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**SURVEY REPORT  
SUBMITTED TO  
THE HEALTH WELFARE AND FOOD BUREAU**

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# **Survey on the Public Transport Needs of Persons with Disabilities Survey Report**

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**Social Sciences Research Centre  
The University of Hong Kong**

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## Executive Summary

### Section One: Travel Characteristics and Travel expenditure Incurred

#### E1.1 Background Information

E1.1.1 The Social Sciences Research Centre (SSRC) of The University of Hong Kong was commissioned by the Health Welfare and Food Bureau of the HKSAR Government to conduct a sample survey to assess the traveling characteristics and to estimate the travel expenditures of the Persons with Disabilities (PWDs) who are the recipients of Disability Allowance (DA) or Comprehensive Social Security Assistance (CSSA) with 100% loss in earning capacity. Survey data were collected through telephone interviews and face-to-face interviews from 7th September to 16th October 2006 (excluding 1st, 2nd, 8th, 14th and 15th October 2006).

E1.1.2 The main objectives of the survey were:

- To estimate the travel expenditures of the PWDs for each public transport mode.
- To identify the general travel behaviour of the target respondents.
- To evaluate the factors affecting choice of public transport mode by PWDs.
- To understand the likely impact of concessionary fares.

E1.1.3 Information from the respondents about their traveling characteristics including purpose, origins and destinations, mode of transportations used and the impact of different possible concessions was enumerated. Demographic information such as age, working or studying status, personal and household income was also collected during the interviews.

E1.1.4 PWDs are defined as those who have at least one of the following conditions:

- Physical handicap (PH)
- Visual impairment (VI)
- Hearing impairment (HI)
- Speech impairment (SI)
- Mental illness (MI)
- Autism<sup>i</sup>
- Mental handicap (MH)

E1.1.5 The target respondents were the PWDs aged between 12 and 64 inclusive, classified into the following categories:

- Recipients of Normal Disability Allowance (NDA) and Higher Disability Allowance (HDA).
- Recipients of Comprehensive Social Security Assistance (CSSA) receiving the standard rates for those 100% disabled or requiring constant attendance in institutions or the community.

E1.1.6 The overall combined response rate was 88.0% for all the telephone and face-to-face interviews conducted. The response rate for the telephone interviews alone was 87.6% and for the face-to-face interviews alone was 91.4%.

E1.1.7 A total of 84,595 PWDs in the target categories were identified by the Social Welfare Department and all the estimates and tables presented are weighted

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<sup>i</sup> Autism PWDs are grouped with Mental Illness (MI) in this survey.

according to the respective PWD population, except the table presenting the sampling of the surveyed PWDs in this survey.

## **E1.2 Personal Information**

E1.2.1 In this survey, 1,977 interviews were completed by the PWDs and the remaining 1,183 interviews were completed by their carer<sup>ii</sup> who takes care of the respondents' daily life.

E1.2.2 Amongst the 3,160 respondents who participated in this survey, males (50.7%) and females (49.3%) each comprised about half of the population.

E1.2.3 Nearly ten percent of the respondents were living in Tuen Mun (9.6%) and another 9.5% living in Yuen Long, which were the two largest groups. Only 1.3% of them were living in Wan Chai and 1.2% were living in Islands. 55.5% of the respondents were living in the New Territories (31.1% living in the New Territories West and 24.4% living in New Territories East), and 29.7% of them were living in Kowloon and 14.7% living in Hong Kong Island.

E1.2.4 More than one-sixth of the surveyed PWDs were aged between 50 and 54, which is the largest age group followed by respondents aged 55-59 (15.7%) and 45 to 49 (14.5%). Only 2.3% of the respondents were aged below 15.

E1.2.5 At the beginning of the questionnaire, respondents were asked to define their disability types and the kind of allowance currently received<sup>iii</sup>. Nearly half of the surveyed PWDs reported that they had a physical handicap (45.2%) and another forty percent were suffering from mental illnesses (43.7%). Only 1.5% claimed they were suffering from autism. Regarding the type of allowance, more than half of the surveyed PWDs said that they were currently receiving DA (8.7% of them were receiving Higher DA and 90.2% receiving Normal DA, 1.1% did not provide relevant information), while 36.9% reported that they were receiving CSSA.

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<sup>ii</sup> The carer answered the questionnaire may not be the person who accompanies the PWD for traveling.

<sup>iii</sup> Self-defined disability status and types of allowance receiving reported by the PWDs. Multiple responses allowed.

E1.2.6 The following table summarizes the overall number of successful interviews by combined type of disability and financial support (type of disability and financial support of the surveyed PWD refers to the database provided by SWD rather than the self-reported status):

Disability	Overall	CSSA: 100% disabled		CSSA: constant attendance		DA	
		Institution	Community	Institution	Community	Higher	Normal
<i>VI</i>	8.6% (273)	-	0.1% (4)	-	-	0.4% (14)	8.1% (255)
<i>HI</i>	8.3% (261)	0.3% (8)	2.2% (71)	-	-	-	5.8% (182)
<i>MI</i>	30.7% (971)	7.9% (250)	8.9% (281)	0.9% (29)	0.7% (21)	1.6% (52)	10.7% (338)
<i>MH</i>	7.4% (233)	0.3% (8)	0.3% (8)	0.0% (1)	-	2.8% (88)	4.1% (128)
<i>PH</i>	45.0% (1422)	3.4% (108)	6.3% (201)	2.7% (88)	5.5% (171)	13.7% (426)	13.5% (428)
Total	100.0% (3160)	11.8% (374)	17.9% (565)	3.7% (118)	6.1% (192)	18.4% (580)	42.1% (1331)

E1.2.7 72.3% of the respondents were neither working nor studying. The remaining respondents were either students (10.6%) or working (17.7%).

E1.2.8 73.0% of the 556 surveyed workers were working full-time, the rest (26.9%) were part-time workers.

E1.2.9 Amongst the 335 PWDs who were students, 80.5% of them were full-time students and the remaining 19.5% were part-time students.

E1.2.10 Most of the respondents not working or studying were unable to go to school or work due to their disabilities (66.3%). One-sixth of them were home-makers, 9.4% were unemployed and 7.7% of them have retired.

E1.2.11 Only 1.4% of the surveyed PWDs owned at least one vehicle. Amongst the 46 surveyed vehicle owners, 41.7% of them have a disabled person parking permit.

E1.2.12 Only 1.5% of the surveyed PWDs said that they will drive when go out.

E1.2.13 A quarter of the respondents reported the need for mobility aids when traveling. The most common aids were crutches (47.6%) and wheelchair (38.5%), including 34.2% for manual wheelchair and 4.3% for electrical wheelchair.

E1.2.14 Most of the respondents had personal monthly income of HKD4,000 or below (73.8%). Only 2.1% of them reported personal monthly income of more than HKD10,000.

E1.2.15 A quarter of the respondents had household monthly income of HKD10,000 or above, which is the largest income group followed by income of HKD4,000 or below (21.6%). One-fifth of them did not know the monthly income of their household (19.3%).

### **E1.3 Travel Characteristics: An Overview**

E1.3.1 The surveyed PWDs were asked about their trips ( where “Trip” means a journey with a main purpose and a single destination which can consist of several sub-trips) made the day before being interviewed including all the characteristics such as the main purpose of the trips, frequency of making trips etc.

E1.3.2 After that, details of each sub-trip (where “Sub-trip” means a single journey

on one mode of transport) were recorded including the time taken, starting point and destination, mode of transport used and the reasons for using that transport mode.

E1.3.3 Near half of the respondents were traveling within the New Territories. 50.8% of the weekday trips and 50.2% of the Sunday or public holiday trips started in the New Territories. Eastern District, Yuen Long, Tuen Mun, Kwai Tsing and Sha Tin were the most popular districts during the last weekday, Sunday or public holiday.

E1.3.4 The trip purposes for weekday and Sunday or public holiday had some differences. Apart from returning home, having social or recreational activities and handling daily living matters were common purposes for both weekday and Sunday or public holiday trips. However, going to work or school was a common purpose for weekday trips while having leisure or volunteering activities was a common purpose for Sunday or public holiday trips.

E1.3.5 More trips made during Sunday or public holiday involved carers<sup>iv</sup> accompanying the surveyed PWDs than for weekday trips. Regarding other trip characteristics, the weekday and Sunday or public holiday trips were similar.

E1.3.6 Reasons for selecting the transport mode were reported by the respondents for weekday and Sunday or public holiday trips. It is found that the day of trip has little effect on the respondents' choice of transport mode.

#### **E1.4 Travel characteristics during the last weekday (Monday to Saturday)**

E1.4.1 A total of 3,384 trips were made during the last weekday in the survey period. Regarding the starting point of the surveyed PWDs on weekdays, 9.3% of them started their trips in Tuen Mun, followed by trips started in Eastern district (8.4%) and Sha Tin (8.5%). Only 0.8% of reported trips started outside Hong Kong. The most popular trips amongst the respondents were trips within the same district, approximately half of the trips made during weekdays were within the same district (50.4%), 6.4% reported they travel within Tuen Mun and 5.5% within Yuen Long.

E1.4.2 In this survey, peak hours were defined as 7:00am to 9:30am and 5:00pm to 8:00pm on Monday to Friday and 7:00am to 9:30am only on Saturday. Around one third of the trips on Monday to Friday started during peak hours (33.1%) and the remaining 66.9% during non-peak hours. While on Saturday, only 14.0% of the trips started during peak hours.

E1.4.3 More than half of the trips made by the surveyed PWDs have three sub-trips (58.5%) which have a mean travel time of 46.8 minutes. The overall mean travel time for weekday trips was 50.2 minutes.

E1.4.4 For respondents traveling during weekdays, returning home (43.4%), social/recreational activities (13.0%), handle daily living matters (12.8%), and go to work/school (12.6%) were the main purposes of trips.

E1.4.5 Over four-fifth of the trips made during weekdays reported use of a vehicle (81.0%). Nearly one-fifth of the trips made during weekdays had other people accompanying the PWDs during the trips (18.9%). More than a quarter (27.1%) of the trips were made less than once a week and 8.2% of the trips were made every day of the week.

E1.4.6 Slightly more than seventy percent of the respondents went out during the day before the interview day (71.1%). While less than half of the respondents used vehicle at least once (41.9%) and 13.3% of them required a carer to accompany them

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<sup>iv</sup> "Carer" refers to a person who accompanies the PWD for traveling on public transport.

during the weekday trips.

E1.4.7 Amongst the respondents who made at least one trip during the last weekday, a larger proportion who were females, full-time students or younger respondents (especially those aged below 25), required a carer to accompany them on at least one trip. Besides, more PWDs who had mental handicap or were receiving Higher DA required assistance from a carer.

E1.4.8 To summarize the factors affecting the choice of transport modes on weekdays, convenience of alighting locations (31.7%), the only choice around the starting point (27.1%) and convenience of boarding locations (25.5%) were the three main reasons for choosing the transport modes. Overall, only 13.9% of the respondents claimed that their choices were mainly related to the fare of the chosen mode, although this factor was more common for those using the tram or ferry.

## **E1.5 Travel characteristics during last Sunday or public holiday**

E1.5.1 A total of 1,940 trips were made during the last Sunday or public holiday. The three most popular starting points were Eastern District (9.0%), Kwai Tsing (8.5%) and Yuen Long (7.9%). Again, about half (50.0%) of the trips made during the last Sunday or public holiday were trips within the same district, and 5.8% reported they travel within Eastern District.

E1.5.2 During Sunday, more than half of the trips started between 8:30am and 12:00noon (53.8%). A similar amount of trips started during this timeslot for trips on a public holiday (47.8%) as well.

E1.5.3 More than half of the Sunday or public holiday trips made by the surveyed PWDs consisted of three sub-trips (57.5%) with a mean travel time of 46.6 minutes. The overall mean travel time amongst the trips made by the respondents on Sunday or a public holiday was 49.2 minutes.

E1.5.4 Returning home (42.0%), Social/ recreational activities (16.8%), handling daily living matters (14.8%) and leisure/ volunteering activities (10.0%) were the main purposes of trips made on Sunday or a public holiday.

E1.5.5 Eighty percent of the Sunday or public holiday trips reported use of transport vehicle (80.5%). Over a quarter of the trips made had a carer accompanying the PWDs during the trips (27.6%).

E1.5.6 One third of the Sunday or public holiday trips were made less than once a week (33.4%) and 61.4% of trips were made at least once a week.

E1.5.7 More than half of the surveyed PWDs went out during the previous Sunday or public holiday (54.3%). More than half of the respondents used a vehicle at least once (52.8%) and 12.2% of them required a carer during the Sunday or public holiday trips.

E1.5.8 Amongst the respondents who made at least one trip during the last Sunday or public holiday, more PWDs who are females, full-time students or younger respondents (especially those aged below 30) required a carer to accompany them when making trip. In terms of disability types and allowance received, more PWDs who had mental handicap, visual impairment or were receiving higher DA required the assistance from the carer.

E1.5.9 Convenience of alighting locations (30.4%), the only choice around the starting point (24.8%) and convenience of boarding locations (24.2%) were the three main reasons suggested by the respondents when they choose the transport modes for

Sunday or public holiday. Overall, less than one-sixth of the respondents claimed that they chose a particular transport mode because of a reasonable fare or cheap fare (14.3%), however, like weekdays, this reason was more common amongst those using the tram or ferry.

## **E1.6 Travel expenditure Incurred**

E1.6.1 A total of 3,384 trips (7,962 sub-trips) were made by the 3,160 respondents who reported their trips on the last weekday (from Monday to Saturday), 41.7% of them made at least one trip on that day. Amongst the respondents, one-fifth of them traveled by bus (20.2%), 9.3% by GMB and 7.5% by other vehicles<sup>v</sup>. According to the average amount spent per respondent during weekdays, \$2.3 was spent on bus, which is the highest amongst other modes of transport.

E1.6.2 On the other hand, a total of 1,940 trips (5,288 sub-trips) were made by the respondents who reported their trips on the last Sunday or public holiday (28.3% of the respondents made at least one trip during the last Sunday or public holiday). Slightly less than one-sixth of them traveled by bus (13.7%), 6.3% by GMB and 5.7% by other vehicles. The average traveling expenditure per PWD was \$4.4 (\$1.6 was spent on the bus).

E1.6.3 Concerning the day of week, PWDs had higher average traveling expenditure on the last weekday (\$6.9) than on the last Sunday or public holiday (\$4.4).

## **E1.7 Weekly total travel expenditure per PWD eligible for concession**

E1.7.1 The average weekly total expenditure on all modes of public transport per PWD is \$45.8. The respondents spent \$15.4 on buses (\$11.1 spent on KMB on average), followed by \$8.2 on taxis and \$5.2 on other vehicles. For the five selected transport modes (bus, KCR, LRT, MTR and tram), \$27.5 was spent on the five modes in total per week.

E1.7.2 Respondents who had visual impairment (\$57.0) or mental handicap (\$52.3) spent slightly more than the respondents with other disability types on traveling. Respondents who had visual or hearing impairment spent more on bus, KCR, LRT, MTR and tram, with an amount of \$44.3 and \$41.1 respectively, than on other transport modes. Respondents who did not have a physical handicap spent a significant proportion of their travel expenses on bus, while the respondents who had a physical handicap spent substantially more on taxis (\$11.5) than the other respondents.

E1.7.3 Respondents receiving Normal DA (\$31.4) spent more on trips using the five selected modes than the respondents receiving Higher DA (\$14.5). The respondents receiving CSSA living in institution only spent \$5.9 on average on bus, KCR, LRT, MTR and tram per week, which is the lowest amongst the expenditures within the six allowance groups. Concerning the total weekly travel expenses, respondents receiving CSSA and living in an institution only spent \$16.2 per week, which is significantly less than CSSA recipients living in the community (\$40.7).

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<sup>v</sup> "Other vehicles" included Red minibus, Resident shuttle bus, Private car, Company or school bus etc.

## **E1.8 Limitations**

E1.8.1 One of the major concerns was that the PWDs who had hearing impairment or mental handicap needed to be handled with great care from the process of obtaining consent to the data collection process. The particular difficulty of obtaining consent for the respondents who had hearing impairment was noticed at the stage of contacting the PWDs to ask for their agreement before the commencement of the project. The number of successful interviewed hearing impairment cases was only 260 out of a total of 3,160 cases. Applying post-stratified weighting to the data should have minimized the effect of contact problems in particular disability groups.

E1.8.2 Some of the trip or sub-trip information was lost if the interviews were completed by the carers. For example, the trip purposes, reasons for choosing particular mode of transport or the length of the sub-trips often could not be answered by carers.

E1.8.3 Some of the expenditure estimates include estimated travel for the carers, which may be significantly under or overestimated. This is because we assumed that carers paid the same amount as PWDs on trips where the PWDs reported needing a carer. In reality, some of the PWDs may need more than one carer when making their trips, but we assumed only one carer in our estimation. On the other hand, the carers' fee was assumed to be the same as the PWDs fare, whereas the carers may actually be paying more (if the PWD is a child) or less (if the carer is elderly) than the PWD fare.

## **Section Two: Fare Concession Impact**

### **E2.1 Background Information**

E2.1.1 Before the commencement of the survey, members of the LegCo Subcommittee to Study the Transport Needs of and Provision of Concessionary Public Transport Fares for Persons with Disabilities (the Subcommittee) requested the administration to consult the disabled community and public transport operators about providing fare concession to the PWDs, including two railway corporations, the franchised bus companies and tram operator. The five modes of bus, KCR, LRT, MTR and tram were selected and listed in the questions related to hypothetical fare concession.

E2.1.2 The requirement was specified in the third Subcommittee Meeting of the Legislative Council to Study the Transport Needs of and Provision of Concessionary Public Transport Fares for Persons with Disabilities meeting held on 16 February 2006.

E2.1.3 At the Subcommittee meetings on 10 July 2006, Members of the Subcommittee requested that the survey should include questions to assess how PWDs would change their use of public transport services, particularly the additional trips that would be made, if fare concessions were provided on the above five modes. Having regard to Subcommittee members' request, hypothetical questions were included in the questionnaire to ask respondents to estimate their change in public transport usage or expenditure on buses, MTR, LCR, LRT and tram if 50% fare concession for PWDs were provided on Sunday/public holiday only, during non-peak hours on all days or whole day throughout the year.

### **E2.2 Limitations**

E2.2.1 The answers to all the hypothetical questions can only be used as a reference, as the answers of the surveyed PWDs cannot be tested until a real fare concession comes into effect.

E2.2.2 General difficulties in answering hypothetical questions were noted during the survey. The surveyed PWDs generally found it quite difficult to answer the percentage increase in use of a mode of transport under different hypothetical concessions even if they were a current user of that mode of transport. They found it even more difficult to estimate their likely weekly expenditure of modes of transport that they are not current users of, under the hypothetical concessions. The missing values affect the estimation of the cashflow and the revenue forgone, so alternative estimation methods were introduced. For the percentage increases, the mean increase for those who could answer this question was used to impute the missing increase for those who could not answer. This is reasonable as it automatically scales current use. For new customers, the missing amount of weekly expenditure was estimated in two different ways. Firstly, we estimated using the mean amount for new customers who could estimate expenditure, which should be an upper bound on expenditure. Secondly, we assumed that new customers who could not estimate the amount would spend very little, so we estimated zero weekly expenditure. This should serve as a lower bound for estimated expenditure.

E2.2.3 It was not practical to assess substitutional effects (i.e. any decrease in use of one transport mode as a result of increase in other modes, so the estimates may show a positive bias as a result, although the major substitution effect is likely to be on modes without concession).



E2.2.4 Citybus offers a 50% full-day concession to passengers aged over 60 years. This is implicitly accounted for by asking for the respondents about actual expenses. However, it was not explicitly taken into account for the questions on possible new concessions which imply that there is an additional concession, however only 3 respondents were in this situation. The same situation exists for PWDs who enjoyed other concessions now, such as the student 50% full-day concession when using the MTR (there are 52 respondents in this situation).

### **E2.3 Fare concession impact: An Overview**

E2.3.1 Based on the responses from the surveyed PWDs to the hypothetical questions, amongst those five transport modes, the bus was leading in the proportion of current users (53.5%), followed by the MTR (24.8%), LRT (11.4%) and KCR (11.3%). Only 5.5% of the respondents were using the tram at least once a week.

E2.3.2 An average increase of more than 100% in trips for existing customers was reported for the MTR and KCR under full day fare concession, 103.57% and 101.52% were reported respectively.

E2.3.3 Increases in trips for existing customers were also recorded for the bus (72.41%), LRT (70.33%) and tram (69.96%). But the increases were not as large as those for the KCR and MTR.

E2.3.4 More than one-third of respondents not usually using MTR would consider using it under the full day concession (37.80%, comprising 28.43% of the total population), followed closely by bus (32.40%, comprising 15.07% of the total population), and KCR (30.40%, comprising 26.96% of the total population).

E2.3.5 Amongst the respondents who could estimate the expected amount to be spent on a particular mode of transport under the full day fare concession, the KCR was leading in the average estimated weekly amount to be spent (\$30.62). The MTR was in the second place (\$27.09) and the bus in the third place (\$22.32).

### **E2.4 Fare concession impact by transport modes**

E2.4.1 A quarter of the surveyed PWDs traveled by MTR at least once a week (24.8%). The mean percentage increase in trips for these current users ranged from 48.5% (public holiday concession) to 103.6% (full day concession). 12.3% (public holiday concession) to 16.3% (full day concession) of the respondents expected to start using MTR under the concession, the average amount estimated to be spent on the MTR by new customers also increasing from \$18.09 (public holiday concession) to \$27.09 (full day concession) per week.

E2.4.2 11.3% of the surveyed PWDs were current KCR users. The current users expected to increase their usage by 50.6% under public holiday concession and by 101.5% under full day concession. 11.6% (public holiday concession) to 14.9% (full day concession) of the respondents expected to start using KCR at least once a week under the concession. The new customers are estimated to spend \$22.02 (public holiday concession) to \$30.62 (full day concession) per week.

E2.4.3 11.4% of the PWDs were current users of LRT and they expected to increase their usage by 40.03% (public holiday concession) to 70.33% (full day concession) under the different fare concession options. The estimated percentages of new customers were expected to increase, ranging from 6.1% (public holiday concession) to 8.0% (full day concession). The estimated amount to be spent on the LRT by new customers ranged from \$18.68 (public holiday concession) to \$21.14

(full day concession) per week.

E2.4.4 More than half of the respondents were regular bus users (53.5%), which is far more than the proportion of regular users of the other four modes. The mean percentage increase in trips for existing users ranged from 39.7% (public holiday concession) to 72.4% (full day concession). Under the concessions, 7.6% (public holiday concession) to 9.0% (full day concession) of the respondents expected to start using the bus, and they expected to spend \$16.05 (public holiday concession) to \$22.32 (full day concession) per week.

E2.4.5 The tram has the smallest proportion of current users amongst the five selected transport modes in this survey (5.5%). The mean percentage increase in trips under concession ranged from 44.0% (public holiday concession) to 70.0% (full day concession). It is expected to have 6.0% (public holiday concession) to 7.6% (full day concession) new customers under the concessions and the new users expected to spend \$6.95 (public holiday concession) to \$10.90 (full day concession) per week.

## **E2.5 Estimated expenditure per PWD after concession**

E2.5.1 Estimated travel expenditure per specific transport mode under different kinds of fare concession (by full-day, non-peak or public holiday concessions) was calculated according to the respondents current trip fare for the existing customers. Under the 50% concession, the cost of the trips were separated into three different sums according to the trip making time and the corresponding concessionary timeslots (if the trip making time was within the concessionary timeslots, 50% concession were applied to the fare, vice versa). Additional usage (in percentage) under fare concession was also considered during the calculation of the estimated travel expenditure.

E2.5.2 For the new customers, the estimated expenditure was calculated according to the amounts they were willing to spend per week under different concessionary timeslots.

E2.5.3 For the respondents who could not answer the percentage of usage increase (for existing customers) or the weekly amount of money increase (for new customers) under different concessions, the mean of the valid responses were used to impute the missing data to estimate the upper bound of the cashflow and the revenue forgone under hypothetical concessions. The missing weekly expenditures of new customers were estimated as zero to provide a lower bound for the expenditure under concessions. So, the estimated weekly cashflow and revenue forgone are presented in ranges rather than single estimates.

E2.5.4 The surveyed PWDs were asked to estimate the amount they expect to spend under 50% fare concessions for three different timeslots (Sundays & Public Holidays, Off-peak and full day) on the five selected transport modes. The total weekly transport expenditure for the selected modes (MTR, KCR, LRT, Bus & Tram) per PWD is estimated as \$27.53 with no concession, \$39.66 under the public holiday concession and \$43.8 under the full day concession. However, the increase is due to new customers, as the figures allowing only for the increase in use for existing customers are \$26.30 under the public holiday concession and \$19.94 under the full day concession.

E2.5.5 The estimated increase is not evenly spread across the five selected modes, with the major increases being for MTR and KCR. For MTR, the estimated weekly expenditure is \$6.04 with no concession, increasing to \$9.72 with the public holiday concession and \$12.18 under the full day concession. Again, excluding new customers, the rates show small declines to \$5.78 under the public holiday concession and \$4.47

under the full day concession.

E2.5.6 Regarding the use of the KCR, the weekly total expenditure per PWD was \$4.30 under no concession, increasing to \$8.72 under the public holiday concession and \$11.31 under the full day concession, while excluding new customers, the rates decrease to \$4.07 under the public holiday concession and \$3.05 under the full day concession.

E2.5.7 Reflecting the smaller coverage area for the LRT the weekly estimate per PWD is \$1.59, increasing to \$3.64 under the public holiday concession and \$4.28 under the full day concession. Without new customers, the figures reduce to \$1.51 under the public holiday concession and \$1.07 under the full day concession.

E2.5.8 The concessions have much less effect on the spending behavior of bus users. Respondents normally spent \$15.35 per week on the bus, increasing slightly to \$16.67 under the public holiday concession and decreasing slightly to \$14.53 under the full day concession. Excluding new customers, the expenditure on bus reduces to \$14.70 under the public holiday concession and \$11.17 under the full day concession.

E2.5.9 Only \$0.25 per PWD per week was spent on tram amongst the respondents without concession. Without new customers, the amount spent is quite stable, with \$0.24 under the public holiday concession and \$0.19 under the full day concession. Including new customers shows an increase that is large in percentage terms to \$0.91 under the public holiday concession and \$1.53 under the full day concession.

E2.5.10 Amongst the disability types, the full day concession raises the overall weekly averages above \$40, and all the allowance types show a substantial increase in weekly average expenditure of \$15 to \$20 under the full day concession, the increases are mainly due to new customers under the concessions.

## **E2.6 Reasons for no increase in using public transport with concessions**

E2.6.1 The main reasons reported for not using the MTR even if there is a 50% fare concession were depending whether they have the need to use the MTR (36.1%), rarely/ never go out (30.6%) and rarely/ no need to use MTR (27.4%), 13.8% reported no service to the respondents' destination and 7.6% claimed that the boarding locations were inconvenient. Only 5.3% of the respondents claimed that one of the reasons for not using MTR was still due to the fare.

E2.6.2 Regarding the reasons for not using the KCR under a 50% fare concession, rarely/ no need to use the KCR (40.2%), depending on the need to use the KCR (33.8%) and rarely/ never go out (24.6%) were the main reasons. Apart from the mentioned reasons, 16.6% of the respondents claimed that the KCR has no service to their destination. Only 3.1% of the respondents claimed that it is related to fare issue.

E2.6.3 The reasons for not using the LRT under the fare concession were rarely/ no need to use the LRT (46.9%), depending on the need to use the LRT (21.5%) and rarely/ never go out (20.2%). Another 32.7% reported that the LRT has no service to the respondents' destination. Fare issue was not one of the main issues reported by the respondents, only 1.7% of them mentioned about this.

E2.6.4 The main reasons for not using the bus under the 50% fare concession were depending on the need to travel by bus (46.6%), rarely/ never go out (25.6%) and rarely/ no need to travel by bus (19.7%). Some of the respondents claimed that the difficulties in boarding and alighting (4.9%) hindered them from traveling by bus. Regarding the fare issue, only 3.1% of the respondents reported this reason.

E2.6.5 The main reasons for not using the tram under the fare concessions were

rarely/ no need to travel by the tram (39.3%), no service to the respondents' destination (33.3%) and depending on the need to travel by tram (17.0%). Besides, nearly one-sixth of the respondents claimed that they rarely or never go out (15.7%). Besides, insignificant amount of respondents reported fare issue (1.2%).

E2.6.6 The main reasons for not using the selected modes of transport were very similar, the most common reason was that they rarely or no need to travel by it, followed by no service to the respondents' destination and depending on whether they need to use it. Also, a significant proportion of respondents claimed that they rarely or never go out was their reason for not using transport even with concessions. It is noteworthy that after concessions, very few PWDs report that fares restrict them from using any of the selected modes of transport.

## **E2.7 Cashflow and revenue increase under the impact of fare concession**

E2.7.1 In this survey, the estimated weekly cashflow presents the difference in monetary terms between the weekly revenue of particular transport operator under the different 50% fare concessions (when taking into account the usage of hypothetical new customers under concession and the increased usage by the existing customers under concession) and the normal fare. Negative cashflow implies the increased customers and usage after concession are unable to cover the decrease in cashflow due to the 50% concession offered when compared with normal fare, while positive value implies that more money can be earned under fare concession when compared with normal fare.

E2.7.2 On the other hand, the weekly revenue forgone presents the figures from a different angle. After taking into account the usage of hypothetical new customers under concession and the increased usage by the existing customers under concession, the revenue forgone presents the difference between the normal fare and the fare under 50% concession. That is, how much money will not be received because of the 50% concession by each transport operator.

E2.7.3 The meaning of "Existing customer" was those who usually use particular transport modes at least once a week, while the meaning of "New customer" was those who would start to use a particular transport mode under hypothetical fare concession.

## **E2.8 Cashflow and revenue increase under the impact of fare concession: Excluding new customers**

E2.8.1 Excluding the new customers who claimed that they would start to use a particular mode of transport under fare concession, the overall weekly cashflow for the five selected modes recorded a reduction, ranging from \$104,052.88 (public holiday concession) to \$642,191.14 (full day concession).

E2.8.2 The maximum weekly revenue forgone estimated for the five selected modes ranged from \$192,216.98 (public holiday concession) to \$1,686,673.26 (full day concession).

E2.8.3 Amongst the current users of the five modes of transports, bus was leading in the decrease in weekly cashflow, ranging from \$55,341.07 (public holiday concession) to \$353,893.36 (full day concession), followed by MTR (ranging from \$21,890.33 to \$133,018.96), KCR (ranging from \$20,020.57 to \$106,067.27) and LRT (ranging from \$6,276.85 to \$43,789.20).

E2.8.4 Only a tiny decrease in cashflow was reported for the tram. The decrease in

cashflow ranged from \$524.06 (public holiday concession) to \$5,422.57 (full day concession). The reason for this was the low tram usage.

## **E2.9 Cashflow and revenue increase under the impact of fare concession: Including new customers**

E2.9.1 Taking into account all the five transport modes and including all the new customers under concession, the full day fare concession is estimated to result in the greatest overall increase in weekly cashflow. The increases in overall weekly cashflow under the full day fare concession ranged from \$499,778.17 to \$1,378,495.91.

E2.9.2 The estimated maximum weekly revenue forgone under full day concession ranged from \$2,828,642.57 to \$3,707,360.32 including new customers.

E2.9.3 Apart from the bus, there were increases in weekly cashflow after including all the new customers under fare concession for the other four selected transport modes.

E2.9.4 For bus, weekly cashflow is estimated to decrease under non-peak hours (ranging from \$83,280.95 to \$175,933.94) and full day fare concession (ranging from \$69,261.14 to \$184,147.74) including all the new customers.

E2.9.5 Bus recorded the maximum weekly revenue forgone amongst five selected modes of transport, i.e. \$1,229,300.69 estimated under the full day fare concession.

E2.9.6 Amongst the other four transport modes (MTR, KCR, LRT and tram), the maximum increase in weekly cashflow ranged from \$280,146.30 to \$593,017.53 estimated under full day concession of KCR, closely followed by MTR (ranging from \$240,295.70 to \$519,089.95).

E2.9.7 The increases in weekly cashflow of LRT and tram were the least amongst the other four selected transport modes. The maximum increase for the LRT and tram ranged from \$98,920.19 to \$227,525.70 and \$64,563.72 to \$108,123.86 estimated under full day concession respectively.

## **Section 3: Conclusion of the Survey**

E3.1 The average weekly total expenditure on all modes of public transport per PWD is \$45.8. The respondents spent \$15.4 on buses (\$11.1 spent on KMB on average), followed by \$8.2 on taxis and \$5.2 on other vehicles. For the five selected transport modes (bus, KCR, LRT, MTR and tram), \$27.5 was spent on the five modes in total per week.

E3.2 To summarize the factors affecting the choice of transport modes, convenience of alighting locations, the only choice around the starting point and convenience of boarding locations were the three main reasons for choosing most of the transport modes with efficiency added for KCR, MTR and taxi, cost for tram and ferry and special facilities for Rehabus.

E3.3 The main reasons for not using the selected modes of transport were very similar, the most common reason was that they rarely or no need to travel by it, followed by no service to the respondents' destination and depending on whether they need to use it. Also, a significant proportion of respondents claimed that they rarely

or never go out was their reason for not using transport even with concessions. It is noteworthy that after concessions, very few PWDs report that fares restrict them from using any of the selected modes of transport.

E3.4 From the respondents' responses to the above questions, cost was not the most important factor affecting the choices of transport, as other reasons such as the convenience of alighting or choices available around the starting point are more important. However, under the hypothetical 50% fare concession, existing customers were stimulated to increase use, while other PWDs were stimulated to start using particular transport modes. Caution is necessary, though, as the answers to the hypothetical questions and the estimated change in revenue can only serve as a reference. Respondents may have expressed an interest in using the transport modes under fare concession without careful consideration of all the implications, such as the increased expenditure by any carers needed.

E3.5 Under different fare concession options, that is, public holiday concession, non-peak hour concession (hours except Mon-Fri 700am-930am, 500pm-800pm & Sat 700am-930am) and full day concession, the total weekly expenditure per PWD on MTR, KCR, LRT and tram is found to increase. The total weekly expenditure per PWD on buses was estimated to increase only under public holiday concession. While the increase in weekly expenditure per PWD is not evenly spread across the five transport modes, with the major increases being for the MTR and KCR.

E3.6 There were increases in weekly cashflow in MTR, KCR, LRT and tram including all the new users under concessions. However, because half of the respondents were already existing bus users, the proportion of new users and the expected amount spent by them were relatively small, leading to a net reduction in weekly cashflow under the non-peak hour concession and full day fare concession.

E3.7 The overall estimated weekly expenditure for bus, MTR, KCR, LRT and tram combined per PWD under concession ranges from \$33.44 to \$43.82. While it is hard to validate these estimates directly, some reference can be made to the current weekly travel expenditure across all transport modes per PWD of \$45.8 and across the five selected modes of \$27.53. Thus, while there is a significant increase in estimated total expenditure for the five selected modes, if there is some substitution of transport modes without concession by modes with concession, then the total expenditure across all modes may not be too different before and after concessions, suggesting that the estimates of expenditure under concession have at least some face validity.

## **Introduction and Background Information**

The Social Sciences Research Centre (SSRC) of The University of Hong Kong was commissioned by the Health Welfare and Food Bureau of the HKSAR Government to conduct a sample survey to assess the traveling characteristics and to estimate the travel expenditures of the Persons with Disabilities (PWDs) who are the recipients of Disability Allowance (DA) or Comprehensive Social Security Assistance (CSSA) with 100% loss in earning capacity. Survey data were collected through telephone interviews and face-to-face interviews from 7th September to 16th October 2006 (excluding 1st, 2nd, 8th, 14th and 15th October 2006).

The main objectives of the survey are:

- To estimate the travel expenditures of the PWDs for each public transport mode.
- To identify the general travel behaviour of the target respondents.
- To evaluate the factors affecting choice of public transport mode by PWDs.
- To understand the likely impact of concessionary fares.

Information from the respondents about their traveling characteristics including purpose, origins and destinations, mode of transportations used and questions regarding different concessions was enumerated.

Demographic information such as age, working or studying status, personal and household income was also collected during the interviews.

A total of 84,595 PWDs in the target categories were identified by the Social Welfare Department (SWD) and all the estimates and tables presented are weighted according to the respective population, except Table 1.1.6 which shows the sampling of the surveyed PWDs in this survey.

# Chapter One: Travel Characteristics and Travel Expenditure Incurred

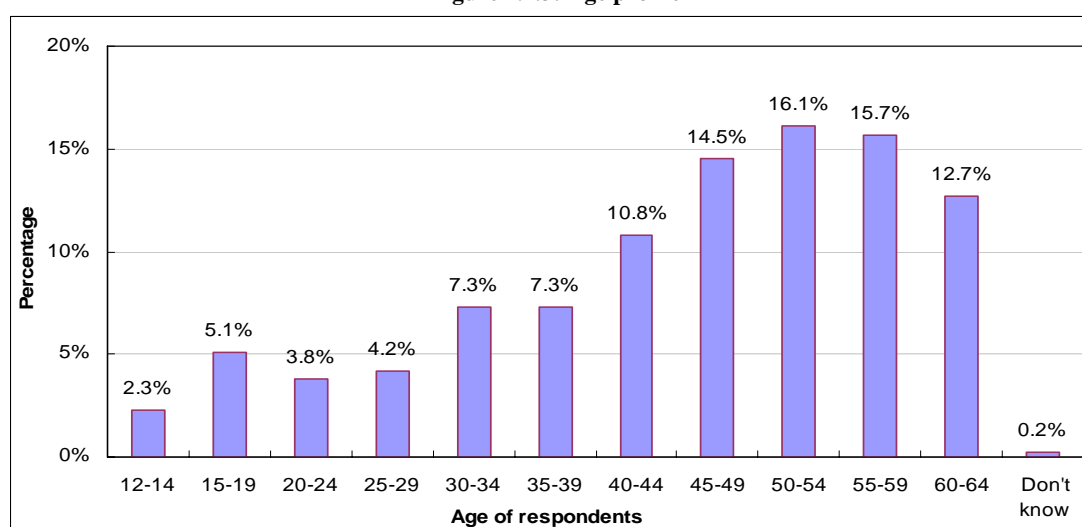
## 1.1 Personal Information

1.1.1 The number of successful interviews was 3,160 including 2,786 cases via telephone interview and the remaining 374 by face-to-face interview.

1.1.2 In this survey, 1,977 interviews were completed by the PWDs and the remaining 1,183 interviews were completed by their carer<sup>vi</sup> who takes care of the respondents' daily life.

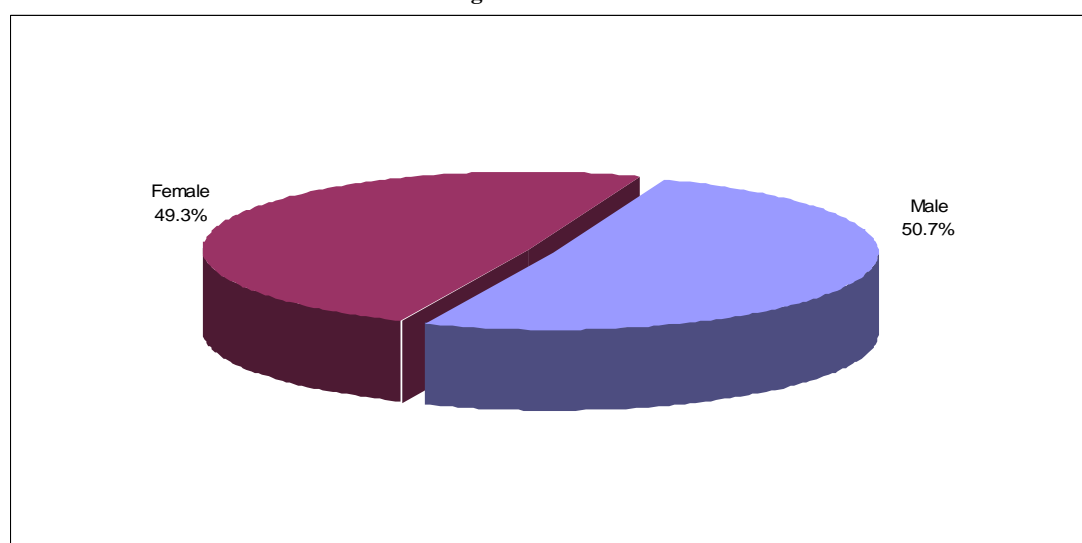
1.1.3 The age distribution of the PWDs is summarized in Figure 1.1.3. Less than one-sixth of the surveyed PWDs were aged between 50 and 54, which is the largest age group followed by respondents aged 55-59 (15.7%) and 45 to 49 (14.5%). Only 2.3% of the respondents were aged below 15.

Figure 1.1.3: Age profile



1.1.4 Figure 1.1.4 shows the gender of the respondents. Amongst the 3,160 respondents who participated in this survey, males (50.7%) and females (49.3%) each comprised about half of the population.

Figure 1.1.4: Gender

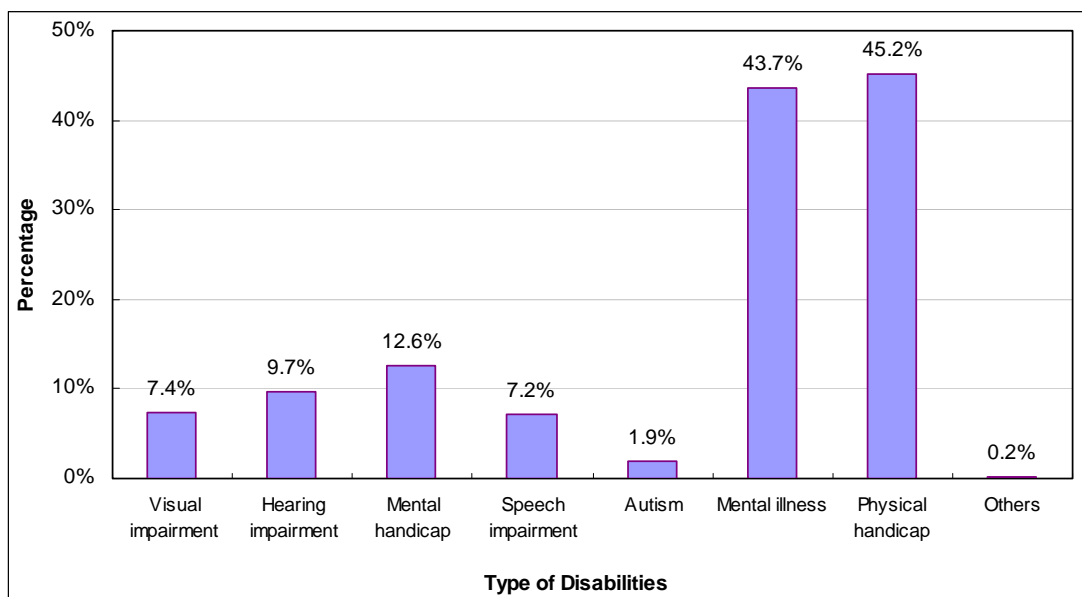


<sup>vi</sup> The carer answered the questionnaire may not be the person who accompanies the PWD for traveling.



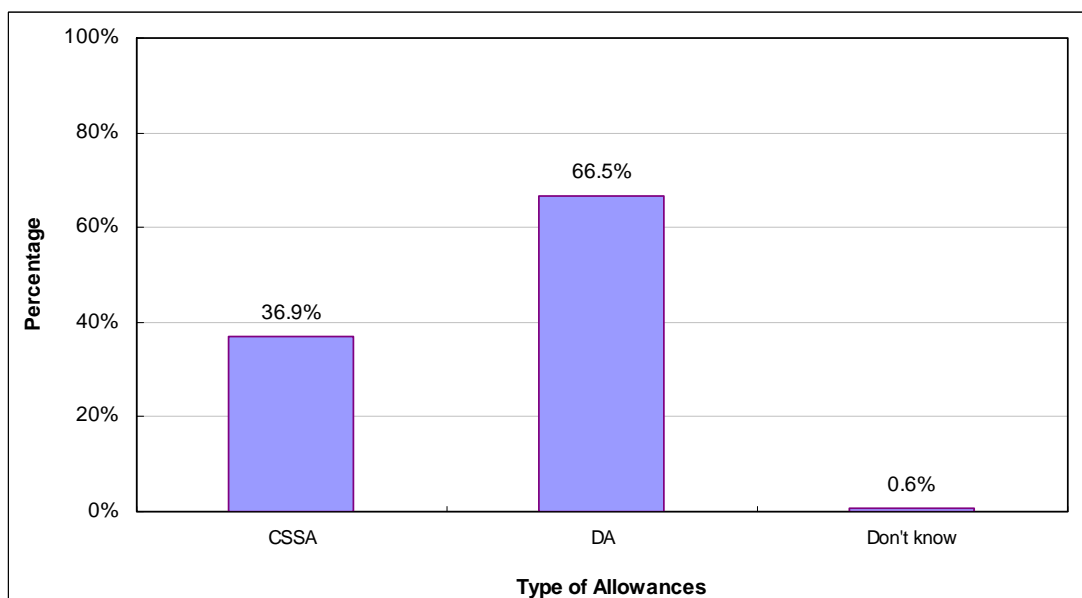
1.1.5 At the beginning of the survey, respondents were asked to define their disability types and the kind of allowance they currently received<sup>vii</sup>. Nearly half of the surveyed PWDs reported themselves having a physical handicap (45.2%) and forty percent were suffering from mental illness (43.7%). Only 1.9% of them were PWDs suffering from autism. (Figure 1.1.5)

**Figure 1.1.5: Type of Disabilities (multiple responses)**



1.1.6 Regarding the type of allowance they were usually receiving, 66.5% of the surveyed PWDs were currently receiving disabled allowance (8.7% of them were receiving Higher DA and 90.2% receiving Normal DA, 1.1% do not know the type of DA receiving), while 36.9% were receiving CSSA. (Figure 1.1.6a & 1.1.6b)

**Figure 1.1.6a: Type of Allowances (multiple responses)**



<sup>vii</sup> Self-defined disability status and types of allowance receiving reported by the PWDs. Multiple responses allowed.

**Figure 1.1.6b: Type of DA received**

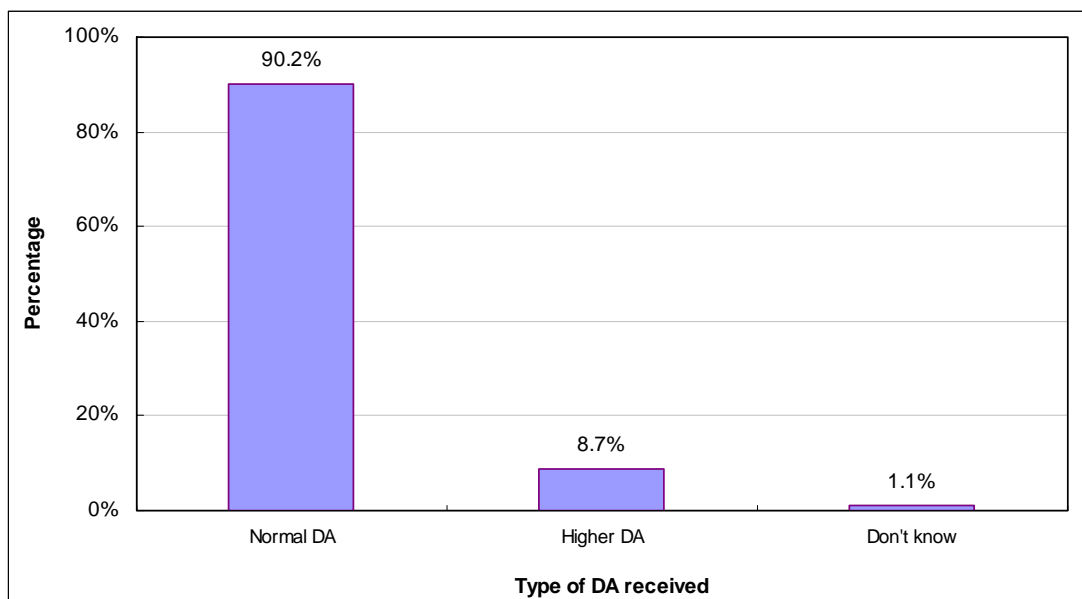


Table 1.1.6 summarizes the overall number of successful interviews by combined type of disability and financial support (type of disability and financial support of the surveyed PWD refers to the database provided by SWD rather than the self-reported status):

**Table 1.1.6: Type of Disability and Allowance received**

Disability	Overall	CSSA:100% disabled		CSSA: constant attendance		DA	
		Institution	Community	Institution	Community	Higher	Normal
<i>Visual impairment</i>	8.6% (273)	-	0.1% (4)	-	-	0.4% (14)	8.1% (255)
<i>Hearing impairment</i>	8.3% (261)	0.3% (8)	2.2% (71)	-	-	-	5.8% (182)
<i>Mental illness</i>	30.7% (971)	7.9% (250)	8.9% (281)	0.9% (29)	0.7% (21)	1.6% (52)	10.7% (338)
<i>Mental handicap</i>	7.4% (233)	0.3% (8)	0.3% (8)	0.0% (1)	-	2.8% (88)	4.1% (128)
<i>Physical handicap</i>	45.0% (1422)	3.4% (108)	6.3% (201)	2.7% (88)	5.5% (171)	13.7% (426)	13.5% (428)
<b>Total</b>	<b>100.0% (3160)</b>	<b>11.8% (374)</b>	<b>17.9% (565)</b>	<b>3.7% (118)</b>	<b>6.1% (192)</b>	<b>18.4% (580)</b>	<b>42.1% (1331)</b>

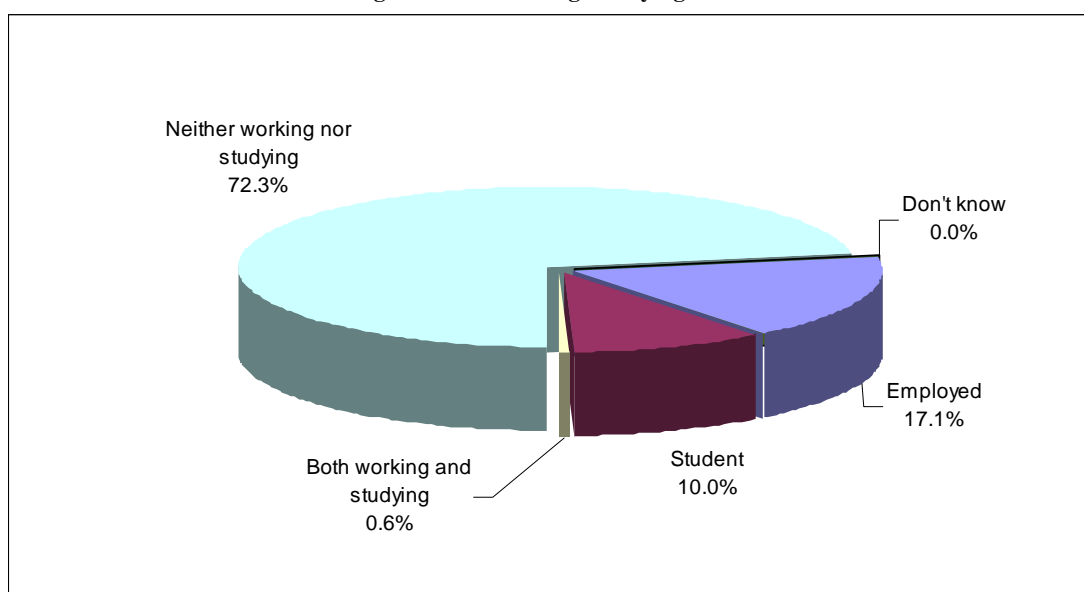
1.1.7 Table 1.1.7 shows the residential district of the surveyed PWDs. Nearly ten percent of the respondents were living in Tuen Mun (9.6%) and another 9.5% living in Yuen Long, which were the two largest groups. Only 1.3% of them were living in Wan Chai and 1.2% were living in Islands. 55.5% of the respondents were living in the New Territories (31.1% living in the New Territories West and 24.4% living in the New Territories East), 29.7% of them were living in Kowloon and 14.7% living in Hong Kong Island.

**Table 1.1.7: Residential District**

		Frequency	Percent
Valid	Central and Western	66	2.1
	Wan Chai	42	1.3
	Eastern	235	7.4
	Southern	122	3.9
	Yau Tsim Mong	93	2.9
	Shum Shui Po	219	6.9
	Kowloon City	141	4.5
	Wong Tai Sin	203	6.4
	Kwun Tong	284	9.0
	Kwai Tsing	254	8.0
	Tsuen Wan	88	2.8
	Tuen Mun	302	9.6
	Yuen Long	301	9.5
	Islands	38	1.2
	North	176	5.6
	Tai Po	156	4.9
	Sha Tin	289	9.1
	Sai Kung	151	4.8
	Total	3,160	100.0

1.1.8 Figure 1.1.8 shows that 72.3% of the respondents were neither working nor studying. The remaining respondents were either students (10.0%) or working group (17.1%), another 0.6% of them were both working and studying.

**Figure 1.1.8: Working/ Studying Status**

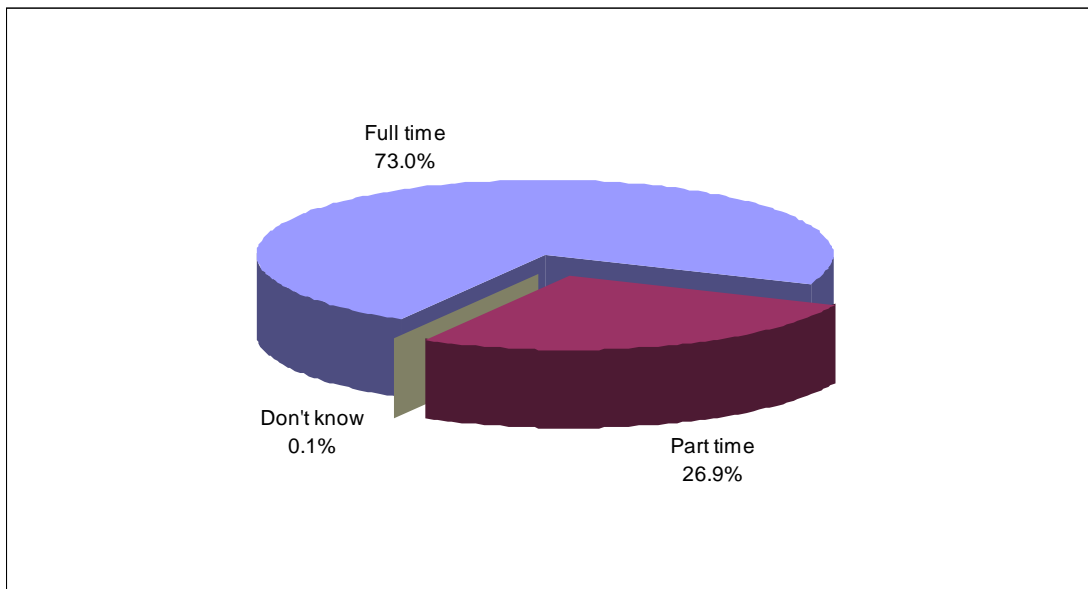


73.0% of the 556 surveyed workers were working full-time, a quarter of them were part-time workers (26.9%). (Figure 1.1.8a)

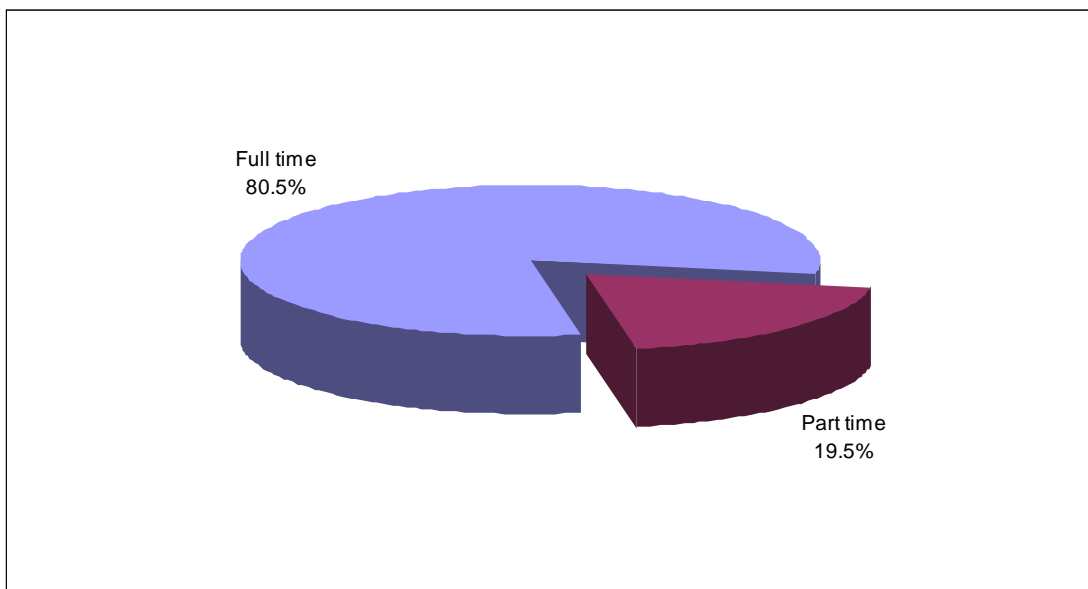
As shown in Figure 1.1.8b, amongst the 335 PWDs who were students, 80.5% of them were full-time students and the remaining 19.5% were part-time students.

Most of the respondents not working or studying were unable to go to school or work due to their disabilities (66.3%). One-sixth of them were home-makers, 9.4% were unemployed and 7.7% of them had retired. (Figure 1.1.8c)

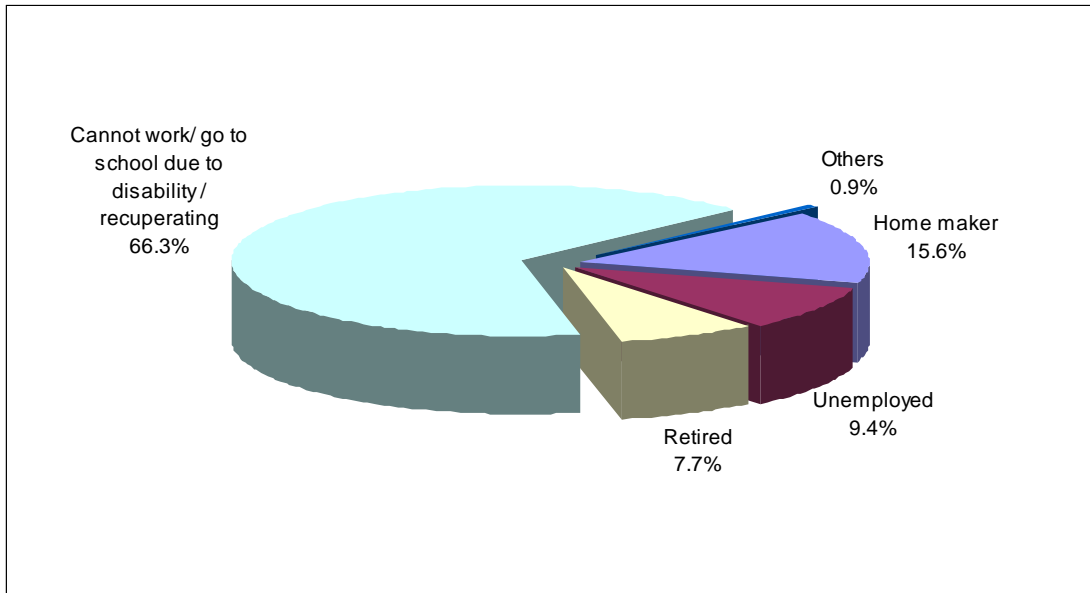
**Figure 1.1.8a: Type of employment**



**Figure 1.1.8b: Type of schooling**

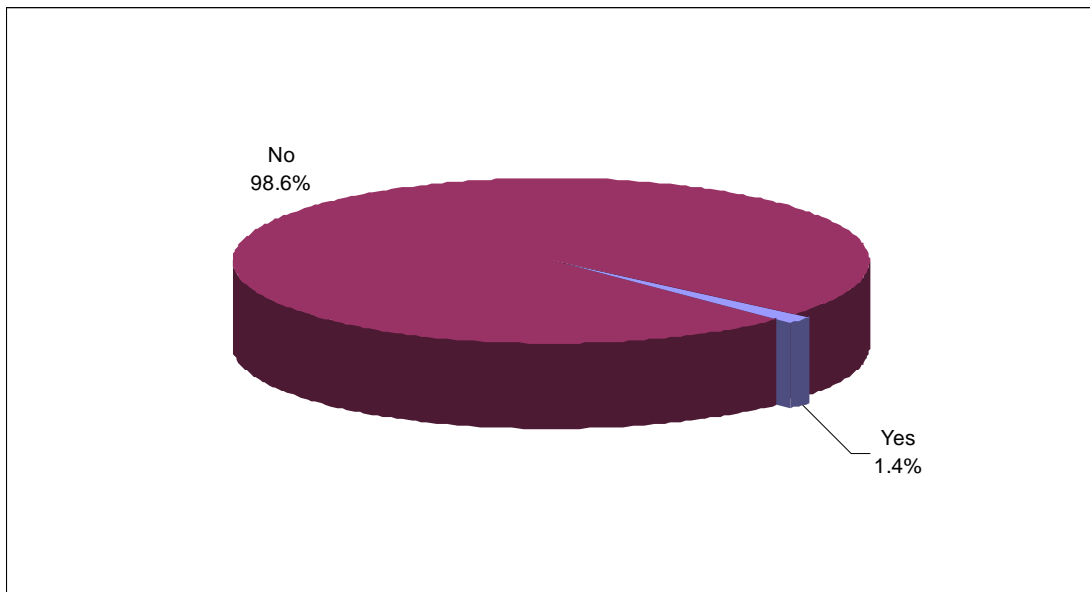


**Figure 1.1.8c: PWDs neither working nor schooling**

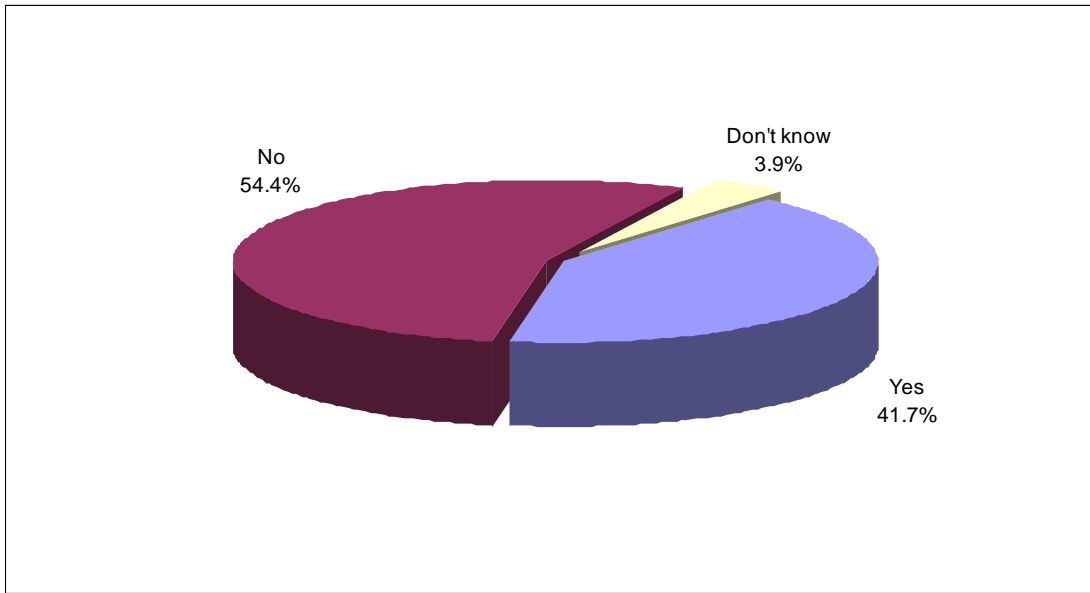


1.1.9 Figure 1.1.9 and 1.1.9a show that only 1.4% of the surveyed PWDs owned at least one vehicle. Amongst the 46 surveyed vehicle owners, 41.7% of them have a disabled person parking permit.

**Figure 1.1.9: Car Ownership Rate**

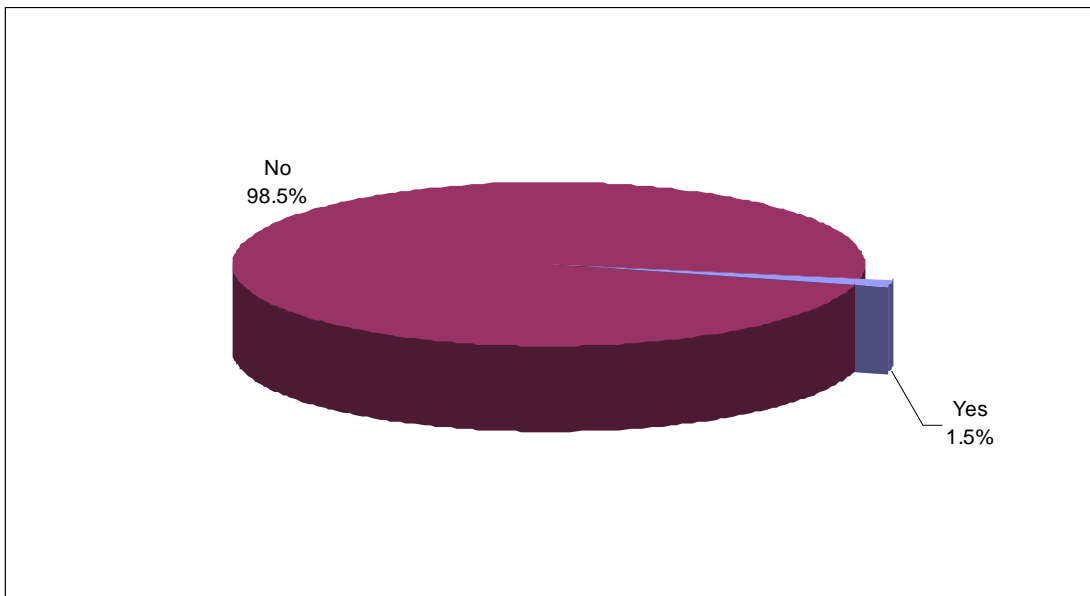


**Figure 1.1.9a: Disabled Person Parking Permit**



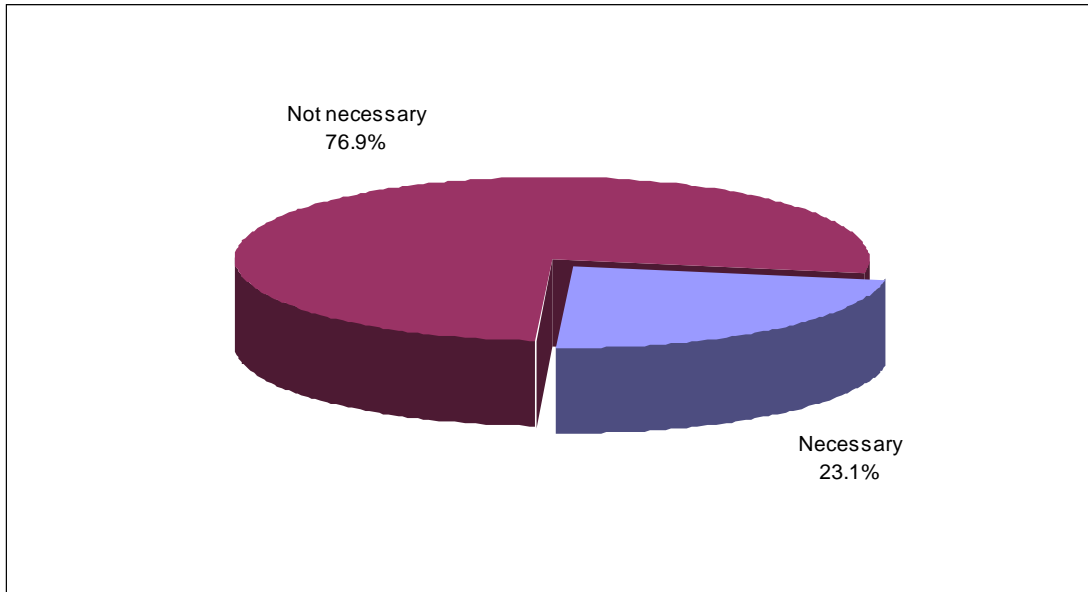
1.1.10 Only 1.5% of the surveyed PWDs said that they will drive when go out. (Figure 1.1.10)

**Figure 1.1.10: Whether Drive when Go Out**

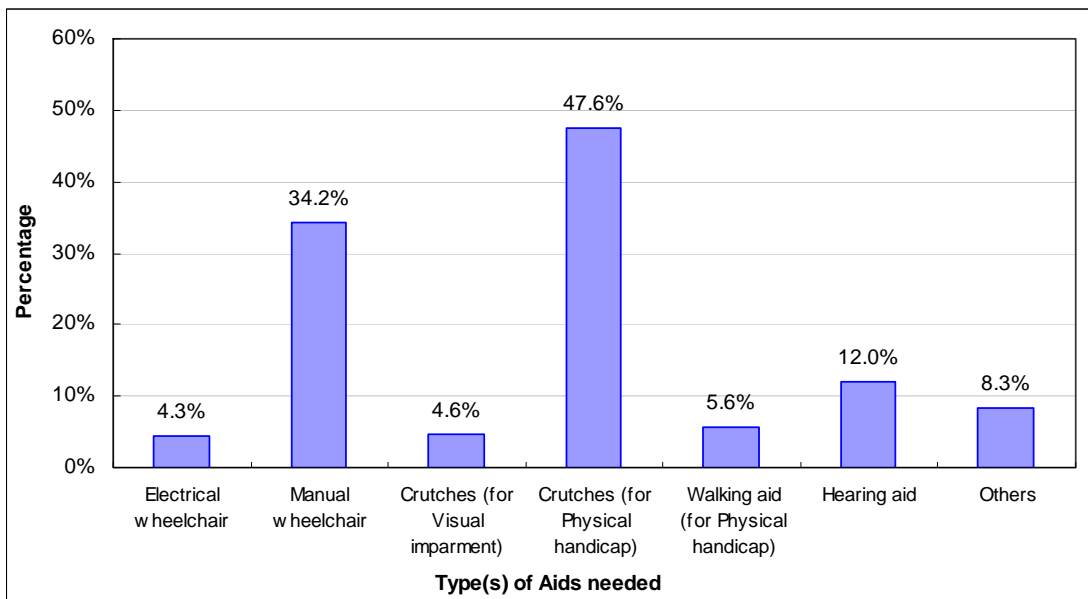


1.1.11 Figure 1.1.11 summarizes the need for mobility aids. A quarter of the respondents reported the need for mobility aids when traveling. Figure 1.1.11a shows that the most common aids were crutches for the respondents who had physical handicap (47.6%) and wheelchair (38.5%), including 34.2% for manual wheelchair and 4.3% for electrical wheelchair.

**Figure 1.1.11: Need any Mobility Aids**

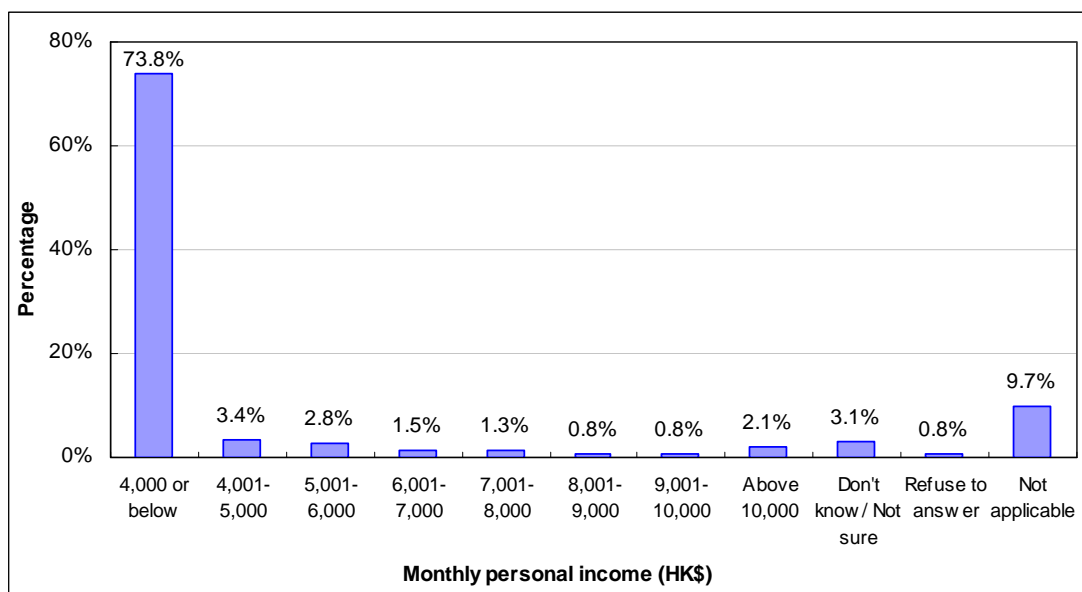


**Figure 1.1.11a: Type(s) of Aids needed (multiple responses)**



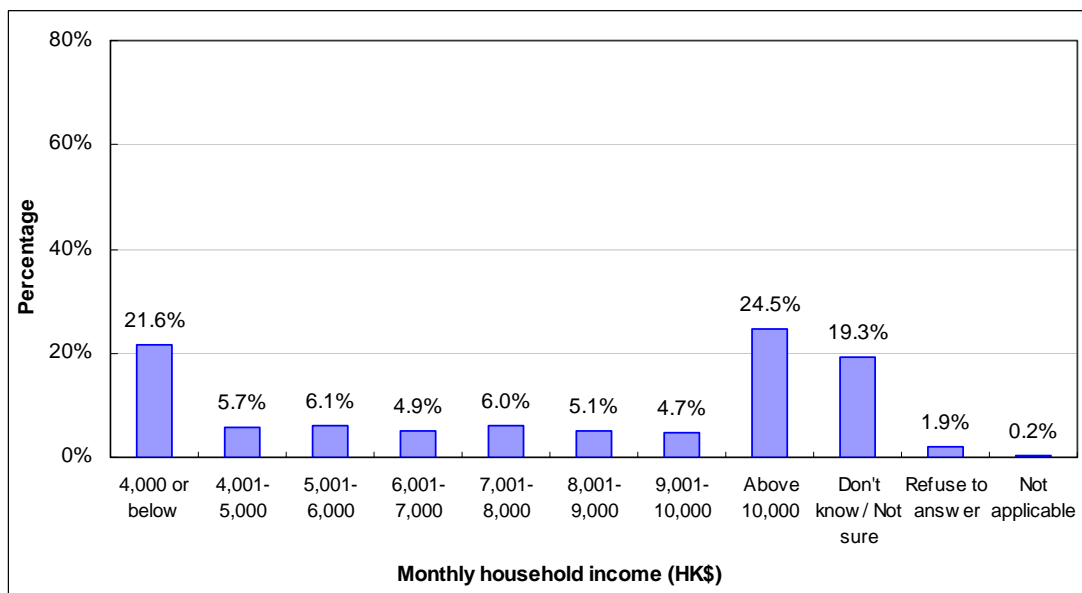
1.1.12 Most of the respondents had a personal monthly income of HKD4,000 or below (73.8%). Only 2.1% of them reported a personal income of more than HKD10,000. (Figure 1.1.12)

Figure 1.1.12: Monthly personal income



1.1.13 A quarter of the respondents had a household monthly income of HKD10,000 or above, which is the largest income group followed by income of HKD4,000 or below (21.6%). One-fifth of them did not know the household monthly income of their family (19.3%). (Figure 1.1.13)

Figure 1.1.13: Monthly household income

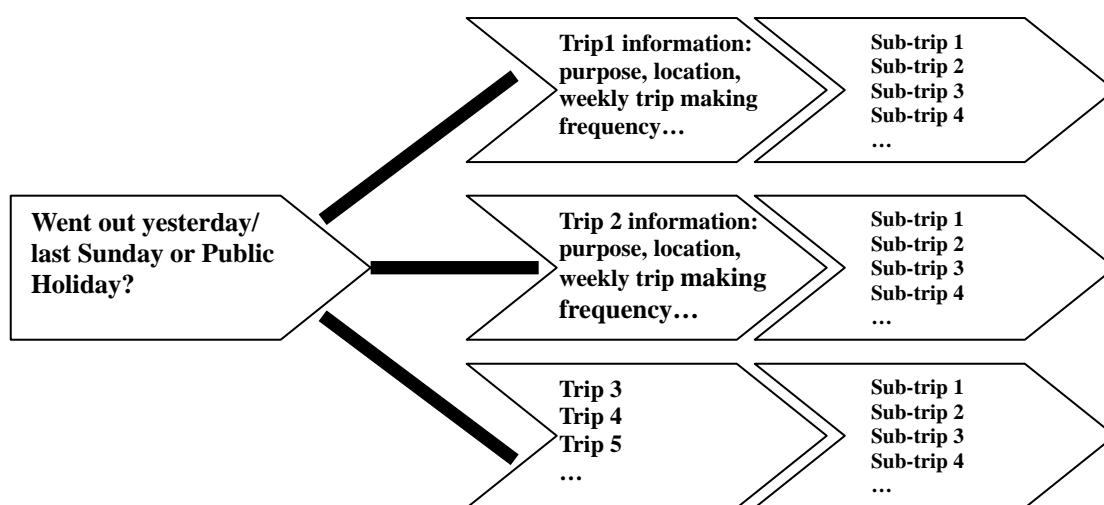




## 1.2 Travel Characteristics

### Travel Characteristics: An Overview

In this survey, PWDs were asked about their trips made on the last weekday and the last Sunday/ Public Holiday before being interviewed including all the characteristics such as the main purpose of the trips, frequency for making trips etc. After that, details of each sub-trip were asked (where sub-trip means a single journey on one mode of transport) including the time taken, starting point and destination, mode of transport used and the reasons for using that transport mode. From the PWDs' responses, a maximum of 8 sub-trips were recorded, while most of the trips contained 3 sub-trips. The following flow-chart shows the question flow for the trips and sub-trips:



More of the respondents were traveling within the New Territories. 41.8% of the weekday trips and 39.7% of the Sunday or public holiday trips started in the New Territories. Eastern District, Yuen Long, Tuen Mun, Kwai Tsing and Sha Tin were the most popular districts during a weekday, Sunday or public holiday.

The trip purposes for weekday and Sunday or public holiday had some differences. Apart from returning home, having social or recreational activities and handling daily living matters were common purposes for both weekday and Sunday or public holiday trips. However, going to work or school was a common purpose for weekday trips while having leisure or volunteering activities was a common purpose for Sunday or public holiday trips.

More trips made during a Sunday or public holiday involved carers<sup>viii</sup> accompanying the PWDs than the weekday trips. More respondents traveled by vehicles during a Sunday or public holiday, while more trips made during weekdays involved the use of vehicles than the Sunday or public holiday trips. Regarding other trip characteristics, the weekday and Sunday or public holiday trips were similar.

Reasons for selecting the transport mode were reported by the respondents for weekday and Sunday or public holiday trips. It is found that the day of trip has little effect on the respondents' choice of transport mode.

Regarding the trip-making time, lots of respondents started their trips during peak hours<sup>ix</sup> in the morning (0700 to 0930) on Monday to Friday, it is mainly due to the

<sup>viii</sup> "Carer" refers to a person who accompanies the PWD for traveling on public transport.

<sup>ix</sup> In this survey, peak hours were defined as 7:00am to 9:30am and 5:00pm to 8:00pm on Monday to

working and studying respondents, while the trip-making times were more evenly spread for the Saturday, Sunday or public holiday trips.

The mean number of sub-trips and the length of the trips were very similar for trips made on a weekday and Sunday or public holiday. It implied that respondents were not likely to travel to more places or travel for a longer time during a Sunday or public holiday than the other days in a week. Approximately sixty percent of the trips consisted of 3 sub-trips.

## 1.2A Travel characteristics during the last weekday (Monday to Saturday)

1.2A.1 A total of 3,384 trips were made during the last weekday in the survey period. Slightly more than seventy percent of the respondents went out during the day before the interview day (71.1%).

1.2A.2 Figure 1.2A.2a shows that less than half of the respondents used a vehicle at least once (41.9%). While in Figure 1.2A.2b, over four-fifth of the trips made during weekdays reported use of a transport vehicle (81.0%). More than a quarter (27.1%) of the trips were made less than once a week and 8.2% of the trips were made every day of the week. (Table 1.2A.2)

Figure 1.2A.2a: Whether use transport vehicle (last weekday) by respondents

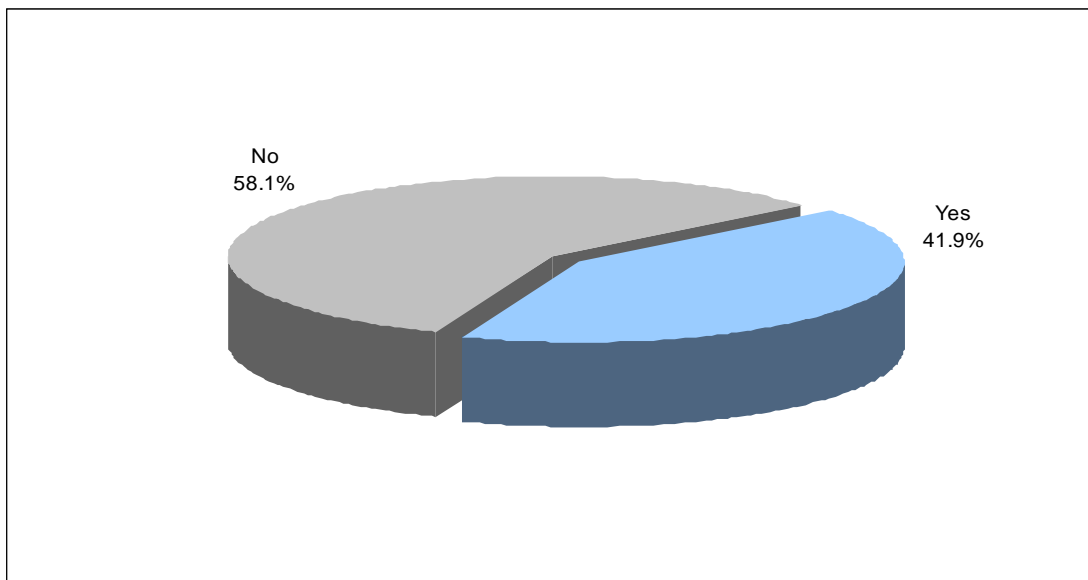
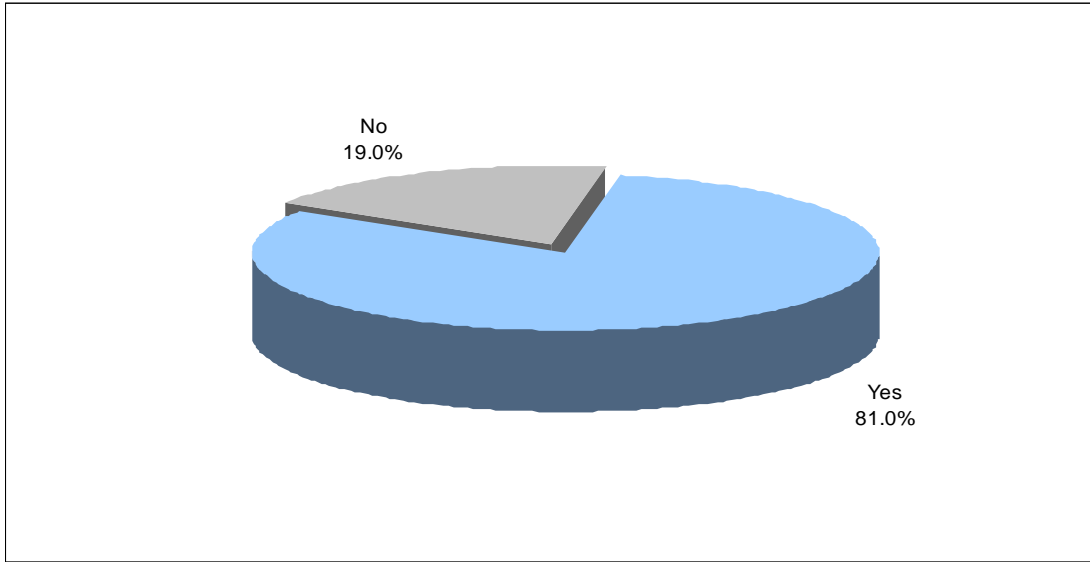


Figure 1.2A.2b: Whether use transport vehicle (last weekday) by trips

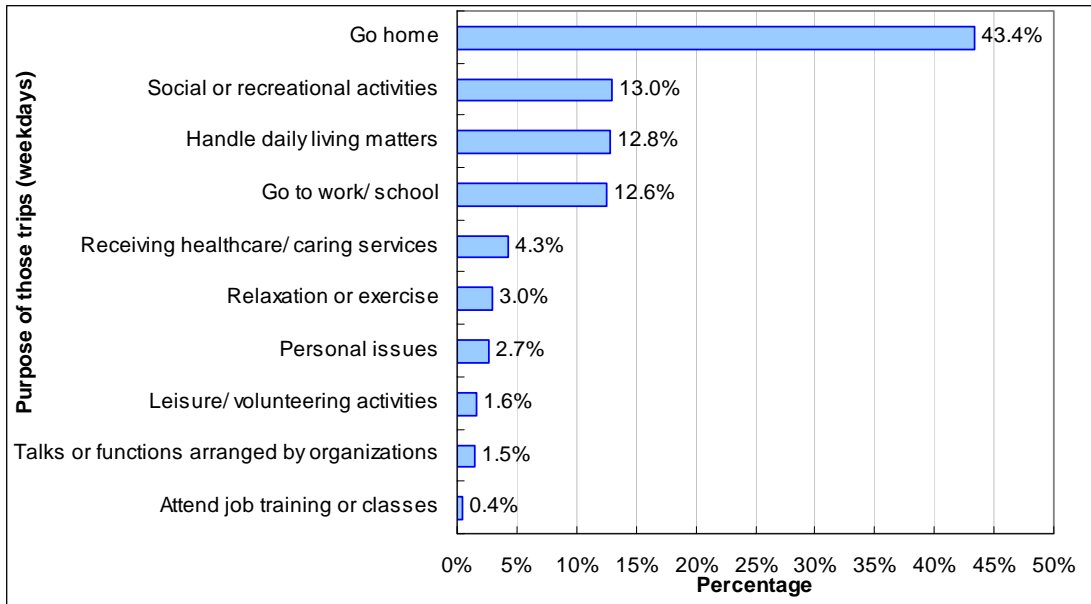


**Table 1.2A.2: Number of day a week the PWDs go to the same place with the same purpose (last weekday)**

		Frequency	Percent
Valid	1.0	396	11.7
	1.5	103	3.0
	2.0	234	6.9
	2.5	61	1.8
	3.0	142	4.2
	3.5	58	1.7
	4.0	87	2.6
	4.5	37	1.1
	5.0	558	16.5
	5.5	65	1.9
	6.0	273	8.1
	6.5	13	0.4
	7.0	276	8.2
	Less than once a week	916	27.1
	Not fixed/ not sure	165	4.9
	Total	3,384	100.0

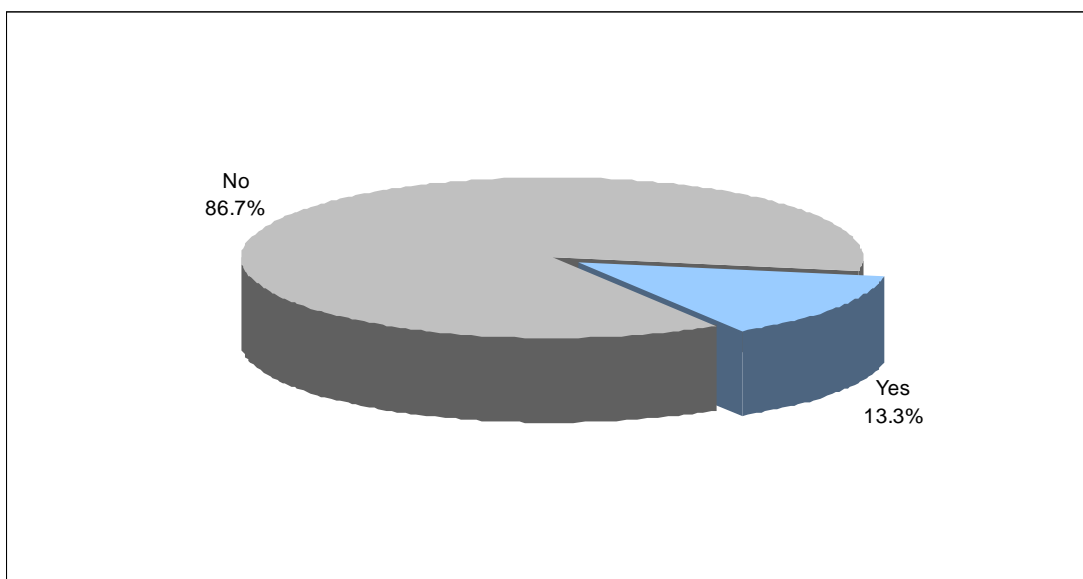
1.2A.3 The reasons for making the trips are presented in Figure 1.2A.3. For respondents traveling during weekdays, returning home (43.4%), social/ recreational activities (13.0%), handle daily living matters (12.8%), and go to work/ school (12.6%) were the main purposes of trips made during weekdays.

**Figure 1.2A.3: Purpose of those trips (weekdays)**

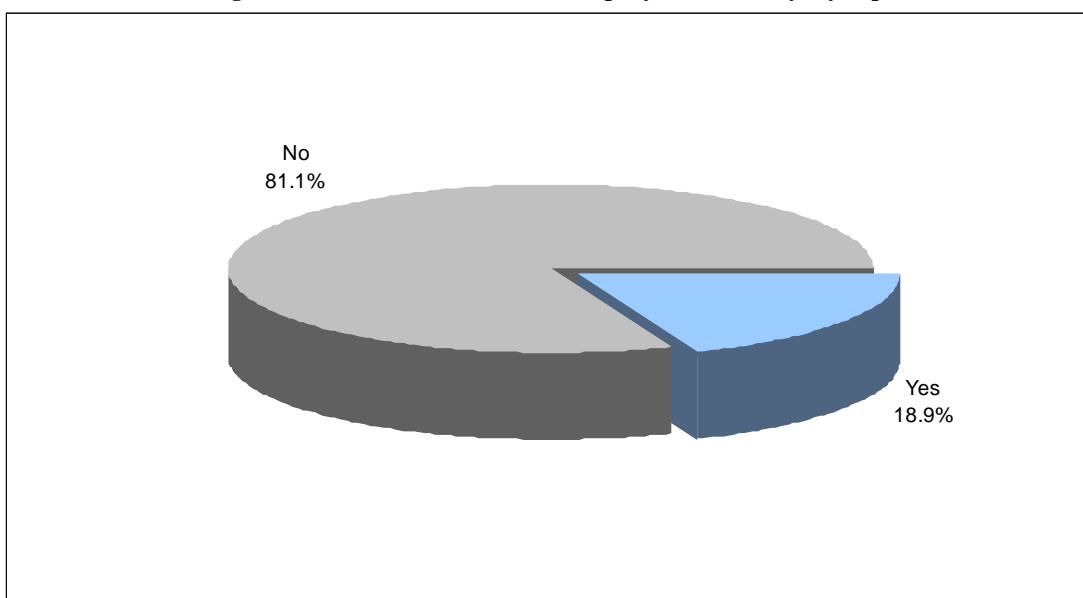


1.2A.4 Figure 1.2A.4a shows that 13.3% of the surveyed PWDs made at least one trip on the last weekday that needed a carer to accompany them. While 18.9% of the trips made by all respondents were made with a carer accompanying (Figure 1.2A.4b)

**Figure 1.2A.4a: Need a carer to accompany (last weekday) by respondents**



**Figure 1.2A.4b: Need a carer to accompany (last weekday) by trips**



1.2A.5 Regarding the starting point of the PWDs on weekdays, 9.3% of the surveyed PWDs started their trips in Tuen Mun, followed by trips started in Eastern district (8.4%) and Sha Tin (8.5%). Only 0.8% reported trips started outside Hong Kong. The most popular trips amongst the respondents were trips within the same district as approximately half of the trips made during weekdays were within the same district (50.4%), 6.4% reported they travel within Tuen Mun and 5.5% within Yuen Long. (Table 1.2A.5a)

**Table 1.2A.5a: Starting Point and Destination Matrix (last weekday)**

		Destination																					
Starting Point		C&W	WC	ED	SD	YTM	SSP	KC	WTS	KT	KS	TW	TM	YL	IS	ND	TP	ST	SK	OHK	NR	Total	
	C&W	0.8%	0.2%	0.3%	0.3%	0.1%	0.2%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	2.4%
	WC	0.2%	1.3%	1.0%	0.4%	0.1%	0.1%	0.0%	0.1%	0.2%	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	4.2%
	ED	0.3%	0.9%	5.4%	0.4%	0.1%	0.1%	0.1%	0.3%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	8.4%
	SD	0.2%	0.4%	0.4%	2.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	3.7%
	YTM	0.1%	0.1%	0.2%	0.1%	1.8%	0.6%	0.7%	0.6%	0.5%	0.4%	0.1%	0.0%	0.1%	0.1%	0.3%	0.2%	0.4%	0.1%	0.0%	0.0%	0.0%	6.5%
	SSP	0.2%	0.1%	0.1%	0.1%	0.8%	2.6%	0.4%	0.2%	0.3%	0.7%	0.1%	0.0%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	6.2%
	KC	0.1%	0.0%	0.1%	0.0%	0.6%	0.4%	1.3%	0.6%	0.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	4.2%
	WTS	0.0%	0.1%	0.1%	0.1%	0.6%	0.2%	0.5%	2.3%	0.5%	0.2%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.3%	0.2%	0.1%	0.0%	0.0%	5.6%
	KT	0.1%	0.3%	0.2%	0.1%	0.4%	0.3%	0.3%	0.5%	3.3%	0.1%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.4%	0.8%	0.0%	0.0%	0.0%	7.4%
	KS	0.1%	0.1%	0.1%	0.0%	0.4%	0.6%	0.2%	0.1%	0.1%	3.8%	1.0%	0.2%	0.2%	0.1%	0.1%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	7.8%
	TW	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	1.0%	1.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	3.8%
	TM	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.2%	0.4%	6.4%	1.3%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	9.3%
	YL	0.0%	0.1%	0.1%	0.0%	0.1%	0.3%	0.0%	0.1%	0.0%	0.2%	0.1%	1.3%	5.5%	0.1%	0.1%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	8.2%
	IS	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
	ND	0.0%	0.2%	0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.3%	0.0%	3.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	5.2%
	TP	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.4%	1.8%	0.2%	0.0%	0.1%	0.0%	0.0%	3.5%
	ST	0.0%	0.0%	0.0%	0.0%	0.5%	0.2%	0.4%	0.3%	0.4%	0.2%	0.2%	0.1%	0.0%	0.1%	0.1%	0.3%	5.7%	0.0%	0.0%	0.0%	0.0%	8.5%
	SK	0.0%	0.1%	0.2%	0.0%	0.1%	0.1%	0.1%	0.2%	0.8%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.1%	0.0%	3.3%
	OHK	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
	NR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	Total	2.3%	4.2%	8.5%	3.9%	6.4%	6.3%	4.2%	5.7%	7.3%	7.7%	4.0%	9.3%	8.3%	1.3%	5.0%	3.5%	8.5%	3.2%	0.5%	0.1%	0.0%	100.0%

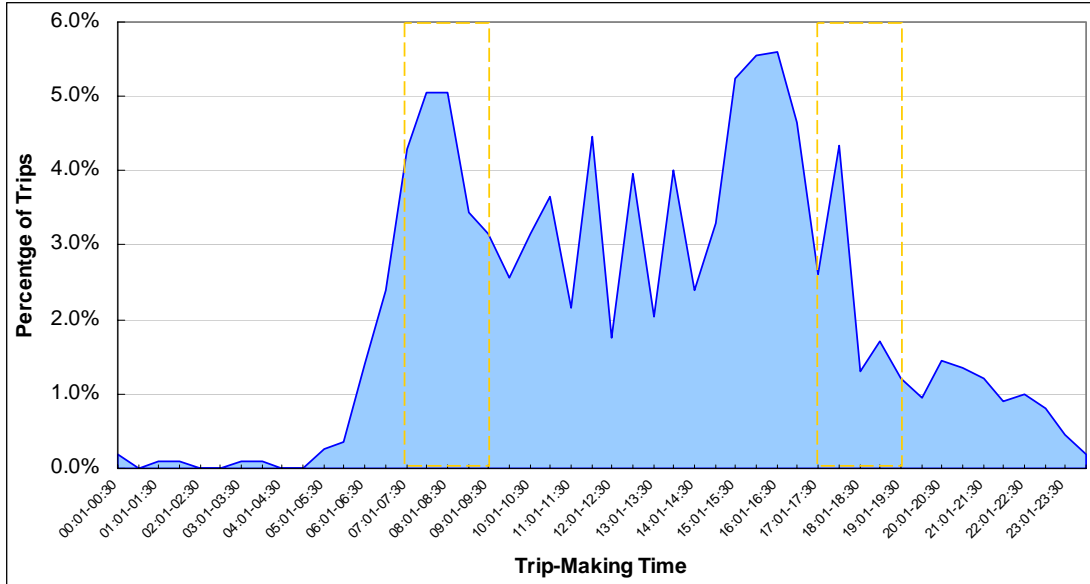
**Table 1.2A.5a: Starting Point and Destination Matrix (last weekday)**

Central and Western	= C&W	(base= 80 )
Wan Chai	= WC	(base= 142 )
Eastern	= ED	(base= 286 )
Southern	= SD	(base= 127 )
Yau Tsim Mong	= YTM	(base= 219 )
Shum Shui Po	= SSP	(base= 209 )
Kowloon City	= KC	(base= 142 )
Wong Tai Sin	= WTS	(base= 189 )
Kwun Tong	= KT	(base= 250 )
Kwai Tsing	= KS	(base= 263 )
Tsuen Wan	= TW	(base= 128 )
Tuen Mun	= TM	(base= 314 )
Yuen Long	= YL	(base= 277 )
Islands	= IS	(base= 41 )
North	= ND	(base= 176 )
Tai Po	= TP	(base= 118 )
Sha Tin	= ST	(base= 289 )
Sai Kung	= SK	(base= 111 )
Outside H.K. boundary	= OHK	(base= 26 )
Not remember	= NR	(base= 3 )
Total	=	(base= 3390 )*

*\* A total of 3,390 trips were recorded in this part, while 3,384 trips were shown on the other tables. The discrepancy was due to a combination of rounding and the weighting applied.*

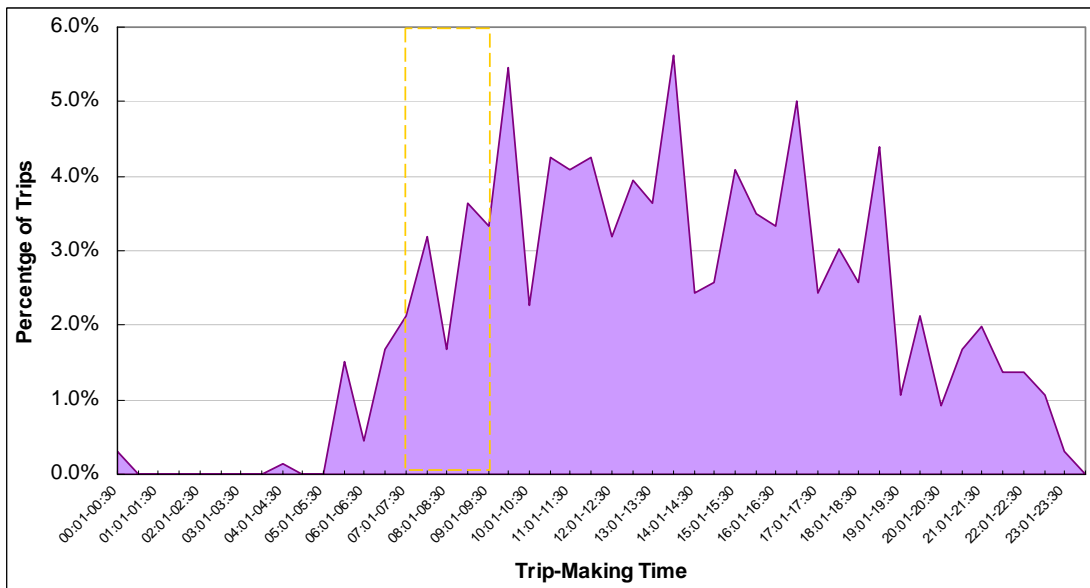
1.2A.6 Figure 1.2A.6a and 1.2A.6b show that around one third of the trips on Monday to Friday started during peak hours (33.1%) and the remaining 66.9% during non-peak hours. While on Saturday, only 14.0% of the trips started during peak hours.

**Figure 1.2A.6a: Start time Mon-Fri**



\* highlighted region indicate peak hours (0700-0930 and 1700-2000)

**Figure 1.2A.6b: Start time Sat.**

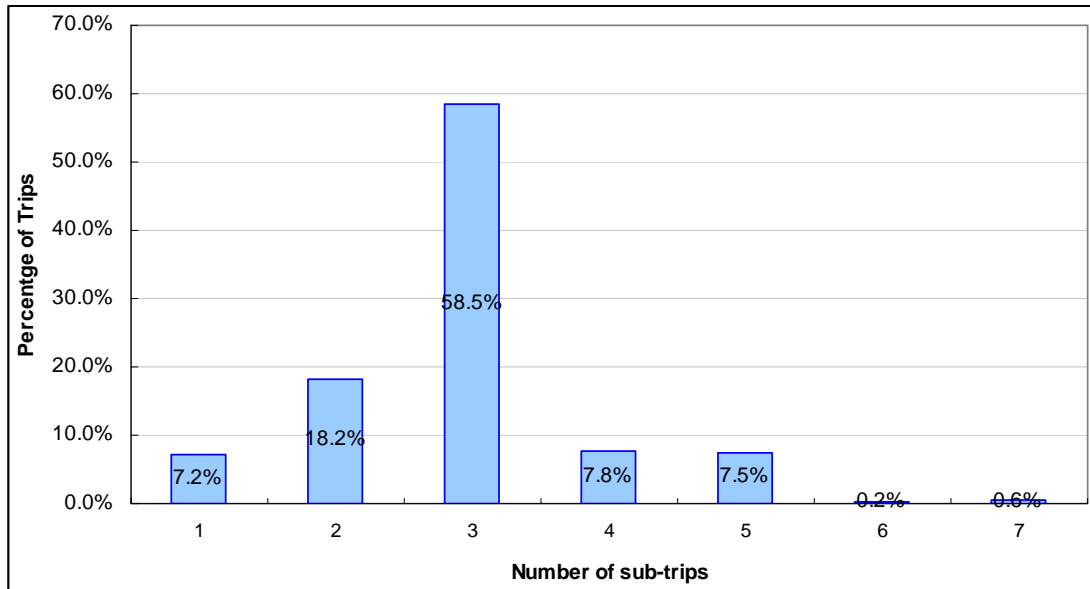


\* highlighted region indicate peak hours (0700-0930 ONLY)

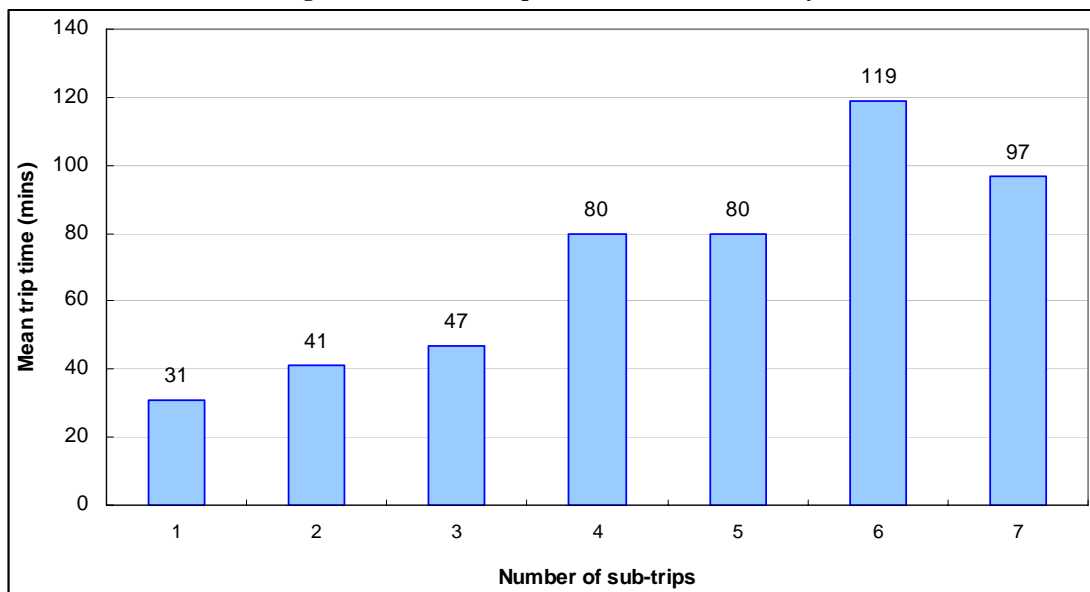


1.2A.7 More than half of the trips made by the PWDs have three sub-trips (58.5%) which have a mean travel time of 46.8 minutes. (Figure 1.2A.7a & 1.2A.7b) The overall mean travel time for weekday trips was 50.2 minutes, as summarized in Table 1.2A.7.

**Figure 1.2A.7a: Sub-trips information (last weekday)**



**Figure 1.2A.7b: Sub-trips information (last weekday)**



**Table 1.2A.7: Sub-trips information (last weekday)**

No. of sub-trips	Mean trip time (min.)	Std Deviation of trip time (min.)
1	31	22
2	41	24
3	47	25
4	80	30
5	80	27
6	119	39
7	97	40
Overall	50	29

1.2A.8 Table 1.2A.8 below summarizes the factors affecting the choice of transport modes on weekdays:

**Table 1.2A.8: Factors affecting the choice of transport modes (last weekday)**

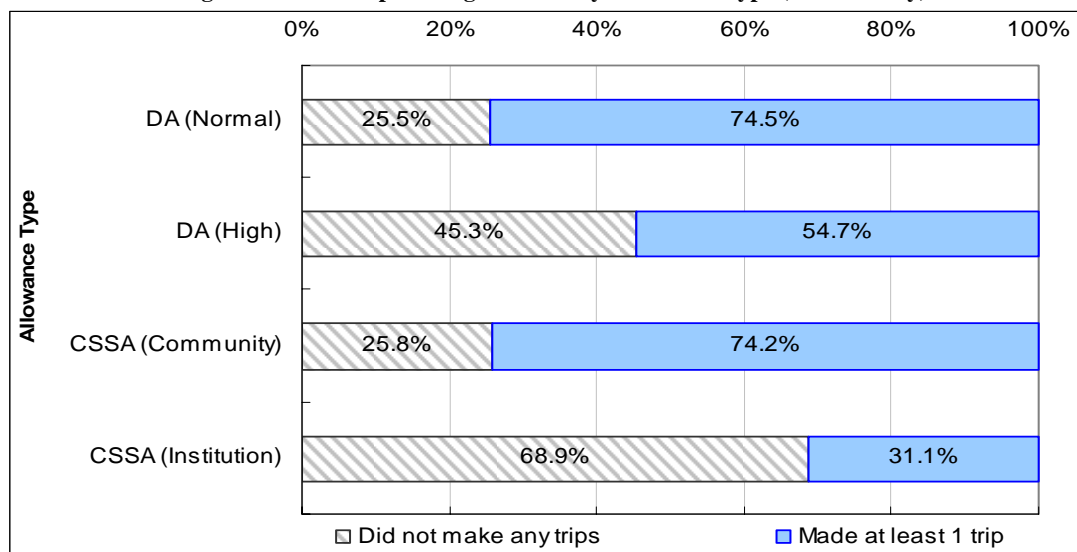
Transport Modes	Top 3 Factors affecting the choice of transport modes
Bus	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
KCR	<ul style="list-style-type: none"> <li>■ Fast services/ time efficient</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
LRT	<ul style="list-style-type: none"> <li>■ No other choice</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
MTR	<ul style="list-style-type: none"> <li>■ Fast services/ time efficient</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Tram	<ul style="list-style-type: none"> <li>■ Reasonable fare/ cheap</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Green Minibus	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Ferry	<ul style="list-style-type: none"> <li>■ No other choice</li> <li>■ Reasonable fare/ cheap</li> <li>■ To pick up/ drop off family members</li> </ul>
Rehabus	<ul style="list-style-type: none"> <li>■ No other choice</li> <li>■ Special facilities convenient for boarding/ alighting</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Taxi	<ul style="list-style-type: none"> <li>■ Convenient boarding locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Fast services/ time efficient</li> </ul>
Other vehicles <sup>x</sup>	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> <li>■ No other choice</li> </ul>

<sup>x</sup> “Other vehicles” included Red minibus, Resident shuttle bus, Private car, Company or school bus etc. Detailed explanations can be found in *Appendix IV: Coding Manual*.

1.2A.9 To summarize the factors affecting the choice of transport modes on weekdays, convenience of alighting locations, the only choice around the starting point and convenience of boarding locations were the three main reasons for choosing most of the transport modes with efficiency added for KCR, MTR and taxi, cost for tram and ferry and special facilities for Rehabus.

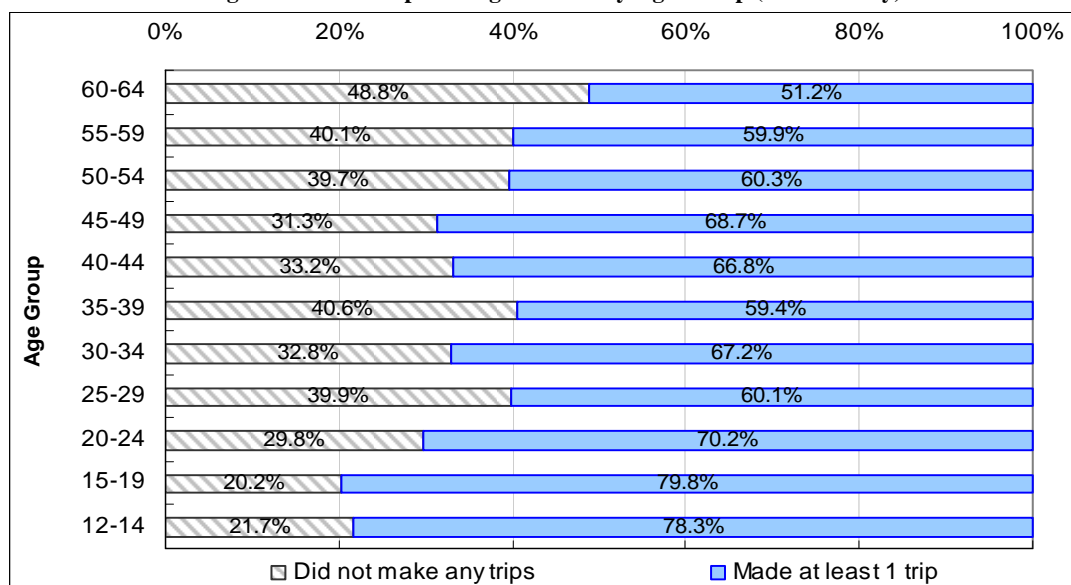
1.2A.10 Figure 1.2A.10 shows that respondents receiving DA (Normal) or CSSA living in the community were more likely to make trips during the last weekday. Significant differences were recorded between different allowance types (Kruskal Wallis Test Chi-Sq = 175.5, p-value<0.001<sup>xi</sup>).

Figure 1.2A.10: Trip making behavior by Allowance Type (last weekday)



1.2A.11 Significant differences were recorded between age groups and whether they made any trips during the last weekday (Kruskal Wallis Test Chi-Sq = 73.5, p-value<0.001). Young PWDs (aged 12 to 19) were more likely to make trips than the older ones. (Figure 1.2A.11)

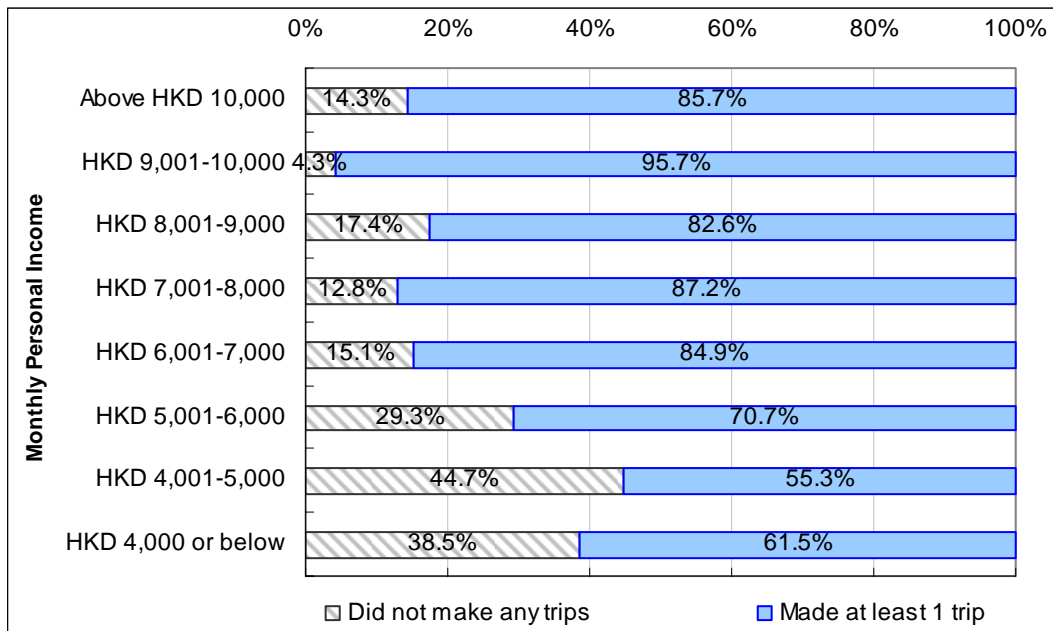
Figure 1.2A.11: Trip making behavior by Age Group (last weekday)



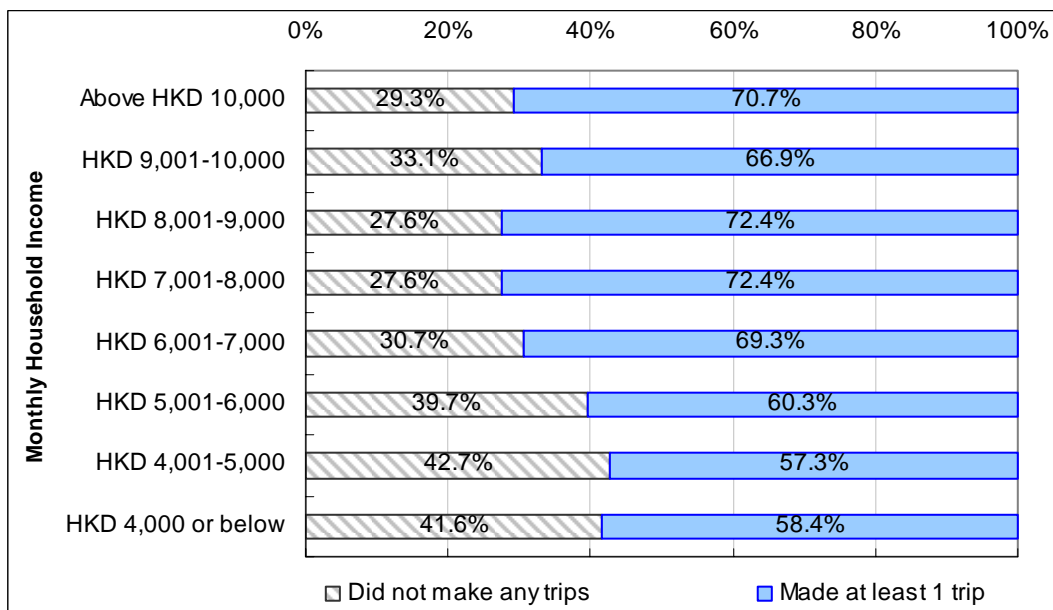
<sup>xi</sup> P-value<0.05 implies statistically significant difference between groups under 5% significance level.

1.2A.12 Figure 1.2A.12 and 1.2A.13 show the significant differences between different personal income groups (Kruskal Wallis Test Chi-Sq = 60.5, p-value<0.001) and household income groups (Kruskal Wallis Test Chi-Sq = 38.3, p-value<0.001) in terms of their trip making behavior. The PWDs with higher personal or household income were more likely to make a trip during the last weekday.

**Figure 1.2A.12: Trip making behavior by Monthly Personal Income (last weekday)**



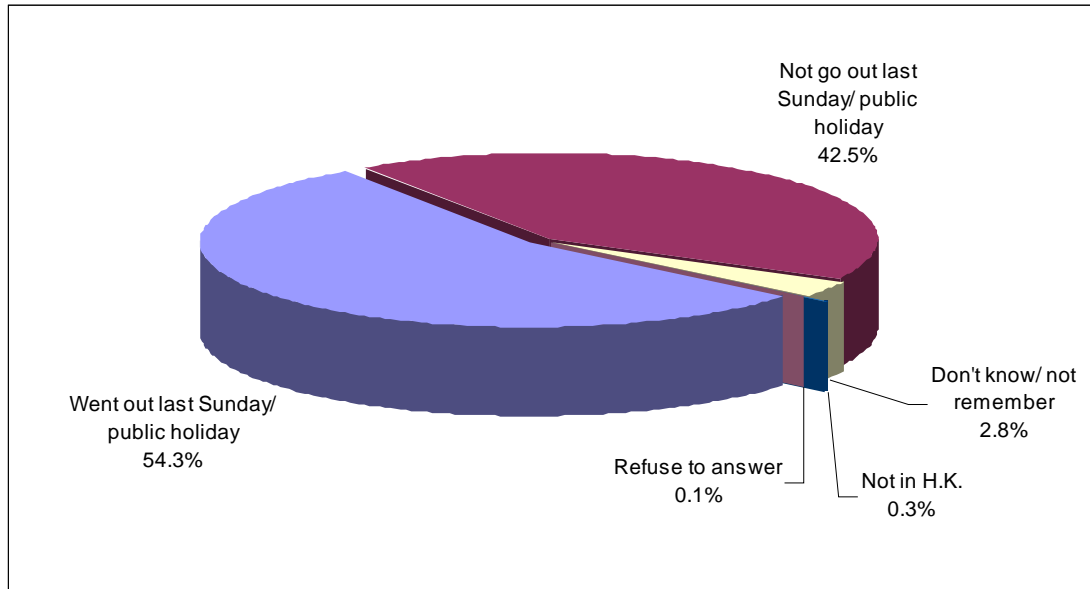
**Figure 1.2A.13: Trip making behavior by Monthly Household Income (last weekday)**



## 1.2B Travel characteristics during last Sunday or public holiday

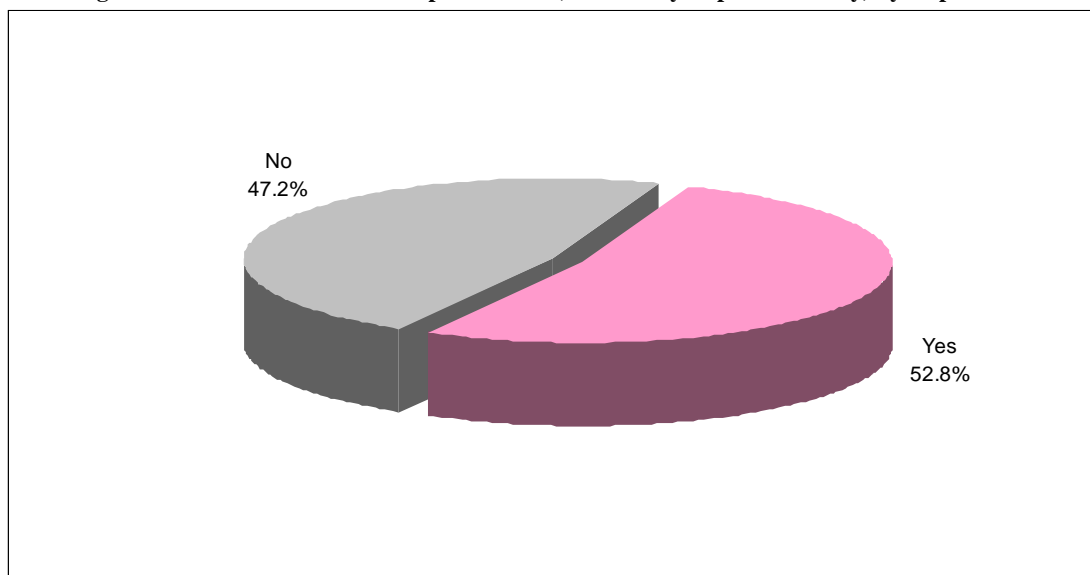
1.2B.1 More than half of the surveyed PWDs went out during the previous Sunday or public holiday (54.3%). (Figure 1.2B.1)

Figure 1.2B.1: Whether went out last Sunday or public holiday

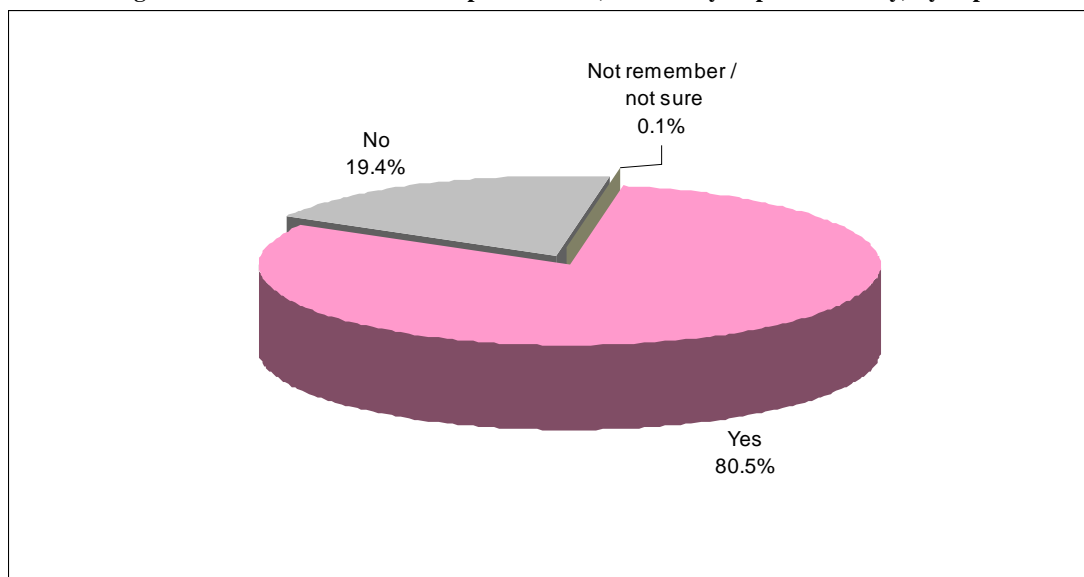


1.2B.2 Figure 1.2B.2a and 1.2B.2b summarizes the use of a vehicle during the previous Sunday or public holiday. More than half of the respondents used a vehicle at least once (52.8%). Eighty percent of the Sunday or public holiday trips made reported use of a transport vehicle (80.5%). One third of the Sunday or public holiday trips were made less than once a week (33.4%) and 61.4% of trips were made at least once a week.

Figure 1.2B.2a: Whether use transport vehicle (last Sunday or public holiday) by respondents



**Figure 1.2B.2b: Whether use transport vehicle (last Sunday or public holiday) by trips**

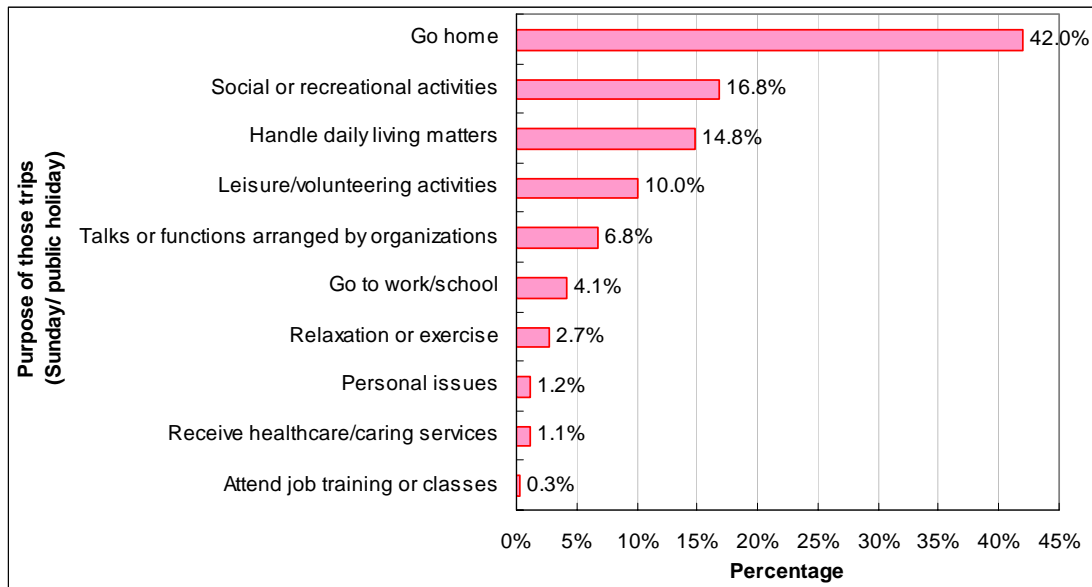


**Table 1.2B.2: Number of day a week the PWDs go to the same place with the same purpose (last Sunday or public holiday)**

		Frequency	Percent	Valid Percent
Valid	1.0	585	25.2	25.2
	1.5	88	3.8	3.8
	2.0	226	9.7	9.7
	2.5	39	1.7	1.7
	3.0	51	2.2	2.2
	3.5	34	1.5	1.5
	4.0	45	1.9	1.9
	4.5	10	0.4	0.4
	5.0	76	3.3	3.3
	5.5	13	0.6	0.6
	6.0	109	4.7	4.7
	6.5	3	0.1	0.1
	7.0	146	6.3	6.3
	Less than once a week	773	33.4	33.4
Not fixed/ not sure	119	5.1	5.1	
Total	2,316	100.0	100.0	

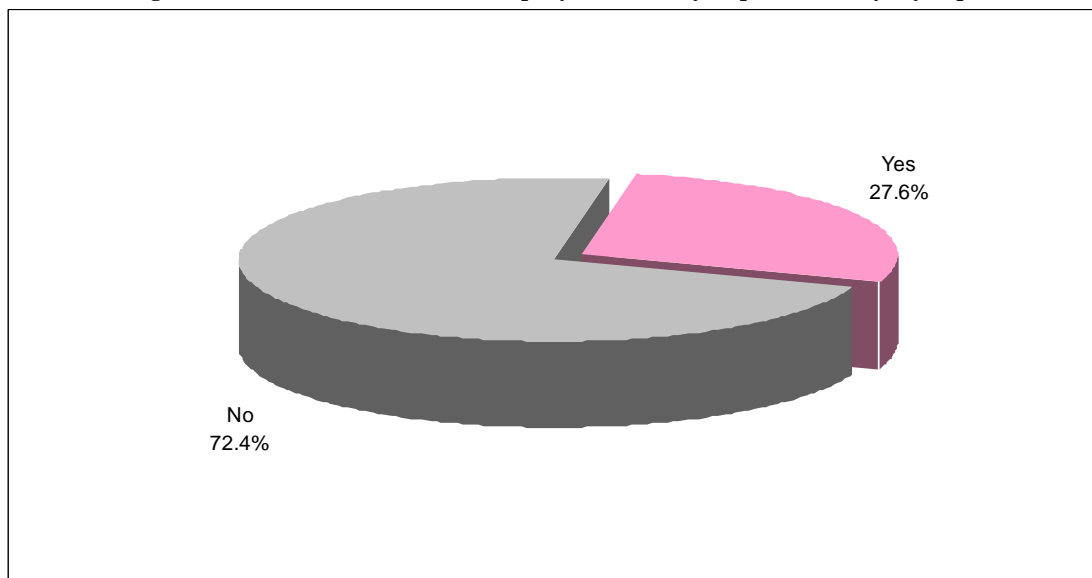
1.2B.3 Returning home (42.0%), social/ recreational activities (16.8%), and handle daily matters (14.8%) and leisure/ volunteering activities (10.0%) were the main purposes of trips made during the last Sunday or public holiday. (Figure 1.2B.3)

**Figure 1.2B.3: Trip Purpose (last Sunday or public holiday)**

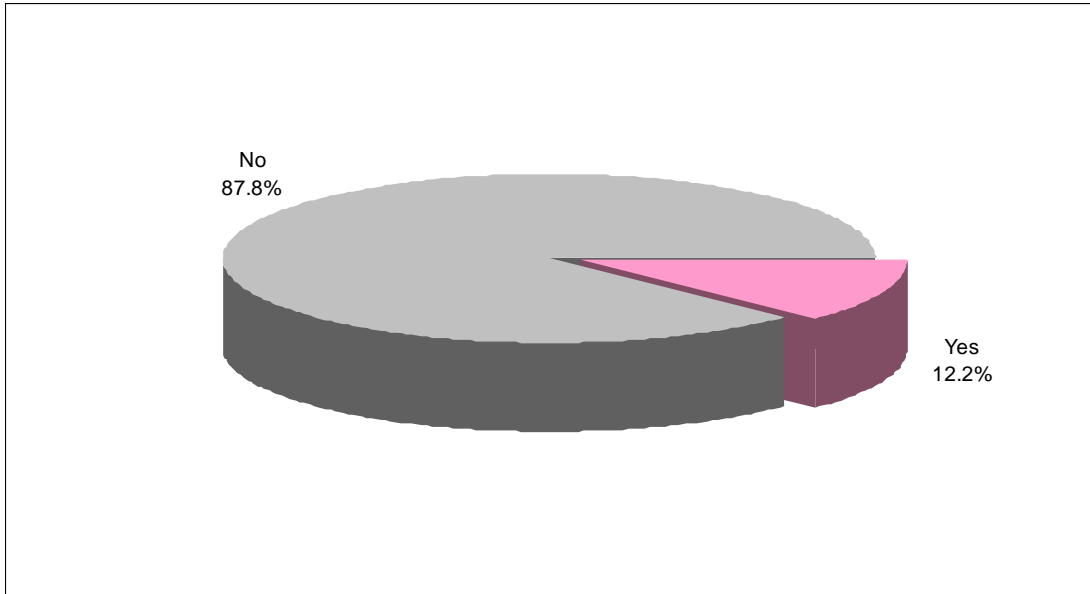


1.2B.4 In Figure 1.2B.4a and 1.2B.4b, 12.2% of the surveyed PWDs made at least one trip on the last Sunday or public holiday that needed a carer to accompany them. While over a quarter of the trips made by all respondents were made with a carer accompanying (27.6%).

**Figure 1.2B.4a: Need a carer to accompany (last Sunday or public holiday) by trips**



**Figure 1.2B.4b: Need a carer to accompany (last Sunday or public holiday) by respondents**



1.2B.5 The three most popular starting points were Eastern District (9.0%), Yuen Long (8.5%) and Tuen Mun (7.9%). Again, about half (50.0%) of the trips made during the last Sunday or public holiday were trips within the same district, and 5.8% reported they travel within Eastern District. (Table 1.2B.5b)



**Table 1.2B.5b: Starting Point and Destination Matrix (last Sunday or public holiday)**

		Destination																			Total		
Starting Point		C&W	WC	ED	SD	YTM	SSP	KC	WTS	KT	KS	TW	TM	YL	IS	ND	TP	ST	SK	OHK	NR	Total	
	C&W	0.2%	0.4%	0.3%	0.0%	0.3%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
	WC	0.3%	1.2%	0.9%	0.3%	0.1%	0.0%	0.1%	0.0%	0.3%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	3.6%
	ED	0.3%	0.8%	5.8%	0.3%	0.3%	0.0%	0.1%	0.3%	0.2%	0.0%	0.0%	0.1%	0.0%	0.2%	0.1%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	9.0%
	SD	0.1%	0.3%	0.4%	2.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%
	YTM	0.2%	0.1%	0.4%	0.1%	1.9%	0.8%	0.2%	0.6%	0.4%	0.4%	0.2%	0.4%	0.1%	0.0%	0.5%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	7.1%
	SSP	0.0%	0.1%	0.0%	0.0%	0.6%	3.2%	0.2%	0.3%	0.3%	0.4%	0.3%	0.1%	0.3%	0.2%	0.0%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	6.6%
	KC	0.0%	0.1%	0.1%	0.0%	0.2%	0.2%	1.4%	0.6%	0.3%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.5%	0.1%	0.0%	0.0%	0.0%	3.9%
	WTS	0.2%	0.0%	0.3%	0.2%	0.8%	0.3%	0.6%	2.9%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.3%	0.1%	0.0%	0.0%	6.6%
	KT	0.0%	0.3%	0.2%	0.0%	0.6%	0.2%	0.4%	0.2%	3.5%	0.3%	0.0%	0.1%	0.3%	0.1%	0.1%	0.0%	0.2%	0.4%	0.0%	0.0%	0.0%	7.0%
	KS	0.1%	0.0%	0.0%	0.0%	0.3%	0.4%	0.2%	0.2%	0.4%	3.4%	1.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	7.3%
	TW	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.0%	0.1%	0.0%	1.7%	1.3%	0.3%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	4.2%
	TM	0.0%	0.1%	0.0%	0.2%	0.2%	0.1%	0.0%	0.1%	0.2%	0.3%	0.3%	5.1%	0.8%	0.0%	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	7.9%
	YL	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.0%	0.3%	0.1%	0.0%	0.9%	6.0%	0.2%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	8.5%
	IS	0.0%	0.1%	0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.2%	0.1%	0.2%	0.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	1.7%
	ND	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	2.2%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	4.3%
	TP	0.1%	0.0%	0.0%	0.0%	0.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.0%	0.7%	2.9%	0.3%	0.1%	0.1%	0.0%	0.0%	5.2%
	ST	0.0%	0.0%	0.2%	0.0%	0.3%	0.2%	0.5%	0.4%	0.2%	0.1%	0.2%	0.0%	0.0%	0.1%	0.3%	0.3%	4.1%	0.2%	0.0%	0.0%	0.0%	7.0%
	SK	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.2%	0.3%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.2%	2.1%	0.0%	0.0%	0.0%	4.1%
	OHK	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
NR	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	
Total	1.5%	3.7%	9.0%	3.8%	7.0%	6.3%	4.1%	6.6%	7.1%	7.3%	4.3%	8.3%	8.2%	1.6%	4.5%	5.3%	7.1%	3.8%	0.5%	0.1%	100.0%		

**Table 1.2B.5b: Starting Point and Destination Matrix (last Sunday or public holiday)**

Central and Western	= C&W	(base= 35 )
Wan Chai	= WC	(base= 84 )
Eastern	= ED	(base= 208 )
Southern	= SD	(base= 85 )
Yau Tsim Mong	= YTM	(base= 164 )
Shum Shui Po	= SSP	(base= 152 )
Kowloon City	= KC	(base= 91 )
Wong Tai Sin	= WTS	(base= 153 )
Kwun Tong	= KT	(base= 162 )
Kwai Tsing	= KS	(base= 168 )
Tsuen Wan	= TW	(base= 98 )
Tuen Mun	= TM	(base= 182 )
Yuen Long	= YL	(base= 197 )
Islands	= IS	(base= 40 )
North	= ND	(base= 99 )
Tai Po	= TP	(base= 121 )
Sha Tin	= ST	(base= 163 )
Sai Kung	= SK	(base= 95 )
Outside H.K. boundary	= OHK	(base= 15 )
Not remember	= NR	(base= 2 )
Total	=	(base= 2,314 )*

*\* A total of 2,314 trips were recorded in this part, while 2,316 trips were shown on the other tables. The discrepancy was due to the combination of rounding and the weighting applied.*

1.2B.6 During Sunday, more than a quarter of the trips started between 8:30am and 12:00noon (27.3%). A similar amount of trips started during this timeslot for trips on the public holiday (24.6%) as well. Very few trips were made on a Sunday or public holiday before 8:30am. (Figure 1.2B.6a & 1.2B.6b)

Figure 1.2B.6a: Start time Sun.

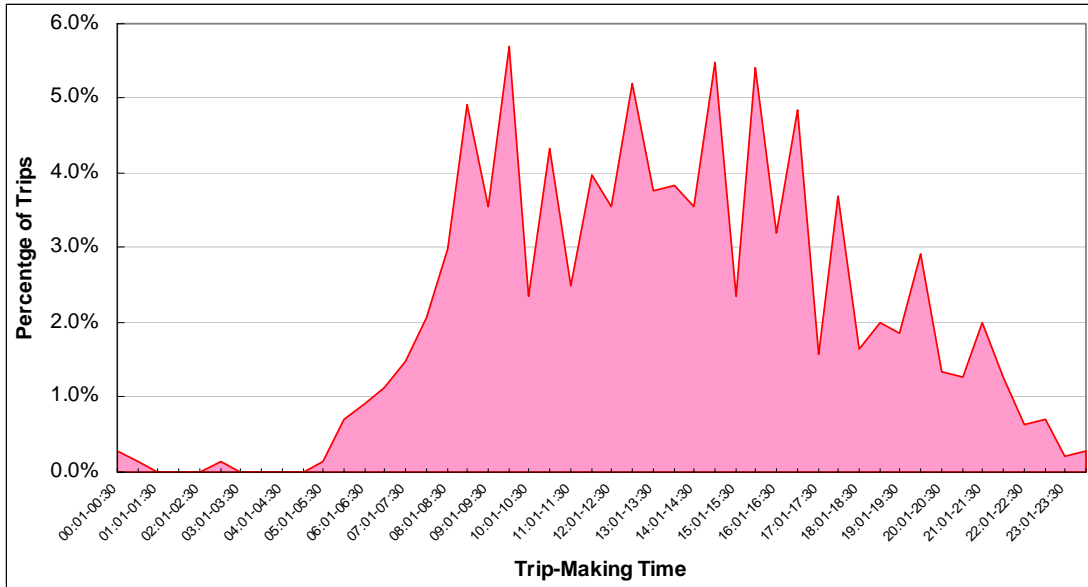
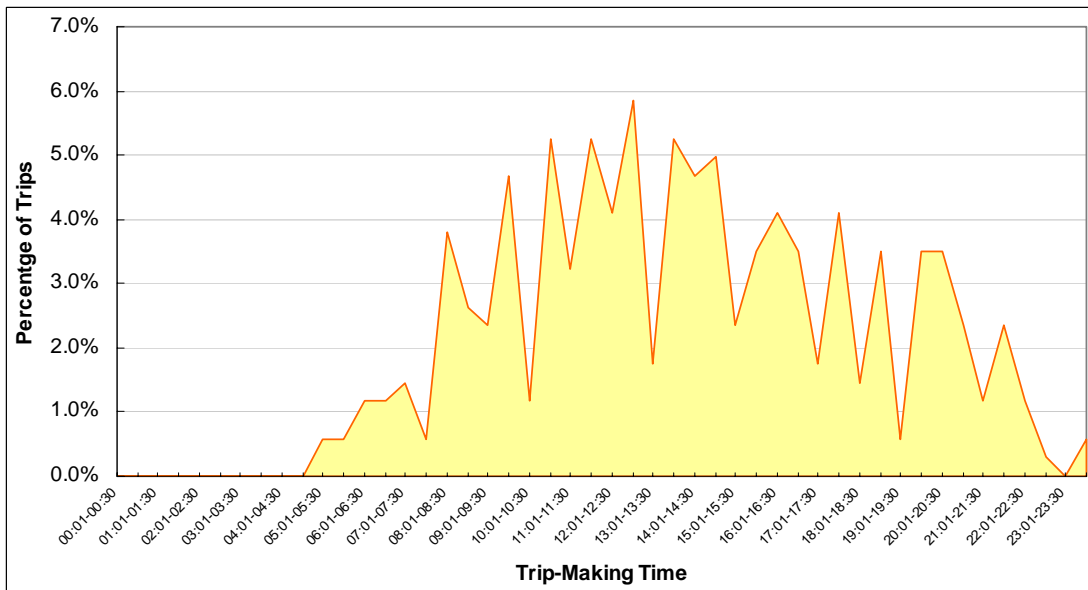
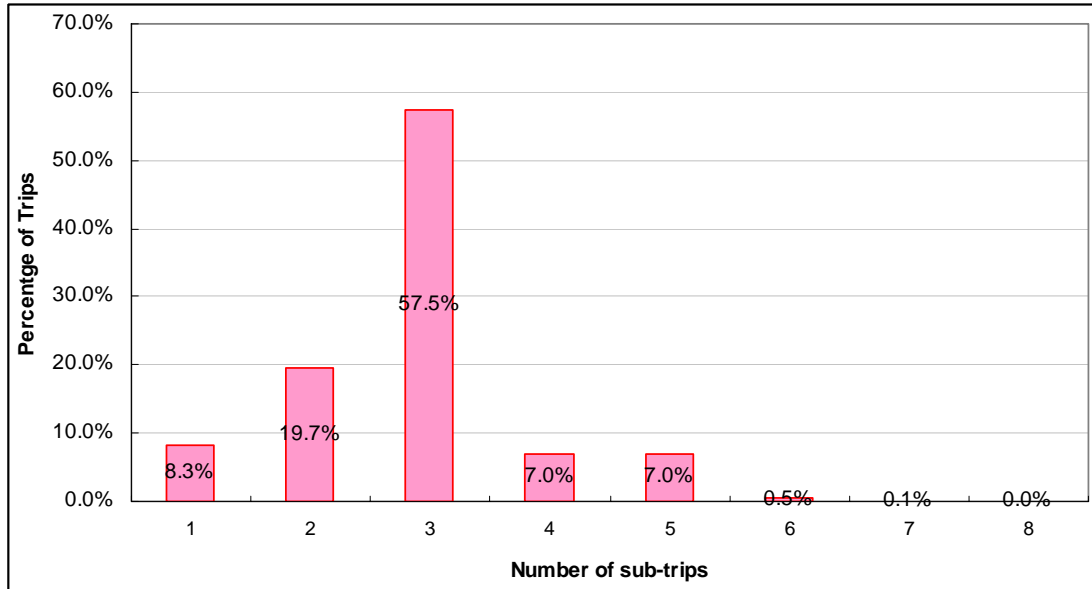


Figure 1.2B.6b: Start time Public holiday

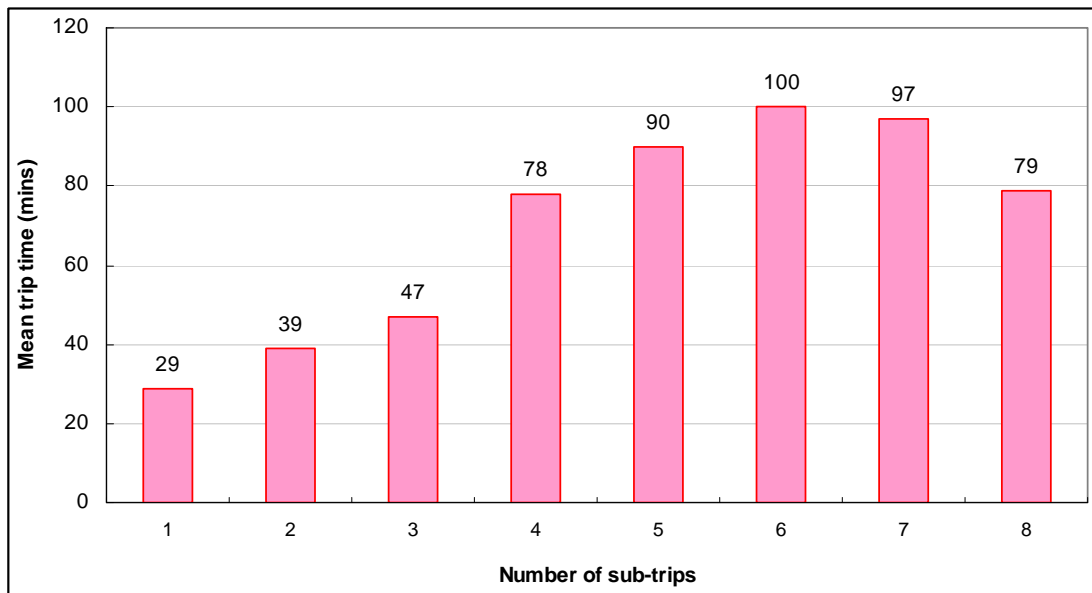


1.2B.7 Figure 1.2B.7a and 1.2B.7b shows that more than half of the last Sunday or public holiday trips made by the PWDs had 3 sub-trips (57.5%) and the mean travel time for them was 46.6 minutes. The overall mean travel time for trips made by the PWDs on the last Sunday or public holidays was 49.2 minutes. (Table 1.2B.7)

**Figure 1.2B.7a: Sub-trips information (last Sunday or public holiday)**



**Figure 1.2B.7b: Sub-trips information (last Sunday or public holiday)**



**Table 1.2B.7: Sub-trips information (last Sunday or public holiday)**

No. of sub-trips	Mean trip time (min.)	Std Deviation of trip time (min.)
1	29	20
2	39	23
3	47	22
4	78	30
5	90	33
6	100	18
7	97	48
8	79	-
Overall	49	29

1.2B.8 Table 1.2B.8 reports the main factors affecting the PWDs' choice of transport modes when making trips:

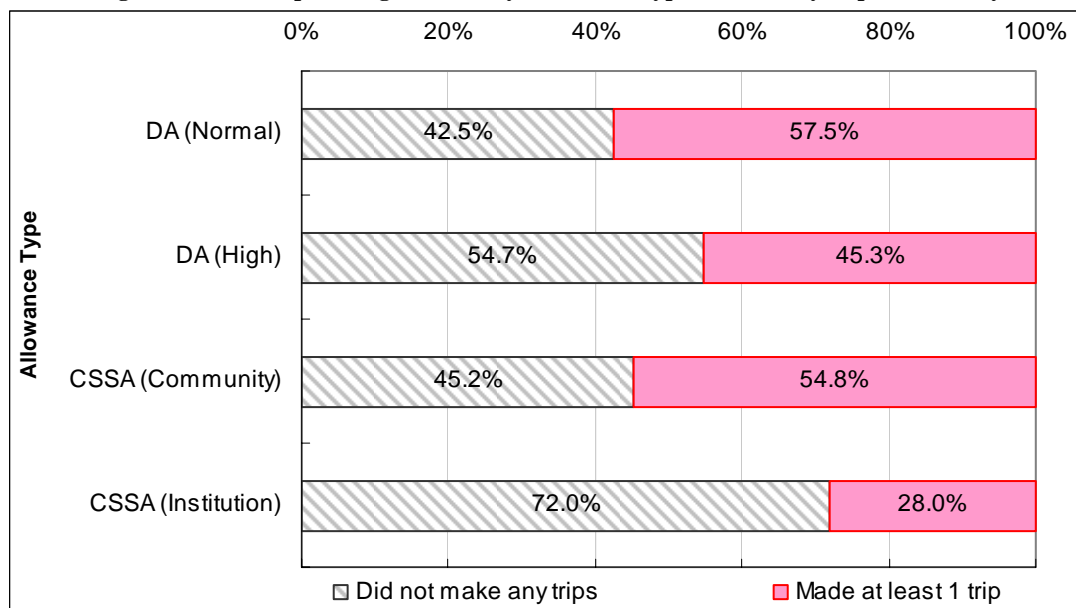
**Table 1.2B.8: Factors affecting the choice of transport modes (last Sunday or public holiday)**

Transport Modes	Top 3 Factors affecting the choice of transport modes
Bus	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
KCR	<ul style="list-style-type: none"> <li>■ Fast services/time efficient</li> <li>■ No other choice</li> <li>■ Convenient alighting locations-near home/ destination</li> </ul>
LRT	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
MTR	<ul style="list-style-type: none"> <li>■ Fast services/time efficient</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Tram	<ul style="list-style-type: none"> <li>■ Reasonable fare/cheap</li> <li>■ Adequate service frequency</li> <li>■ Convenient alighting locations-near home/ destination</li> </ul>
Green Minibus	<ul style="list-style-type: none"> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ No other choice</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>
Ferry	<ul style="list-style-type: none"> <li>■ No other choice</li> <li>■ Personal preference</li> <li>■ Reasonable fare/cheap</li> </ul>
Rehabus	<ul style="list-style-type: none"> <li>■ Arranged by centre/ orgainsation</li> <li>■ No other choice</li> <li>■ Special facilities convenient for boarding/ alighting</li> </ul>
Taxi	<ul style="list-style-type: none"> <li>■ Fast services/time efficient</li> <li>■ Convenient boarding locations-near home/ destination</li> <li>■ Convenient alighting locations-near home/ destination</li> </ul>
Other vehicles	<ul style="list-style-type: none"> <li>■ A car available for driving/ traveling</li> <li>■ Convenient alighting locations-near home/ destination</li> <li>■ Convenient boarding locations-near home/ destination</li> </ul>

1.2B.9 Convenience of alighting locations, the only choice around the starting point and convenience of boarding locations were the three main reasons suggested by the respondents when they choose most transport modes for Sunday or public holiday, with efficiency added for KCR, MTR, cost for tram and ferry and special facilities for Rehabus.

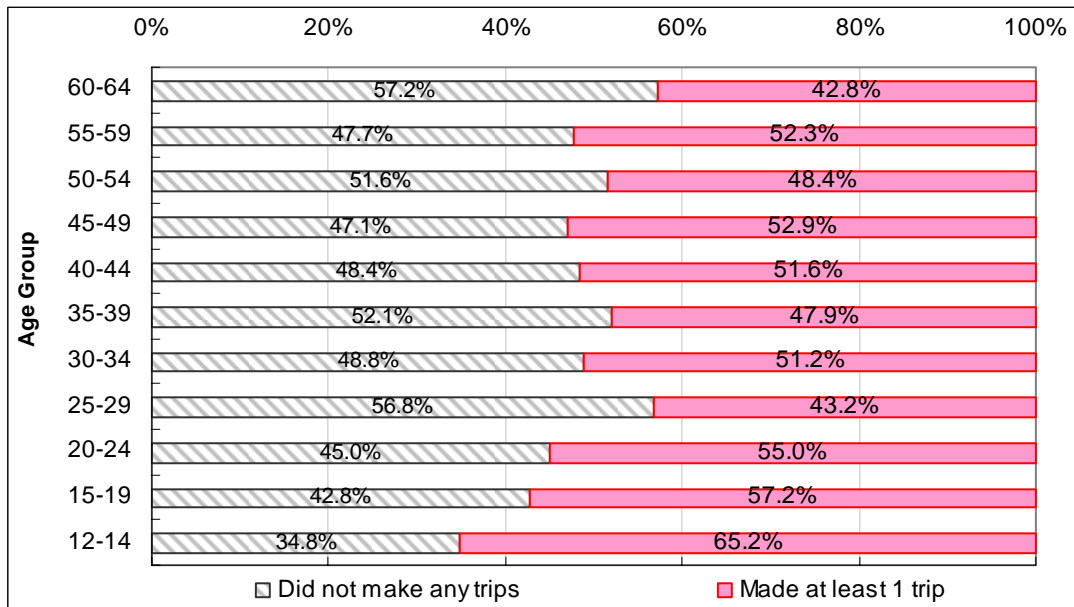
1.2B.10 Significant differences between different allowance types in terms of whether they made any trips on Sunday or public holiday were recorded (Kruskal Wallis Test Chi-Sq = 62.8, p-value<0.001). Respondents who were receiving DA (Normal) or CSSA (Community) were more likely to make at least 1 trip than the other PWDs. (Figure 1.2B.10)

Figure 1.2B.10: Trip making behavior by Allowance Type (last Sunday or public holiday)



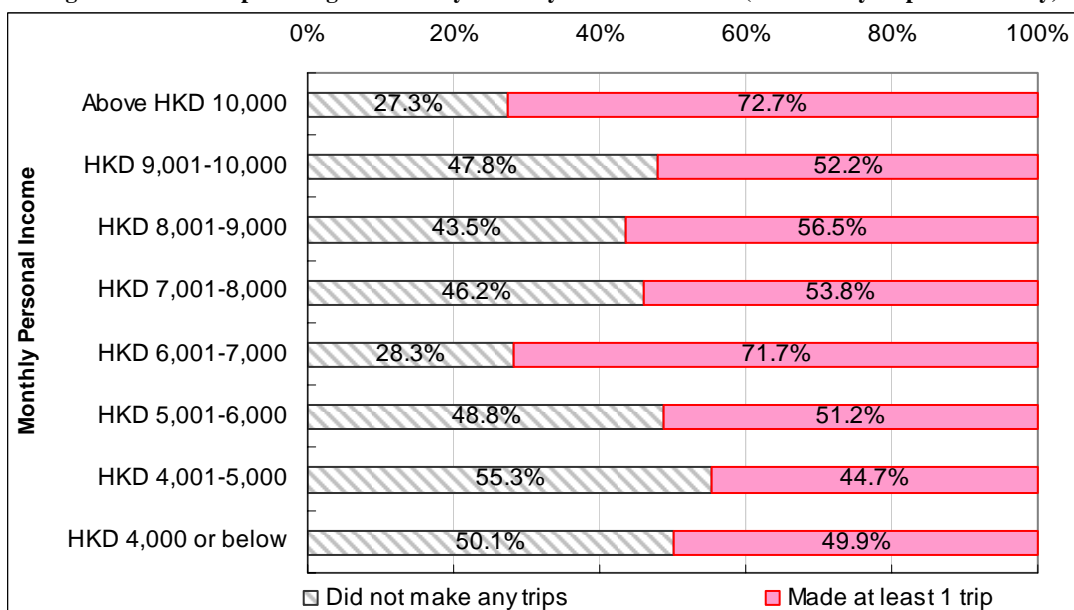
1.2B.11 Figure 1.2B.11 shows the trip making behavior of different age groups on Sunday and public holiday. Young PWDs (aged 12 to 19) were significantly more likely to make trips on a public holiday and Sunday than the older PWDs (Kruskal Wallis Test Chi-Sq = 27.6, p-value = 0.002).

**Figure 1.2B.11: Trip making behavior by Age Group (last Sunday or public holiday)**

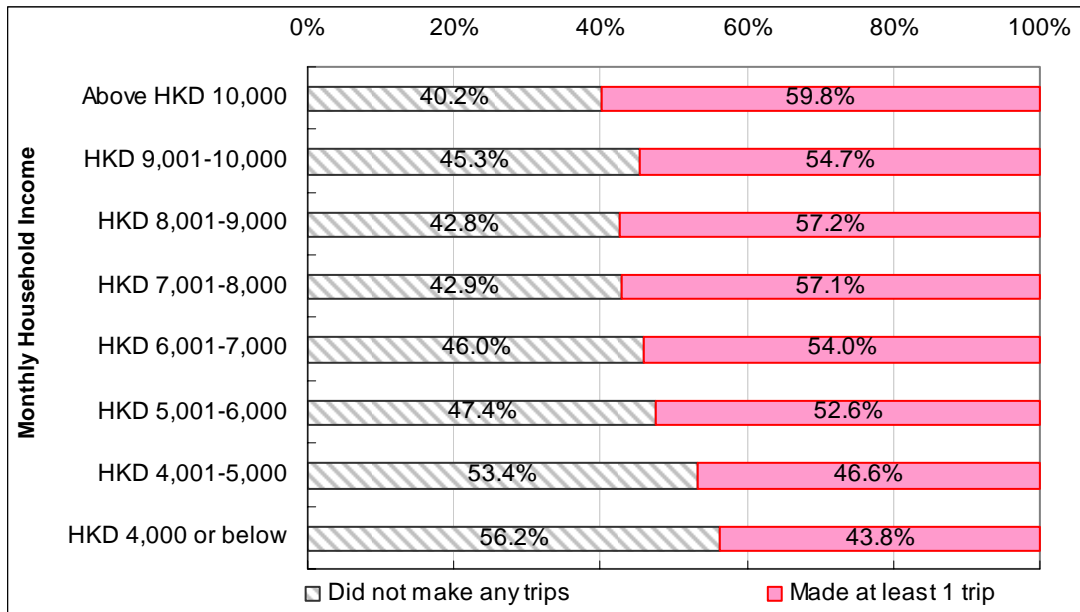


1.2B.12 Figure 1.2B.12 and 1.2B.13 report the trip making behavior on Sunday and public holiday of respondents by their personal and family income. Significant differences were recorded between different personal income groups (Kruskal Wallis Test Chi-Sq = 27.5, p-value<0.001) and household income groups (Kruskal Wallis Test Chi-Sq =41.3, p-value<0.001). PWDs with higher personal or household income were more likely to make trips on a Sunday or public holiday.

**Figure 1.2B.12: Trip making behavior by Monthly Personal Income (last Sunday or public holiday)**



**Figure 1.2B.13: Trip making behavior by Monthly Household Income (last Sunday or public holiday)**





### 1.3 Travel Expenditure Incurred

1.3.1 A total of 3,384 trips (7,962 sub-trips) were made by the 3,160 respondents who reported their trips on the last weekday (from Monday to Saturday), 41.7% of them made at least one sub-trip using any mode of vehicular transport on that day. The travel expenditures by transport mode are presented in Table 1.3.1.

Amongst the respondents, one-fifth of them traveled by bus (20.24%), 9.30% by GMB and 7.69% by MTR. According to the amount spent per PWD on the last weekday, \$2.3 was spent on bus (\$2.7 when including the carers' fee), which is the highest amongst all modes of transport. In terms of the expenditure per sub-trip, apart from taxi (\$34.9), ferry (\$10.8) was leading closely followed by KCR (\$8.4) and Rehabus (\$7.9).

Respondents spent an average of \$4.2 on the five selected transport modes (Bus, KCR, LRT, MTR and tram), which increased to \$4.8 when including the carers' fee. Similar increases were recorded for the expenditure per PWD for all modes, with increased from \$6.9 to \$8.0 when including an estimation of carer expenditure.

**Table 1.3.1: Daily Travel Expenditure (last weekday)**

<b>Last weekday (Mon to Sat) Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users <sup>xii</sup>	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) <sup>xiii</sup> per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>Bus</b>	1,268	20.24	0.4	7,384.1	2.3	2.7	11.5	5.8
<b>KCR</b>	240	4.23	0.1	2,020.2	0.6	0.7	15.1	8.4
<b>LRT</b>	232	3.67	0.1	774.5	0.2	0.3	6.7	3.3
<b>MTR</b>	434	7.69	0.1	2,889.0	0.9	1.0	11.9	6.7
<b>Tram<sup>xiv</sup></b>	62	1.12	0.0	124.0	0.0	0.0	3.5	2.0
<b>Subtotal (the 5 selected modes)</b>	<b>2,235</b>	<b>30.46</b>	<b>0.7</b>	<b>13,191.8</b>	<b>4.2</b>	<b>4.8</b>	<b>13.7</b>	<b>5.9</b>
<b>Green Minibus (GMB)</b>	490	9.30	0.2	1,860.7	0.6	0.7	6.3	3.8
<b>Ferry</b>	13	0.36	0.0	142.9	0.0	0.0	12.4	10.8
<b>Cross boundary Bus</b>	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
<b>Rehabus</b>	35	0.50	0.0	273.3	0.1	0.2	17.2	7.9
<b>Taxi</b>	105	2.37	0.0	3,675.7	1.2	1.2	49.0	34.9
<b>Other vehicles</b>	431	7.54	0.1	2,540.9	0.8	1.2	10.7	5.9
<b>Others<sup>xv</sup></b>	4,652	39.32	1.5	0.0	0.0	0.0	0.0	0.0
<b>All Modes</b>	<b>7,962</b>	<b>41.69</b>	<b>2.5</b>	<b>21,685.3</b>	<b>6.9</b>	<b>8.0</b>	<b>16.5</b>	<b>2.7</b>

<sup>xii</sup> Multiple responses allowed. So, the accumulated percentage may not add up to 100%. [The population is referring to the 3,160 surveyed PWDs.](#)

<sup>xiii</sup> To estimate the travel expenditure per PWD including the carers, we assumed that carers paid the same amount as PWDs on trips where the PWDs reported needing a carer.

<sup>xiv</sup> All the figures in the report for "Tram" only covers trips using Hong Kong Tramways alone, no trips were made using Peak Tram reported by the respondents.

<sup>xv</sup> "Others" included walking, wheelchair, bicycle etc. Detailed explanations can be found in *Appendix IV: Coding Manual*.

1.3.1.1 Table 1.3.1.1 presents the bus travel expenditure on the last weekday. 1,268 sub-trips were made by the respondents on the bus. KMB was the main type of bus they used, 937 sub-trips were made, which comprised 15.15% of the total sub-trips. In terms of travel expenditure per PWD, \$1.7 per PWD was spent on KMB buses which increased to \$2.0 when including the carers' fee. City Bus (\$7.6) was leading in mean expenditure per sub-trip followed by KMB (\$5.7) and NWFB (\$5.7).

**Table 1.3.1.1: Bus Daily Travel Expenditure (last weekday)**

<b>Last weekday (Mon to Sat) Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>Bus</b>	<b>1,268</b>	<b>20.24</b>	<b>0.4</b>	<b>7,384.1</b>	<b>2.3</b>	<b>2.7</b>	<b>11.5</b>	<b>5.8</b>
KMB	937	15.15	0.3	5,367.0	1.7	2.0	11.2	5.7
NWFB	116	2.40	0.0	635.5	0.2	0.2	8.4	5.5
City Bus	142	2.80	0.0	1,077.0	0.3	0.4	12.2	7.6
Other buses <sup>xvi</sup>	73	1.27	0.0	304.6	0.1	0.1	7.6	4.2

1.3.1.2 Only 240 of 7,962 sub-trips in total were made using the KCR during the last weekday. East Rail was more popular than the West rail amongst the surveyed PWDs, and respondents spent an average of \$9.1 on East Rail while they only spent \$5.3 on West Rail. Including the carers' fee has a negligible effect on the travel expenditure per PWD, which means that only a small proportion of the respondents traveled on the KCR with their carers. (Table 1.3.1.2)

**Table 1.3.1.2: KCR Daily Travel Expenditure (last weekday)**

<b>Last weekday (Mon to Sat) Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>KCR</b>	<b>240</b>	<b>4.23</b>	<b>0.1</b>	<b>2,020.2</b>	<b>0.6</b>	<b>0.7</b>	<b>15.1</b>	<b>8.4</b>
KCR East Rail	196	3.44	0.1	1,789.2	0.6	0.6	16.5	9.1
KCR West Rail	44	0.79	0.0	230.9	0.1	0.1	9.2	5.3

<sup>xvi</sup> "Other buses" included Long Win Bus Company limited and New Lantau Bus Company limited.

1.3.2 Table 1.3.2 reports the Sunday or public holiday travel expenditure. A total of 1,940 trips (5,288 sub-trips) were made by the 3,160 respondents on the last Sunday or public holiday (28.3% of them made at least one trip using any mode of public transport on that day). Slightly less than one-sixth of them traveled by bus (13.72%), 6.28% by GMB and 5.66% by other vehicles. The average traveling expenditure per PWD was \$4.4 (\$1.6 was spent on bus) and it increased to \$5.4 when including the carers' fee (\$2.0 was spent on bus). Taxi was the mode of transport with the highest travel expenditure per sub-trip (\$28.3), followed by ferry (\$11.3) and KCR (\$8.8).

**Table 1.3.2: Daily Travel Expenditure (last Sunday or public holiday)**

<b>Last Sunday or Public Holiday Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>Bus</b>	844	13.72	0.3	4,964.2	1.6	2.0	11.4	5.9
<b>KCR</b>	185	3.56	0.1	1,637.6	0.5	0.7	14.5	8.8
<b>LRT</b>	128	2.17	0.0	450.0	0.1	0.2	6.6	3.5
<b>MTR</b>	254	4.59	0.1	1,756.6	0.6	0.7	12.1	6.9
<b>Tram</b>	28	0.55	0.0	51.8	0.0	0.0	3.0	1.8
<b>Subtotal (the 5 selected modes)</b>	<b>1,439</b>	<b>19.90</b>	<b>0.5</b>	<b>8,860.2</b>	<b>2.8</b>	<b>3.6</b>	<b>14.1</b>	<b>6.2</b>
<b>Green Minibus (GMB)</b>	318	6.28	0.1	1,262.1	0.4	0.5	6.4	4.0
<b>Ferry</b>	21	0.47	0.0	239.0	0.1	0.1	16.0	11.3
<b>Cross boundary Bus</b>	0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
<b>Rehabus</b>	7	0.19	0.0	48.2	0.0	0.0	7.8	7.2
<b>Taxi</b>	94	1.84	0.0	2,674.3	0.8	0.8	46.0	28.3
<b>Other vehicles</b>	327	5.66	0.1	793.5	0.3	0.4	4.4	2.4
<b>Others</b>	3,082	26.89	1.0	0.0	0.0	0.0	0.0	0.0
<b>All Modes</b>	<b>5,288</b>	<b>28.30</b>	<b>1.7</b>	<b>13,877.3</b>	<b>4.4</b>	<b>5.4</b>	<b>15.5</b>	<b>2.6</b>

1.3.2.1 844 sub-trips were made using the buses during the last Sunday or public holiday respectively. Of the 844 sub-trips using bus, 644 sub-trips were using KMB which comprised 10.57% of the population, and the mean expenditure per PWD was \$1.2, which increased slightly to \$1.5 when including the carers' fee. City Bus (\$6.7) was leading in the mean travel expenditure per sub-trip, followed by KMB (\$5.9). (Table 1.3.2.1)

**Table 1.3.2.1: Bus Daily Travel Expenditure (last Sunday or public holiday)**

<b>Last Sunday or Public Holiday Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>Bus</b>	<b>844</b>	<b>13.72</b>	<b>0.3</b>	<b>4,964.2</b>	<b>1.6</b>	<b>2.0</b>	<b>11.4</b>	<b>5.9</b>
KMB	644	10.57	0.2	3,808.4	1.2	1.5	11.4	5.9
NWFB	82	1.78	0.0	415.5	0.1	0.2	7.4	5.1
City Bus	71	1.42	0.0	478.9	0.2	0.2	10.6	6.7
Other buses	47	0.94	0.0	261.4	0.1	0.2	8.8	5.5

1.3.2.2 A total of 185 sub-trips were made using KCR. Most KCR users were using East Rail (148 out of 185 sub-trips), amongst the East Rail users, the mean expenditure per sub-trip was \$9.3 compared with \$6.9 spent on West Rail per sub-trip. When taking into account the fare of their carers, the expenditure per PWD spent on East Rail increased very slightly from \$0.4 to \$0.5, while the travel expenditure per PWD remains unchanged for West Rail. (Table 1.3.2.2)

**Table 1.3.2.2: KCR Daily Travel Expenditure (last Sunday or public holiday)**

<b>Last Sunday or Public Holiday Overall (scaled weight) n=3160</b>	Frequency (sub-trips)	% of population who are users	Sub-trips per PWD	Total travel exp.	Travel exp. (exclude carer) per PWD (mean)	Travel exp. (include carer) per PWD (mean)	Travel exp. per user (mean)	Travel exp. per sub-trip (mean)
<b>KCR</b>	<b>185</b>	<b>3.56</b>	<b>0.1</b>	<b>1,637.6</b>	<b>0.5</b>	<b>0.7</b>	<b>14.5</b>	<b>8.8</b>
KCR East Rail	148	2.83	0.0	1,377.6	0.4	0.5	15.4	9.3
KCR West Rail	38	0.74	0.0	260.0	0.1	0.1	11.1	6.9

1.3.3 Concerning the day of week, respondents have higher average traveling expenditure on Monday to Saturday (\$6.9) than on Sunday or public holiday (\$4.4).

## 1.4 Weekly total travel expenditure per PWD

1.4.1 Table 1.4.1 below summarizes the characteristics of the surveyed PWDs made at least one trip who needed a carer when traveling. Significant differences in the need for a carer were recorded amongst different types of surveyed PWDs.

**Table 1.4.1: Characteristics of the PWDs made at least one trip who needed a carer when traveling**

Characteristics of the PWDs		Weekdays		Sunday/Public holiday	
		All trips do NOT need a carer	At least one trip need a carer	All trips do NOT need a carer	At least one trip need a carer
<i>Gender</i>	Male	82.6%	17.4%	82.6%	17.4%
	Female	79.7%	<b>20.3%</b>	72.8%	<b>27.2%</b>
<i>Working Status</i>	Working	88.2%	11.8%	84.2%	15.8%
	Studying	59.6%	<b>40.4%</b>	53.7%	<b>46.3%</b>
	Working & Studying	98.4%	1.6%	97.3%	2.7%
	Neither working nor studying	82.5%	17.5%	79.7%	20.3%
<i>Allowance Type</i>	CSSA (institution)	68.4%	31.6%	73.3%	26.7%
	CSSA (community)	86.9%	13.1%	86.4%	13.6%
	DA (Normal)	80.9%	19.1%	75.6%	24.4%
	DA (Higher)	37.1%	<b>62.9%</b>	31.3%	<b>68.7%</b>
<i>Disability Type</i>	Visual Impairment	75.0%	25.0%	58.2%	<b>41.8%</b>
	Hearing Impairment	92.2%	7.8%	88.6%	11.4%
	Mental Illness	87.4%	12.6%	87.9%	12.1%
	Mental Handicap	59.1%	<b>40.9%</b>	46.8%	<b>53.2%</b>
	Physical Handicap	79.3%	20.7%	74.5%	25.5%
<i>Age</i>	12-14	45.2%	<b>54.8%</b>	42.4%	<b>57.6%</b>
	15-19	63.0%	<b>37.0%</b>	49.6%	<b>50.4%</b>
	20-24	73.4%	<b>26.6%</b>	65.2%	<b>34.8%</b>
	25-29	82.0%	18.0%	76.0%	<b>24.0%</b>
	30-34	83.2%	16.8%	85.1%	14.9%
	35-39	85.8%	14.2%	83.1%	16.9%
	40-44	88.6%	11.4%	81.1%	18.9%
	45-49	89.2%	10.8%	84.7%	15.3%
	50-54	83.3%	16.7%	81.6%	18.4%
	55-59	77.7%	22.3%	78.7%	21.3%
	60-64	81.1%	18.9%	78.4%	21.6%

*\*Bolded figures indicate significantly more PWDs need a carer to accompany them when making trips.*

1.4.2 Amongst the respondents who made at least one trip during the last weekday, a larger proportion who were females, full-time students or younger respondents (especially those aged below 25), required a carer to accompany them on at least one trip. Besides, more PWDs who had mental handicap or were receiving Higher DA required assistance from a carer.

1.4.3 On the other hand, very similar characteristics were noted for the respondents who traveled on the last Sunday or public holiday. Amongst the respondents who made at least one trip during the last Sunday or public holiday, more PWDs who are females, full-time students or younger respondents (especially those aged below 30) required a carer to accompany them when making trip. In terms of disability types and allowance received, more PWDs who had mental handicap, visual impairment or were receiving higher DA required assistance from a carer.

1.4.4 Table 1.4.2 presents the estimated weekly travel expenditure per PWD. The average weekly total expenditure on all modes of public transport per PWD is \$45.8. The respondents spent \$15.4 on buses, followed by \$8.2 on taxi and \$5.2 on other vehicles. For the five selected transport modes (Bus, KCR, LRT, MTR and Tram), \$27.5 was spent in total per week.

1.4.5 When including carers estimated expenditure, \$53.6 was spent on all kinds of public transport. When comparing with the weekly expenditure per PWD excluding carers (\$45.8), a difference of \$7.8 was noted. For the five selected transport modes, the weekly expenditure increased from \$27.5 (excluding carers) to \$31.7 when including the carers' fare. (Table 1.4.2)

**Table 1.4.2: Weekly Travel Expenditure per PWD**

<b>Weekly Total per PWD</b>	<b>Excluding carers</b>	<b>Including carers</b>
Bus	15.4	17.9
KCR	4.3	4.9
LRT	1.6	1.9
MTR	6	6.8
Tram	0.2	0.3
<b>Subtotal (the 5 selected modes)</b>	<b>27.5</b>	<b>31.7</b>
Green Minibus (GMB)	3.9	4.4
Ferry	0.4	0.4
Cross boundary Bus	0	0
Rehabus	0.6	1
Taxi	8.2	8.2
Other vehicles	5.2	7.8
Others	0	0
<b>All Modes</b>	<b>45.8</b>	<b>53.6</b>

1.4.6 Concerning the weekly total spent on buses, respondents spent an average of \$11.1 on KMB per PWD, which is the largest amount when compared with other bus companies. (Table 1.4.3)

1.4.7 The respondents and their carers spent \$13.2 on KMB per week including carers, which is the maximum amongst different bus companies. When comparing the weekly travel expenditure per PWD on all the buses, \$17.9 was recorded when including the carers, but only \$15.4 when excluding carers. (Table 1.4.3)

**Table 1.4.3: Bus Weekly Travel Expenditure per PWD**

<b>Weekly Total per PWD</b>	<b>Excluding carers</b>	<b>Including carers</b>
<b>Bus</b>	<b>15.4</b>	<b>17.9</b>
KMB	11.1	13.2
NWFB	1.3	1.5
City Bus	2.2	2.4
Other buses	0.7	0.8

1.4.8 The average weekly amount spent on KCR East Rail (\$3.7) per PWD was about six times the amount spent on West Rail (\$0.6) per PWD. (Table 1.4.4)

1.4.9 The weekly expenditure per PWD spent on KCR was \$4.9 including carers, which is very similar to the expenditure spent when excluding the carers of \$4.3. The increase was mainly due to the increase in expenditure for East Rail, which increased from \$3.7 (excluding carers) to \$4.2 (including carers). (Table 1.4.4)

**Table 1.4.4: KCR Weekly Travel Expenditure per PWD**

<b>Weekly Total per PWD</b>	<b>Excluding carers</b>	<b>Including carers</b>
<b>KCR</b>	<b>4.3</b>	<b>4.9</b>
KCR East Rail	3.7	4.2
KCR West Rail	0.6	0.7

1.4.10 Table 1.4.5 shows the weekly expenditure per PWD by disability type. Respondents who had visual impairment (\$57.0) or mental handicap (\$52.3) spent slightly more than the respondents with other disability types on traveling. Respondents who had visual or hearing impairment spent more than their counterparts on bus, KCR, LRT, MTR and tram, with an amount of \$44.3 and \$41.1 spent in total respectively, than on other transport modes. Respondents who did not have a physical handicap spent more of their travel expenses on bus, while the respondents who had a physical handicap spent substantially more on taxis (\$11.5) than the other respondents.

1.4.11 The weekly expenditure per PWD who had mental handicap or visual handicap recorded the largest increases when including carers, they spent an average of \$69.2 (\$57.0 excluding carers) and \$72.1 (\$52.3 excluding carers) respectively. (Table 1.4.5)

**Table 1.4.5: Weekly Travel Expenditure per PWD (by Disability Type)**

<b>Weekly Total per PWD</b>	<b>Visual impairment</b>		<b>Hearing impairment</b>		<b>Mental illness</b>		<b>Mental handicap</b>		<b>Physical handicap</b>	
	<b>Excluding carers</b>	<b>Including carers</b>	<b>Excluding carers</b>	<b>Including carers</b>	<b>Excluding carers</b>	<b>Including carers</b>	<b>Excluding carers</b>	<b>Including carers</b>	<b>Excluding carers</b>	<b>Including carers</b>
Bus	22.7	27.7	24.4	27.3	13.7	15.3	17.3	21.3	15.1	18
KCR	6.1	7.8	4.2	4.3	4.4	4.7	4	5.7	4.1	4.7
LRT	1	1.1	1.7	2.6	1.7	2	2.4	3.7	1.3	1.6
MTR	14.2	17.4	10.7	10.8	6.8	7.3	4.8	7.3	4.4	5.3
Tram	0.3	0.3	0.1	0.1	0.2	0.2	1.5	0.6	0.2	0.2
<b>Subtotal (the 5 selected modes)</b>	<b>44.3</b>	<b>54.4</b>	<b>41.1</b>	<b>45.2</b>	<b>26.9</b>	<b>29.5</b>	<b>30.1</b>	<b>38.7</b>	<b>25.2</b>	<b>29.8</b>
Green Minibus (GMB)	4.3	5.3	2.9	3.1	4.1	4.5	1.7	2.6	4.1	4.7
Ferry	0.8	1.4	0.1	0.1	0.3	0.3	0.6	0.6	0.5	0.5
Cross boundary Bus	0	0	0	0	0	0	0	0	0	0
Rehabus	0.2	0.2	0	0	0.4	0.7	0.2	0.3	0.9	1.7
Taxi	5.9	5.9	2.8	2.8	6.9	6.9	3.4	3.4	11.5	11.5
Other vehicles	1.5	2	2.9	3.5	4.5	6.7	16.2	26.6	4	5.7
Others	0	0	0	0	0	0	0	0	0	0
<b>All Modes</b>	<b>57</b>	<b>69.2</b>	<b>49.8</b>	<b>54.7</b>	<b>43.1</b>	<b>48.6</b>	<b>52.3</b>	<b>72.1</b>	<b>46.2</b>	<b>53.7</b>

1.4.12 Amongst different bus companies, KMB was leading in weekly travel expenditure per PWD amongst the five disability types presented in Table 1.4.6, ranging from \$9.1 (MI) to \$18.7 (Hearing impairment). The average expenditures on other bus companies were relatively small. (Table 1.4.6)

1.4.13 Similar to the case when excluding carers, a significant part of the travel expenditure on buses was for KMB. The impact of including carers on weekly travel expenditure was not very significant, only a slight increase for each disability type was recorded. (Table 1.4.6)

**Table 1.4.6: Bus Weekly Travel Expenditure per PWD (by Disability Type)**

Weekly Total per PWD	Visual impairment		Hearing impairment		Mental illness		Mental handicap		Physical handicap	
	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers
<b>Bus</b>	<b>22.7</b>	<b>27.7</b>	<b>24.4</b>	<b>27.3</b>	<b>13.7</b>	<b>15.3</b>	<b>17.3</b>	<b>21.3</b>	<b>15.1</b>	<b>18</b>
KMB	17.1	21.3	18.7	20.4	9.1	10.4	14.9	18.4	11	13.6
NWFB	2.3	2.7	1.2	1.3	1.2	1.2	1	1	1.6	1.9
City Bus	2.8	3.3	2.9	2.9	2.8	3	1	1.2	1.9	1.9
Other buses	0.4	0.5	1.6	2.8	0.7	0.8	0.5	0.7	0.6	0.6

1.4.14 Most of the expenditure was spent on East Rail rather than West Rail. Respondents who had visual impairment spent \$5.5 on East Rail per PWD, which is the maximum expenditure amongst all the disability types. (Table 1.4.7)

1.4.15 Respondents who had visual impairment or mental handicap spent \$7.8 and \$5.7 respectively per week with their carers on KCR, which are the maximum increases when comparing with the expenditure spent without the carers (\$6.1 and \$4.0 respectively excluding carers).

**Table 1.4.7: KCR Weekly Travel Expenditure per PWD (by Disability Type)**

Weekly Total per PWD	Visual impairment		Hearing impairment		Mental illness		Mental handicap		Physical handicap	
	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers
<b>KCR</b>	<b>6.1</b>	<b>7.8</b>	<b>4.2</b>	<b>4.3</b>	<b>4.4</b>	<b>4.7</b>	<b>4.0</b>	<b>5.7</b>	<b>4.1</b>	<b>4.7</b>
KCR East Rail	5.5	7	3.3	3.4	3.5	3.6	3.7	5.3	3.9	4.4
KCR West Rail	0.6	0.8	0.9	0.9	0.9	1.1	0.3	0.5	0.2	0.3

1.4.16 Weekly expenditures per PWD by allowance type are summarized in Table 1.4.8. Respondents receiving Normal DA (\$31.4) spent more on trips using the five selected transport modes than the respondents receiving Higher DA (\$14.5). The respondents receiving CSSA and living in institution only spent \$5.9 on average on bus, KCR, LRT, MTR and tram per week, which is the lowest amongst the expenditures within the six allowance groups. Concerning the total weekly travel expenses, respondents receiving CSSA and living in an institution only spent \$16.2 per week, which is significantly less than those living in the community (\$40.7).



1.4.17 Respondents receiving Higher DA spent \$85.6 per week on travel expenditure with their carers, which is significantly increased when compared with their expenditure excluding carers (\$59.6). Amongst the other disability types, the increases in weekly traveling expenditure with carers were small when compared with the increase for the Higher DA recipients.

**Table 1.4.8: Weekly Travel Expenditure per PWD (by Allowance Type)**

Weekly Total per PWD	CSSA (Overall)		CSSA (Institution)		CSSA (Community)		DA (Overall)		DA (Higher)		DA (Normal)	
	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers
<b>Bus</b>	13.0	14.9	3.6	4.2	14.7	16.8	16.8	19.8	7.8	12.7	17.5	20.3
<b>KCR</b>	4.0	4.2	0.2	0.2	4.6	4.9	4.6	5.4	2.4	3.9	4.7	5.5
<b>LRT</b>	1.8	2.1	1.1	1.3	2.0	2.2	1.4	1.8	0.9	1.6	1.4	1.8
<b>MTR</b>	4.5	4.7	1.0	1.0	5.2	5.3	7.1	8.3	3.2	4.9	7.4	8.5
<b>Tram</b>	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.4
<b>Subtotal (the 5 selected modes)</b>	<b>23.5</b>	<b>25.9</b>	<b>5.9</b>	<b>6.7</b>	<b>26.7</b>	<b>29.4</b>	<b>30.2</b>	<b>35.6</b>	<b>14.5</b>	<b>23.2</b>	<b>31.4</b>	<b>36.5</b>
<b>Green Minibus (GMB)</b>	3.5	3.8	1.9	2.3	3.7	4.1	4.1	4.7	1.4	1.9	4.3	4.9
<b>Ferry</b>	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.7	0.1	0.3	0.7	0.7
<b>Cross boundary Bus</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Rehabus</b>	0.5	0.9	0.2	0.3	0.5	1.0	0.6	1.1	6.3	11.4	0.2	0.3
<b>Taxi</b>	6.5	6.5	4.9	4.9	6.8	6.8	9.3	9.3	23.2	23.2	8.3	8.3
<b>Other vehicles</b>	3.0	3.9	3.3	5.6	2.9	3.5	6.6	10.2	14.1	25.5	6.0	9.1
<b>Others</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>All Modes</b>	<b>36.9</b>	<b>41.0</b>	<b>16.2</b>	<b>19.9</b>	<b>40.7</b>	<b>44.8</b>	<b>51.5</b>	<b>61.7</b>	<b>59.6</b>	<b>85.6</b>	<b>50.8</b>	<b>59.8</b>

1.4.18 Respondents living in an institution receiving CSSA spent less on buses amongst different allowance types. Respondents receiving DA (Normal) allowance spent \$12.8 per week on KMB, followed by respondents receiving CSSA living in the community (\$10.2). The weekly expenditures spent on other bus companies were comparatively small. (Table 1.4.9)

1.4.19 The weekly travel expenditure on buses from the Higher DA recipients with their carers recorded a comparatively larger increase when compared with the expenditure excluding carers than the other allowance groups, their expenditure increased from \$7.8 excluding carers to \$12.7 including carers. (Table 1.4.9)

**Table 1.4.9: Bus Weekly Travel Expenditure per PWD (by Allowance Type)**

Weekly Total per PWD	CSSA (Overall)		CSSA (Institution)		CSSA (Community)		DA (Overall)		DA (Higher)		DA (Normal)	
	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers
<b>Bus</b>	<b>13.0</b>	<b>14.9</b>	<b>3.6</b>	<b>4.2</b>	<b>14.7</b>	<b>16.8</b>	<b>16.8</b>	<b>19.8</b>	<b>7.8</b>	<b>12.7</b>	<b>17.5</b>	<b>20.3</b>
KMB	9.1	10.7	2.7	2.8	10.2	12.2	12.3	14.7	5.9	9.7	12.8	15.1
NWFB	0.9	0.9	0.2	0.3	1.0	1.0	1.7	1.9	0.8	1.4	1.7	1.9
City Bus	2.7	2.8	0.5	0.9	3.1	3.1	2.0	2.1	0.5	0.7	2.1	2.2
Other buses	0.4	0.5	0.2	0.2	0.4	0.5	0.9	1.0	0.7	0.8	0.9	1.0

1.4.20 East Rail was leading in weekly KCR travel expenditures per PWD amongst different allowance types, ranging from \$0.1 (CSSA (Institution)) to \$4.3 (CSSA (Community)). On average, weekly expenditure per PWD for West Rail was less than \$1. (Table 1.4.10)

1.4.21 Different types of allowance recipients spent more on East Rail than the West Rail. The impact of traveling with carers on the weekly expenditure spent on KCR was tiny, only substantial increases were recorded when for Higher DA from \$2.4 to \$3.9. (Table 1.4.10)

**Table 1.4.10: KCR Weekly Travel Expenditure per PWD (by Allowance Type)**

Weekly Total per PWD	CSSA (Overall)		CSSA (Institution)		CSSA (Community)		DA (Overall)		DA (Higher)		DA (Normal)	
	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers	Excluding carers	Including carers
<b>KCR</b>	<b>4.0</b>	<b>4.2</b>	<b>0.2</b>	<b>0.2</b>	<b>4.6</b>	<b>4.9</b>	<b>4.6</b>	<b>5.4</b>	<b>2.4</b>	<b>3.9</b>	<b>4.7</b>	<b>5.5</b>
KCR East Rail	3.7	3.8	0.1	0.1	4.3	4.5	3.8	4.5	2.0	3.4	4.0	4.6
KCR West Rail	0.3	0.3	0.1	0.1	0.3	0.3	0.7	0.9	0.4	0.5	0.8	0.9

## 1.5 Limitations of the Survey

1.5.1 One of the major concerns was that the PWDs who had hearing impairment or mental handicap needed to be handled with great care from the process of obtaining consent to the data collection process. The particular difficulty of obtaining consent for the respondents who had hearing impairment was noticed at the stage of contacting the PWDs to ask for their agreement before the commencement of the project. The number of successful interviewed hearing impairment cases was only 260 out of a total of 3,160 cases (most of the successful interviews were completed by the interviewers communicated with the PWDs who had hearing impairment by hand writing, so sign language was not needed). Applying post-stratified weighting to the data should have minimized the effect of contact problems in particular disability groups.

1.5.2 In this survey, 1,977 interviews were completed by the PWDs, while another 1,183 were completed by their carers. Some of the trip or sub-trip information was lost if the interviews were completed by the carers. For example, the trip purposes, reasons for choosing particular mode of transport or the length of the sub-trips often could not be answered by carers. And the carer who answered the questionnaire may not be the person who accompanies the PWDs when traveling.

## **Chapter Two: Fare Concessions Impact**

### **2.1 Introduction and Background Information**

2.1.1 Before the commencement of the survey, members of the LegCo Subcommittee to Study the Transport Needs of and Provision of Concessionary Public Transport Fares for Persons with Disabilities (the Subcommittee) requested the administration to consult the disabled community and public transport operators about providing fare concession to the PWDs, including two railway corporations, the franchised bus companies and tram operator. The five modes of bus, KCR, LRT, MTR and tram were selected and listed in the questions related to hypothetical fare concession.

2.1.2 The requirement was specified in the third Subcommittee Meeting of the Legislative Council to Study the Transport Needs of and Provision of Concessionary Public Transport Fares for Persons with Disabilities meeting held on 16 February 2006.

2.1.3 At the Subcommittee meeting on 10 July 2006, Members of the Subcommittee requested that the survey should include questions to assess how PWDs would change their use of public transport services, particularly the additional trips that would be made, if fare concessions were provided on the above five modes. Having regard to Subcommittee members' request, hypothetical questions were included in the questionnaire to ask respondents to estimate their change in public transport usage or expenditure on buses, MTR, LCR, LRT and tram if 50% fare concession for PWDs were provided on Sunday/public holiday only, during non-peak hours on all days or whole day throughout the year<sup>xvii</sup>.

### **2.2 Limitations**

2.2.1 Some of the expenditure estimates include estimated travel for the carers, which may be significantly under or overestimated. This is because we assumed that carers paid the same amount as PWDs on trips where the PWDs reported needing a carer. In reality, some of the PWDs may need more than one carer when making their trips, but we assumed only one carer in our estimation. On the other hand, the carers' fee was assumed to be the same as the PWDs fare, whereas the carers may actually be paying more (if the PWD is a child) or less (if the carer is elderly) than the PWD fare.

2.2.2 The answers to all the hypothetical questions can only be used as a reference, as the answers of the surveyed PWDs cannot be tested until a real fare concession comes into effect.

2.2.3 General difficulties in answering hypothetical questions were noted during the survey. The surveyed PWDs generally found it quite difficult to answer the percentage increase in use of a mode of transport under different hypothetical concessions even if they were a current user of that mode of transport. They found it even more difficult to estimate their likely weekly expenditure of modes of transport that they are not current users of, under the hypothetical concessions. The missing

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<sup>xvii</sup> The estimated traffic fares of the carers were not collected when the PWDs were answering the hypothetical questions, so the estimated weekly cashflow and revenue forgone in Chapter Two were only based on the PWDs' traffic fare. The impact of carers' fare under hypothetical fare concessions was not taken into account in this survey.

values affect the estimation of the cashflow and the revenue forgone, so alternative estimation methods were introduced. For the percentage increases, the mean increase for those who could answer this question was used to impute the missing increase for those who could not answer. This is reasonable as it automatically scales current use. For new customers, the missing amount of weekly expenditure was estimated in two different ways. Firstly, we estimated using the mean amount for new customers who could estimate expenditure, which should be an upper bound on expenditure. Secondly, we assumed that new customers who could not estimate the amount would spend very little, so we estimated zero weekly expenditure. This should serve as a lower bound for estimated expenditure.

2.2.4 It was not practical to assess substitutional effects (i.e. any decrease in use of one transport mode as a result of increase in other modes, so the estimates may show a positive bias as a result, although the major substitution effect is likely to be on modes without concession).

2.2.5 Citybus offers a 50% full-day concession to passengers aged over 60 years. This is implicitly accounted for by asking for the respondents about actual expenses. However, it was not explicitly taken into account for the questions on possible new concessions which imply that there is an additional concession, however only 3 respondents were in this situation. The same situation exists for PWDs who enjoyed other concessions now, such as the student 50% full-day concession when using the MTR (there are 52 respondents in this situation).

2.2.6 The answers to all the hypothetical questions can only be used as a reference, as the answers of the surveyed PWDs cannot be tested until a real fare concession comes into effect.

### **2.3 Fare concession impact: An Overview**

2.3.1 Based on the responses from the surveyed PWDs to the hypothetical questions, amongst the five selected transport modes, the bus was leading in the proportion of existing customers (53.5%), followed by MTR (24.8%), LRT (11.4%) and KCR (11.3%). Only 5.5% of the respondents were using the tram at least once a week.

2.3.2 An average increase of more than 100% in trips for existing customers was reported for the MTR and KCR full day fare concession, 103.57% and 101.52% were reported respectively.

2.3.3 Increases in trips for existing customers were also recorded for the bus (72.41%), LRT (70.33%) and tram (69.96%). But the increases were not as largely as for the KCR and MTR users.

2.3.4 More than one-third of respondents not usually using MTR would consider using it under the full day concession (37.80%, comprising 28.43% of the total population), followed closely by bus (32.40%, comprising 15.07% of the total population), KCR (30.40%, comprising 26.96% of the total population).

2.3.5 Amongst the respondents who could estimate the expected amount to be spent on a particular mode of transport under the full day fare concession, KCR was leading in the average estimated amount to be spent (\$30.62). MTR was in the second place (\$27.09) and the bus in the third place (\$22.32).

## 2.4 Fare concession impact by transport modes

2.4.1 Table 2.4.1 shows the estimated travel expenditure on MTR after concession. A quarter of the PWDs traveled by MTR at least once a week (24.8%). The mean percentage increase in trips for current users ranged from 48.5% (public holiday concession) to 103.6% (full day concession). 12.3% (public holiday concession) to 16.3% (full day concession) of the respondents expected to start using MTR under the concession, the average amount estimated to be spent on the MTR by new customers also increasing from \$18.09 (public holiday concession) to \$27.09 (full day concession) per week.

**Table 2.4.1: Estimated Expenditure per PWD After Concession (MTR)**

MTR			50% Fare concession		
			Public holiday	Non-peak hours	Full-day
current user	24.80%	cannot answer the %:	7.60%	7.80%	9.80%
		a. mean % within those who can answer:	48.53%	68.99%	103.57%
non-current user	75.20%	% of non-current users who will consider using it:	29.00%	32.80%	37.80%
		a. overall % of PWDs who will consider using it:	21.81%	24.67%	28.43%
		b. % cannot answer the amount among those non-current users who will consider using it:	43.60%	43.60%	42.70%
		c. overall % of PWDs who answered the amount:	12.30%	13.91%	16.29%
		d. mean amount of increase within those who can answer:	HK\$18.09	HK\$21.62	HK\$27.09

2.4.2 In Table 2.4.2, 11.3% of the surveyed PWDs were current KCR users. The current users expected to increase their usage by 50.6% under public holiday concession and by 101.5% under full day concession. 11.6% (public holiday concession) to 14.9% (full day concession) of the respondents expected to start using KCR at least once a week under the concession. The new customers are estimated to spend \$22.02 (public holiday concession) to \$30.62 (full day concession) per week.

**Table 2.4.2: Estimated Expenditure per PWD After Concession (KCR)**

KCR			50% Fare concession		
			Public holiday	Non-peak hours	Full-day
current user	11.30%	cannot answer the %:	3.30%	5.30%	6.00%
		a. mean % within those who can answer:	50.60%	65.28%	101.52%
non-current user	88.70%	% of non-current users who will consider using it:	23.80%	26.50%	30.40%
		a. overall % of PWDs who will consider using it:	21.11%	23.51%	26.96%
		b. % cannot answer the amount among those non-current users who will consider using it:	45.00%	45.00%	44.70%
		c. overall % of PWDs who answered the amount:	11.61%	12.93%	14.91%
		d. mean amount of increase within those who can answer:	HK\$22.02	HK\$25.29	HK\$30.62

2.4.3 The characteristics of the LRT users under concession are quite similar to the KCR users. 11.4% of the PWDs were current users of LRT and they expected to increase their usage by 40.03% (public holiday concession) to 70.33% (full day concession) under the different fare concession options. The estimated percentages of new customers were expected to increase, ranging from 6.1% (public holiday concession) to 8.0% (full day concession). The estimated amount to be spent on LRT by new customers ranged from \$18.68 (public holiday concession) to \$21.14 (full day concession) per week. (Table 2.4.3)

**Table 2.4.3: Estimated Expenditure per PWD After Concession (LRT)**

LRT			50% Fare concession		
			Public holiday	Non-peak hours	Full-day
current user	11.40%	cannot answer the %:	7.60%	7.20%	7.30%
		a. mean % within those who can answer:	40.03%	55.97%	70.33%
non-current user	88.60%	% of non-current users who will consider using it:	12.90%	14.40%	17.10%
		a. overall % of PWDs who will consider using it:	11.43%	12.76%	15.15%
		b. % cannot answer the amount among those non-current users who will consider using it:	46.80%	46.40%	47.30%
		c. overall % of PWDs who answered the amount:	6.08%	6.84%	7.98%
		d. mean amount of increase within those who can answer:	HK\$18.68	HK\$18.34	HK\$21.14

2.4.4 Table 2.4.4 shows that more than half of the respondents were existing bus users (53.5%), which is far more than the proportion of existing users of the other four modes. The mean percentage increase in trips for existing users ranged from 39.7% (public holiday concession) to 72.4% (full day concession). Under the fare concession, 7.6% (public holiday concession) to 9.0% (full day concession) of the respondents expected to start using the bus, and they are estimated to spend \$16.05 (public holiday concession) to \$22.32 (full day concession) per week.

**Table 2.4.4: Estimated Expenditure per PWD After Concession (Bus)**

Bus			50% Fare concession		
			Public holiday	Non-peak hours	Full-day
current user	53.50%	cannot answer the %:	7.50%	8.10%	9.30%
		a. mean % within those who can answer:	39.71%	50.69%	72.41%
non-current user	46.50%	% of non-current users who will consider using it:	26.40%	29.10%	32.40%
		a. overall % of PWDs who will consider using it:	12.28%	13.53%	15.07%
		b. % cannot answer the amount among those non-current users who will consider using it:	38.00%	42.00%	40.30%
		c. overall % of PWDs who answered the amount:	7.61%	7.85%	8.99%
		d. mean amount of increase within those who can answer:	HK\$16.05	HK\$19.31	HK\$22.32

2.4.5 The tram had the smallest proportion of existing users amongst the five selected transport modes in this survey (5.5%). The mean percentage increase in trips under concession ranged from 44.0% (public holiday concession) to 70.0% (full day concession). It is estimated to have 6.0% (public holiday concession) to 7.6% (full day concession) new customers under the fare concession and the new users are estimated to spend \$6.95 (public holiday concession) to \$10.90 (full day concession) per week. (Table 2.4.5)

**Table 2.4.5: Estimated Expenditure per PWD After Concession (Tram)**

Tram			50% Fare concession		
			Public holiday	Non-peak hours	Full-day
<i>current user</i>	5.50%	cannot answer the %:	4.70%	6.50%	6.70%
		a. mean % within those who can answer:	43.96%	51.38%	69.96%
<i>non-current user</i>	94.50%	% of non-current users who will consider using it:	10.20%	11.40%	13.00%
		a. overall % of PWDs who will consider using it:	9.64%	10.77%	12.29%
		b. % cannot answer the amount among those non-current users who will consider using it:	38.00%	37.80%	38.20%
		c. overall % of PWDs who answered the amount:	5.98%	6.70%	7.59%
		d. mean amount of increase within those who can answer:	HK\$6.95	HK\$7.87	HK\$10.90

## 2.5 Estimated expenditure per PWD after concession

2.5.1 The surveyed PWDs were asked to estimate the amount they expect to spend under 50% fare concessions for three different timeslots (Sundays & Public Holidays, Off-peak and full day) on the five selected transport modes, the findings were presented in Table 2.5.1. The total weekly transport expenditure for the selected modes (MTR, KCR, LRT, Bus & Tram) per PWD is estimated as \$27.53 with no concession, \$39.66 under the public holiday concession and \$43.8 under the full day concession using the upper bound estimation. However, the figures allowing only for the increase in use for existing customers are \$26.30 under the Sunday and public holiday concession and \$19.94 under the full day concession.

**Table 2.5.1: Estimated Expenditure per PWD After Concession (Overall)**

All modes with concession (MTR, KCR, LRT, Bus & Tram)	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	27.53	27.53	27.53
Public holiday 50% fare concession	26.30	33.85	39.66
Non-peak hours 50% fare concession	21.12	30.70	38.19
Full day 50% fare concession	19.94	33.44	43.82

2.5.2 The estimated increase is not evenly spread across the five selected modes, with the major increases being for MTR and KCR. For MTR, the estimated upper bound weekly expenditure is \$6.04 with no concession, increasing to \$9.72 with the public holiday concession and \$12.18 under the full day concession. Again, excluding new customers, the rates show small declines to \$5.78 under the public holiday concession and \$4.47 under the full day concession. (Table 2.5.2)

**Table 2.5.2: Estimated Expenditure per PWD After Concession (MTR)**

MTR	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	6.04	6.04	6.04
Public holiday 50% fare concession	5.78	8.01	9.72
Non-peak hours 50% fare concession	4.79	7.79	10.13
Full day 50% fare concession	4.47	8.88	12.18



2.5.3 Regarding the use of the KCR, the weekly total expenditure per PWD was \$4.30 under no concession, using the upper bound, \$8.72 under the public holiday concession and \$11.31 under the full day concession, while excluding new customers, the rates are \$4.07 under the public holiday concession and \$3.05 under the full day concession. (Table 2.5.3)

**Table 2.5.3: Estimated Expenditure per PWD After Concession (KCR)**

KCR	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	4.30	4.30	4.30
Public holiday 50% fare concession	4.07	6.62	8.72
Non-peak hours 50% fare concession	3.22	6.49	9.16
Full day 50% fare concession	3.05	7.62	11.31

2.5.4 Reflecting the smaller coverage area for the LRT, the weekly estimate per PWD is \$1.59 under no concession, using the upper bound , \$3.64 under the public holiday concession and \$4.28 under the full day concession. Excluding new customers, the figures reduce to \$1.51 under the public holiday concession and \$1.07 under the full day concession. (Table 2.5.4)

**Table 2.5.4: Estimated Expenditure per PWD After Concession (LRT)**

LRT	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	1.59	1.59	1.59
Public holiday 50% fare concession	1.51	2.65	3.64
Non-peak hours 50% fare concession	1.18	2.44	3.52
Full day 50% fare concession	1.07	2.76	4.28

2.5.5 Table 2.5.5 shows that the concessions have much less effect on the spending behavior of bus users. Respondents normally spent \$15.35 per week on the bus under no concession, using upper bound slightly increase to \$16.67 under the public holiday concession and decreasing slightly to \$14.53 under the full day concession. Excluding new customers, the expenditure on bus reduces to \$14.70 under the public holiday concession and \$11.17 under the full day concession.

**Table 2.5.5: Estimated Expenditure per PWD After Concession (Bus)**

Bus	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	15.35	15.35	15.35
Public holiday 50% fare concession	14.70	15.92	16.67
Non-peak hours 50% fare concession	11.75	13.27	14.37
Full day 50% fare concession	11.17	13.17	14.53

2.5.6 Only \$0.25 using upper bound per PWD per week was spent on tram amongst the respondents without concession. Without new customers, the amount spent is quite stable, with \$0.24 under the public holiday concession and \$0.19 under the full day concession. Including new customers shows an increase that is large in percentage term to \$0.91 under the public holiday concession and \$1.53 under the full day concession. (Table 2.5.6)

**Table 2.5.6: Estimated Expenditure per PWD After Concession (Tram)**

Tram	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	0.25	0.25	0.25
Public holiday 50% fare concession	0.24	0.66	0.91
Non-peak hours 50% fare concession	0.17	0.70	1.02
Full day 50% fare concession	0.19	1.01	1.53

2.5.7 Amongst the disability types, the full day concession raises all the weekly averages above \$40 using the upper bound, and all the allowance types show a substantial increase in weekly average expenditure under the full day concession of \$15 to \$20, the increases were mainly due to new customers under the concessions. (Table 2.5.7&2.5.8)

**Table 2.5.7: Estimated Expenditure per PWD After Concession by Disability Type**

<b>All modes with concession (Overall)</b>	Overall	Visual impairment	Hearing impairment	Mental illness	Mental handicap	Physical handicap
No concession	27.53	44.33	41.10	26.92	30.15	28.18
Full day 50% traffic concession (excluding new customers)	19.94	33.71	27.14	19.84	22.08	20.26
Full day 50% traffic concession including new customers(Upper bound)	43.82	54.68	49.45	44.37	45.24	48.77

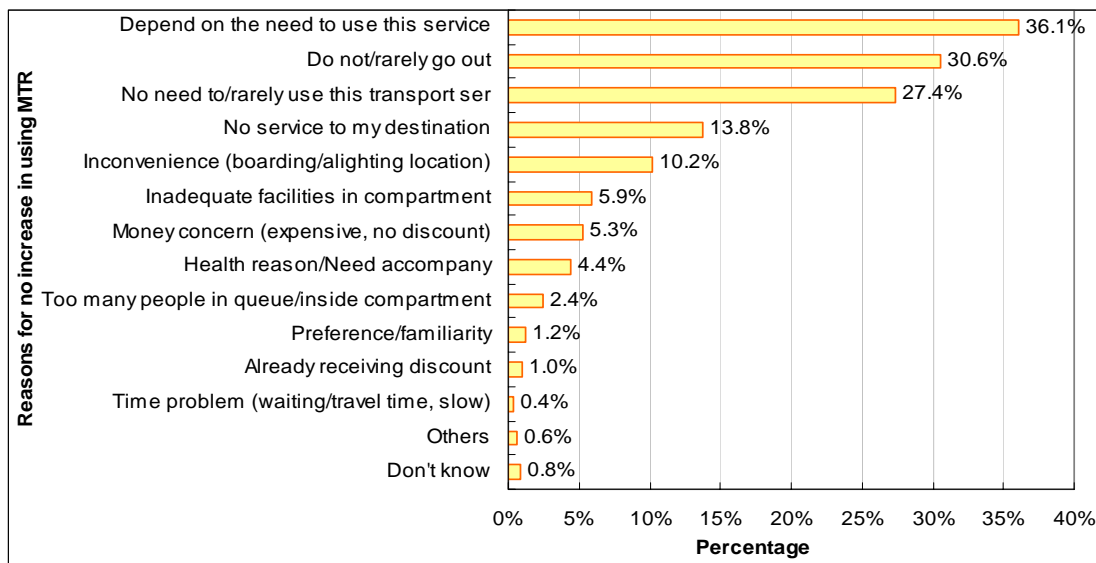
**Table 2.5.8: Estimated Expenditure per PWD After Concession by Allowance Type**

<b>All modes with concession (Overall)</b>	Overall	CSSA (overall)	CSSA (Institution)	CSSA (Community)	DA (overall)	DA (Higher)	DA (Normal)
No concession	27.53	23.48	5.91	26.67	30.19	14.53	31.41
Full day 50% traffic concession (excluding new customers)	19.94	16.96	3.84	19.33	21.91	10.13	22.83
Full day 50% traffic concession including new customers(Upper bound)	43.82	40.54	25.42	43.25	46.00	36.13	46.77

## 2.6 Reasons for no increase in using public transport with concession

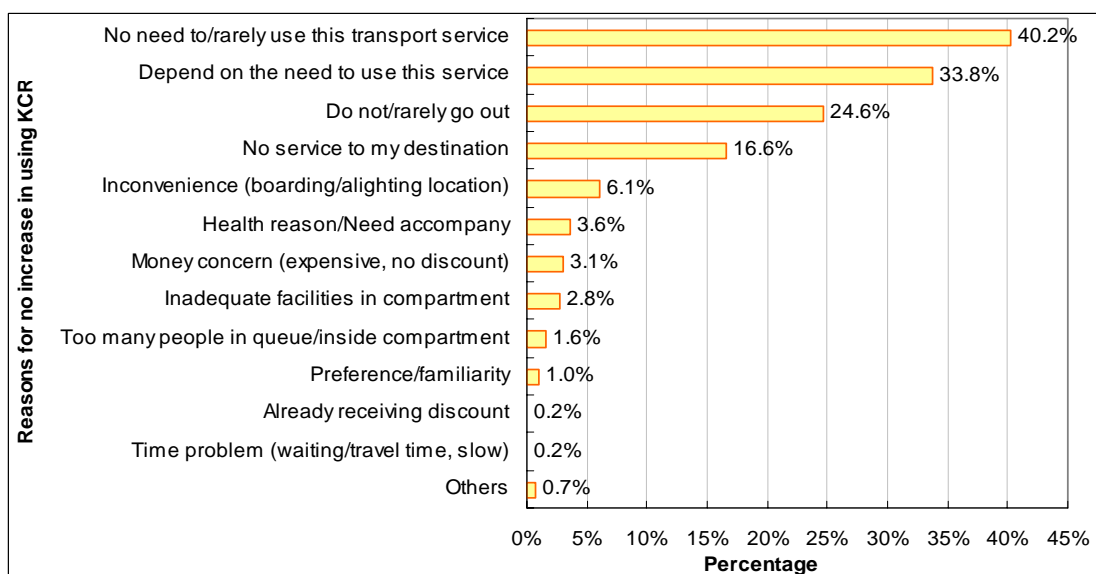
2.6.1 Figure 2.6.1 shows the reasons for no increase in using the MTR under hypothetical concession. The main reasons reported for not using the MTR even if there is a 50% concession were depending whether they have the need to use the MTR (36.1%), rarely/ never go out (30.6%) and rarely/ no need to use MTR (27.4%), 13.8% reported no service to the respondents' destination and 10.2% claimed that the boarding/ alighting locations were inconvenient. Only 5.3% of the respondents claimed that one of the reasons for not using MTR was still due to the fare.

**Figure 2.6.1: Reasons for no increase in using MTR**



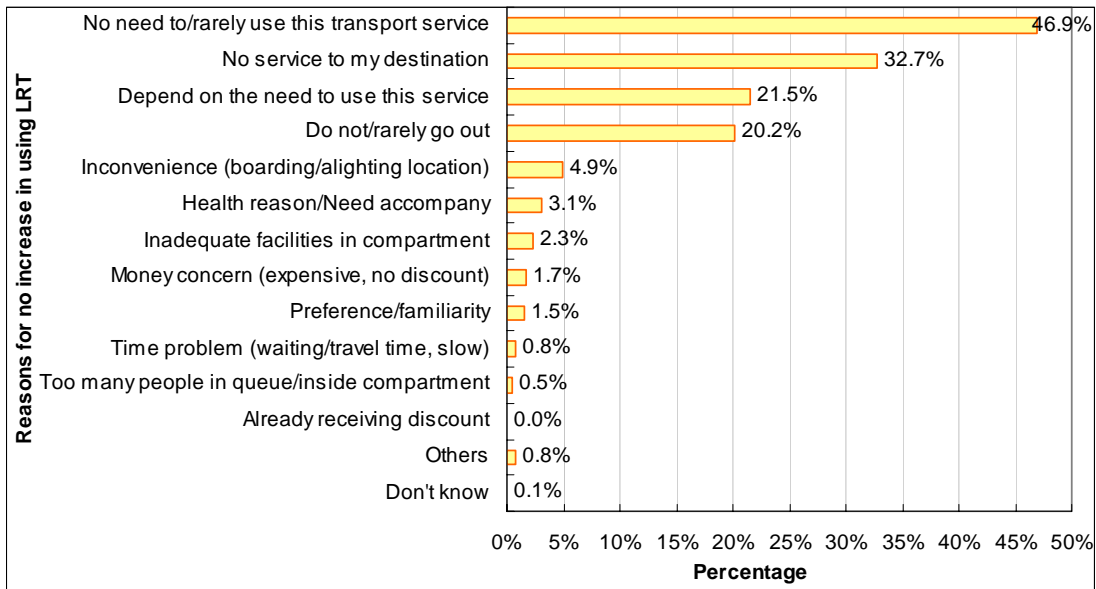
2.6.2 Regarding the reasons for not using the KCR under a 50% fare concession, rarely/ no need to use the KCR (40.2%), depending on the need to use the KCR (33.8%) and rarely/ never go out (24.6%) were the main reasons. Apart from the mentioned reasons, 16.6% of the respondents claimed that the KCR has no service to their destination. Only 3.1% of the respondents claimed that it is related to fare issue. (Figure A2C.2)

**Figure 2.6.2: Reasons for no increase in using KCR**



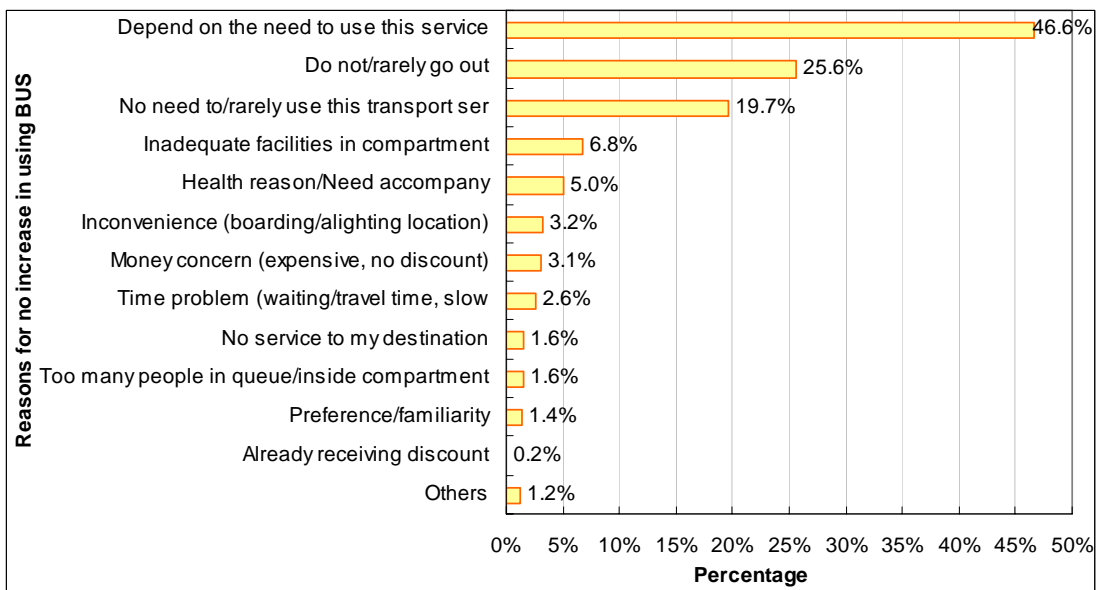
2.6.3 The reasons for not using the LRT under the fare concession were rarely/ no need to use the LRT (46.9%), depending on the need to use the LRT (21.5%) and rarely/ never go out (20.2%). Another 32.7% reported that the LRT has no service to the respondents' destination. Fare issue was not one of the main issues reported by the respondents, only 1.7% of them mentioned about this. (Figure 2.6.3)

**Figure 2.6.3: Reasons for no increase in using LRT**



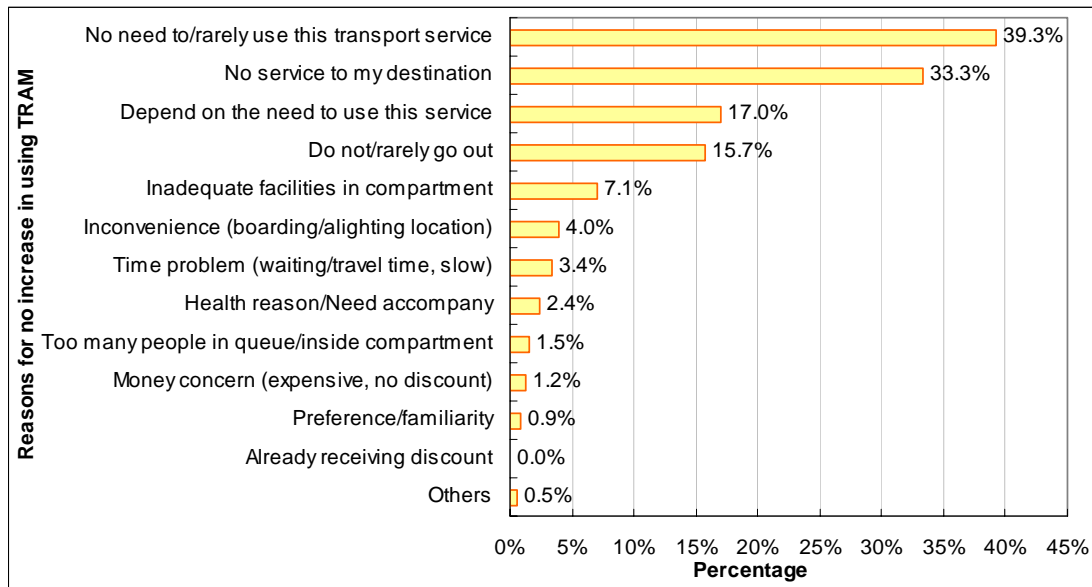
2.6.4 Figure 2.6.4 shows the main reasons for not using the bus under the 50% concession were depending on the need to travel by bus (46.6%), rarely/ never go out (25.6%) and rarely/ no need to travel by bus (19.7%). Some of the respondents claimed that the lack of facilities in compartment (6.8%) hindered them from traveling by bus. Regarding the fare issue, only 3.1% of the respondents reported this reason.

**Figure 2.6.4: Reasons for no increase in using BUS**



2.6.5 The main reasons for not using the tram under the concessions were rarely/ no need to travel by the tram (39.3%), no service to the respondents' destination (33.3%) and depending on the need to travel by tram (17.0%). Besides, nearly one-sixth of the respondents claimed that they rarely or never go out (15.7%). Besides, insignificant amount of respondents reported fare issue (1.2%). (Figure 2.6.5)

Figure 2.6.5: Reasons for no increase in using TRAM



2.6.6 Basically, the main reasons for not using the selected modes of transport were very similar, the most common reason was that they rarely or no need to travel by it, followed by no service to the respondents' destination and depending on whether they need to use it. Also, a significant proportion of respondents claimed that they rarely or never go out was their reason for not using transport even with concessions. It is noteworthy that after concessions, very few PWDs report that fares restrict them from using any of the selected modes of transport.

## 2.7 Changes in Weekly Cashflow and Revenue Forgone under the Impact of Fare Concession

In this survey, the estimated weekly cashflow presents the difference in monetary terms between the weekly revenue of particular transport operator under the different 50% fare concessions (when taking into account the usage of potential new customers under concession and the increased usage by the existing customers under concession) and the normal fare. Negative cashflow implies the increased customers and usage after concession are unable to cover the decrease in cashflow due to the 50% concession offered when compared with normal fare, while positive value implies that more money can be earned under fare concession when compared with the normal fare.

On the other hand, the weekly revenue forgone presents the figures from a different angle. After taking into account the usage of potential new customers under concession and the increased usage by the existing customers under concession, the revenue forgone presents the difference between the normal fare and the fare under 50% concession. That is, how much money will not be received because of the 50% concession by each transport operator. (Information about the estimation procedures can be found in *Appendix II: Estimation Procedure of Total PWD spending on specific transport mode*)

The meaning of “Existing customer” was those who usually use particular transport modes at least once a week. While the meaning of “New customer” was those who would start to use a particular transport mode under hypothetical fare concession.

The following example illustrates the calculation processes of weekly revenue forgone and weekly cashflow<sup>xviii</sup>.

### EXAMPLE:

Under the full-day 50% concession across the five selected modes (from Table 2.5.1):

All modes with concession (MTR, KCR, LRT, Bus & Tram)	Weekly total per PWD EXCLUDING new customers	Weekly total per PWD INCLUDING new customers	
		Lower bound	Upper bound
No concession	27.53	27.53	27.53
Full day 50% fare concession	19.94	33.44	43.82

Under no concession, the total weekly expenditure for the PWDs was:

$$\$27.53 * 84,595 = \$2,329,000$$

Under full-day 50% concession excluding new customers, the total weekly expenditure for the PWDs were:

$$\$19.94 * 84,595 = \$1,687,000$$

$$\text{Change in Weekly Cashflow} = \$1,687,000 - \$2,329,000 = -\$642,000$$

$$\text{Revenue Forgone} = -\$1,687,000 \text{ (as the PWDs only paid 50\% of the fare for all trips)}$$

(The figures can be found in Table 2.7.1.1)

<sup>xviii</sup> All figures used in this example were rounded to the nearest thousand dollar.

Under full-day 50% concession including new customers (lower bound), the total weekly expenditure for the PWDs was:

$$\$33.44 * 84,595 = \$2,829,000$$

$$\text{Change in Weekly Cashflow} = \$2,829,000 - \$2,329,000 = \$500,000$$

$$\text{Revenue Forgone} = -\$2,829,000$$

(The figures can be found in Table 2.7.2.1)

Under full-day 50% concession including new customers (upper bound), the total weekly expenditure for the PWDs was:

$$\$43.82 * 84,595 = \$3,707,000$$

$$\text{Change in Weekly Cashflow} = \$3,707,000 - \$2,329,000 = \$1,378,000$$

$$\text{Revenue Forgone} = -\$3,707,000$$

(The figures can be found in Table 2.7.2.1)

## 2.7.1 Changes in Weekly Cashflow and Revenue Forgone under the Impact of Fare Concession: Excluding new customers

2.7.1.1 Excluding the new customers who claimed that they would start to use a particular mode of transport under fare concession, the overall weekly cashflow for the five selected modes recorded a reduction, ranging from \$104,052.88 (public holiday concession) to \$642,191.14 (full day concession) which is presented in Table 2.7.1.1.

**Table 2.7.1.1: Cashflow and Revenue Forgone excluding new customers (Overall)**

All modes with concession (MTR, KCR, LRT, Bus & Tram)	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-104,052.88	-192,216.98
Non-peak hours 50% fare concession	-541,984.72	-1,103,756.01
Full day 50% fare concession	-642,191.14	-1,686,673.26

2.7.1.2 The maximum weekly revenue forgone estimated for the five selected modes ranged from \$192,216.98 (public holiday concession) to \$1,686,673.26 (full day concession).

2.7.1.3 Amongst the current users of the five public transport modes, the bus was leading in the decrease in weekly cashflow, ranging from \$55,341.07 (public holiday concession) to \$353,893.36 (full day concession), followed by MTR (ranged from \$21,890.33 to \$133,018.96), KCR (ranging from \$20,020.57 to \$106,067.27) and LRT (ranging from \$6,276.85 to \$43,789.20).



2.7.1.4 Only a tiny decrease in cashflow was reported for the tram. The decrease in weekly cashflow ranged from \$524.06 (public holiday concession) to \$5,422.57 (full day concession). The reason for this was the low tram usage. (Figure 2.7.1.1a to 2.7.1.1e)

**Figure 2.7.1.1a: Change in Cashflow and Revenue forgone (MTR)**

<b>MTR</b>	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-21,890.33	-36,842.05
Non-peak hours 50% fare concession	-105,934.96	-229,764.09
Full day 50% fare concession	-133,018.74	-377,926.19

**Figure 2.7.1.1b: Change in Cashflow and Revenue forgone (KCR)**

<b>KCR</b>	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-20,020.57	-34,898.44
Non-peak hours 50% fare concession	-91,439.15	-164,159.30
Full day 50% fare concession	-106,067.27	-258,054.01

**Figure 2. 7.1.1c: Change in Cashflow and Revenue forgone (LRT)**

<b>LRT</b>	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-6,276.85	-8,615.83
Non-peak hours 50% fare concession	-34,090.72	-68,915.78
Full day 50% fare concession	-43,789.20	-90,363.18

**Figure 2. 7.1.1d: Change in Cashflow and Revenue forgone (Bus)**

<b>Bus</b>	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-55,341.07	-110,666.33
Non-peak hours 50% fare concession	-304,166.00	-631,148.87
Full day 50% fare concession	-353,893.36	-944,668.47

**Figure 2. 7.1.1e: Change in Cashflow and Revenue forgone (Tram)**

<b>Tram</b>	Change in Cashflow (EXCLUDING new customers)	Revenue Forgone (EXCLUDING new customers)
Public holiday 50% fare concession	-524.06	-1,194.34
Non-peak hours 50% fare concession	-6,353.88	-9,767.96
Full day 50% fare concession	-5,422.57	-15,661.41

## 2.7.2 Changes in Weekly Cashflow and Revenue Forgone under the Impact of Fare Concession: Including new customers

2.7.2.1 Taking into account all the five transport modes and including all the new customers under concession, the full day fare concession is estimated to result in the greatest overall increase in weekly cashflow. The increases in overall weekly cashflow under the full day 50% fare concession ranged from \$499,778.17 to \$1,378,495.91.

2.7.2.2 The estimated maximum weekly revenue forgone under full day concession ranged from \$2,828,642.57 to \$3,707,360.32 including new customers. (Table 2.7.2.1)

**Table 2.7.2.1: Change in Cashflow and Revenue forgone w/new users (Overall)**

All modes with concession (MTR, KCR, LRT, Bus & Tram)	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+535,007.45	+1,026,094.65	-831,277.30	-1,322,364.51
Non-peak hours 50% fare concession	+268,005.64	+902,202.17	-1,913,746.37	-2,547,942.90
Full day 50% fare concession	+499,778.17	+1,378,495.91	-2,828,642.57	-3,707,360.32

2.7.2.3 Apart from the bus, there were increases in weekly cashflow after including all the new customers under fare concession for the other four selected transport modes.

2.7.2.4 Decreases in weekly cashflow of the bus were estimated under non-peak hours (ranging from \$83,280.95 to \$175,933.94) and full day fare concession (ranging from \$69,261.14 to \$184,147.74) including all the new customers. (Table 2.9.1a)

**Table 2.7.2.1a: Change in Cashflow and Revenue forgone w/new users (Bus)**

Bus	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+47,983.69	+111,456.87	-213,991.08	-277,464.26
Non-peak hours 50% fare concession	-175,933.94	-83,280.95	-759,380.93	-852,033.93
Full day 50% fare concession	-184,147.74	-69,261.14	-1,114,414.09	-1,229,300.69

2.7.2.5 The maximum decrease in weekly revenue amongst different types of transports was \$1,229,300.69, estimated under the bus full day fare concession.

2.7.2.6 Amongst the other four transport modes (MTR, KCR, LRT and tram), the maximum increase in weekly cashflow ranged from \$280,146.30 to \$593,017.53 estimated under full day concession of KCR, closely followed by MTR (ranging from \$240,295.70 to \$519,089.95). (Table 2.7.2.1b to 2.7.2.1e)

**Table 2. 7.2.1b: Change in Cashflow and Revenue forgone w/new users (MTR)**

<b>MTR</b>	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+166,339.47	+311,563.77	-225,071.84	-370,296.14
Non-peak hours 50% fare concession	+148,471.14	+345,712.14	-484,170.18	-681,411.18
Full day 50% fare concession	+240,295.70	+519,089.95	-751,240.63	-1,030,034.88

**Table 2. 7.2.1c: Change in Cashflow and Revenue forgone w/new users (KCR)**

<b>KCR</b>	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+196,248.40	+373,289.23	-251,167.42	-428,208.25
Non-peak hours 50% fare concession	+185,186.24	+410,876.75	-440,784.70	-666,475.21
Full day 50% fare concession	+280,146.30	+593,017.53	-644,267.57	-957,138.81

**Table 2. 7.2.1d: Change in Cashflow and Revenue forgone w/new users (LRT)**

<b>LRT</b>	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+89,801.41	+173,885.53	-104,694.09	-188,778.21
Non-peak hours 50% fare concession	+72,029.98	+163,688.72	-175,036.49	-266,695.23
Full day 50% fare concession	+98,920.19	+227,525.70	-233,072.58	-361,678.09

**Table 2. 7.2.1e: Change in Cashflow and Revenue forgone w/new users (Tram)**

<b>Tram</b>	Change in Cashflow (INCLUDING new customers)		Revenue Forgone (INCLUDING new customers)	
	Lower bound	Upper bound	Lower bound	Upper bound
Public holiday 50% fare concession	+34,634.47	+55,899.25	-36,352.87	-57,617.64
Non-peak hours 50% fare concession	+38,252.22	+65,205.51	-54,374.06	-81,327.35
Full day 50% fare concession	+64,563.72	+108,123.86	-85,647.70	-129,207.85

2.7.2.7 The increases in weekly cashflow of LRT and tram were the least amount the other four selected transport modes. The maximum increase for the LRT and tram ranged from \$98,920.19 to 227,525.70 and \$64,563.72 to \$108,123.86 estimated under full day concession respectively.

## **Section Three: Conclusion**

### **3.1 Travel Characteristics and Travel expenditure Incurred**

3.1.1 The survey findings provide useful information on the travel characteristics of the PWDs during the last weekday and Sunday or public holiday. The PWDs were often traveling within the same district, especially their living district. So the use of public transports in their trips was not too common, only around half of the respondents traveled using vehicles in this survey.

3.1.2 The average weekly total expenditure on all modes of public transport per PWD is \$45.8. The respondents spent \$15.4 on buses (\$11.1 spent on KMB on average), followed by \$8.2 on taxis and \$5.2 on other vehicles. For the five selected transport modes (bus, KCR, LRT, MTR and tram), \$27.5 was spent in total per week.

3.1.3 Respondents who had visual impairment or mental handicap spent more than the other respondents. On the other hand, the respondents receiving DA spent more on travel per week than those receiving CSSA, it is largely due to the higher usage of taxi amongst the respondents receiving DA.

3.1.4 The mean travel time of each trip was approximately 50 minutes and usually involved three sub-trips, including the sub-trips that the PWDs were returning home. Less than one-fifth of the surveyed PWDs needed carers to accompany them when making trips. So there was only relatively small impact of carers' traffic fares on overall travel expenditure per PWD per sub-trip, although it may be significant for some individual.

3.1.5 Amongst the PWDs who made at least one trip during the last weekday, a larger proportion of PWDs who were females, full-time students or younger respondents (especially those aged below 25), required a carer to accompany them on at least one trip. Besides, more PWDs who had mental handicap and were receiving Higher DA required assistance from a carer. On the other hand, amongst those who made at least one trip on the last Sunday or public holiday, more PWDs who are females, full-time students or younger respondents (especially those aged below 30) required a carer to accompany them when making trips. In terms of disability types and allowance received, more PWDs who had mental handicap, visual impairment or receiving Higher DA required the assistance from a carer.

3.1.6 Bus was the major mode of transport used by the PWDs to make their trips. The main reasons were convenience of alighting locations or boarding locations, some of them claimed that bus was the only choice around their starting place.

3.1.7 To summarize the factors affecting the choice of transport modes, convenience of alighting locations, the only choice around the starting point and convenience of boarding locations were the three main reasons for choosing most of the transport modes with efficiency added for KCR, MTR and taxi, cost for tram and ferry and special facilities for Rehabus.

## **3.2 Fare Concession Impact**

3.2.1 Under hypothetical concession, a significant proportion of PWDs not usually using MTR would consider using it, followed by bus and KCR in terms of the proportions of new users under concession. Amongst the new customers under hypothetical concessions, the new KCR customers were leading in the average estimated amount to be spent, followed by MTR and the bus.

3.2.2 The main reasons for not using the selected modes of transport were very similar, the most common reason was that they rarely or no need to travel by it, followed by no service to the respondents' destination and depending on whether they need to use it. Also, a significant proportion of respondents claimed that they rarely or never go out was their reason for not using transport even with concessions. It is noteworthy that after concessions, very few PWDs report that fares restrict them from using any of the selected modes of transport.

3.2.3 From the respondents' responses to the above questions, cost was not the most important factor affecting the choices of transport, as other reasons such as the convenience of alighting or choices available around the starting point are more important. However, under the hypothetical 50% fare concession, existing customers were stimulated to increase use, while other PWDs were stimulated to start using particular transport modes. Caution is necessary, though, as the answers to the hypothetical questions and the estimated change in revenue can only serve as a reference. Respondents may have expressed an interest in using the transport modes under fare concession without careful consideration of all the implications, such as the increased expenditure by any carers needed.

3.2.4 Under different fare concession options, that is, public holiday concession, non-peak hour concession (hours except Mon-Fri 700am-930am, 500pm-800pm & Sat 700am-930am) and full day concession, the total weekly expenditure per PWD on MTR, KCR, LRT and tram is found to increase. The total weekly expenditure per PWD on buses was estimated to increase only under public holiday concession. While the increase in weekly expenditure per PWD is not evenly spread across the five transport modes, with the major increases being for the MTR and KCR.

3.2.5 There were increases in weekly cashflow in MTR, KCR, LRT and tram including all the new users under concessions. However, because half of the respondents were already existing bus users, the proportion of new users and the expected total amount spent by them were relatively small, leading to a net reduction in weekly cashflow under the non-peak hour concession and full day fare concession.

3.2.6 The overall estimated weekly expenditure for bus, MTR, KCR, LRT and tram combined per PWD under concession ranges from \$33.44 to \$43.82. While it is hard to validate these estimates directly, some reference can be made to the current weekly travel expenditure across all transport modes per PWD of \$45.8 and across the five selected modes of \$27.53. Thus, while there is a significant increase in estimated total expenditure for the five selected modes, if there is some substitution of transport modes without concession by modes with concession, then the total expenditure across all modes may not be too different before and after concessions, suggesting that the estimates of expenditure under concession have at least some face validity.

## **Appendix I: Methodology**

### **A1.1 Research Method**

A1.1.1 Face-to-face personal interviews and telephone interviews were used to obtain information from the target population.

A1.1.2 SSRC successfully completed 3,160 interviews comprising 2,786 telephone interviews and 439 face-to-face interviews.

A1.1.3 Before the commencement of the fieldwork, the SSRC generated a stratified random sample of 10,508 PWDs from the SWD database of claimants, over-sampling less common disability and allowance combinations. This sample was given to HWFB who sent a notification letter to the sampled PWDs and then telephoned them to seek consent to participate in the survey. When obtaining the consents from respondents, the HWFB asked for the preferred mode of interview (either face-to-face personal interview or telephone interview) and the preferred time period for conducting the interview. After receiving consents from respondents, the HWFB provided the contact information including names, telephone number and contact address to the SSRC to follow up.

### **A1.2 Target Respondents**

A1.2.1 PWDs are defined as those who have at least one of the following conditions:

- (i) Physical handicap (PH);
- (ii) Visual impairment (VI);
- (iii) Hearing impairment (HI);
- (iv) Speech impairment (SI);
- (v) Mental illness (MI);
- (vi) Autism<sup>xix</sup>; and/or
- (vii) Mental handicap (MH)

A1.2.2 The target respondents were the PWDs aged between 12 and 64 inclusive, classified into the following two categories:

- (i) Recipients of Normal Disability Allowance (NDA) and High Disability Allowance (HAD); and
- (ii) Recipients of Comprehensive Social Security Assistance (CSSA) receiving standard rates for those 100% disabled or requiring constant attendance in institutions or the community.

A1.2.3 Proxy reporting by the carer(s) of the respondents was allowed as instructed by the respondents or if the respondents were unable to communicate with the SSRC's interviewers through written or oral communications.

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<sup>xix</sup> Autism PWDs are grouped with Mental illness (MI) in this survey.



### **A1.3 Questionnaire Design**

A1.3.1 The questionnaire used was mainly focused on the personal trip characteristics for the previous weekday (Monday to Saturday excluding public holidays) and the previous Sunday or public holiday (which is 2<sup>nd</sup> October in this survey. Data was not collected on October 8<sup>th</sup>, which would have provided limited data for the public holiday on October 7<sup>th</sup>).

A1.3.2 The questionnaire covered the following areas:

1. Whether he/she owns a vehicle;
2. Trip purpose, origin and destination (district council level);
3. Trip time and journey time;
4. Mode and expenditure of transport for each sub-trip involved;
5. Each type transport mode involved in the trip;
6. Types of travel aids used during the trip;
7. Whether carer is needed to accompany the respondents for the whole of the trip to assist them to take transports;
8. Main factors affecting choice of transport modes;
9. Weekly frequency of going to the same place with the same purpose by the respondents; and
10. Demographic information including gender, age, type of disability, type of allowance receiving, working/studying status, any mobility aids when using public transports or walking, average monthly personal and household incomes.

A1.3.3 A bilingual questionnaire designed by the SSRC in consultation with the HWFB and approved by HWFB was used to administer the telephone interviews and face-to-face personal interviews. The Chinese questionnaire and interview scripts were written in colloquial Cantonese.

A1.3.4 All the materials used during the interviews such as interviewer guidelines, coding manual, editing and validation rules prepared by the SSRC were approved by the HWFB before the start of the fieldwork.

A1.3.5 The last part of the questionnaire covered questions regarding the respondents' increased or new usage under each hypothetical concession per transport mode (respondents were asked mode-by-mode in rotation). Respondents did not know which transport modes were eligible to providing concessions before they were asked. The reason for not mentioning the five selected transport modes together at the beginning of this part is because it is not known which modes will offer a concession or what concession they will each offer.

### **A1.4 Pilot study**

A1.4.1 A pilot study comprising 36 successfully completed interviews, including 31 telephone interviews and 5 face-to-face interviews, was conducted on 17<sup>th</sup>, 18<sup>th</sup> and 21<sup>st</sup> August 2006 to test the length, logic, wording and format of the questionnaire. The data collected from these pilot interviews were not counted as part of the survey report. However 5 pilot cases from sampling groups with very small population

counts were interviewed again to use in the main survey.

## A1.5 Fieldwork

A1.5.1 The fieldwork was carried out by either telephone interview or face-to-face personal interview between September 6 and October 16, 2006 (excluding October 1-2 and October 14-15, 2006). Interviews were mainly conducted between 10 a.m. and 9:30 p.m. on weekdays and Sunday or public holiday unless otherwise specified by the respondents.

## A1.6 Response rate

A1.6.1 A total of 4,273 households were contacted including 3,834 households by telephone interview with up to 5 contact attempts and 439 by face-to-face. The number of successful interviews was 3,160 including 2,786 contacted by telephone and 439 by face-to-face interview. The refusal cases of the respondents were 231 in total. The dropout cases (partial) of the respondents amounted to 68 cases. The cases which were 'not available' or 'no answer' (in total 130 cases) were attempted at least five times before being classified as non-response cases.

A1.6.2 Figure A1.6.2 shows the details the breakdown of the status of all the cases:

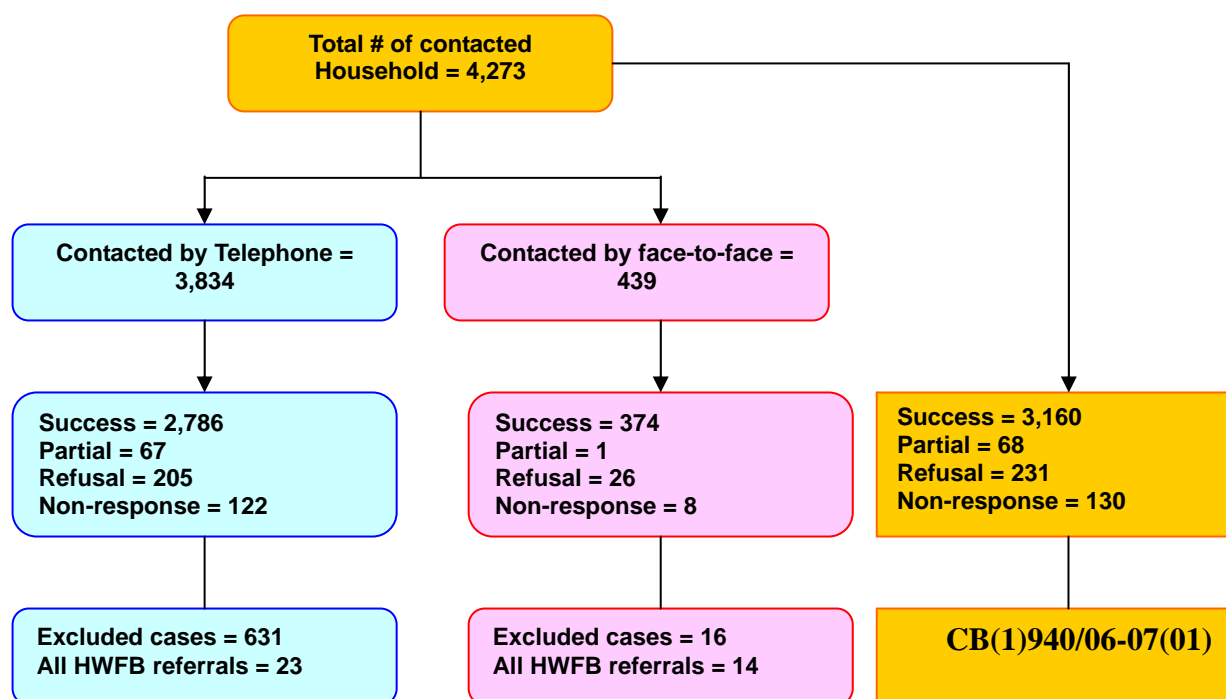


Figure A1.6.2: Breakdown of cases

Excluded cases included death cases, changed financial status, fail to communicate, invalid contact information, moved to unknown location, over-aged, not available to answer during fieldwork period, non-response cases without prior consent etc.

The HWFB referral cases included institutional refusal, PWDs or carers not informed before contact, cannot contact the PWDs with the given institution phone number, PWDs who have not heard of the survey etc.

A1.6.3 The overall combined response rate was 88.0% for all the telephone and face-to-face interviews conducted. The response rate for telephone interviews alone was 87.6% and for the face-to-face interviews alone was 91.4%. The following are the breakdown of each response rate:

Response rate = the number of successful interviews divided by the sum of the numbers of successful interviews, drop-out cases, refusal cases and non-response cases

**Overall:**  $3,160 / (3,160 + 68 + 231 + 130) = 88.0\%$

Telephone interview only:  $2,786 / (2,786 + 67 + 205 + 122) = 87.6\%$

Face-to-face interview only:  $374 / (374 + 1 + 26 + 8) = 91.4\%$

A1.6.4 Table A1.6.4 shows the overall number of successful interviews by type of disability and financial support:

**Table A1.6.4: Breakdown of cases by Disability and Allowance type**

Disability	Overall	CSSA:100% disabled		CSSA: constant attendance		DA	
		Institution	Community	Institution	Community	Higher	Normal
<i>VI</i>	8.6% (273)	-	0.1% (4)	-	-	0.4% (14)	8.1% (255)
<i>HI</i>	8.3% (261)	0.3% (8)	2.2% (71)	-	-	-	5.8% (182)
<i>MI</i>	30.7% (971)	7.9% (250)	8.9% (281)	0.9% (29)	0.7% (21)	1.6% (52)	10.7% (338)
<i>MH</i>	7.4% (233)	0.3% (8)	0.3% (8)	0.0% (1)	-	2.8% (88)	4.1% (128)
<i>PH</i>	45.0% (1422)	3.4% (108)	6.3% (201)	2.7% (88)	5.5% (171)	13.7% (426)	13.5% (428)
Total	100.0% (3160)	11.8% (374)	17.9% (565)	3.7% (118)	6.1% (192)	18.4% (580)	42.1% (1331)

## A1.7 Quality control

A1.7.1 All SSRC interviewers were well trained in a standardized approach prior to the commencement of the survey. All interviews were conducted by experienced interviewers fluent in Cantonese, Putonghua and English.

A1.7.2 The SSRC engaged in quality checks for each stage of the survey to ensure satisfactory standards of performance. At least 15% of the questionnaires completed by each interviewer were checked by the SSRC independently.

## A1.8 Sampling and Weighting

A1.8.1 A total of 84,595 PWDs of different types was reported by the Social Welfare Department (dated April 2006) in Table A1.8.1. Refers to Table A1.8.1 below, the sampling procedure of this survey consisted of three sample groups:

- **Sample 1** (cells in Black): included all PWDs from cells with 100 or less PWDs, that is 130 cases were sampled.
- **Sample 2** (cells in Grey): included 25% from cells with 101 to 5000 PWDs, that is 4,015 cases were sampled.
- **Sample 3**: included 4.5% from cells with more than 5,000 PWDs, that is 3,078 cases were sampled.

Notification letters were sent to the sampled PWDs prior to the commencement of the fieldwork from HWFB to increase the response rate of this survey.

**Table A1.8.1: Total PWDs Population by Disability and Allowance type**

Population	CSSA:100% disabled		CSSA: constant attendance		Disability Allowance		Total
	Institution	Community	Institution	Community	Higher	Normal	
<i>VI</i>		14			31	1917	1962
<i>HI</i>	27	947				3107	4081
<i>MI</i>	2718	16106	299	187	378	16008	35696
<i>MR</i>	20	30	6	2	575	7502	8135
<i>PH</i>	850	9767	886	1465	2731	19022	34721
<b>Total</b>	<b>3615</b>	<b>26864</b>	<b>1191</b>	<b>1654</b>	<b>3715</b>	<b>47556</b>	<b>84595</b>

A1.8.2 To take account of the over-sampling of rare groups and differing response rates (see Table A1.6.3 for the sample counts) and the population, weighting was applied in order to make the results more representative of the targeted PWDs population and to enable projection of the total revenue or cashflow to the whole PWDs population.

A1.8.3 Table A1.8.3 shows the weighting factors used in the analysis. The highlighted cells indicate merging of groups, within the highlighted cells of the same colour/pattern, the same weighting factors were applied. The reason for this was because some cells had sample counts that were too low.

**Table A1.8.3: Weighting Factor by Disability and Allowance type**

Weighting Factor	CSSA:100% disabled		CSSA: constant attendance		Disability Allowance		Total
	Institution	Community	Institution	Community	Higher	Normal	
<i>Vi</i>		0.0934			0.0934	0.2808	0.3742
<i>HI</i>	0.4605	0.4605				0.6377	1.0982
<i>MI</i>	0.4061	2.1410	0.3851	0.3326	0.2715	1.7691	5.3056
<i>MR</i>	0.1274	0.1274	0.1274	0.1274	0.2441	2.1893	2.5608
<i>PH</i>	0.2940	1.8151	0.3761	0.3200	0.2395	1.6602	4.7049
<b>Total</b>	<b>0.7001</b>	<b>4.4167</b>	<b>0.7612</b>	<b>0.7801</b>	<b>0.8485</b>	<b>6.5372</b>	<b>14.0438</b>

A1.8.4 All the estimates and tables presented in this report are weighted according to the targeted PWD population in Hong Kong, except for the tables presenting the sampling of the surveyed PWDs in this survey (Table A1.6.4 & A1.8.1). All the one-way percentages presented are weighted.

## Appendix II: Estimation Procedure of Total PWD spending on specific transport mode

The data collection process was carried out throughout the 7 days of the week. After SSRC has collected all the information, the data were being processed in two stages:

**First Stage:** SSRC found the total expenditure per day for each day of the week by transport mode separately (trips to be separated into peak or non-peak trips). This allows us to look at which days are different throughout the week. SSRC discovered that the travel expenditures on Monday to Saturday were indistinguishable which would allow us to merge the data for Monday to Saturday. SSRC applied the weighting by the PWDs' main type of disability to estimate the total expenditure for each day. Data for the last Sunday will be gathered during every interview with the PWDs. The total for Sunday will be worked out just like the weekdays' total except that there is seven times more data for Sunday than for each weekday for the first 3 weeks. Trips on public holiday, that is 2<sup>nd</sup> October (trips on October 7<sup>th</sup> were excluded as no fieldwork was done on October 8<sup>th</sup>), will be recorded instead of trips on Sundays in the fourth week. The formula to work out the weekly expenditure in terms of daily expenditures is:

**5\*[248/261(Daily Expenditure on Mon. to Fri.) + 13/261(Daily Expenditure on Public Holiday)] + Daily Expenditure on Sat. + Daily Expenditure on Sun.**

where "261" is the number of weekdays in a year, "248" days were normal weekdays and "13" days were public holidays (the average number of public holidays on Monday to Friday per year<sup>xx</sup>). The factor "5" accounts for the 5 days in a week from Monday to Friday.

**Second Stage:** The second stage is to calculate the total revenue foregone and total cashflow per specific transport mode (by peak, non-peak or public holiday concessions), the exact concessionary percentage and the definition of peak and non-peak hour are needed to work out the total sum. All trips collected during the interviews will be classified into peak and non-peak trips.

*i, For the existing customers<sup>xxi</sup> of a particular transport mode:* To work out the change in total revenue, the change is summed across all trips relevant to the concession (which maybe zero for some respondents). So the change in revenue for a trip currently costing \$X is:

**\$X [(1-y/100) (1+z/100)-1]**

where y is the concessionary percentage (i.e. 50%) and z is the percentage increase in trips using that mode.

*ii, For the new customers<sup>xxii</sup> of a particular transport mode:* For respondents who were not existing customers but who would become customers under a concession, the weekly estimated expenditure \$W was calculated according to the amount the respondents responded that they would be willing to spend per week under concession.

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<sup>xx</sup> We excluded consideration of public holidays on Saturdays as we had no relevant data.

<sup>xxi</sup> Existing customer of a particular transport mode refers to the PWDs who use particular transport mode at least once a week.

<sup>xxii</sup> New customer of a particular transport mode refers to the PWDs who would spend money on particular transport mode under the concessions, but no money were spent on it currently.

For the respondents who could not answer the percentage of usage increase (for existing customers), the mean of the valid responses was used to impute the missing data before doing the calculations.

For the respondents who could not answer the weekly amount of money to be spent (for new customers) under different concessions, the mean of the valid responses was used to impute the missing data to estimate the **upper bound** of the cashflow and the revenue forgone under hypothetical concessions. The missing weekly expenditures of new customers were estimated as zero to provide a **lower bound** for the expenditure under concessions. So, the estimated weekly cashflow and revenue forgone are presented as ranges rather than single estimates.

## Appendix III: Statistical Tables

**Table 1.1.3: Age profile**

		Frequency	Percent
Valid	12-14	73	2.3
	15-19	160	5.1
	20-24	120	3.8
	25-29	133	4.2
	30-34	232	7.3
	35-39	231	7.3
	40-44	342	10.8
	45-49	457	14.5
	50-54	510	16.1
	55-59	495	15.7
	60-64	400	12.7
	Don't know	6	0.2
	Total	3,160	100.0

**Table 1.1.4: Gender**

		Frequency	Percent
Valid	Male	1,602	50.7
	Female	1,558	49.3
	Total	3,160	100.0

**Table 1.1.5: Type of Disabilities**

		Responses		Percent of Cases
		N	Percent	
dis_types(a)	Blind	232	5.8%	7.4%
	Deaf	307	7.6%	9.7%
	Mentally retarded	398	9.9%	12.6%
	Speech defect	228	5.6%	7.2%
	Autism	59	1.5%	1.9%
	Mentally ill	1,382	34.2%	43.7%
	Physically disabled	1,427	35.3%	45.2%
	Others	7	0.2%	0.2%
Total	4,041	100.0%	127.9%	

**Table 1.1.8: Working/ Studying Status**

		Frequency	Percent
Valid	Employed	540	17.1
	Student	317	10.0
	Both working and studying	18	0.6
	Neither working nor schooling	2285	72.3
	Don't know	1	0.0
	Total	3161	100.0

**Table 1.1.8a: Type of employment**

		Frequency	Percent	Valid Percent
Valid	Full time	406	12.9	73.0
	Part time	150	4.7	26.9
	Don't know	1	0.0	0.1
	Total	556	17.6	100.0
Missing	Not working	2,604	82.4	
Total		3,160	100.0	

**Table 1.1.8b: Type of schooling**

		Frequency	Percent	Valid Percent
Valid	Full time	270	8.5	80.5
	Part time	65	2.1	19.5
	Total	335	10.6	100.0
Missing	Not in school	2,825	89.4	
Total		3,160	100.0	

**Table 1.1.8c: PWDs neither working nor schooling**

		Frequency	Percent	Valid Percent
Valid	Home maker	358	11.3	15.6
	Unemployed	216	6.8	9.4
	Retired	176	5.6	7.7
	Cannot work/ go to school due to disability / recuperating	1,516	48.0	66.3
	Others	21	0.7	0.9
	Total	2,287	72.4	100.0
	Missing	Working or schooling	873	27.6
Total		3,160	100.0	

**Table 1.1.9: Car Ownership Rate**

		Frequency	Percent
Valid	Yes	46	1.4
	No	3,114	98.6
	Total	3,160	100.0

**Table 1.1.9a: Disabled Person Parking Permit?**

		Frequency	Percent	Valid Percent
Valid	Yes	19	0.6	41.7
	No	25	0.8	54.4
	Don't know	2	0.1	3.9
	Total	46	1.4	100.0
Missing	Do not own any cars	3,114	98.6	
Total		3,160	100.0	

**Table 1.1.10: Whether Drive when Go Out**

		Frequency	Percent
Valid	Yes	46	1.5
	No	3,114	98.5
	Total	3,160	100.0



**Table 1.1.11: Need any Mobility Aids**

		Frequency	Percent
Valid	Necessary	730	23.1
	Not necessary	2,429	76.9
	Cannot travel	1	0.0
	Total	3,160	100.0

**Table 1.1.11a: Type(s) of Aids needed**

		Responses		Percent of Cases
		N	Percent	
aids(a)	Electrical wheelchair	31	3.7%	4.3%
	Manual wheelchair	251	29.3%	34.2%
	Crutches (for the blindness)	33	3.9%	4.6%
	Crutches (for physically disabled)	348	40.8%	47.6%
	Walking aid (for physically disabled)	41	4.8%	5.6%
	Hearing aid	88	10.3%	12.0%
	Others	61	7.1%	8.3%
Total		854	100.0%	116.6%

**Table 1.1.12: Monthly personal income**

		Frequency	Percent
Valid	HKD 4,000 or below	2,331	73.8
	HKD 4,001-5,000	106	3.4
	HKD 5,001-6,000	89	2.8
	HKD 6,001-7,000	46	1.5
	HKD 7,001-8,000	40	1.3
	HKD 8,001-9,000	24	0.8
	HKD 9,001-10,000	26	0.8
	Above HKD 10,000	67	2.1
	Don't know/ Not sure	99	3.1
	Refuse to answer	26	0.8
	Not applicable	305	9.7
	Total	3,160	100.0

**Table 1.1.13: Monthly household income**

		Frequency	Percent
Valid	HKD 4,000 or below	683	21.6
	HKD 4,001-5,000	179	5.7
	HKD 5,001-6,000	194	6.1
	HKD 6,001-7,000	156	4.9
	HKD 7,001-8,000	188	6.0
	HKD 8,001-9,000	161	5.1
	HKD 9,001-10,000	149	4.7
	Above HKD 10,000	774	24.5
	Don't know/ Not sure	610	19.3
	Refuse to answer	59	1.9
	Not applicable	8	0.2
	Total	3,160	100.0

**Table 1.2A.2a: Whether use transport vehicle (last weekdays) by respondents**

		Frequency	Percent
Valid	Yes	1,323	41.9
	No	1,837	58.1
	Total	3,160	100.0

**Table 1.2A.2b: Whether use transport vehicle (last weekdays) by trips**

		Frequency	Percent
Valid	Yes	2,742	81.0
	No	642	19.0
	Total	3,384	100.0

**Table 1.2A.2c: Number of day a week the PWDs go to the same place with the same purpose (last weekdays)**

		Frequency	Percent
Valid	1.0	396	11.7
	1.5	103	3.0
	2.0	234	6.9
	2.5	61	1.8
	3.0	142	4.2
	3.5	58	1.7
	4.0	87	2.6
	4.5	37	1.1
	5.0	558	16.5
	5.5	65	1.9
	6.0	273	8.1
	6.5	13	0.4
	7.0	276	8.2
	Less than once a week	916	27.1
	Not fixed/ not sure	165	4.9
	Total	3,384	100.0

**Table 1.2A.3: Purpose of those trips (last weekdays)**

		Frequency	Percent
Valid	Go home	1,468	43.4
	Social or recreational activities	441	13
	Handle daily living matters	432	12.8
	Go to work/ school	426	12.6
	Receiving healthcare/ caring services	145	4.3
	Relaxation or exercise	102	3
	Personal issues	90	2.7
	Leisure/ volunteering activities	217	1.6
	Talks or functions arranged by organizations	50	1.5
	Attend job training or classes	13	0.4
	Total	3,384	100.0

**Table 1.2A.4a: Need someone to accompany (last weekdays) by trips**

		Frequency	Percent
Valid	Yes	638	18.9
	No	2,745	81.1
	Total	3,384	100.0

**Figure 1.2A.4b: Need someone to accompany (last weekdays) by respondents**

		Frequency	Percent
Valid	Yes	421	13.3
	No	2,739	86.7
Total		3,160	100.0

**Table 1.2A.6a: Start time Mon-Fri**

		Responses		Percent of Cases
		N	Percent	
<b>Start time Mon-Fri</b>	00:01-00:30	4	0.2%	0.4%
	01:01-01:30	2	0.1%	0.2%
	01:31-02:00	2	0.1%	0.2%
	03:01-03:30	2	0.1%	0.2%
	03:31-04:00	2	0.1%	0.2%
	05:01-05:30	5	0.3%	0.5%
	05:31-06:00	7	0.3%	0.7%
	06:01-06:30	28	1.4%	2.8%
	06:31-07:00	48	2.4%	4.8%
	07:01-07:30	86	4.2%	8.6%
	07:31-08:00	101	4.9%	10.1%
	08:01-08:30	101	4.9%	10.1%
	08:31-09:00	69	3.4%	6.9%
	09:01-09:30	63	3.1%	6.3%
	09:31-10:00	51	2.5%	5.1%
	10:01-10:30	63	3.1%	6.3%
	10:31-11:00	73	3.6%	7.3%
	11:01-11:30	43	2.1%	4.3%
	11:31-12:00	89	4.3%	8.9%
	12:01-12:30	35	1.7%	3.5%
	12:31-13:00	79	3.8%	7.9%
	13:01-13:30	41	2.0%	4.1%
	13:31-14:00	80	3.9%	8.0%
	14:01-14:30	48	2.3%	4.8%
	14:31-15:00	66	3.2%	6.6%
	15:01-15:30	105	5.1%	10.5%
	15:31-16:00	111	5.4%	11.2%
	16:01-16:30	112	5.5%	11.3%
	16:31-17:00	93	4.5%	9.4%
	17:01-17:30	52	2.5%	5.2%
	17:31-18:00	87	4.2%	8.7%
	18:01-18:30	26	1.3%	2.6%
	18:31-19:00	34	1.7%	3.4%
19:01-19:30	24	1.2%	2.4%	
19:31-20:00	19	0.9%	1.9%	
20:01-20:30	29	1.4%	2.9%	
20:31-21:00	27	1.3%	2.7%	
21:01-21:30	24	1.2%	2.4%	
21:31-22:00	18	0.9%	1.8%	
22:01-22:30	20	1.0%	2.0%	
22:31-23:00	16	0.8%	1.6%	
23:01-23:30	9	0.5%	0.9%	
23:31-24:00	4	0.2%	0.4%	
Cannot remember	55	2.7%	5.5%	
<b>Total</b>		2,055	100.0%	205.8%

\* highlighted cells indicate peak hours

**Table 1.2A.6b: Start time Sat.**

		Responses		Percent of Cases
		N	Percent	
Start time Sat.	00:01-00:30	2	0.4%	0.8%
	04:01-04:30	1	0.1%	0.2%
	05:31-06:00	10	1.4%	3.0%
	06:01-06:30	3	0.4%	0.8%
	06:31-07:00	11	1.6%	3.3%
	07:01-07:30	14	2.1%	4.4%
	07:31-08:00	21	3.0%	6.4%
	08:01-08:30	11	1.7%	3.5%
	08:31-09:00	24	3.5%	7.4%
	09:01-09:30	22	3.1%	6.7%
	09:31-10:00	36	5.2%	11.0%
	10:01-10:30	15	2.3%	4.8%
	10:31-11:00	28	4.1%	8.6%
	11:01-11:30	27	4.0%	8.5%
	11:31-12:00	28	4.0%	8.5%
	12:01-12:30	21	3.0%	6.4%
	12:31-13:00	26	3.8%	8.0%
	13:01-13:30	24	3.5%	7.4%
	13:31-14:00	37	5.5%	11.6%
	14:01-14:30	16	2.3%	4.8%
	14:31-15:00	17	2.4%	5.1%
	15:01-15:30	27	4.0%	8.4%
	15:31-16:00	23	3.4%	7.1%
	16:01-16:30	22	3.1%	6.7%
	16:31-17:00	33	4.8%	10.2%
	17:01-17:30	16	2.4%	5.1%
	17:31-18:00	20	2.9%	6.1%
	18:01-18:30	17	2.5%	5.3%
	18:31-19:00	29	4.2%	8.9%
	19:01-19:30	7	1.0%	2.2%
	19:31-20:00	14	2.0%	4.3%
	20:01-20:30	6	0.8%	1.8%
	20:31-21:00	11	1.6%	3.3%
21:01-21:30	13	2.0%	4.1%	
21:31-22:00	9	1.3%	2.8%	
22:01-22:30	9	1.3%	2.7%	
22:31-23:00	7	1.1%	2.2%	
23:01-23:30	2	0.2%	0.5%	
	Cannot remember	28	4.1%	8.7%
Total		687	100.0%	211.7%

\* highlighted cells indicate peak hours

**Table 1.2A.7: Sub-trips information (last weekdays)**

No. of sub-trips	Count	%	Mean trip time (min.)	Std Deviation of trip time (min.)
1	173	7	31	22
2	439	18	41	24
3	1,409	59	47	25
4	188	8	80	30
5	181	8	80	27
6	4	0	119	39
7	14	1	97	40
Total	2,409	100	50	29

**Table 1.2A.10 Trip making behavior by Allowance type (last weekday)**

			Whether made any trips on weekday		Total
			made 0 trip	made at least 1 trip	
Allowance Type	CSSA (Institution)	Count	126	57	183
		%	68.9%	31.1%	100.0%
	CSSA (Community)	Count	274	788	1,062
		%	25.8%	74.2%	100.0%
	DA (High)	Count	63	76	139
		%	45.3%	54.7%	100.0%
	DA (Normal)	Count	452	1,324	1,776
		%	25.5%	74.5%	100.0%
Total		Count	915	2,245	3,160
		%	29.0%	71.0%	100.0%

**Table 1.2A.11 Trip making behavior by Age Group (last weekday)**

			Whether made any trips on weekday		Total
			made 0 trip	made at least 1 trip	
Age Group	12-14	Count	15	54	69
		%	21.7%	78.3%	100.0%
	15-19	Count	35	138	173
		%	20.2%	79.8%	100.0%
	20-24	Count	45	106	151
		%	29.8%	70.2%	100.0%
	25-29	Count	59	89	148
		%	39.9%	60.1%	100.0%
	30-34	Count	66	135	201
		%	32.8%	67.2%	100.0%
	35-39	Count	89	130	219
		%	40.6%	59.4%	100.0%
	40-44	Count	103	207	310
		%	33.2%	66.8%	100.0%
	45-49	Count	126	277	403
		%	31.3%	68.7%	100.0%
	50-54	Count	197	299	496
		%	39.7%	60.3%	100.0%
	55-59	Count	206	308	514
		%	40.1%	59.9%	100.0%
	60-64	Count	227	238	465

	%	48.8%	51.2%	100.0%
Total	Count	1,168	1,981	3,149
	%	37.1%	62.9%	100.0%

**Table 1.2A.12 Trip making behavior by Monthly Personal Income (last weekday)**

			Whether made any trips on weekday		Total
			made 0 trip	made at least 1 trip	
Monthly personal income	HKD 4,000 or below	Count	895	1,428	2,323
		%	38.5%	61.5%	100.0%
	HKD 4,001-5,000	Count	68	84	152
		%	44.7%	55.3%	100.0%
	HKD 5,001-6,000	Count	24	58	82
		%	29.3%	70.7%	100.0%
	HKD 6,001-7,000	Count	8	45	53
		%	15.1%	84.9%	100.0%
	HKD 7,001-8,000	Count	5	34	39
		%	12.8%	87.2%	100.0%
	HKD 8,001-9,000	Count	4	19	23
		%	17.4%	82.6%	100.0%
	HKD 9,001-10,000	Count	1	22	23
		%	4.3%	95.7%	100.0%
Above HKD 10,000	Count	11	66	77	
	%	14.3%	85.7%	100.0%	
Total	Count	1,016	1,756	2,772	
	%	36.7%	63.3%	100.0%	

**Table 1.2A.13 Trip making behavior by Monthly Household Income (last weekday)**

			Whether made any trips on weekday		Total
			made 0 trip	made at least 1 trip	
Monthly household income	HKD 4,000 or below	Count	262	368	630
		%	41.6%	58.4%	100.0%
	HKD 4,001-5,000	Count	76	102	178
		%	42.7%	57.3%	100.0%
	HKD 5,001-6,000	Count	62	94	156
		%	39.7%	60.3%	100.0%
	HKD 6,001-7,000	Count	46	104	150
		%	30.7%	69.3%	100.0%
	HKD 7,001-8,000	Count	43	113	156
		%	27.6%	72.4%	100.0%
	HKD 8,001-9,000	Count	40	105	145
		%	27.6%	72.4%	100.0%
	HKD 9,001-10,000	Count	49	99	148
		%	33.1%	66.9%	100.0%
Above HKD 10,000	Count	236	569	805	
	%	29.3%	70.7%	100.0%	
Total	Count	814	1,554	2,368	
	%	34.4%	65.6%	100.0%	

**Table 1.2B.1: Whether went out last Sunday/ public holiday**

		Frequency	Percent
Valid	Went out last Sunday/ public holiday	1,719	54.4
	Not go out last Sunday/ public holiday	1,342	42.5
	Don't know/ not remember	87	2.8
	Not in H.K.	10	0.3
	Refuse to answer	2	0.1
	Total	3,160	100.0

**Table 1.2B.2a: Whether use transport vehicle (last Sunday or public holiday) by respondents**

		Frequency	Percent
Valid	Yes	1,669	52.8
	No	1,491	47.2
Total		3,160	100.0

**Table 1.2B.2b: Whether use transport vehicle (last Sunday or public holiday) by trips**

		Frequency	Percent
Valid	Yes	1,865	80.5
	No	449	19.4
	Not remember / not sure	2	0.1
	Total	2,316	100.0

**Table 1.2B.3: Trip Purpose (last Sunday or public holiday)**

		Frequency	Percent
Valid	Go home	974	42
	Social or recreational activities	390	16.8
	Handle daily living matters	343	14.8
	Leisure/volunteering activities	231	10
	Talks or functions arranged by organizations	158	6.8
	Go to work/school	95	4.1
	Relaxation or exercise	63	2.7
	Personal issues	28	1.2
	Receive healthcare/caring services	26	1.1
	Attend job training or classes	8	0.3
	Total	2,316	100.0

**Table 1.2B.4: Need someone to accompany (last Sunday or public holiday) by sub-trips**

		Frequency	Percent
Valid	Yes	640	27.6
	No	1,676	72.4
	Total	2,316	100.0



**Table 1.2B.4: Need someone to accompany (last Sunday or public holiday) by respondents**

		Frequency	Percent
Valid	Yes	385	12.2
	No	2,775	87.8
	Total	3,160	100.0

**Table 1.2B.6a: Start time Sun.**

		Responses		Percent of Cases
		N	Percent	
<b>Start time Sun.</b>	00:01-00:30	4	0.2%	0.5%
	00:31-01:00	2	0.1%	0.3%
	01:31-02:00	0	0.0%	0.1%
	02:31-03:00	2	0.1%	0.3%
	05:01-05:30	2	0.1%	0.2%
	05:31-06:00	10	0.7%	1.4%
	06:01-06:30	13	0.9%	1.9%
	06:31-07:00	16	1.1%	2.3%
	07:01-07:30	21	1.4%	3.0%
	07:31-08:00	29	1.9%	4.0%
	08:01-08:30	42	2.8%	5.9%
	08:31-09:00	69	4.6%	9.7%
	09:01-09:30	50	3.3%	7.0%
	09:31-10:00	80	5.3%	11.2%
	10:01-10:30	33	2.2%	4.7%
	10:31-11:00	61	4.0%	8.5%
	11:01-11:30	35	2.3%	4.9%
	11:31-12:00	56	3.7%	7.9%
	12:01-12:30	50	3.3%	7.0%
	12:31-13:00	73	4.9%	10.3%
	13:01-13:30	53	3.5%	7.4%
	13:31-14:00	54	3.6%	7.5%
	14:01-14:30	50	3.3%	6.9%
	14:31-15:00	77	5.1%	10.7%
	15:01-15:30	33	2.2%	4.6%
	15:31-16:00	76	5.1%	10.7%
	16:01-16:30	45	3.0%	6.4%
	16:31-17:00	68	4.5%	9.6%
	17:01-17:30	22	1.5%	3.1%
	17:31-18:00	52	3.4%	7.3%
18:01-18:30	23	1.6%	3.3%	
18:31-19:00	28	1.9%	4.0%	
19:01-19:30	26	1.7%	3.6%	
19:31-20:00	41	2.7%	5.7%	
20:01-20:30	19	1.2%	2.6%	
20:31-21:00	18	1.2%	2.6%	
21:01-21:30	28	1.8%	3.9%	
21:31-22:00	18	1.2%	2.5%	
22:01-22:30	9	0.6%	1.2%	
22:31-23:00	10	0.7%	1.4%	
23:01-23:30	3	0.2%	0.4%	

	23:31-24:00	4	0.3%	0.6%
	Cannot remember	101	6.7%	14.1%
Total		1,507	100.0%	210.9%

**Table 1.2B.6b: Start time Public holiday**

		Responses		Percent of Cases
		N	Percent	
<b>Start time Public holiday</b>	00:01-00:30	0	0.1%	0.1%
	05:01-05:30	2	0.5%	1.0%
	05:31-06:00	2	0.6%	1.2%
	06:01-06:30	4	1.0%	2.1%
	06:31-07:00	4	1.2%	2.5%
	07:01-07:30	5	1.4%	2.7%
	07:31-08:00	2	0.5%	0.9%
	08:01-08:30	13	3.5%	7.1%
	08:31-09:00	9	2.6%	5.3%
	09:01-09:30	8	2.1%	4.3%
	09:31-10:00	16	4.4%	8.9%
	10:01-10:30	4	1.2%	2.4%
	10:31-11:00	18	5.1%	10.4%
	11:01-11:30	11	3.0%	6.1%
	11:31-12:00	18	5.2%	10.4%
	12:01-12:30	14	3.9%	7.8%
	12:31-13:00	20	5.6%	11.4%
	13:01-13:30	6	1.6%	3.3%
	13:31-14:00	18	5.0%	10.0%
	14:01-14:30	16	4.4%	9.0%
	14:31-15:00	17	4.8%	9.7%
	15:01-15:30	8	2.2%	4.5%
	15:31-16:00	12	3.5%	7.0%
	16:01-16:30	14	3.8%	7.7%
	16:31-17:00	12	3.4%	6.8%
	17:01-17:30	6	1.7%	3.5%
	17:31-18:00	14	4.0%	8.1%
	18:01-18:30	5	1.3%	2.7%
	18:31-19:00	12	3.2%	6.5%
	19:01-19:30	2	0.6%	1.1%
	19:31-20:00	12	3.3%	6.6%
	20:01-20:30	12	3.3%	6.6%
20:31-21:00	8	2.2%	4.4%	
21:01-21:30	4	1.1%	2.2%	
21:31-22:00	8	2.2%	4.4%	
22:01-22:30	4	1.1%	2.2%	
22:31-23:00	1	0.2%	0.4%	
23:31-24:00	2	0.5%	0.9%	
	Cannot remember	17	4.8%	9.7%
Total		359	100.0%	202.1%

**Table 1.2B.7: Sub-trips information (last Sunday or public holiday)**

No. of sub-trips	Count	%	Mean trip time (min.)	Std Deviation of trip time (min.)
1	129	8	29	20
2	307	20	39	23
3	899	57	47	22
4	110	7	78	30
5	109	7	90	33
6	8	1	100	18
7	1	0	97	48
8	0	0	79	.
Total	1,564	100	49	29

**Table 1.2B.10 Trip making behavior by Allowance Type (last Sunday or public holiday)**

			Whether made any trips on Sunday/ Public holiday		Total
			made 0 trip	made at least 1 trip	
Allowance Type	CSSA (Institution)	Count	131	51	182
		%	72.0%	28.0%	100.0%
	CSSA (Community)	Count	480	583	1,063
		%	45.2%	54.8%	100.0%
	DA (High)	Count	76	63	139
	%	54.7%	45.3%	100.0%	
	DA (Normal)	Count	754	1,022	1,776
		%	42.5%	57.5%	100.0%
Total		Count	1,441	1,719	3,160
		%	45.6%	54.4%	100.0%

**Table 1.2B.11 Trip making behavior by Age Group (last Sunday or public holiday)**

			Whether made any trips on Sunday/ Public holiday		Total
			made 0 trip	made at least 1 trip	
Age Group	12-14	Count	24	45	69
		%	34.8%	65.2%	100.0%
	15-19	Count	74	99	173
		%	42.8%	57.2%	100.0%
	20-24	Count	68	83	151
		%	45.0%	55.0%	100.0%
	25-29	Count	84	64	148
		%	56.8%	43.2%	100.0%
	30-34	Count	98	103	201
		%	48.8%	51.2%	100.0%
	35-39	Count	114	105	219
		%	52.1%	47.9%	100.0%
	40-44	Count	150	160	310
		%	48.4%	51.6%	100.0%
	45-49	Count	190	213	403
		%	47.1%	52.9%	100.0%
	50-54	Count	256	240	496
		%	51.6%	48.4%	100.0%

	55-59	Count	245	269	514
		%	47.7%	52.3%	100.0%
	60-64	Count	266	199	465
		%	57.2%	42.8%	100.0%
Total		Count	1,569	1,580	3,149
		%	49.8%	50.2%	100.0%

**Table 1.2B.12 Trip making behavior by Monthly Personal Income (last Sunday or public holiday)**

			Whether made any trips on Sunday/ Public holiday		Total
			made 0 trip	made at least 1 trip	
Monthly personal income	HKD 4,000 or below	Count	1,164	1,159	2,323
		%	50.1%	49.9%	100.0%
	HKD 4,001-5,000	Count	84	68	152
		%	55.3%	44.7%	100.0%
	HKD 5,001-6,000	Count	40	42	82
		%	48.8%	51.2%	100.0%
	HKD 6,001-7,000	Count	15	38	53
		%	28.3%	71.7%	100.0%
	HKD 7,001-8,000	Count	18	21	39
		%	46.2%	53.8%	100.0%
	HKD 8,001-9,000	Count	10	13	23
		%	43.5%	56.5%	100.0%
	HKD 9,001-10,000	Count	11	12	23
		%	47.8%	52.2%	100.0%
	Above HKD 10,000	Count	21	56	77
		%	27.3%	72.7%	100.0%
Total		Count	1,363	1,409	2,772
		%	49.2%	50.8%	100.0%

**Table 1.2B.13 Trip making behavior by Monthly Household Income (last Sunday or public holiday)**

			Whether made any trips on Sunday/ Public holiday		Total
			made 0 trip	made at least 1 trip	
Monthly household income	HKD 4,000 or below	Count	354	276	630
		%	56.2%	43.8%	100.0%
	HKD 4,001-5,000	Count	95	83	178
		%	53.4%	46.6%	100.0%
	HKD 5,001-6,000	Count	74	82	156
		%	47.4%	52.6%	100.0%
	HKD 6,001-7,000	Count	69	81	150
		%	46.0%	54.0%	100.0%
	HKD 7,001-8,000	Count	67	89	156
		%	42.9%	57.1%	100.0%
	HKD 8,001-9,000	Count	62	83	145
		%	42.8%	57.2%	100.0%
	HKD 9,001-10,000	Count	67	81	148
		%	45.3%	54.7%	100.0%
	Above HKD 10,000	Count	324	481	805
		%	40.2%	59.8%	100.0%
Total		Count	1,112	1,256	2,368
		%	47.0%	53.0%	100.0%

**Table 2.6.1: Reasons for no increase in using MTR**

	Responses		Percent of Cases
	N	Percent	
Depend on the need to use this service	642	25.9%	36.1%
Do not/rarely go out	544	21.9%	30.6%
No need to/rarely use this transport ser	487	19.6%	27.4%
No service to my destination	245	9.9%	13.7%
Inconvenience (boarding/alighting location)	181	7.3%	10.2%
Inadequate facilities in compartment	104	4.2%	5.9%
Money concern (expensive, no discount)	94	3.8%	5.3%
Health reason/Need accompany	79	3.2%	4.4%
Too many people in queue/inside compartment	42	1.7%	2.4%
Preference/familiarity	22	0.9%	1.2%
Already receiving discount	18	0.7%	1.0%
Others	15	0.6%	0.8%
Time problem (waiting/travel time, slow)	7	0.3%	0.4%
Don't know	2	0.1%	0.1%
Total	2,478	100.0%	139.5%

**Table 2.6.2: Reasons for no increase in using KCR**

	Responses		Percent of Cases
	N	Percent	
No need to/rarely use this transport service	838	29.9%	40.2%
Depend on the need to use this service	704	25.1%	33.8%
Do not/rarely go out	513	18.3%	24.6%
No service to my destination	347	12.4%	16.6%
Inconvenience (boarding/alighting location)	127	4.5%	6.1%
Health reason/Need accompany	75	2.7%	3.6%
Money concern (expensive, no discount)	65	2.3%	3.1%
Inadequate facilities in compartment	59	2.1%	2.8%
Too many people in queue/inside compartment	33	1.2%	1.6%
Preference/familiarity	22	0.8%	1.0%
Others	14	0.5%	0.7%
Time problem (waiting/travel time, slow)	4	0.2%	0.2%
Already receiving discount	5	0.2%	0.2%
Total	2,806	100.0%	134.5%

**Table 2.6.3: Reasons for no increase in using LRT**

	Responses		Percent of Cases
	N	Percent	
No need to/rarely use this transport service	1,158	34.2%	46.9%
No service to my destination	806	23.8%	32.6%
Depend on the need to use this service	532	15.7%	21.5%
Do not/rarely go out	499	14.7%	20.2%
Inconvenience (boarding/alighting location)	122	3.6%	4.9%
Health reason/Need accompany	76	2.2%	3.1%
Inadequate facilities in compartment/at	57	1.7%	2.3%
Money concern (expensive, no discount)	43	1.3%	1.7%
Preference/familiarity	38	1.1%	1.5%
Time problem (waiting/travel time, slow	20	0.6%	0.8%
Others	21	0.6%	0.8%
Too many people in queue/inside compartment	13	0.4%	0.5%
Don't know	2	0.1%	0.1%
Already receiving discount	1	0.0%	0.0%
<b>Total</b>	<b>3,387</b>	<b>100.0%</b>	<b>137.1%</b>

**Table 2.6.4: Reasons for no increase in using BUS**

	Responses		Percent of Cases
	N	Percent	
Depend on the need to use this service	780	39.3%	46.6%
Do not/rarely go out	428	21.6%	25.6%
No need to/rarely use this transport ser	330	16.6%	19.7%
Inadequate facilities in compartment	113	5.7%	6.8%
Health reason/Need accompany	83	4.2%	5.0%
Inconvenience (boarding/alighting location)	53	2.7%	3.2%
Money concern (expensive, no discount)	52	2.6%	3.1%
Time problem (waiting/travel time, slow	44	2.2%	2.6%
Too many people in queue/inside compartment	26	1.3%	1.6%
No service to my destination	27	1.4%	1.6%
Preference/familiarity	23	1.2%	1.4%
Others	20	1.0%	1.2%
Already receiving discount	4	0.2%	0.2%
<b>Total</b>	<b>1,982</b>	<b>100.0%</b>	<b>118.5%</b>

**Table 2.6.5: Reasons for no increase in using TRAM**

	Responses		Percent of Cases
	N	Percent	
No need to/rarely use this transport service	1,054	31.1%	39.3%
No service to my destination	893	26.3%	33.3%
Depend on the need to use this service	457	13.5%	17.0%
Do not/rarely go out	421	12.4%	15.7%
Inadequate facilities in compartment/at	190	5.6%	7.1%
Inconvenience (boarding/alighting location)	108	3.2%	4.0%
Time problem (waiting/travel time, slow)	90	2.7%	3.4%
Health reason/Need accompany	65	1.9%	2.4%
Too many people in queue/inside compartment	42	1.2%	1.5%
Money concern (expensive, no discount)	32	0.9%	1.2%
Preference/familiarity	24	0.7%	0.9%
Others	14	0.4%	0.5%
Already receiving discount	1	0.0%	0.0%
Total	3,390	100.0%	126.3%

## Appendix IV: Coding Manual and Interviewer Guidelines

### Coding Manual

#### 一、地區附加資料

District	Code	District	Code
Central and Western district	01	Kwai Tsing district	10
Wan Chai district	02	Tsuen Wan district	11
Eastern district	03	Tuen Mun district	12
Southern district	04	Yuen Long district	13
Yau Tsim Wong district	05	Islands district	14
Sham Shui Po district	06	North district	15
Kowloon City district	07	Tai Po district	16
Wong Tai Sin district	08	Sha Tin district	17
Kwun Tong district	09	Sai Kung district	18
		Outside HK boundary	19

#### 二、交通工具公司附加資料

##### 交通工具公司附加資料

	交通工具	附加資料	編碼
一、	巴士 Bus	九龍巴士公司-普通巴士 KMB – Non -air-conditioning bus	B01
		九龍巴士公司-空調巴士 KMB – air-conditioning bus	B02
		新世界第一巴士服務有限公司 NWFB – FIRST BUS	B03
		城巴有限公司 Citybus Limited	B04
		龍運巴士 Long Win Bus Company Limited;	B05
		新大嶼山巴士有限公司 New Lantao Bus Co.ltd	B06
二、	九廣鐵路 KCR	九廣東鐵-頭等車廂 KCR East Rail – First class	K11
		九廣東鐵-普通車廂 KCR East Rail – Standard class	K12
		九廣西鐵 KCR West Rail	K13
		輕便鐵路 KCR Light Rail	K14
		九鐵免費接駁巴士 (K 車) KCR free Feeder Bus	K15



三、	地下鐵路 MTR	地下鐵路 MTR	M21
四、	專線小巴（綠色小巴） Green Minibus(GMB)	專線小巴（綠色小巴） Green Minibus (GMB)	G22

KMB: Kowloon Motor Bus Company (1933) Limited;

NWFB: New World First Bus Services Limited.

MTR: Mass Transit Railway

KCR: Kowloon Canton Railway

五、	渡輪 Ferry	天星小輪有限公司 The "Star" Ferry Company, Limited	F23
		新世界第一渡輪服務有限公司-普通渡輪 (普通位) New World First Ferry Services Ltd. – Ordinary Ferry (Ordinary)	F24
		新世界第一渡輪服務有限公司-普通渡輪 (豪華位) New World First Ferry Services Ltd. –Ordinary Ferry (Deluxe)	F25
		新世界第一渡輪服務有限公司-高速渡輪 New World First Ferry Services Ltd. - Fast Ferries	F26
		新世界第一渡輪服務有限公司 (沒有分類) New World First Ferry Services Ltd. – (No classification)	F27
		港九小輪有限公司 Hong Kong & Kowloon Ferry Ltd.	F28
		愉景灣航運服務 Discovery Bay Transportation Services Limited	F29
		珀麗灣渡輪公司 Park Island Transport Company Ltd.	F30
		其他渡輪公司 Other Ferry company	F31
		富裕小輪 Fortune Ferry	F32
		香港仔小輪公司 Eastern Ferry Companies	F33

六、	皇巴士 Huangbus	新香港巴士有限公司 New Hong Kong Bus Co., Ltd	C36
七、	電車 Trams	香港電車有限公司 Hongkong Tramways Limited	H41
		山頂纜車有限公司 Peak Tramways Company Limited	H42
八、	復康巴士 Rehabuses	香港復康會- 電話預約服務 Hong Kong Society for Rehabilitation - Dial-a-ride Service	J46
		香港復康會- 固定路線服務(月/半月結形式) Hong Kong Society for Rehabilitation - Scheduled Route Service	J47
		香港復康會- 聯載服務 (月結形式) Hong Kong Society for Rehabilitation - Pooled Dial-a-ride Service	J48
		香港復康會- 穿梭服務 Hong Kong Society for Rehabilitation - Feeder Service	J49
九、	的士 Taxi	的士 Taxi	T51
十、	其他車輛 Other vehicles	紅色小巴 Red minibus	U61
		屋邨巴士 Resident shuttle bus	U62
		私家車 (自行駕駛) Private car (being driver)	U63
		私家車 (作為乘客) Private car (being passenger)	U64
		院舍車輛 Institution's vehicle	U65
		中心車輛 Center's vehicle	U66
		電單車(自行駕駛) Motorcycle (being driver)	U67
		電單車 (作為乘客) Motorcycle (being passenger)	U68
		公司車/ 廠車 Company's / Factory's vehicle	U69
		校車 School bus	U70
		旅遊車 Limousine	U71
		出租車 Rental car	U72
		商場穿梭巴士 Shopping malls' shuttle bus	U73
		跨境巴士 Cross -border bus	U74
		其他車輛 Other vehicles	U75
		屋村住戶免費巴士 Free estate resident shuttle bus	U76
醫院非緊急救護車 Non-emergency Ambulance	U77		

十一、	其他 Others	輪椅代步 Wheelchair	V91
		步行 Walk	V92
		單車 Bicycle	V93
		高爾夫球車 Golf trolley	V94
		其他 Others	V95

### 三、優惠附加資料

#### 優惠附加資料

	交通工具	優惠	編碼
一、	巴士 Bus	分段收費 Section fare	B101
		巴士接駁優惠 Octopus Bus-Bus Interchange (BBI) packages	B102
		即日回程優惠 "Same Day" Return (SDR) Discount	B103
		60-65 歲長者優惠 (半價) 60-65 years old elderly discount (half-price)	B105
		日票 (大嶼山巴士) Daily ticket (Lantau Island Bus)	B106
		小童優惠 Children discounts	B107
		巴士其他優惠 Others bus discounts	B108
		九巴家屬優惠 KMB staffs' relative discounts	B109
		長者八達通假日優惠 (65 歲或以上) Sunday/Public Holiday Fare Discount for the Elderly (over 65 years old)	B110
		海洋公園職員優惠價 Ocean Park staffs' discount	B111

二、	九廣鐵路 KCR	東鐵全月通 KCR East Rail One-Month Pass	K121
		九鐵免費接駁巴士 (K 車) KCR free Feeder Bus	K122
		西鐵免費接駁輕鐵 Free interchange with West Rail and Light Rail	K123
		九鐵接駁巴士優惠 East Rail and Bus interchange discount	K124
		九鐵接駁專線小巴優惠 East Rail and GMB interchange discount	K125
		西鐵月票 (\$300) (包搭輕鐵、元朗區 k 車、接駁小巴) West Rail monthly ticket (\$300) (including Light Rail, Yuen Long K bus, interchange Mini-bus)	K126
		西鐵月票 (\$400) (包搭輕鐵、元朗區 k 車、接駁小巴) West Rail monthly ticket (\$400) (including Light Rail, Yuen Long K bus, interchange Mini-bus)	K127
		西鐵全日通 West Rail One-day Pass	K128
		九鐵其他優惠 KRC others discounts	K129
		長者優惠 (半價) Elderly discount (half-price)	K130

三、	地下鐵路 MTR	八達通優惠機 (\$2 優惠) MTR Octopus Fare Saver (\$2 discount)	M141
		機鐵免費接駁地鐵 Free interchange with Airport Express and MTR	M142
		博覽館站免費即日來回 Same day free return to and from for AsiaWorld - Expo station	M143
		地鐵接駁巴士優惠 MTR – Bus interchange discount	M144
		地鐵接駁專線小巴優惠 MTR – GMB interchange discount	M145
		全日制學生優惠 Full-time student discount	M146
		<sup>xxiii</sup> 長者優惠 (invalid) Elderly discount (invalid)	M147
		地鐵其他優惠 MTR other discount	M148
		八達通積分優惠 – 單程免費 Octopus bonus points discount – Free single ride	M149
		小童優惠 Children discount	M150
		地鐵職員家屬優惠 MTR staffs' family members discount	M151
四、	專線小巴 (綠色小巴) Green Minibus (GMB)	分段收費 Section fare	G161
		專線小巴接駁專線小巴優惠 GMB - GMB interchange discount	G162
		專線小巴接駁九鐵優惠 GMB – KCR interchange discount	G163
		專線小巴接駁地鐵優惠 GMB – MTR interchange discount	G164
		全日制學生優惠 Full-time student discounts	G165
		專線小巴其他優惠 Others GMB discounts	G166

<sup>xxiii</sup> 註: 長者優惠只適用於 65 歲或以上長者。

五、	渡輪 Ferry	分段收費 Section fare	F171
		月票 Monthly ticket	F172
		渡輪其他優惠 Other ferry discounts	F173
		傷殘人士半價優惠 Passenger with disabilities half-price discount	F174
		渡輪推廣優惠 Ferry promotion discount	F175
六、	皇巴士 Huangbus	其他優惠 Others discounts	C181
七、	電車 Trams	其他優惠 Others discounts	H186
九、	的士 Taxi	的士接駁機鐵優惠 Taxi - Airport Express interchange discount	T191
		的士其他優惠 Others taxi discounts	T192
		的士折扣優惠 Taxi discount	T193
十、	其他 Others	紅色小巴分段收費 Red minibus' section fare	R195
		商場穿梭巴士優惠 Shopping malls' shuttle bus discount	R196

#### 四、豁免附加資料

##### 豁免

豁免方式	編碼
公司支付車資 Paid by Company	P201
中心支付車資 Paid by Centre	P202
主辦機構支付車資 Paid by Sponsor institution	P203
社署支付車資 Paid by Social Welfare Department (SWD)	P204
醫院支付車資 Paid by Hospital	P205
同行者支付車資 Paid by Accompanist(s)	P206
其他豁免 Others modes of wavier	P288

五、付款模式附加資料

付款模式

付款模式	編碼
現金 Cash	Z01
八達通 Octopus	Z02
月票 Monthly ticket	Z03
日票 Daily ticket	Z04
銀行過數 (指自動轉賬, 支票等) Bank transactions (for auto-pay, cheque...etc)	Z 88
其他付款模式 Other payment methods	Z 89

**Q9 / Q13 Trips Purposes**

30	Process / get visa or passport	辦理 / 領取證件
31	Engage in volunteer work	做義工
32	Attend talks	參與講座
33	Attend class/ take lessons after school or work	參加補習 / 上堂
34	Get nursing services	接受托管服務
35	Go to bank	前往銀行處理事務
36	Accompany relatives or friends to see doctor	陪親友覆診 / 看症
37	Do exercise	做運動
38	Meet social worker	約見社工
39	Meeting with / activities between relatives or friends	辦理親戚朋友間的事情 / 活動 (約見親戚朋友 / 親友間之活動)
40	Receive premium	領取優惠
41	Personal issues	私人事務
42	To pick up/ drop off family members, relatives or friends	接送家人 / 親友外出
43	Have a tour/ trip/ journey for leisure	觀光 / 旅遊 / 郊遊



**Q12/Q16 Reasons for choosing particular transport mode to make the trip**

30	Chosen by accompanist(s) / not chosen by respondent	由同行者選擇 / 非受訪者自己選擇
31	Need career accompany along the trip	因沿途有人照顧 / 沿途需要有人照顧
32	No need to wait / Time for waiting bus is faster	不用候車 / 候車時間短
33	Cause by weather (for convenience)	因天氣問題 (為方便)
34	Provide discount	有優惠
35	No traffic jam	不會塞車
36	Don't know other transportation/ only know this transportation	不懂乘搭其他交通工具/只懂乘搭這種交通工具
37	Restricted by wheelchair, but still can use this transportation	輪椅所限，但可乘搭這種交通工具
38	Comfortable compartment	車廂舒適
39	Use to / familiar with this transportation	習慣 / 熟悉這種交通工具
40	No need to ask for "stop over" beforehand	下車前不用叫 '停車'
41	Personal health / psychology problem	個人健康 / 心理問題
42	Personal preference	個人喜好
43	Safe	安全
44	Staff / driver has good attitude	職員 / 司機態度良好
45	To pick up/ drop off family members	接送家人外出
46	Fewer passengers inside compartment	車廂的人較少
47	Depart / Arrive on time	準時到達 / 開出

**Q20 Reasons for no increase in using particular transport mode under concession**

30	Too crowd inside compartment	車廂人多擠迫
31	No one assist/ accompany	沒有人協助/陪同
32	Not enough discount / not interested	優惠太少 / 不吸引
33	Not familiar with routes of the transportation	不熟悉這種交通工具的路線 (如何站上/落車)
34	Inconvenience because need interchange	需要轉車不方便
35	Don't want to spend money / save money	不想花錢 / 爲了省錢
36	Insufficient facilities in stations / bus stops	車站設備不足
37	Personal health problem	個人健康問題，不宜 / 不能乘搭這種交通工具或身體問題
38	No discount for accompanists	同行者沒有優惠
39	Arranged / chosen by other people	由其他人安排 / 選擇所乘搭的交通工具
40	Already have elderly discounts (half price)	已有長者優惠 (半價)
41	Already have student discounts (half price)	已有學生優惠 (半價)
42	Slow speed	速度慢
43	Have private car as mean of transportation	有私家車代步
44	No special reason	沒有特別原因
45	Personal preference	個人喜好
46	Avoid causing inconvenience to others	怕對他人造成不便
47	Not secure / dangerous	不安全 / 覺得危險
48	Need to queue up for aboard / too many people in the queue	需要排隊上車 / 很多人排隊
49	Poor ventilation	空氣不好 / 空氣不流通

50	Familiar with this/ a specific transportation	習慣 / 熟悉某種交通工具
51	Staff / driver has poor attitude	職員 / 司機態度差
52	Discount is not applicable for them	優惠不適用
53	Have discounts already (Not including students / elderly discounts)	本身已有優惠 (不包括學生 / 長者優惠)

## Interviewer Guidelines

# Interviewer Guidelines

## Survey on the Public Transport Needs of Persons with Disabilities

### **Before Interviewing (For conducting household face-to-face interview only)**

1. Familiarize yourself with the questionnaire.
2. Dress code: Dress properly and no bizarre clothing. You need to wear a T-shirt with “HKU” printed.
3. Please bring along with you of SSRC ID card, all documents, questionnaires, pens /pencils, bottle of water, show cards, tables of transport route, mobile phone and security alarm.
4. Confirm the venue and time before each visit.
5. Check the time carefully during each visit as we have set the maximum time for each visit to be one hour.
6. Make sure that you contact your supervisor before each visit.

### **Before Interviewing (For conducting telephone interview only)**

7. Familiarize yourself with the questionnaire.
8. Confirm the appointment time before start interview.
9. Check the time carefully during each interview as we have set the maximum time for each interview to be one hour.

### **Manner (For conducting both household face-to-face and telephone interviews)**

1. Be positive in asking for interviews.
2. Be gentle and polite to all people including those who refuse to be interviewed by you.
3. Use a clear and friendly tone to communicate with your respondents.

### **When you arrive at the location (For conducting household face-to-face interview)**

1. Make sure that you turn your mobile phone to “silent mode” before ringing the door bell.
2. You should not ring the door bell for more than three times
3. When the household member opens the door, you must show your SSRC ID card for your identity and state the objective of the survey to the respondent clearly
4. If you cannot reach the respondent, please leave a “note” and let the respondent know that you have been arrived.

**During the interview (For conducting both household face-to-face and telephone interviews)**

1. Interviewer should follow the sequence of the telephone control sheet given by the supervisor.
2. Interviewer must give a warm greeting and tell the respondent that this is a survey commissioned by the HWFB about the public transport needs of PWDs which the respondent should have already been contacted about and it will take about 20 minutes.
3. If the respondent is not available at that time then interviewer should try to make an appointment at a time which is convenient to the respondent and inform the supervisor of the appointment.
4. Interviewer must ask every question following the instructed sequence.
5. Questions should be read exactly as worded.
6. Answers should be recorded without interviewer discretion.
7. If the respondent's answer to the question is not a complete and adequate answer, probe for clarification and elaboration as follows:
  - What do you mean by that?
  - Please tell me more about that.
  - Anything else?
8. Open-ended questions: Write down the answer verbatim; use no paraphrasing or summaries.
9. If the respondent is impatient about the length of the questionnaire, ask whether he/she wants us to call back later on the same day in order to suit his/her convenience.
10. The respondent has the right to drop out anytime during the interview, interviewer should politely seek his/her consent to call later or convert to face-to-face interview. If the respondent refuses to continue the interview then interviewer must thank the respondent.

**After the interview (For conducting both household face-to-face and telephone interviews)**

1. At the end of the interview, interviewer should thank and inform the interviewee that quality checking may be done in the following week.
2. After the completion of the interview, interviewer should check that all of the following information is complete:
  - Sampling group
  - Questionnaire number
  - Type of interview mode
  - Telephone number
  - Date of interview
  - Start and end time of interview
  - Before returning the questionnaires, please check whether all questions are properly filled in and make sure that your handwriting is legible.
3. Please report to your supervisor after each visit. (For conducting household face-to-face interview only)

**Remarks: (For conducting both household face-to-face and telephone interviews)**

1. If interviewer encounters any problems during the interview, he/she must report to his/her supervisor immediately.
2. Interviewer is forbidden to disclose any information collected from the interview.
3. If you cannot arrive respondent's flat on time, please call to your supervisor as soon as you can. (For conducting household face-to-face interview only)
4. Interviewer must return all survey material including all questionnaires and coding manual to the supervisor after each day of the fieldwork.
5. Interviewer should not disclose any of his/her personal information to the respondent. If the respondent has any further enquiry, please refer to the SSRC's contact information.

**Question-specific reminders: (For conducting both household face-to-face and telephone interviews)**

1. For the questionnaire number, the first three digits are the interviewer number and the last four digits are the questionnaire number by the corresponding interviewer.
2. All questions are asking about the person with disability and none of them are asking about the carer.
3. For the “Living district”, interviewer should ask the respondents’ usual living district. If respondent answers more than one place of residence, interviewer should ask and recode the district that the respondent lives most frequently.
4. For the respondent’s age, if the respondent answers the date of birth, interviewer should write down in the space next to the question and then work out the age of respondent.
5. For the type of disability, interviewer should mark the main type of disability as recorded in the control sheet and then ask for any other disabilities.
6. The Normal Disability Allowance is fixed to an amount of HK\$1,125 and the Higher Disability Allowance is fixed to an amount of HK\$2,250. If the respondent can’t answer which types of Disability Allowance, interviewer should further ask the amount of allowance for this question.
7. If the respondent do not receive any types of allowance, interviewer should ask the following two question:
  - (i) “Have you ever received any types of allowance?” If yes, interviewer should further ask “Which type of allowance have you received?” Interviewer should record down the answer in the space next to the question.
  - (ii) “When did you stop receiving your allowance?” Interviewer should record down the date in the space next to the question and say “Thank you very much for your cooperation.” to end the interview.
8. For the type of allowance being received, interviewer should not cross check with the respondent according to the record.
9. For Q7 driving car, the frequency of driving habit is not considered.
10. For Q8 the mobility aids, interviewer should record all types of mobility aids by respondent.
11. For section B, the yesterday approach is used to select a specific weekday to record the trip information of the respondents. Yesterday’s trip refers to the trips on the day before the interview. For example, if the interview is conducted on Wednesday, please ask about all the trips on Tuesday.
12. For sections B, interviewer must record down all the trips that respondent went on yesterday.
13. For the trip in Q9 and Q13, if the respondent did not use any transport mode, interviewer should not ask about the details of trip characteristic in Q12. For example, if “Trip 1” from “Shaukiwan” was only walking to the nearby restaurant in “Shaukiwan” for the purpose of eating breakfast and then “Trip 2” from the restaurant in “Shaukiwan” was taking a minibus to office in “North Point” for the purpose of working. Then, for “Trip 1” it is not necessary to ask the details of trip characteristics in Q12 but the interviewer must ask the trip characteristics of “Trip 2” in Q12.

14. If walking is involving as part of the trip, the interviewer should ask all the transport modes and walking information for the trip characteristics in Q12.
15. The time of starting point and destination of each trip in Q12 and Q16 should be recorded in 24 hour format.
16. Interviewer must ask the place of starting point and destination of each trip in Q12 and Q16 at least at district level.
17. For the frequency of each trip in Q11 and Q15, if the respondent goes out “less than one day per week”, interviewer should write down the code “8”.
18. For the frequency of each trip in Q11 and Q15, if the respondent “is not sure or cannot answer” how many times that he/she goes out per week, interviewer should write down the code “9”.
19. For the frequency of each trip in Q11 and Q15, if the respondent cannot provide a concrete answer, interviewer should take the average of respondent’s answer. For example, if the respondent answers 2 to 3 days per week, then interviewer should code 2.5 on the questionnaire.
20. For the reasons for choosing that type of transport in Q12 and Q16, interviewer must ask at least two times “Anything else” in order to ensure that all possible reasons are answered by the respondent.
21. If respondent cannot remember or is not sure about the details of his/her trip characteristic after asking two times, interviewer should write down the code “999”.
22. For the transport company in Q12 and Q15, interviewer should pay attention to the different coding numbers using the same company, according to the different classes, with or without air-condition and whether it is franchised or not.
23. For section C, the Sunday or public holiday trip information refers to the last Sunday for the interviews conducting in September and the last public holiday for the interviews conducting in October.
24. For transport modes in section D, interviewer should rotate the sequence of the transport modes in order to avoid bias.
25. For the monthly personal income in Q21, the code “NA” is used for the respondents who receive CSSA because the allowance of CSSA is on the household basis.
26. For section D, the definition of “normally use” is the respondent uses it at least once a week.
27. For the percentages in Q17a, Q18a and Q19a, the percentages refer to the percentage increase / decrease by respondent. For example, if the respondent normally uses the particular transport mode once a week and he/she will take it two times more after the concession is offered, then the interviewer should code 200%.
28. For the reasons for not increasing the usage of public transport in Q20, if the respondent does not increase the usage of that transport mode in the full day 50% fare concession in Q19a or the respondent does not consider using that transport mode in Q19b, interviewer should ask the respondent’s reasons in Q20.
29. For the percentages and amounts in Q17, Q18 and Q19, if the respondent answer “not sure or don’t know”, interviewer should write down the code “999”.
30. For the amounts in Q17, Q18 and Q19, interviewer should pay attention on the increased amount of travel spending which is based on the fare level



after 50% concessions and should not base on the fare level before 50% concessions.