 13 | 7.6 | 7.6 | 7.6 |
| FACTORY/WAREHOUSE | 2 | 6 | 3.5 | 3.5 | 11.1 |
| CONSTRUCTION SITE | 3 | 3 | 1.8 | 1.8 | 12.9 |
| NO FIXED SITE | 4 | 23 | 13.5 | 13.5 | 26.3 |
| SERVICE ESTABLISHMENT | 5 | 42 | 24.6 | 24.6 | 50.9 |
| INSTITUTION | 6 | 29 | 17.0 | 17.0 | 67.8 |
| HOME | 7 | 40 | 23.4 | 23.4 | 91.2 |
| OTHER | 8 | 12 | 7.0 | 7.0 | 98.2 |
| INVALID | 9 | 3 | 1.8 | 1.8 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(8) JOB 1 NORMAL WORKING WEEK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| WEEKDAYS REGULAR HOURS | 1 | 2116 | 58.8 | 58.8 | 58.8 |
| WEEKDAYS VARIABLE HOURS | 2 | 549 | 15.3 | 15.3 | 74.1 |
| SHIFTWORK | 3 | 320 | 8.9 | 8.9 | 83.0 |
| COMPRESSED WORK WEEK | 4 | 145 | 4.0 | 4.0 | 87.0 |
| WEEKENDS/EVENINGS | 5 | 213 | 5.9 | 5.9 | 92.9 |
| OTHER | 6 | 229 | 6.4 | 6.4 | 99.3 |
| INVAILD | 9 | 26 | .7 | .7 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(9) JOB 2 NORMAL WORKING WEEK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| WEEKDAY REGULAR HOURS | 1 | 15 | 8.8 | 8.8 | 8.8 |
| WEEKDAY VARIABLE HOURS | 2 | 30 | 17.5 | 17.5 | 26.3 |
| SHIFTWORK | 3 | 4 | 2.3 | 2.3 | 28.7 |
| COMPRESSED WORK WEEK | 4 | 12 | 7.0 | 7.0 | 35.7 |
| WEEKENDS/EVENINGS | 5 | 74 | 43.3 | 43.3 | 78.9 |
| OTHER | 6 | 28 | 16.4 | 16.4 | 95.3 |
| INVALID | 9 | 8 | 4.7 | 4.7 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(10) JOB 1 NUMBER OF DAYS IN COMPRESSED WORK WEEK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 3453 | 96.0 | 96.0 | 96.0 |
| | 1 | 6 | .2 | .2 | 96.1 |
| | 2 | 32 | .9 | .9 | 97.0 |
| | 3 | 42 | 1.2 | 1.2 | 98.2 |
| | 4 | 52 | 1.4 | 1.4 | 99.6 |
| | 9 | 13 | .4 | .4 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(11) JOB 2 NUMBER OF DAYS IN COMPRESSED WORK WEEK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 159 | 93.0 | 93.0 | 93.0 |
| | 1 | 2 | 1.2 | 1.2 | 94.2 |
| | 2 | 6 | 3.5 | 3.5 | 97.7 |
| | 3 | 3 | 1.8 | 1.8 | 99.4 |
| | 9 | 1 | .6 | .6 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(12) JOB 1 NUMBER OF HOURS WORKED ON MONDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 538 | 15.0 | 15.0 | 15.0 |
| | 1.00 | 12 | .3 | .3 | 15.3 |
| | 1.50 | 3 | .1 | .1 | 15.4 |
| | 2.00 | 33 | .9 | .9 | 16.3 |
| | 2.50 | 5 | .1 | .1 | 16.4 |
| | 3.00 | 34 | .9 | .9 | 17.4 |
| | 3.50 | 5 | .1 | .1 | 17.5 |
| | 3.90 | 1 | .0 | .0 | 17.5 |
| | 4.00 | 59 | 1.6 | 1.6 | 19.2 |
| | 4.50 | 9 | .3 | .3 | 19.4 |
| | 5.00 | 55 | 1.5 | 1.5 | 21.0 |
| | 5.20 | 1 | .0 | .0 | 21.0 |
| | 5.50 | 8 | .2 | .2 | 21.2 |
| | 6.00 | 51 | 1.4 | 1.4 | 22.6 |
| | 6.20 | 4 | .1 | .1 | 22.7 |
| | 6.40 | 1 | .0 | .0 | 22.8 |
| | 6.50 | 14 | .4 | .4 | 23.2 |
| | 6.60 | 1 | .0 | .0 | 23.2 |
| | 6.70 | 1 | .0 | .0 | 23.2 |
| | 6.75 | 2 | .1 | .1 | 23.3 |
| | 7.00 | 283 | 7.9 | 7.9 | 31.1 |
| | 7.20 | 35 | 1.0 | 1.0 | 32.1 |
| | 7.25 | 10 | .3 | .3 | 32.4 |
| | 7.50 | 313 | 8.7 | 8.7 | 41.1 |
| | 7.70 | 4 | .1 | .1 | 41.2 |
| | 7.75 | 2 | .1 | .1 | 41.2 |
| | 8.00 | 1422 | 39.5 | 39.5 | 80.8 |
| | 8.20 | 2 | .1 | .1 | 80.8 |
| | 8.25 | 2 | .1 | .1 | 80.9 |
| | 8.30 | 1 | .0 | .0 | 80.9 |
| | 8.40 | 2 | .1 | .1 | 81.0 |
| | 8.50 | 84 | 2.3 | 2.3 | 83.3 |
| | 8.70 | 3 | .1 | .1 | 83.4 |
| | 9.00 | 224 | 6.2 | 6.2 | 89.6 |
| | 9.20 | 1 | .0 | .0 | 89.6 |
| | 9.40 | 1 | .0 | .0 | 89.7 |
| | 9.50 | 21 | .6 | .6 | 90.2 |
| | 10.00 | 174 | 4.8 | 4.8 | 95.1 |
| | 10.40 | 1 | .0 | .0 | 95.1 |
| | 10.50 | 9 | .3 | .3 | 95.4 |
| | 11.00 | 38 | 1.1 | 1.1 | 96.4 |
| | 11.50 | 3 | .1 | .1 | 96.5 |
| | 12.00 | 93 | 2.6 | 2.6 | 99.1 |
| | 12.50 | 1 | .0 | .0 | 99.1 |
| | 13.00 | 4 | .1 | .1 | 99.2 |
| | 14.00 | 13 | .4 | .4 | 99.6 |
| | 14.50 | 1 | .0 | .0 | 99.6 |
| | 15.00 | 6 | .2 | .2 | 99.8 |
| | 15.50 | 1 | .0 | .0 | 99.8 |
| | 16.00 | 3 | .1 | .1 | 99.9 |
| | 17.00 | 2 | .1 | .1 | 99.9 |
| | 18.00 | 1 | .0 | .0 | 100.0 |
| | 23.00 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(13) JOB 1 NUMBER OF HOURS WORKED ON TUESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 510 | 14.2 | 14.2 | 14.2 |
| | 1.00 | 14 | .4 | .4 | 14.6 |
| | 1.50 | 2 | .1 | .1 | 14.6 |
| | 2.00 | 29 | .8 | .8 | 15.4 |
| | 2.50 | 5 | .1 | .1 | 15.6 |
| | 3.00 | 28 | .8 | .8 | 16.3 |
| | 3.50 | 5 | .1 | .1 | 16.5 |
| | 3.90 | 1 | .0 | .0 | 16.5 |
| | 4.00 | 65 | 1.8 | 1.8 | 18.3 |
| | 4.50 | 12 | .3 | .3 | 18.6 |
| | 5.00 | 42 | 1.2 | 1.2 | 19.8 |
| | 5.50 | 3 | .1 | .1 | 19.9 |
| | 6.00 | 55 | 1.5 | 1.5 | 21.4 |
| | 6.20 | 4 | .1 | .1 | 21.5 |
| | 6.40 | 1 | .0 | .0 | 21.6 |
| | 6.50 | 19 | .5 | .5 | 22.1 |
| | 6.60 | 1 | .0 | .0 | 22.1 |
| | 6.70 | 1 | .0 | .0 | 22.2 |
| | 6.75 | 2 | .1 | .1 | 22.2 |
| | 7.00 | 297 | 8.3 | 8.3 | 30.5 |
| | 7.20 | 36 | 1.0 | 1.0 | 31.5 |
| | 7.25 | 10 | .3 | .3 | 31.7 |
| | 7.30 | 1 | .0 | .0 | 31.8 |
| | 7.50 | 321 | 8.9 | 8.9 | 40.7 |
| | 7.70 | 3 | .1 | .1 | 40.8 |
| | 7.75 | 2 | .1 | .1 | 40.8 |
| | 8.00 | 1414 | 39.3 | 39.3 | 80.1 |
| | 8.10 | 1 | .0 | .0 | 80.2 |
| | 8.20 | 2 | .1 | .1 | 80.2 |
| | 8.25 | 3 | .1 | .1 | 80.3 |
| | 8.30 | 1 | .0 | .0 | 80.3 |
| | 8.40 | 2 | .1 | .1 | 80.4 |
| | 8.50 | 80 | 2.2 | 2.2 | 82.6 |
| | 8.70 | 2 | .1 | .1 | 82.7 |
| | 9.00 | 234 | 6.5 | 6.5 | 89.2 |
| | 9.20 | 1 | .0 | .0 | 89.2 |
| | 9.40 | 1 | .0 | .0 | 89.2 |
| | 9.50 | 17 | .5 | .5 | 89.7 |
| | 9.70 | 1 | .0 | .0 | 89.7 |
| | 10.00 | 170 | 4.7 | 4.7 | 94.4 |
| | 10.20 | 1 | .0 | .0 | 94.5 |
| | 10.40 | 1 | .0 | .0 | 94.5 |
| | 10.50 | 13 | .4 | .4 | 94.9 |
| | 11.00 | 39 | 1.1 | 1.1 | 95.9 |
| | 11.20 | 1 | .0 | .0 | 96.0 |
| | 11.50 | 8 | .2 | .2 | 96.2 |
| | 12.00 | 102 | 2.8 | 2.8 | 99.0 |
| | 13.00 | 4 | .1 | .1 | 99.1 |
| | 14.00 | 12 | .3 | .3 | 99.5 |
| | 15.00 | 9 | .3 | .3 | 99.7 |
| | 15.50 | 1 | .0 | .0 | 99.7 |
| | 16.00 | 7 | .2 | .2 | 99.9 |
| | 20.00 | 1 | .0 | .0 | 100.0 |
| | 24.00 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(14) JOB 1 NUMBER OF HOURS WORKED ON WEDNESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 487 | 13.5 | 13.5 | 13.5 |
| | 1.00 | 8 | .2 | .2 | 13.8 |
| | 1.20 | 1 | .0 | .0 | 13.8 |
| | 1.50 | 3 | .1 | .1 | 13.9 |
| | 2.00 | 30 | .8 | .8 | 14.7 |
| | 2.50 | 6 | .2 | .2 | 14.9 |
| | 3.00 | 43 | 1.2 | 1.2 | 16.1 |
| | 3.50 | 6 | .2 | .2 | 16.2 |
| | 3.90 | 1 | .0 | .0 | 16.3 |
| | 4.00 | 70 | 1.9 | 1.9 | 18.2 |
| | 4.50 | 11 | .3 | .3 | 18.5 |
| | 5.00 | 39 | 1.1 | 1.1 | 19.6 |
| | 5.50 | 10 | .3 | .3 | 19.9 |
| | 5.70 | 1 | .0 | .0 | 19.9 |
| | 6.00 | 47 | 1.3 | 1.3 | 21.2 |
| | 6.20 | 4 | .1 | .1 | 21.3 |
| | 6.40 | 1 | .0 | .0 | 21.3 |
| | 6.50 | 13 | .4 | .4 | 21.7 |
| | 6.60 | 1 | .0 | .0 | 21.7 |
| | 6.70 | 1 | .0 | .0 | 21.8 |
| | 6.75 | 2 | .1 | .1 | 21.8 |
| | 7.00 | 302 | 8.4 | 8.4 | 30.2 |
| | 7.20 | 33 | .9 | .9 | 31.1 |
| | 7.25 | 10 | .3 | .3 | 31.4 |
| | 7.30 | 1 | .0 | .0 | 31.4 |
| | 7.50 | 317 | 8.8 | 8.8 | 40.2 |
| | 7.70 | 4 | .1 | .1 | 40.4 |
| | 7.75 | 1 | .0 | .0 | 40.4 |
| | 8.00 | 1444 | 40.1 | 40.1 | 80.5 |
| | 8.20 | 3 | .1 | .1 | 80.6 |
| | 8.25 | 2 | .1 | .1 | 80.7 |
| | 8.30 | 1 | .0 | .0 | 80.7 |
| | 8.40 | 2 | .1 | .1 | 80.7 |
| | 8.50 | 76 | 2.1 | 2.1 | 82.9 |
| | 8.60 | 1 | .0 | .0 | 82.9 |
| | 8.70 | 4 | .1 | .1 | 83.0 |
| | 8.75 | 2 | .1 | .1 | 83.0 |
| | 9.00 | 226 | 6.3 | 6.3 | 89.3 |
| | 9.20 | 1 | .0 | .0 | 89.4 |
| | 9.30 | 1 | .0 | .0 | 89.4 |
| | 9.40 | 1 | .0 | .0 | 89.4 |
| | 9.50 | 13 | .4 | .4 | 89.8 |
| | 9.70 | 1 | .0 | .0 | 89.8 |
| | 10.00 | 179 | 5.0 | 5.0 | 94.8 |
| | 10.40 | 1 | .0 | .0 | 94.8 |
| | 10.50 | 7 | .2 | .2 | 95.0 |
| | 11.00 | 43 | 1.2 | 1.2 | 96.2 |
| | 11.20 | 2 | .1 | .1 | 96.2 |
| | 11.30 | 1 | .0 | .0 | 96.3 |
| | 11.50 | 6 | .2 | .2 | 96.4 |
| | 12.00 | 92 | 2.6 | 2.6 | 99.0 |
| | 12.50 | 1 | .0 | .0 | 99.0 |
| | 13.00 | 6 | .2 | .2 | 99.2 |
| | 13.50 | 1 | .0 | .0 | 99.2 |
| | 14.00 | 16 | .4 | .4 | 99.7 |
| | 15.00 | 5 | .1 | .1 | 99.8 |
| | 15.50 | 1 | .0 | .0 | 99.8 |
| | 16.00 | 4 | .1 | .1 | 99.9 |
| | 18.00 | 2 | .1 | .1 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(15) JOB 1 NUMBER OF HOURS WORKED ON THURSDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 491 | 13.6 | 13.6 | 13.6 |
| | 1.00 | 10 | .3 | .3 | 13.9 |
| | 1.20 | 1 | .0 | .0 | 14.0 |
| | 1.50 | 3 | .1 | .1 | 14.0 |
| | 2.00 | 30 | .8 | .8 | 14.9 |
| | 2.20 | 1 | .0 | .0 | 14.9 |
| | 2.50 | 6 | .2 | .2 | 15.1 |
| | 3.00 | 28 | .8 | .8 | 15.8 |
| | 3.50 | 11 | .3 | .3 | 16.1 |
| | 3.90 | 1 | .0 | .0 | 16.2 |
| | 4.00 | 73 | 2.0 | 2.0 | 18.2 |
| | 4.50 | 8 | .2 | .2 | 18.4 |
| | 5.00 | 53 | 1.5 | 1.5 | 19.9 |
| | 5.50 | 5 | .1 | .1 | 20.0 |
| | 6.00 | 67 | 1.9 | 1.9 | 21.9 |
| | 6.20 | 4 | .1 | .1 | 22.0 |
| | 6.40 | 1 | .0 | .0 | 22.0 |
| | 6.50 | 16 | .4 | .4 | 22.5 |
| | 6.60 | 1 | .0 | .0 | 22.5 |
| | 6.70 | 2 | .1 | .1 | 22.6 |
| | 6.75 | 3 | .1 | .1 | 22.7 |
| | 7.00 | 308 | 8.6 | 8.6 | 31.2 |
| | 7.20 | 34 | .9 | .9 | 32.2 |
| | 7.25 | 10 | .3 | .3 | 32.4 |
| | 7.30 | 1 | .0 | .0 | 32.5 |
| | 7.50 | 306 | 8.5 | 8.5 | 41.0 |
| | 7.70 | 4 | .1 | .1 | 41.1 |
| | 7.75 | 2 | .1 | .1 | 41.1 |
| | 8.00 | 1393 | 38.7 | 38.7 | 79.8 |
| | 8.10 | 1 | .0 | .0 | 79.9 |
| | 8.20 | 3 | .1 | .1 | 80.0 |
| | 8.25 | 3 | .1 | .1 | 80.0 |
| | 8.30 | 1 | .0 | .0 | 80.1 |
| | 8.40 | 2 | .1 | .1 | 80.1 |
| | 8.50 | 83 | 2.3 | 2.3 | 82.4 |
| | 8.70 | 4 | .1 | .1 | 82.5 |
| | 8.90 | 1 | .0 | .0 | 82.6 |
| | 9.00 | 244 | 6.8 | 6.8 | 89.4 |
| | 9.20 | 2 | .1 | .1 | 89.4 |
| | 9.40 | 1 | .0 | .0 | 89.4 |
| | 9.50 | 19 | .5 | .5 | 90.0 |
| | 10.00 | 176 | 4.9 | 4.9 | 94.9 |
| | 10.40 | 1 | .0 | .0 | 94.9 |
| | 10.50 | 10 | .3 | .3 | 95.2 |
| | 11.00 | 31 | .9 | .9 | 96.0 |
| | 11.20 | 1 | .0 | .0 | 96.1 |
| | 11.50 | 3 | .1 | .1 | 96.1 |
| | 12.00 | 93 | 2.6 | 2.6 | 98.7 |
| | 12.50 | 2 | .1 | .1 | 98.8 |
| | 13.00 | 9 | .3 | .3 | 99.0 |
| | 14.00 | 18 | .5 | .5 | 99.5 |
| | 15.00 | 7 | .2 | .2 | 99.7 |
| | 15.50 | 1 | .0 | .0 | 99.7 |
| | 16.00 | 7 | .2 | .2 | 99.9 |
| | 19.00 | 1 | .0 | .0 | 100.0 |
| | 20.00 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(16) JOB 1 NUMBER OF HOURS WORKED ON FRIDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 520 | 14.5 | 14.5 | 14.5 |
| | 1.00 | 12 | .3 | .3 | 14.8 |
| | 1.50 | 2 | .1 | .1 | 14.8 |
| | 2.00 | 17 | .5 | .5 | 15.3 |
| | 2.50 | 4 | .1 | .1 | 15.4 |
| | 3.00 | 38 | 1.1 | 1.1 | 16.5 |
| | 3.25 | 1 | .0 | .0 | 16.5 |
| | 3.50 | 11 | .3 | .3 | 16.8 |
| | 3.90 | 1 | .0 | .0 | 16.8 |
| | 4.00 | 80 | 2.2 | 2.2 | 19.1 |
| | 4.20 | 1 | .0 | .0 | 19.1 |
| | 4.50 | 14 | .4 | .4 | 19.5 |
| | 5.00 | 77 | 2.1 | 2.1 | 21.6 |
| | 5.50 | 20 | .6 | .6 | 22.2 |
| | 6.00 | 92 | 2.6 | 2.6 | 24.7 |
| | 6.20 | 2 | .1 | .1 | 24.8 |
| | 6.40 | 1 | .0 | .0 | 24.8 |
| | 6.50 | 23 | .6 | .6 | 25.5 |
| | 6.60 | 1 | .0 | .0 | 25.5 |
| | 6.70 | 3 | .1 | .1 | 25.6 |
| | 6.75 | 2 | .1 | .1 | 25.6 |
| | 7.00 | 313 | 8.7 | 8.7 | 34.3 |
| | 7.20 | 36 | 1.0 | 1.0 | 35.3 |
| | 7.25 | 10 | .3 | .3 | 35.6 |
| | 7.30 | 1 | .0 | .0 | 35.6 |
| | 7.50 | 308 | 8.6 | 8.6 | 44.2 |
| | 7.70 | 2 | .1 | .1 | 44.2 |
| | 7.75 | 2 | .1 | .1 | 44.3 |
| | 8.00 | 1435 | 39.9 | 39.9 | 84.2 |
| | 8.20 | 6 | .2 | .2 | 84.4 |
| | 8.25 | 3 | .1 | .1 | 84.4 |
| | 8.40 | 2 | .1 | .1 | 84.5 |
| | 8.50 | 69 | 1.9 | 1.9 | 86.4 |
| | 8.70 | 1 | .0 | .0 | 86.4 |
| | 8.80 | 1 | .0 | .0 | 86.5 |
| | 9.00 | 203 | 5.6 | 5.6 | 92.1 |
| | 9.20 | 2 | .1 | .1 | 92.2 |
| | 9.50 | 16 | .4 | .4 | 92.6 |
| | 10.00 | 130 | 3.6 | 3.6 | 96.2 |
| | 10.40 | 1 | .0 | .0 | 96.2 |
| | 10.50 | 4 | .1 | .1 | 96.4 |
| | 11.00 | 27 | .8 | .8 | 97.1 |
| | 11.20 | 2 | .1 | .1 | 97.2 |
| | 11.50 | 2 | .1 | .1 | 97.2 |
| | 12.00 | 65 | 1.8 | 1.8 | 99.0 |
| | 13.00 | 5 | .1 | .1 | 99.2 |
| | 13.50 | 2 | .1 | .1 | 99.2 |
| | 14.00 | 13 | .4 | .4 | 99.6 |
| | 14.50 | 1 | .0 | .0 | 99.6 |
| | 15.00 | 2 | .1 | .1 | 99.7 |
| | 15.50 | 1 | .0 | .0 | 99.7 |
| | 16.00 | 10 | .3 | .3 | 100.0 |
| | 17.00 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(17) JOB 1 NUMBER OF HOURS WORKED ON SATURDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 2779 | 77.2 | 77.2 | 77.2 |
| | 1.00 | 18 | .5 | .5 | 77.7 |
| | 1.50 | 1 | .0 | .0 | 77.8 |
| | 2.00 | 40 | 1.1 | 1.1 | 78.9 |
| | 2.50 | 1 | .0 | .0 | 78.9 |
| | 3.00 | 25 | .7 | .7 | 79.6 |
| | 3.50 | 3 | .1 | .1 | 79.7 |
| | 3.90 | 1 | .0 | .0 | 79.7 |
| | 4.00 | 82 | 2.3 | 2.3 | 82.0 |
| | 4.50 | 9 | .3 | .3 | 82.2 |
| | 5.00 | 65 | 1.8 | 1.8 | 84.0 |
| | 5.50 | 6 | .2 | .2 | 84.2 |
| | 6.00 | 54 | 1.5 | 1.5 | 85.7 |
| | 6.20 | 1 | .0 | .0 | 85.7 |
| | 6.50 | 8 | .2 | .2 | 86.0 |
| | 7.00 | 48 | 1.3 | 1.3 | 87.3 |
| | 7.20 | 3 | .1 | .1 | 87.4 |
| | 7.30 | 1 | .0 | .0 | 87.4 |
| | 7.50 | 35 | 1.0 | 1.0 | 88.4 |
| | 8.00 | 248 | 6.9 | 6.9 | 95.3 |
| | 8.50 | 14 | .4 | .4 | 95.7 |
| | 9.00 | 48 | 1.3 | 1.3 | 97.0 |
| | 9.50 | 2 | .1 | .1 | 97.1 |
| | 10.00 | 40 | 1.1 | 1.1 | 98.2 |
| | 10.50 | 1 | .0 | .0 | 98.2 |
| | 11.00 | 7 | .2 | .2 | 98.4 |
| | 11.50 | 1 | .0 | .0 | 98.4 |
| | 12.00 | 41 | 1.1 | 1.1 | 99.6 |
| | 13.00 | 1 | .0 | .0 | 99.6 |
| | 14.00 | 6 | .2 | .2 | 99.7 |
| | 15.00 | 2 | .1 | .1 | 99.8 |
| | 16.00 | 7 | .2 | .2 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(18) JOB 1 NUMBER OF HOURS WORKED ON SUNDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | 0.00 | 3184 | 88.5 | 88.5 | 88.5 |
| | 0.50 | 1 | .0 | .0 | 88.5 |
| | 1.00 | 9 | .3 | .3 | 88.8 |
| | 1.50 | 2 | .1 | .1 | 88.8 |
| | 2.00 | 26 | .7 | .7 | 89.5 |
| | 2.50 | 1 | .0 | .0 | 89.6 |
| | 3.00 | 32 | .9 | .9 | 90.5 |
| | 3.50 | 3 | .1 | .1 | 90.6 |
| | 3.90 | 1 | .0 | .0 | 90.6 |
| | 4.00 | 42 | 1.2 | 1.2 | 91.7 |
| | 4.50 | 3 | .1 | .1 | 91.8 |
| | 5.00 | 22 | .6 | .6 | 92.4 |
| | 5.50 | 4 | .1 | .1 | 92.6 |
| | 6.00 | 21 | .6 | .6 | 93.1 |
| | 6.20 | 1 | .0 | .0 | 93.2 |
| | 6.50 | 2 | .1 | .1 | 93.2 |
| | 7.00 | 15 | .4 | .4 | 93.6 |
| | 7.20 | 1 | .0 | .0 | 93.7 |
| | 7.50 | 19 | .5 | .5 | 94.2 |
| | 8.00 | 126 | 3.5 | 3.5 | 97.7 |
| | 8.20 | 1 | .0 | .0 | 97.7 |
| | 8.50 | 7 | .2 | .2 | 97.9 |
| | 9.00 | 13 | .4 | .4 | 98.3 |
| | 9.50 | 1 | .0 | .0 | 98.3 |
| | 10.00 | 23 | .6 | .6 | 98.9 |
| | 10.50 | 1 | .0 | .0 | 99.0 |
| | 11.00 | 2 | .1 | .1 | 99.0 |
| | 12.00 | 27 | .8 | .8 | 99.8 |
| | 14.00 | 3 | .1 | .1 | 99.9 |
| | 16.00 | 3 | .1 | .1 | 99.9 |
| | 17.00 | 1 | .0 | .0 | 100.0 |
| | 23.00 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(19) JOB 2 NUMBER OF HOURS WORKED ON MONDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 118 | 69.0 | 69.0 | 69.0 |
| | 0.50 | 1 | .6 | .6 | 69.6 |
| | 1.00 | 1 | .6 | .6 | 70.2 |
| | 1.50 | 2 | 1.2 | 1.2 | 71.3 |
| | 2.00 | 9 | 5.3 | 5.3 | 76.6 |
| | 3.00 | 6 | 3.5 | 3.5 | 80.1 |
| | 4.00 | 15 | 8.8 | 8.8 | 88.9 |
| | 4.50 | 1 | .6 | .6 | 89.5 |
| | 5.00 | 1 | .6 | .6 | 90.1 |
| | 5.50 | 1 | .6 | .6 | 90.6 |
| | 6.00 | 5 | 2.9 | 2.9 | 93.6 |
| | 7.50 | 2 | 1.2 | 1.2 | 94.7 |
| | 8.00 | 6 | 3.5 | 3.5 | 98.2 |
| | 9.00 | 2 | 1.2 | 1.2 | 99.4 |
| | 14.00 | 1 | .6 | .6 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(20) JOB 2 NUMBER OF HOURS WORKED ON TUESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 105 | 61.4 | 61.4 | 61.4 |
| | 1.00 | 4 | 2.3 | 2.3 | 63.7 |
| | 1.50 | 1 | .6 | .6 | 64.3 |
| | 2.00 | 12 | 7.0 | 7.0 | 71.3 |
| | 2.50 | 2 | 1.2 | 1.2 | 72.5 |
| | 3.00 | 8 | 4.7 | 4.7 | 77.2 |
| | 4.00 | 14 | 8.2 | 8.2 | 85.4 |
| | 4.50 | 1 | .6 | .6 | 86.0 |
| | 5.00 | 7 | 4.1 | 4.1 | 90.1 |
| | 5.50 | 2 | 1.2 | 1.2 | 91.2 |
| | 6.00 | 2 | 1.2 | 1.2 | 92.4 |
| | 7.00 | 3 | 1.8 | 1.8 | 94.2 |
| | 7.50 | 2 | 1.2 | 1.2 | 95.3 |
| | 8.00 | 3 | 1.8 | 1.8 | 97.1 |
| | 9.00 | 2 | 1.2 | 1.2 | 98.2 |
| | 12.00 | 2 | 1.2 | 1.2 | 99.4 |
| | 17.00 | 1 | .6 | .6 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(21) JOB 2 NUMBER OF HOURS WORKED ON WEDNESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 107 | 62.6 | 62.6 | 62.6 |
| | 0.50 | 1 | .6 | .6 | 63.2 |
| | 1.00 | 2 | 1.2 | 1.2 | 64.3 |
| | 2.00 | 15 | 8.8 | 8.8 | 73.1 |
| | 3.00 | 7 | 4.1 | 4.1 | 77.2 |
| | 3.50 | 1 | .6 | .6 | 77.8 |
| | 4.00 | 20 | 11.7 | 11.7 | 89.5 |
| | 5.00 | 4 | 2.3 | 2.3 | 91.8 |
| | 5.50 | 1 | .6 | .6 | 92.4 |
| | 6.00 | 3 | 1.8 | 1.8 | 94.2 |
| | 7.00 | 2 | 1.2 | 1.2 | 95.3 |
| | 7.50 | 2 | 1.2 | 1.2 | 96.5 |
| | 8.00 | 4 | 2.3 | 2.3 | 98.8 |
| | 9.00 | 1 | .6 | .6 | 99.4 |
| | 12.00 | 1 | .6 | .6 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 171 | 100.0 | 100.0 | |

(22) JOB 2 NUMBER OF HOURS WORKED ON THURSDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 102 | 59.6 | 59.6 | 59.6 |
| | 0.50 | 2 | 1.2 | 1.2 | 60.8 |
| | 1.00 | 3 | 1.8 | 1.8 | 62.6 |
| | 2.00 | 9 | 5.3 | 5.3 | 67.8 |
| | 3.00 | 8 | 4.7 | 4.7 | 72.5 |
| | 3.50 | 1 | .6 | .6 | 73.1 |
| | 4.00 | 9 | 5.3 | 5.3 | 78.4 |
| | 4.50 | 3 | 1.8 | 1.8 | 80.1 |
| | 5.00 | 8 | 4.7 | 4.7 | 84.8 |
| | 5.50 | 1 | .6 | .6 | 85.4 |
| | 6.00 | 5 | 2.9 | 2.9 | 88.3 |
| | 7.00 | 6 | 3.5 | 3.5 | 91.8 |
| | 7.50 | 3 | 1.8 | 1.8 | 93.6 |
| | 8.00 | 6 | 3.5 | 3.5 | 97.1 |
| | 10.00 | 3 | 1.8 | 1.8 | 98.8 |
| | 11.00 | 1 | .6 | .6 | 99.4 |
| | 12.00 | 1 | .6 | .6 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 171 | 100.0 | 100.0 | |

(23) JOB 2 NUMBER OF HOURS WORKED ON FRIDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 117 | 68.4 | 68.4 | 68.4 |
| | 0.50 | 1 | .6 | .6 | 69.0 |
| | 1.00 | 3 | 1.8 | 1.8 | 70.8 |
| | 1.50 | 1 | .6 | .6 | 71.3 |
| | 2.00 | 5 | 2.9 | 2.9 | 74.3 |
| | 2.50 | 1 | .6 | .6 | 74.9 |
| | 3.00 | 2 | 1.2 | 1.2 | 76.0 |
| | 4.00 | 12 | 7.0 | 7.0 | 83.0 |
| | 5.00 | 5 | 2.9 | 2.9 | 86.0 |
| | 5.50 | 1 | .6 | .6 | 86.5 |
| | 6.00 | 5 | 2.9 | 2.9 | 89.5 |
| | 7.00 | 2 | 1.2 | 1.2 | 90.6 |
| | 7.50 | 4 | 2.3 | 2.3 | 93.0 |
| | 8.00 | 9 | 5.3 | 5.3 | 98.2 |
| | 12.00 | 2 | 1.2 | 1.2 | 99.4 |
| | 16.00 | 1 | .6 | .6 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(24) JOB 2 NUMBER OF HOURS WORKED ON SATURDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 111 | 64.9 | 64.9 | 64.9 |
| | 1.00 | 1 | .6 | .6 | 65.5 |
| | 2.00 | 9 | 5.3 | 5.3 | 70.8 |
| | 2.50 | 2 | 1.2 | 1.2 | 71.9 |
| | 3.00 | 4 | 2.3 | 2.3 | 74.3 |
| | 4.00 | 9 | 5.3 | 5.3 | 79.5 |
| | 5.00 | 5 | 2.9 | 2.9 | 82.5 |
| | 5.50 | 1 | .6 | .6 | 83.0 |
| | 6.00 | 4 | 2.3 | 2.3 | 85.4 |
| | 6.50 | 1 | .6 | .6 | 86.0 |
| | 7.00 | 3 | 1.8 | 1.8 | 87.7 |
| | 7.50 | 1 | .6 | .6 | 88.3 |
| | 8.00 | 8 | 4.7 | 4.7 | 93.0 |
| | 8.50 | 2 | 1.2 | 1.2 | 94.2 |
| | 9.00 | 2 | 1.2 | 1.2 | 95.3 |
| | 9.50 | 1 | .6 | .6 | 95.9 |
| | 10.00 | 2 | 1.2 | 1.2 | 97.1 |
| | 12.00 | 3 | 1.8 | 1.8 | 98.8 |
| | 14.00 | 2 | 1.2 | 1.2 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(25) JOB 2 NUMBER OF HOURS WORKED ON SUNDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 131 | 76.6 | 76.6 | 76.6 |
| | 1.00 | 3 | 1.8 | 1.8 | 78.4 |
| | 2.00 | 9 | 5.3 | 5.3 | 83.6 |
| | 3.00 | 2 | 1.2 | 1.2 | 84.8 |
| | 4.00 | 7 | 4.1 | 4.1 | 88.9 |
| | 5.00 | 1 | .6 | .6 | 89.5 |
| | 6.00 | 3 | 1.8 | 1.8 | 91.2 |
| | 7.00 | 2 | 1.2 | 1.2 | 92.4 |
| | 8.00 | 9 | 5.3 | 5.3 | 97.7 |
| | 9.00 | 1 | .6 | .6 | 98.2 |
| | 10.00 | 1 | .6 | .6 | 98.8 |
| | 12.00 | 2 | 1.2 | 1.2 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

(26) JOB 1 TRAVEL MODE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| DRIVER | 1 | 2139 | 59.4 | 59.4 | 59.4 |
| PASSENGER | 2 | 217 | 6.0 | 6.0 | 65.5 |
| PUBLIC TRANSIT | 3 | 680 | 18.9 | 18.9 | 84.4 |
| PRIVATE & PUBLIC TRANSIT | 4 | 181 | 5.0 | 5.0 | 89.4 |
| WALK | 5 | 228 | 6.3 | 6.3 | 95.7 |
| OTHER | 6 | 80 | 2.2 | 2.2 | 98.0 |
| INVALID | 9 | 73 | 2.0 | 2.0 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

(27) JOB 2 TRAVEL MODE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| DRIVER | 1 | 87 | 50.9 | 50.9 | 50.9 |
| PASSENGER | 2 | 7 | 4.1 | 4.1 | 55.0 |
| PUBLIC TRANSIT | 3 | 23 | 13.5 | 13.5 | 68.4 |
| PRIVATE & PUBLIC TRANSIT | 4 | 4 | 2.3 | 2.3 | 70.8 |
| WALK | 5 | 18 | 10.5 | 10.5 | 81.3 |
| OTHER | 6 | 13 | 7.6 | 7.6 | 88.9 |
| INVALID | 9 | 19 | 11.1 | 11.1 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

**(28) JOB 1 VEHICLE AVAILABILITY**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ALLWAYS AVAILABLE | 1 | 2049 | 56.9 | 56.9 | 56.9 |
| USUALLY AVAILABLE | 2 | 233 | 6.5 | 6.5 | 63.4 |
| SOMETIMES AVAILABLE | 3 | 254 | 7.1 | 7.1 | 70.5 |
| RARELY AVAILABLE | 4 | 130 | 3.6 | 3.6 | 74.1 |
| NEVER AVAILABLE | 5 | 849 | 23.6 | 23.6 | 97.7 |
| INVAILD | 9 | 83 | 2.3 | 2.3 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

**(29) JOB 2 VEHICLE AVAILABILITY**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ALLWAYS AVAILABLE | 1 | 81 | 47.4 | 47.4 | 47.4 |
| USUALLY AVAILABLE | 2 | 12 | 7.0 | 7.0 | 54.4 |
| SOMETIMES AVAILABLE | 3 | 6 | 3.5 | 3.5 | 57.9 |
| RARELY AVAILABLE | 4 | 2 | 1.2 | 1.2 | 59.1 |
| NEVER AVAILABLE | 5 | 45 | 26.3 | 26.3 | 85.4 |
| INVALID | 9 | 25 | 14.6 | 14.6 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

**(30) PARKING COST AT PLACE OF WORK**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | .00 | 5855 | 90.1 | 90.1 | 90.1 |
| | .50 | 2 | .0 | .0 | 90.1 |
| | 1.00 | 7 | .1 | .1 | 90.2 |
| | 1.20 | 4 | .1 | .1 | 90.3 |
| | 1.25 | 1 | .0 | .0 | 90.3 |
| | 1.30 | 3 | .0 | .0 | 90.3 |
| | 1.40 | 1 | .0 | .0 | 90.4 |
| | 1.50 | 14 | .2 | .2 | 90.6 |
| | 1.70 | 1 | .0 | .0 | 90.6 |
| | 1.80 | 1 | .0 | .0 | 90.6 |
| | 2.00 | 30 | .5 | .5 | 91.1 |
| | 2.10 | 3 | .0 | .0 | 91.1 |
| | 2.20 | 2 | .0 | .0 | 91.1 |
| | 2.25 | 1 | .0 | .0 | 91.2 |
| | 2.50 | 15 | .2 | .2 | 91.4 |
| | 2.70 | 2 | .0 | .0 | 91.4 |
| | 2.75 | 1 | .0 | .0 | 91.4 |
| | 3.00 | 35 | .5 | .5 | 92.0 |
| | 3.25 | 1 | .0 | .0 | 92.0 |
| | 3.50 | 13 | .2 | .2 | 92.2 |
| | 3.70 | 6 | .1 | .1 | 92.3 |

(30) PARKING COST AT PLACE OF WORK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 3.75 | 3 | .0 | .0 | 92.3 |
| | 4.00 | 26 | .4 | .4 | 92.7 |
| | 4.50 | 14 | .2 | .2 | 92.9 |
| | 4.70 | 1 | .0 | .0 | 93.0 |
| | 5.00 | 43 | .7 | .7 | 93.6 |
| | 5.20 | 3 | .0 | .0 | 93.7 |
| | 5.50 | 10 | .2 | .2 | 93.8 |
| | 5.70 | 1 | .0 | .0 | 93.8 |
| | 5.75 | 1 | .0 | .0 | 93.8 |
| | 5.80 | 1 | .0 | .0 | 93.9 |
| | 6.00 | 32 | .5 | .5 | 94.4 |
| | 6.50 | 9 | .1 | .1 | 94.5 |
| | 6.60 | 2 | .0 | .0 | 94.5 |
| | 6.80 | 2 | .0 | .0 | 94.6 |
| | 7.00 | 23 | .4 | .4 | 94.9 |
| | 7.50 | 3 | .0 | .0 | 95.0 |
| | 8.00 | 41 | .6 | .6 | 95.6 |
| | 8.50 | 4 | .1 | .1 | 95.6 |
| | 9.00 | 16 | .2 | .2 | 95.9 |
| | 9.50 | 1 | .0 | .0 | 95.9 |
| | 9.75 | 1 | .0 | .0 | 95.9 |
| | 10.00 | 27 | .4 | .4 | 96.3 |
| | 11.00 | 2 | .0 | .0 | 96.4 |
| | 11.50 | 1 | .0 | .0 | 96.4 |
| | 12.00 | 5 | .1 | .1 | 96.5 |
| | 12.50 | 2 | .0 | .0 | 96.5 |
| | 13.00 | 2 | .0 | .0 | 96.5 |
| | 13.50 | 5 | .1 | .1 | 96.6 |
| | 14.00 | 9 | .1 | .1 | 96.7 |
| | 15.00 | 11 | .2 | .2 | 96.9 |
| | 15.50 | 1 | .0 | .0 | 96.9 |
| | 16.00 | 1 | .0 | .0 | 96.9 |
| | 17.00 | 1 | .0 | .0 | 97.0 |
| | 17.50 | 1 | .0 | .0 | 97.0 |
| | 18.00 | 1 | .0 | .0 | 97.0 |
| | 18.30 | 1 | .0 | .0 | 97.0 |
| | 19.50 | 1 | .0 | .0 | 97.0 |
| | 20.00 | 15 | .2 | .2 | 97.2 |
| | 21.00 | 8 | .1 | .1 | 97.4 |
| | 22.00 | 1 | .0 | .0 | 97.4 |
| | 22.50 | 1 | .0 | .0 | 97.4 |
| | 23.00 | 1 | .0 | .0 | 97.4 |
| | 24.00 | 1 | .0 | .0 | 97.4 |
| | 25.00 | 12 | .2 | .2 | 97.6 |
| | 26.00 | 4 | .1 | .1 | 97.7 |
| | 27.00 | 1 | .0 | .0 | 97.7 |
| | 28.00 | 2 | .0 | .0 | 97.7 |
| | 29.00 | 1 | .0 | .0 | 97.7 |
| | 30.00 | 23 | .4 | .4 | 98.1 |
| | 32.00 | 1 | .0 | .0 | 98.1 |
| | 34.00 | 1 | .0 | .0 | 98.1 |
| | 35.00 | 8 | .1 | .1 | 98.2 |
| | 36.50 | 1 | .0 | .0 | 98.3 |
| | 37.50 | 3 | .0 | .0 | 98.3 |
| | 40.00 | 15 | .2 | .2 | 98.5 |
| | 42.00 | 1 | .0 | .0 | 98.6 |
| | 42.50 | 1 | .0 | .0 | 98.6 |
| | 44.00 | 1 | .0 | .0 | 98.6 |
| | 45.00 | 7 | .1 | .1 | 98.7 |
| | 48.00 | 2 | .0 | .0 | 98.7 |

(30) PARKING COST AT PLACE OF WORK

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 49.00 | 1 | .0 | .0 | 98.7 |
| | 50.00 | 16 | .2 | .2 | 99.0 |
| | 54.00 | 1 | .0 | .0 | 99.0 |
| | 55.00 | 3 | .0 | .0 | 99.0 |
| | 57.50 | 2 | .0 | .0 | 99.1 |
| | 60.00 | 12 | .2 | .2 | 99.3 |
| | 65.00 | 12 | .2 | .2 | 99.4 |
| | 70.00 | 9 | .1 | .1 | 99.6 |
| | 75.00 | 2 | .0 | .0 | 99.6 |
| | 80.00 | 12 | .2 | .2 | 99.8 |
| | 85.00 | 1 | .0 | .0 | 99.8 |
| | 90.00 | 3 | .0 | .0 | 99.9 |
| | 99.00 | 6 | .1 | .1 | 100.0 |
| | 207.50 | 2 | .0 | .0 | 100.0 |
| | 417.50 | 1 | .0 | .0 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(31) QUALIFER FOR PARKING COSTS

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NOT EMPLOYED/NO RESPONSE | | 2902 | 44.6 | 44.6 | 44.6 |
| FREE PARKING | 1 | 2477 | 38.1 | 38.1 | 82.8 |
| DON'T KNOW | 3 | 400 | 6.2 | 6.2 | 88.9 |
| INVALID | 9 | 79 | 1.2 | 1.2 | 90.1 |
| COST PER DAY | D | 367 | 5.6 | 5.6 | 95.8 |
| COST PER MOMTH | M | 245 | 3.8 | 3.8 | 99.5 |
| COST PER WEEK | W | 30 | .5 | .5 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

**(32) JOB 1 TRANSIT AVAILABILITY**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ALLWAYS AVAILABLE | 1 | 2077 | 57.7 | 57.7 | 57.7 |
| SOMETIMES AVAILABLE | 2 | 269 | 7.5 | 7.5 | 65.2 |
| NEVER AVAILABLE | 3 | 832 | 23.1 | 23.1 | 88.3 |
| DON'T KNOW | 4 | 284 | 7.9 | 7.9 | 96.2 |
| INVAILD | 9 | 136 | 3.8 | 3.8 | 100.0 |
| | TOTAL | 3598 | 100.0 | 100.0 | |

**(33) JOB 2 TRANSIT AVAILABILITY**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ALLWAYS AVAILABLE | 1 | 64 | 37.4 | 37.4 | 37.4 |
| SOMETIMES AVAILABLE | 2 | 15 | 8.8 | 8.8 | 46.2 |
| NEVER AVAILABLE | 3 | 36 | 21.1 | 21.1 | 67.3 |
| DON'T KNOW | 4 | 13 | 7.6 | 7.6 | 74.9 |
| INVALID | 9 | 43 | 25.1 | 25.1 | 100.0 |
| | TOTAL | 171 | 100.0 | 100.0 | |

**(34) STUDENT STATUS**

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| FULL-TIME STUDENTS | F | 1055 | 78.5 | 78.5 | 78.5 |
| INVALID | N | 11 | .8 | .8 | 79.3 |
| PART-TIME STUDENTS | P | 278 | 20.7 | 20.7 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(35) NUMBER OF HOURS SCHOOL ATTENDED ON MONDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 250 | 18.6 | 18.6 | 18.6 |
| | 1.00 | 8 | .6 | .6 | 19.2 |
| | 1.50 | 2 | .1 | .1 | 19.3 |
| | 2.00 | 24 | 1.8 | 1.8 | 21.1 |
| | 2.50 | 12 | .9 | .9 | 22.0 |
| | 3.00 | 89 | 6.6 | 6.6 | 28.6 |
| | 3.50 | 5 | .4 | .4 | 29.0 |
| | 4.00 | 42 | 3.1 | 3.1 | 32.1 |
| | 4.50 | 8 | .6 | .6 | 32.7 |
| | 4.60 | 1 | .1 | .1 | 32.8 |
| | 5.00 | 56 | 4.2 | 4.2 | 37.0 |
| | 5.20 | 8 | .6 | .6 | 37.6 |
| | 5.25 | 1 | .1 | .1 | 37.6 |
| | 5.30 | 3 | .2 | .2 | 37.9 |
| | 5.50 | 57 | 4.2 | 4.2 | 42.1 |
| | 5.66 | 2 | .1 | .1 | 42.3 |
| | 5.70 | 8 | .6 | .6 | 42.9 |
| | 5.75 | 1 | .1 | .1 | 42.9 |
| | 5.80 | 3 | .2 | .2 | 43.2 |
| | 6.00 | 258 | 19.2 | 19.2 | 62.4 |
| | 6.10 | 1 | .1 | .1 | 62.4 |
| | 6.20 | 5 | .4 | .4 | 62.8 |
| | 6.25 | 2 | .1 | .1 | 62.9 |
| | 6.30 | 7 | .5 | .5 | 63.5 |
| | 6.40 | 1 | .1 | .1 | 63.5 |
| | 6.50 | 229 | 17.0 | 17.0 | 80.6 |
| | 6.70 | 10 | .7 | .7 | 81.3 |
| | 6.75 | 3 | .2 | .2 | 81.5 |
| | 7.00 | 137 | 10.2 | 10.2 | 91.7 |
| | 7.20 | 1 | .1 | .1 | 91.8 |
| | 7.50 | 24 | 1.8 | 1.8 | 93.6 |
| | 7.70 | 1 | .1 | .1 | 93.7 |
| | 8.00 | 59 | 4.4 | 4.4 | 98.1 |
| | 8.50 | 1 | .1 | .1 | 98.1 |
| | 9.00 | 13 | 1.0 | 1.0 | 99.1 |
| | 9.50 | 1 | .1 | .1 | 99.2 |
| | 10.00 | 7 | .5 | .5 | 99.7 |
| | 12.00 | 3 | .2 | .2 | 99.9 |
| | 15.50 | 1 | .1 | .1 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(36) NUMBER OF HOURS SCHOOL ATTENDED ON TUESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 254 | 18.9 | 18.9 | 18.9 |
| | 1.00 | 5 | .4 | .4 | 19.3 |
| | 2.00 | 23 | 1.7 | 1.7 | 21.0 |
| | 2.50 | 7 | .5 | .5 | 21.5 |
| | 3.00 | 82 | 6.1 | 6.1 | 27.6 |
| | 3.50 | 4 | .3 | .3 | 27.9 |
| | 4.00 | 43 | 3.2 | 3.2 | 31.1 |
| | 4.50 | 7 | .5 | .5 | 31.6 |
| | 4.60 | 1 | .1 | .1 | 31.7 |
| | 5.00 | 60 | 4.5 | 4.5 | 36.2 |
| | 5.10 | 1 | .1 | .1 | 36.2 |
| | 5.20 | 7 | .5 | .5 | 36.8 |
| | 5.25 | 1 | .1 | .1 | 36.8 |
| | 5.30 | 3 | .2 | .2 | 37.1 |
| | 5.50 | 58 | 4.3 | 4.3 | 41.4 |
| | 5.66 | 2 | .1 | .1 | 41.5 |
| | 5.70 | 8 | .6 | .6 | 42.1 |
| | 5.75 | 1 | .1 | .1 | 42.2 |
| | 5.80 | 2 | .1 | .1 | 42.3 |
| | 6.00 | 258 | 19.2 | 19.2 | 61.5 |
| | 6.20 | 5 | .4 | .4 | 61.9 |
| | 6.25 | 2 | .1 | .1 | 62.1 |
| | 6.30 | 7 | .5 | .5 | 62.6 |
| | 6.40 | 1 | .1 | .1 | 62.6 |
| | 6.50 | 227 | 16.9 | 16.9 | 79.5 |
| | 6.70 | 9 | .7 | .7 | 80.2 |
| | 6.75 | 4 | .3 | .3 | 80.5 |
| | 7.00 | 145 | 10.8 | 10.8 | 91.3 |
| | 7.10 | 1 | .1 | .1 | 91.4 |
| | 7.20 | 1 | .1 | .1 | 91.4 |
| | 7.50 | 25 | 1.9 | 1.9 | 93.3 |
| | 7.70 | 1 | .1 | .1 | 93.4 |
| | 8.00 | 54 | 4.0 | 4.0 | 97.4 |
| | 8.20 | 1 | .1 | .1 | 97.5 |
| | 8.50 | 2 | .1 | .1 | 97.6 |
| | 9.00 | 13 | 1.0 | 1.0 | 98.6 |
| | 9.20 | 1 | .1 | .1 | 98.7 |
| | 9.50 | 3 | .2 | .2 | 98.9 |
| | 10.00 | 3 | .2 | .2 | 99.1 |
| | 10.50 | 1 | .1 | .1 | 99.2 |
| | 11.00 | 3 | .2 | .2 | 99.4 |
| | 12.00 | 8 | .6 | .6 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(37) NUMBER OF HOURS SCHOOL ATTENDED ON WEDNESDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 254 | 18.9 | 18.9 | 18.9 |
| | 1.00 | 2 | .1 | .1 | 19.0 |
| | 1.50 | 2 | .1 | .1 | 19.2 |
| | 2.00 | 18 | 1.3 | 1.3 | 20.5 |
| | 2.50 | 9 | .7 | .7 | 21.2 |
| | 3.00 | 80 | 6.0 | 6.0 | 27.2 |
| | 3.50 | 7 | .5 | .5 | 27.7 |
| | 4.00 | 48 | 3.6 | 3.6 | 31.3 |
| | 4.20 | 1 | .1 | .1 | 31.3 |
| | 4.50 | 5 | .4 | .4 | 31.7 |
| | 4.60 | 1 | .1 | .1 | 31.8 |
| | 5.00 | 56 | 4.2 | 4.2 | 35.9 |
| | 5.20 | 6 | .4 | .4 | 36.4 |
| | 5.25 | 1 | .1 | .1 | 36.5 |
| | 5.30 | 3 | .2 | .2 | 36.7 |
| | 5.50 | 57 | 4.2 | 4.2 | 40.9 |
| | 5.66 | 2 | .1 | .1 | 41.1 |
| | 5.70 | 8 | .6 | .6 | 41.7 |
| | 5.75 | 1 | .1 | .1 | 41.7 |
| | 5.80 | 2 | .1 | .1 | 41.9 |
| | 6.00 | 256 | 19.0 | 19.0 | 60.9 |
| | 6.20 | 5 | .4 | .4 | 61.3 |
| | 6.25 | 2 | .1 | .1 | 61.5 |
| | 6.30 | 7 | .5 | .5 | 62.0 |
| | 6.40 | 1 | .1 | .1 | 62.1 |
| | 6.50 | 230 | 17.1 | 17.1 | 79.2 |
| | 6.70 | 9 | .7 | .7 | 79.8 |
| | 6.75 | 4 | .3 | .3 | 80.1 |
| | 7.00 | 152 | 11.3 | 11.3 | 91.4 |
| | 7.10 | 1 | .1 | .1 | 91.5 |
| | 7.20 | 1 | .1 | .1 | 91.6 |
| | 7.50 | 22 | 1.6 | 1.6 | 93.2 |
| | 7.70 | 1 | .1 | .1 | 93.3 |
| | 8.00 | 60 | 4.5 | 4.5 | 97.8 |
| | 8.20 | 1 | .1 | .1 | 97.8 |
| | 8.50 | 2 | .1 | .1 | 98.0 |
| | 9.00 | 14 | 1.0 | 1.0 | 99.0 |
| | 9.20 | 1 | .1 | .1 | 99.1 |
| | 9.50 | 2 | .1 | .1 | 99.3 |
| | 10.00 | 7 | .5 | .5 | 99.8 |
| | 12.00 | 1 | .1 | .1 | 99.9 |
| | 12.50 | 1 | .1 | .1 | 99.9 |
| | 14.50 | 1 | .1 | .1 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(38) NUMBER OF HOURS SCHOOL ATTENDED ON THURSDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 289 | 21.5 | 21.5 | 21.5 |
| | 1.00 | 6 | .4 | .4 | 21.9 |
| | 1.50 | 3 | .2 | .2 | 22.2 |
| | 2.00 | 19 | 1.4 | 1.4 | 23.6 |
| | 2.50 | 5 | .4 | .4 | 24.0 |
| | 3.00 | 66 | 4.9 | 4.9 | 28.9 |
| | 3.50 | 7 | .5 | .5 | 29.4 |
| | 4.00 | 41 | 3.1 | 3.1 | 32.4 |
| | 4.20 | 1 | .1 | .1 | 32.5 |
| | 4.50 | 7 | .5 | .5 | 33.0 |
| | 4.60 | 1 | .1 | .1 | 33.1 |
| | 5.00 | 52 | 3.9 | 3.9 | 37.0 |
| | 5.20 | 6 | .4 | .4 | 37.4 |
| | 5.25 | 1 | .1 | .1 | 37.5 |
| | 5.30 | 3 | .2 | .2 | 37.7 |
| | 5.50 | 62 | 4.6 | 4.6 | 42.3 |
| | 5.66 | 2 | .1 | .1 | 42.5 |
| | 5.70 | 8 | .6 | .6 | 43.1 |
| | 5.75 | 1 | .1 | .1 | 43.2 |
| | 5.80 | 2 | .1 | .1 | 43.3 |
| | 6.00 | 253 | 18.8 | 18.8 | 62.1 |
| | 6.20 | 5 | .4 | .4 | 62.5 |
| | 6.25 | 2 | .1 | .1 | 62.6 |
| | 6.30 | 7 | .5 | .5 | 63.2 |
| | 6.40 | 1 | .1 | .1 | 63.2 |
| | 6.50 | 225 | 16.7 | 16.7 | 80.0 |
| | 6.70 | 9 | .7 | .7 | 80.7 |
| | 6.75 | 4 | .3 | .3 | 81.0 |
| | 7.00 | 148 | 11.0 | 11.0 | 92.0 |
| | 7.10 | 1 | .1 | .1 | 92.0 |
| | 7.20 | 1 | .1 | .1 | 92.1 |
| | 7.50 | 27 | 2.0 | 2.0 | 94.1 |
| | 7.70 | 1 | .1 | .1 | 94.2 |
| | 8.00 | 53 | 3.9 | 3.9 | 98.1 |
| | 8.20 | 1 | .1 | .1 | 98.2 |
| | 8.50 | 2 | .1 | .1 | 98.4 |
| | 9.00 | 9 | .7 | .7 | 99.0 |
| | 9.20 | 1 | .1 | .1 | 99.1 |
| | 9.50 | 2 | .1 | .1 | 99.3 |
| | 10.00 | 5 | .4 | .4 | 99.6 |
| | 10.50 | 1 | .1 | .1 | 99.7 |
| | 11.00 | 2 | .1 | .1 | 99.9 |
| | 12.00 | 2 | .1 | .1 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(39) NUMBER OF HOURS SCHOOL ATTENDED ON FRIDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 375 | 27.9 | 27.9 | 27.9 |
| | 1.00 | 9 | .7 | .7 | 28.6 |
| | 2.00 | 14 | 1.0 | 1.0 | 29.6 |
| | 2.50 | 4 | .3 | .3 | 29.9 |
| | 2.70 | 2 | .1 | .1 | 30.1 |
| | 3.00 | 40 | 3.0 | 3.0 | 33.0 |
| | 3.50 | 3 | .2 | .2 | 33.3 |
| | 4.00 | 32 | 2.4 | 2.4 | 35.6 |
| | 4.50 | 7 | .5 | .5 | 36.2 |
| | 4.60 | 1 | .1 | .1 | 36.2 |
| | 5.00 | 66 | 4.9 | 4.9 | 41.1 |
| | 5.10 | 1 | .1 | .1 | 41.2 |
| | 5.20 | 5 | .4 | .4 | 41.6 |
| | 5.25 | 1 | .1 | .1 | 41.7 |
| | 5.30 | 3 | .2 | .2 | 41.9 |
| | 5.50 | 58 | 4.3 | 4.3 | 46.2 |
| | 5.66 | 2 | .1 | .1 | 46.4 |
| | 5.70 | 8 | .6 | .6 | 46.9 |
| | 5.75 | 1 | .1 | .1 | 47.0 |
| | 5.80 | 2 | .1 | .1 | 47.2 |
| | 6.00 | 237 | 17.6 | 17.6 | 64.8 |
| | 6.20 | 5 | .4 | .4 | 65.2 |
| | 6.25 | 2 | .1 | .1 | 65.3 |
| | 6.30 | 7 | .5 | .5 | 65.8 |
| | 6.40 | 1 | .1 | .1 | 65.9 |
| | 6.50 | 223 | 16.6 | 16.6 | 82.5 |
| | 6.70 | 9 | .7 | .7 | 83.2 |
| | 6.75 | 3 | .2 | .2 | 83.4 |
| | 7.00 | 136 | 10.1 | 10.1 | 93.5 |
| | 7.10 | 1 | .1 | .1 | 93.6 |
| | 7.20 | 1 | .1 | .1 | 93.7 |
| | 7.50 | 21 | 1.6 | 1.6 | 95.2 |
| | 7.70 | 1 | .1 | .1 | 95.3 |
| | 8.00 | 48 | 3.6 | 3.6 | 98.9 |
| | 8.50 | 3 | .2 | .2 | 99.1 |
| | 9.00 | 6 | .4 | .4 | 99.6 |
| | 9.50 | 2 | .1 | .1 | 99.7 |
| | 10.00 | 2 | .1 | .1 | 99.9 |
| | 12.00 | 1 | .1 | .1 | 99.9 |
| | 15.50 | 1 | .1 | .1 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(40) NUMBER OF HOURS SCHOOL ATTENDED ON SATURDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 1291 | 96.1 | 96.1 | 96.1 |
| | 2.00 | 2 | .1 | .1 | 96.2 |
| | 2.50 | 8 | .6 | .6 | 96.8 |
| | 3.00 | 6 | .4 | .4 | 97.2 |
| | 4.00 | 4 | .3 | .3 | 97.5 |
| | 4.50 | 1 | .1 | .1 | 97.6 |
| | 5.00 | 6 | .4 | .4 | 98.1 |
| | 5.50 | 1 | .1 | .1 | 98.1 |
| | 6.00 | 8 | .6 | .6 | 98.7 |
| | 6.50 | 5 | .4 | .4 | 99.1 |
| | 6.75 | 1 | .1 | .1 | 99.2 |
| | 7.00 | 4 | .3 | .3 | 99.5 |
| | 7.50 | 2 | .1 | .1 | 99.6 |
| | 8.00 | 3 | .2 | .2 | 99.9 |
| | 12.00 | 1 | .1 | .1 | 99.9 |
| | 15.50 | 1 | .1 | .1 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(41) NUMBER OF HOURS SCHOOL ATTENDED ON SUNDAY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 0.00 | 1315 | 97.8 | 97.8 | 97.8 |
| | 1.00 | 1 | .1 | .1 | 97.9 |
| | 2.00 | 1 | .1 | .1 | 98.0 |
| | 3.50 | 1 | .1 | .1 | 98.1 |
| | 4.00 | 3 | .2 | .2 | 98.3 |
| | 4.50 | 2 | .1 | .1 | 98.4 |
| | 5.00 | 3 | .2 | .2 | 98.7 |
| | 5.50 | 1 | .1 | .1 | 98.7 |
| | 6.00 | 4 | .3 | .3 | 99.0 |
| | 6.50 | 6 | .4 | .4 | 99.5 |
| | 6.75 | 1 | .1 | .1 | 99.6 |
| | 7.00 | 2 | .1 | .1 | 99.7 |
| | 8.00 | 1 | .1 | .1 | 99.8 |
| | 9.50 | 1 | .1 | .1 | 99.9 |
| | 12.00 | 2 | .1 | .1 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(42) MODE OF TRAVEL TO SCHOOL

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 11 | .8 | .8 | .8 |
| DRIVER | 1 | 244 | 18.2 | 18.2 | 19.0 |
| PASSENGER | 2 | 85 | 6.3 | 6.3 | 25.3 |
| TRANSIT/SCHOOL BUS | 3 | 468 | 34.8 | 34.8 | 60.1 |
| PRIVATE & PUBLIC TRANSIT | 4 | 30 | 2.2 | 2.2 | 62.4 |
| WALK | 5 | 459 | 34.2 | 34.2 | 96.5 |
| OTHER | 6 | 28 | 2.1 | 2.1 | 98.6 |
| INVALID | 9 | 19 | 1.4 | 1.4 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(43) VEHICLE AVAILABILITY FOR SCHOOL

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 11 | .8 | .8 | .8 |
| ALLWAYS AVAILABLE | 1 | 254 | 18.9 | 18.9 | 19.7 |
| USUALLY AVAILABLE | 2 | 61 | 4.5 | 4.5 | 24.3 |
| SOMETIMES AVAILABLE | 3 | 89 | 6.6 | 6.6 | 30.9 |
| RARELY AVAILABLE | 4 | 82 | 6.1 | 6.1 | 37.0 |
| NEVER AVAILABLE | 5 | 826 | 61.5 | 61.5 | 98.4 |
| INVALID | 9 | 21 | 1.6 | 1.6 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(44) TRANSIT AVAILABILITY FOR SCHOOL

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 11 | .8 | .8 | .8 |
| ALLWAYS AVAILABLE | 1 | 744 | 55.4 | 55.4 | 56.2 |
| USUALLY AVAILABLE | 2 | 45 | 3.3 | 3.3 | 59.5 |
| NEVER AVAILABLE | 3 | 397 | 29.5 | 29.5 | 89.1 |
| DON'T KNOW | 4 | 109 | 8.1 | 8.1 | 97.2 |
| INVAILD | 9 | 38 | 2.8 | 2.8 | 100.0 |
| | TOTAL | 1344 | 100.0 | 100.0 | |

(45) SEX

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 595 | 9.2 | 9.2 | 9.2 |
| FEMALE | F | 3082 | 47.4 | 47.4 | 56.6 |
| MALE | M | 2823 | 43.4 | 43.4 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(46) AGE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 706 | 10.9 | 10.9 | 10.9 |
| | 06 | 70 | 1.1 | 1.1 | 11.9 |
| | 07 | 64 | 1.0 | 1.0 | 12.9 |
| | 08 | 57 | .9 | .9 | 13.8 |
| | 09 | 57 | .9 | .9 | 14.7 |
| | 10 | 57 | .9 | .9 | 15.6 |
| | 11 | 61 | .9 | .9 | 16.5 |
| | 12 | 75 | 1.2 | 1.2 | 17.6 |
| | 13 | 71 | 1.1 | 1.1 | 18.7 |
| | 14 | 61 | .9 | .9 | 19.7 |
| | 15 | 70 | 1.1 | 1.1 | 20.8 |
| | 16 | 93 | 1.4 | 1.4 | 22.2 |
| | 17 | 68 | 1.0 | 1.0 | 23.2 |
| | 18 | 66 | 1.0 | 1.0 | 24.2 |
| | 19 | 55 | .8 | .8 | 25.1 |
| | 20 | 74 | 1.1 | 1.1 | 26.2 |
| | 21 | 80 | 1.2 | 1.2 | 27.5 |
| | 22 | 81 | 1.2 | 1.2 | 28.7 |
| | 23 | 97 | 1.5 | 1.5 | 30.2 |
| | 24 | 94 | 1.4 | 1.4 | 31.6 |
| | 25 | 128 | 2.0 | 2.0 | 33.6 |
| | 26 | 116 | 1.8 | 1.8 | 35.4 |
| | 27 | 111 | 1.7 | 1.7 | 37.1 |
| | 28 | 129 | 2.0 | 2.0 | 39.1 |
| | 29 | 116 | 1.8 | 1.8 | 40.9 |
| | 30 | 130 | 2.0 | 2.0 | 42.9 |
| | 31 | 109 | 1.7 | 1.7 | 44.6 |
| | 32 | 129 | 2.0 | 2.0 | 46.5 |
| | 33 | 124 | 1.9 | 1.9 | 48.4 |
| | 34 | 118 | 1.8 | 1.8 | 50.3 |
| | 35 | 131 | 2.0 | 2.0 | 52.3 |
| | 36 | 106 | 1.6 | 1.6 | 53.9 |
| | 37 | 114 | 1.8 | 1.8 | 55.7 |
| | 38 | 122 | 1.9 | 1.9 | 57.5 |
| | 39 | 92 | 1.4 | 1.4 | 59.0 |
| | 40 | 139 | 2.1 | 2.1 | 61.1 |
| | 41 | 62 | 1.0 | 1.0 | 62.0 |
| | 42 | 89 | 1.4 | 1.4 | 63.4 |
| | 43 | 81 | 1.2 | 1.2 | 64.7 |
| | 44 | 85 | 1.3 | 1.3 | 66.0 |
| | 45 | 75 | 1.2 | 1.2 | 67.1 |
| | 46 | 69 | 1.1 | 1.1 | 68.2 |
| | 47 | 72 | 1.1 | 1.1 | 69.3 |
| | 48 | 69 | 1.1 | 1.1 | 70.4 |
| | 49 | 65 | 1.0 | 1.0 | 71.4 |
| | 50 | 75 | 1.2 | 1.2 | 72.5 |
| | 51 | 58 | .9 | .9 | 73.4 |
| | 52 | 63 | 1.0 | 1.0 | 74.4 |
| | 53 | 85 | 1.3 | 1.3 | 75.7 |
| | 54 | 75 | 1.2 | 1.2 | 76.8 |
| | 55 | 71 | 1.1 | 1.1 | 77.9 |
| | 56 | 92 | 1.4 | 1.4 | 79.3 |
| | 57 | 69 | 1.1 | 1.1 | 80.4 |
| | 58 | 85 | 1.3 | 1.3 | 81.7 |
| | 59 | 69 | 1.1 | 1.1 | 82.8 |
| | 60 | 80 | 1.2 | 1.2 | 84.0 |
| | 61 | 85 | 1.3 | 1.3 | 85.3 |
| | 62 | 78 | 1.2 | 1.2 | 86.5 |
| | 63 | 78 | 1.2 | 1.2 | 87.7 |
| | 64 | 83 | 1.3 | 1.3 | 89.0 |

(46) AGE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 65 | 80 | 1.2 | 1.2 | 90.2 |
| | 66 | 59 | .9 | .9 | 91.1 |
| | 67 | 69 | 1.1 | 1.1 | 92.2 |
| | 68 | 38 | .6 | .6 | 92.8 |
| | 69 | 39 | .6 | .6 | 93.4 |
| | 70 | 52 | .8 | .8 | 94.2 |
| | 71 | 31 | .5 | .5 | 94.6 |
| | 72 | 45 | .7 | .7 | 95.3 |
| | 73 | 39 | .6 | .6 | 95.9 |
| | 74 | 33 | .5 | .5 | 96.4 |
| | 75 | 37 | .6 | .6 | 97.0 |
| | 76 | 30 | .5 | .5 | 97.5 |
| | 77 | 22 | .3 | .3 | 97.8 |
| | 78 | 20 | .3 | .3 | 98.1 |
| | 79 | 23 | .4 | .4 | 98.5 |
| | 80 | 20 | .3 | .3 | 98.8 |
| | 81 | 16 | .2 | .2 | 99.0 |
| | 82 | 14 | .2 | .2 | 99.2 |
| | 83 | 13 | .2 | .2 | 99.4 |
| | 84 | 8 | .1 | .1 | 99.6 |
| | 85 | 7 | .1 | .1 | 99.7 |
| | 86 | 9 | .1 | .1 | 99.8 |
| | 87 | 3 | .0 | .0 | 99.9 |
| | 88 | 1 | .0 | .0 | 99.9 |
| | 89 | 2 | .0 | .0 | 99.9 |
| | 90 | 1 | .0 | .0 | 99.9 |
| | 91 | 2 | .0 | .0 | 100.0 |
| | 92 | 1 | .0 | .0 | 100.0 |
| | 97 | 2 | .0 | .0 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(47) LICENSE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 665 | 10.2 | 10.2 | 10.2 |
| NO DRIVER LICENSE | N | 1712 | 26.3 | 26.3 | 36.6 |
| HAS DRIVER LICENSE | Y | 4123 | 63.4 | 63.4 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(48) DWELLING TYPE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 604 | 9.3 | 9.3 | 9.3 |
| SINGLE-DETACHED | 1 | 3338 | 51.4 | 51.4 | 60.6 |
| SEMI-DETACHED | 2 | 550 | 8.5 | 8.5 | 69.1 |
| TOWN/ROW HOUSE | 3 | 428 | 6.6 | 6.6 | 75.7 |
| APARTMENT | 4 | 1525 | 23.5 | 23.5 | 99.2 |
| OTHER | 5 | 55 | .8 | .8 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(49) PERSONAL INCOME

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 915 | 14.1 | 14.1 | 14.1 |
| NO INCOME | 01 | 1129 | 17.4 | 17.4 | 31.4 |
| LESS THAN $5,000 | 02 | 551 | 8.5 | 8.5 | 39.9 |
| $5,000 - $9,999 | 03 | 504 | 7.8 | 7.8 | 47.7 |
| $10,000 - $14,999 | 04 | 512 | 7.9 | 7.9 | 55.6 |
| $15,000 - $19,999 | 05 | 596 | 9.2 | 9.2 | 64.7 |
| $20,000 - $24,999 | 06 | 549 | 8.4 | 8.4 | 73.2 |
| $25,000 - $29,999 | 07 | 456 | 7.0 | 7.0 | 80.2 |
| $30,000 - $34,999 | 08 | 417 | 6.4 | 6.4 | 86.6 |
| $35,000 - $39,999 | 09 | 278 | 4.3 | 4.3 | 90.9 |
| $40,000 - $44,999 | 10 | 199 | 3.1 | 3.1 | 93.9 |
| $45,000 - $49,999 | 11 | 125 | 1.9 | 1.9 | 95.9 |
| $50,000 - $54,999 | 12 | 80 | 1.2 | 1.2 | 97.1 |
| $55,000 - $59,999 | 13 | 40 | .6 | .6 | 97.7 |
| $60,000 AND OVER | 14 | 149 | 2.3 | 2.3 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

(50) NUMBER OF RESPONDENTS WHO RESPONDEND TO THE TELEPHONE SURVEY

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| UNKNOWN | | 38 | .6 | .6 | .6 |
| NON RESPONDENTS | N | 3672 | 56.5 | 56.5 | 57.1 |
| RESPONDENTS | Y | 2790 | 42.9 | 42.9 | 100.0 |
| | TOTAL | 6500 | 100.0 | 100.0 | |

## TDS TRIP TABULATIONS

The following tabulations are "Number of Trips" stratified by various trip characteristics. The "value" represents the survey responses. The "frequency" figures are the actual (unexpanded) number of Trip records in the TDS Trip file.

**(1) TRIP START TIME**

| Value Label | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| INVALID | 11 | .1 | .1 | .1 |
| 0400 - 0429 | 10 | .1 | .1 | .1 |
| 0430 - 0459 | 8 | .0 | .0 | .2 |
| 0500 - 0529 | 27 | .2 | .2 | .3 |
| 0530 - 0559 | 83 | .5 | .5 | .8 |
| 0600 - 0629 | 230 | 1.3 | 1.3 | 2.1 |
| 0630 - 0659 | 372 | 2.2 | 2.2 | 4.3 |
| 0700 - 0729 | 587 | 3.4 | 3.4 | 7.7 |
| 0730 - 0759 | 789 | 4.6 | 4.6 | 12.2 |
| 0800 - 0829 | 960 | 5.5 | 5.5 | 17.8 |
| 0830 - 0859 | 813 | 4.7 | 4.7 | 22.5 |
| 0900 - 0929 | 342 | 2.0 | 2.0 | 24.4 |
| 0930 - 0959 | 284 | 1.6 | 1.6 | 26.1 |
| 1000 - 1029 | 391 | 2.3 | 2.3 | 28.4 |
| 1030 - 1059 | 325 | 1.9 | 1.9 | 30.2 |
| 1100 - 1129 | 412 | 2.4 | 2.4 | 32.6 |
| 1130 - 1159 | 449 | 2.6 | 2.6 | 35.2 |
| 1200 - 1229 | 519 | 3.0 | 3.0 | 38.2 |
| 1230 - 1259 | 520 | 3.0 | 3.0 | 41.2 |
| 1300 - 1329 | 463 | 2.7 | 2.7 | 43.9 |
| 1330 - 1359 | 413 | 2.4 | 2.4 | 46.3 |
| 1400 - 1429 | 385 | 2.2 | 2.2 | 48.5 |
| 1430 - 1459 | 337 | 1.9 | 1.9 | 50.4 |
| 1500 - 1529 | 720 | 4.2 | 4.2 | 54.6 |
| 1530 - 1559 | 943 | 5.5 | 5.5 | 60.1 |
| 1600 - 1629 | 834 | 4.8 | 4.8 | 64.9 |
| 1630 - 1659 | 843 | 4.9 | 4.9 | 69.8 |
| 1700 - 1729 | 933 | 5.4 | 5.4 | 75.1 |
| 1730 - 1759 | 587 | 3.4 | 3.4 | 78.5 |
| 1800 - 1829 | 607 | 3.5 | 3.5 | 82.0 |
| 1830 - 1859 | 490 | 2.8 | 2.8 | 84.9 |
| 1900 - 1929 | 483 | 2.8 | 2.8 | 87.7 |
| 1930 - 1959 | 336 | 1.9 | 1.9 | 89.6 |
| 2000 - 2029 | 334 | 1.9 | 1.9 | 91.5 |
| 2030 - 2059 | 254 | 1.5 | 1.5 | 93.0 |
| 2100 - 2129 | 302 | 1.7 | 1.7 | 94.8 |
| 2130 - 2159 | 209 | 1.2 | 1.2 | 96.0 |
| 2200 - 2229 | 190 | 1.1 | 1.1 | 97.1 |
| 2230 - 2259 | 147 | .8 | .8 | 97.9 |
| 2300 - 2329 | 135 | .8 | .8 | 98.7 |
| 2330 - 2359 | 72 | .4 | .4 | 99.1 |
| 2400 - 2429 | 50 | .3 | .3 | 99.4 |
| 2430 - 2459 | 32 | .2 | .2 | 99.6 |
| 2500 - 2529 | 30 | .2 | .2 | 99.8 |
| 2600 - 2629 | 13 | .1 | .1 | 99.8 |
| 2630 - 2659 | 18 | .1 | .1 | 99.9 |
| 2700 - 2729 | 7 | .0 | .0 | 99.9 |
| 2730 - 2759 | 3 | .0 | .0 | 100.0 |
| TOTAL | 17301 | 100.0 | 100.0 | |

(2) TRIP END TIME

| Value Label | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|
| INVALID | 33 | .2 | .2 | .2 |
| 0400 - 0429 | 5 | .0 | .0 | .2 |
| 0430 - 0459 | 4 | .0 | .0 | .2 |
| 0500 - 0529 | 13 | .1 | .1 | .3 |
| 0530 - 0559 | 27 | .2 | .2 | .5 |
| 0600 - 0629 | 90 | .5 | .5 | 1.0 |
| 0630 - 0659 | 247 | 1.4 | 1.4 | 2.4 |
| 0700 - 0729 | 359 | 2.1 | 2.1 | 4.5 |
| 0730 - 0759 | 608 | 3.5 | 3.5 | 8.0 |
| 0800 - 0829 | 899 | 5.2 | 5.2 | 13.2 |
| 0830 - 0859 | 1217 | 7.0 | 7.0 | 20.2 |
| 0900 - 0929 | 519 | 3.0 | 3.0 | 23.2 |
| 0930 - 0959 | 310 | 1.8 | 1.8 | 25.0 |
| 1000 - 1029 | 358 | 2.1 | 2.1 | 27.1 |
| 1030 - 1059 | 341 | 2.0 | 2.0 | 29.1 |
| 1100 - 1129 | 400 | 2.3 | 2.3 | 31.4 |
| 1130 - 1159 | 409 | 2.4 | 2.4 | 33.7 |
| 1200 - 1229 | 566 | 3.3 | 3.3 | 37.0 |
| 1230 - 1259 | 472 | 2.7 | 2.7 | 39.7 |
| 1300 - 1329 | 500 | 2.9 | 2.9 | 42.6 |
| 1330 - 1359 | 387 | 2.2 | 2.2 | 44.9 |
| 1400 - 1429 | 396 | 2.3 | 2.3 | 47.2 |
| 1430 - 1459 | 300 | 1.7 | 1.7 | 48.9 |
| 1500 - 1529 | 479 | 2.8 | 2.8 | 51.7 |
| 1530 - 1559 | 838 | 4.8 | 4.8 | 56.5 |
| 1600 - 1629 | 903 | 5.2 | 5.2 | 61.7 |
| 1630 - 1659 | 694 | 4.0 | 4.0 | 65.7 |
| 1700 - 1729 | 880 | 5.1 | 5.1 | 70.8 |
| 1730 - 1759 | 827 | 4.8 | 4.8 | 75.6 |
| 1800 - 1829 | 692 | 4.0 | 4.0 | 79.6 |
| 1830 - 1859 | 612 | 3.5 | 3.5 | 83.1 |
| 1900 - 1929 | 514 | 3.0 | 3.0 | 86.1 |
| 1930 - 1959 | 417 | 2.4 | 2.4 | 88.5 |
| 2000 - 2029 | 343 | 2.0 | 2.0 | 90.5 |
| 2030 - 2059 | 280 | 1.6 | 1.6 | 92.1 |
| 2100 - 2129 | 293 | 1.7 | 1.7 | 93.8 |
| 2130 - 2159 | 222 | 1.3 | 1.3 | 95.1 |
| 2200 - 2229 | 224 | 1.3 | 1.3 | 96.4 |
| 2230 - 2259 | 162 | .9 | .9 | 97.3 |
| 2300 - 2329 | 156 | .9 | .9 | 98.2 |
| 2330 - 2359 | 100 | .6 | .6 | 98.8 |
| 2400 - 2429 | 62 | .4 | .4 | 99.2 |
| 2430 - 2459 | 41 | .2 | .2 | 99.4 |
| 2500 - 2529 | 35 | .2 | .2 | 99.6 |
| 2530 - 2559 | 23 | .1 | .1 | 99.7 |
| 2600 - 2629 | 21 | .1 | .1 | 99.8 |
| 2630 - 2659 | 10 | .1 | .1 | 99.9 |
| 2700 - 2729 | 8 | .0 | .0 | 99.9 |
| 2730 - 2759 | 2 | .0 | .0 | 99.9 |
| 2800 | 1 | .0 | .0 | 100.0 |
| TOTAL | 17301 | 100.0 | 100.0 | |

(3) TRIP MODE 1

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| TRANSIT | B | 1813 | 10.5 | 10.5 | 10.5 |
| BICYCLE | C | 47 | .3 | .3 | 10.8 |
| DRIVE | D | 9761 | 56.4 | 56.4 | 67.2 |
| GO TRANSIT | G | 55 | .3 | .3 | 67.5 |
| OTHER | O | 74 | .4 | .4 | 67.9 |
| PASSENGER | P | 2383 | 13.8 | 13.8 | 81.7 |
| SCHOOL BUS | S | 581 | 3.4 | 3.4 | 85.0 |
| TAXI | T | 88 | .5 | .5 | 85.6 |
| VIA RAIL | V | 1 | .0 | .0 | 85.6 |
| WALK | W | 2498 | 14.4 | 14.4 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(4) TRIP MODE 2

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 16030 | 92.7 | 92.7 | 92.7 |
| TRANSIT | B | 434 | 2.5 | 2.5 | 95.2 |
| BICYCLE | C | 4 | .0 | .0 | 95.2 |
| DRIVE | D | 53 | .3 | .3 | 95.5 |
| GO TRANSIT | G | 123 | .7 | .7 | 96.2 |
| MOTORCYCLE | M | 1 | .0 | .0 | 96.2 |
| OTHER | O | 7 | .0 | .0 | 96.2 |
| PASSENGER | P | 26 | .2 | .2 | 96.4 |
| SCHOOL BUS | S | 518 | 3.0 | 3.0 | 99.4 |
| TAXI | T | 19 | .1 | .1 | 99.5 |
| VIA RAIL | V | 4 | .0 | .0 | 99.5 |
| WALK | W | 82 | .5 | .5 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(5) TRIP MODE 3

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 16876 | 97.5 | 97.5 | 97.5 |
| TRANSIT | B | 186 | 1.1 | 1.1 | 98.6 |
| BICYCLE | C | 4 | .0 | .0 | 98.6 |
| DRIVE | D | 32 | .2 | .2 | 98.8 |
| GO TRANSIT | G | 12 | .1 | .1 | 98.9 |
| OTHER | O | 2 | .0 | .0 | 98.9 |
| PASSENGER | P | 12 | .1 | .1 | 99.0 |
| SCHOOL BUS | S | 58 | .3 | .3 | 99.3 |
| TAXI | T | 1 | .0 | .0 | 99.3 |
| WALK | W | 118 | .7 | .7 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(6) TRIP MODE 4

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| NO RESPONSE | | 17252 | 99.7 | 99.7 | 99.7 |
| TRANSIT | B | 20 | .1 | .1 | 99.8 |
| DRIVE | D | 1 | .0 | .0 | 99.8 |
| OTHER | O | 1 | .0 | .0 | 99.8 |
| PASSENGER | P | 5 | .0 | .0 | 99.9 |
| SCHOOL BUS | S | 2 | .0 | .0 | 99.9 |
| WALK | W | 20 | .1 | .1 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(7) ORIGIN TRIP PURPOSE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ENTERTAINMENT | E | 1560 | 9.0 | 9.0 | 9.4 |
| SERVE PASSENGER | F | 687 | 4.0 | 4.0 | 13.4 |
| HOME | H | 6789 | 39.2 | 39.2 | 52.6 |
| SHOPPING | M | 1581 | 9.1 | 9.1 | 61.7 |
| OTHER | O | 127 | .8 | .8 | 62.5 |
| PERSONAL BUSINESS | P | 1613 | 9.3 | 9.3 | 71.8 |
| SCHOOL | S | 1173 | 6.8 | 6.8 | 78.6 |
| WORK | W | 3771 | 21.8 | 21.8 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(8) DESTINATION TRIP PURPOSE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| ENTERTAINMENT | E | 1638 | 9.5 | 9.5 | 9.5 |
| SERVE PASSENGER | F | 692 | 4.0 | 4.0 | 13.5 |
| HOME | H | 6600 | 38.1 | 38.1 | 51.6 |
| SHOPPING | M | 1605 | 9.3 | 9.3 | 60.9 |
| OTHER | O | 68 | .4 | .4 | 61.3 |
| PERSONAL BUSINESS | P | 1661 | 9.6 | 9.6 | 70.9 |
| SCHOOL | S | 1186 | 6.9 | 6.9 | 77.7 |
| WORK | W | 3851 | 22.3 | 22.3 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 13 | .1 | .1 | .1 |
| | 2 | 37 | .2 | .2 | .3 |
| | 3 | 6 | .0 | .0 | .3 |
| | 4 | 33 | .2 | .2 | .5 |
| | 5 | 38 | .2 | .2 | .7 |
| | 6 | 11 | .1 | .1 | .8 |
| | 7 | 56 | .3 | .3 | 1.1 |
| | 8 | 20 | .1 | .1 | 1.2 |
| | 9 | 66 | .4 | .4 | 1.6 |
| | 10 | 36 | .2 | .2 | 1.8 |
| | 11 | 50 | .3 | .3 | 2.1 |
| | 12 | 73 | .4 | .4 | 2.5 |
| | 13 | 11 | .1 | .1 | 2.6 |
| | 14 | 11 | .1 | .1 | 2.7 |
| | 15 | 20 | .1 | .1 | 2.8 |
| | 16 | 62 | .4 | .4 | 3.1 |
| | 17 | 57 | .3 | .3 | 3.5 |
| | 18 | 28 | .2 | .2 | 3.6 |
| | 19 | 55 | .3 | .3 | 4.0 |
| | 20 | 16 | .1 | .1 | 4.0 |
| | 21 | 10 | .1 | .1 | 4.1 |
| | 22 | 1 | .0 | .0 | 4.1 |
| | 23 | 7 | .0 | .0 | 4.2 |
| | 24 | 17 | .1 | .1 | 4.2 |
| | 25 | 16 | .1 | .1 | 4.3 |
| | 26 | 86 | .5 | .5 | 4.8 |
| | 27 | 22 | .1 | .1 | 5.0 |
| | 28 | 36 | .2 | .2 | 5.2 |
| | 29 | 28 | .2 | .2 | 5.3 |
| | 30 | 14 | .1 | .1 | 5.4 |
| | 31 | 18 | .1 | .1 | 5.5 |
| | 32 | 45 | .3 | .3 | 5.8 |
| | 33 | 150 | .9 | .9 | 6.6 |
| | 34 | 48 | .3 | .3 | 6.9 |
| | 35 | 62 | .4 | .4 | 7.3 |
| | 36 | 36 | .2 | .2 | 7.5 |
| | 37 | 7 | .0 | .0 | 7.5 |
| | 38 | 11 | .1 | .1 | 7.6 |
| | 39 | 17 | .1 | .1 | 7.7 |
| | 40 | 14 | .1 | .1 | 7.8 |
| | 41 | 11 | .1 | .1 | 7.8 |
| | 43 | 4 | .0 | .0 | 7.9 |
| | 44 | 10 | .1 | .1 | 7.9 |
| | 45 | 4 | .0 | .0 | 7.9 |
| | 47 | 14 | .1 | .1 | 8.0 |
| | 48 | 3 | .0 | .0 | 8.0 |
| | 49 | 6 | .0 | .0 | 8.1 |
| | 50 | 1 | .0 | .0 | 8.1 |
| | 51 | 7 | .0 | .0 | 8.1 |
| | 52 | 7 | .0 | .0 | 8.2 |
| | 53 | 6 | .0 | .0 | 8.2 |
| | 54 | 2 | .0 | .0 | 8.2 |
| | 55 | 12 | .1 | .1 | 8.3 |
| | 56 | 16 | .1 | .1 | 8.4 |
| | 57 | 23 | .1 | .1 | 8.5 |
| | 58 | 13 | .1 | .1 | 8.6 |
| | 59 | 2 | .0 | .0 | 8.6 |
| | 60 | 14 | .1 | .1 | 8.7 |
| | 61 | 11 | .1 | .1 | 8.7 |
| | 62 | 8 | .0 | .0 | 8.8 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 63 | 6 | .0 | .0 | 8.8 |
| | 64 | 20 | .1 | .1 | 8.9 |
| | 65 | 23 | .1 | .1 | 9.1 |
| | 66 | 21 | .1 | .1 | 9.2 |
| | 67 | 12 | .1 | .1 | 9.3 |
| | 68 | 2 | .0 | .0 | 9.3 |
| | 69 | 26 | .2 | .2 | 9.4 |
| | 70 | 2 | .0 | .0 | 9.4 |
| | 71 | 4 | .0 | .0 | 9.5 |
| | 72 | 18 | .1 | .1 | 9.6 |
| | 73 | 13 | .1 | .1 | 9.6 |
| | 74 | 9 | .1 | .1 | 9.7 |
| | 75 | 2 | .0 | .0 | 9.7 |
| | 76 | 3 | .0 | .0 | 9.7 |
| | 77 | 13 | .1 | .1 | 9.8 |
| | 78 | 8 | .0 | .0 | 9.8 |
| | 79 | 9 | .1 | .1 | 9.9 |
| | 80 | 3 | .0 | .0 | 9.9 |
| | 81 | 42 | .2 | .2 | 10.1 |
| | 82 | 2 | .0 | .0 | 10.2 |
| | 83 | 2 | .0 | .0 | 10.2 |
| | 84 | 29 | .2 | .2 | 10.3 |
| | 85 | 4 | .0 | .0 | 10.4 |
| | 86 | 8 | .0 | .0 | 10.4 |
| | 87 | 40 | .2 | .2 | 10.6 |
| | 88 | 15 | .1 | .1 | 10.7 |
| | 89 | 33 | .2 | .2 | 10.9 |
| | 90 | 4 | .0 | .0 | 10.9 |
| | 91 | 15 | .1 | .1 | 11.0 |
| | 92 | 14 | .1 | .1 | 11.1 |
| | 93 | 18 | .1 | .1 | 11.2 |
| | 94 | 19 | .1 | .1 | 11.3 |
| | 95 | 6 | .0 | .0 | 11.4 |
| | 96 | 2 | .0 | .0 | 11.4 |
| | 97 | 17 | .1 | .1 | 11.5 |
| | 98 | 9 | .1 | .1 | 11.5 |
| | 99 | 10 | .1 | .1 | 11.6 |
| | 100 | 12 | .1 | .1 | 11.6 |
| | 101 | 8 | .0 | .0 | 11.7 |
| | 102 | 7 | .0 | .0 | 11.7 |
| | 103 | 2 | .0 | .0 | 11.7 |
| | 104 | 3 | .0 | .0 | 11.8 |
| | 105 | 4 | .0 | .0 | 11.8 |
| | 106 | 16 | .1 | .1 | 11.9 |
| | 107 | 1 | .0 | .0 | 11.9 |
| | 108 | 8 | .0 | .0 | 11.9 |
| | 109 | 3 | .0 | .0 | 11.9 |
| | 110 | 30 | .2 | .2 | 12.1 |
| | 111 | 16 | .1 | .1 | 12.2 |
| | 112 | 8 | .0 | .0 | 12.3 |
| | 113 | 5 | .0 | .0 | 12.3 |
| | 114 | 7 | .0 | .0 | 12.3 |
| | 115 | 4 | .0 | .0 | 12.3 |
| | 116 | 11 | .1 | .1 | 12.4 |
| | 117 | 20 | .1 | .1 | 12.5 |
| | 118 | 11 | .1 | .1 | 12.6 |
| | 119 | 12 | .1 | .1 | 12.7 |
| | 120 | 2 | .0 | .0 | 12.7 |
| | 121 | 8 | .0 | .0 | 12.7 |
| | 122 | 5 | .0 | .0 | 12.7 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 123 | 22 | .1 | .1 | 12.9 |
| | 124 | 4 | .0 | .0 | 12.9 |
| | 125 | 8 | .0 | .0 | 12.9 |
| | 126 | 16 | .1 | .1 | 13.0 |
| | 127 | 27 | .2 | .2 | 13.2 |
| | 128 | 8 | .0 | .0 | 13.2 |
| | 129 | 36 | .2 | .2 | 13.4 |
| | 130 | 16 | .1 | .1 | 13.5 |
| | 131 | 14 | .1 | .1 | 13.6 |
| | 132 | 5 | .0 | .0 | 13.6 |
| | 133 | 14 | .1 | .1 | 13.7 |
| | 134 | 5 | .0 | .0 | 13.8 |
| | 135 | 2 | .0 | .0 | 13.8 |
| | 136 | 5 | .0 | .0 | 13.8 |
| | 137 | 7 | .0 | .0 | 13.8 |
| | 138 | 5 | .0 | .0 | 13.9 |
| | 139 | 31 | .2 | .2 | 14.0 |
| | 140 | 49 | .3 | .3 | 14.3 |
| | 141 | 18 | .1 | .1 | 14.4 |
| | 142 | 24 | .1 | .1 | 14.6 |
| | 143 | 10 | .1 | .1 | 14.6 |
| | 144 | 28 | .2 | .2 | 14.8 |
| | 145 | 26 | .2 | .2 | 14.9 |
| | 146 | 28 | .2 | .2 | 15.1 |
| | 147 | 51 | .3 | .3 | 15.4 |
| | 148 | 18 | .1 | .1 | 15.5 |
| | 149 | 4 | .0 | .0 | 15.5 |
| | 150 | 9 | .1 | .1 | 15.6 |
| | 151 | 23 | .1 | .1 | 15.7 |
| | 153 | 4 | .0 | .0 | 15.7 |
| | 154 | 6 | .0 | .0 | 15.8 |
| | 155 | 12 | .1 | .1 | 15.8 |
| | 156 | 42 | .2 | .2 | 16.1 |
| | 157 | 23 | .1 | .1 | 16.2 |
| | 158 | 7 | .0 | .0 | 16.3 |
| | 159 | 6 | .0 | .0 | 16.3 |
| | 160 | 6 | .0 | .0 | 16.3 |
| | 161 | 17 | .1 | .1 | 16.4 |
| | 162 | 13 | .1 | .1 | 16.5 |
| | 163 | 18 | .1 | .1 | 16.6 |
| | 164 | 18 | .1 | .1 | 16.7 |
| | 165 | 2 | .0 | .0 | 16.7 |
| | 166 | 24 | .1 | .1 | 16.9 |
| | 167 | 10 | .1 | .1 | 16.9 |
| | 168 | 41 | .2 | .2 | 17.1 |
| | 169 | 10 | .1 | .1 | 17.2 |
| | 170 | 1 | .0 | .0 | 17.2 |
| | 171 | 16 | .1 | .1 | 17.3 |
| | 173 | 34 | .2 | .2 | 17.5 |
| | 174 | 43 | .2 | .2 | 17.8 |
| | 175 | 23 | .1 | .1 | 17.9 |
| | 176 | 15 | .1 | .1 | 18.0 |
| | 177 | 40 | .2 | .2 | 18.2 |
| | 178 | 3 | .0 | .0 | 18.2 |
| | 179 | 34 | .2 | .2 | 18.4 |
| | 180 | 14 | .1 | .1 | 18.5 |
| | 181 | 18 | .1 | .1 | 18.6 |
| | 182 | 4 | .0 | .0 | 18.6 |
| | 183 | 27 | .2 | .2 | 18.8 |
| | 184 | 14 | .1 | .1 | 18.9 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 185 | 3 | .0 | .0 | 18.9 |
| | 186 | 21 | .1 | .1 | 19.0 |
| | 187 | 30 | .2 | .2 | 19.2 |
| | 188 | 17 | .1 | .1 | 19.3 |
| | 189 | 17 | .1 | .1 | 19.4 |
| | 190 | 32 | .2 | .2 | 19.6 |
| | 191 | 6 | .0 | .0 | 19.6 |
| | 192 | 16 | .1 | .1 | 19.7 |
| | 193 | 14 | .1 | .1 | 19.8 |
| | 194 | 6 | .0 | .0 | 19.8 |
| | 195 | 16 | .1 | .1 | 19.9 |
| | 196 | 7 | .0 | .0 | 19.9 |
| | 197 | 14 | .1 | .1 | 20.0 |
| | 198 | 20 | .1 | .1 | 20.1 |
| | 199 | 1 | .0 | .0 | 20.1 |
| | 200 | 17 | .1 | .1 | 20.2 |
| | 201 | 6 | .0 | .0 | 20.3 |
| | 202 | 28 | .2 | .2 | 20.4 |
| | 203 | 8 | .0 | .0 | 20.5 |
| | 204 | 7 | .0 | .0 | 20.5 |
| | 205 | 18 | .1 | .1 | 20.6 |
| | 206 | 2 | .0 | .0 | 20.6 |
| | 207 | 14 | .1 | .1 | 20.7 |
| | 208 | 28 | .2 | .2 | 20.9 |
| | 209 | 16 | .1 | .1 | 21.0 |
| | 210 | 5 | .0 | .0 | 21.0 |
| | 211 | 12 | .1 | .1 | 21.1 |
| | 212 | 12 | .1 | .1 | 21.1 |
| | 213 | 22 | .1 | .1 | 21.3 |
| | 214 | 9 | .1 | .1 | 21.3 |
| | 215 | 8 | .0 | .0 | 21.4 |
| | 216 | 9 | .1 | .1 | 21.4 |
| | 217 | 15 | .1 | .1 | 21.5 |
| | 218 | 4 | .0 | .0 | 21.5 |
| | 219 | 8 | .0 | .0 | 21.6 |
| | 220 | 10 | .1 | .1 | 21.6 |
| | 221 | 9 | .1 | .1 | 21.7 |
| | 222 | 9 | .1 | .1 | 21.7 |
| | 223 | 12 | .1 | .1 | 21.8 |
| | 224 | 25 | .1 | .1 | 21.9 |
| | 225 | 25 | .1 | .1 | 22.1 |
| | 226 | 17 | .1 | .1 | 22.2 |
| | 227 | 4 | .0 | .0 | 22.2 |
| | 228 | 15 | .1 | .1 | 22.3 |
| | 229 | 8 | .0 | .0 | 22.3 |
| | 230 | 12 | .1 | .1 | 22.4 |
| | 231 | 9 | .1 | .1 | 22.5 |
| | 233 | 37 | .2 | .2 | 22.7 |
| | 234 | 14 | .1 | .1 | 22.8 |
| | 236 | 5 | .0 | .0 | 22.8 |
| | 237 | 28 | .2 | .2 | 22.9 |
| | 238 | 44 | .3 | .3 | 23.2 |
| | 239 | 55 | .3 | .3 | 23.5 |
| | 240 | 23 | .1 | .1 | 23.7 |
| | 241 | 35 | .2 | .2 | 23.9 |
| | 242 | 9 | .1 | .1 | 23.9 |
| | 243 | 11 | .1 | .1 | 24.0 |
| | 245 | 5 | .0 | .0 | 24.0 |
| | 246 | 6 | .0 | .0 | 24.0 |
| | 247 | 4 | .0 | .0 | 24.1 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 248 | 10 | .1 | .1 | 24.1 |
| | 249 | 18 | .1 | .1 | 24.2 |
| | 250 | 6 | .0 | .0 | 24.3 |
| | 251 | 39 | .2 | .2 | 24.5 |
| | 252 | 9 | .1 | .1 | 24.5 |
| | 253 | 20 | .1 | .1 | 24.6 |
| | 254 | 36 | .2 | .2 | 24.9 |
| | 255 | 7 | .0 | .0 | 24.9 |
| | 256 | 7 | .0 | .0 | 24.9 |
| | 257 | 6 | .0 | .0 | 25.0 |
| | 258 | 20 | .1 | .1 | 25.1 |
| | 259 | 2 | .0 | .0 | 25.1 |
| | 260 | 12 | .1 | .1 | 25.2 |
| | 261 | 11 | .1 | .1 | 25.2 |
| | 262 | 40 | .2 | .2 | 25.5 |
| | 263 | 7 | .0 | .0 | 25.5 |
| | 264 | 5 | .0 | .0 | 25.5 |
| | 265 | 2 | .0 | .0 | 25.5 |
| | 266 | 12 | .1 | .1 | 25.6 |
| | 267 | 3 | .0 | .0 | 25.6 |
| | 268 | 8 | .0 | .0 | 25.7 |
| | 269 | 9 | .1 | .1 | 25.7 |
| | 270 | 2 | .0 | .0 | 25.7 |
| | 271 | 1 | .0 | .0 | 25.7 |
| | 272 | 24 | .1 | .1 | 25.9 |
| | 273 | 10 | .1 | .1 | 25.9 |
| | 274 | 9 | .1 | .1 | 26.0 |
| | 275 | 18 | .1 | .1 | 26.1 |
| | 276 | 22 | .1 | .1 | 26.2 |
| | 277 | 8 | .0 | .0 | 26.3 |
| | 278 | 7 | .0 | .0 | 26.3 |
| | 279 | 21 | .1 | .1 | 26.4 |
| | 280 | 4 | .0 | .0 | 26.5 |
| | 281 | 69 | .4 | .4 | 26.9 |
| | 282 | 5 | .0 | .0 | 26.9 |
| | 283 | 22 | .1 | .1 | 27.0 |
| | 284 | 15 | .1 | .1 | 27.1 |
| | 285 | 9 | .1 | .1 | 27.1 |
| | 286 | 12 | .1 | .1 | 27.2 |
| | 287 | 27 | .2 | .2 | 27.4 |
| | 288 | 16 | .1 | .1 | 27.5 |
| | 289 | 9 | .1 | .1 | 27.5 |
| | 290 | 22 | .1 | .1 | 27.6 |
| | 291 | 9 | .1 | .1 | 27.7 |
| | 292 | 7 | .0 | .0 | 27.7 |
| | 293 | 25 | .1 | .1 | 27.9 |
| | 294 | 5 | .0 | .0 | 27.9 |
| | 295 | 2 | .0 | .0 | 27.9 |
| | 296 | 3 | .0 | .0 | 27.9 |
| | 298 | 21 | .1 | .1 | 28.1 |
| | 299 | 11 | .1 | .1 | 28.1 |
| | 300 | 26 | .2 | .2 | 28.3 |
| | 301 | 28 | .2 | .2 | 28.4 |
| | 302 | 78 | .5 | .5 | 28.9 |
| | 303 | 37 | .2 | .2 | 29.1 |
| | 304 | 16 | .1 | .1 | 29.2 |
| | 305 | 43 | .2 | .2 | 29.4 |
| | 306 | 35 | .2 | .2 | 29.6 |
| | 307 | 31 | .2 | .2 | 29.8 |
| | 308 | 12 | .1 | .1 | 29.9 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 309 | 9 | .1 | .1 | 29.9 |
| | 310 | 24 | .1 | .1 | 30.1 |
| | 311 | 5 | .0 | .0 | 30.1 |
| | 312 | 15 | .1 | .1 | 30.2 |
| | 313 | 7 | .0 | .0 | 30.2 |
| | 314 | 42 | .2 | .2 | 30.5 |
| | 315 | 22 | .1 | .1 | 30.6 |
| | 316 | 17 | .1 | .1 | 30.7 |
| | 317 | 28 | .2 | .2 | 30.9 |
| | 318 | 20 | .1 | .1 | 31.0 |
| | 319 | 14 | .1 | .1 | 31.1 |
| | 320 | 42 | .2 | .2 | 31.3 |
| | 321 | 27 | .2 | .2 | 31.5 |
| | 322 | 40 | .2 | .2 | 31.7 |
| | 323 | 41 | .2 | .2 | 31.9 |
| | 324 | 21 | .1 | .1 | 32.1 |
| | 325 | 31 | .2 | .2 | 32.2 |
| | 326 | 16 | .1 | .1 | 32.3 |
| | 327 | 24 | .1 | .1 | 32.5 |
| | 328 | 22 | .1 | .1 | 32.6 |
| | 329 | 26 | .2 | .2 | 32.7 |
| | 330 | 18 | .1 | .1 | 32.8 |
| | 331 | 39 | .2 | .2 | 33.1 |
| | 332 | 24 | .1 | .1 | 33.2 |
| | 333 | 43 | .2 | .2 | 33.5 |
| | 334 | 15 | .1 | .1 | 33.5 |
| | 335 | 13 | .1 | .1 | 33.6 |
| | 336 | 13 | .1 | .1 | 33.7 |
| | 337 | 17 | .1 | .1 | 33.8 |
| | 338 | 26 | .2 | .2 | 33.9 |
| | 339 | 27 | .2 | .2 | 34.1 |
| | 340 | 7 | .0 | .0 | 34.1 |
| | 341 | 29 | .2 | .2 | 34.3 |
| | 342 | 11 | .1 | .1 | 34.4 |
| | 343 | 19 | .1 | .1 | 34.5 |
| | 344 | 8 | .0 | .0 | 34.5 |
| | 345 | 18 | .1 | .1 | 34.6 |
| | 346 | 21 | .1 | .1 | 34.8 |
| | 347 | 45 | .3 | .3 | 35.0 |
| | 348 | 11 | .1 | .1 | 35.1 |
| | 349 | 17 | .1 | .1 | 35.2 |
| | 350 | 21 | .1 | .1 | 35.3 |
| | 351 | 12 | .1 | .1 | 35.4 |
| | 352 | 10 | .1 | .1 | 35.4 |
| | 353 | 27 | .2 | .2 | 35.6 |
| | 355 | 5 | .0 | .0 | 35.6 |
| | 356 | 18 | .1 | .1 | 35.7 |
| | 357 | 2 | .0 | .0 | 35.7 |
| | 358 | 15 | .1 | .1 | 35.8 |
| | 359 | 32 | .2 | .2 | 36.0 |
| | 360 | 9 | .1 | .1 | 36.0 |
| | 361 | 8 | .0 | .0 | 36.1 |
| | 362 | 15 | .1 | .1 | 36.2 |
| | 363 | 7 | .0 | .0 | 36.2 |
| | 364 | 14 | .1 | .1 | 36.3 |
| | 365 | 11 | .1 | .1 | 36.4 |
| | 366 | 17 | .1 | .1 | 36.5 |
| | 368 | 5 | .0 | .0 | 36.5 |
| | 369 | 22 | .1 | .1 | 36.6 |
| | 370 | 34 | .2 | .2 | 36.8 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 371 | 9 | .1 | .1 | 36.9 |
| | 372 | 21 | .1 | .1 | 37.0 |
| | 373 | 15 | .1 | .1 | 37.1 |
| | 375 | 3 | .0 | .0 | 37.1 |
| | 376 | 37 | .2 | .2 | 37.3 |
| | 377 | 57 | .3 | .3 | 37.6 |
| | 378 | 10 | .1 | .1 | 37.7 |
| | 379 | 10 | .1 | .1 | 37.8 |
| | 380 | 31 | .2 | .2 | 37.9 |
| | 382 | 2 | .0 | .0 | 37.9 |
| | 383 | 1 | .0 | .0 | 38.0 |
| | 384 | 11 | .1 | .1 | 38.0 |
| | 385 | 1 | .0 | .0 | 38.0 |
| | 387 | 1 | .0 | .0 | 38.0 |
| | 389 | 3 | .0 | .0 | 38.0 |
| | 390 | 33 | .2 | .2 | 38.2 |
| | 391 | 9 | .1 | .1 | 38.3 |
| | 392 | 13 | .1 | .1 | 38.4 |
| | 393 | 1 | .0 | .0 | 38.4 |
| | 394 | 13 | .1 | .1 | 38.4 |
| | 395 | 18 | .1 | .1 | 38.5 |
| | 396 | 13 | .1 | .1 | 38.6 |
| | 397 | 35 | .2 | .2 | 38.8 |
| | 398 | 27 | .2 | .2 | 39.0 |
| | 399 | 44 | .3 | .3 | 39.2 |
| | 400 | 10 | .1 | .1 | 39.3 |
| | 412 | 6 | .0 | .0 | 39.3 |
| | 414 | 7 | .0 | .0 | 39.4 |
| | 415 | 5 | .0 | .0 | 39.4 |
| | 417 | 30 | .2 | .2 | 39.6 |
| | 418 | 7 | .0 | .0 | 39.6 |
| | 419 | 4 | .0 | .0 | 39.6 |
| | 420 | 25 | .1 | .1 | 39.8 |
| | 421 | 31 | .2 | .2 | 40.0 |
| | 422 | 5 | .0 | .0 | 40.0 |
| | 423 | 1 | .0 | .0 | 40.0 |
| | 424 | 2 | .0 | .0 | 40.0 |
| | 425 | 3 | .0 | .0 | 40.0 |
| | 426 | 3 | .0 | .0 | 40.0 |
| | 427 | 57 | .3 | .3 | 40.4 |
| | 428 | 49 | .3 | .3 | 40.7 |
| | 430 | 11 | .1 | .1 | 40.7 |
| | 431 | 1 | .0 | .0 | 40.7 |
| | 434 | 1 | .0 | .0 | 40.7 |
| | 440 | 1 | .0 | .0 | 40.7 |
| | 442 | 1 | .0 | .0 | 40.7 |
| | 443 | 1 | .0 | .0 | 40.7 |
| | 449 | 16 | .1 | .1 | 40.8 |
| | 451 | 3 | .0 | .0 | 40.9 |
| | 452 | 10 | .1 | .1 | 40.9 |
| | 453 | 7 | .0 | .0 | 41.0 |
| | 454 | 2 | .0 | .0 | 41.0 |
| | 456 | 2 | .0 | .0 | 41.0 |
| | 457 | 20 | .1 | .1 | 41.1 |
| | 458 | 17 | .1 | .1 | 41.2 |
| | 460 | 7 | .0 | .0 | 41.2 |
| | 461 | 19 | .1 | .1 | 41.3 |
| | 462 | 11 | .1 | .1 | 41.4 |
| | 464 | 1 | .0 | .0 | 41.4 |
| | 465 | 3 | .0 | .0 | 41.4 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 466 | 2 | .0 | .0 | 41.4 |
| | 468 | 2 | .0 | .0 | 41.4 |
| | 469 | 1 | .0 | .0 | 41.5 |
| | 471 | 1 | .0 | .0 | 41.5 |
| | 472 | 1 | .0 | .0 | 41.5 |
| | 473 | 18 | .1 | .1 | 41.6 |
| | 474 | 13 | .1 | .1 | 41.6 |
| | 475 | 8 | .0 | .0 | 41.7 |
| | 476 | 4 | .0 | .0 | 41.7 |
| | 477 | 4 | .0 | .0 | 41.7 |
| | 478 | 15 | .1 | .1 | 41.8 |
| | 479 | 11 | .1 | .1 | 41.9 |
| | 480 | 8 | .0 | .0 | 41.9 |
| | 481 | 37 | .2 | .2 | 42.1 |
| | 482 | 2 | .0 | .0 | 42.2 |
| | 483 | 1 | .0 | .0 | 42.2 |
| | 484 | 9 | .1 | .1 | 42.2 |
| | 485 | 2 | .0 | .0 | 42.2 |
| | 486 | 8 | .0 | .0 | 42.3 |
| | 488 | 9 | .1 | .1 | 42.3 |
| | 489 | 2 | .0 | .0 | 42.3 |
| | 490 | 7 | .0 | .0 | 42.4 |
| | 492 | 8 | .0 | .0 | 42.4 |
| | 493 | 2 | .0 | .0 | 42.4 |
| | 494 | 15 | .1 | .1 | 42.5 |
| | 495 | 1 | .0 | .0 | 42.5 |
| | 496 | 4 | .0 | .0 | 42.6 |
| | 500 | 4 | .0 | .0 | 42.6 |
| | 503 | 1 | .0 | .0 | 42.6 |
| | 504 | 12 | .1 | .1 | 42.7 |
| | 506 | 13 | .1 | .1 | 42.7 |
| | 507 | 13 | .1 | .1 | 42.8 |
| | 508 | 24 | .1 | .1 | 42.9 |
| | 509 | 21 | .1 | .1 | 43.1 |
| | 510 | 1 | .0 | .0 | 43.1 |
| | 512 | 1 | .0 | .0 | 43.1 |
| | 513 | 7 | .0 | .0 | 43.1 |
| | 514 | 2 | .0 | .0 | 43.1 |
| | 515 | 6 | .0 | .0 | 43.2 |
| | 516 | 39 | .2 | .2 | 43.4 |
| | 517 | 11 | .1 | .1 | 43.4 |
| | 518 | 22 | .1 | .1 | 43.6 |
| | 519 | 14 | .1 | .1 | 43.7 |
| | 520 | 2 | .0 | .0 | 43.7 |
| | 521 | 25 | .1 | .1 | 43.8 |
| | 522 | 27 | .2 | .2 | 44.0 |
| | 523 | 22 | .1 | .1 | 44.1 |
| | 524 | 19 | .1 | .1 | 44.2 |
| | 525 | 4 | .0 | .0 | 44.2 |
| | 526 | 10 | .1 | .1 | 44.3 |
| | 527 | 28 | .2 | .2 | 44.4 |
| | 528 | 9 | .1 | .1 | 44.5 |
| | 529 | 29 | .2 | .2 | 44.7 |
| | 530 | 48 | .3 | .3 | 44.9 |
| | 531 | 9 | .1 | .1 | 45.0 |
| | 532 | 19 | .1 | .1 | 45.1 |
| | 533 | 43 | .2 | .2 | 45.4 |
| | 534 | 24 | .1 | .1 | 45.5 |
| | 535 | 3 | .0 | .0 | 45.5 |
| | 536 | 3 | .0 | .0 | 45.5 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 537 | 10 | .1 | .1 | 45.6 |
| | 538 | 10 | .1 | .1 | 45.6 |
| | 539 | 13 | .1 | .1 | 45.7 |
| | 541 | 25 | .1 | .1 | 45.9 |
| | 543 | 27 | .2 | .2 | 46.0 |
| | 545 | 1 | .0 | .0 | 46.0 |
| | 547 | 12 | .1 | .1 | 46.1 |
| | 548 | 10 | .1 | .1 | 46.2 |
| | 550 | 8 | .0 | .0 | 46.2 |
| | 551 | 1 | .0 | .0 | 46.2 |
| | 554 | 1 | .0 | .0 | 46.2 |
| | 555 | 4 | .0 | .0 | 46.2 |
| | 559 | 3 | .0 | .0 | 46.3 |
| | 560 | 1 | .0 | .0 | 46.3 |
| | 562 | 1 | .0 | .0 | 46.3 |
| | 565 | 7 | .0 | .0 | 46.3 |
| | 569 | 3 | .0 | .0 | 46.3 |
| | 570 | 10 | .1 | .1 | 46.4 |
| | 571 | 5 | .0 | .0 | 46.4 |
| | 572 | 7 | .0 | .0 | 46.4 |
| | 573 | 15 | .1 | .1 | 46.5 |
| | 574 | 28 | .2 | .2 | 46.7 |
| | 575 | 1 | .0 | .0 | 46.7 |
| | 576 | 3 | .0 | .0 | 46.7 |
| | 583 | 2 | .0 | .0 | 46.7 |
| | 585 | 4 | .0 | .0 | 46.8 |
| | 587 | 4 | .0 | .0 | 46.8 |
| | 588 | 5 | .0 | .0 | 46.8 |
| | 589 | 11 | .1 | .1 | 46.9 |
| | 590 | 30 | .2 | .2 | 47.0 |
| | 591 | 5 | .0 | .0 | 47.1 |
| | 594 | 1 | .0 | .0 | 47.1 |
| | 596 | 15 | .1 | .1 | 47.2 |
| | 597 | 6 | .0 | .0 | 47.2 |
| | 598 | 14 | .1 | .1 | 47.3 |
| | 600 | 19 | .1 | .1 | 47.4 |
| | 601 | 44 | .3 | .3 | 47.6 |
| | 602 | 1 | .0 | .0 | 47.7 |
| | 603 | 2 | .0 | .0 | 47.7 |
| | 604 | 4 | .0 | .0 | 47.7 |
| | 606 | 12 | .1 | .1 | 47.8 |
| | 607 | 5 | .0 | .0 | 47.8 |
| | 608 | 42 | .2 | .2 | 48.0 |
| | 609 | 26 | .2 | .2 | 48.2 |
| | 610 | 2 | .0 | .0 | 48.2 |
| | 613 | 5 | .0 | .0 | 48.2 |
| | 616 | 2 | .0 | .0 | 48.2 |
| | 617 | 3 | .0 | .0 | 48.2 |
| | 631 | 18 | .1 | .1 | 48.3 |
| | 632 | 35 | .2 | .2 | 48.6 |
| | 633 | 22 | .1 | .1 | 48.7 |
| | 635 | 18 | .1 | .1 | 48.8 |
| | 636 | 50 | .3 | .3 | 49.1 |
| | 637 | 17 | .1 | .1 | 49.2 |
| | 639 | 2 | .0 | .0 | 49.2 |
| | 640 | 3 | .0 | .0 | 49.2 |
| | 641 | 10 | .1 | .1 | 49.3 |
| | 642 | 6 | .0 | .0 | 49.3 |
| | 643 | 1 | .0 | .0 | 49.3 |
| | 644 | 84 | .5 | .5 | 49.8 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 645 | 27 | .2 | .2 | 49.9 |
| | 647 | 1 | .0 | .0 | 49.9 |
| | 648 | 1 | .0 | .0 | 50.0 |
| | 649 | 5 | .0 | .0 | 50.0 |
| | 650 | 4 | .0 | .0 | 50.0 |
| | 656 | 3 | .0 | .0 | 50.0 |
| | 657 | 36 | .2 | .2 | 50.2 |
| | 658 | 9 | .1 | .1 | 50.3 |
| | 659 | 25 | .1 | .1 | 50.4 |
| | 660 | 2 | .0 | .0 | 50.4 |
| | 661 | 56 | .3 | .3 | 50.8 |
| | 662 | 4 | .0 | .0 | 50.8 |
| | 663 | 13 | .1 | .1 | 50.9 |
| | 665 | 4 | .0 | .0 | 50.9 |
| | 667 | 4 | .0 | .0 | 50.9 |
| | 668 | 6 | .0 | .0 | 50.9 |
| | 669 | 2 | .0 | .0 | 51.0 |
| | 670 | 35 | .2 | .2 | 51.2 |
| | 671 | 49 | .3 | .3 | 51.4 |
| | 672 | 41 | .2 | .2 | 51.7 |
| | 673 | 2 | .0 | .0 | 51.7 |
| | 674 | 25 | .1 | .1 | 51.8 |
| | 675 | 23 | .1 | .1 | 52.0 |
| | 676 | 1 | .0 | .0 | 52.0 |
| | 677 | 14 | .1 | .1 | 52.0 |
| | 678 | 38 | .2 | .2 | 52.3 |
| | 679 | 23 | .1 | .1 | 52.4 |
| | 680 | 4 | .0 | .0 | 52.4 |
| | 682 | 4 | .0 | .0 | 52.4 |
| | 683 | 17 | .1 | .1 | 52.5 |
| | 684 | 10 | .1 | .1 | 52.6 |
| | 685 | 2 | .0 | .0 | 52.6 |
| | 686 | 7 | .0 | .0 | 52.7 |
| | 687 | 28 | .2 | .2 | 52.8 |
| | 688 | 23 | .1 | .1 | 53.0 |
| | 689 | 32 | .2 | .2 | 53.1 |
| | 690 | 8 | .0 | .0 | 53.2 |
| | 693 | 1 | .0 | .0 | 53.2 |
| | 694 | 11 | .1 | .1 | 53.3 |
| | 695 | 23 | .1 | .1 | 53.4 |
| | 696 | 6 | .0 | .0 | 53.4 |
| | 697 | 101 | .6 | .6 | 54.0 |
| | 698 | 7 | .0 | .0 | 54.0 |
| | 699 | 8 | .0 | .0 | 54.1 |
| | 701 | 18 | .1 | .1 | 54.2 |
| | 702 | 18 | .1 | .1 | 54.3 |
| | 704 | 16 | .1 | .1 | 54.4 |
| | 705 | 19 | .1 | .1 | 54.5 |
| | 706 | 7 | .0 | .0 | 54.5 |
| | 707 | 24 | .1 | .1 | 54.7 |
| | 708 | 12 | .1 | .1 | 54.7 |
| | 710 | 3 | .0 | .0 | 54.8 |
| | 711 | 1 | .0 | .0 | 54.8 |
| | 712 | 10 | .1 | .1 | 54.8 |
| | 713 | 11 | .1 | .1 | 54.9 |
| | 715 | 40 | .2 | .2 | 55.1 |
| | 716 | 4 | .0 | .0 | 55.1 |
| | 717 | 3 | .0 | .0 | 55.2 |
| | 718 | 20 | .1 | .1 | 55.3 |
| | 719 | 14 | .1 | .1 | 55.4 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 720 | 7 | .0 | .0 | 55.4 |
| | 721 | 16 | .1 | .1 | 55.5 |
| | 722 | 9 | .1 | .1 | 55.5 |
| | 723 | 1 | .0 | .0 | 55.6 |
| | 725 | 4 | .0 | .0 | 55.6 |
| | 727 | 2 | .0 | .0 | 55.6 |
| | 728 | 10 | .1 | .1 | 55.6 |
| | 729 | 1 | .0 | .0 | 55.6 |
| | 730 | 5 | .0 | .0 | 55.7 |
| | 731 | 3 | .0 | .0 | 55.7 |
| | 732 | 1 | .0 | .0 | 55.7 |
| | 734 | 7 | .0 | .0 | 55.7 |
| | 735 | 1 | .0 | .0 | 55.7 |
| | 736 | 16 | .1 | .1 | 55.8 |
| | 737 | 3 | .0 | .0 | 55.9 |
| | 738 | 1 | .0 | .0 | 55.9 |
| | 739 | 6 | .0 | .0 | 55.9 |
| | 740 | 20 | .1 | .1 | 56.0 |
| | 741 | 9 | .1 | .1 | 56.1 |
| | 742 | 1 | .0 | .0 | 56.1 |
| | 743 | 1 | .0 | .0 | 56.1 |
| | 744 | 5 | .0 | .0 | 56.1 |
| | 745 | 35 | .2 | .2 | 56.3 |
| | 747 | 4 | .0 | .0 | 56.3 |
| | 749 | 12 | .1 | .1 | 56.4 |
| | 750 | 12 | .1 | .1 | 56.5 |
| | 751 | 15 | .1 | .1 | 56.6 |
| | 752 | 4 | .0 | .0 | 56.6 |
| | 753 | 1 | .0 | .0 | 56.6 |
| | 754 | 30 | .2 | .2 | 56.8 |
| | 770 | 1 | .0 | .0 | 56.8 |
| | 771 | 7 | .0 | .0 | 56.8 |
| | 773 | 31 | .2 | .2 | 57.0 |
| | 775 | 25 | .1 | .1 | 57.1 |
| | 776 | 22 | .1 | .1 | 57.3 |
| | 777 | 33 | .2 | .2 | 57.4 |
| | 778 | 48 | .3 | .3 | 57.7 |
| | 779 | 19 | .1 | .1 | 57.8 |
| | 780 | 51 | .3 | .3 | 58.1 |
| | 781 | 24 | .1 | .1 | 58.3 |
| | 782 | 21 | .1 | .1 | 58.4 |
| | 783 | 25 | .1 | .1 | 58.5 |
| | 784 | 26 | .2 | .2 | 58.7 |
| | 785 | 26 | .2 | .2 | 58.8 |
| | 786 | 41 | .2 | .2 | 59.1 |
| | 787 | 37 | .2 | .2 | 59.3 |
| | 788 | 16 | .1 | .1 | 59.4 |
| | 789 | 22 | .1 | .1 | 59.5 |
| | 790 | 9 | .1 | .1 | 59.6 |
| | 791 | 9 | .1 | .1 | 59.6 |
| | 792 | 3 | .0 | .0 | 59.6 |
| | 793 | 13 | .1 | .1 | 59.7 |
| | 794 | 7 | .0 | .0 | 59.7 |
| | 795 | 8 | .0 | .0 | 59.8 |
| | 796 | 20 | .1 | .1 | 59.9 |
| | 797 | 10 | .1 | .1 | 60.0 |
| | 798 | 78 | .5 | .5 | 60.4 |
| | 799 | 34 | .2 | .2 | 60.6 |
| | 800 | 16 | .1 | .1 | 60.7 |
| | 802 | 12 | .1 | .1 | 60.8 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 803 | 16 | .1 | .1 | 60.9 |
| | 804 | 30 | .2 | .2 | 61.0 |
| | 805 | 61 | .4 | .4 | 61.4 |
| | 806 | 15 | .1 | .1 | 61.5 |
| | 807 | 10 | .1 | .1 | 61.5 |
| | 808 | 5 | .0 | .0 | 61.6 |
| | 809 | 29 | .2 | .2 | 61.7 |
| | 810 | 50 | .3 | .3 | 62.0 |
| | 811 | 28 | .2 | .2 | 62.2 |
| | 812 | 16 | .1 | .1 | 62.3 |
| | 813 | 15 | .1 | .1 | 62.4 |
| | 814 | 24 | .1 | .1 | 62.5 |
| | 815 | 56 | .3 | .3 | 62.8 |
| | 816 | 25 | .1 | .1 | 63.0 |
| | 817 | 13 | .1 | .1 | 63.0 |
| | 818 | 17 | .1 | .1 | 63.1 |
| | 820 | 18 | .1 | .1 | 63.2 |
| | 821 | 2 | .0 | .0 | 63.3 |
| | 822 | 5 | .0 | .0 | 63.3 |
| | 823 | 3 | .0 | .0 | 63.3 |
| | 824 | 1 | .0 | .0 | 63.3 |
| | 828 | 3 | .0 | .0 | 63.3 |
| | 829 | 9 | .1 | .1 | 63.4 |
| | 831 | 1 | .0 | .0 | 63.4 |
| | 832 | 1 | .0 | .0 | 63.4 |
| | 833 | 1 | .0 | .0 | 63.4 |
| | 834 | 2 | .0 | .0 | 63.4 |
| | 835 | 6 | .0 | .0 | 63.4 |
| | 836 | 30 | .2 | .2 | 63.6 |
| | 837 | 17 | .1 | .1 | 63.7 |
| | 839 | 13 | .1 | .1 | 63.8 |
| | 840 | 9 | .1 | .1 | 63.8 |
| | 841 | 18 | .1 | .1 | 63.9 |
| | 842 | 4 | .0 | .0 | 64.0 |
| | 843 | 50 | .3 | .3 | 64.3 |
| | 844 | 1 | .0 | .0 | 64.3 |
| | 846 | 29 | .2 | .2 | 64.4 |
| | 847 | 11 | .1 | .1 | 64.5 |
| | 848 | 60 | .3 | .3 | 64.8 |
| | 849 | 2 | .0 | .0 | 64.9 |
| | 851 | 31 | .2 | .2 | 65.0 |
| | 852 | 16 | .1 | .1 | 65.1 |
| | 853 | 32 | .2 | .2 | 65.3 |
| | 854 | 18 | .1 | .1 | 65.4 |
| | 855 | 55 | .3 | .3 | 65.7 |
| | 856 | 3 | .0 | .0 | 65.7 |
| | 859 | 4 | .0 | .0 | 65.8 |
| | 861 | 2 | .0 | .0 | 65.8 |
| | 862 | 2 | .0 | .0 | 65.8 |
| | 863 | 2 | .0 | .0 | 65.8 |
| | 865 | 2 | .0 | .0 | 65.8 |
| | 867 | 5 | .0 | .0 | 65.8 |
| | 868 | 1 | .0 | .0 | 65.9 |
| | 871 | 3 | .0 | .0 | 65.9 |
| | 872 | 1 | .0 | .0 | 65.9 |
| | 874 | 9 | .1 | .1 | 65.9 |
| | 875 | 5 | .0 | .0 | 66.0 |
| | 876 | 19 | .1 | .1 | 66.1 |
| | 877 | 5 | .0 | .0 | 66.1 |
| | 878 | 18 | .1 | .1 | 66.2 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 879 | 7 | .0 | .0 | 66.2 |
| | 880 | 23 | .1 | .1 | 66.4 |
| | 881 | 33 | .2 | .2 | 66.6 |
| | 882 | 22 | .1 | .1 | 66.7 |
| | 883 | 9 | .1 | .1 | 66.7 |
| | 884 | 19 | .1 | .1 | 66.9 |
| | 885 | 1 | .0 | .0 | 66.9 |
| | 886 | 4 | .0 | .0 | 66.9 |
| | 887 | 17 | .1 | .1 | 67.0 |
| | 888 | 12 | .1 | .1 | 67.0 |
| | 889 | 1 | .0 | .0 | 67.1 |
| | 890 | 2 | .0 | .0 | 67.1 |
| | 891 | 19 | .1 | .1 | 67.2 |
| | 892 | 18 | .1 | .1 | 67.3 |
| | 893 | 51 | .3 | .3 | 67.6 |
| | 894 | 19 | .1 | .1 | 67.7 |
| | 895 | 6 | .0 | .0 | 67.7 |
| | 896 | 37 | .2 | .2 | 67.9 |
| | 897 | 42 | .2 | .2 | 68.2 |
| | 898 | 4 | .0 | .0 | 68.2 |
| | 899 | 27 | .2 | .2 | 68.4 |
| | 900 | 16 | .1 | .1 | 68.4 |
| | 902 | 10 | .1 | .1 | 68.5 |
| | 903 | 26 | .2 | .2 | 68.7 |
| | 904 | 38 | .2 | .2 | 68.9 |
| | 905 | 2 | .0 | .0 | 68.9 |
| | 906 | 9 | .1 | .1 | 68.9 |
| | 908 | 9 | .1 | .1 | 69.0 |
| | 909 | 48 | .3 | .3 | 69.3 |
| | 910 | 21 | .1 | .1 | 69.4 |
| | 913 | 16 | .1 | .1 | 69.5 |
| | 914 | 2 | .0 | .0 | 69.5 |
| | 915 | 1 | .0 | .0 | 69.5 |
| | 918 | 4 | .0 | .0 | 69.5 |
| | 919 | 5 | .0 | .0 | 69.6 |
| | 920 | 1 | .0 | .0 | 69.6 |
| | 921 | 1 | .0 | .0 | 69.6 |
| | 923 | 4 | .0 | .0 | 69.6 |
| | 927 | 4 | .0 | .0 | 69.6 |
| | 928 | 20 | .1 | .1 | 69.7 |
| | 929 | 7 | .0 | .0 | 69.8 |
| | 930 | 49 | .3 | .3 | 70.0 |
| | 931 | 5 | .0 | .0 | 70.1 |
| | 932 | 14 | .1 | .1 | 70.2 |
| | 933 | 18 | .1 | .1 | 70.3 |
| | 934 | 1 | .0 | .0 | 70.3 |
| | 938 | 6 | .0 | .0 | 70.3 |
| | 940 | 3 | .0 | .0 | 70.3 |
| | 941 | 4 | .0 | .0 | 70.3 |
| | 942 | 5 | .0 | .0 | 70.4 |
| | 943 | 3 | .0 | .0 | 70.4 |
| | 944 | 6 | .0 | .0 | 70.4 |
| | 960 | 21 | .1 | .1 | 70.5 |
| | 961 | 2 | .0 | .0 | 70.6 |
| | 962 | 13 | .1 | .1 | 70.6 |
| | 963 | 24 | .1 | .1 | 70.8 |
| | 964 | 22 | .1 | .1 | 70.9 |
| | 965 | 6 | .0 | .0 | 70.9 |
| | 966 | 26 | .2 | .2 | 71.1 |
| | 967 | 12 | .1 | .1 | 71.2 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 968 | 19 | .1 | .1 | 71.3 |
| | 969 | 7 | .0 | .0 | 71.3 |
| | 970 | 26 | .2 | .2 | 71.5 |
| | 971 | 11 | .1 | .1 | 71.5 |
| | 972 | 2 | .0 | .0 | 71.5 |
| | 973 | 20 | .1 | .1 | 71.6 |
| | 974 | 7 | .0 | .0 | 71.7 |
| | 975 | 23 | .1 | .1 | 71.8 |
| | 976 | 5 | .0 | .0 | 71.8 |
| | 977 | 5 | .0 | .0 | 71.9 |
| | 979 | 13 | .1 | .1 | 71.9 |
| | 980 | 3 | .0 | .0 | 72.0 |
| | 981 | 12 | .1 | .1 | 72.0 |
| | 984 | 4 | .0 | .0 | 72.1 |
| | 985 | 10 | .1 | .1 | 72.1 |
| | 986 | 4 | .0 | .0 | 72.1 |
| | 987 | 13 | .1 | .1 | 72.2 |
| | 988 | 22 | .1 | .1 | 72.3 |
| | 989 | 20 | .1 | .1 | 72.5 |
| | 990 | 2 | .0 | .0 | 72.5 |
| | 991 | 15 | .1 | .1 | 72.6 |
| | 993 | 24 | .1 | .1 | 72.7 |
| | 995 | 2 | .0 | .0 | 72.7 |
| | 999 | 1 | .0 | .0 | 72.7 |
| | 1001 | 15 | .1 | .1 | 72.8 |
| | 1002 | 5 | .0 | .0 | 72.8 |
| | 1003 | 9 | .1 | .1 | 72.9 |
| | 1004 | 9 | .1 | .1 | 72.9 |
| | 1005 | 27 | .2 | .2 | 73.1 |
| | 1006 | 7 | .0 | .0 | 73.1 |
| | 1007 | 16 | .1 | .1 | 73.2 |
| | 1008 | 7 | .0 | .0 | 73.3 |
| | 1009 | 69 | .4 | .4 | 73.7 |
| | 1010 | 64 | .4 | .4 | 74.0 |
| | 1011 | 31 | .2 | .2 | 74.2 |
| | 1012 | 23 | .1 | .1 | 74.3 |
| | 1013 | 15 | .1 | .1 | 74.4 |
| | 1014 | 57 | .3 | .3 | 74.8 |
| | 1015 | 7 | .0 | .0 | 74.8 |
| | 1016 | 4 | .0 | .0 | 74.8 |
| | 1017 | 12 | .1 | .1 | 74.9 |
| | 1018 | 14 | .1 | .1 | 75.0 |
| | 1019 | 5 | .0 | .0 | 75.0 |
| | 1020 | 1 | .0 | .0 | 75.0 |
| | 1021 | 5 | .0 | .0 | 75.0 |
| | 1022 | 14 | .1 | .1 | 75.1 |
| | 1023 | 11 | .1 | .1 | 75.2 |
| | 1024 | 12 | .1 | .1 | 75.2 |
| | 1025 | 18 | .1 | .1 | 75.3 |
| | 1026 | 19 | .1 | .1 | 75.5 |
| | 1027 | 17 | .1 | .1 | 75.6 |
| | 1028 | 1 | .0 | .0 | 75.6 |
| | 1031 | 5 | .0 | .0 | 75.6 |
| | 1032 | 16 | .1 | .1 | 75.7 |
| | 1033 | 33 | .2 | .2 | 75.9 |
| | 1034 | 15 | .1 | .1 | 76.0 |
| | 1035 | 18 | .1 | .1 | 76.1 |
| | 1036 | 9 | .1 | .1 | 76.1 |
| | 1037 | 25 | .1 | .1 | 76.3 |
| | 1038 | 3 | .0 | .0 | 76.3 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1039 | 28 | .2 | .2 | 76.4 |
| | 1040 | 10 | .1 | .1 | 76.5 |
| | 1041 | 6 | .0 | .0 | 76.5 |
| | 1043 | 5 | .0 | .0 | 76.6 |
| | 1047 | 8 | .0 | .0 | 76.6 |
| | 1048 | 7 | .0 | .0 | 76.6 |
| | 1049 | 1 | .0 | .0 | 76.7 |
| | 1050 | 1 | .0 | .0 | 76.7 |
| | 1057 | 2 | .0 | .0 | 76.7 |
| | 1059 | 11 | .1 | .1 | 76.7 |
| | 1060 | 5 | .0 | .0 | 76.8 |
| | 1061 | 38 | .2 | .2 | 77.0 |
| | 1062 | 24 | .1 | .1 | 77.1 |
| | 1063 | 14 | .1 | .1 | 77.2 |
| | 1066 | 3 | .0 | .0 | 77.2 |
| | 1067 | 1 | .0 | .0 | 77.2 |
| | 1071 | 3 | .0 | .0 | 77.2 |
| | 1075 | 1 | .0 | .0 | 77.2 |
| | 1078 | 1 | .0 | .0 | 77.3 |
| | 1079 | 1 | .0 | .0 | 77.3 |
| | 1080 | 3 | .0 | .0 | 77.3 |
| | 1082 | 3 | .0 | .0 | 77.3 |
| | 1083 | 36 | .2 | .2 | 77.5 |
| | 1084 | 30 | .2 | .2 | 77.7 |
| | 1085 | 21 | .1 | .1 | 77.8 |
| | 1086 | 6 | .0 | .0 | 77.8 |
| | 1087 | 29 | .2 | .2 | 78.0 |
| | 1090 | 1 | .0 | .0 | 78.0 |
| | 1092 | 14 | .1 | .1 | 78.1 |
| | 1094 | 5 | .0 | .0 | 78.1 |
| | 1134 | 2 | .0 | .0 | 78.1 |
| | 1136 | 19 | .1 | .1 | 78.2 |
| | 1137 | 1 | .0 | .0 | 78.2 |
| | 1138 | 1 | .0 | .0 | 78.2 |
| | 1139 | 15 | .1 | .1 | 78.3 |
| | 1140 | 14 | .1 | .1 | 78.4 |
| | 1141 | 15 | .1 | .1 | 78.5 |
| | 1142 | 2 | .0 | .0 | 78.5 |
| | 1143 | 35 | .2 | .2 | 78.7 |
| | 1145 | 1 | .0 | .0 | 78.7 |
| | 1146 | 11 | .1 | .1 | 78.8 |
| | 1147 | 7 | .0 | .0 | 78.8 |
| | 1148 | 19 | .1 | .1 | 78.9 |
| | 1149 | 14 | .1 | .1 | 79.0 |
| | 1150 | 24 | .1 | .1 | 79.2 |
| | 1151 | 36 | .2 | .2 | 79.4 |
| | 1152 | 46 | .3 | .3 | 79.6 |
| | 1153 | 14 | .1 | .1 | 79.7 |
| | 1154 | 60 | .3 | .3 | 80.1 |
| | 1156 | 36 | .2 | .2 | 80.3 |
| | 1157 | 27 | .2 | .2 | 80.4 |
| | 1158 | 19 | .1 | .1 | 80.5 |
| | 1159 | 14 | .1 | .1 | 80.6 |
| | 1160 | 3 | .0 | .0 | 80.6 |
| | 1162 | 4 | .0 | .0 | 80.7 |
| | 1163 | 1 | .0 | .0 | 80.7 |
| | 1165 | 9 | .1 | .1 | 80.7 |
| | 1166 | 10 | .1 | .1 | 80.8 |
| | 1167 | 2 | .0 | .0 | 80.8 |
| | 1168 | 2 | .0 | .0 | 80.8 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1171 | 1 | .0 | .0 | 80.8 |
| | 1172 | 3 | .0 | .0 | 80.8 |
| | 1173 | 3 | .0 | .0 | 80.8 |
| | 1174 | 7 | .0 | .0 | 80.9 |
| | 1175 | 10 | .1 | .1 | 80.9 |
| | 1177 | 13 | .1 | .1 | 81.0 |
| | 1178 | 10 | .1 | .1 | 81.1 |
| | 1179 | 9 | .1 | .1 | 81.1 |
| | 1180 | 20 | .1 | .1 | 81.2 |
| | 1181 | 2 | .0 | .0 | 81.2 |
| | 1182 | 16 | .1 | .1 | 81.3 |
| | 1183 | 56 | .3 | .3 | 81.7 |
| | 1184 | 13 | .1 | .1 | 81.7 |
| | 1185 | 13 | .1 | .1 | 81.8 |
| | 1186 | 36 | .2 | .2 | 82.0 |
| | 1187 | 38 | .2 | .2 | 82.2 |
| | 1188 | 54 | .3 | .3 | 82.6 |
| | 1189 | 30 | .2 | .2 | 82.7 |
| | 1190 | 28 | .2 | .2 | 82.9 |
| | 1191 | 86 | .5 | .5 | 83.4 |
| | 1192 | 165 | 1.0 | 1.0 | 84.3 |
| | 1193 | 52 | .3 | .3 | 84.6 |
| | 1195 | 35 | .2 | .2 | 84.8 |
| | 1196 | 52 | .3 | .3 | 85.1 |
| | 1197 | 36 | .2 | .2 | 85.3 |
| | 1198 | 88 | .5 | .5 | 85.9 |
| | 1199 | 128 | .7 | .7 | 86.6 |
| | 1200 | 12 | .1 | .1 | 86.7 |
| | 1201 | 80 | .5 | .5 | 87.1 |
| | 1202 | 99 | .6 | .6 | 87.7 |
| | 1203 | 18 | .1 | .1 | 87.8 |
| | 1205 | 5 | .0 | .0 | 87.8 |
| | 1206 | 31 | .2 | .2 | 88.0 |
| | 1207 | 12 | .1 | .1 | 88.1 |
| | 1208 | 10 | .1 | .1 | 88.1 |
| | 1209 | 34 | .2 | .2 | 88.3 |
| | 1210 | 4 | .0 | .0 | 88.4 |
| | 1211 | 54 | .3 | .3 | 88.7 |
| | 1212 | 15 | .1 | .1 | 88.8 |
| | 1213 | 7 | .0 | .0 | 88.8 |
| | 1214 | 15 | .1 | .1 | 88.9 |
| | 1215 | 53 | .3 | .3 | 89.2 |
| | 1216 | 28 | .2 | .2 | 89.4 |
| | 1217 | 43 | .2 | .2 | 89.6 |
| | 1218 | 29 | .2 | .2 | 89.8 |
| | 1219 | 43 | .2 | .2 | 90.0 |
| | 1220 | 16 | .1 | .1 | 90.1 |
| | 1221 | 50 | .3 | .3 | 90.4 |
| | 1222 | 20 | .1 | .1 | 90.5 |
| | 1223 | 74 | .4 | .4 | 90.9 |
| | 1224 | 46 | .3 | .3 | 91.2 |
| | 1225 | 38 | .2 | .2 | 91.4 |
| | 1226 | 42 | .2 | .2 | 91.7 |
| | 1227 | 3 | .0 | .0 | 91.7 |
| | 1228 | 1 | .0 | .0 | 91.7 |
| | 1229 | 18 | .1 | .1 | 91.8 |
| | 1230 | 27 | .2 | .2 | 92.0 |
| | 1231 | 63 | .4 | .4 | 92.3 |
| | 1232 | 7 | .0 | .0 | 92.4 |
| | 1233 | 64 | .4 | .4 | 92.7 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1234 | 20 | .1 | .1 | 92.8 |
| | 1235 | 48 | .3 | .3 | 93.1 |
| | 1236 | 48 | .3 | .3 | 93.4 |
| | 1237 | 23 | .1 | .1 | 93.5 |
| | 1238 | 32 | .2 | .2 | 93.7 |
| | 1239 | 2 | .0 | .0 | 93.7 |
| | 1240 | 2 | .0 | .0 | 93.7 |
| | 1242 | 22 | .1 | .1 | 93.9 |
| | 1243 | 57 | .3 | .3 | 94.2 |
| | 1244 | 9 | .1 | .1 | 94.2 |
| | 1245 | 108 | .6 | .6 | 94.9 |
| | 1246 | 35 | .2 | .2 | 95.1 |
| | 1247 | 47 | .3 | .3 | 95.3 |
| | 1248 | 81 | .5 | .5 | 95.8 |
| | 1249 | 45 | .3 | .3 | 96.1 |
| | 1250 | 74 | .4 | .4 | 96.5 |
| | 1251 | 47 | .3 | .3 | 96.8 |
| | 1252 | 91 | .5 | .5 | 97.3 |
| | 1253 | 39 | .2 | .2 | 97.5 |
| | 1254 | 73 | .4 | .4 | 97.9 |
| | 1255 | 81 | .5 | .5 | 98.4 |
| | 1256 | 22 | .1 | .1 | 98.5 |
| | 1257 | 14 | .1 | .1 | 98.6 |
| | 1258 | 3 | .0 | .0 | 98.6 |
| | 1259 | 11 | .1 | .1 | 98.7 |
| | 1261 | 6 | .0 | .0 | 98.7 |
| | 1262 | 4 | .0 | .0 | 98.8 |
| | 1263 | 6 | .0 | .0 | 98.8 |
| | 1264 | 32 | .2 | .2 | 99.0 |
| | 1265 | 26 | .2 | .2 | 99.1 |
| | 1266 | 2 | .0 | .0 | 99.1 |
| | 1270 | 6 | .0 | .0 | 99.2 |
| | 1272 | 1 | .0 | .0 | 99.2 |
| | 1273 | 1 | .0 | .0 | 99.2 |
| | 1274 | 1 | .0 | .0 | 99.2 |
| | 1276 | 2 | .0 | .0 | 99.2 |
| | 1277 | 8 | .0 | .0 | 99.3 |
| | 1279 | 6 | .0 | .0 | 99.3 |
| | 1280 | 7 | .0 | .0 | 99.3 |
| | 1281 | 7 | .0 | .0 | 99.4 |
| | 1282 | 2 | .0 | .0 | 99.4 |
| | 1283 | 1 | .0 | .0 | 99.4 |
| | 1284 | 10 | .1 | .1 | 99.4 |
| | 1285 | 2 | .0 | .0 | 99.5 |
| | 1286 | 9 | .1 | .1 | 99.5 |
| | 1287 | 2 | .0 | .0 | 99.5 |
| | 1288 | 7 | .0 | .0 | 99.6 |
| | 1289 | 12 | .1 | .1 | 99.6 |
| | 1290 | 6 | .0 | .0 | 99.7 |
| | 1291 | 1 | .0 | .0 | 99.7 |
| | 1292 | 18 | .1 | .1 | 99.8 |
| | 1293 | 3 | .0 | .0 | 99.8 |
| | 1297 | 2 | .0 | .0 | 99.8 |
| | 1298 | 12 | .1 | .1 | 99.9 |
| | 1301 | 1 | .0 | .0 | 99.9 |

(9) TRIP ORIGIN T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1302 | 2 | .0 | .0 | 99.9 |
| | 1309 | 1 | .0 | .0 | 99.9 |
| | 1314 | 1 | .0 | .0 | 99.9 |
| | 9993 | 8 | .0 | .0 | 99.9 |
| | 9996 | 9 | .1 | .1 | 100.0 |
| | | --- | --- | --- | |
| | TOTAL | 17301 | 100.0 | 100.0 | |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1 | 13 | .1 | .1 | .1 |
| | 2 | 38 | .2 | .2 | .3 |
| | 3 | 6 | .0 | .0 | .3 |
| | 4 | 34 | .2 | .2 | .5 |
| | 5 | 39 | .2 | .2 | .8 |
| | 6 | 11 | .1 | .1 | .8 |
| | 7 | 56 | .3 | .3 | 1.1 |
| | 8 | 20 | .1 | .1 | 1.3 |
| | 9 | 65 | .4 | .4 | 1.6 |
| | 10 | 36 | .2 | .2 | 1.8 |
| | 11 | 51 | .3 | .3 | 2.1 |
| | 12 | 74 | .4 | .4 | 2.6 |
| | 13 | 11 | .1 | .1 | 2.6 |
| | 14 | 10 | .1 | .1 | 2.7 |
| | 15 | 20 | .1 | .1 | 2.8 |
| | 16 | 62 | .4 | .4 | 3.2 |
| | 17 | 60 | .3 | .3 | 3.5 |
| | 18 | 29 | .2 | .2 | 3.7 |
| | 19 | 54 | .3 | .3 | 4.0 |
| | 20 | 16 | .1 | .1 | 4.1 |
| | 21 | 9 | .1 | .1 | 4.1 |
| | 22 | 1 | .0 | .0 | 4.1 |
| | 23 | 7 | .0 | .0 | 4.2 |
| | 24 | 18 | .1 | .1 | 4.3 |
| | 25 | 16 | .1 | .1 | 4.4 |
| | 26 | 87 | .5 | .5 | 4.9 |
| | 27 | 24 | .1 | .1 | 5.0 |
| | 28 | 36 | .2 | .2 | 5.2 |
| | 29 | 28 | .2 | .2 | 5.4 |
| | 30 | 15 | .1 | .1 | 5.5 |
| | 31 | 18 | .1 | .1 | 5.6 |
| | 32 | 46 | .3 | .3 | 5.8 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 33 | 149 | .9 | .9 | 6.7 |
| | 34 | 50 | .3 | .3 | 7.0 |
| | 35 | 62 | .4 | .4 | 7.3 |
| | 36 | 36 | .2 | .2 | 7.6 |
| | 37 | 7 | .0 | .0 | 7.6 |
| | 38 | 11 | .1 | .1 | 7.7 |
| | 39 | 17 | .1 | .1 | 7.8 |
| | 40 | 14 | .1 | .1 | 7.8 |
| | 41 | 11 | .1 | .1 | 7.9 |
| | 43 | 4 | .0 | .0 | 7.9 |
| | 44 | 10 | .1 | .1 | 8.0 |
| | 45 | 4 | .0 | .0 | 8.0 |
| | 47 | 14 | .1 | .1 | 8.1 |
| | 48 | 3 | .0 | .0 | 8.1 |
| | 49 | 6 | .0 | .0 | 8.1 |
| | 50 | 1 | .0 | .0 | 8.1 |
| | 51 | 7 | .0 | .0 | 8.2 |
| | 52 | 7 | .0 | .0 | 8.2 |
| | 53 | 6 | .0 | .0 | 8.3 |
| | 54 | 2 | .0 | .0 | 8.3 |
| | 55 | 12 | .1 | .1 | 8.3 |
| | 56 | 17 | .1 | .1 | 8.4 |
| | 57 | 24 | .1 | .1 | 8.6 |
| | 58 | 13 | .1 | .1 | 8.7 |
| | 59 | 2 | .0 | .0 | 8.7 |
| | 60 | 14 | .1 | .1 | 8.7 |
| | 61 | 10 | .1 | .1 | 8.8 |
| | 62 | 8 | .0 | .0 | 8.8 |
| | 63 | 6 | .0 | .0 | 8.9 |
| | 64 | 19 | .1 | .1 | 9.0 |
| | 65 | 23 | .1 | .1 | 9.1 |
| | 66 | 19 | .1 | .1 | 9.2 |
| | 67 | 12 | .1 | .1 | 9.3 |
| | 68 | 2 | .0 | .0 | 9.3 |
| | 69 | 26 | .2 | .2 | 9.5 |
| | 70 | 2 | .0 | .0 | 9.5 |
| | 71 | 4 | .0 | .0 | 9.5 |
| | 72 | 18 | .1 | .1 | 9.6 |
| | 73 | 13 | .1 | .1 | 9.7 |
| | 74 | 9 | .1 | .1 | 9.7 |
| | 75 | 2 | .0 | .0 | 9.7 |
| | 76 | 2 | .0 | .0 | 9.8 |
| | 77 | 13 | .1 | .1 | 9.8 |
| | 78 | 9 | .1 | .1 | 9.9 |
| | 79 | 9 | .1 | .1 | 9.9 |
| | 80 | 3 | .0 | .0 | 10.0 |
| | 81 | 40 | .2 | .2 | 10.2 |
| | 82 | 2 | .0 | .0 | 10.2 |
| | 83 | 2 | .0 | .0 | 10.2 |
| | 84 | 30 | .2 | .2 | 10.4 |
| | 85 | 4 | .0 | .0 | 10.4 |
| | 86 | 8 | .0 | .0 | 10.5 |
| | 87 | 41 | .2 | .2 | 10.7 |
| | 88 | 15 | .1 | .1 | 10.8 |
| | 89 | 33 | .2 | .2 | 11.0 |
| | 90 | 4 | .0 | .0 | 11.0 |
| | 91 | 15 | .1 | .1 | 11.1 |
| | 92 | 14 | .1 | .1 | 11.2 |
| | 93 | 16 | .1 | .1 | 11.2 |
| | 94 | 20 | .1 | .1 | 11.4 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 95 | 6 | .0 | .0 | 11.4 |
| | 96 | 2 | .0 | .0 | 11.4 |
| | 97 | 17 | .1 | .1 | 11.5 |
| | 98 | 9 | .1 | .1 | 11.6 |
| | 99 | 10 | .1 | .1 | 11.6 |
| | 100 | 12 | .1 | .1 | 11.7 |
| | 101 | 8 | .0 | .0 | 11.7 |
| | 102 | 7 | .0 | .0 | 11.8 |
| | 103 | 2 | .0 | .0 | 11.8 |
| | 104 | 3 | .0 | .0 | 11.8 |
| | 105 | 4 | .0 | .0 | 11.8 |
| | 106 | 16 | .1 | .1 | 11.9 |
| | 107 | 1 | .0 | .0 | 11.9 |
| | 108 | 8 | .0 | .0 | 12.0 |
| | 109 | 3 | .0 | .0 | 12.0 |
| | 110 | 30 | .2 | .2 | 12.2 |
| | 111 | 16 | .1 | .1 | 12.3 |
| | 112 | 8 | .0 | .0 | 12.3 |
| | 113 | 5 | .0 | .0 | 12.3 |
| | 114 | 7 | .0 | .0 | 12.4 |
| | 115 | 4 | .0 | .0 | 12.4 |
| | 116 | 11 | .1 | .1 | 12.5 |
| | 117 | 19 | .1 | .1 | 12.6 |
| | 118 | 10 | .1 | .1 | 12.6 |
| | 119 | 12 | .1 | .1 | 12.7 |
| | 120 | 2 | .0 | .0 | 12.7 |
| | 121 | 7 | .0 | .0 | 12.7 |
| | 122 | 5 | .0 | .0 | 12.8 |
| | 123 | 22 | .1 | .1 | 12.9 |
| | 124 | 4 | .0 | .0 | 12.9 |
| | 125 | 8 | .0 | .0 | 13.0 |
| | 126 | 16 | .1 | .1 | 13.1 |
| | 127 | 24 | .1 | .1 | 13.2 |
| | 128 | 8 | .0 | .0 | 13.2 |
| | 129 | 37 | .2 | .2 | 13.5 |
| | 130 | 16 | .1 | .1 | 13.6 |
| | 131 | 14 | .1 | .1 | 13.6 |
| | 132 | 6 | .0 | .0 | 13.7 |
| | 133 | 13 | .1 | .1 | 13.7 |
| | 134 | 5 | .0 | .0 | 13.8 |
| | 135 | 2 | .0 | .0 | 13.8 |
| | 136 | 5 | .0 | .0 | 13.8 |
| | 137 | 7 | .0 | .0 | 13.9 |
| | 138 | 6 | .0 | .0 | 13.9 |
| | 139 | 31 | .2 | .2 | 14.1 |
| | 140 | 49 | .3 | .3 | 14.4 |
| | 141 | 18 | .1 | .1 | 14.5 |
| | 142 | 24 | .1 | .1 | 14.6 |
| | 143 | 10 | .1 | .1 | 14.7 |
| | 144 | 28 | .2 | .2 | 14.8 |
| | 145 | 26 | .2 | .2 | 15.0 |
| | 146 | 28 | .2 | .2 | 15.1 |
| | 147 | 50 | .3 | .3 | 15.4 |
| | 148 | 18 | .1 | .1 | 15.5 |
| | 149 | 4 | .0 | .0 | 15.5 |
| | 150 | 9 | .1 | .1 | 15.6 |
| | 151 | 23 | .1 | .1 | 15.7 |
| | 153 | 4 | .0 | .0 | 15.8 |
| | 154 | 6 | .0 | .0 | 15.8 |
| | 155 | 12 | .1 | .1 | 15.9 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 156 | 42 | .2 | .2 | 16.1 |
| | 157 | 22 | .1 | .1 | 16.2 |
| | 158 | 7 | .0 | .0 | 16.3 |
| | 159 | 6 | .0 | .0 | 16.3 |
| | 160 | 7 | .0 | .0 | 16.3 |
| | 161 | 17 | .1 | .1 | 16.4 |
| | 162 | 13 | .1 | .1 | 16.5 |
| | 163 | 18 | .1 | .1 | 16.6 |
| | 164 | 17 | .1 | .1 | 16.7 |
| | 165 | 4 | .0 | .0 | 16.7 |
| | 166 | 22 | .1 | .1 | 16.9 |
| | 167 | 9 | .1 | .1 | 16.9 |
| | 168 | 41 | .2 | .2 | 17.2 |
| | 169 | 10 | .1 | .1 | 17.2 |
| | 170 | 1 | .0 | .0 | 17.2 |
| | 171 | 16 | .1 | .1 | 17.3 |
| | 173 | 34 | .2 | .2 | 17.5 |
| | 174 | 43 | .2 | .2 | 17.8 |
| | 175 | 23 | .1 | .1 | 17.9 |
| | 176 | 14 | .1 | .1 | 18.0 |
| | 177 | 41 | .2 | .2 | 18.2 |
| | 178 | 3 | .0 | .0 | 18.2 |
| | 179 | 34 | .2 | .2 | 18.4 |
| | 180 | 14 | .1 | .1 | 18.5 |
| | 181 | 18 | .1 | .1 | 18.6 |
| | 182 | 4 | .0 | .0 | 18.6 |
| | 183 | 27 | .2 | .2 | 18.8 |
| | 184 | 14 | .1 | .1 | 18.9 |
| | 185 | 3 | .0 | .0 | 18.9 |
| | 186 | 21 | .1 | .1 | 19.0 |
| | 187 | 30 | .2 | .2 | 19.2 |
| | 188 | 17 | .1 | .1 | 19.3 |
| | 189 | 17 | .1 | .1 | 19.4 |
| | 190 | 32 | .2 | .2 | 19.6 |
| | 191 | 6 | .0 | .0 | 19.6 |
| | 192 | 16 | .1 | .1 | 19.7 |
| | 193 | 13 | .1 | .1 | 19.8 |
| | 194 | 6 | .0 | .0 | 19.8 |
| | 195 | 16 | .1 | .1 | 19.9 |
| | 196 | 7 | .0 | .0 | 19.9 |
| | 197 | 14 | .1 | .1 | 20.0 |
| | 198 | 20 | .1 | .1 | 20.1 |
| | 199 | 1 | .0 | .0 | 20.1 |
| | 200 | 16 | .1 | .1 | 20.2 |
| | 201 | 6 | .0 | .0 | 20.3 |
| | 202 | 28 | .2 | .2 | 20.4 |
| | 203 | 8 | .0 | .0 | 20.5 |
| | 204 | 7 | .0 | .0 | 20.5 |
| | 205 | 18 | .1 | .1 | 20.6 |
| | 206 | 2 | .0 | .0 | 20.6 |
| | 207 | 14 | .1 | .1 | 20.7 |
| | 208 | 28 | .2 | .2 | 20.9 |
| | 209 | 16 | .1 | .1 | 21.0 |
| | 210 | 5 | .0 | .0 | 21.0 |
| | 211 | 12 | .1 | .1 | 21.1 |
| | 212 | 12 | .1 | .1 | 21.1 |
| | 213 | 22 | .1 | .1 | 21.3 |
| | 214 | 9 | .1 | .1 | 21.3 |
| | 215 | 12 | .1 | .1 | 21.4 |
| | 216 | 7 | .0 | .0 | 21.4 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 217 | 15 | .1 | .1 | 21.5 |
| | 218 | 4 | .0 | .0 | 21.5 |
| | 219 | 7 | .0 | .0 | 21.6 |
| | 220 | 10 | .1 | .1 | 21.6 |
| | 221 | 9 | .1 | .1 | 21.7 |
| | 222 | 9 | .1 | .1 | 21.7 |
| | 223 | 12 | .1 | .1 | 21.8 |
| | 224 | 25 | .1 | .1 | 21.9 |
| | 225 | 25 | .1 | .1 | 22.1 |
| | 226 | 15 | .1 | .1 | 22.2 |
| | 227 | 4 | .0 | .0 | 22.2 |
| | 228 | 14 | .1 | .1 | 22.3 |
| | 229 | 8 | .0 | .0 | 22.3 |
| | 230 | 12 | .1 | .1 | 22.4 |
| | 231 | 9 | .1 | .1 | 22.4 |
| | 233 | 39 | .2 | .2 | 22.7 |
| | 234 | 13 | .1 | .1 | 22.7 |
| | 236 | 5 | .0 | .0 | 22.8 |
| | 237 | 30 | .2 | .2 | 22.9 |
| | 238 | 45 | .3 | .3 | 23.2 |
| | 239 | 55 | .3 | .3 | 23.5 |
| | 240 | 23 | .1 | .1 | 23.7 |
| | 241 | 35 | .2 | .2 | 23.9 |
| | 242 | 9 | .1 | .1 | 23.9 |
| | 243 | 11 | .1 | .1 | 24.0 |
| | 245 | 5 | .0 | .0 | 24.0 |
| | 246 | 5 | .0 | .0 | 24.0 |
| | 247 | 3 | .0 | .0 | 24.1 |
| | 248 | 10 | .1 | .1 | 24.1 |
| | 249 | 18 | .1 | .1 | 24.2 |
| | 250 | 7 | .0 | .0 | 24.3 |
| | 251 | 38 | .2 | .2 | 24.5 |
| | 252 | 9 | .1 | .1 | 24.5 |
| | 253 | 15 | .1 | .1 | 24.6 |
| | 254 | 42 | .2 | .2 | 24.9 |
| | 255 | 7 | .0 | .0 | 24.9 |
| | 256 | 7 | .0 | .0 | 24.9 |
| | 257 | 6 | .0 | .0 | 25.0 |
| | 258 | 20 | .1 | .1 | 25.1 |
| | 259 | 2 | .0 | .0 | 25.1 |
| | 260 | 13 | .1 | .1 | 25.2 |
| | 261 | 10 | .1 | .1 | 25.2 |
| | 262 | 40 | .2 | .2 | 25.5 |
| | 263 | 7 | .0 | .0 | 25.5 |
| | 264 | 5 | .0 | .0 | 25.5 |
| | 265 | 2 | .0 | .0 | 25.5 |
| | 266 | 12 | .1 | .1 | 25.6 |
| | 267 | 3 | .0 | .0 | 25.6 |
| | 268 | 8 | .0 | .0 | 25.7 |
| | 269 | 9 | .1 | .1 | 25.7 |
| | 270 | 2 | .0 | .0 | 25.7 |
| | 271 | 1 | .0 | .0 | 25.7 |
| | 272 | 24 | .1 | .1 | 25.9 |
| | 273 | 10 | .1 | .1 | 25.9 |
| | 274 | 9 | .1 | .1 | 26.0 |
| | 275 | 18 | .1 | .1 | 26.1 |
| | 276 | 21 | .1 | .1 | 26.2 |
| | 277 | 8 | .0 | .0 | 26.3 |
| | 278 | 7 | .0 | .0 | 26.3 |
| | 279 | 21 | .1 | .1 | 26.4 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 280 | 4 | .0 | .0 | 26.4 |
| | 281 | 69 | .4 | .4 | 26.8 |
| | 282 | 5 | .0 | .0 | 26.9 |
| | 283 | 22 | .1 | .1 | 27.0 |
| | 284 | 15 | .1 | .1 | 27.1 |
| | 285 | 10 | .1 | .1 | 27.1 |
| | 286 | 12 | .1 | .1 | 27.2 |
| | 287 | 27 | .2 | .2 | 27.4 |
| | 288 | 16 | .1 | .1 | 27.5 |
| | 289 | 9 | .1 | .1 | 27.5 |
| | 290 | 19 | .1 | .1 | 27.6 |
| | 291 | 9 | .1 | .1 | 27.7 |
| | 292 | 7 | .0 | .0 | 27.7 |
| | 293 | 25 | .1 | .1 | 27.9 |
| | 294 | 5 | .0 | .0 | 27.9 |
| | 295 | 2 | .0 | .0 | 27.9 |
| | 296 | 3 | .0 | .0 | 27.9 |
| | 298 | 21 | .1 | .1 | 28.0 |
| | 299 | 10 | .1 | .1 | 28.1 |
| | 300 | 26 | .2 | .2 | 28.3 |
| | 301 | 27 | .2 | .2 | 28.4 |
| | 302 | 78 | .5 | .5 | 28.9 |
| | 303 | 40 | .2 | .2 | 29.1 |
| | 304 | 18 | .1 | .1 | 29.2 |
| | 305 | 43 | .2 | .2 | 29.4 |
| | 306 | 35 | .2 | .2 | 29.6 |
| | 307 | 31 | .2 | .2 | 29.8 |
| | 308 | 12 | .1 | .1 | 29.9 |
| | 309 | 9 | .1 | .1 | 29.9 |
| | 310 | 24 | .1 | .1 | 30.1 |
| | 311 | 5 | .0 | .0 | 30.1 |
| | 312 | 15 | .1 | .1 | 30.2 |
| | 313 | 7 | .0 | .0 | 30.2 |
| | 314 | 42 | .2 | .2 | 30.5 |
| | 315 | 23 | .1 | .1 | 30.6 |
| | 316 | 17 | .1 | .1 | 30.7 |
| | 317 | 28 | .2 | .2 | 30.9 |
| | 318 | 20 | .1 | .1 | 31.0 |
| | 319 | 14 | .1 | .1 | 31.1 |
| | 320 | 40 | .2 | .2 | 31.3 |
| | 321 | 27 | .2 | .2 | 31.5 |
| | 322 | 40 | .2 | .2 | 31.7 |
| | 323 | 43 | .2 | .2 | 31.9 |
| | 324 | 21 | .1 | .1 | 32.1 |
| | 325 | 31 | .2 | .2 | 32.2 |
| | 326 | 16 | .1 | .1 | 32.3 |
| | 327 | 23 | .1 | .1 | 32.5 |
| | 328 | 22 | .1 | .1 | 32.6 |
| | 329 | 27 | .2 | .2 | 32.7 |
| | 330 | 19 | .1 | .1 | 32.9 |
| | 331 | 39 | .2 | .2 | 33.1 |
| | 332 | 19 | .1 | .1 | 33.2 |
| | 333 | 46 | .3 | .3 | 33.5 |
| | 334 | 13 | .1 | .1 | 33.5 |
| | 335 | 21 | .1 | .1 | 33.7 |
| | 336 | 9 | .1 | .1 | 33.7 |
| | 337 | 15 | .1 | .1 | 33.8 |
| | 338 | 27 | .2 | .2 | 34.0 |
| | 339 | 27 | .2 | .2 | 34.1 |
| | 340 | 7 | .0 | .0 | 34.1 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 341 | 29 | .2 | .2 | 34.3 |
| | 342 | 11 | .1 | .1 | 34.4 |
| | 343 | 19 | .1 | .1 | 34.5 |
| | 344 | 8 | .0 | .0 | 34.5 |
| | 345 | 18 | .1 | .1 | 34.6 |
| | 346 | 21 | .1 | .1 | 34.8 |
| | 347 | 45 | .3 | .3 | 35.0 |
| | 348 | 12 | .1 | .1 | 35.1 |
| | 349 | 17 | .1 | .1 | 35.2 |
| | 350 | 21 | .1 | .1 | 35.3 |
| | 351 | 12 | .1 | .1 | 35.4 |
| | 352 | 11 | .1 | .1 | 35.4 |
| | 353 | 23 | .1 | .1 | 35.6 |
| | 355 | 5 | .0 | .0 | 35.6 |
| | 356 | 19 | .1 | .1 | 35.7 |
| | 357 | 2 | .0 | .0 | 35.7 |
| | 358 | 15 | .1 | .1 | 35.8 |
| | 359 | 34 | .2 | .2 | 36.0 |
| | 360 | 9 | .1 | .1 | 36.1 |
| | 361 | 6 | .0 | .0 | 36.1 |
| | 362 | 18 | .1 | .1 | 36.2 |
| | 363 | 7 | .0 | .0 | 36.2 |
| | 364 | 15 | .1 | .1 | 36.3 |
| | 365 | 12 | .1 | .1 | 36.4 |
| | 366 | 17 | .1 | .1 | 36.5 |
| | 368 | 5 | .0 | .0 | 36.5 |
| | 369 | 14 | .1 | .1 | 36.6 |
| | 370 | 42 | .2 | .2 | 36.8 |
| | 371 | 9 | .1 | .1 | 36.9 |
| | 372 | 25 | .1 | .1 | 37.0 |
| | 373 | 15 | .1 | .1 | 37.1 |
| | 375 | 3 | .0 | .0 | 37.1 |
| | 376 | 36 | .2 | .2 | 37.4 |
| | 377 | 56 | .3 | .3 | 37.7 |
| | 378 | 10 | .1 | .1 | 37.7 |
| | 379 | 11 | .1 | .1 | 37.8 |
| | 380 | 31 | .2 | .2 | 38.0 |
| | 382 | 2 | .0 | .0 | 38.0 |
| | 383 | 1 | .0 | .0 | 38.0 |
| | 384 | 11 | .1 | .1 | 38.1 |
| | 385 | 1 | .0 | .0 | 38.1 |
| | 387 | 1 | .0 | .0 | 38.1 |
| | 389 | 3 | .0 | .0 | 38.1 |
| | 390 | 30 | .2 | .2 | 38.3 |
| | 391 | 9 | .1 | .1 | 38.3 |
| | 392 | 13 | .1 | .1 | 38.4 |
| | 393 | 1 | .0 | .0 | 38.4 |
| | 394 | 13 | .1 | .1 | 38.5 |
| | 395 | 18 | .1 | .1 | 38.6 |
| | 396 | 13 | .1 | .1 | 38.7 |
| | 397 | 34 | .2 | .2 | 38.8 |
| | 398 | 28 | .2 | .2 | 39.0 |
| | 399 | 46 | .3 | .3 | 39.3 |
| | 400 | 10 | .1 | .1 | 39.3 |
| | 412 | 6 | .0 | .0 | 39.4 |
| | 414 | 7 | .0 | .0 | 39.4 |
| | 415 | 5 | .0 | .0 | 39.4 |
| | 417 | 30 | .2 | .2 | 39.6 |
| | 418 | 7 | .0 | .0 | 39.7 |
| | 419 | 4 | .0 | .0 | 39.7 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 420 | 25 | .1 | .1 | 39.8 |
| | 421 | 30 | .2 | .2 | 40.0 |
| | 422 | 5 | .0 | .0 | 40.0 |
| | 423 | 1 | .0 | .0 | 40.0 |
| | 424 | 2 | .0 | .0 | 40.0 |
| | 425 | 3 | .0 | .0 | 40.1 |
| | 426 | 3 | .0 | .0 | 40.1 |
| | 427 | 54 | .3 | .3 | 40.4 |
| | 428 | 49 | .3 | .3 | 40.7 |
| | 430 | 10 | .1 | .1 | 40.7 |
| | 431 | 1 | .0 | .0 | 40.7 |
| | 434 | 1 | .0 | .0 | 40.7 |
| | 440 | 1 | .0 | .0 | 40.7 |
| | 442 | 1 | .0 | .0 | 40.7 |
| | 443 | 1 | .0 | .0 | 40.8 |
| | 449 | 16 | .1 | .1 | 40.8 |
| | 451 | 3 | .0 | .0 | 40.9 |
| | 452 | 10 | .1 | .1 | 40.9 |
| | 453 | 7 | .0 | .0 | 41.0 |
| | 454 | 2 | .0 | .0 | 41.0 |
| | 456 | 2 | .0 | .0 | 41.0 |
| | 457 | 20 | .1 | .1 | 41.1 |
| | 458 | 17 | .1 | .1 | 41.2 |
| | 460 | 7 | .0 | .0 | 41.2 |
| | 461 | 20 | .1 | .1 | 41.4 |
| | 462 | 11 | .1 | .1 | 41.4 |
| | 464 | 1 | .0 | .0 | 41.4 |
| | 465 | 3 | .0 | .0 | 41.4 |
| | 466 | 2 | .0 | .0 | 41.5 |
| | 468 | 2 | .0 | .0 | 41.5 |
| | 469 | 1 | .0 | .0 | 41.5 |
| | 471 | 1 | .0 | .0 | 41.5 |
| | 472 | 1 | .0 | .0 | 41.5 |
| | 473 | 18 | .1 | .1 | 41.6 |
| | 474 | 13 | .1 | .1 | 41.7 |
| | 475 | 8 | .0 | .0 | 41.7 |
| | 476 | 4 | .0 | .0 | 41.7 |
| | 477 | 4 | .0 | .0 | 41.8 |
| | 478 | 15 | .1 | .1 | 41.8 |
| | 479 | 11 | .1 | .1 | 41.9 |
| | 480 | 8 | .0 | .0 | 42.0 |
| | 481 | 36 | .2 | .2 | 42.2 |
| | 482 | 2 | .0 | .0 | 42.2 |
| | 483 | 1 | .0 | .0 | 42.2 |
| | 484 | 9 | .1 | .1 | 42.2 |
| | 485 | 2 | .0 | .0 | 42.2 |
| | 486 | 8 | .0 | .0 | 42.3 |
| | 488 | 9 | .1 | .1 | 42.3 |
| | 489 | 2 | .0 | .0 | 42.4 |
| | 490 | 7 | .0 | .0 | 42.4 |
| | 492 | 8 | .0 | .0 | 42.4 |
| | 493 | 2 | .0 | .0 | 42.4 |
| | 494 | 15 | .1 | .1 | 42.5 |
| | 495 | 1 | .0 | .0 | 42.5 |
| | 496 | 4 | .0 | .0 | 42.6 |
| | 500 | 4 | .0 | .0 | 42.6 |
| | 503 | 1 | .0 | .0 | 42.6 |
| | 504 | 12 | .1 | .1 | 42.7 |
| | 506 | 13 | .1 | .1 | 42.7 |
| | 507 | 13 | .1 | .1 | 42.8 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 508 | 24 | .1 | .1 | 43.0 |
| | 509 | 22 | .1 | .1 | 43.1 |
| | 510 | 1 | .0 | .0 | 43.1 |
| | 512 | 1 | .0 | .0 | 43.1 |
| | 513 | 6 | .0 | .0 | 43.1 |
| | 514 | 2 | .0 | .0 | 43.1 |
| | 515 | 6 | .0 | .0 | 43.2 |
| | 516 | 39 | .2 | .2 | 43.4 |
| | 517 | 11 | .1 | .1 | 43.5 |
| | 518 | 22 | .1 | .1 | 43.6 |
| | 519 | 14 | .1 | .1 | 43.7 |
| | 520 | 2 | .0 | .0 | 43.7 |
| | 521 | 25 | .1 | .1 | 43.8 |
| | 522 | 27 | .2 | .2 | 44.0 |
| | 523 | 22 | .1 | .1 | 44.1 |
| | 524 | 19 | .1 | .1 | 44.2 |
| | 525 | 4 | .0 | .0 | 44.2 |
| | 526 | 8 | .0 | .0 | 44.3 |
| | 527 | 28 | .2 | .2 | 44.4 |
| | 528 | 9 | .1 | .1 | 44.5 |
| | 529 | 29 | .2 | .2 | 44.7 |
| | 530 | 50 | .3 | .3 | 45.0 |
| | 531 | 9 | .1 | .1 | 45.0 |
| | 532 | 20 | .1 | .1 | 45.1 |
| | 533 | 44 | .3 | .3 | 45.4 |
| | 534 | 24 | .1 | .1 | 45.5 |
| | 535 | 3 | .0 | .0 | 45.5 |
| | 536 | 3 | .0 | .0 | 45.6 |
| | 537 | 10 | .1 | .1 | 45.6 |
| | 538 | 10 | .1 | .1 | 45.7 |
| | 539 | 13 | .1 | .1 | 45.7 |
| | 541 | 25 | .1 | .1 | 45.9 |
| | 543 | 27 | .2 | .2 | 46.0 |
| | 545 | 1 | .0 | .0 | 46.0 |
| | 547 | 12 | .1 | .1 | 46.1 |
| | 548 | 10 | .1 | .1 | 46.2 |
| | 550 | 8 | .0 | .0 | 46.2 |
| | 551 | 1 | .0 | .0 | 46.2 |
| | 554 | 1 | .0 | .0 | 46.2 |
| | 555 | 4 | .0 | .0 | 46.3 |
| | 559 | 3 | .0 | .0 | 46.3 |
| | 560 | 2 | .0 | .0 | 46.3 |
| | 562 | 1 | .0 | .0 | 46.3 |
| | 565 | 7 | .0 | .0 | 46.3 |
| | 569 | 3 | .0 | .0 | 46.3 |
| | 570 | 7 | .0 | .0 | 46.4 |
| | 571 | 6 | .0 | .0 | 46.4 |
| | 572 | 8 | .0 | .0 | 46.5 |
| | 573 | 13 | .1 | .1 | 46.5 |
| | 574 | 32 | .2 | .2 | 46.7 |
| | 575 | 1 | .0 | .0 | 46.7 |
| | 576 | 3 | .0 | .0 | 46.8 |
| | 583 | 1 | .0 | .0 | 46.8 |
| | 585 | 4 | .0 | .0 | 46.8 |
| | 587 | 4 | .0 | .0 | 46.8 |
| | 588 | 5 | .0 | .0 | 46.8 |
| | 589 | 11 | .1 | .1 | 46.9 |
| | 590 | 30 | .2 | .2 | 47.1 |
| | 591 | 5 | .0 | .0 | 47.1 |
| | 594 | 1 | .0 | .0 | 47.1 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 596 | 15 | .1 | .1 | 47.2 |
| | 597 | 7 | .0 | .0 | 47.2 |
| | 598 | 14 | .1 | .1 | 47.3 |
| | 600 | 19 | .1 | .1 | 47.4 |
| | 601 | 44 | .3 | .3 | 47.7 |
| | 602 | 1 | .0 | .0 | 47.7 |
| | 603 | 1 | .0 | .0 | 47.7 |
| | 604 | 4 | .0 | .0 | 47.7 |
| | 606 | 12 | .1 | .1 | 47.8 |
| | 607 | 5 | .0 | .0 | 47.8 |
| | 608 | 42 | .2 | .2 | 48.1 |
| | 609 | 26 | .2 | .2 | 48.2 |
| | 610 | 2 | .0 | .0 | 48.2 |
| | 613 | 5 | .0 | .0 | 48.2 |
| | 616 | 2 | .0 | .0 | 48.3 |
| | 617 | 3 | .0 | .0 | 48.3 |
| | 631 | 18 | .1 | .1 | 48.4 |
| | 632 | 35 | .2 | .2 | 48.6 |
| | 633 | 22 | .1 | .1 | 48.7 |
| | 635 | 18 | .1 | .1 | 48.8 |
| | 636 | 49 | .3 | .3 | 49.1 |
| | 637 | 17 | .1 | .1 | 49.2 |
| | 639 | 2 | .0 | .0 | 49.2 |
| | 640 | 3 | .0 | .0 | 49.2 |
| | 641 | 10 | .1 | .1 | 49.3 |
| | 642 | 7 | .0 | .0 | 49.3 |
| | 643 | 1 | .0 | .0 | 49.3 |
| | 644 | 84 | .5 | .5 | 49.8 |
| | 645 | 27 | .2 | .2 | 50.0 |
| | 647 | 1 | .0 | .0 | 50.0 |
| | 648 | 1 | .0 | .0 | 50.0 |
| | 649 | 5 | .0 | .0 | 50.0 |
| | 650 | 5 | .0 | .0 | 50.0 |
| | 656 | 3 | .0 | .0 | 50.1 |
| | 657 | 36 | .2 | .2 | 50.3 |
| | 658 | 9 | .1 | .1 | 50.3 |
| | 659 | 25 | .1 | .1 | 50.5 |
| | 660 | 2 | .0 | .0 | 50.5 |
| | 661 | 55 | .3 | .3 | 50.8 |
| | 662 | 4 | .0 | .0 | 50.8 |
| | 663 | 13 | .1 | .1 | 50.9 |
| | 665 | 3 | .0 | .0 | 50.9 |
| | 667 | 4 | .0 | .0 | 50.9 |
| | 668 | 6 | .0 | .0 | 51.0 |
| | 669 | 2 | .0 | .0 | 51.0 |
| | 670 | 34 | .2 | .2 | 51.2 |
| | 671 | 49 | .3 | .3 | 51.5 |
| | 672 | 41 | .2 | .2 | 51.7 |
| | 673 | 2 | .0 | .0 | 51.7 |
| | 674 | 25 | .1 | .1 | 51.8 |
| | 675 | 23 | .1 | .1 | 52.0 |
| | 676 | 1 | .0 | .0 | 52.0 |
| | 677 | 14 | .1 | .1 | 52.1 |
| | 678 | 39 | .2 | .2 | 52.3 |
| | 679 | 21 | .1 | .1 | 52.4 |
| | 680 | 4 | .0 | .0 | 52.4 |
| | 682 | 2 | .0 | .0 | 52.4 |
| | 683 | 17 | .1 | .1 | 52.5 |
| | 684 | 10 | .1 | .1 | 52.6 |
| | 685 | 2 | .0 | .0 | 52.6 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 686 | 7 | .0 | .0 | 52.7 |
| | 687 | 28 | .2 | .2 | 52.8 |
| | 688 | 23 | .1 | .1 | 53.0 |
| | 689 | 32 | .2 | .2 | 53.1 |
| | 690 | 8 | .0 | .0 | 53.2 |
| | 693 | 1 | .0 | .0 | 53.2 |
| | 694 | 11 | .1 | .1 | 53.3 |
| | 695 | 22 | .1 | .1 | 53.4 |
| | 696 | 5 | .0 | .0 | 53.4 |
| | 697 | 100 | .6 | .6 | 54.0 |
| | 698 | 7 | .0 | .0 | 54.0 |
| | 699 | 8 | .0 | .0 | 54.1 |
| | 701 | 18 | .1 | .1 | 54.2 |
| | 702 | 18 | .1 | .1 | 54.3 |
| | 704 | 16 | .1 | .1 | 54.4 |
| | 705 | 18 | .1 | .1 | 54.5 |
| | 706 | 6 | .0 | .0 | 54.5 |
| | 707 | 23 | .1 | .1 | 54.6 |
| | 708 | 12 | .1 | .1 | 54.7 |
| | 710 | 2 | .0 | .0 | 54.7 |
| | 711 | 1 | .0 | .0 | 54.7 |
| | 712 | 10 | .1 | .1 | 54.8 |
| | 713 | 11 | .1 | .1 | 54.9 |
| | 715 | 42 | .2 | .2 | 55.1 |
| | 716 | 4 | .0 | .0 | 55.1 |
| | 717 | 3 | .0 | .0 | 55.1 |
| | 718 | 20 | .1 | .1 | 55.3 |
| | 719 | 14 | .1 | .1 | 55.3 |
| | 720 | 7 | .0 | .0 | 55.4 |
| | 721 | 17 | .1 | .1 | 55.5 |
| | 722 | 9 | .1 | .1 | 55.5 |
| | 723 | 1 | .0 | .0 | 55.5 |
| | 725 | 4 | .0 | .0 | 55.6 |
| | 727 | 2 | .0 | .0 | 55.6 |
| | 728 | 10 | .1 | .1 | 55.6 |
| | 729 | 1 | .0 | .0 | 55.6 |
| | 730 | 5 | .0 | .0 | 55.7 |
| | 731 | 3 | .0 | .0 | 55.7 |
| | 732 | 1 | .0 | .0 | 55.7 |
| | 734 | 7 | .0 | .0 | 55.7 |
| | 735 | 1 | .0 | .0 | 55.7 |
| | 736 | 16 | .1 | .1 | 55.8 |
| | 737 | 3 | .0 | .0 | 55.8 |
| | 738 | 1 | .0 | .0 | 55.8 |
| | 739 | 6 | .0 | .0 | 55.9 |
| | 740 | 20 | .1 | .1 | 56.0 |
| | 741 | 9 | .1 | .1 | 56.0 |
| | 742 | 1 | .0 | .0 | 56.0 |
| | 743 | 1 | .0 | .0 | 56.1 |
| | 744 | 5 | .0 | .0 | 56.1 |
| | 745 | 34 | .2 | .2 | 56.3 |
| | 747 | 4 | .0 | .0 | 56.3 |
| | 749 | 12 | .1 | .1 | 56.4 |
| | 750 | 12 | .1 | .1 | 56.4 |
| | 751 | 14 | .1 | .1 | 56.5 |
| | 752 | 4 | .0 | .0 | 56.5 |
| | 753 | 1 | .0 | .0 | 56.6 |
| | 754 | 31 | .2 | .2 | 56.7 |
| | 770 | 1 | .0 | .0 | 56.7 |
| | 771 | 7 | .0 | .0 | 56.8 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 773 | 31 | .2 | .2 | 57.0 |
| | 775 | 25 | .1 | .1 | 57.1 |
| | 776 | 19 | .1 | .1 | 57.2 |
| | 777 | 31 | .2 | .2 | 57.4 |
| | 778 | 48 | .3 | .3 | 57.7 |
| | 779 | 19 | .1 | .1 | 57.8 |
| | 780 | 50 | .3 | .3 | 58.1 |
| | 781 | 22 | .1 | .1 | 58.2 |
| | 782 | 20 | .1 | .1 | 58.3 |
| | 783 | 25 | .1 | .1 | 58.5 |
| | 784 | 26 | .2 | .2 | 58.6 |
| | 785 | 26 | .2 | .2 | 58.8 |
| | 786 | 42 | .2 | .2 | 59.0 |
| | 787 | 34 | .2 | .2 | 59.2 |
| | 788 | 16 | .1 | .1 | 59.3 |
| | 789 | 22 | .1 | .1 | 59.4 |
| | 790 | 9 | .1 | .1 | 59.5 |
| | 791 | 9 | .1 | .1 | 59.5 |
| | 792 | 1 | .0 | .0 | 59.5 |
| | 793 | 13 | .1 | .1 | 59.6 |
| | 794 | 7 | .0 | .0 | 59.6 |
| | 795 | 8 | .0 | .0 | 59.7 |
| | 796 | 20 | .1 | .1 | 59.8 |
| | 797 | 11 | .1 | .1 | 59.9 |
| | 798 | 77 | .4 | .4 | 60.3 |
| | 799 | 35 | .2 | .2 | 60.5 |
| | 800 | 16 | .1 | .1 | 60.6 |
| | 802 | 12 | .1 | .1 | 60.7 |
| | 803 | 15 | .1 | .1 | 60.8 |
| | 804 | 30 | .2 | .2 | 60.9 |
| | 805 | 61 | .4 | .4 | 61.3 |
| | 806 | 15 | .1 | .1 | 61.4 |
| | 807 | 10 | .1 | .1 | 61.4 |
| | 808 | 5 | .0 | .0 | 61.5 |
| | 809 | 29 | .2 | .2 | 61.6 |
| | 810 | 50 | .3 | .3 | 61.9 |
| | 811 | 30 | .2 | .2 | 62.1 |
| | 812 | 16 | .1 | .1 | 62.2 |
| | 813 | 15 | .1 | .1 | 62.3 |
| | 814 | 24 | .1 | .1 | 62.4 |
| | 815 | 58 | .3 | .3 | 62.7 |
| | 816 | 23 | .1 | .1 | 62.9 |
| | 817 | 13 | .1 | .1 | 63.0 |
| | 818 | 16 | .1 | .1 | 63.0 |
| | 820 | 18 | .1 | .1 | 63.1 |
| | 821 | 2 | .0 | .0 | 63.2 |
| | 822 | 5 | .0 | .0 | 63.2 |
| | 823 | 3 | .0 | .0 | 63.2 |
| | 824 | 1 | .0 | .0 | 63.2 |
| | 828 | 3 | .0 | .0 | 63.2 |
| | 829 | 9 | .1 | .1 | 63.3 |
| | 831 | 1 | .0 | .0 | 63.3 |
| | 832 | 1 | .0 | .0 | 63.3 |
| | 833 | 1 | .0 | .0 | 63.3 |
| | 834 | 2 | .0 | .0 | 63.3 |
| | 835 | 6 | .0 | .0 | 63.3 |
| | 836 | 31 | .2 | .2 | 63.5 |
| | 837 | 17 | .1 | .1 | 63.6 |
| | 839 | 12 | .1 | .1 | 63.7 |
| | 840 | 9 | .1 | .1 | 63.7 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 841 | 18 | .1 | .1 | 63.8 |
| | 842 | 4 | .0 | .0 | 63.9 |
| | 843 | 53 | .3 | .3 | 64.2 |
| | 844 | 1 | .0 | .0 | 64.2 |
| | 846 | 29 | .2 | .2 | 64.3 |
| | 847 | 11 | .1 | .1 | 64.4 |
| | 848 | 60 | .3 | .3 | 64.8 |
| | 849 | 2 | .0 | .0 | 64.8 |
| | 851 | 30 | .2 | .2 | 64.9 |
| | 852 | 17 | .1 | .1 | 65.0 |
| | 853 | 32 | .2 | .2 | 65.2 |
| | 854 | 18 | .1 | .1 | 65.3 |
| | 855 | 55 | .3 | .3 | 65.6 |
| | 856 | 3 | .0 | .0 | 65.7 |
| | 859 | 4 | .0 | .0 | 65.7 |
| | 861 | 2 | .0 | .0 | 65.7 |
| | 862 | 2 | .0 | .0 | 65.7 |
| | 863 | 2 | .0 | .0 | 65.7 |
| | 865 | 2 | .0 | .0 | 65.7 |
| | 867 | 5 | .0 | .0 | 65.8 |
| | 868 | 1 | .0 | .0 | 65.8 |
| | 871 | 3 | .0 | .0 | 65.8 |
| | 872 | 1 | .0 | .0 | 65.8 |
| | 874 | 9 | .1 | .1 | 65.8 |
| | 875 | 5 | .0 | .0 | 65.9 |
| | 876 | 19 | .1 | .1 | 66.0 |
| | 877 | 5 | .0 | .0 | 66.0 |
| | 878 | 18 | .1 | .1 | 66.1 |
| | 879 | 7 | .0 | .0 | 66.2 |
| | 880 | 21 | .1 | .1 | 66.3 |
| | 881 | 34 | .2 | .2 | 66.5 |
| | 882 | 22 | .1 | .1 | 66.6 |
| | 883 | 10 | .1 | .1 | 66.7 |
| | 884 | 18 | .1 | .1 | 66.8 |
| | 885 | 1 | .0 | .0 | 66.8 |
| | 886 | 5 | .0 | .0 | 66.8 |
| | 887 | 17 | .1 | .1 | 66.9 |
| | 888 | 11 | .1 | .1 | 67.0 |
| | 889 | 1 | .0 | .0 | 67.0 |
| | 890 | 2 | .0 | .0 | 67.0 |
| | 891 | 19 | .1 | .1 | 67.1 |
| | 892 | 18 | .1 | .1 | 67.2 |
| | 893 | 51 | .3 | .3 | 67.5 |
| | 894 | 19 | .1 | .1 | 67.6 |
| | 895 | 6 | .0 | .0 | 67.6 |
| | 896 | 36 | .2 | .2 | 67.8 |
| | 897 | 41 | .2 | .2 | 68.1 |
| | 898 | 4 | .0 | .0 | 68.1 |
| | 899 | 27 | .2 | .2 | 68.3 |
| | 900 | 16 | .1 | .1 | 68.3 |
| | 902 | 10 | .1 | .1 | 68.4 |
| | 903 | 26 | .2 | .2 | 68.6 |
| | 904 | 38 | .2 | .2 | 68.8 |
| | 905 | 2 | .0 | .0 | 68.8 |
| | 906 | 9 | .1 | .1 | 68.8 |
| | 908 | 9 | .1 | .1 | 68.9 |
| | 909 | 48 | .3 | .3 | 69.2 |
| | 910 | 21 | .1 | .1 | 69.3 |
| | 913 | 15 | .1 | .1 | 69.4 |
| | 914 | 2 | .0 | .0 | 69.4 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 915 | 1 | .0 | .0 | 69.4 |
| | 918 | 3 | .0 | .0 | 69.4 |
| | 919 | 6 | .0 | .0 | 69.4 |
| | 920 | 1 | .0 | .0 | 69.5 |
| | 921 | 1 | .0 | .0 | 69.5 |
| | 923 | 4 | .0 | .0 | 69.5 |
| | 927 | 4 | .0 | .0 | 69.5 |
| | 928 | 20 | .1 | .1 | 69.6 |
| | 929 | 8 | .0 | .0 | 69.7 |
| | 930 | 51 | .3 | .3 | 70.0 |
| | 931 | 5 | .0 | .0 | 70.0 |
| | 932 | 14 | .1 | .1 | 70.1 |
| | 933 | 16 | .1 | .1 | 70.2 |
| | 934 | 1 | .0 | .0 | 70.2 |
| | 936 | 1 | .0 | .0 | 70.2 |
| | 938 | 5 | .0 | .0 | 70.2 |
| | 940 | 3 | .0 | .0 | 70.2 |
| | 941 | 4 | .0 | .0 | 70.2 |
| | 942 | 5 | .0 | .0 | 70.3 |
| | 943 | 3 | .0 | .0 | 70.3 |
| | 944 | 6 | .0 | .0 | 70.3 |
| | 960 | 21 | .1 | .1 | 70.4 |
| | 961 | 2 | .0 | .0 | 70.5 |
| | 962 | 13 | .1 | .1 | 70.5 |
| | 963 | 23 | .1 | .1 | 70.7 |
| | 964 | 22 | .1 | .1 | 70.8 |
| | 965 | 6 | .0 | .0 | 70.8 |
| | 966 | 26 | .2 | .2 | 71.0 |
| | 967 | 12 | .1 | .1 | 71.0 |
| | 968 | 19 | .1 | .1 | 71.2 |
| | 969 | 7 | .0 | .0 | 71.2 |
| | 970 | 26 | .2 | .2 | 71.3 |
| | 971 | 11 | .1 | .1 | 71.4 |
| | 972 | 2 | .0 | .0 | 71.4 |
| | 973 | 20 | .1 | .1 | 71.5 |
| | 974 | 7 | .0 | .0 | 71.6 |
| | 976 | 5 | .0 | .0 | 71.7 |
| | 977 | 5 | .0 | .0 | 71.8 |
| | 979 | 14 | .1 | .1 | 71.9 |
| | 980 | 3 | .0 | .0 | 71.9 |
| | 981 | 12 | .1 | .1 | 71.9 |
| | 984 | 4 | .0 | .0 | 72.0 |
| | 985 | 10 | .1 | .1 | 72.0 |
| | 986 | 4 | .0 | .0 | 72.0 |
| | 987 | 11 | .1 | .1 | 72.1 |
| | 988 | 21 | .1 | .1 | 72.2 |
| | 989 | 22 | .1 | .1 | 72.4 |
| | 990 | 2 | .0 | .0 | 72.4 |
| | 991 | 15 | .1 | .1 | 72.5 |
| | 993 | 24 | .1 | .1 | 72.6 |
| | 995 | 2 | .0 | .0 | 72.6 |
| | 999 | 1 | .0 | .0 | 72.6 |
| | 1001 | 15 | .1 | .1 | 72.7 |
| | 1002 | 5 | .0 | .0 | 72.7 |
| | 1003 | 9 | .1 | .1 | 72.8 |
| | 1004 | 9 | .1 | .1 | 72.8 |
| | 1005 | 27 | .2 | .2 | 73.0 |
| | 1006 | 7 | .0 | .0 | 73.0 |
| | 1007 | 16 | .1 | .1 | 73.1 |
| | 1008 | 7 | .0 | .0 | 73.2 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1009 | 68 | .4 | .4 | 73.6 |
| | 1010 | 66 | .4 | .4 | 73.9 |
| | 1011 | 31 | .2 | .2 | 74.1 |
| | 1012 | 21 | .1 | .1 | 74.2 |
| | 1013 | 15 | .1 | .1 | 74.3 |
| | 1014 | 58 | .3 | .3 | 74.7 |
| | 1015 | 6 | .0 | .0 | 74.7 |
| | 1016 | 4 | .0 | .0 | 74.7 |
| | 1017 | 12 | .1 | .1 | 74.8 |
| | 1018 | 14 | .1 | .1 | 74.9 |
| | 1019 | 6 | .0 | .0 | 74.9 |
| | 1020 | 1 | .0 | .0 | 74.9 |
| | 1021 | 5 | .0 | .0 | 74.9 |
| | 1022 | 14 | .1 | .1 | 75.0 |
| | 1023 | 11 | .1 | .1 | 75.1 |
| | 1024 | 12 | .1 | .1 | 75.2 |
| | 1025 | 18 | .1 | .1 | 75.3 |
| | 1026 | 19 | .1 | .1 | 75.4 |
| | 1027 | 17 | .1 | .1 | 75.5 |
| | 1028 | 1 | .0 | .0 | 75.5 |
| | 1031 | 5 | .0 | .0 | 75.5 |
| | 1032 | 16 | .1 | .1 | 75.6 |
| | 1033 | 32 | .2 | .2 | 75.8 |
| | 1034 | 15 | .1 | .1 | 75.9 |
| | 1035 | 18 | .1 | .1 | 76.0 |
| | 1036 | 9 | .1 | .1 | 76.0 |
| | 1037 | 25 | .1 | .1 | 76.2 |
| | 1038 | 3 | .0 | .0 | 76.2 |
| | 1039 | 29 | .2 | .2 | 76.3 |
| | 1040 | 10 | .1 | .1 | 76.4 |
| | 1041 | 6 | .0 | .0 | 76.4 |
| | 1043 | 5 | .0 | .0 | 76.5 |
| | 1047 | 8 | .0 | .0 | 76.5 |
| | 1048 | 7 | .0 | .0 | 76.6 |
| | 1049 | 1 | .0 | .0 | 76.6 |
| | 1050 | 2 | .0 | .0 | 76.6 |
| | 1057 | 2 | .0 | .0 | 76.6 |
| | 1059 | 11 | .1 | .1 | 76.6 |
| | 1060 | 5 | .0 | .0 | 76.7 |
| | 1061 | 38 | .2 | .2 | 76.9 |
| | 1062 | 24 | .1 | .1 | 77.0 |
| | 1063 | 14 | .1 | .1 | 77.1 |
| | 1066 | 3 | .0 | .0 | 77.1 |
| | 1067 | 1 | .0 | .0 | 77.1 |
| | 1071 | 3 | .0 | .0 | 77.2 |
| | 1075 | 1 | .0 | .0 | 77.2 |
| | 1078 | 1 | .0 | .0 | 77.2 |
| | 1079 | 1 | .0 | .0 | 77.2 |
| | 1080 | 2 | .0 | .0 | 77.2 |
| | 1082 | 3 | .0 | .0 | 77.2 |
| | 1083 | 35 | .2 | .2 | 77.4 |
| | 1084 | 30 | .2 | .2 | 77.6 |
| | 1085 | 20 | .1 | .1 | 77.7 |
| | 1086 | 6 | .0 | .0 | 77.7 |
| | 1087 | 28 | .2 | .2 | 77.9 |
| | 1090 | 1 | .0 | .0 | 77.9 |
| | 1092 | 14 | .1 | .1 | 78.0 |
| | 1094 | 5 | .0 | .0 | 78.0 |
| | 1133 | 2 | .0 | .0 | 78.0 |
| | 1134 | 3 | .0 | .0 | 78.0 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1136 | 19 | .1 | .1 | 78.1 |
| | 1137 | 1 | .0 | .0 | 78.2 |
| | 1138 | 1 | .0 | .0 | 78.2 |
| | 1139 | 16 | .1 | .1 | 78.2 |
| | 1140 | 14 | .1 | .1 | 78.3 |
| | 1141 | 15 | .1 | .1 | 78.4 |
| | 1142 | 2 | .0 | .0 | 78.4 |
| | 1143 | 35 | .2 | .2 | 78.6 |
| | 1145 | 1 | .0 | .0 | 78.6 |
| | 1146 | 11 | .1 | .1 | 78.7 |
| | 1147 | 7 | .0 | .0 | 78.7 |
| | 1148 | 19 | .1 | .1 | 78.9 |
| | 1149 | 14 | .1 | .1 | 78.9 |
| | 1150 | 24 | .1 | .1 | 79.1 |
| | 1151 | 37 | .2 | .2 | 79.3 |
| | 1152 | 44 | .3 | .3 | 79.5 |
| | 1153 | 15 | .1 | .1 | 79.6 |
| | 1154 | 56 | .3 | .3 | 79.9 |
| | 1156 | 36 | .2 | .2 | 80.2 |
| | 1157 | 27 | .2 | .2 | 80.3 |
| | 1158 | 19 | .1 | .1 | 80.4 |
| | 1159 | 14 | .1 | .1 | 80.5 |
| | 1160 | 3 | .0 | .0 | 80.5 |
| | 1162 | 4 | .0 | .0 | 80.5 |
| | 1163 | 1 | .0 | .0 | 80.6 |
| | 1165 | 8 | .0 | .0 | 80.6 |
| | 1166 | 10 | .1 | .1 | 80.7 |
| | 1167 | 2 | .0 | .0 | 80.7 |
| | 1168 | 2 | .0 | .0 | 80.7 |
| | 1171 | 1 | .0 | .0 | 80.7 |
| | 1172 | 3 | .0 | .0 | 80.7 |
| | 1173 | 3 | .0 | .0 | 80.7 |
| | 1174 | 7 | .0 | .0 | 80.8 |
| | 1175 | 9 | .1 | .1 | 80.8 |
| | 1177 | 13 | .1 | .1 | 80.9 |
| | 1178 | 10 | .1 | .1 | 80.9 |
| | 1179 | 9 | .1 | .1 | 81.0 |
| | 1180 | 19 | .1 | .1 | 81.1 |
| | 1181 | 2 | .0 | .0 | 81.1 |
| | 1182 | 17 | .1 | .1 | 81.2 |
| | 1183 | 55 | .3 | .3 | 81.5 |
| | 1184 | 13 | .1 | .1 | 81.6 |
| | 1185 | 13 | .1 | .1 | 81.7 |
| | 1186 | 35 | .2 | .2 | 81.9 |
| | 1187 | 37 | .2 | .2 | 82.1 |
| | 1188 | 53 | .3 | .3 | 82.4 |
| | 1189 | 30 | .2 | .2 | 82.6 |
| | 1190 | 28 | .2 | .2 | 82.7 |
| | 1191 | 87 | .5 | .5 | 83.2 |
| | 1192 | 165 | 1.0 | 1.0 | 84.2 |
| | 1193 | 53 | .3 | .3 | 84.5 |
| | 1195 | 34 | .2 | .2 | 84.7 |
| | 1196 | 52 | .3 | .3 | 85.0 |
| | 1197 | 35 | .2 | .2 | 85.2 |
| | 1198 | 89 | .5 | .5 | 85.7 |
| | 1199 | 129 | .7 | .7 | 86.5 |
| | 1200 | 12 | .1 | .1 | 86.5 |
| | 1201 | 81 | .5 | .5 | 87.0 |
| | 1202 | 100 | .6 | .6 | 87.6 |
| | 1203 | 18 | .1 | .1 | 87.7 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1205 | 5 | .0 | .0 | 87.7 |
| | 1206 | 31 | .2 | .2 | 87.9 |
| | 1207 | 12 | .1 | .1 | 88.0 |
| | 1208 | 10 | .1 | .1 | 88.0 |
| | 1209 | 35 | .2 | .2 | 88.2 |
| | 1210 | 3 | .0 | .0 | 88.2 |
| | 1211 | 54 | .3 | .3 | 88.5 |
| | 1212 | 15 | .1 | .1 | 88.6 |
| | 1213 | 8 | .0 | .0 | 88.7 |
| | 1214 | 15 | .1 | .1 | 88.8 |
| | 1215 | 54 | .3 | .3 | 89.1 |
| | 1216 | 29 | .2 | .2 | 89.2 |
| | 1217 | 43 | .2 | .2 | 89.5 |
| | 1218 | 29 | .2 | .2 | 89.7 |
| | 1219 | 41 | .2 | .2 | 89.9 |
| | 1220 | 16 | .1 | .1 | 90.0 |
| | 1221 | 50 | .3 | .3 | 90.3 |
| | 1222 | 20 | .1 | .1 | 90.4 |
| | 1223 | 75 | .4 | .4 | 90.8 |
| | 1224 | 44 | .3 | .3 | 91.1 |
| | 1225 | 39 | .2 | .2 | 91.3 |
| | 1226 | 42 | .2 | .2 | 91.6 |
| | 1227 | 3 | .0 | .0 | 91.6 |
| | 1228 | 1 | .0 | .0 | 91.6 |
| | 1229 | 17 | .1 | .1 | 91.7 |
| | 1230 | 27 | .2 | .2 | 91.8 |
| | 1231 | 63 | .4 | .4 | 92.2 |
| | 1232 | 7 | .0 | .0 | 92.2 |
| | 1233 | 64 | .4 | .4 | 92.6 |
| | 1234 | 21 | .1 | .1 | 92.7 |
| | 1235 | 45 | .3 | .3 | 93.0 |
| | 1236 | 49 | .3 | .3 | 93.3 |
| | 1237 | 25 | .1 | .1 | 93.4 |
| | 1238 | 34 | .2 | .2 | 93.6 |
| | 1239 | 2 | .0 | .0 | 93.6 |
| | 1242 | 22 | .1 | .1 | 93.8 |
| | 1243 | 55 | .3 | .3 | 94.1 |
| | 1244 | 9 | .1 | .1 | 94.1 |
| | 1245 | 110 | .6 | .6 | 94.8 |
| | 1246 | 36 | .2 | .2 | 95.0 |
| | 1247 | 47 | .3 | .3 | 95.2 |
| | 1248 | 79 | .5 | .5 | 95.7 |
| | 1249 | 45 | .3 | .3 | 96.0 |
| | 1250 | 76 | .4 | .4 | 96.4 |
| | 1251 | 47 | .3 | .3 | 96.7 |
| | 1252 | 91 | .5 | .5 | 97.2 |
| | 1253 | 37 | .2 | .2 | 97.4 |
| | 1254 | 76 | .4 | .4 | 97.8 |
| | 1255 | 78 | .5 | .5 | 98.3 |
| | 1256 | 20 | .1 | .1 | 98.4 |
| | 1257 | 14 | .1 | .1 | 98.5 |
| | 1258 | 3 | .0 | .0 | 98.5 |
| | 1259 | 10 | .1 | .1 | 98.6 |
| | 1261 | 6 | .0 | .0 | 98.6 |
| | 1262 | 4 | .0 | .0 | 98.6 |
| | 1263 | 5 | .0 | .0 | 98.7 |
| | 1264 | 32 | .2 | .2 | 98.8 |
| | 1265 | 24 | .1 | .1 | 99.0 |
| | 1266 | 2 | .0 | .0 | 99.0 |
| | 1270 | 8 | .0 | .0 | 99.0 |

(10) TRIP DESTINATION T.A.R.M.S. ZONE

| Value Label | Value | Frequency | Percent | Valid Percent | Cum Percent |
|---|---|---|---|---|---|
| | 1273 | 1 | .0 | .0 | 99.0 |
| | 1274 | 1 | .0 | .0 | 99.0 |
| | 1276 | 2 | .0 | .0 | 99.1 |
| | 1277 | 9 | .1 | .1 | 99.1 |
| | 1279 | 6 | .0 | .0 | 99.1 |
| | 1280 | 11 | .1 | .1 | 99.2 |
| | 1281 | 7 | .0 | .0 | 99.2 |
| | 1282 | 2 | .0 | .0 | 99.3 |
| | 1283 | 1 | .0 | .0 | 99.3 |
| | 1284 | 10 | .1 | .1 | 99.3 |
| | 1285 | 2 | .0 | .0 | 99.3 |
| | 1286 | 9 | .1 | .1 | 99.4 |
| | 1287 | 2 | .0 | .0 | 99.4 |
| | 1288 | 7 | .0 | .0 | 99.4 |
| | 1289 | 12 | .1 | .1 | 99.5 |
| | 1290 | 9 | .1 | .1 | 99.6 |
| | 1291 | 1 | .0 | .0 | 99.6 |
| | 1292 | 23 | .1 | .1 | 99.7 |
| | 1293 | 5 | .0 | .0 | 99.7 |
| | 1295 | 2 | .0 | .0 | 99.7 |
| | 1297 | 2 | .0 | .0 | 99.8 |
| | 1298 | 12 | .1 | .1 | 99.8 |
| | 1302 | 3 | .0 | .0 | 99.8 |
| | 1308 | 1 | .0 | .0 | 99.8 |
| | 1310 | 2 | .0 | .0 | 99.9 |
| | 1313 | 1 | .0 | .0 | 99.9 |
| | 9993 | 8 | .0 | .0 | 99.9 |
| | 9996 | 16 | .1 | .1 | 100.0 |
| | TOTAL | 17301 | 100.0 | 100.0 | |

# APPENDIX D

## TTS VALIDATION TABLES (SEE CHAPTER 4)

(1) TDS TOTAL PERSON TRIP RATES

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.66 | 0.91 | 0.59 |
| EMPLOYMENT STATUS | FULL TIME | 2013 | 3.17 | 0.80 | 0.81 |
| | PART TIME | 393 | 2.98 | 1.05 | 0.63 |
| | AT HOME | 64 | 2.81 | 1.40 | 0.84 |
| | OTHER | 1740 | 1.99 | 0.99 | 0.32 |
| STUDENT STATUS | YES | 910 | 2.88 | 0.66 | 0.43 |
| | NO | 3300 | 2.60 | 0.98 | 0.63 |
| AGE | UNDER 15 | 405 | 2.58 | 0.42 | 0.18 |
| | 15-24 | 498 | 2.81 | 0.70 | 0.49 |
| | 25-44 | 1643 | 3.13 | 1.06 | 0.81 |
| | 45-64 | 995 | 2.76 | 1.03 | 0.64 |
| | OVER 65 | 489 | 1.53 | 1.04 | 0.33 |
| SEX | MALE | 1892 | 2.96 | 0.90 | 0.66 |
| | FEMALE | 2194 | 2.55 | 0.97 | 0.57 |
| LICENSE | YES | 2903 | 2.96 | 1.09 | 0.78 |
| | NO | 1147 | 2.24 | 0.56 | 0.21 |
| RESPOND | YES | 1965 | 2.79 | 1.03 | 0.71 |
| | NO | 2245 | 2.55 | 0.81 | 0.49 |
| MUNICIPALITY | METRO | 1503 | 2.50 | 0.82 | 0.53 |
| | HAMILTON | 932 | 2.70 | 0.97 | 0.61 |
| | OTHER | 1775 | 2.78 | 0.96 | 0.63 |

(4) TTS TOTAL PERSON TRIP RATES

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.35 | 0.84 | 0.33 |
| EMPLOYMENT STATUS | FULL TIME | 2093 | 2.75 | 0.73 | 0.45 |
| | PART TIME | 314 | 2.62 | 0.88 | 0.36 |
| | AT HOME | 82 | 2.06 | 1.28 | 0.40 |
| | OTHER | 1721 | 1.83 | 0.94 | 0.18 |
| STUDENT STATUS | YES | 764 | 2.25 | 0.36 | 0.11 |
| | NO | 3446 | 2.37 | 0.95 | 0.38 |
| AGE | UNDER 15 | 438 | 2.07 | 0.26 | 0.05 |
| | 15-24 | 529 | 2.47 | 0.58 | 0.25 |
| | 25-44 | 1671 | 2.63 | 0.89 | 0.45 |
| | 45-64 | 1014 | 2.41 | 0.97 | 0.38 |
| | OVER 65 | 498 | 1.71 | 1.29 | 0.22 |
| SEX | MALE | 1965 | 2.49 | 0.81 | 0.34 |
| | FEMALE | 2243 | 2.23 | 0.87 | 0.32 |
| LICENSE | YES | 2933 | 2.65 | 1.01 | 0.43 |
| | NO | 1276 | 1.66 | 0.44 | 0.09 |
| RESPOND | YES | 1965 | 2.63 | 1.07 | 0.47 |
| | NO | 2245 | 2.10 | 0.64 | 0.21 |
| MUNICIPALITY | METRO | 1503 | 2.23 | 0.77 | 0.30 |
| | HAMILTON | 932 | 2.43 | 0.94 | 0.34 |
| | OTHER | 1775 | 2.41 | 0.85 | 0.35 |

**(2) TDS RESPONDENTS TRIP RATES**

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.79 | 1.03 | 0.71 |
| EMPLOYMENT STATUS | FULL TIME | 1090 | 3.26 | 0.81 | 0.87 |
| | PART TIME | 181 | 2.96 | 1.13 | 0.69 |
| | AT HOME | 35 | 2.46 | 1.09 | 0.85 |
| | OTHER | 659 | 1.98 | 1.36 | 0.44 |
| STUDENT STATUS | YES | 214 | 3.40 | 0.99 | 0.85 |
| | NO | 1751 | 2.72 | 1.03 | 0.69 |
| AGE | UNDER 15 | 5 | 2.40 | 0.40 | 0.20 |
| | 15-24 | 141 | 2.99 | 0.74 | 0.74 |
| | 25-44 | 923 | 3.17 | 1.06 | 0.87 |
| | 45-64 | 529 | 2.85 | 1.04 | 0.68 |
| | OVER 65 | 322 | 1.63 | 1.13 | 0.35 |
| SEX | MALE | 865 | 3.05 | 1.00 | 0.76 |
| | FEMALE | 1086 | 2.62 | 1.07 | 0.69 |
| LICENSE | YES | 2933 | 3.06 | 1.11 | 0.82 |
| | NO | 1276 | 1.69 | 0.72 | 0.26 |
| MUNICIPALITY | METRO | 777 | 2.65 | 0.94 | 0.63 |
| | HAMILTON | 415 | 2.88 | 1.14 | 0.78 |
| | OTHER | 773 | 2.88 | 1.06 | 0.75 |

**(5) TTS RESPONDENTS TRIP RATES**

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.64 | 1.07 | 0.47 |
| EMPLOYMENT STATUS | FULL TIME | 1121 | 2.97 | 0.81 | 0.56 |
| | PART TIME | 146 | 2.97 | 1.18 | 0.52 |
| | AT HOME | 49 | 2.33 | 1.45 | 0.45 |
| | OTHER | 649 | 2.01 | 1.47 | 0.30 |
| STUDENT STATUS | YES | 110 | 2.77 | 0.61 | 0.31 |
| | NO | 1855 | 2.63 | 1.10 | 0.48 |
| AGE | UNDER 15 | 4 | 2.00 | 0.00 | -0.13 |
| | 15-24 | 166 | 2.73 | 0.79 | 0.27 |
| | 25-44 | 928 | 2.86 | 0.95 | 0.42 |
| | 45-64 | 542 | 2.69 | 1.09 | 0.36 |
| | OVER 65 | 342 | 1.90 | 1.47 | 0.12 |
| SEX | MALE | 873 | 2.86 | 1.05 | 0.48 |
| | FEMALE | 1091 | 2.46 | 1.09 | 0.46 |
| LICENSE | YES | 1615 | 2.86 | 1.14 | 0.53 |
| | NO | 350 | 1.64 | 0.73 | 0.17 |
| MUNICIPALITY | METRO | 777 | 2.46 | 0.94 | 0.39 |
| | HAMILTON | 415 | 2.78 | 1.23 | 0.55 |
| | OTHER | 773 | 2.75 | 1.12 | 0.50 |

(3) TDS NON-RESPONDENTS TRIP RATES

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.55 | 0.81 | 0.49 |
| EMPLOYMENT STATUS | FULL TIME | 923 | 3.07 | 0.78 | 0.74 |
| | PART TIME | 212 | 3.00 | 0.99 | 0.60 |
| | AT HOME | 29 | 3.24 | 1.79 | 0.83 |
| | OTHER | 1081 | 2.00 | 0.77 | 0.25 |
| STUDENT STATUS | YES | 696 | 2.72 | 0.56 | 0.30 |
| | NO | 1549 | 2.47 | 0.92 | 0.57 |
| AGE | UNDER 15 | 400 | 2.58 | 0.43 | 0.23 |
| | 15-24 | 357 | 2.74 | 0.69 | 0.45 |
| | 25-44 | 720 | 3.07 | 1.07 | 0.80 |
| | 45-64 | 466 | 2.65 | 1.02 | 0.64 |
| | OVER 65 | 167 | 2.34 | 0.87 | 0.35 |
| SEX | MALE | 1027 | 2.89 | 0.82 | 0.58 |
| | FEMALE | 1108 | 2.49 | 0.88 | 0.45 |
| LICENSE | YES | 1309 | 3.03 | 1.08 | 0.73 |
| | NO | 808 | 2.17 | 0.50 | 0.18 |
| MUNICIPALITY | METRO | 726 | 2.34 | 0.70 | 0.42 |
| | HAMILTON | 517 | 2.55 | 0.84 | 0.48 |
| | OTHER | 1002 | 2.70 | 0.88 | 0.55 |

(6) TTS NON-RESONDENTS TRIP RATES

| | | RESPOND | TOTAL TRIPS | HBO | NHB |
|---|---|---|---|---|---|
| | | | 2.10 | 0.64 | 0.21 |
| EMPLOYMENT STATUS | FULL TIME | 972 | 2.50 | 0.65 | 0.31 |
| | PART TIME | 168 | 2.32 | 0.62 | 0.21 |
| | AT HOME | 33 | 1.66 | 1.03 | 0.33 |
| | OTHER | 1072 | 1.72 | 0.62 | 0.11 |
| STUDENT STATUS | YES | 654 | 2.16 | 0.31 | 0.08 |
| | NO | 1591 | 2.07 | 0.77 | 0.26 |
| AGE | UNDER 15 | 434 | 2.07 | 0.27 | 0.06 |
| | 15-24 | 363 | 2.36 | 0.49 | 0.19 |
| | 25-44 | 743 | 2.35 | 0.80 | 0.32 |
| | 45-64 | 472 | 2.09 | 0.83 | 0.26 |
| | OVER 65 | 174 | 1.36 | 0.96 | 0.15 |
| SEX | MALE | 1092 | 2.19 | 0.61 | 0.23 |
| | FEMALE | 1152 | 2.01 | 0.67 | 0.19 |
| LICENSE | YES | 1318 | 2.41 | 0.86 | 0.31 |
| | NO | 962 | 1.66 | 0.33 | 0.06 |
| MUNICIPALITY | METRO | 726 | 2.00 | 0.59 | 0.19 |
| | HAMILTON | 517 | 2.15 | 0.71 | 0.17 |
| | OTHER | 1002 | 2.14 | 0.64 | 0.24 |

(7) TDS/TTS HOME BASED WORK TRIP RATES COMPARISON

| | | TDS | TTS |
|---|---|---|---|
| TOTAL | FULL TIME | 1.51 | 1.54 |
| | PART TIME | 0.81 | 0.83 |
| | AT HOME | 0.64 | 0.40 |
| RESPONDENTS | FULL TIME | 1.52 | 1.57 |
| | PART TIME | 0.86 | 0.85 |
| | AT HOME | 0.73 | 0.40 |
| NON-RESPONDENTS | FULL TIME | 1.51 | 1.52 |
| | PART TIME | 0.78 | 0.82 |
| | AT HOME | 0.60 | 0.40 |

(8) TDS/TTS HOME BASED SCHOOL TRIP RATES COMPARISON

| | TDS | TTS |
|---|---|---|
| TOTAL PERSONS | 1.84 | 1.74 |
| RESPONDENTS | 1.59 | 1.67 |
| NON-RESPONDENTS | 1.86 | 1.75 |

(9) TDS TOTAL PERSONS - TRIPS BY TRIP PURPOSE BY MODE[1]

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 2106565 | 679155 | 151158 | 17831 | 2954709 |
| HBS | 276436 | 426044 | 705945 | 686 | 1409111 |
| HBO | 2994743 | 297743 | 0 | 5362 | 3297847 |
| NHB | 1935439 | 211249 | 0 | 12974 | 2159662 |
| TOTAL | 7313183 | 1614191 | 857103 | 36852 | 9821328 |

TDS TOTAL PERSON TRIP RATES FOR PURPOSE BY MODE

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 0.59 | 0.19 | 0.04 | 0.00 | 0.82 |
| HBS | 0.08 | 0.12 | 0.20 | 0.00 | 0.39 |
| HBO | 0.83 | 0.08 | 0.00 | 0.00 | 0.92 |
| NHB | 0.54 | 0.06 | 0.00 | 0.00 | 0.60 |
| TOTAL | 2.03 | 0.45 | 0.24 | 0.01 | 2.73 |

[1] These trip rates were calculated using expanded trips and expanded persons. Other trip rates refering to same category in this chapter are non-expanded trip rates.

(10) TTS TOTAL PERSONS - TRIPS BY TRIP PURPOSE BY MODE[2]

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| OTHER | 79413 | 13541 | 1676 | 0 | 94630 |
| HBW | 2153730 | 648664 | 130173 | 4327 | 2936895 |
| HBS | 240691 | 484537 | 610612 | 1759 | 1337599 |
| HBO | 2654773 | 232528 | 8202 | 1611 | 2897114 |
| NHB | 994131 | 89081 | 3420 | 2546 | 1089178 |
| TOTAL | 6122739 | 1468352 | 754082 | 10243 | 8355415 |

TTS TOTAL PERSON TRIP RATES FOR PURPOSE BY MODE

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| OTHER | 0.02 | 0.00 | 0.00 | 0.00 | 0.03 |
| HBW | 0.60 | 0.18 | 0.04 | 0.00 | 0.82 |
| HBS | 0.07 | 0.13 | 0.17 | 0.00 | 0.37 |
| HBO | 0.74 | 0.06 | 0.00 | 0.00 | 0.80 |
| NHB | 0.28 | 0.02 | 0.00 | 0.00 | 0.30 |
| TOTAL | 1.70 | 0.41 | 0.21 | 0.00 | 2.32 |

[2] See footnote 1.

(11) RELATIVE TRIP RATES (TDS/TTS) BY TRIP PURPOSE AND TRIP MODE

TDS TRIP RATE/TTS TRIP RATE

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 0.98 | 1.05 | 1.16 | 4.12 | 1.01 |
| HBS | 1.15 | 0.88 | 1.16 | 0.39 | 1.05 |
| HBO | 1.13 | 1.28 | 0.00 | 3.33 | 1.14 |
| NHB | 1.95 | 2.37 | 0.00 | 5.10 | 1.98 |
| TOTAL | 1.19 | 1.10 | 1.14 | 3.60 | 1.18 |

# APPENDIX E

# SEASONAL VARIATIONS IN GTA TRAVEL PATTERN

## SEASONAL VARIATION IN GTA TRAVEL PATTERNS

### AVERAGE WEEKDAY RIDERSHIP (TTC)

| TTS SURVEY PERIOD | RIDERSHIP |
|---|---|
| SET 86 | 1501724 |
| OCT 86 | 1536859 |
| NOV 86 | 1564667 |

| TDS SURVEY PERIOD | RIDERSHIP |
|---|---|
| FEB 87 | 1542544 |
| MAR 87 | 1499782 |

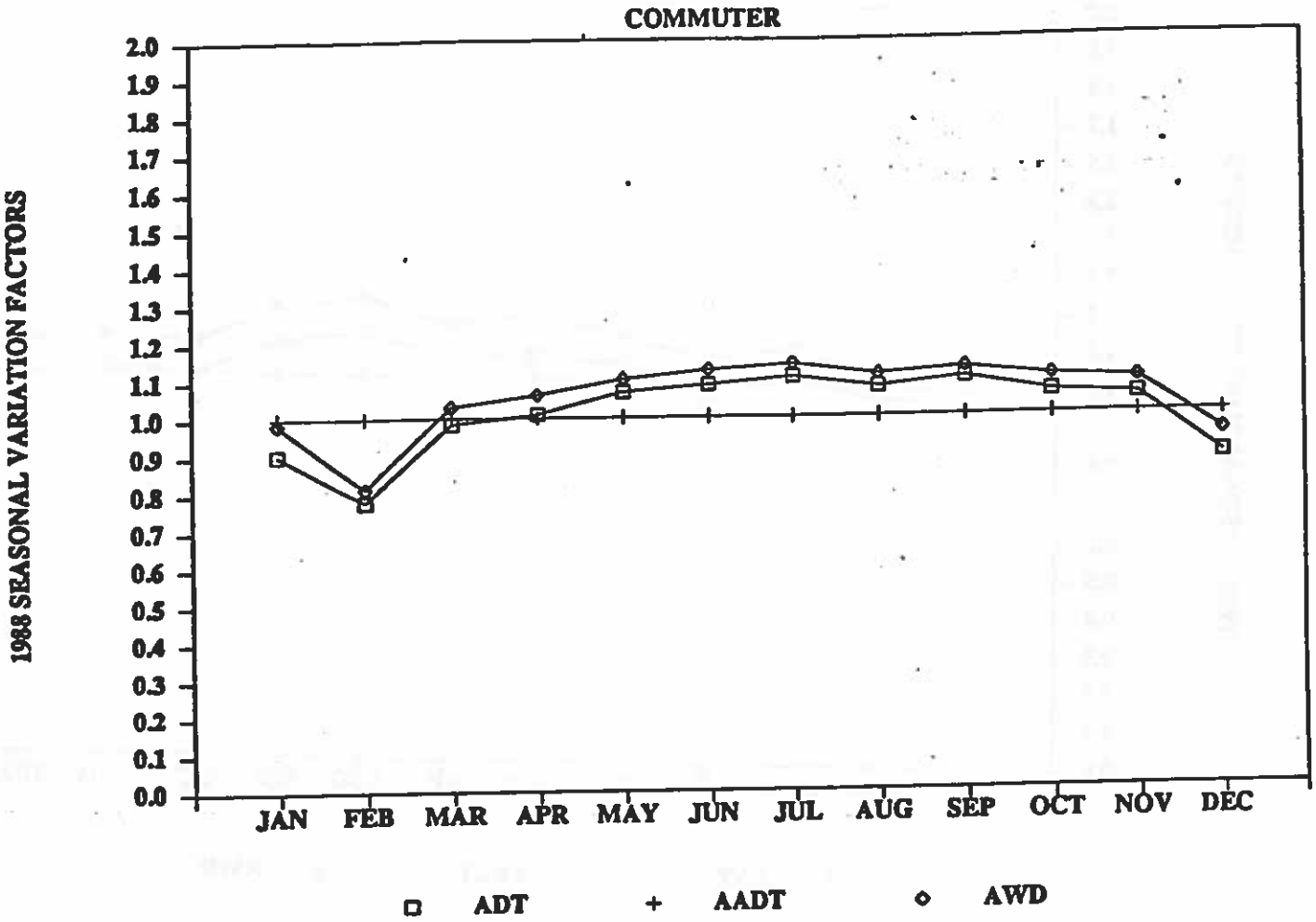
* Source : TTC Finance Branch

**SEASONAL VARIATION IN GTA TRAVEL PATTERNS**

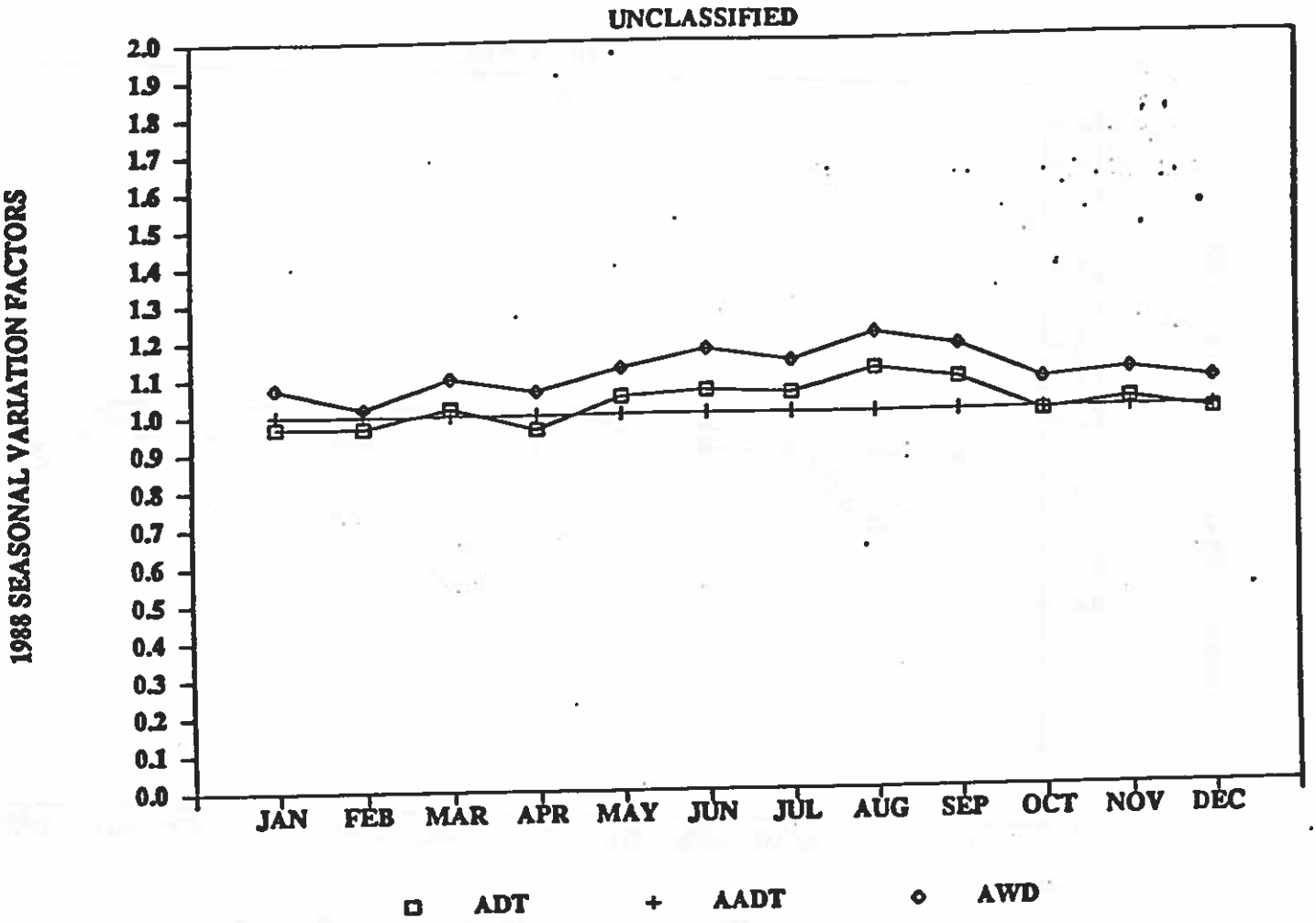
Average Daily Traffic On Toronto Area Highway 1988

Source : MTO, Highway Planning Office

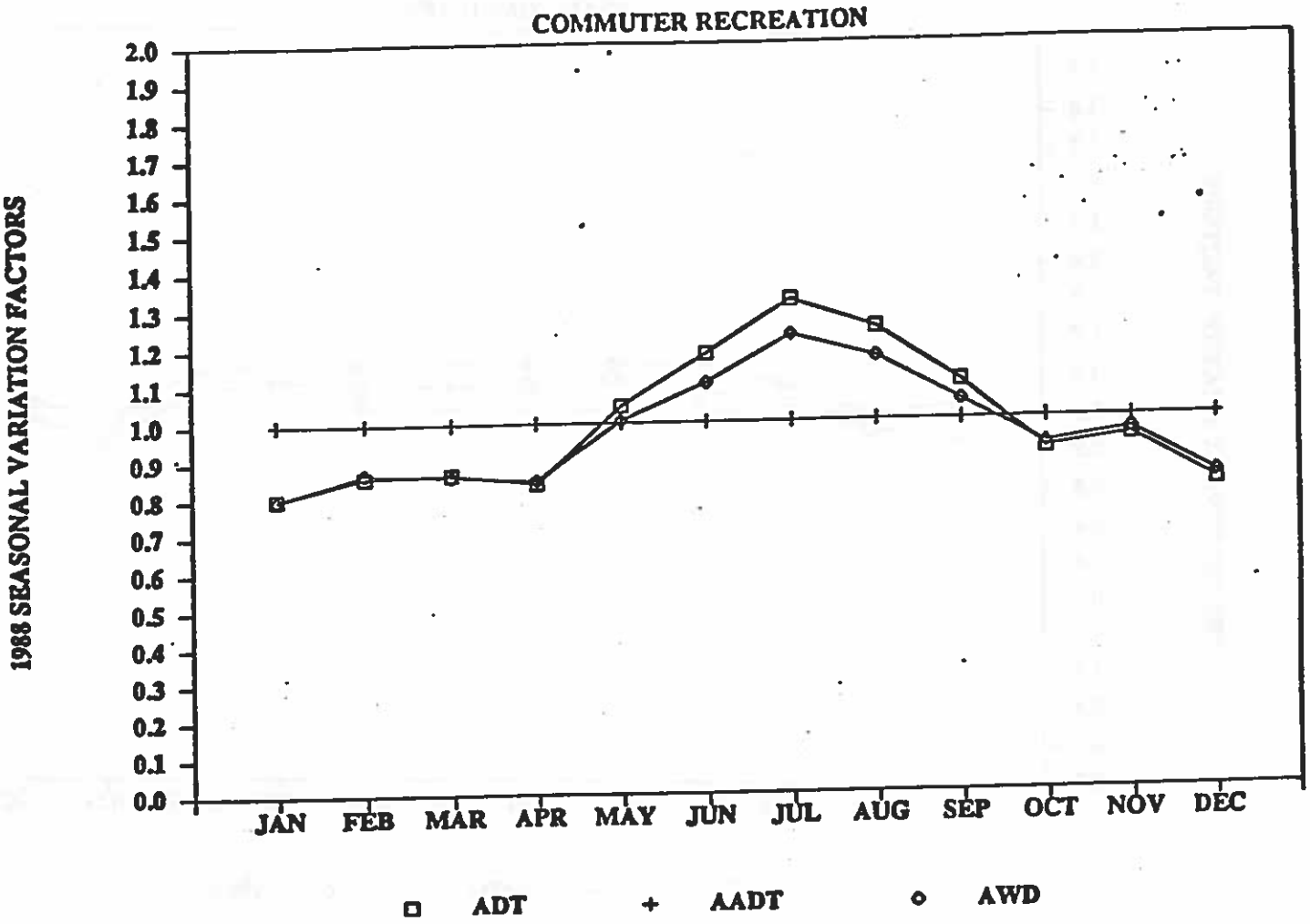
# PCS: 031 - DIXIE



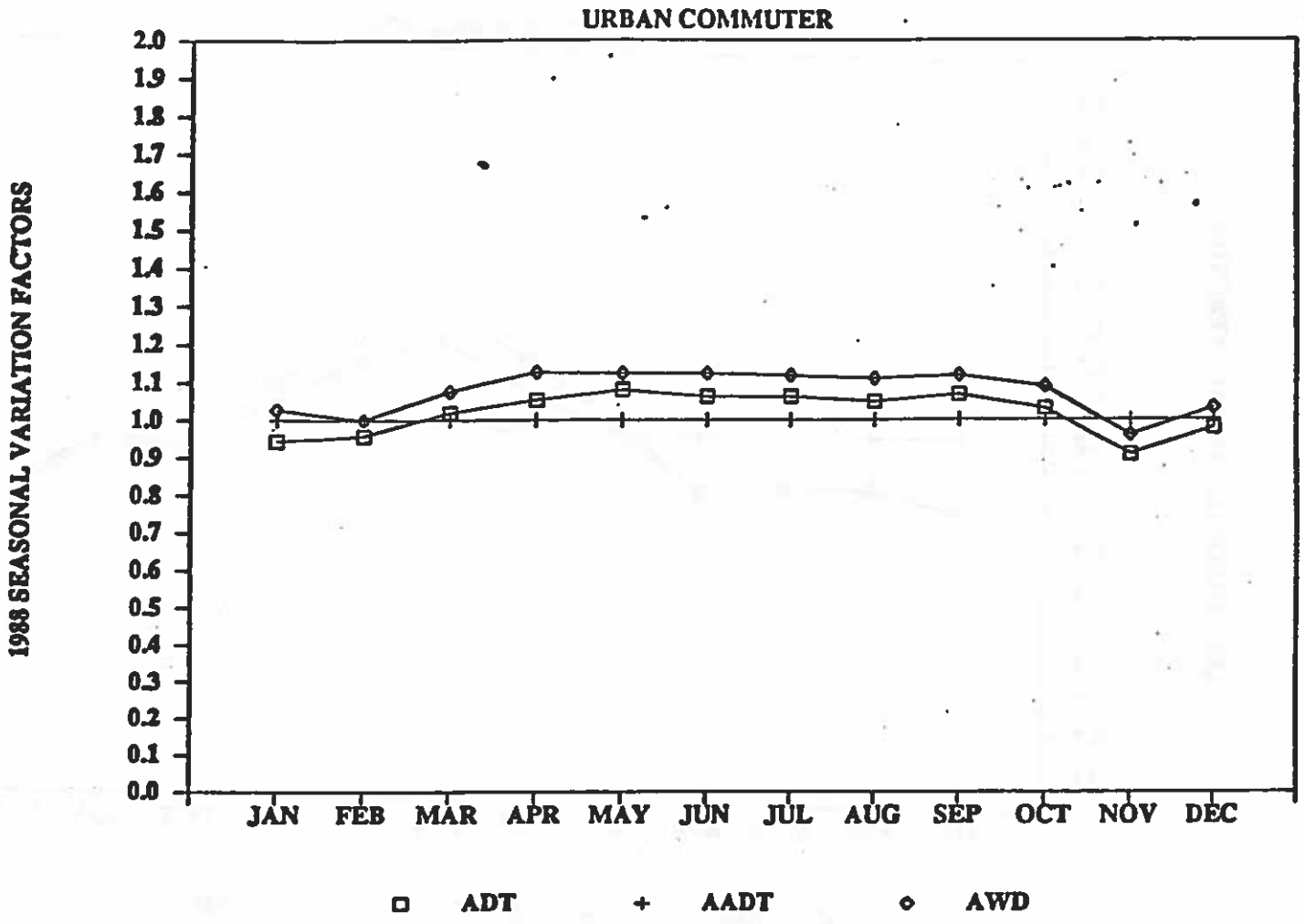
# PCS: 034 - BELFIELD



# PCS: 037 - MAPLE



# PCS: 075 - KEELE



# APPENDIX F

## TDS VALIDATION TABULATIONS (SEE CHAPTER 5)

(1) 1986 HOUSEHOLDS BY REGION, TDS TTS & CENSUS

| | TDS | TTS | CENSUS | TDS-TTS | % DIFF | TDS-CENSU | % DIFF |
|---|---|---|---|---|---|---|---|
| METRO | 820394 | 820866 | 820776 | -472 | -0.06% | -382 | -0.05% |
| DURHAM | 123320 | 106161 | 106040 | 17159 | 16.16% | 17280 | 16.30% |
| YORK | 95018 | 106048 | 106014 | -11030 | -10.40% | -10996 | -10.37% |
| PEEL | 175405 | 186802 | 186804 | -11397 | -6.10% | -11399 | -6.10% |
| HALTON | 82823 | 90175 | 90170 | -7352 | -8.15% | -7347 | -8.15% |
| HAMILTON | 166927 | 156319 | 156269 | 10608 | 6.79% | 10658 | 6.82% |
| GTA TOTAL | 1463887 | 1466371 | 1466073 | -2484 | -0.17% | -2186 | -0.15% |

(2) PERCENTAGE DISTRIBUTION OF 1986 HOUSEHOLDS BY HOUSEHOLD SIZE

| | HOUSEHOLD SIZE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| TORONTO CMA | | | | | | | | | | |
| TDS | 19.8% | 30.8% | 18.8% | 24.7% | 4.6% | 1.2% | 0.0% | 0.0% | 0.0% | 0.0% |
| TTS | 19.5% | 30.9% | 18.9% | 19.6% | 8.1% | 2.2% | 0.7% | 0.2% | 0.1% | 0.0% |
| CENSUS | 21.5% | 28.4% | 17.1% | 19.0% | 8.7% | 3.2% | 0.9% | 0.2% | 0.1% | 0.1% |
| OSHAWA CA | | | | | | | | | | |
| TDS | 14.0% | 26.7% | 20.3% | 34.1% | 5.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| TTS | 14.2% | 29.0% | 20.1% | 25.5% | 9.2% | 1.6% | 0.2% | 0.2% | 0.0% | 0.0% |
| CENSUS | 15.9% | 28.1% | 19.6% | 23.6% | 9.3% | 2.6% | 0.5% | 0.2% | 0.1% | 0.0% |
| HAMILTON CMA | | | | | | | | | | |
| TDS | 18.8% | 32.8% | 17.7% | 24.1% | 5.8% | 0.6% | 0.2% | 0.0% | 0.0% | 0.0% |
| TTS | 18.9% | 31.9% | 18.5% | 20.4% | 7.6% | 0.2% | 0.5% | 0.2% | 0.0% | 0.0% |
| CENSUS | 21.6% | 30.3% | 17.9% | 19.1% | 7.8% | 2.4% | 0.6% | 0.2% | 0.1% | 0.0% |

(3) 1986 POPULATION BY REGION, TDS TTS & CENSUS

| | TDS | TTS | CENSUS | TDS-TTS | % DIFF | TDS-CENSU | % DIFF |
|---|---|---|---|---|---|---|---|
| METRO | 2064336 | 2135450 | 2189758 | -71114 | -3.33% | -125422 | -5.73% |
| DURHAM | 362462 | 318157 | 323280 | 44305 | 13.93% | 39182 | 12.12% |
| YORK | 288555 | 344491 | 352356 | -55936 | -16.24% | -63801 | -18.11% |
| PEEL | 541577 | 577508 | 592834 | -35931 | -6.22% | -51257 | -8.65% |
| HALTON | 231195 | 265344 | 271412 | -34149 | -12.87% | -40217 | -14.82% |
| HAMILTON | 445107 | 423781 | 423520 | 21326 | 5.03% | 21587 | 5.10% |
| GTA TOTAL | 3933232 | 4064731 | 4153160 | -131499 | -3.24% | -219928 | -5.30% |

**(4) AGE GROUP DISTRIBUTION BY 3 CMA'S**

| | 0 TO 14 | 15 TO 19 | 20 TO 29 | 30 TO 49 | 50 TO 69 | OVER 70 |
|---|---|---|---|---|---|---|
| TORONTO CMA | | | | | | |
| TDS | 21.3 | 6.0 | 14.5 | 33.1 | 20.0 | 5.1 |
| TTS | 18.0 | 7.4 | 19.7 | 31.8 | 18.5 | 5.0 |
| CENSUS | 19.5 | 7.3 | 19.2 | 29.6 | 18.0 | 6.4 |
| OSHAWA CA | | | | | | |
| TDS | 23.4 | 6.4 | 18.9 | 29.4 | 16.5 | 5.3 |
| TTS | 22.8 | 7.7 | 17.0 | 32.4 | 16.0 | 4.1 |
| CENSUS | 22.8 | 7.8 | 18.1 | 29.6 | 16.2 | 5.5 |
| HAMILTON CMA | | | | | | |
| TDS | 22.6 | 5.7 | 14.4 | 32.1 | 18.9 | 6.3 |
| TTS | 19.4 | 7.6 | 16.9 | 29.2 | 20.7 | 6.3 |
| CENSUS | 19.8 | 7.6 | 17.4 | 27.6 | 20.0 | 7.6 |

**(5) 1986 LABOUR FORCE PARTICIPATION RATES BY 6 REGIONS**

| | TDS | | TTS | | CENSUS | | TDS | TTS | CENSUS |
|---|---|---|---|---|---|---|---|---|---|
| | TOTAL POP | ELF | TOTAL POP | ELF | TOTAL POP | ELF | ELF/POP | ELF/POP | ELF/POP |
| METRO | 2064336 | 1160564 | 2135450 | 1207410 | 2189758 | 1198040 | 56.2% | 56.5% | 54.7% |
| DURHAM | 362462 | 182031 | 318157 | 164857 | 323280 | 166765 | 50.2% | 51.8% | 51.6% |
| YORK | 288555 | 153731 | 344491 | 183719 | 352356 | 186510 | 53.3% | 53.3% | 52.9% |
| PEEL | 541577 | 295243 | 577508 | 324212 | 592834 | 330050 | 54.5% | 56.1% | 55.7% |
| HALTON | 231195 | 119404 | 265344 | 139985 | 271412 | 146855 | 51.6% | 52.8% | 54.1% |
| HAMILTON | 445107 | 214611 | 423781 | 203710 | 423520 | 202445 | 48.2% | 48.1% | 47.8% |
| GTA TOTAL | 3933232 | 2125584 | 4064731 | 2223893 | 4153160 | 2230665 | 54.0% | 54.7% | 53.7% |

**(6) PERCENTAGE OF PART AND FULL TIME WORKERS IN GTA BY SEX**

| | | TDS | % | TTS | % |
|---|---|---|---|---|---|
| MALES | FULL TIME | 1055888 | 89.5% | 1122000 | 92.9% |
| | PART TIME | 123765 | 10.5% | 85800 | 7.1% |
| FEMALES | FULL TIME | 673670 | 71.3% | 750300 | 78.0% |
| | PART TIME | 271326 | 28.7% | 211400 | 22.0% |
| TOTAL | FULL TIME | 1729842 | 81.4% | 1872300 | 86.3% |
| | PART TIME | 395740 | 18.6% | 297200 | 13.7% |
| | MALE TOTAL | 1179653 | | 1207800 | |
| | FEMALE TOTAL | 944996 | | 961700 | |
| | TOTAL | 2125582 | | 2169500 | |

(7) OCCUPATION BY REGION COMPARISON TDS/CENSUS

| | METRO TDS | METRO CENSUS | DURHAM TDS | DURHAM CENSUS | YORK TDS | YORK CENSUS | PEEL TDS | PEEL CENSUS |
|---|---|---|---|---|---|---|---|---|
| CLERICAL | 247412 | 287795 | 27818 | 28540 | 33669 | 40000 | 55571 | 79565 |
| SALES | 109945 | 118400 | 18593 | 16395 | 9910 | 21875 | 26874 | 34965 |
| SERVICE | 116654 | 140300 | 21137 | 18295 | 11980 | 16765 | 36892 | 29920 |
| FACTORY | 124693 | 165735 | 33196 | 32230 | 8842 | 20315 | 36487 | 53655 |
| RESOURCE | 0 | 8405 | 1653 | 4595 | 4538 | 4225 | 1036 | 3640 |
| CONSTRUCTION | 64959 | 56665 | 13018 | 10085 | 10631 | 11800 | 18430 | 13895 |
| TRANSPORTATION | 20955 | 33245 | 1913 | 6140 | 2055 | 5825 | 10929 | 13185 |
| PROFESSIONAL | 445589 | 378265 | 61439 | 44060 | 66756 | 65215 | 101942 | 93425 |
| OTHER | 30354 | 71205 | 3264 | 10195 | 5351 | 7550 | 7082 | 21640 |
| TOTAL | 1160561 | 1260015 | 182031 | 170535 | 153732 | 193570 | 295243 | 343890 |

| | HALTON TDS | HALTON CENSUS | HAM-WEN TDS | HAM-WEN CENSUS | TOTAL |
|---|---|---|---|---|---|
| CLERICAL | 22930 | 29415 | 40893 | 38195 | 428293 |
| SALES | 10860 | 17005 | 14988 | 19535 | 191172 |
| SERVICE | 12857 | 14965 | 26638 | 26710 | 226158 |
| FACTORY | 8236 | 20570 | 44287 | 40925 | 255742 |
| RESOURCE | 233 | 3150 | 1601 | 5000 | 9060 |
| CONSTRUCTION | 5466 | 5445 | 11786 | 12220 | 124290 |
| TRANSPORTATION | 3581 | 4635 | 5551 | 7940 | 44983 |
| PROFESSIONAL | 51405 | 50665 | 61059 | 50985 | 788190 |
| OTHER | 3835 | 7320 | 7808 | 14280 | 57694 |
| TOTAL | 119403 | 153170 | 214611 | 215790 | 2125582 |

(8) TDS/METRO EMPLOYMENT SURVEY

| | TOTAL TDS | % | METRO EMPLOYMENT SURVEY |
|---|---|---|---|
| OFFICE BUILDING | 581399 | 46.2% | 43.4% |
| FACTORY/WAREHOUSE | 180294 | 14.3% | 20.1% |
| CONSTRUCTION SITE | 29371 | 2.3% | |
| NO FIXED SITE | 128476 | 10.2% | |
| SERVICE ESTABLISHMENT | 117989 | 9.4% | 22.3% |
| INSTITUTION | 176482 | 14.0% | 11.8% |
| HOME | 9962 | 0.8% | |
| OTHER | 32328 | 2.6% | 2.4% |
| UNKNOWN | 2986 | 0.2% | |
| TOTAL | 1259287 | 100.0% | 100.0% |

(9) TDS REGIONAL DISTRIBUTION OF HOME TO WORK TRIPS

| | METRO | DURHAM | YORK | PEEL | HALTON | HAM-WEN | TOTAL |
|---|---|---|---|---|---|---|---|
| METRO | 759401 | 10028 | 52775 | 48810 | 8502 | 1660 | 881176 |
| DURHAM | 44690 | 85183 | 4276 | 1851 | 233 | 0 | 136233 |
| YORK | 60762 | 2007 | 35158 | 4206 | 695 | 0 | 102828 |
| PEEL | 77228 | 899 | 12665 | 119877 | 4493 | 360 | 215522 |
| HALTON | 24020 | 0 | 1397 | 27746 | 47594 | 10623 | 111380 |
| HAM-WEN | 5749 | 0 | 0 | 1666 | 17253 | 128680 | 153348 |
| TOTAL | 971850 | 98117 | 106271 | 204156 | 78770 | 141323 | 1600487 |

(10) TTS REGIONAL DISTRIBUTION OF HOME TO WORK TRIPS

| | METRO | DURHAM | YORK | PEEL | HALTON | HAM-WEN | TOTAL |
|---|---|---|---|---|---|---|---|
| METRO | 764340 | 9020 | 53060 | 50480 | 3940 | 1380 | 882220 |
| DURHAM | 31130 | 77790 | 4720 | 1500 | 160 | 90 | 115380 |
| YORK | 65820 | 2250 | 57180 | 6280 | 390 | 100 | 132010 |
| PEEL | 90740 | 650 | 7100 | 130430 | 6150 | 1400 | 236470 |
| HALTON | 18670 | 190 | 870 | 17750 | 53790 | 10100 | 101370 |
| HAM-WEN | 4000 | 130 | 260 | 2210 | 15050 | 118070 | 139720 |
| TOTAL | 974700 | 90030 | 123190 | 208650 | 79480 | 131140 | 1607190 |

(11) TDS TOTAL PERSON TRIP ORIGIN-DESTINATION MATRIX

| | METRO | DURHAM | YORK | PEEL | HALTON | HAM-WEN | |
|---|---|---|---|---|---|---|---|
| METRO | 4649735 | 84316 | 208794 | 229065 | 44482 | 11766 | 5228158 |
| DURHAM | 84234 | 731477 | 12316 | 4601 | 233 | 0 | 832861 |
| YORK | 211289 | 9071 | 437186 | 24317 | 5813 | 786 | 688462 |
| PEEL | 226085 | 5997 | 23634 | 931110 | 48888 | 5938 | 1241652 |
| HALTON | 45848 | 233 | 6423 | 51089 | 496337 | 51743 | 651673 |
| HAM-WEN | 13526 | 0 | 786 | 3185 | 54480 | 999320 | 1071297 |
| TOTAL | 5230717 | 831094 | 689139 | 1243367 | 650233 | 1069553 | 9714103 |

(12) TTS TOTAL PERSON TRIP ORIGIN-DESTINATION MATRIX

| | METRO | DURHAM | YORK | PEEL | HALTON | HAM-WEN | |
|---|---|---|---|---|---|---|---|
| METRO | 3920500 | 65000 | 222700 | 237100 | 33400 | 10600 | 4489300 |
| DURHAM | 65500 | 565800 | 13900 | 3700 | 700 | 600 | 650200 |
| YORK | 223000 | 14000 | 441900 | 22500 | 2500 | 900 | 704800 |
| PEEL | 237600 | 3800 | 23000 | 864700 | 45100 | 7600 | 1181800 |
| HALTON | 33800 | 500 | 2500 | 45000 | 463900 | 51400 | 597100 |
| HAM-WEN | 10800 | 400 | 1000 | 7500 | 51400 | 815000 | 886100 |
| | 4491200 | 649500 | 705000 | 1180500 | 597000 | 886100 | 8509300 |

# APPENDIX G

## SPECIAL TABULATIONS (SEE CHAPTER 6) FOR RESEARCH AND PLANNING APPLICATIONS

(1) TDS OCCUPATION BY LANDUSE

LANDUSE

| OCCUPATION | OFFICE | WAREHOUSE | CONSTRUCTION | NO FIXED SITE | SERVICE EST. | INSTITUTION | HOME | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| CLERICAL | 289940 | 25584 | 0 | 786 | 63907 | 23190 | 15230 | 9213 | 427850 |
| SALES | 53425 | 6894 | 0 | 33369 | 88156 | 0 | 1728 | 7600 | 191172 |
| SERVICE | 22715 | 12739 | 0 | 22262 | 116785 | 31097 | 9578 | 10982 | 226158 |
| FACTORY | 4817 | 242375 | 703 | 4247 | 2131 | 0 | 0 | 1470 | 255743 |
| RESOURCE | 0 | 384 | 332 | 1419 | 0 | 0 | 5856 | 1070 | 9061 |
| CONSTRUCTION | 4921 | 17225 | 56168 | 35442 | 4681 | 4068 | 793 | 992 | 124290 |
| TRANSPORTATION | 2641 | 4960 | 2627 | 26268 | 1621 | 464 | 0 | 6403 | 44984 |
| PROFESSIONAL | 406154 | 58205 | 2645 | 19349 | 41459 | 219489 | 23345 | 17543 | 788189 |
| OTHER | 17455 | 5426 | 0 | 1944 | 6652 | 11679 | 3450 | 5529 | 52135 |
| TOTAL | 802068 | 373792 | 62475 | 145086 | 325392 | 289987 | 59980 | 60802 | 2119582 |

LANUSE

| OCCUPATION | OFFICE | WAREHOUSE | CONSTRUCTION | NO FIXED SITE | SERVICE EST. | INSTITUTION | HOME | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| CLERICAL | 36.1% | 6.8% | 0.0% | 0.5% | 19.6% | 8.0% | 25.4% | 15.2% | 20.2% |
| SALES | 6.7% | 1.8% | 0.0% | 23.0% | 27.1% | 0.0% | 2.9% | 12.5% | 9.0% |
| SERVICE | 2.8% | 3.4% | 0.0% | 15.3% | 35.9% | 10.7% | 16.0% | 18.1% | 10.7% |
| FACTORY | 0.6% | 64.8% | 1.1% | 2.9% | 0.7% | 0.0% | 0.0% | 2.4% | 12.1% |
| RESOURCE | 0.0% | 0.1% | 0.5% | 1.0% | 0.0% | 0.0% | 9.8% | 1.8% | 0.4% |
| CONSTRUCTION | 0.6% | 4.6% | 89.9% | 24.4% | 1.4% | 1.4% | 1.3% | 1.6% | 5.9% |
| TRANSPORTATION | 0.3% | 1.3% | 4.2% | 18.1% | 0.5% | 0.2% | 0.0% | 10.5% | 2.1% |
| PROFESSIONAL | 50.6% | 15.6% | 4.2% | 13.3% | 12.7% | 75.7% | 38.9% | 28.9% | 37.2% |
| OTHER | 2.2% | 1.5% | 0.0% | 1.3% | 2.0% | 4.0% | 5.8% | 9.1% | 2.5% |
| TOTAL | 37.8% | 17.6% | 2.9% | 6.8% | 15.4% | 13.7% | 2.8% | 2.9% | 100.0% |

(2) OCCUPATION BY NORMAL WORK WEEK

NORMAL WORK WEEK

| OCCUPATION | WEEKDAY REG. | WEEKDAY VAR. | SHIFTWORK | COMP WORK | WEEKEND/EVENING | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| CLERICAL | 291652 | 59054 | 4907 | 22877 | 39661 | 9478 | 427629 |
| SALES | 68708 | 52358 | 2827 | 9128 | 31110 | 26431 | 190562 |
| SERVICE | 93056 | 27351 | 30578 | 11720 | 38158 | 25295 | 226158 |
| FACTORY | 152801 | 14157 | 66162 | 6599 | 11124 | 4899 | 255742 |
| RESOURCE | 2182 | 1000 | 0 | 0 | 0 | 5877 | 9059 |
| CONSTRUCTION | 92065 | 21116 | 3348 | 384 | 0 | 7378 | 124291 |
| TRANSPORTATION | 15655 | 14207 | 10775 | 2857 | 0 | 1490 | 44984 |
| PROFESSIONAL | 516114 | 131706 | 43173 | 29759 | 10452 | 53913 | 785117 |
| OTHER | 28886 | 10007 | 795 | 3253 | 7718 | 2172 | 52831 |
| TOTAL | 1261119 | 330956 | 162565 | 86577 | 138223 | 136933 | 2116373 |

NORMAL WORK WEEK

| OCCUPATION | WEEKDAY REG. | WEEKDAY VAR. | SHIFTWORK | COMP WORK | WEEKEND/EVENING | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| CLERICAL | 23.1% | 17.8% | 3.0% | 26.4% | 28.7% | 6.9% | 20.2% |
| SALES | 5.4% | 15.8% | 1.7% | 10.5% | 22.5% | 19.3% | 9.0% |
| SERVICE | 7.4% | 8.3% | 18.8% | 13.5% | 27.6% | 18.5% | 10.7% |
| FACTORY | 12.1% | 4.3% | 40.7% | 7.6% | 8.0% | 3.6% | 12.1% |
| RESOURCE | 0.2% | 0.3% | 0.0% | 0.0% | 0.0% | 4.3% | 0.4% |
| CONSTRUCTION | 7.3% | 6.4% | 2.1% | 0.4% | 0.0% | 5.4% | 5.9% |
| TRANSPORTATION | 1.2% | 4.3% | 6.6% | 3.3% | 0.0% | 1.1% | 2.1% |
| PROFESSIONAL | 40.9% | 39.8% | 26.6% | 34.4% | 7.6% | 39.4% | 37.1% |
| OTHER | 2.3% | 3.0% | 0.5% | 3.8% | 5.6% | 1.6% | 2.5% |
| TOTAL | 59.6% | 15.6% | 7.7% | 4.1% | 6.5% | 6.5% | 100.0% |

(3) TDS LANDUSE BY NORMAL WORK WEEK

NORMAL WORK WEEK

| LANDUSE | WEEKDAY REG. | WEEKDAY VAR. | SHIFTWORK | COMP WORK | WEEKEND/EVENING | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| OFFICE | 629343 | 104850 | 12505 | 19711 | 12828 | 20943 | 800180 |
| WAREHOUSE | 245991 | 24789 | 78013 | 8534 | 10786 | 5679 | 373792 |
| CONSTRUCTION SITE | 42553 | 14272 | 2759 | 0 | 0 | 2891 | 62475 |
| NO FIXED SITE | 67934 | 37981 | 12350 | 3087 | 4532 | 18593 | 144477 |
| SERVICE EST. | 87459 | 77453 | 13290 | 22858 | 81128 | 43205 | 325393 |
| INSTITUTION | 138207 | 43917 | 38919 | 22463 | 21726 | 22907 | 288139 |
| HOME | 13022 | 22589 | 793 | 3334 | 3611 | 16631 | 59980 |
| OTHER | 36169 | 5106 | 3937 | 5893 | 3613 | 6083 | 60801 |
| TOTAL | 1260678 | 330957 | 162566 | 85880 | 138224 | 136932 | 2115237 |

NORMAL WORK WEEK

| LANDUSE | WEEKDAY REG. | WEEKDAY VAR. | SHIFTWORK | COMP WORK | WEEKEND/EVENING | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| OFFICE | 49.9% | 31.7% | 7.7% | 23.0% | 9.3% | 15.3% | 37.8% |
| WAREHOUSE | 19.5% | 7.5% | 48.0% | 9.9% | 7.8% | 4.1% | 17.7% |
| CONSTRUCTION SITE | 3.4% | 4.3% | 1.7% | 0.0% | 0.0% | 2.1% | 3.0% |
| NO FIXED SITE | 5.4% | 11.5% | 7.6% | 3.6% | 3.3% | 13.6% | 6.8% |
| SERVICE EST. | 6.9% | 23.4% | 8.2% | 26.6% | 58.7% | 31.6% | 15.4% |
| INSTITUTION | 11.0% | 13.3% | 23.9% | 26.2% | 15.7% | 16.7% | 13.6% |
| HOME | 1.0% | 6.8% | 0.5% | 3.9% | 2.6% | 12.1% | 2.8% |
| OTHER | 2.9% | 1.5% | 2.4% | 6.9% | 2.6% | 4.4% | 2.9% |
| TOTAL | 59.6% | 15.6% | 7.7% | 4.1% | 6.5% | 6.5% | 100.0% |

## (4) TRIP DIARY SURVEY ANALYSIS : END TIME BY OCCUPATION

### (4.1) CENTRAL CORDON AREA

OCCUPATION

| END TIME | CLERICAL | SALES | SERVICE | FACTORY | RESOURCE | CONSTRUCTION | TRANSPORTATION | PROFESSIONAL | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 6 | 1.2% | 6.8% | 19.7% | 6.0% | 0.0% | 20.0% | 0.0% | 0.6% | 0.0% | 3.3% |
| 7 | 22.1% | 1.8% | 19.4% | 78.5% | 0.0% | 55.3% | 0.0% | 18.9% | 0.0% | 20.0% |
| 8 | 57.5% | 22.1% | 6.1% | 7.7% | 0.0% | 13.3% | 22.6% | 42.7% | 0.0% | 39.7% |
| 9 | 8.9% | 24.2% | 1.7% | 0.0% | 0.0% | 0.0% | 11.1% | 11.4% | 100.0% | 11.9% |
| 10 | 1.5% | 8.9% | 12.3% | 0.0% | 0.0% | 0.0% | 0.0% | 7.4% | 0.0% | 5.8% |
| 11 | 1.4% | 14.7% | 8.5% | 0.0% | 0.0% | 0.0% | 42.2% | 1.5% | 0.0% | 3.7% |
| 12 | 0.0% | 9.0% | 1.7% | 0.0% | 0.0% | 0.0% | 24.1% | 2.3% | 0.0% | 2.4% |
| 13 | 0.0% | 1.1% | 0.0% | 0.0% | 0.0% | 3.9% | 0.0% | 5.6% | 0.0% | 2.9% |
| 14 | 1.2% | 4.2% | 4.6% | 0.0% | 0.0% | 7.5% | 0.0% | 3.1% | 0.0% | 2.7% |
| 15 | 2.5% | 1.9% | 16.1% | 0.0% | 0.0% | 0.0% | 0.0% | 2.6% | 0.0% | 3.3% |
| 16 | 0.0% | 0.0% | 6.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.9% | 0.0% | 0.9% |
| 17 | 0.0% | 2.7% | 0.0% | 7.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.5% |
| 18 | 0.7% | 0.0% | 3.7% | 0.0% | 0.0% | 0.0% | 0.0% | 1.1% | 0.0% | 1.0% |
| 19 | 0.0% | 2.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.9% | 0.0% | 0.7% |
| 20 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 21 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.5% |
| 22 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 23 | 2.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.8% |

### (4.2) METRO TORONTO (EXCLUDING THE CENTRAL CORDON AREA)

OCCUPATION

| END TIME | CLERICAL | SALES | SERVICE | FACTORY | RESOURCE | CONSTRUCTION | TRANSPORTATION | PROFESSIONAL | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| 5 | 0.0% | 0.0% | 2.5% | 0.4% | 0.0% | 0.0% | 18.9% | 0.0% | 0.0% | 0.8% |
| 6 | 4.3% | 0.8% | 8.8% | 27.2% | 0.0% | 12.0% | 13.0% | 3.4% | 16.5% | 7.6% |
| 7 | 18.9% | 6.8% | 16.1% | 42.8% | 0.0% | 38.9% | 13.4% | 23.5% | 22.0% | 23.3% |
| 8 | 46.8% | 7.4% | 20.0% | 11.8% | 0.0% | 14.2% | 7.9% | 35.0% | 47.6% | 27.9% |
| 9 | 11.1% | 15.7% | 13.8% | 0.8% | 0.0% | 6.6% | 9.1% | 8.6% | 13.9% | 9.3% |
| 10 | 3.3% | 14.4% | 3.9% | 0.0% | 0.0% | 1.8% | 1.5% | 1.6% | 0.0% | 3.3% |
| 11 | 0.2% | 14.9% | 5.0% | 0.0% | 0.0% | 5.0% | 0.0% | 2.8% | 0.0% | 3.6% |
| 12 | 0.5% | 7.0% | 0.4% | 0.0% | 0.0% | 5.9% | 0.0% | 2.5% | 0.0% | 2.4% |
| 13 | 5.1% | 4.5% | 4.6% | 0.0% | 0.0% | 1.3% | 11.8% | 7.1% | 0.0% | 5.1% |
| 14 | 1.3% | 9.0% | 2.2% | 1.4% | 0.0% | 6.6% | 0.0% | 1.4% | 0.0% | 2.6% |
| 15 | 2.8% | 4.8% | 14.5% | 6.9% | 0.0% | 4.9% | 11.7% | 2.1% | 0.0% | 4.5% |
| 16 | 1.5% | 4.7% | 5.0% | 0.0% | 0.0% | 1.3% | 1.8% | 4.8% | 0.0% | 3.2% |
| 17 | 1.7% | 0.7% | 0.0% | 0.8% | 0.0% | 0.0% | 2.2% | 3.3% | 0.0% | 1.9% |
| 18 | 1.2% | 0.0% | 1.5% | 2.5% | 0.0% | 0.0% | 1.4% | 0.7% | 0.0% | 0.9% |
| 19 | 0.5% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | 4.7% | 2.1% | 0.0% | 1.1% |
| 20 | 0.0% | 2.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.4% | 0.0% | 0.4% |
| 21 | 0.0% | 4.9% | 0.0% | 2.5% | 0.0% | 0.0% | 1.3% | 0.2% | 0.0% | 1.0% |
| 22 | 0.5% | 1.6% | 0.0% | 1.9% | 0.0% | 0.0% | 0.0% | 0.5% | 0.0% | 0.7% |
| 23 | 0.0% | 0.0% | 0.7% | 0.3% | 0.0% | 1.5% | 0.0% | 0.0% | 0.0% | 0.2% |
| 24 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 25 | 0.0% | 0.0% | 1.1% | 0.0% | 0.0% | 0.0% | 1.4% | 0.0% | 0.0% | 0.1% |

(4.3) GTA (EXCLUDING METRO AND CENTRAL CORDON AREA)

| END TIME | OCCUPATION | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | CLERICAL | SALES | SERVICE | FACTORY | RESOURCE | CONSTRUCTION | TRANSPORTATION | PROFESSIONAL | OTHER | TOTAL |
| 4 | 0.5% | 0.0% | 0.0% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| 5 | 0.0% | 0.0% | 5.9% | 2.5% | 0.0% | 0.0% | 2.7% | 0.2% | 0.0% | 1.0% |
| 6 | 1.7% | 0.0% | 10.5% | 29.7% | 20.4% | 15.5% | 21.5% | 2.3% | 6.0% | 7.9% |
| 7 | 17.0% | 7.2% | 19.0% | 36.6% | 15.1% | 49.1% | 13.8% | 18.8% | 33.3% | 21.5% |
| 8 | 45.5% | 16.9% | 12.6% | 7.0% | 8.4% | 12.6% | 6.3% | 30.1% | 34.9% | 23.8% |
| 9 | 8.7% | 23.9% | 6.4% | 0.3% | 30.7% | 1.0% | 3.1% | 12.0% | 6.8% | 10.1% |
| 10 | 1.9% | 6.9% | 5.6% | 0.0% | 0.0% | 0.6% | 4.7% | 4.0% | 0.0% | 3.4% |
| 11 | 1.0% | 12.6% | 7.6% | 0.0% | 0.0% | 3.1% | 0.0% | 2.5% | 0.0% | 3.8% |
| 12 | 5.9% | 4.3% | 5.7% | 0.3% | 8.4% | 4.1% | 4.0% | 5.3% | 5.2% | 4.5% |
| 13 | 5.2% | 3.8% | 3.4% | 1.7% | 0.0% | 4.1% | 8.7% | 11.3% | 0.0% | 6.6% |
| 14 | 1.6% | 9.8% | 2.7% | 8.0% | 8.4% | 1.2% | 9.2% | 3.6% | 1.3% | 4.7% |
| 15 | 1.9% | 3.0% | 3.5% | 4.3% | 0.0% | 1.8% | 14.5% | 4.5% | 0.0% | 3.8% |
| 16 | 1.6% | 8.2% | 1.9% | 2.6% | 0.0% | 2.0% | 0.0% | 1.4% | 10.5% | 2.8% |
| 17 | 4.4% | 0.7% | 7.0% | 2.2% | 8.4% | 0.9% | 4.7% | 0.8% | 1.9% | 2.2% |
| 18 | 0.3% | 2.1% | 3.7% | 2.8% | 0.0% | 2.0% | 3.1% | 1.7% | 0.0% | 1.9% |
| 19 | 2.5% | 0.0% | 1.5% | 0.3% | 0.0% | 0.0% | 1.5% | 0.8% | 0.0% | 0.9% |
| 20 | 0.3% | 0.5% | 1.2% | 0.3% | 0.0% | 0.0% | 0.0% | 0.3% | 0.0% | 0.4% |
| 21 | 0.0% | 0.0% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% |
| 22 | 0.0% | 0.0% | 0.9% | 0.7% | 0.0% | 1.2% | 0.0% | 0.5% | 0.0% | 0.4% |
| 23 | 0.0% | 0.0% | 0.4% | 0.2% | 0.0% | 1.2% | 2.2% | 0.0% | 0.0% | 0.2% |

(5) TRIP DIARY SURVEY ANALYSIS : END TIME BY LANDUSE

(5.1) CENTRAL CORDON AREA

| END TIME | LANDUSE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | OFFICE | FACTORY | CONSTRUCTION SITE | NO FIXED SITE | SERVICE EST. | INSTITUTION | HOME | OTHER | TOTAL |
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 6 | 0.9% | 29.6% | 45.0% | 0.0% | 17.0% | 0.0% | 0.0% | 0.0% | 3.3% |
| 7 | 19.3% | 48.2% | 55.0% | 14.6% | 18.9% | 21.4% | 0.0% | 0.0% | 20.0% |
| 8 | 50.9% | 7.0% | 0.0% | 18.1% | 16.9% | 21.6% | 0.0% | 79.1% | 39.7% |
| 9 | 13.1% | 0.0% | 0.0% | 7.0% | 12.1% | 13.6% | 0.0% | 11.8% | 11.9% |
| 10 | 4.4% | 2.7% | 0.0% | 9.1% | 9.6% | 7.1% | 63.9% | 0.0% | 5.8% |
| 11 | 1.4% | 5.4% | 0.0% | 20.5% | 5.5% | 2.4% | 0.0% | 0.0% | 3.7% |
| 12 | 1.1% | 0.0% | 0.0% | 15.2% | 2.9% | 0.9% | 0.0% | 0.0% | 2.4% |
| 13 | 3.2% | 0.0% | 0.0% | 2.3% | 0.0% | 4.4% | 0.0% | 9.1% | 2.9% |
| 14 | 0.9% | 0.0% | 0.0% | 3.9% | 3.1% | 12.0% | 0.0% | 0.0% | 2.7% |
| 15 | 1.8% | 0.0% | 0.0% | 3.4% | 0.0% | 12.1% | 36.1% | 0.0% | 3.3% |
| 16 | 0.3% | 0.0% | 0.0% | 2.9% | 5.3% | 0.0% | 0.0% | 0.0% | 0.9% |
| 17 | 0.4% | 7.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.5% |
| 18 | 0.9% | 0.0% | 0.0% | 0.0% | 5.5% | 0.0% | 0.0% | 0.0% | 1.0% |
| 19 | 0.1% | 0.0% | 0.0% | 0.0% | 3.1% | 2.8% | 0.0% | 0.0% | 0.7% |
| 20 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 21 | 0.0% | 0.0% | 0.0% | 2.9% | 0.0% | 1.7% | 0.0% | 0.0% | 0.5% |
| 22 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 23 | 1.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.8% |

(5.2) METRO TORONTO (EXCLUDING THE CENTRAL CORDON AREA)

LANDUSE

| END TIME | OFFICE | FACTORY | CONSTRUCTION SITE | NO FIXED SITE | SERVICE EST. | INSTITUTION | HOME | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 0.0% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| 5 | 0.5% | 0.2% | 0.0% | 5.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.8% |
| 6 | 2.4% | 20.7% | 15.1% | 5.9% | 5.8% | 5.4% | 0.0% | 7.0% | 7.6% |
| 7 | 23.2% | 40.1% | 25.5% | 6.9% | 15.8% | 17.7% | 0.0% | 34.0% | 23.4% |
| 8 | 37.3% | 19.1% | 11.0% | 11.1% | 21.8% | 35.0% | 0.0% | 29.4% | 27.7% |
| 9 | 10.8% | 2.1% | 3.1% | 12.6% | 15.2% | 10.2% | 21.0% | 4.6% | 9.3% |
| 10 | 3.1% | 0.0% | 7.7% | 9.5% | 7.4% | 0.9% | 0.0% | 1.3% | 3.4% |
| 11 | 2.7% | 2.5% | 7.7% | 5.3% | 5.5% | 1.5% | 21.4% | 10.3% | 3.6% |
| 12 | 2.8% | 0.6% | 7.7% | 0.6% | 3.8% | 2.7% | 0.0% | 4.1% | 2.4% |
| 13 | 8.3% | 0.9% | 0.0% | 6.3% | 3.5% | 4.1% | 0.0% | 2.6% | 5.1% |
| 14 | 1.3% | 2.4% | 3.1% | 12.3% | 1.6% | 0.8% | 0.0% | 0.0% | 2.7% |
| 15 | 1.8% | 4.4% | 14.4% | 10.2% | 2.0% | 7.6% | 0.0% | 2.8% | 4.5% |
| 16 | 2.1% | 0.4% | 0.0% | 5.0% | 5.9% | 4.3% | 57.6% | 2.3% | 3.3% |
| 17 | 1.1% | 0.9% | 4.6% | 0.6% | 3.0% | 5.4% | 0.0% | 0.0% | 1.9% |
| 18 | 0.7% | 1.5% | 0.0% | 1.4% | 0.0% | 1.5% | 0.0% | 0.0% | 0.9% |
| 19 | 0.6% | 0.0% | 0.0% | 1.2% | 4.3% | 2.2% | 0.0% | 0.0% | 1.1% |
| 20 | 0.1% | 0.5% | 0.0% | 2.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.4% |
| 21 | 0.2% | 1.5% | 0.0% | 2.0% | 3.9% | 0.0% | 0.0% | 0.0% | 1.0% |
| 22 | 0.9% | 1.2% | 0.0% | 0.0% | 0.5% | 0.6% | 0.0% | 0.0% | 0.7% |
| 23 | 0.0% | 0.2% | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 1.6% | 0.2% |
| 24 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 25 | 0.0% | 0.4% | 0.0% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |

(5.3) GTA (EXCLUDING METRO AND CENTRAL CORDON AREA)

LANDUSE

| END TIME | OFFICE | FACTORY | CONSTRUCTION SITE | NO FIXED SITE | SERVICE EST. | INSTITUTION | HOME | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 0.1% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| 5 | 0.6% | 1.9% | 1.1% | 0.3% | 2.6% | 0.0% | 0.0% | 0.0% | 1.0% |
| 6 | 1.8% | 21.2% | 20.1% | 5.4% | 7.4% | 1.7% | 23.2% | 2.0% | 8.0% |
| 7 | 19.5% | 37.6% | 53.5% | 16.0% | 8.0% | 11.8% | 0.0% | 6.2% | 21.4% |
| 8 | 32.8% | 11.1% | 9.1% | 13.3% | 20.6% | 40.5% | 12.0% | 29.6% | 23.8% |
| 9 | 9.6% | 4.3% | 0.8% | 15.4% | 18.3% | 10.5% | 17.4% | 9.6% | 10.1% |
| 10 | 4.6% | 2.7% | 0.0% | 2.7% | 4.6% | 3.0% | 4.3% | 0.0% | 3.4% |
| 11 | 2.8% | 0.0% | 2.6% | 11.2% | 4.8% | 4.7% | 4.3% | 6.3% | 3.8% |
| 12 | 6.3% | 0.5% | 1.9% | 9.3% | 2.0% | 6.1% | 4.3% | 1.9% | 4.5% |
| 13 | 8.7% | 2.4% | 2.7% | 8.0% | 4.8% | 6.1% | 0.0% | 19.0% | 6.6% |
| 14 | 4.1% | 6.8% | 0.0% | 6.7% | 4.3% | 2.6% | 2.6% | 4.4% | 4.7% |
| 15 | 2.3% | 3.4% | 0.0% | 3.6% | 5.0% | 4.5% | 31.9% | 11.1% | 3.8% |
| 16 | 2.4% | 1.4% | 1.0% | 5.7% | 5.0% | 0.7% | 0.0% | 5.9% | 2.8% |
| 17 | 1.7% | 1.8% | 3.3% | 1.8% | 5.9% | 0.0% | 0.0% | 4.0% | 2.2% |
| 18 | 1.2% | 1.8% | 2.0% | 0.8% | 4.3% | 3.7% | 0.0% | 0.0% | 1.9% |
| 19 | 1.0% | 0.4% | 0.0% | 0.0% | 1.0% | 2.8% | 0.0% | 0.0% | 0.9% |
| 20 | 0.3% | 0.7% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.0% | 0.4% |
| 21 | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.4% | 0.0% | 0.0% | 0.1% |
| 22 | 0.3% | 0.4% | 1.9% | 0.0% | 1.3% | 0.0% | 0.0% | 0.0% | 0.4% |
| 23 | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% |

## (6) TRIP DIARY SURVEY ANALYSIS : END TIME BY TRIP PURPOSE

### (6.1) CENTRAL CORDON AREA

| | HBW | HBS | HBO | NHB | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.1% | 0.0% | 0.0% | 0.0% | 0.1% |
| 5 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 6 | 3.3% | 0.0% | 0.2% | 0.2% | 1.6% |
| 7 | 19.1% | 0.0% | 1.3% | 2.4% | 10.0% |
| 8 | 39.3% | 51.1% | 6.4% | 3.0% | 23.9% |
| 9 | 11.4% | 24.2% | 2.6% | 5.6% | 8.9% |
| 10 | 4.8% | 8.9% | 7.5% | 7.6% | 6.3% |
| 11 | 1.5% | 4.1% | 12.9% | 6.8% | 5.3% |
| 12 | 1.4% | 3.5% | 7.0% | 9.0% | 4.7% |
| 13 | 0.6% | 1.3% | 4.8% | 9.7% | 3.9% |
| 14 | 1.0% | 0.8% | 5.7% | 8.1% | 3.8% |
| 15 | 0.7% | 0.0% | 10.4% | 8.6% | 4.7% |
| 16 | 2.9% | 0.0% | 4.7% | 10.1% | 5.0% |
| 17 | 3.9% | 1.9% | 5.5% | 8.1% | 5.2% |
| 18 | 3.8% | 4.3% | 9.4% | 9.4% | 6.4% |
| 19 | 2.8% | 0.0% | 3.0% | 5.0% | 3.3% |
| 20 | 0.6% | 0.0% | 6.2% | 2.4% | 2.1% |
| 21 | 1.4% | 0.0% | 4.7% | 1.7% | 2.0% |
| 22 | 0.0% | 0.0% | 3.7% | 0.8% | 0.9% |
| 23 | 0.9% | 0.0% | 1.9% | 1.0% | 1.1% |
| 24 | 0.2% | 0.0% | 1.3% | 0.5% | 0.5% |
| 25 | 0.3% | 0.0% | 0.8% | 0.0% | 0.3% |

### (6.2) METRO TORONTO (EXCLUDING THE CENTRAL CORDON AREA)

| | HBW | HBS | HBO | NHB | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.6% | 0.0% | 0.0% | 0.0% | 0.2% |
| 6 | 5.1% | 0.0% | 0.9% | 0.1% | 2.0% |
| 7 | 14.5% | 4.9% | 2.7% | 1.3% | 6.3% |
| 8 | 16.2% | 60.6% | 4.8% | 4.3% | 12.6% |
| 9 | 5.3% | 10.3% | 3.3% | 3.1% | 4.5% |
| 10 | 1.4% | 2.5% | 6.2% | 4.8% | 4.0% |
| 11 | 0.8% | 1.6% | 5.9% | 6.6% | 4.1% |
| 12 | 1.3% | 13.6% | 5.4% | 10.7% | 6.0% |
| 13 | 1.3% | 3.8% | 5.0% | 11.1% | 5.1% |
| 14 | 1.5% | 0.0% | 5.0% | 6.4% | 3.8% |
| 15 | 3.5% | 0.4% | 6.5% | 8.2% | 5.4% |
| 16 | 11.7% | 0.0% | 7.3% | 11.7% | 9.2% |
| 17 | 16.6% | 0.0% | 8.0% | 11.0% | 10.8% |
| 18 | 9.2% | 0.8% | 9.4% | 5.0% | 7.6% |
| 19 | 3.4% | 1.1% | 10.5% | 7.4% | 6.8% |
| 20 | 1.4% | 0.4% | 5.6% | 2.5% | 3.1% |
| 21 | 1.1% | 0.0% | 5.1% | 2.7% | 2.9% |
| 22 | 2.7% | 0.0% | 4.3% | 2.2% | 2.9% |
| 23 | 0.9% | 0.0% | 2.8% | 0.4% | 1.4% |
| 24 | 0.7% | 0.0% | 0.7% | 0.1% | 0.5% |
| 25 | 0.4% | 0.0% | 0.4% | 0.2% | 0.4% |
| 26 | 0.4% | 0.0% | 0.1% | 0.1% | 0.2% |
| 27 | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% |

(6.3) GTA (EXCLUDING METRO AND CENTRAL CORDON AREA)

| | HBW | HBS | HBO | NHB | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.7% | 0.0% | 0.2% | 0.0% | 0.3% |
| 6 | 5.4% | 0.0% | 0.7% | 0.4% | 2.0% |
| 7 | 15.0% | 2.2% | 1.9% | 1.3% | 5.8% |
| 8 | 14.6% | 70.7% | 5.8% | 5.3% | 13.9% |
| 9 | 5.9% | 5.5% | 4.6% | 5.6% | 5.3% |
| 10 | 1.0% | 1.5% | 4.9% | 7.5% | 4.0% |
| 11 | 1.2% | 0.7% | 5.4% | 7.4% | 4.2% |
| 12 | 2.4% | 11.3% | 4.0% | 10.7% | 5.7% |
| 13 | 2.3% | 3.0% | 4.0% | 10.6% | 4.9% |
| 14 | 1.9% | 0.1% | 4.5% | 7.3% | 4.0% |
| 15 | 4.9% | 0.3% | 5.1% | 8.1% | 5.3% |
| 16 | 9.7% | 0.2% | 7.4% | 9.7% | 8.0% |
| 17 | 16.8% | 0.2% | 9.8% | 7.9% | 10.6% |
| 18 | 7.5% | 2.7% | 11.0% | 6.1% | 8.1% |
| 19 | 3.2% | 0.9% | 8.9% | 4.5% | 5.5% |
| 20 | 1.1% | 0.1% | 6.9% | 2.7% | 3.6% |
| 21 | 1.4% | 0.5% | 6.7% | 2.3% | 3.6% |
| 22 | 1.3% | 0.0% | 4.0% | 1.3% | 2.2% |
| 23 | 1.7% | 0.0% | 2.8% | 0.8% | 1.8% |
| 24 | 1.3% | 0.0% | 1.0% | 0.0% | 0.8% |
| 25 | 0.3% | 0.0% | 0.3% | 0.2% | 0.3% |
| 26 | 0.2% | 0.0% | 0.2% | 0.0% | 0.1% |
| 27 | 0.0% | 0.0% | 0.1% | 0.0% | 0.0% |

(7) TRIP DIARY SURVEY ANALYSIS : END TIME BY TRIP MODE

(7.1) CENTRAL CORDON AREA

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.9% | 0.0% | 0.1% |
| 5 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 6 | 2.2% | 1.3% | 0.0% | 0.0% | 1.6% |
| 7 | 9.9% | 9.7% | 6.3% | 34.9% | 9.6% |
| 8 | 14.1% | 30.2% | 21.7% | 32.6% | 23.1% |
| 9 | 7.5% | 10.2% | 3.1% | 0.0% | 8.6% |
| 10 | 7.4% | 5.7% | 1.7% | 0.0% | 6.1% |
| 11 | 5.8% | 5.0% | 1.9% | 0.0% | 5.1% |
| 12 | 3.7% | 4.4% | 17.6% | 0.0% | 4.9% |
| 13 | 3.4% | 5.1% | 4.1% | 0.0% | 4.3% |
| 14 | 5.4% | 2.7% | 0.0% | 0.0% | 3.7% |
| 15 | 5.7% | 4.7% | 4.3% | 0.0% | 5.1% |
| 16 | 6.0% | 4.7% | 12.7% | 0.0% | 5.7% |
| 17 | 6.3% | 5.2% | 8.1% | 0.0% | 5.8% |
| 18 | 8.2% | 4.2% | 8.7% | 32.6% | 6.2% |
| 19 | 3.7% | 2.9% | 1.9% | 0.0% | 3.2% |
| 20 | 4.3% | 0.6% | 1.7% | 0.0% | 2.2% |
| 21 | 3.3% | 0.8% | 3.5% | 0.0% | 2.0% |
| 22 | 1.6% | 0.6% | 0.0% | 0.0% | 0.9% |
| 23 | 0.7% | 1.4% | 0.0% | 0.0% | 1.0% |
| 24 | 0.6% | 0.4% | 0.0% | 0.0% | 0.5% |
| 25 | 0.3% | 0.0% | 1.9% | 0.0% | 0.3% |

(7.2) METRO TORONTO (EXCLUDING THE CENTRAL CORDON AREA)

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.2% | 0.1% | 0.0% | 0.0% | 0.2% |
| 6 | 1.9% | 2.3% | 0.0% | 4.7% | 1.8% |
| 7 | 6.4% | 4.7% | 3.7% | 8.4% | 5.9% |
| 8 | 8.7% | 16.7% | 27.3% | 6.0% | 11.7% |
| 9 | 4.1% | 4.1% | 4.4% | 0.0% | 4.1% |
| 10 | 4.6% | 2.5% | 0.1% | 5.4% | 3.8% |
| 11 | 4.5% | 2.4% | 5.3% | 0.0% | 4.2% |
| 12 | 5.9% | 2.1% | 19.3% | 0.0% | 6.4% |
| 13 | 5.5% | 3.2% | 2.7% | 5.4% | 4.8% |
| 14 | 4.2% | 2.5% | 2.4% | 0.0% | 3.7% |
| 15 | 5.9% | 8.0% | 19.2% | 8.1% | 7.4% |
| 16 | 9.3% | 14.6% | 9.6% | 22.2% | 10.3% |
| 17 | 10.0% | 16.3% | 3.1% | 4.7% | 10.5% |
| 18 | 7.9% | 9.2% | 0.2% | 2.6% | 7.4% |
| 19 | 7.9% | 2.8% | 0.8% | 0.0% | 6.3% |
| 20 | 3.6% | 2.0% | 0.4% | 5.4% | 3.0% |
| 21 | 3.4% | 1.6% | 0.8% | 5.4% | 2.9% |
| 22 | 3.2% | 2.9% | 0.7% | 0.0% | 2.9% |
| 23 | 1.6% | 0.8% | 0.0% | 18.8% | 1.4% |
| 24 | 0.5% | 0.6% | 0.0% | 0.0% | 0.5% |
| 25 | 0.4% | 0.1% | 0.0% | 2.6% | 0.3% |
| 26 | 0.2% | 0.2% | 0.0% | 0.0% | 0.2% |
| 27 | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% |

(7.3) GTA (EXCLUDING METRO AND CENTRAL CORDON AREA)

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| 4 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| 5 | 0.3% | 0.0% | 0.1% | 0.0% | 0.3% |
| 6 | 2.1% | 0.7% | 0.5% | 4.9% | 1.9% |
| 7 | 5.8% | 4.1% | 1.6% | 10.5% | 5.3% |
| 8 | 9.6% | 25.2% | 31.6% | 6.9% | 12.9% |
| 9 | 5.2% | 4.6% | 2.7% | 3.8% | 4.9% |
| 10 | 4.2% | 1.9% | 0.7% | 5.5% | 3.7% |
| 11 | 4.5% | 2.2% | 4.9% | 0.0% | 4.3% |
| 12 | 5.2% | 1.8% | 17.5% | 6.3% | 6.0% |
| 13 | 5.1% | 1.6% | 3.4% | 3.8% | 4.7% |
| 14 | 4.2% | 2.6% | 0.3% | 4.9% | 3.7% |
| 15 | 6.2% | 14.3% | 21.4% | 4.9% | 8.2% |
| 16 | 8.7% | 16.3% | 10.1% | 9.5% | 9.5% |
| 17 | 11.0% | 10.5% | 2.5% | 8.7% | 10.2% |
| 18 | 8.2% | 8.4% | 1.1% | 6.7% | 7.5% |
| 19 | 5.8% | 2.7% | 0.5% | 4.9% | 5.1% |
| 20 | 4.0% | 0.3% | 0.1% | 4.9% | 3.3% |
| 21 | 4.1% | 1.1% | 0.1% | 4.9% | 3.5% |
| 22 | 2.6% | 0.6% | 0.4% | 0.0% | 2.2% |
| 23 | 1.9% | 1.0% | 0.3% | 9.0% | 1.7% |
| 24 | 0.8% | 0.0% | 0.1% | 0.0% | 0.7% |
| 25 | 0.3% | 0.0% | 0.0% | 0.0% | 0.2% |
| 26 | 0.2% | 0.0% | 0.0% | 0.0% | 0.1% |
| 27 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

## (8) TDS TRIP PURPOSE BY TRIP MODE DURING AM PEAK PERIOD (7 TO 9 AM)

### (8.1) CENTRAL CORDON AREA

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 60312 | 148476 | 8903 | 741 | 218432 |
| HBS | 4676 | 14284 | 5670 | 0 | 24630 |
| HBO | 9473 | 2184 | 0 | 0 | 11657 |
| NHB | 4878 | 5688 | 0 | 793 | 11359 |
| TOTAL | 79338 | 170632 | 14573 | 1535 | 266078 |

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 76.0% | 87.0% | 61.1% | 48.3% | 82.1% |
| HBS | 5.9% | 8.4% | 38.9% | 0.0% | 9.3% |
| HBO | 11.9% | 1.3% | 0.0% | 0.0% | 4.4% |
| NHB | 6.1% | 3.3% | 0.0% | 51.7% | 4.3% |
| TOTAL | 29.8% | 64.1% | 5.5% | 0.6% | 100.0% |

### (8.2) PLANNING DISTRICT 9 (REXDALE)

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 24829 | 5180 | 0 | 0 | 30010 |
| HBS | 0 | 1772 | 0 | 0 | 1772 |
| HBO | 0 | 0 | 0 | 0 | 0 |
| NHB | 3856 | 0 | 0 | 0 | 3856 |
| TOTAL | 28685 | 6952 | 0.0001 | 0.0001 | 35638 |

| | AUTO | TRANSIT | WALK | OTHER | TOTAL |
|---|---|---|---|---|---|
| HBW | 86.6% | 74.5% | 0.0% | 0.0% | 84.2% |
| HBS | 0.0% | 25.5% | 0.0% | 0.0% | 5.0% |
| HBO | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| NHB | 13.4% | 0.0% | 0.0% | 0.0% | 10.8% |
| TOTAL | 80.5% | 19.5% | 0.0% | 0.0% | 100.0% |

# APPENDIX H

# STATISTICAL ERROR ESTIMATION

## STATISTICAL ERROR ESTIMATION

### 1) Sampling Error

The sampling error for any variable may be calculated with the expression

$$P \pm 1.98 \text{ (for 95\% confidence interval) } \sqrt{PQ/N}$$

for example, the sampling error for the variable "Proportions of Home to Work Trips Destined to Metro From Regional Municipality of York" may be calculated as follows:

| | |
|---|---|
| P = 0.591 | (proportion of TDS respondent which did answer) |
| Q = 0.409 | (Q = 1-P) |
| N = 272 | (Total Number of Home to Work Trips Made by Respondents) |

substitution yields $\sqrt{(0.591*0.409)/272}$
$= \sqrt{0.000888672}$
$= 2.98\ \%$

With a 95% confidence level overall, the "t" value is 1.96 and therefore, 1.96 * 2.98% = 5.84%.

### 2) Non-sampling Error (or Bias)

The non-sampling error estimated here is in terms of non-responses to the proportional distribution. The first step is to estimate the bias($\beta$) as follows:

$$\beta = [W_1P_1 + W_2P_2] - P_1$$

- $W_1$ and $W_2$ are weights of respondents and non-respondents respectively
- $P_1$ is the proportion of the respondents population which did answer and which did make a home to work trip to Metro from York Region
- $P_2$ is the proportion of the sample population which did not answer and which made a home to work trip to Metro from York Region. $P_2$ is not known but must fall between 0 and 1.
- For this analysis $P_1$ represents TDS response and the unknown $P_2$ has been estimated based on the results of the TTS survey.

The estimate of bias($\beta$) was calculated as follows:

$$\beta = ([0.32*0.591] + [0.68*0.499]) - 0.591$$
$$\beta = (0.18912 + 0.33932) - 0.591$$
$$\beta = -0.06256 \ (-6.26\%)$$

### 3) Mean Square Error (or Total Error)

Mean Square Error is also called total error and is equal to the Variance of Sampling plus the square of the bias($\beta$). Therefore,

$$MSE = (PQ/N) + \beta^2$$
$$MSE = (0.591*0.409)/272 + 0.003913753$$
$$MSE = 0.004802425$$

Total Error = $\sqrt{MSE} = \sqrt{0.004802425} = 0.06930 \quad (6.93\%)$

The proportion of this total error which is due to bias is calculated as the ratio of $\beta^2$/MSE.

$$\beta^2/MSE = 0.0039137/0.0048024 = 0.8149534 \ (81.50\%)$$