

TOTAL MOBILITY USERS SURVEY

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EXECUTIVE SUMMARY

The purpose of the research study of the Total Mobility Scheme was to assist the government-funded Working Group on Transport Systems for Transport Disadvantaged in New Zealand in fulfilling its terms of reference. The Total Mobility Scheme provides reduced fares for taxi travel by people with disabilities.

The study included a survey of users of the Total Mobility Scheme in two cities to provide more information about the scheme, especially to identify who uses it and the purposes of their trips.

The user survey took place over a two-week period in September 1992 of all Total Mobility users in Dunedin and Palmerston North. This is the first such survey of users of the service to be undertaken.

Summaries of the data analysis of the survey results are presented. Also included is a brief statement about possible future research that can be built on these results and could be extrapolated to the nationwide experience of Total Mobility and its users.

ABSTRACT

The research study of the Total Mobility Scheme, which provides reduced fares for taxi travel by people with disabilities, was undertaken to assist the government-funded Working Group on Transport Systems for Transport Disadvantaged in New Zealand in fulfilling its terms of reference. The study included a survey of users of the Total Mobility Scheme in Dunedin and Palmerston North, to provide more information about the scheme, especially to identify who uses it and the purposes of their trips. Summaries of the data analysis of the survey results are presented, and also a brief statement about possible future research that can be built on these results.

1. INTRODUCTION

The purpose of the research study of the Total Mobility Scheme, which provides reduced fares for taxi travel by people with disabilities, was to assist the Working Group on Transport Systems for Transport Disadvantaged¹ in fulfilling its terms of reference. The Working Group was set up by the Minister of Transport, and comprises representatives from Transit New Zealand, Disabled Persons Assembly and the Ministry of Transport. Its terms of reference cover a range of matters that include defining transport disadvantaged, assessing the future demands, needs and costs of alternative provisions for transport disadvantaged, and assessing the feasibility and justification of a nationwide land transport voucher scheme for the transport disadvantaged (i.e. people without cars who generally are dependent on public transport).

The objective of the survey of Total Mobility users is to provide more information about the Total Mobility Scheme, especially to identify who uses the service and the purposes of their trips. At present little quantitative information is available about Total Mobility users, and this is the first such survey of users of the service to be undertaken.

Total Mobility is a nationwide project of the Disabled Persons Assembly (New Zealand) Incorporated run in co-operation with the New Zealand Taxi Proprietors Federation Incorporated and regional councils. Taxi companies which are not part of the Taxi Proprietors Federation can also take part in the Total Mobility Scheme.

If disability prevents someone from using regular public transport services, the cost of a taxi journey is reduced by a subsidy through discount fares using special vouchers. The discount typically reduces the price of a fare by half. There are two types of voucher available:

¹ Hereafter referred to as the Working Group.

1. Individual (yellow) vouchers which allow individuals to pay half the normal fare price to the taxi driver.
2. Agency (blue) vouchers which provide for the fare to be charged to the Disabled Persons Assembly Agency to which the persons belong, and no money is paid by the individual.

In both cases, the discount portions are provided by the relevant regional council and Transit New Zealand.

2. OBJECTIVE

The objective of the study was to identify:

- (i) the users of the service, and
- (ii) the purposes of their trips.

It was attained by surveying a sample of Total Mobility Scheme users in the cities of Dunedin and Palmerston North.

3. METHODOLOGY

This study entailed a survey of Total Mobility Scheme users in Dunedin and Palmerston North over a two week period in September 1992 (but avoiding school holidays). The survey was administered by taxi drivers, who wrote the information on the back of the Total Mobility trip vouchers which they received from their passengers. The vouchers were then sent to the consultants for data analysis, the results were evaluated and this report was prepared. The methodology of this study involved four stages as discussed below.

3.1 Preparation for Survey of Total Mobility Users

The purpose of this stage of the study was to ensure that the work undertaken would fully meet the above objectives and that the survey would be carried out effectively within the given time frame. Some background research was also undertaken before preparing the survey of Total Mobility users.

The next task entailed liaison with taxi companies. This included meeting with and writing to taxi company representatives in Dunedin and Palmerston North, and with Mr George Tyler, Secretary of the New Zealand Taxi Proprietors Federation, to enlist their co-operation with the survey.

Agencies involved in the Total Mobility service were contacted to inform them about the survey and to enlist their co-operation.

Meetings were held with regional council representatives.

Preparation of the survey materials and documentation was part of this stage and included the design of questions and materials to be given to taxi drivers, preparation of explanatory information about the survey, preparation of information about how the taxi drivers were to sensitively administer the survey, and what they were to do with their completed vouchers. They were told that the answers to their questions were to be written on the back of the voucher by the taxi driver, and that the additional information sought was the time of day of the trip, and the trip purpose or specifics of the destination.

Taxi drivers were asked to return completed vouchers to their companies. Taxi companies were asked to send the vouchers to the consultants after the companies had processed their billings to the regional councils.

3.2 Survey of Total Mobility Users

This stage entailed the tasks involved with undertaking the two-week survey of Total Mobility users. The survey materials were distributed to taxi drivers and explanatory information was given to them and their companies. The survey was undertaken by all taxi companies existing in both cities at the time of the survey. After the taxi companies had processed the vouchers for billing to the regional council, the vouchers were forwarded to the consultants for data entry into the computer.

3.3 Computer Data Entry & Analysis of Total Mobility Users Survey Results

The tasks in this stage entailed setting up the computer data entry and reporting formats for the survey data, entering the data from each voucher into the computer, calculating frequencies, cross-tabulations and percentages, and finally reviewing and analysing the results.

3.4 Report Preparation

This stage entailed the preparation of the draft report, the review of that report by Transit New Zealand, followed by preparation of the final report.

4. TIME FRAME

This study was undertaken during the period July-November 1992. The survey of Total Mobility Users took place during the two weeks of 14-27 September 1992.

5. KEY PERSONNEL

The study was undertaken by Janet Chambers of Connell Wagner Limited, in consultation with Jennie McMurrin, Economic Analyst with Transit New Zealand, and Dave Henderson, Chief Executive Officer of Disabled Persons Assembly (New Zealand) Inc.

6. OVERVIEW OF SURVEY RESULTS

During the two weeks of the survey, 2320 trips were taken by Total Mobility users in Palmerston North and Dunedin, for which 2320 vouchers were completed.

The taxi companies and their drivers were very co-operative and helpful with the survey, and their passengers were equally as co-operative.

The taxi companies which participated in the survey were City Taxis-Dunedin (52 drivers), Dunedin Taxis (73 drivers), Gold Star Taxis-Dunedin (7 drivers), Call A Cab-Dunedin (30 drivers), and Palmerston North Taxis (51 drivers). Four maxi-taxis have been specially equipped with wheelchair hoists in Dunedin, and four in Palmerston North.

When they were interviewed before the survey, the taxi companies were asked about their drivers' experience with the Total Mobility Scheme. All reported that the scheme represents a small but important part of their revenue, and thus they are keen to see that it continues. Also, for that reason, they expected that their drivers would be very co-operative with the survey, which of course is what happened.

When the taxi companies were asked about problems, concerns or criticisms of the scheme, little comment was made in that regard. The companies are generally satisfied with the way the scheme is administered and do not generally mind the additional effort sometimes required to sensitively respond to the needs of the scheme users. However, one criticism that was made many times is that many people who need the service do not know about it, or who use the service do not get sufficient vouchers to meet their needs.

It is clear that in many cases a user of the Total Mobility Scheme will develop a rapport with a particular driver, and will often request that driver each time. Furthermore, in many cases a driver will go out of his/her way to assist the user by taking the person to their door, turning on the light, carrying items inside for them, making sure they are settled, and sometimes driving by later to check on them. It is little wonder that such personal attention is appreciated by the user and that they would request a particular driver in the future. In such cases, the additional time spent by the driver is not compensated as it is not metered and usually takes place after the fare has been paid.

The comment was made during the interviews that it would be appropriate for this extra effort and time by drivers to be compensated by the Total Mobility Scheme in some

way, and that it would encourage drivers to be helpful, especially during stressful times such as on Friday and Saturday nights.

The Total Mobility Scheme is used by 20 agencies in Dunedin, and during the two-week survey it was used by clients from 19 of them. The service is used by 15 agencies in Palmerston North, and during the survey it was used by clients from 12 of them.

A list of all 35 of those agencies is presented in Appendix 1. In each case the name of the agency is preceded by a code number which the regional councils use when they are processing the taxi companies' billings for Total Mobility vouchers. The initial letter preceding each code number stands for Dunedin ("d") or Palmerston North ("p"), where the agency is located.

The categories of analysis include all of those specifically requested by Transit New Zealand for this study, augmented by further assessment of data where the consultants considered such assessment could be of interest to the Working Group.

7. DATA ANALYSIS

The data analysis of the survey results presented in this section combines, in most cases, the results from Dunedin and Palmerston North because of the large number of categories of assessment. The analysis resulted in many categories with very small numbers, and if the results had been further divided the final numbers would have been so small as to render the percentages meaningless in many instances.

The exception to this is when the results by region are relevant (e.g. as in Section 7.1.2). Furthermore, when information is presented about a particular agency, that agency's location has been identified in each case.

7.1 Frequencies and Percentages of Trips

The results of the data analysis that pertain to trips made by Total Mobility users are presented in this section of the report. A total of 2320 trips were taken over the two-week period. As each trip was represented by the use of one voucher, 2320 total vouchers were used.

Many trips were taken by more than one passenger using the same voucher at the same time. For results concerning numbers of passengers, see Section 7.2.

7.1.1 Trips by Agency

The number of trips taken by passengers from each agency, and the percentages that those trips represent of the total (2320) trips, are presented in Appendix 1.

Nine agencies together represented about 82.3% of the trips taken. The agency with the highest number of trips was CCS-Manawatu with 504 trips or 21.7% of the total. The agencies with the next eight highest numbers of trips were:

IHC-Otago	(355 trips/15.3%)
Arthritis Foundation-Dunedin	(302 trips/13.0%)
CCS-Dunedin	(225 trips/9.7%)
Royal NZ Foundation for Blind-Dunedin	(136 trips/5.9%)
Royal NZ Foundation for Blind-PN	(116 trips/5.0%)
Manawatu-Wanganui Regional Council ²	(94 trips/4.1%)
IHC-Manawatu	(90 trips/3.9%)
Mosgiel Abilities Resource Centre	(86 trips/3.7%)

These results are presented in the form of a pie chart in Figure 1.

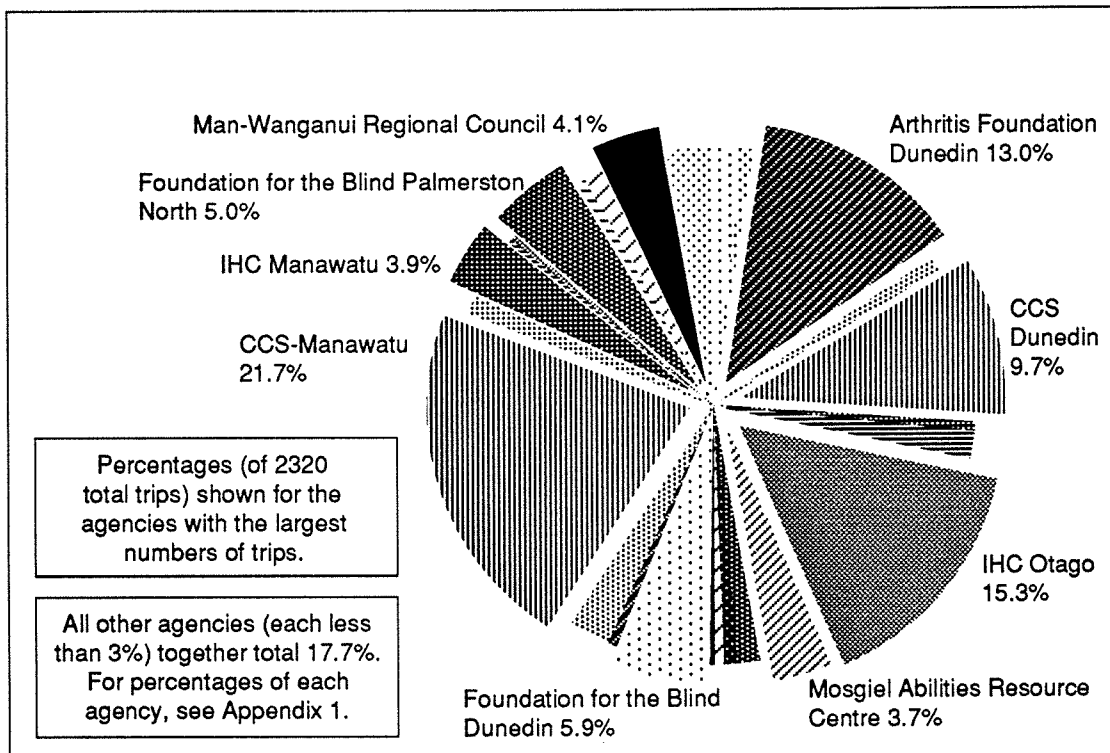


Figure 1. Percentages of trips by agency.

A review of Appendix 1 also provides information about trips by agency by region, as the first 20 agencies in the table are from Dunedin, and the last 15 agencies are from Palmerston North. While most agencies are unique to each region, five agencies are

² The Manawatu-Wanganui Regional Council joined the Disabled Persons Assembly so that it could give out vouchers to people who do not want to join an organisation for people with disabilities, or to those whose disability is not covered by an organisation in their area.

established in both regions and provide some basis for comparison. The percentage of total trips taken in each region by members of those five agencies is listed in Table 1.

Table 1. Total trips (%) taken by members of agencies established in both Dunedin and Palmerston North regions.

Agency	Dunedin % total trips (1296)	Palmerston North % total trips (1024)
Arthritis Foundation	23.3	6.0
CCS	17.4	9.2
IHC	27.4	8.8
Multiple Sclerosis Society	2.4	0.9
Royal NZ Foundation for Blind	10.5	11.3
% total trips taken by these agencies	81.0	76.2

The first three agencies on this table generated quite different proportions of total trips in each region. The difference was most marked for CCS, which is probably related to its role in Palmerston North as an umbrella agency covering non-crippled people and others who are not covered by any other local organisation. This role is not duplicated by the CCS in Dunedin. The differences between regions for the Arthritis Foundation and IHC could perhaps be similarly explained, but further research would be required to draw such a conclusion.

7.1.2 Trips by Region

The analysis of the numbers of trips taken within each region shows that 1314 trips (56.6% of the total 2320 trips) were taken in Dunedin and 1006 trips (43.3%) were taken in Palmerston North. The population of Dunedin is about 114,000 and the population of Palmerston North is about 69,000.

7.1.3 Trips by Colour of Voucher

The analysis of trips by the two voucher colours indicates that 1829 trips (78.8%) were taken using yellow vouchers and 491 trips (21.2%) were taken using blue vouchers.

In Dunedin, 33.0% of the trips used blue vouchers and 67.0% used yellow vouchers. In Palmerston North, 5.7% of the trips used blue vouchers and 94.3% used yellow vouchers. The reason for this difference in proportion of yellow to blue vouchers in the two regions is not known without further research. However, it could be related to the fact that IHC (the heaviest user of blue vouchers) has been in Dunedin for a longer period of time than it has in Palmerston North, and therefore the system is more established.

The 11 agencies that used blue vouchers are listed in Table 2, with details of number of trips taken and the percentage they represented of the total trips using blue vouchers.

Table 2. Trips taken by agencies using blue vouchers.

Agency	Number of Trips	% Total Trips
Hawksbury Trust-Dunedin	19	3.87
CCS-Dunedin	62	12.63
DPA-Dunedin	3	0.61
IHC-Otago	338	68.84
Abilities Resource Centre	1	0.20
Multiple Sclerosis-Dunedin	11	2.24
CCS-Manawatu	4	0.82
Stroke Foundation-PN	9	1.83
IHC-Manawatu	38	7.74
Royal NZ Foundation for Blind-PN	4	0.81
Association for Blind-PN	2	0.41
Total	491	100.00

7.1.4 Trips by Trip Purpose

The analysis of the number of trips taken for each trip purpose shows that the largest category was for trips home (912 trips, or 39.3% of the total).

A high percentage of total trips, about 50%, were expected to be trips home. This expectation was based on the assumption that relatively few outings would entail trips to more than one destination (e.g. home to work, then work to shopping, then shopping to home), and that most trips would be return trips from home to one destination, and then from that destination to home.

Upon further investigation of the vouchers, the 912 (39.3%) of recorded trips to home was found to be an under-assessment of the actual number of trips home. In many discernible instances the taxi driver recorded that a trip purpose was for other than a trip home when in fact it was a trip home. Instead, the taxi driver recorded the purpose of the outing (from which the passenger was returning home), rather than the purpose of the trip. The total number of trips home has been estimated to be about 1044 or 45%.

Therefore, if the recorded numbers of trips home were to be included in the analysis of frequencies and percentages of trips by destination, then these numbers would distort those statistics. As a result the table in Appendix 2.1, which presents the analysis of the number of trips taken for each trip purpose, excludes trips home from the calculations.

Appendix 8.1 includes trips home as one of the categories of trip purpose. Those trips home include trips home that were recorded as such by the taxi driver, as well as the researcher's interpretation of trips home that had been apparently mistakenly recorded as trips to a different destination by the taxi driver.

Appendix 2.1 shows that the most common trip purpose (of 1385 trips, excluding trips home) was for work (voluntary or paid) (307 trips/22.2%), with nearly as many trips for shopping/bank/post office (305 trips/22.0%).

The next most common trip purposes were:

Doctor/physiotherapist/hospital/dentist	(285 trips/20.6%)
Visiting friends/relatives	(118 trips/8.5%)
Club/group meeting/activity	(84 trips/6.1%)
CCS	(42 trips/3.0%)
University/High School/Polytech	(41 trips/3.0%)
Workbridge/training	(40 trips/2.9%)
Meal in restaurant or cafe	(29 trips/2.1%)

Together these nine trip purposes represented 90.4% of the trips taken (excluding trips home). These results are presented in the form of a pie chart in Figure 2.

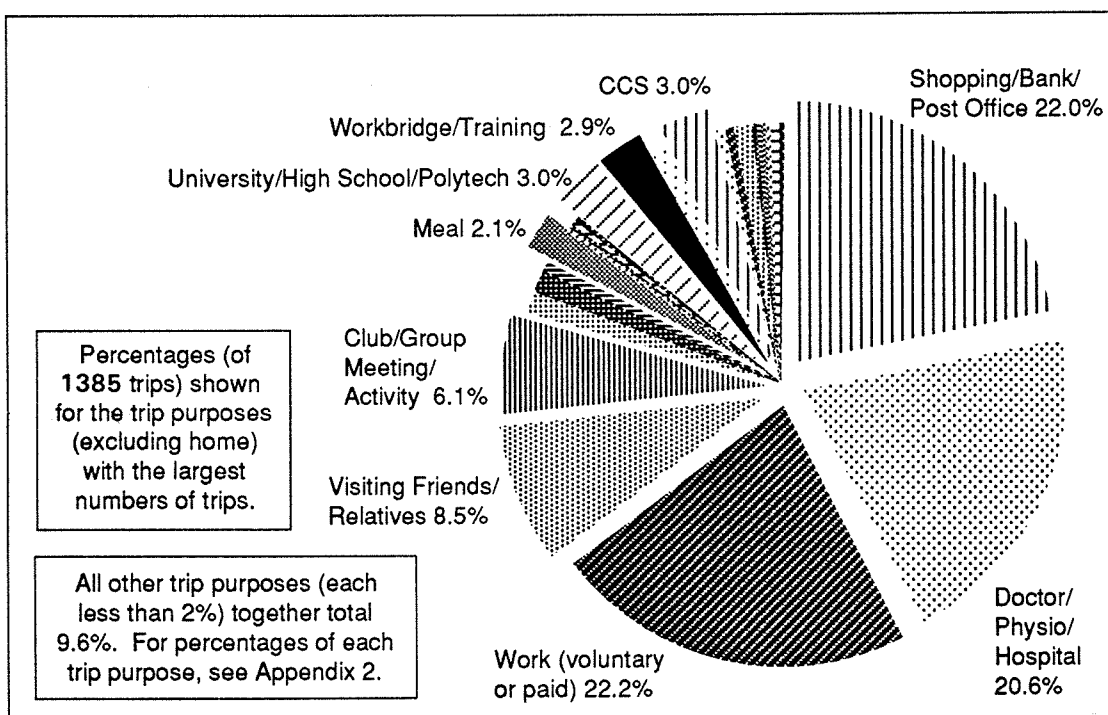


Figure 2. Percentages of trips by trip purpose (excluding trips home).

The information about Trips by Trip Purpose is further broken down into the two regions in Appendices 2.2 and 2.3.

7.1.5 Trips by Day of Week

Appendix 3 presents the results of the analysis of frequency of trips by day of the week. Those results are presented in tabular and bar chart form.

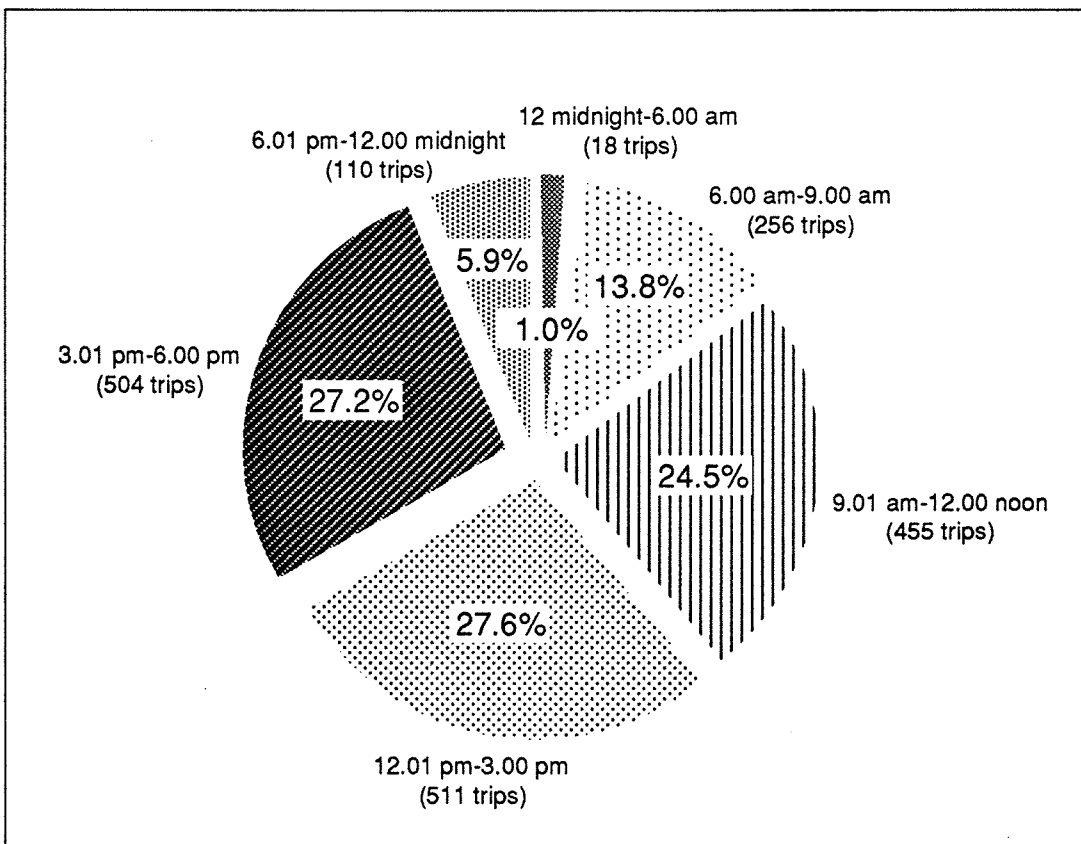
From a review of those results, it is clear that a significant proportion (92.4%) of the trips took place on weekdays (14-18 September and 21-25 September), compared to a much smaller proportion (7.6%) of trips that took place on weekends (19-20 September and 26-27 September).

The average number (mean) of trips taken on each weekday was 214 trips; the average number (mean) of trips taken on each weekend day was 44 trips.

7.1.6 Trips by Time of Day

The results of the analysis of the number of trips taken during five different time periods of the day are presented in Figure 3. As could be expected, most of the trips took place during the morning, afternoon and early evening hours, with fewer trips taken during the early morning and late night hours.

Figure 3. Frequency of trips by time of day.



7.2 Numbers of Passengers

The total number of passengers that travelled using Total Mobility vouchers during the two-week period was 3867.

The average number (mean) of passengers per voucher (trip) was 1.7, because more than one passenger can travel using one voucher. The range of numbers of passengers per voucher was from 1 to 14, as illustrated in Figure 4.

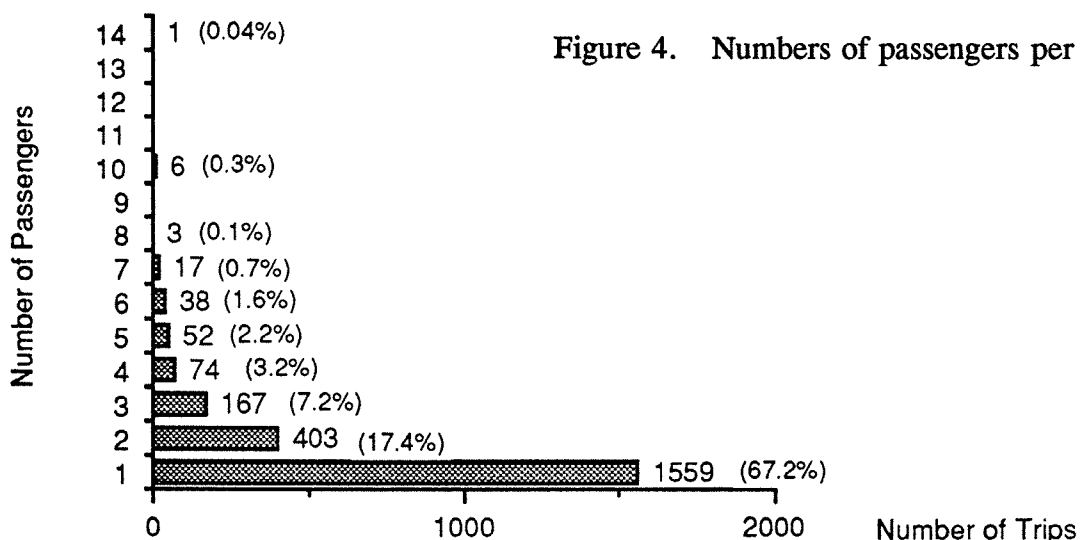


Figure 4. Numbers of passengers per trip.

7.2.1 Passengers by Agency

Appendix 4 presents the results of the analysis of numbers of passengers per trip by agency. The numbers of passengers per trip for the two agencies with the largest number of trips is illustrated in Figure 5.

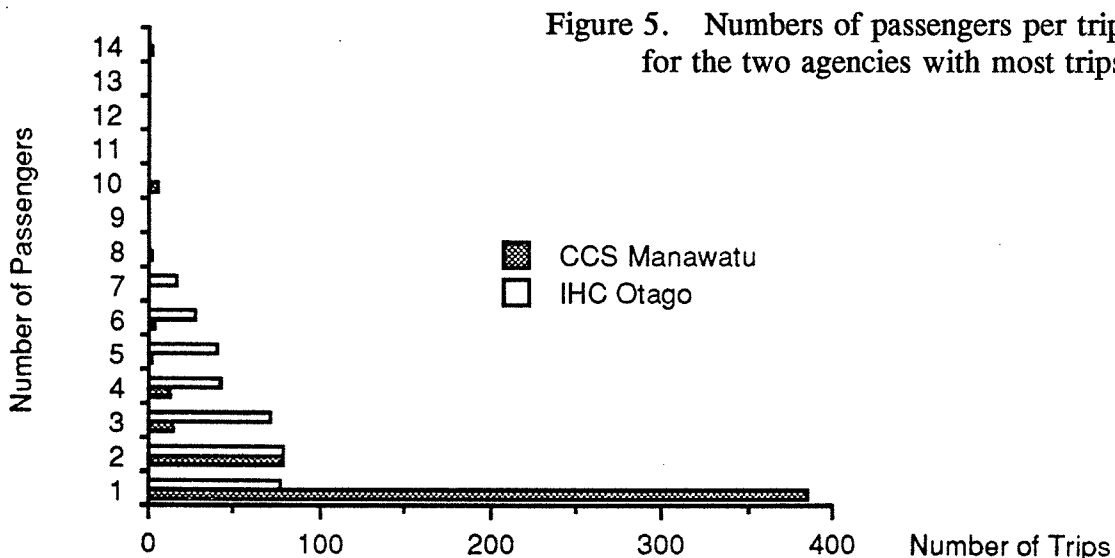


Figure 5. Numbers of passengers per trip for the two agencies with most trips.

The agency with the largest average number of passengers per voucher was IHC-Otago with 3.1 passengers per voucher. The agencies with the next largest average number of passengers per voucher were:

- Hawksbury Trust-Dunedin (2.9 passengers per voucher)
- Stroke Foundation-Palmerston North (2.6 passengers per voucher)
- Disabled Persons Assembly-Dunedin (2.0 passengers per voucher)
- Agoraphobia Support Group-Dunedin (2.0 passengers per voucher)
- IHC-Manawatu (2.0 passengers per voucher)

7.2.2 Passengers by Voucher Colour

The average number of passengers per blue voucher (3.0) was higher than the average number of passengers per yellow voucher (1.3). This result is not surprising, because agencies (especially IHC) commonly use blue vouchers to transport groups of people from a common origin to a common destination, whereas yellow vouchers are more commonly used by individuals who only occasionally organise their travel in a group. In some instances, particularly those where a yellow voucher is used, a second passenger may not be disabled; they may instead be an able-bodied care-giver accompanying a disabled passenger.

7.2.3 Passengers by Trip Purpose

Appendix 5 presents the results of the analysis of numbers of passengers per trip by trip purpose.

The trip purpose with the largest average number of passengers per voucher was voting (6 passengers per voucher), but this was the only trip for that purpose that year as local body elections had coincided with the survey period.

The trip purposes with the next largest average numbers of passengers per voucher were:

Children to school/creche/plunket	(2.7 passengers per voucher) - 3 trips
Bowling	(2.7 passengers per voucher) - 6 trips
Work:voluntary or paid	(2.4 passengers per voucher) - 307 trips
Cinema/Opera/Concert	(2.3 passengers per voucher) - 10 trips

Some other trip purposes with large numbers of trips had the following average passengers per voucher:

Home	(1.8 passengers per voucher) - 912 trips
Shopping/Bank/Post Office	(1.3 passengers per voucher) - 305 trips
Doctor/Physio/Hospital/Dentist	(1.3 passengers per voucher) - 285 trips
Visiting friends/relatives	(1.3 passengers per voucher) - 118 trips

7.3 Fares

The average (mean) fare was \$8.37, and the fares ranged from \$1.00 to \$44.50. The total of all the Total Mobility taxi fares for the two-week period was \$19,414.75.

7.3.1 Fares by Region

The taxi fare structures for both regions are similar.

The average (mean) fare in Dunedin was \$9.43. The fares there ranged from \$1.00 to \$44.50. The total of all the Dunedin Total Mobility taxi fares for the two-week period was \$12,388.76.

The average (mean) fare in Palmerston North was \$6.98. The fares there ranged from \$2.40 to \$40.00. The total of all the Palmerston North Total Mobility taxi fares for the two week period was \$7,025.99.

The fact that the average fare was higher in Dunedin than in Palmerston North probably reflects Dunedin's settlement pattern which is more spread out and less compact than that of Palmerston North and thus results in longer average trip lengths.

7.3.2 Fares by Voucher Colour

As expected, the average fare for trips using blue vouchers was higher than for trips using yellow vouchers, related particularly to the higher average number of passengers per trip using blue vouchers (see Section 1, Introduction). Thus, the average (mean) fare for trips using blue vouchers was \$12.72, but the average (mean) fare for trips using yellow vouchers was \$7.20.

7.3.3 Fares by Agency

Appendix 6 presents the results of the analysis of fares by agency. The agency with the highest average fare per trip was the Disabled Persons Assembly-Dunedin with an average (mean) fare of \$17.57 for 3 trips, and with an average of 2.0 passengers per trip.

The agencies with the next largest average fares per trip were:

Hawksbury Trust-Dunedin	(\$14.70) - 19 trips, 2.9 passengers/trip
Wakari Hospital-Dunedin	(\$14.00) - 1 trip, 1 passenger/trip
IHC-Otago	(\$12.45) - 355 trips, 3.1 passengers/trip
CCS-Dunedin	(\$11.91) - 225 trips, 1.5 passengers/trip
Multiple Sclerosis Society-Dunedin	(\$10.76) - 31 trips, 1.7 passengers/trip
Amputee Society-Dunedin	(\$10.46) - 11 trips, 1.2 passengers/trip

Some other agencies with large numbers of trips had the following average fares per trip:

CCS-Manawatu	(\$7.55) - 504 trips
Arthritis Foundation-Dunedin	(\$6.17) - 302 trips
Royal NZ Foundation for Blind-Dunedin	(\$7.36) - 136 trips
Royal NZ Foundation for Blind-PN	(\$6.44) - 116 trips

7.3.4 Fares by Trip Purpose

Appendix 7 presents the results of the analysis of fares by trip purpose. The trip purpose with the highest average fare per trip was for Occupational Therapy with an average (mean) fare of \$15.35 for 8 trips.

The trip purposes with the next largest average fares per trip were:

CCS	(\$12.49) - 42 trips
Voting ³	(\$12.20) - 1 trip
Train Station/Airport	(\$11.76) - 5 trips
Work:voluntary or paid	(\$10.68) - 307 trips

Some other trip purposes with large numbers of trips had the following average fares per trip:

Home	(\$8.74) - 912 trips
Shopping/Bank/Post Office	(\$6.12) - 305 trips
Doctor/Physiotherapist/Hospital/Dentist	(\$7.61) - 285 trips
Visiting friends or relatives	(\$7.95) - 118 trips

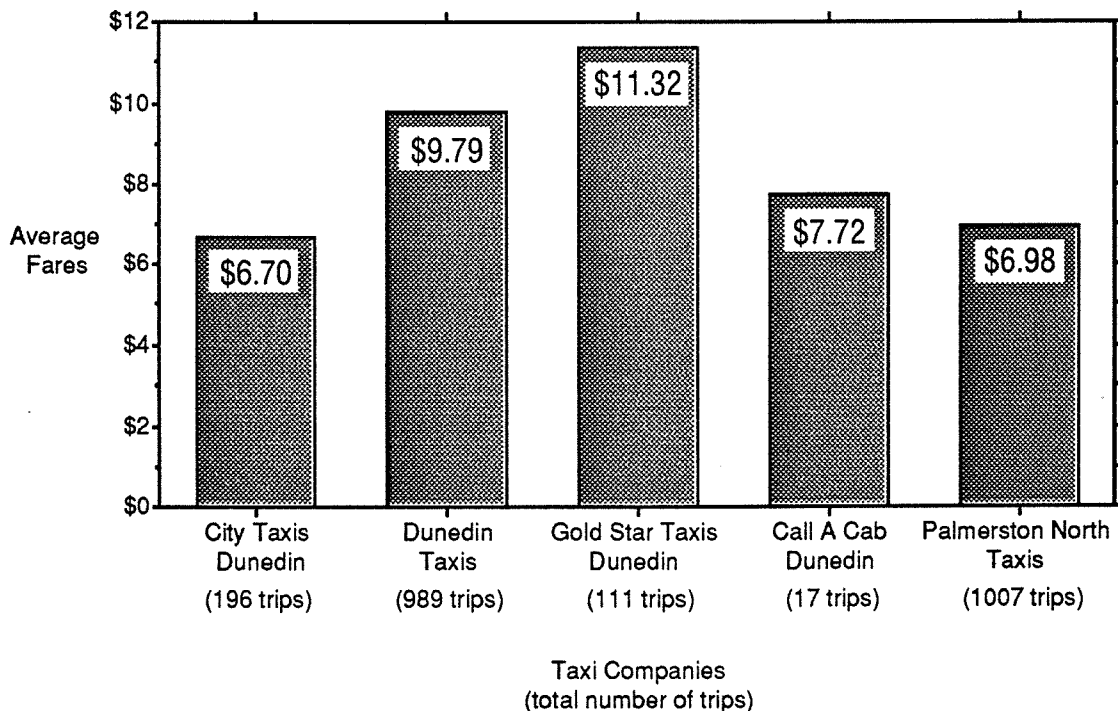
7.3.5 Fares by Day of Week

There was little difference between the average fares on weekdays and weekends, with an average (mean) fare on weekdays of \$8.34 (ranging from \$1.00 to \$44.50), and an average (mean) fare on weekends of \$8.62 (ranging from \$2.80 to \$32.00).

7.3.6 Fares by Taxi Company

Figure 6 presents the results of the analysis of fares by taxi company, in bar chart form.

Figure 6. Average fare per trip by taxi company.



³ Refer to Section 7.2.3.

Gold Star Taxis had the highest average (mean) fare of \$11.32 for 111 trips. The fact that they are located in Mosgiel may possibly explain this as they would more likely carry their passengers from Mosgiel to Dunedin, a longer journey than journeys made by inner city taxi companies.

The average fares of the other four taxi companies were as follows:

Dunedin Taxis	\$9.79 for 989 trips
Call A Cab-Dunedin	\$7.72 for 17 trips
Palmerston North Taxis	\$6.98 for 1007 trips
City Taxis-Dunedin	\$6.70 for 196 trips

7.4 Trip Purpose

Some of the results of the analysis related to trip purpose have already been presented above:

Section 7.1.4 and Appendix 2 present the number of trips taken for each trip purpose and the percentages that those trips represent of the total trips.

Section 7.2.3 and Appendix 5 present the results of the analysis of numbers of passengers by trip purpose.

Section 7.3.4 and Appendix 7 present the results of the analysis of fares by trip purpose.

7.4.1 Trip Purpose by Agency

Appendix 8.1 presents the results of the analysis of trip purpose reported by individuals from each agency. Not all individuals answered the question. The matrix presents the 30 trip purposes down the left hand side and the 31 agencies across the top. The space available to print the name of each agency was limited and only allows for an agency's code number. Explanation of code numbers is in Appendix 1. Appendices 8.2 and 8.3 show trip purpose by agency, expressed as percentages of all trip purposes (Appendix 8.2) and as percentages of all agencies (in Appendix 8.3).

In Appendix 10 the results of the analysis of trip purpose by agency are presented in pie charts for the six agencies which had the highest recorded numbers of trips. The pie charts illustrate the proportion of total trips taken for each trip purpose (excluding trips home).

The information presented below was derived from an evaluation of these results. It shows the five most common trip purposes (excluding trips home) for each of those agencies with the highest numbers of trips.

For CCS-Manawatu (code p209) with 504 trips or 21.7% of the total trips taken (excluding trips home):

18.5 %	of trips were for Shopping/Bank/Post Office
17.2 %	Doctor/Physiotherapist/Hospital/Dentist
13.6 %	Visiting Friends/Relatives
12.2 %	Workbridge/Training
11.3 %	Work:Voluntary or Paid

For IHC-Otago (code d217) with 355 trips or 15.3% of the total trips taken (excluding trips home):

89.5 %	of trips were for Work:Voluntary or Paid
2.8 %	Gym/Fitness Centre
2.2 %	Doctor/Physiotherapist/Hospital/Dentist
1.6 %	Bowling
1.1 %	Meal

Arthritis Foundation-Dunedin (code d329) with 302 trips or 13.0% of the total trips taken (excluding trips home):

38.2 %	of trips were for Shopping/Bank/Post Office
35.8 %	Doctor/Physiotherapist/Hospital/Dentist
8.5 %	Visiting Friends/Relatives
7.1 %	Club/Group Meeting/Activity
2.4 %	Hairdresser

CCS-Dunedin (code d137) with 225 trips or 9.7% of the total trips taken (excluding trips home):

26.2 %	of trips were for Work:voluntary or paid
24.8 %	CCS-Dunedin
18.1 %	Doctor/Physiotherapist/Hospital/Dentist
6.7 %	Shopping/Bank/Post Office
5.4 %	University/High School/Polytech

Royal New Zealand Foundation for the Blind-Dunedin (code d360) with 136 trips or 5.9% of total trips (excluding trips home):

26.9 %	of trips were for Shopping/Bank/Post Office
18.3 %	Visiting Friends/Relatives
15.0 %	Doctor/Physiotherapist/Hospital/Dentist
10.8 %	Meal
9.7 %	Club/Group Meeting/Activity

Royal NZ Foundation for the Blind-Palmerston North (code p379) with 116 trips or 5.0% of total trips (excluding trips home):

28.8%	of trips were for Shopping/Bank/Post Office
32.9%	Doctor/Physiotherapist/Hospital/Dentist
8.2%	Blind Foundation
6.8%	Club/Group Meeting/Activity
4.1%	Visiting Friends/Relatives
4.1%	University/High School/Polytech

For comments regarding the different experiences between the same organisation in the two regions, refer to Section 7.1.1. The differences may be explained by the same reasons, although further research would be required to verify this.

7.4.2 Trip Purpose by Day of Week

Figures 7a and 7b present the results of the analysis of trip purpose (excluding home) by day of the week. Trips home were excluded from the analysis, as explained in Section 7.1.4. Figure 7a shows trips on weekend days, and Figure 7b shows trips on weekdays in which the pie charts illustrate the proportion of total trips taken for each trip purpose.

Figure 7a. Trip purpose (excluding trips home) on weekend days.

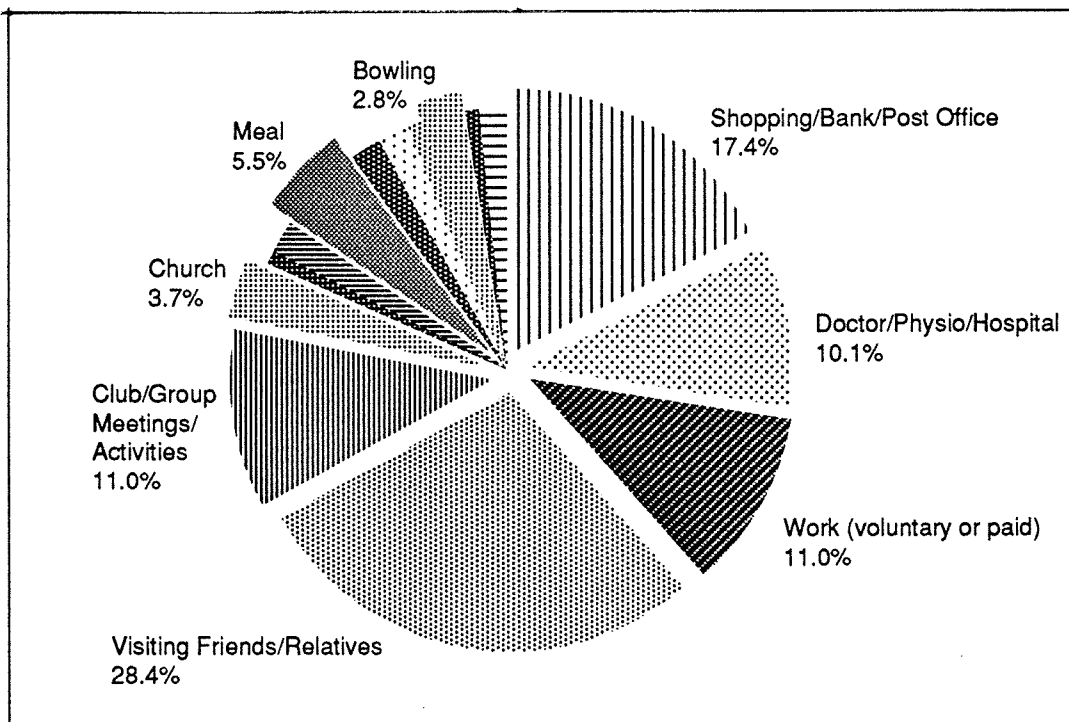
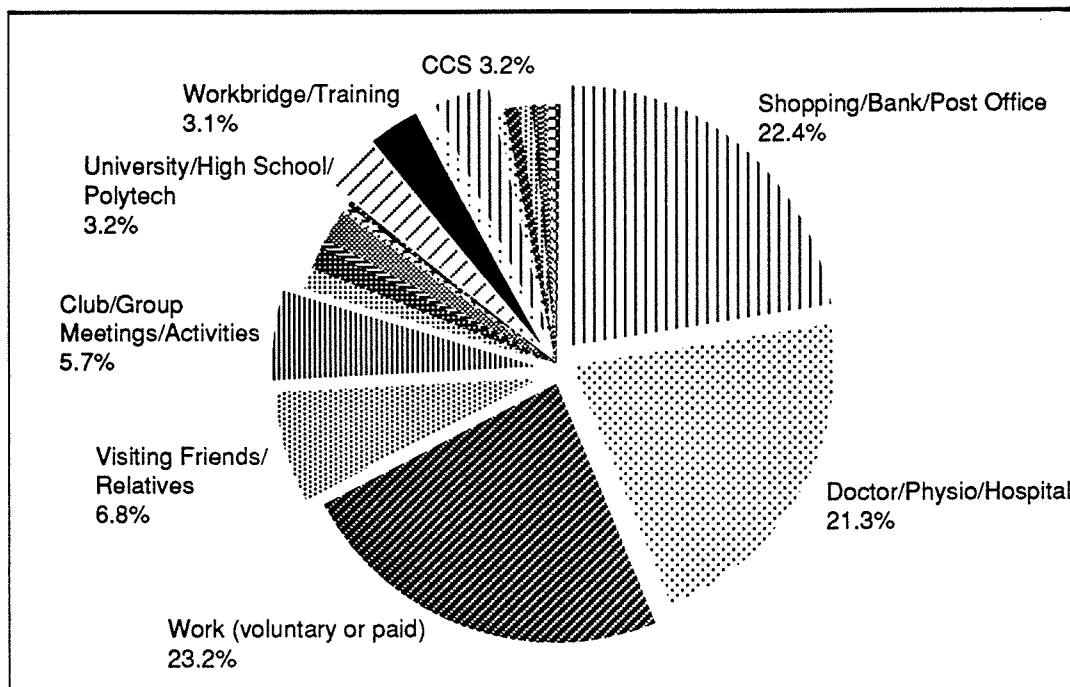


Figure 7b. Trip purpose (excluding trips home) on weekdays.



As could be expected, trips to work, the doctor and shopping were proportionately greater during weekdays than during weekends. On weekends, socially-related trips such as visiting friends/relatives, club/group meetings/activities, going out for a meal, bowling and church were proportionately greater than during weekdays.

7.5 Time of Day

Some of the results of the analysis related to time of day of trips have already been presented above: Section 7.1.6 (and Figure 3) presented the number of trips taken during each of five time categories and the percentages that those trips represent of the total trips.

7.5.1 Frequency of Trips by Agency by Time of Day

The analysis of trips by agency by time of day resulted in the generation of 35 tables, one for each agency, showing the proportion of trips taken during each of five time categories. Appendix 9 presents the results of this analysis for the four agencies with the highest recorded numbers of trips: CCS-Manawatu, IHC-Otago, Arthritis Foundation-Dunedin, and CCS-Dunedin.

Each agency's trips followed different time patterns which reflect the travel patterns of that particular agency's clients. For example, most of IHC trips are group trips from home to work in the morning, and then from work to home in the late afternoon. In comparison, CCS-Manawatu and CCS-Dunedin both have a more evenly spread pattern of trips over the five time categories for a much wider range of trip purposes.

7.5.2 Time of Day of Trips for Particular Purposes by CCS-Manawatu

The analysis of trips by agency by time of day was taken further to analyse those results by trip purpose. This generated 930 tables: one for each trip purpose for each agency, showing the proportion of trips taken during each of five time categories.

Four of those tables are presented in Appendix 11 for CCS-Manawatu, which was the agency with the highest recorded number of trips. The trip purposes selected were those which, for that agency, had the highest recorded numbers of trips.

The results presented are fairly predictable. The tables show that most (82.9%) of the trips to go shopping, to the bank or to the post office took place between 9 am and 3 pm, as did most (79.3%) of the trips to the doctor, physiotherapist or dentist, and most (72%) of the trips to visit friends or relatives.

8. FUTURE RESEARCH

8.1 Further Use of This Survey

The results of this survey provide the Working Group with substantial information to help identify the users of the Total Mobility scheme and their trip purposes.

Additional research could be undertaken to build on the results of this survey to provide a better indication of the New Zealand-wide experience, and to help the Working Group to better meet two of its terms of reference which are:

- To assess the future demands, needs and costs of alternative provisions for transport disadvantaged, and
- To assess the feasibility and justification of a nationwide land transport voucher.

The findings of this study could be extrapolated to the New Zealand population as a whole. This would enable the information to be considered in the context of the need for the scheme, and the scheme's effectiveness and efficiency. It would entail the collection of comparable information from other representative regions, and reference to those areas' demographic and geographic differences.

8.2 Further Surveys

Other factors that could have significant influence on nationwide projections of who uses Total Mobility and why they use it, include the nature and role of organisations and institutions in other regions of the country, and the availability of other forms of transport in those regions.

An assessment of the need for the scheme would require consultation with users and/or their agencies to obtain further information such as how many of their members use the scheme, alternative forms of transport available, potential effects to the users and organisations if the Total Mobility Scheme was not available, and the benefits versus the costs of the scheme.

Such information could be collected through a combination of surveys and personal interviews. The results could include a series of case studies of Total Mobility users which would describe the role that Total Mobility plays in their lives.

Interviews with agency representatives would allow the collected data to be viewed in a recent historical context. For example, feedback could be sought about the changing patterns of use of the Total Mobility Scheme (e.g. has there been a decrease in use of vouchers for discretionary travel, or what has been the effect of de-institutionalisation on patterns of Total Mobility use).

At the same time, the results of a survey of regional councils (undertaken by Transit New Zealand while this Total Mobility survey was being undertaken) could be built on. For example, in the report on the preliminary analysis of the survey results, it is stated that "competition in the supply of services is important" for a "scheme such as Total Mobility. This is because if there is only one provider available and entry barriers to the market exist, prices may become inflated." The report then states that "in most of the bigger areas ... there are a fairly large number of taxi operators involved in the scheme", but "in some of the smaller areas ... only one taxi company exists".

A survey could test whether the average fares in larger areas (with greater competition) are lower than those in smaller areas (with less competition). Of course, it would be important for the survey to control for other variable factors that have an influence on fares.

8.3 Driver Training

The survey of regional councils indicated that training taxi drivers to deal with people with disabilities is at present required by two regional councils, and that other councils are planning to introduce training. It would be interesting to determine whether such training makes a difference to the behaviour of drivers and the perceived results to the users.

A survey of users, agencies and taxi drivers in regions that do and regions that do not require training could provide such results. It could also identify the aspects of training that are most useful and aspects that may need to be introduced.

8.4 Potential Demand

Research could be undertaken to identify the potential un-met demand for the Total Mobility scheme. The taxi companies reported that they believe that many people who need the scheme are unaware of it. The regional councils indicated that large territorial areas are not served by the scheme. Also users often run out of vouchers and that more vouchers need to be issued before fuller use of the scheme can be made.

These indications show that the Total Mobility Scheme has the potential for expansion and a study could investigate the nature and scope of this significant un-met demand as well as the potential cost and administrative implications of meeting this demand.

APPENDICES

APPENDIX 1. FREQUENCIES AND PERCENTAGES OF TRIPS BY AGENCY.

Bar	Agency Code Number and Name (1)	Count	%
1	d402 Age Concern	47	2.026
2	d405 Agoraphobia (2)	3	.129
3	d371 Amputee Soc (3)	11	.474
4	d329 Arthritis Fndtn	302	13.017
5	d605 Hawksbury (4)	19	.819
6	d137 CCS	225	9.698
7	d404 DPA	3	.129
8	d602 Disabled Citzns	10	.431
9	d447 Dun Stroke Cl...	36	1.552
10	d217 IHC Otago	355	15.302
11	d384 AbilitiesResCtr	86	3.707
12	d339 Mult Sclerosis	31	1.336
13	d601 Musc Dystrophy	3	.129
14	d377 Para & Phy (5)	17	.733
15	d397 Parkinsonism	10	.431
16	d448 Presby Sup (6)	8	.345
17	d360 Royal Fdn Blind	136	5.862
18	d367 Wakari Hospi...	1	.043
19	d603 NZ Assoc Deaf	0	0
20	d401 Epilepsy Assn	11	.474
21	p107 Arthritis Fdn	61	2.629
22	p139 CCS Manawatu	504	21.724
23	p161 Stroke Fdn	27	1.164
24	p209 IHC Manawatu	90	3.879
25	p237 Mult Sclerosis	9	.388
26	p256 Para & Phy (5)	8	.345
27	p369 Agoraphobics	0	0
28	p379 Royal Fdn Blind	116	5
29	p383 PN Stroke Club	10	.431
30	p810 Natnl Heart (7)	0	0
31	p811ADARDS	29	1.25
32	p812 Regional Cncl	94	4.052
33	p813 Riding Disabled	0	0
34	p1651 PN Assn Blind	2	.086
35	p1652 Age Concern	56	2.414
		2320	100.00%

(1) d=Dunedin, p=Palmerston North
 (2) Agoraphobia Support Group
 (3) Amputee Society of Otago
 (4) Hawksbury Community Living Trust

(5) Paraplegic & Physically Disabled Association
 (6) Presbyterian Support Services
 (7) National Heart Foundation

APPENDIX 2. FREQUENCIES AND PERCENTAGES OF TRIPS BY TRIP PURPOSE (EXCLUDING TRIPS HOME).

Appendix 2.1. Frequencies and percentages of trips by trip purpose (excluding trips home) for Dunedin and Palmerston North.

Bar	Trip Purpose	Count	%
1	Home	0	0
2	Shopping/Bank/PO	305	22.022
3	Doctor/Physio/Hosp	285	20.578
4	Work:Volntry or Pd	307	22.166
5	Visiting friends/rel	118	8.52
6	Club/Group Meeting	84	6.065
7	Church	20	1.444
8	Hairdresser	18	1.3
9	Tavern/Hotel	8	.578
10	Meal	29	2.094
11	Kid:School/Creche	3	.217
12	Sightseeing	2	.144
13	Paying Bills	5	.361
14	Library	5	.361
15	University/Hi School	41	2.96
16	Workbridge/training	40	2.888
17	Blind Foundation	14	1.011
18	CCS	42	3.032
19	PU/Delivery Items	6	.433
20	Gym/Fitness Center	9	.65
21	Occupational Therapy	8	.578
22	Racetrack	1	.072
23	Bowling	6	.433
24	Train Station/Airprt	5	.361
25	Funeral/Cemetery	5	.361
26	Housing Corp/SWelfr	5	.361
27	Dancing	2	.144
28	Voting	1	.072
29	Cinema/Opera	10	.722
30	Veterinarian	1	.072
		1385	100.00%

Appendix 2.2. Frequencies and percentages of trips by trip purpose (excluding trips home) for Dunedin.

Bar	Trip Purpose	Count	%
1	Home	0	0
2	Shopping/Bank/PO	174	21.271
3	Doctor/Physio/Hosp	170	20.782
4	Work:Voluntry or Pd	239	29.218
5	Visiting friends/rel	52	6.357
6	Club/Group Meeting	48	5.868
7	Church	6	.733
8	Hairdresser	11	1.345
9	Tavern/Hotel	5	.611
10	Meal	20	2.445
11	Kid:School/Creche	3	.367
12	Sightseeing	1	.122
13	Paying Bills	3	.367
14	Library	2	.244
15	University/Hi School	8	.978
16	Workbridge/training	2	.244
17	Blind Foundation	8	.978
18	CCS	37	4.523
19	PU/Delivery Items	3	.367
20	Gym/Fitness Centre	8	.978
21	Occupational Therapy	5	.611
22	Racetrack	1	.122
23	Bowling	3	.367
24	Train Station/Airprt	2	.244
25	Funeral/Cemetery	3	.367
26	Housing Corp/SWelfr	0	0
27	Dancing	1	.122
28	Voting	0	0
29	Cinema/Opera	3	.367
30	Veterinarian	0	0
		818	100.00%

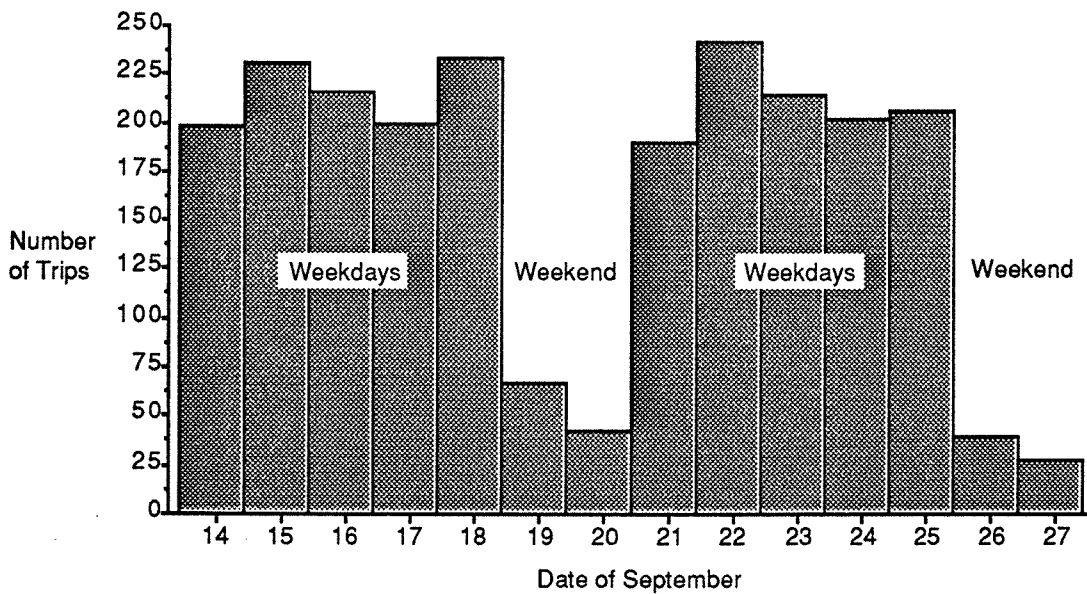
Appendix 2.3. Frequencies and percentages of trips by trip purpose (excluding trips home) for Palmerston North.

Bar	Trip Purpose	Count	%
1	Home	0	0
2	Shopping/Bank/PO	131	23.104
3	Doctor/Physio/Hosp	115	20.282
4	Work:Voluntry orPd	68	11.993
5	Visiting friends/rel	66	11.64
6	Club/Group Meeting	36	6.349
7	Church	14	2.469
8	Hairdresser	7	1.235
9	Tavern/Hotel	3	.529
10	Meal	9	1.587
11	Kid:School/Creche	0	0
12	Sightseeing	1	.176
13	Paying Bills	2	.353
14	Library	3	.529
15	University/Hi School	33	5.82
16	Workbridge/training	38	6.702
17	Blind Foundation	6	1.058
18	CCS	5	.882
19	PU/Delivery Items	3	.529
20	Gym/Fitness Centre	1	.176
21	Occupational Therapy	3	.529
22	Racetrack	0	0
23	Bowling	3	.529
24	Train Station/Airprt	3	.529
25	Funeral/Cemetery	2	.353
26	Housing Corp/SWelfr	5	.882
27	Dancing	1	.176
28	Voting	1	.176
29	Cinema/Opera	7	1.235
30	Veterinarian	1	.176
		567	100.00%

APPENDIX 3. FREQUENCIES AND PERCENTAGES OF TRIPS BY DAY OF WEEK.

Bar	Day of Week	Count	%
1	Monday 14 Sept	198	8.568
2	Tuesday 15 Sept	231	9.996
3	Wednesday 16 Sept	216	9.347
4	Thursday 17 Sept	200	8.654
5	Friday 18 Sept	234	10.125
6	Saturday 19 Sept	67	2.899
7	Sunday 20 Sept	42	1.817
8	Monday 21 Sept	190	8.222
9	Tuesday 22 Sept	242	10.472
10	Wednesday 23 Sept	215	9.303
11	Thursday 24 Sept	202	8.741
12	Friday 25 Sept	206	8.914
13	Saturday 26 Sept	40	1.731
14	Sunday 27 Sept	28	1.212
		2311*	100.00%

* Note: This total is 9 less than the 2320 total trips taken, because in 9 cases the date of the trip was not recorded.



**APPENDIX 4. AVERAGE NUMBER OF PASSENGERS
PER TRIP BY AGENCY.**

Bar	Agency Code Number and Name	Total Passengers	Average (Mean)
1	d402 Age Concern	56	1.191
2	d405 Agoraphobia ...	6	2
3	d371 Amputee Soci...	13	1.182
4	d329 Arthritis Fndtn	341	1.129
5	d605 Hawksbury C...	56	2.947
6	d137 CCS	340	1.511
7	d404 DPA	6	2
8	d602 Disabled Citzns	10	1
9	d447 Dun Stroke Cl...	55	1.528
10	d217 IHC Otago	1106	3.115
11	d384 AbilitiesResCtr	92	1.07
12	d339 Mult Sclerosis	54	1.742
13	d601 Musc Dystrophy	3	1
14	d377 Para & Phys ...	20	1.176
15	d397 Parkinsonism	10	1
16	d448 Presby Suppo...	8	1
17	d360 Royal Fnd Blind	213	1.566
18	d367 Wakari Hospi...	1	1
19	d603 NZ Assoc Deaf	0	0
20	d401 Epilepsy Assn	12	1.091
21	p107 Arthritis Found	74	1.213
22	p139 CCS Manawatu	752	1.492
23	p161 Stroke Found...	69	2.556
24	p209 IHC Manawatu	179	1.989
25	p237 Mult Sclerosis	9	1
26	p256 Para & Phys ...	11	1.375
27	p369 Agoraphobics	0	0
28	p379 Foundatn Blind	138	1.19
29	p383 PN Stroke Club	10	1
30	p810 National Heart F	0	0
31	p811ADARDS	37	1.276
32	p812 Regional Cncl	121	1.287
33	p813 Riding Disabled	0	0
34	p1651 PN Assn Blind	3	1.5
35	p1652 Age Concern	62	1.107 -

(See Appendix 1 for explanation of agency names.)

**APPENDIX 5. AVERAGE NUMBERS OF PASSENGERS
PER TRIP BY TRIP PURPOSE.**

Bar	Trip Purpose	Total Passengers	Average (Mean)
1	Home	1613	1.769
2	Shopping/Bank/PO	393	1.289
3	Doctor/Physio/Hosp	368	1.291
4	Work:Voluntry orPd	728	2.371
5	Visiting friends/rel	157	1.331
6	Club/Group Meeting	134	1.595
7	Church	38	1.9
8	Hairdresser	19	1.056
9	Tavern/Hotel	11	1.375
10	Meal	57	1.966
11	Kid:School/Creche	8	2.667
12	Sightseeing	4	2
13	Paying Bills	5	1
14	Library	8	1.6
15	University/Hi School	56	1.366
16	Workbridge/training	40	1
17	Blind Foundation	17	1.214
18	CCS	82	1.952
19	PU/Delivery Items	7	1.167
20	Gym/Fitness Centre	14	1.556
21	Occupational Therapy	11	1.375
22	Racetrack	1	1
23	Bowling	16	2.667
24	Train Station/Airprt	9	1.8
25	Funeral/Cemetery	5	1
26	Housing Corp/SWelfr	8	1.6
27	Dancing	4	2
28	Voting	6	6
29	Cinema/Opera	23	2.3
30	Veterinarian	2	2

APPENDIX 6. AVERAGE FARE PER TRIP BY AGENCY.

Bar	Agency Code Number and Name	Total Number of Trips	Average (Mean) Fare
1	d402 Age Concern	47	\$6.60
2	d405 Agoraphobia ...	3	\$7.07
3	d371 Amputee Soci...	11	\$10.46
4	d329 Arthritis Fndtn	302	\$6.17
5	d605 Hawksbury C...	19	\$14.70
6	d137 CCS	225	\$11.91
7	d404 DPA	3	\$17.57
8	d602 Disabled Citzns	10	\$9.18
9	d447 Dun Stroke Cl...	36	\$10.12
10	d217 IHC Otago	355	\$12.45
11	d384 AbilitiesResCtr	86	\$5.87
12	d339 Mult Sclerosis	31	\$10.76
13	d601 Musc Dystrophy	3	\$6.33
14	d377 Para & Phys ...	17	\$8.53
15	d397 Parkinsonism	10	\$4.73
16	d448 Presby Suppo...	8	\$6.22
17	d360 Royal Fnd Blind	136	\$7.36
18	d367 Wakari Hospi...	1	\$14.00
19	d603 NZ Assoc Deaf	0	0
20	d401 Epilepsy Assn	11	\$6.90
21	p107 Arthritis Found	61	\$5.49
22	p139 CCS Manawatu	504	\$7.55
23	p161 Stroke Found...	27	\$9.92
24	p209 IHC Manawatu	90	\$7.38
25	p237 Mult Sclerosis	9	\$6.03
26	p256 Para & Phys ...	8	\$5.59
27	p369 Agoraphobics	0	0
28	p379 Foundatn Blind	116	\$6.44
29	p383 PN Stroke Club	10	\$4.45
30	p810 Nationl Heart F	0	0
31	p811ADARDS	29	\$8.21
32	p812 Regional Cncl	94	\$5.76
33	p813 Riding Disabled	0	0
34	p1651 PN Assn Blind	2	\$7.00
35	p1652 Age Concern	56	\$4.85

(See Appendix 1 for explanation of agency names.)

APPENDIX 7. AVERAGE FARE PER TRIP BY TRIP PURPOSE.

Bar	Trip Purpose	Total Number of Trips	Average (Mean) Fare
1	Home	912	\$8.74
2	Shopping/Bank/PO	305	\$6.12
3	Doctor/Physio/Hosp	285	\$7.61
4	Work:Voluntry orPd	307	\$10.68
5	Visiting friends/rel	118	\$7.95
6	Club/Group Meeting	84	\$8.62
7	Church	20	\$8.32
8	Hairdresser	18	\$4.79
9	Tavern/Hotel	8	\$5.31
10	Meal	29	\$7.53
11	Kid:School/Creche	3	\$5.27
12	Sightseeing	2	\$14.00
13	Paying Bills	5	\$8.92
14	Library	5	\$5.48
15	University/Hi School	41	\$8.14
16	Workbridge/training	40	\$6.38
17	Blind Foundation	14	\$6.21
18	CCS	42	\$12.49
19	PU/Delivery Items	6	\$4.15
20	Gym/Fitness Centre	9	\$9.40
21	Occupational Therapy	8	\$15.35
22	Racetrack	1	\$4.00
23	Bowling	6	\$6.43
24	Train Station/Airprt	5	\$11.76
25	Funeral/Cemetery	5	\$7.22
26	Housing Corp/SWelfr	5	\$5.58
27	Dancing	2	\$7.55
28	Voting	1	\$12.20
29	Cinema/Opera	10	\$6.58
30	Veterinarian	1	\$6.00

APPENDIX 8. TRIP PURPOSE BY AGENCY.

Appendix 8.1. Results of trip purpose reported by individuals from each agency.

(Not all individuals reported their destination when answering the questions. Appendix 1 lists code numbers and names of the agencies.)

Trip Purpose	Agencies (Code Numbers)																											Totals					
	d402	d405	d371	d329	d605	d137	d404	d602	d447	d217	d384	d339	d601	d377	d397	d448	d360	d367	d401	p107	p139	p161	p209	p237	p256	p379	p383		p811	p812	p1651	p1652	
Home	16		4	86	9	73	1	5	14	174	32	11	1	7	4	5	43			2	30	199	10	55	4	4	42	4	8	46	1	22	912
Shopping/Bank/PO	15		2	81		10			7	1	21	4	1	2	3	1	25			1	15	56	4			1	21	1	5	18		10	305
Doctor/Physio/Hosp	9	2	1	76		27		1	9	4	10	9			2	1	14	1	4	7	52	2	4			1	24	3	6	13	1	2	285
Work (vol or pd)				3	10	39		4		162	8			6		5		2			34	1	27	2		2					2	307	
Visiting Friends/Rel	2		3	18		4			2		3	2				17			1	1	41						3	1	5	6		9	118
Club/Group Mtg	2			15		7	1		3	1	3	5				1	9	1	1	2	10	8	3			2	5		1	3		2	84
Church				2		3					3				1	1	1				10	1					1	1		1			24
Hairdresser			1	5												1					1			2									8
Tavern/Hotel						4										1					2							1					8
Meal	1			3		2				2	1			1		10					7						1			1			29
Kids/Schl/Creche		1		1												1																	3
Sightseeing				1																							1						2
Paying Bills				1																	1						1						5
Paying Bills				1																	1												5
Library				1												1					1	1								1			5
Univ/Hi Schl/Polyt						8														1	1												5
Workbridge/training				1							1										1	28					3						41
Blind Foundation								1									5				37												40
CCS						37																											14
PU/Delivery of Items						2																											42
Gym/Fitness Centr				1		2								1								2			1								6
Occupational Thrpy				2		3															3												9
Racetrack																																	8
Bowling										1																							1
Train Stn/Airport						1			1														1										6
Funeral/Cemetery	1															2					1	3											5
Housing Corp/Soc W																					1												5
Dancing										1																							2
Voting																					1												1
Cinema/Concert				1												1					5	1											10
Veterinarian																																	1
Totals	46	3	11	298	19	222	3	10	36	355	85	31	3	17	10	8	136	1	11	59	501	27	90	9	8	115	10	27	91	2	53	2297	

Appendix 8.2. Trip purpose by agency, as percentages of all trip purposes.

Trip Purpose	Agencies (Code Numbers)																				Totals											
	d402	d405	d371	d329	d605	d137	d404	d602	d447	d217	d384	d339	d601	d377	d397	d448	d360	d357	d401	p107		p139	p161	p209	p237	p256	p379	p383	p811	p812	p1651	p1652
Home	1.75		.44	9.43	.99	8	.11	55	1.54	19.08	3.51	1.21	.11	.77	.44	55	4.71			22	3.29	21.82	1.1	6.03	.44	.44	4.61	.44	88	5.04	.11	2.41
Shopping/Bank/PO	4.92		.66	26.56		3.28			2.3	.33	6.88	1.31	.33	.66	.98	.33	.82			.33	4.92	18.36	1.31			.33	6.88	.33	1.64	5.9		3.28
Doctor/Physio/Hosp	3.16	7	.35	26.67		9.47		.35	3.16	1.4	3.51	3.16			7	.35	4.91	.35	1.4	2.46	18.25	7	1.4		.35	8.42	1.05	2.11	4.56	.35	7	
Work (vol or pd)				.98	3.26	12.7		1.3		52.77	2.61			1.95			1.63		.65		11.07	.33	8.79	.65		.65					.65	
Visiting Friends/Rel	1.69		2.54	15.25		3.39			1.69		2.54	1.69				14.41		.85	.85	.85	34.75					2.54	.85	4.24	5.08		7.63	
Club/Group Mtg	2.38			17.86		8.33	1.19		3.57	1.19	3.57	5.95			1.19	10.71		1.19	1.19	2.38	11.9	9.52	3.57		2.38	5.95		1.19	3.57		2.38	
Church				10		15										5					50	5				5	5	5				
Hairstresser			5.56	27.78							16.67				5.56		5.56							11.11							16.67	
Tavern/Hotel						150											12.5												12.5			
Meal	3.45			10.34		6.9				6.9	3.45			3.45		34.48					24.14					3.45			3.45			
Kids:Schl/Creche		33.33		33.33												33.33																
Sightseeing				50																												
Paying Bills				20							20										20						20					
Library				20												20					20											
Univ/Hi Schl/Polyt						19.51															2.44	68.29					7.32					2.44
Work/bdgetraining				2.5						2.5											92.5										2.5	
Blind Foundation							7.14			14.29								35.71									42.86					
CCS						88.1															119											
PU/Delivery of lms						33.33															33.33			16.67								
Gym/Fitness Centr				11.11		22.22				55.56											11.11											
Occupational Thrypy				25		37.5															37.5											
Racetrack										100																						
Bowling										50													16.67			33.33						
Train Stn/Airport						20			20												20						40					
Funeral/Cemetery	20															40					20							20				
Housing Corp/Soc W																					20	60							20			
Dancing										50											50											
Votting																					100											
Cinema/Concert				10						10						10					50	10									10	
Veterinarian																										100						
Totals	2	.13	.48	12.97	.83	9.66	.13	.44	1.57	15.45	3.7	1.35	.13	.74	.44	.35	5.92	.04	.48	2.57	21.81	1.18	3.92	.39	.35	5.01	.44	1.18	3.96	.09	2.31	

Appendix 8.3. Trip purpose by agency, as percentages of all agencies.

Trip Purpose	Agencies (Code Numbers)																				Totals												
	d402	d405	d371	d329	d605	d137	d404	d602	d447	d217	d384	d339	d601	d377	d397	d448	d360	d367	d401	p107		p139	p161	p209	p237	p256	p379	p383	p811	p812	p1651	p1652	
Home	34.78		36.36	28.86	47.37	32.88	33.33	50	38.88	49.01	37.65	35.48	33.33	41.18	40	62.5	31.62		18.18	50.85	39.72	37.04	61.11	44.44	50	36.52	40	29.63	50.55	50	41.51	39.7	
Shopping/Bank/PO	32.61		18.18	27.18		4.5			19.44	28	24.71	12.9	33.33	11.76	30	12.5	18.38		9.09	25.42	11.18	14.81			12.5	18.26	10	18.52	19.78		18.87	13.28	
Doctor/Physio/Hosp	19.57	66.67	9.09	25.5		12.16		10	25	1.13	11.76	29.03			20	12.5	10.29	100	36.36	11.86	10.38	7.41	4.44		12.5	20.87	30	22.22	14.29	50	3.77	12.41	
Work (vol or pd)				1.01	52.63	17.57		40		45.63	9.41			35.29			3.68		18.18		6.79	3.7	30	22.22		1.74				3.77	13.37		
Visiting Friends/Rel	4.35		27.27	6.04		1.8			5.56		3.53	6.45				12.5			9.09	1.69	8.18				2.61	10	18.52	6.59		16.98	5.14		
Club/Group Mtg	4.35			5.03		3.15	33.33		8.33	28	3.53	16.13				12.5	6.62		9.09	3.39	2	29.63	3.33		25	4.35		3.7	3.3		3.77	3.66	
Church				.67		1.35										.74					2	3.7				.87	10	1.1			.87		
Hairstresser			9.09	1.68							3.53				10	.74					2			22.22					1.1		5.66	.78	
Tavern/Hotel						1.8										.74					4							3.7				.35	
Meal	2.17			1.01		9				56	1.18			5.88		7.35				1.69	5.59	1.4				.87		1.1				1.26	
Kids-Schl/Creche		33.33		.34												.74																.13	
Sightseeing				.34																						.87						.09	
Paying Bills				.34							1.18		33.33								2					.87						.22	
Library				.34												.74				1.69	2								1.1			.22	
Univ/Hi Schl/Polyt						3.6														1.69	5.59					2.61					1.89	1.78	
Workbridge/training				.34							1.18										7.39										1.89	1.74	
Blind Foundation							33.33				2.35															5.22						.61	
CCS						16.67															1											1.83	
PU/Delivery of Items						9															.4			11.11								.26	
Gym/Fitness Centr				.34		9				1.41											2											.39	
Occupational Thrpy				.67		1.35															6											.35	
Racetrack										28																						.04	
Bowling										.85													1.11				1.74					.26	
Train Stn/Airport						.45			2.78												2						1.74					.22	
Funeral/Cemetery	2.17															1.47					2							3.7				.22	
Housing Corp/Soc W																				1.69	6								1.1			.22	
Dancing										28										1.69												.09	
Voting																					2											.04	
Cinema/Concert										28						.74					1	3.7									1.89	.44	
Veterinarian																										.87						.04	
Totals	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

APPENDIX 9. FREQUENCY OF TRIPS BY SELECTED AGENCIES BY TIME OF DAY.

Information for the four agencies with the highest recorded numbers of trips.

CCS-Manawatu (504 trips)

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	18	6.316
2	9.01 am-12.00 noon	99	34.737
3	12.01 pm-3.00 pm	77	27.018
4	3.01 pm-6.00 pm	62	21.754
5	6.01 pm-12.00 midnight	29	10.175

IHC-Otago (355 trips)

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	145	43.155
2	9.01 am-12.00 noon	7	2.083
3	12.01 pm-3.00 pm	19	5.655
4	3.01 pm-6.00 pm	152	45.238
5	6.01 pm-12.00 midnight	13	3.869

Arthritis Foundation-Dunedin (302 trips)

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	13	4.676
2	9.01 am-12.00 noon	109	39.209
3	12.01 pm-3.00 pm	99	35.612
4	3.01 pm-6.00 pm	50	17.986
5	6.01 pm-12.00 midnight	7	2.518

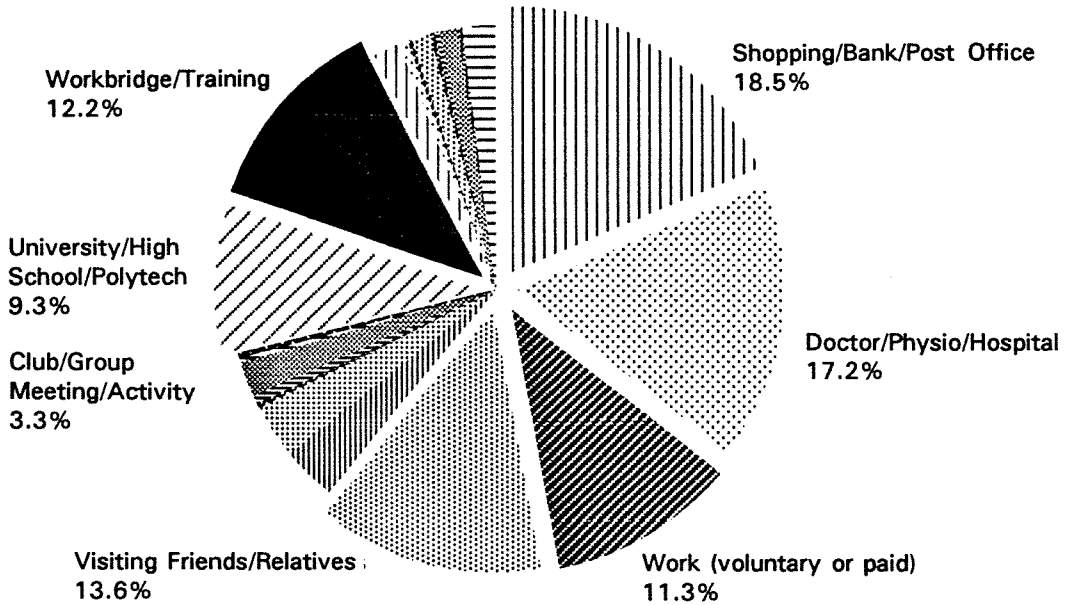
CCS-Dunedin (225 trips)

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	55	25.943
2	9.01 am-12.00 noon	33	15.566
3	12.01 pm-3.00 pm	43	20.283
4	3.01 pm-6.00 pm	59	27.83
5	6.01 pm-12.00 midnight	22	10.377

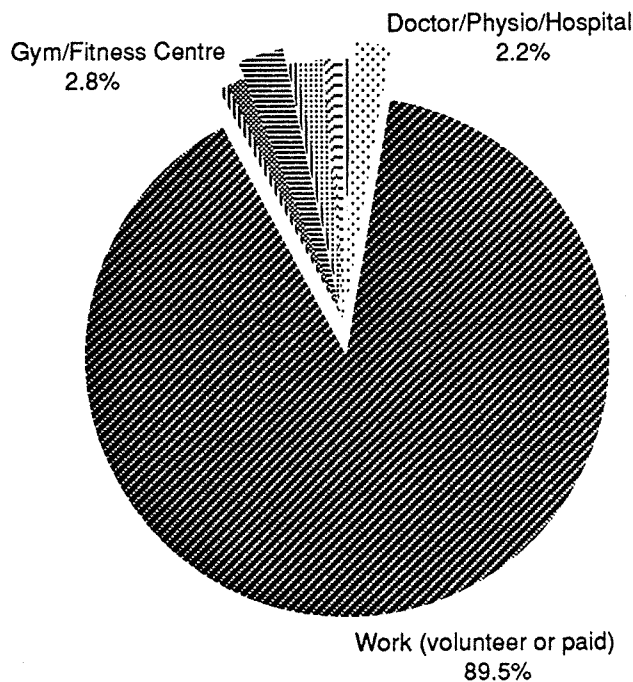
APPENDIX 10. TRIP PURPOSE (EXCLUDING TRIPS HOME) BY SELECTED AGENCIES.

This appendix presents the results of the analysis of trip purpose by agency for the six agencies which had the highest recorded numbers of trips.

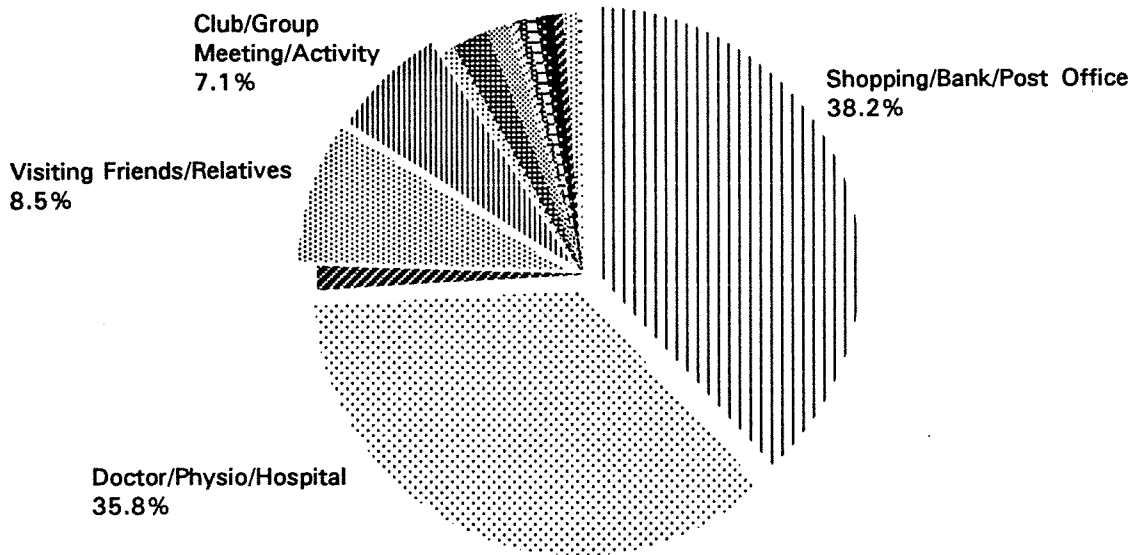
A10.1 CCS-Manawatu



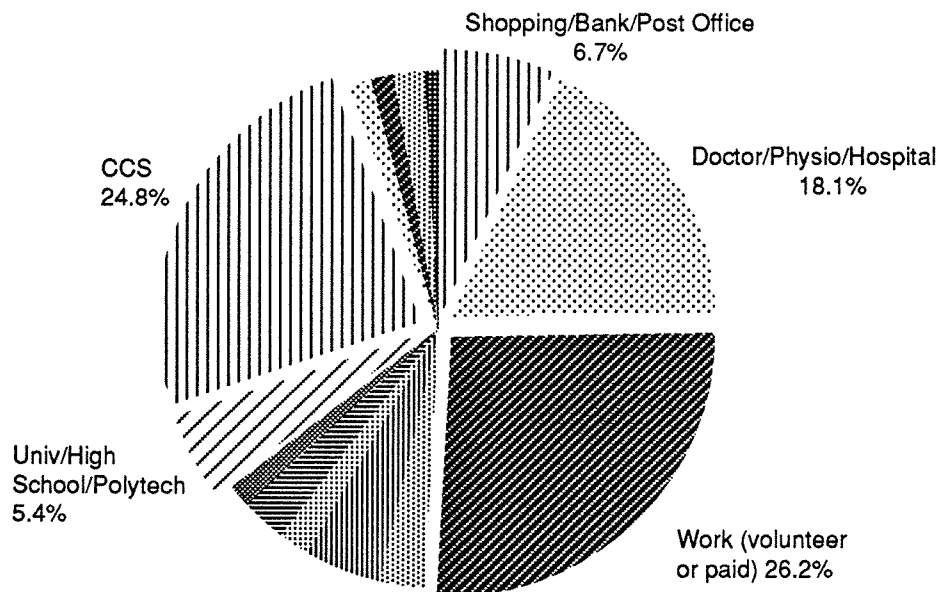
A10.2 IHC-Otago



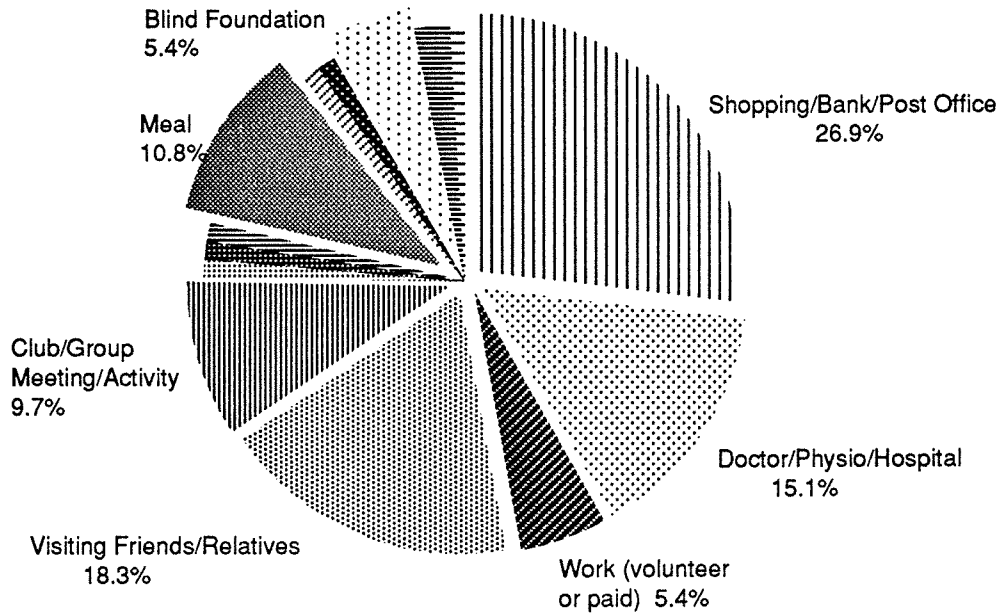
A10.3 Arthritis Foundation-Dunedin



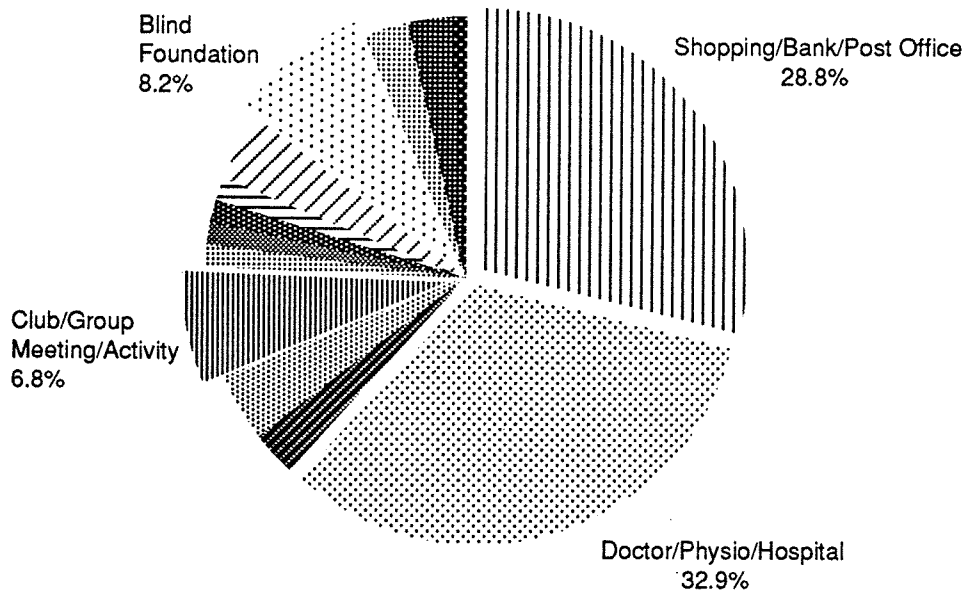
A10.4 CCS-Dunedin



A10.5 Royal New Zealand Foundation for the Blind-Dunedin



A10.6 Royal New Zealand Foundation for the Blind-Palmerston North



**APPENDIX 11. FREQUENCY OF TRIPS BY CCS-MANAWATU FOR
SELECTED TRIP PURPOSES BY TIME OF DAY.**

This appendix presents information on time of day of trips for the agency with the highest recorded number of trips (CCS-Manawatu), for the four agencies for which that agency had the highest recorded numbers of trips.

Shopping/Bank/Post Office

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	1	2.857
2	9.01 am-12.00 noon	13	37.143
3	12.01 pm-3.00 pm	16	45.714
4	3.01 pm-6.00 pm	5	14.286
5	6.01 pm-12.00 midnight	0	0

Doctor/Physiotherapist/Hospital/Dentist

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	3	10.345
2	9.01 am-12.00 noon	14	48.276
3	12.01 pm-3.00 pm	9	31.034
4	3.01 pm-6.00 pm	2	6.897
5	6.01 pm-12.00 midnight	1	3.448

Visiting Friends/Relatives

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	0	0
2	9.01 am-12.00 noon	10	40
3	12.01 pm-3.00 pm	8	32
4	3.01 pm-6.00 pm	3	12
5	6.01 pm-12.00 midnight	4	16

Workbridge/Training

Bar	Time of Day	Count	Percent
1	12.00 midnight-9.00 am	0	0
2	9.01 am-12.00 noon	0	0
3	12.01 pm-3.00 pm	4	100
4	3.01 pm-6.00 pm	0	0
5	6.01 pm-12.00 midnight	0	0

