

# **'Measuring Accessibility as Experienced by Different Socially Disadvantaged Groups'**

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**Working Paper 4**

**Bus User Walk Access Barriers: Keighley**

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# 1 SUMMARY OF THE MAIN FINDINGS

- 1.1 The University of Westminster's Transport Studies Group has received funding from the UK Engineering and Physical Sciences Research Council (EPSRC) to develop more refined and sensitive measures of accessibility that take into account the concerns of various socially disadvantaged groups. The partners for this project include: Transport for London (TfL), the London Borough of Tower Hamlets (LBTH), West Yorkshire PTE (METRO) and Bradford Metropolitan District Council (BMDC).
- 1.2 As part of this study, surveys of bus users were carried out in parts of Keighley. The fieldwork was carried out in May 2004 and was divided into two stages; stage 1 was an initial survey of bus users travelling on one of five routes in Keighley (797 respondents) (see Appendix 1 for a copy of the questionnaire) and stage 2 was a follow-up in-depth interview with a select number of respondents (31 participants) (see Appendix 2). The on-bus survey was carried out by NWA Social and Market Research Company (NWA).
- 1.3 This report is divided into five chapters. Chapter one is a summary of the main findings of the fieldwork, both the on-bus passenger survey and the follow-up interviews. Chapter two introduces the project and outlines the fieldwork methodology. Chapter three provides an overview of the passenger survey findings and chapter four reports on the follow-up interviews. Finally, chapter five provides some general conclusions, based on the two stages of the fieldwork.

## On-Bus Passenger Survey

- 1.4 This was based on a two-page, self completion questionnaire. The aim was to identify the key issues that affect an individual's decision to walk to a bus stop (i.e. time of day, lighting, safety, shelter/seating and gradient issues). The questionnaire consists of fourteen questions, sub-divided into three sections.
- 1.5 Section one asked questions about the respondent's bus journey, including trip purpose, whether they walk from home to their nearest bus stop and, if so, how long their journey takes and whether they have any concerns about getting to and from their bus stop.
- 1.6 Section two asked the respondents to indicate which hypothetical bus stop they would use if they had a choice between bus stops with different access conditions / facilities (i.e. steep hill .v. flat route; marked stop .v. shelter and / or seating; cross a busy road without a pedestrian crossing .v. avoid crossing a busy road; poorly lit quiet area .v. well lit busy area .v. prefer not to go out at night).
- 1.7 Section three asked for a few general demographic details (e.g. age, gender, ethnicity, employment status) and whether people were travelling with young children.

- 1.8 Although questionnaires were handed out to all bus users, the groups of primary interest were:
- Young People aged between 16-24 years of age (164 survey respondents);
  - Older People aged 60 years old and over (238 survey respondents);
  - Black and Minority Ethnic People (35 survey respondents);
  - 'Mobility impaired' (for the purpose of this survey respondents were asked if they have a health condition that affects their mobility) (160 survey respondents);
  - Unemployed People who are either registered unemployed or looking for work (47 survey respondents);
- 1.9 The results of the initial survey indicate that both gender and age have a significant impact on the reasons why people make a journey by bus: women are more likely to travel by bus to access shopping facilities, whereas men tend to use it for more social / leisure purposes. Older respondents (aged 60+) are more likely to use the bus for shopping related trips, whereas young people (under 25) use it for work/education related trips.
- 1.10 When asked how long it takes them to walk to their usual bus stop, 84% of the respondents said less than 10 minutes (61% said less than 5 minutes). Ten percent of the participants said that they did not use their nearest bus stop and mentioned 'better facilities' (e.g. shelter and/or seating) and 'more choice of services' as the main reasons for using a different stop. It is interesting to note that a quarter of the BME group stated that they do not use their nearest bus stop. Concerns about personal safety and the level of lighting in their local area were the main reasons given for using a different stop. The respondents within the BME group were the only people to mention 'personal safety' as a reason for choosing a bus stop.
- 1.11 Gender and age have a significant impact on whether someone is prepared to walk 2 minutes to a bus stop that is up a steep hill or 3 minutes to a stop along a flat route. Men and young people are more likely to choose the nearest bus stop, whereas women and older people prefer to walk along the flat route. When the distance along the flat route is increased (to 5 and 7 minutes), there is no significant difference between the genders or the age groups. Older women with a health condition are more likely to choose a bus stop that is nearest to their home than those older women without a health condition.
- 1.12 There is no significant gender difference amongst the respondents when choosing either a marked bus stop or a stop with seating and/or a shelter facilities. However, the provision of seating/shelter becomes more important to respondents as they grow older, particularly if they have a health condition that affects their mobility. When comparing the different social groups, mobility impaired people are most likely to walk further to access a bus stop with facilities and BME people are most likely to use their nearest bus stop. Those respondents who were travelling with young children said they preferred to walk 2 minutes to a marked stop than 3, 5 or 7 minutes to access a bus stop with facilities. These results indicate that the facilities available at a bus stop are important criteria for some groups of people when choosing which bus stop to use.
- 1.13 Gender has a significant impact on whether someone is prepared to walk 2 minutes along a busy road without a pedestrian crossing or 3, 5 or 7 minutes along a road to a bus stop that avoids crossing a busy road. Men are more likely to walk to the bus stop that is 2 minutes away, whereas women prefer to walk further to avoid crossing a busy road without a pedestrian crossing. The results also show that crossing busy

roads is of most concern to people with a health condition. As the age of the respondent with a health condition increases, respondents are more likely walk further to avoid crossing a busy road. Older women have a greater aversion to the volume of traffic or the lack of pedestrian crossings than older men.

- 1.14 Nearly 70% of the respondents said they feel safe when walking to or from their usual bus stop at night. Older people were most likely to state that they do not feel safe when travelling at night (21% compared to 12% of young people). Women are more likely to choose a bus stop that is slightly further away from their home along a well lit road than men, who prefer the shortest route regardless of how well lit and busy the area is. In addition, women are more likely to avoid making a trip at night if their preferred bus stop is more than 5 minutes from their home. The results suggest that young people are more willing to travel at night and older people are least likely to go out.

## Follow-Up Interviews

- 1.15 The sample of respondents were selected based on the following criteria:
- They indicated on the initial on-bus survey that they would be prepared to provide further assistance;
  - They lived in Keighley;
  - They were over the age of 16;
  - They spent longer than 2 minutes walking to/from home to their usual bus stop;
  - They mentioned having a difficulty or concern about getting to/from their usual bus stop;
  - They expressed a concern about their personal safety when walking to/from their usual bus stop at night.
- 1.16 A total of 103 respondents were contacted and invited to attend an interview; however, only 31 people attended (Braithwaite: 22 participants and Riddlesden: 9 participants).
- 1.17 The aim of the follow up interviews was to explore some of the issues raised within the on-bus passenger survey in more depth. Each interview was divided into eight sections.
- 1.18 Section one covered the reasons why people travel by bus, their frequency of bus use and the time of day they make a trip to and from their usual bus stop. 'Shopping' was the main reason why the participants said they travelled by bus, and this activity tended to be carried out on a fairly frequent basis (four or more times a week).
- 1.19 Sections two and three asked the participants to locate on a map their home, the bus stop at which they board the bus to travel 'TO' their most frequent journey purpose and the stop at which they alight the bus 'FROM' this trip. The participants were asked to mark the route they take to and from the bus stop, indicating where appropriate: zebra, pelican and entry table crossings; central refuges, subways and footbridges etc. They were then asked to rate their walk to and from their usual bus stop in terms of: overall access; lighting conditions; condition of footways/pavements; steepness of route; volume of road traffic; safety from road traffic and personal safety. Over 80% of the participants (n=26) said they could walk to their nearest bus stop in less than 5 minutes.

- 1.20 In section four, participants were asked questions about the facilities available at their usual boarding bus stop (e.g. shelter, seating, lighting, timetable information and real time information) and how satisfied they are with them. If the participants mentioned that a facility was unavailable, then they were asked to indicate whether they would be prepared to walk further to access a stop with a shelter, or a seat or a light, etc. and, if so, how much further. Shelter and seating were the two main facilities that were lacking at most bus stops (27 people said they did not have a shelter and 26 people said their bus stop did not have a seat).
- 1.21 Section five asked the participants if the bus stop they usually use is the stop nearest to their home and if not the reasons why prefer a different stop. In section six, participants were asked to rank on a scale of 1 (very important) to 5 (not at all important/not needed) the importance of different bus stop facilities. In order of priority the results were: timetable information (n=27); lighting (n=25); a shelter (n=21); a seat (n=18) and real time information (n=11).
- 1.22 Analysis of the on-bus survey showed that some respondents provided conflicting responses to the initial trade-off questions. The project team decided to repeat those questions relating to gradients, crossing busy roads and accessibility at night, to check for consistency and the results of which can be found in section seven.
- 1.23 Lastly, in section eight of the interview, participants were shown a map of their local area and were asked to highlight specific roads that they consider to be poorly lit or to be busy due to heavy traffic or speeding vehicles, as well as any areas where they have concerns about their personal safety, both during the day and at night. Finally, participants were asked how often they travel by bus at night and how many extra trips per month they would make by bus if they felt more at ease about walking to/from the bus stop.

## 2 INTRODUCTION

- 2.1 The 'Measuring accessibility as experienced by different socially disadvantaged groups' project, funded by the Engineering and Physical Sciences Research Council, aims to develop more refined measures of accessibility that are sensitive to the varying perceptions, needs and constraints of different social groups.
- 2.2 The project has examined the accessibility requirements of different groups of people living in two areas: Keighley in West Yorkshire and three wards in the east of the London Borough of Tower Hamlets. Issues explored in the two areas include: existing travel patterns (e.g. destinations; timings; purposes and modes); suppressed travel demand and preferred activity patterns; key journey attributes (travel times, reliability, interchange, cost, personal safety, physical access issues); key destination attributes (e.g. type of shop, employment etc); relative importance of attributes and key thresholds (e.g. maximum walking distance).
- 2.3 The results of initial surveys (see working paper 2) showed that more data about the specific journeys people make to/from their regular bus stop was needed to assess perceptions of accessibility held by different groups of people.
- 2.4 In May 2004 an on-bus passenger survey was carried out in Keighley, to gain further insight into the journey patterns and bus access choices of different groups of people living in two smaller areas within Keighley: Braithwaite and Riddlesden. The respondents were asked to complete a questionnaire based on their travel experiences for the day they were being surveyed. All survey questionnaires were distributed between 11:00 and 21:00 on three Saturdays and three weekdays in May. The weather conditions during the course of the fieldwork were recorded as fine. A selection of respondents were then invited to attend a follow-up interview to discuss particular issues that they raised in the questionnaire.
- 3.4 A similar survey has been commissioned in Tower Hamlets, the results of which will be presented in a separate report (see working paper 5).
- 2.5 This report provides a summary of the key results that were obtained from the Keighley on-bus passenger survey and the follow-up interviews.

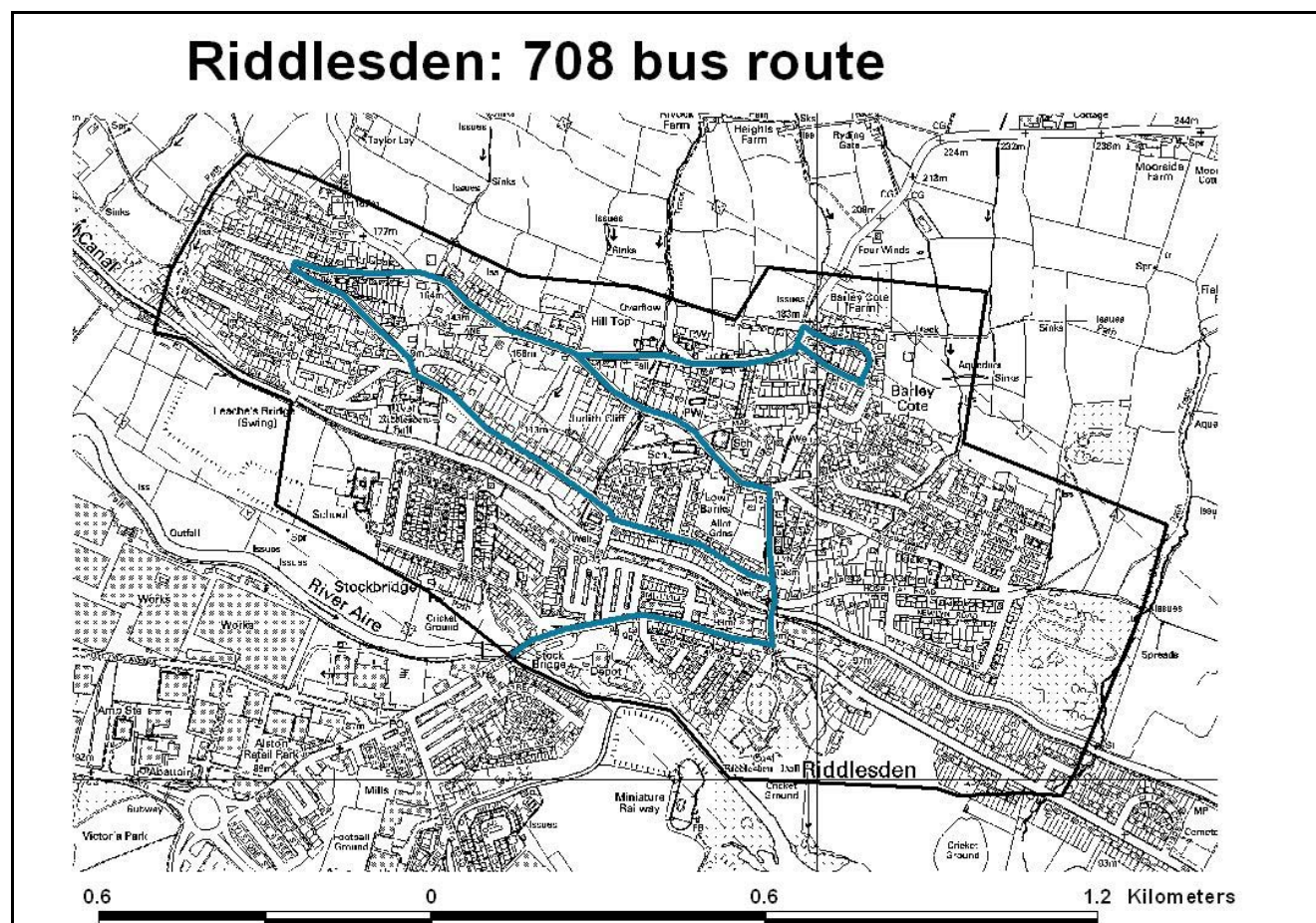
### 3 ON-BUS SURVEY

#### Methodology

3.1 The project methodology was divided into 2 stages. Stage 1 was an on-vehicle survey of bus users travelling on one of four routes in Keighley; 996 people completed a questionnaire, but after filtering (e.g. must live in Keighley and be over the age of 16), the remaining sample size was 797 respondents. Stage 2 was a follow-up in-depth interview with 31 participants who fitted the profile of at least one of the five social groups targeted in Keighley.

- 3.2 The bus routes covered were:
- 708 in Riddlesden (see figure 1)
  - 702 / 703 / 710 / 716 (Braithwaite) (see figure 2).

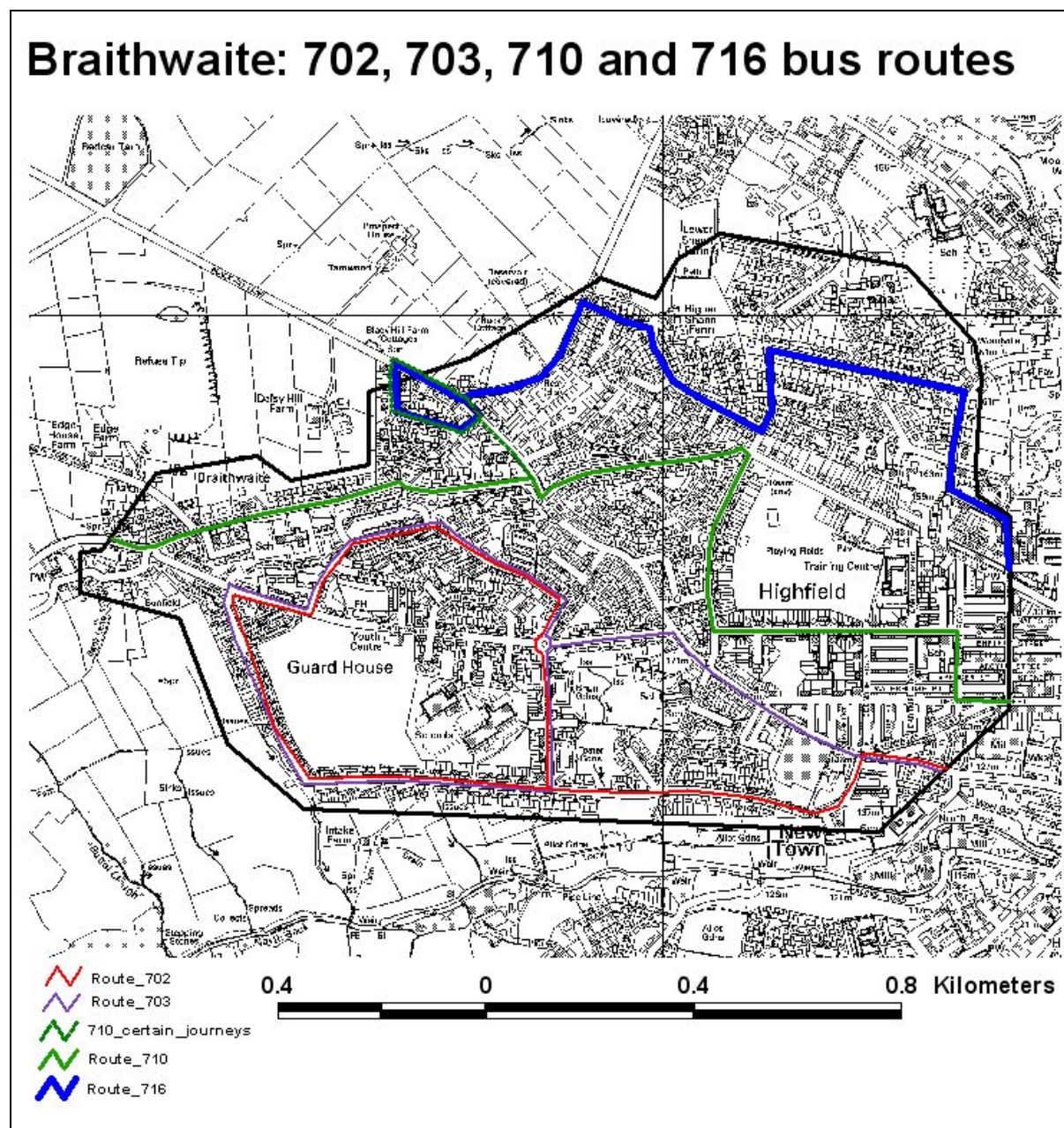
Figure 1: The surveyed bus route in Riddlesden



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Figure 2: The surveyed bus routes in Braithwaite



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3.3 Table 1 shows the number of buses covered by the on-board survey, in relation to the total number of scheduled buses in the same period (between 11:00 & 21:00).

Table 1: Number of buses surveyed

Route Number	Scheduled		Surveyed		Percent surveyed (%)	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
702/703	33	28	18	15	55%	54%
708	17	16	15	12	88%	75%
710	24	17	17	16	71%	94%
716	6	6	4	4	67%	67%

- 3.4 All passengers travelling on the surveyed buses were asked to complete a short questionnaire. On each bus there were two interviewers. One handed out the questionnaires and recorded the bus boarding stop number on the top of each form. The second interviewer counted the number of passengers on board the bus, including those under the age of 16, collected the completed questionnaires and recorded the bus alighting stop number on the form.
- 3.5 Table 2 shows the number of completed survey responses for each route on weekdays and Saturdays. The total number of completed questionnaires were fewer on a Saturday than on a weekday. However, it is important to note that fewer buses were surveyed on a Saturday: 47 compared to 54 on a weekday.

Table 2: Completed questionnaires by bus route and weekday / Saturday

Route	Day of the Week		Total
	Weekday	Saturday	
<b>702</b>	73	71	144
<b>703</b>	74	90	164
<b>708</b>	130	70	200
<b>710</b>	150	93	243
<b>716</b>	23	23	46
<b>Total</b>	450	347	<b>797</b>

- 3.6 Analysis of the survey results (per route and day of the week) showed:
- There were 25% more respondents aged between 16 and 25 among the weekday sample than the Saturday sample;
  - There were the same number of respondents within the mobility impaired group (n=80) on a weekday and a Saturday;
  - More respondents within the unemployed group were found among the Saturday sample (n=27) compared to the weekday sample (n=20).
- 3.7 The highest number of completed questionnaires for each group on a weekday were:
- 710 route - young (n=38), BME (n=6) and mobility impaired (n=28) groups;
  - 708 route - older people (n=53); and
  - 702 route – unemployed (n=20).

- 3.8 The highest number of completed questionnaires per group on a Saturday were:
- 710 route – young (n=18), older people (n=30) and BME (n=4);
  - 702 route – unemployed (n=27);
  - 703 route – Mobility impaired (n=80) and BME (n=4);
  - 708 route – BME (n=4); and
  - 716 route – BME (n=4).

## Demographic Profile of the Total Sample

- 3.9 The demographic profile of the respondents for each target group and the total sample of all respondents are shown in Table 3.

**Table 3: Demographic profile of all respondents.**

	Demographic profile	Social groups					Total Sample N=797
		Young N=164	Older N=238	BME N=35	Unemployed N=47	Mobility Impaired N=160	
Age Group	16-24	100%	-	49%	40%	7%	20%
	25-59	-	-	51%	38%	35%	50%
	60+	-	100%	-	21%	58%	30%
	Missing	-	-	-	-	-	-
Gender	Male	32%	27%	31%	45%	35%	30%
	Female	61%	62%	51%	47%	56%	62%
	Missing	7%	11%	17% *	8%	9%	8%
Ethnicity	White	90%	95%	-	92%	94%	93%
	Black	-	-	9%	-	-	(0.4%)
	Indian	1%	-	2%	-	-	(0.1%)
	Pakistani	6%	-	49%	2%	1%	2%
	Bangladeshi	1%	-	6%	2%	(0.6%)	(0.3%)
	Chinese	-	-	2%	-	-	(0.1%)
	Mixed Race	4%	-	26%	4%	(0.6%)	1%
	Other	-	-	6%	-	-	(0.3%)
	Missing	-	5%	-	-	6% *	3% *
Employment status	Employed (F/T)	31%	3%	37%	-	9%	31%
	Employed (P/T)	15%	5%	17%	-	3%	14%
	F-T Parent/Carer	12%	(0.4%)	14%	-	5%	9%
	Unemployed	12%	-	12%	100%	6%	6%
	Student	29%	-	17%	-	4%	7%
	Retired	-	86%	-	-	59%	28%
	Long term sick	-	1%	-	-	9%	2%
	Missing	1%	5% *	3%	-	4% *	3%

\* Figures do not add up to 100% due to rounding.

3.10 The demographic profile of the total sample of respondents can be summarised as follows:

*Age*

- Forty percent of individuals who are unemployed were between 16-24 years old;
- Half of the overall sample of respondents were aged between 25 and 59 years old;
- Over half (58%) of mobility impaired people were aged 60 or over.

*Gender*

- The majority of respondents were female (62%), 30% were male and the remaining 8% failed to answer the question.

*Ethnicity*

- 93% of the respondents were white, 4% were from an ethnic minority background and 3% failed to answer the question;
- All participants within the older social group were white;
- Ninety percent of the younger group were white;
- Ninety percent of the unemployed social group were white;
- Ninety-four percent of the disabled social group were white;
- Nearly half (49%) of the BME social group were Pakistani and 26% were of mixed race.

*Employment Status*

- Nearly 90% of the older group were retired;
- Less than half of the younger group were employed and nearly 30% were students;
- Over half of the BME social group were employed;
- Over half of the disabled social group were retired;
- Forty five percent of the total sample was employed either full or part time.

## Demographic Profile of the Two Areas:

- 3.11 Of the sample of 797 respondents, 42% (n=334) lived in Braithwaite and 13% (n=107) in Riddlesden. The remaining 45% of the sample either lived in other parts of Keighley or failed to state their postcode or street name.
- 3.12 As shown in Table 4, there are slight differences in the demographic profile of the two areas:
- Riddlesden had a higher percentage of white people over the age of 60, 45% of the respondents said they were 'retired' compared to 26% of Braithwaite residents;
  - Braithwaite had a higher percentage of white people aged between 25 and 59 years, 12% of the respondents answered 'full time parent / carer' as their employment status compared to 1% of Riddlesden residents.

Table 4: Demographic comparison of the two areas

		Braithwaite	Riddlesden
Age (B=334; R=107)	16-24	22%	9%
	25-59	52%	44%
	60+	26%	47%
Gender (B=305; R=92)	Male	27%	26%
	Female	64%	60%
	Missing	9%	14%
Ethnicity (B=328; R=105)	White	92%	93%
	Black	1%	1%
	Pakistani	3%	-
	Mixed Race	2%	3%
	Other	-	1%
	Missing	2%	2%
Employment Status (B=327; R=106)	Employed	44%	47%
	Unemployed	6%	2%
	Parent / carer	12%	1%
	Student	7%	3%
	Disabled / long term sick	3%	1%
	Retired	26%	45%
	Missing	2%	1%

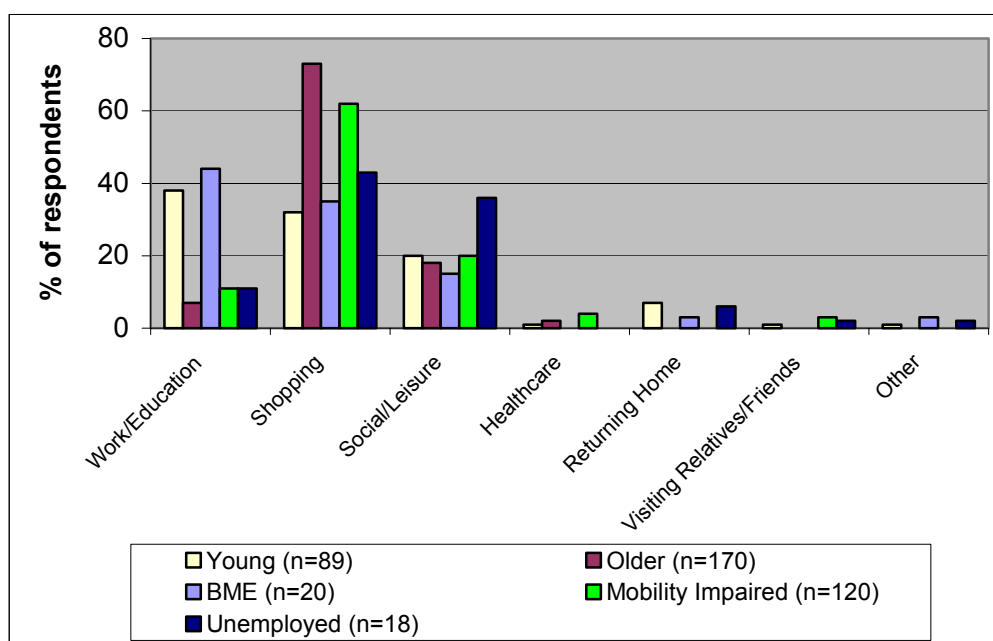
## Results

3.13 This section summarises the main findings from the analysis of the questionnaire, first looking at the reported bus journey and then at the responses to the bus access trade-off questions.

### Reported Bus Journey

3.14 Respondents were asked to state the main reason why they were travelling by bus on the day they were surveyed. As shown in Figure 3, seventy-two percent of older people, nearly two thirds of mobility impaired people and 43% of unemployed people said the main reason they were travelling by bus was for shopping purposes. Forty three percent of the respondents within the BME group and 38% of young people said they were travelling by bus for work / education purposes. Thirty-six percent of unemployed people use the bus for social/leisure related reasons, which is a greater proportion than any other social group.

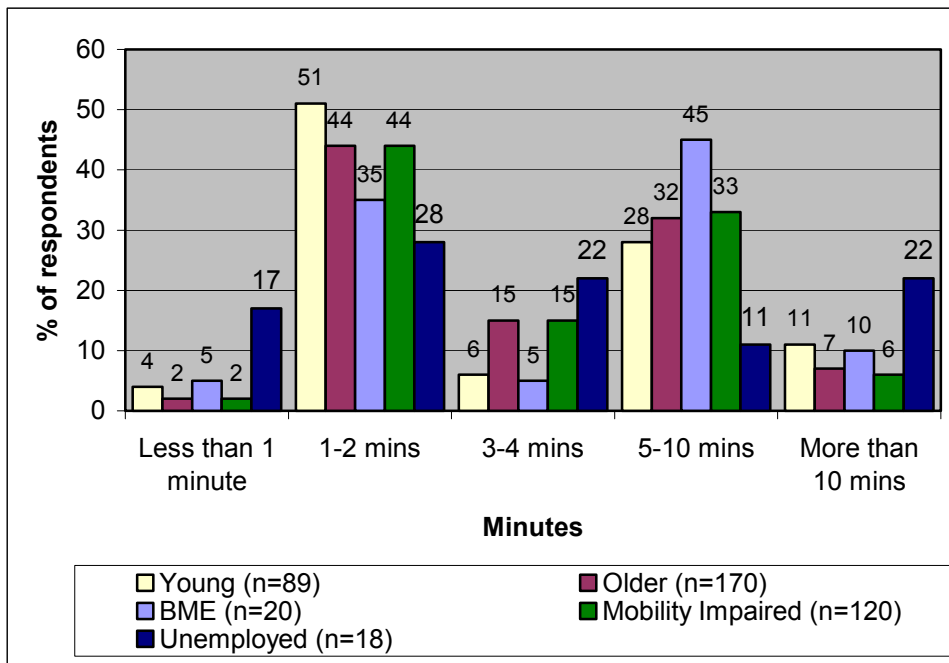
Figure 3: Journey purpose by bus



N.B: 'Other' purposes include: 'paying bills' and 'visiting the hairdresser'.

3.15 Overall, almost three quarters of respondents (73%) said they had walked from home to catch the bus and the remainder were using the bus to travel home (e.g. they walked into the town centre and caught the bus home, or they got a lift to their destination and got the bus back). More than 60% of those who walked to the bus stop said they could reach their usual stop in less than 5 minutes (see Figure 4).

Figure 4: Walk time to the bus stop (minutes)



3.16 Table 5 shows the average walk time to the bus stop for each group of respondents. Those within the BME and unemployed groups spend an extra minute walking to their usual bus stop, compared to the other three groups and the total sample average. Over half of the respondents within the BME group, compared to a third of respondents from the other groups, said they spend more than 5 minutes walking to their usual bus stop.

Table: 5: Average walk time to the bus stop

GROUP	MINUTES
Young people	4
Older people	4
BME	5
Mobility impaired	4
Unemployed	5
Total sample population	4

3.17 When asked if they walk to their nearest bus stop, 87% said 'yes', 10% said 'no' and 3% failed to answer the question. Of the respondents who said 'no', 55% were female, 47% were aged between 25-59, 95% were white, 39% were employed, 84% do not have a health condition that limits their mobility and 83% were not travelling with young children. Figures 5 to 10 (on the following page) illustrate the main reasons respondents gave for not using their closest bus stop; note the small sample sizes, in most cases.

Figure 5: All Social Groups

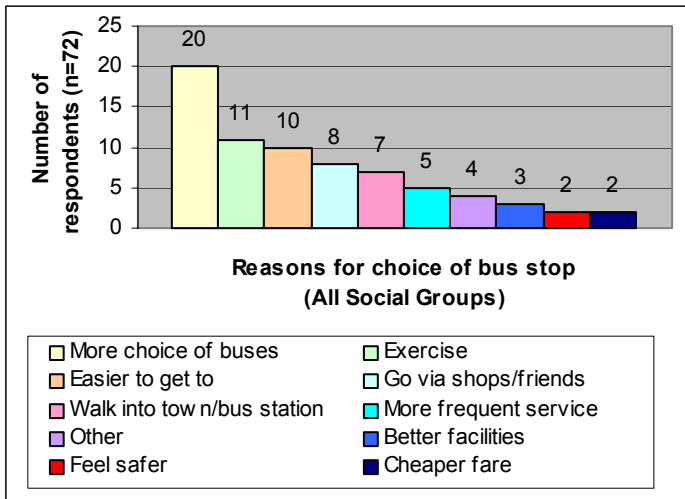


Figure 6: Young people

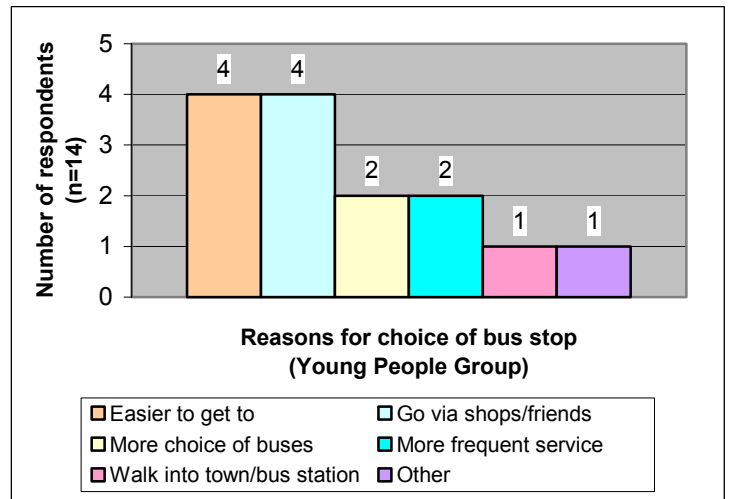


Figure 7: Older People

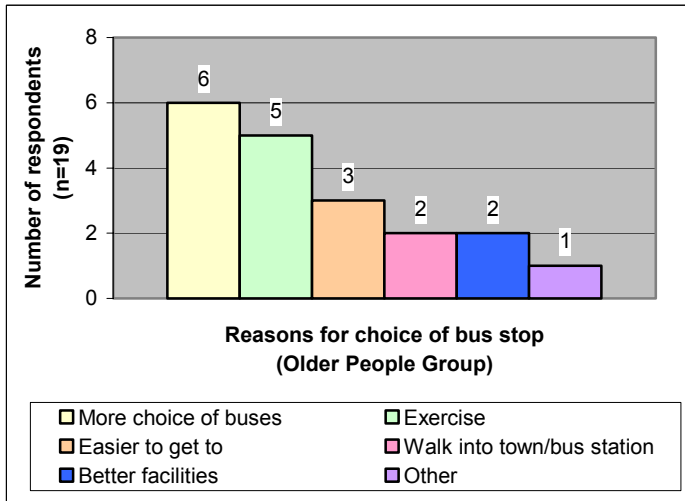


Figure 8: BME People



Figure 9: Mobility Impaired

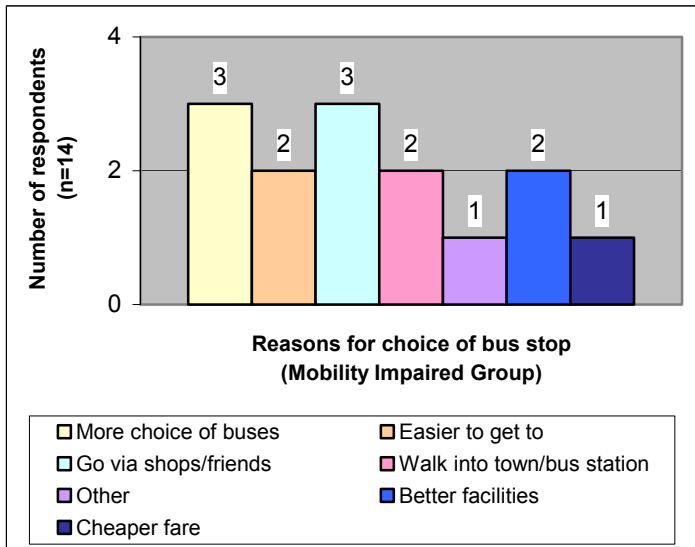
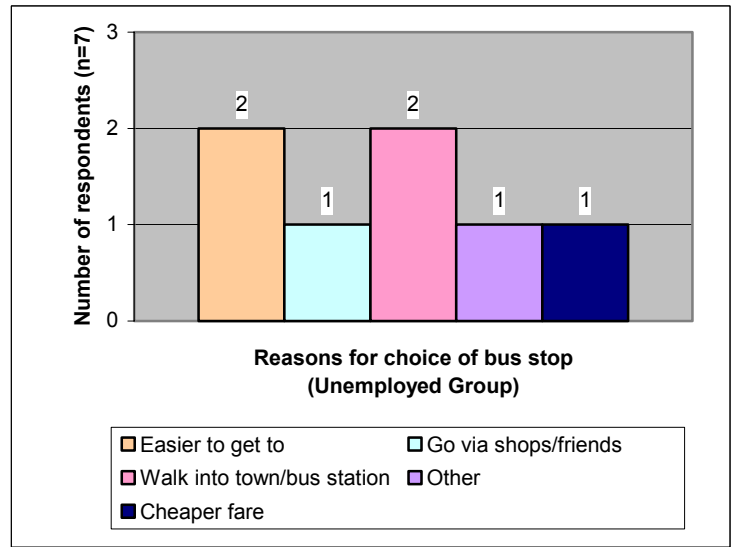


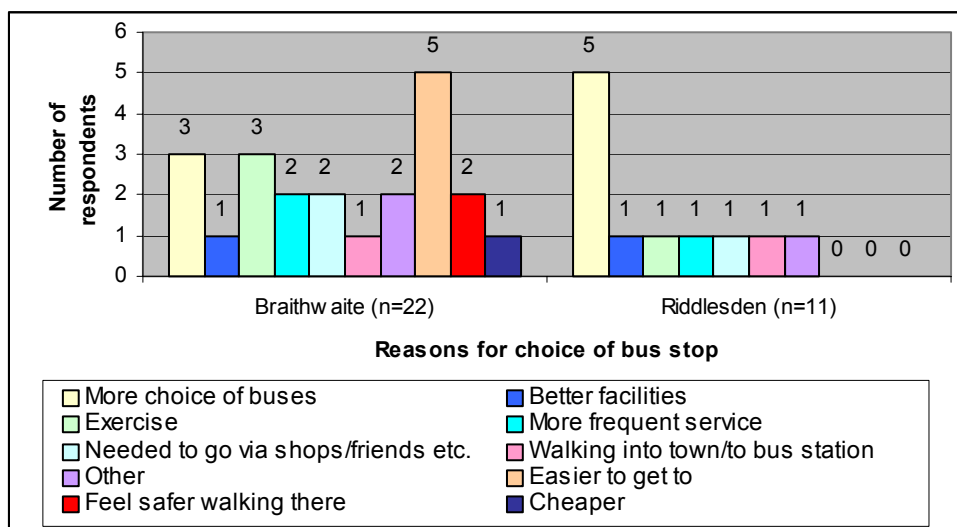
Figure 10: Unemployed





- 3.18 'More choice of buses' (e.g. route services) is one of the main reasons why respondents are prepared to use a bus stop that is not their nearest stop. BME respondents were least likely to use their nearest bus stop and they typically spend between 5 and 10 minutes walking to their usual bus stop. Surprisingly, only BME respondents mentioned 'safety' as one of the reasons for choosing a bus stop not their nearest to home, and only respondents within the older people group highlighted 'exercise' as a factor for consideration.
- 3.19 There are slight differences between the groups in terms of their reasons for using a different bus stop. The main reasons per group are as follows:
- Young people - ease of access and routes via shops and friends;
  - Older people - more choice of buses and exercise;
  - BME people – ease of access, routes via shops and friends and safety;
  - Mobility impaired people – more choice of buses and routes via shops and friends;
  - Unemployed – ease of access and prefer to walk into town/bus station.
- 3.20 There are also slight differences between the two case study areas. As shown in figure 11. Respondents from the Braithwaite area mentioned 'easier to get to' most often, whereas 'more choice of buses' was the main reason for participants living in Riddlesden not using their nearest stop.

Figure 11: A Comparison of Braithwaite and Riddlesden Respondents



- 3.21 The respondents were also asked if they had any difficulties or concerns in getting to and / or from their bus stop that prevented them from making some journeys by bus; 7% (n=52) said yes. The list of concerns was almost identical for men and women. Older participants (39%) were more likely to state that they have a concern than young people (19%) and 16% of mobility impaired respondents said they have a concern compared to 4% of able-bodied people.

3.22 The main concerns highlighted by the respondents were:

- Busy roads – traffic and crossing concerns n=11
- Health problems n=7
- Distance / positioning of stops N=6
- Broken / uneven surfaces pavements N=5
- Other N=5
- Safety at the bus stop N=4
- Service availability / frequency N=2
- Dog fouling N=2

3.23 Further analysis of the two case study areas showed that a total of 6% (n=28) of respondents from the two areas (Braithwaite n=20; Riddlesden n=8) indicated that they have a difficulty or concern about their journey to or from the bus stop. Below is a list of the concerns that the respondents highlighted (n.b. not everyone provided an explanation and some people expressed more than one concern):

- Busy roads B=4; R=5
- Health problems B=2; R=2
- Safety at the bus stop B=2; R=0
- Distance / positioning of stops B=2; R=0
- Service availability / frequency B=2; R=0
- Broken Pavements B=1; R=1
- Other B=2; R=2
- Dog fouling B=2; R=0

### Walk Access Trade-offs

3.24 As one of the main aims of the survey was to identify the importance of the walking environment in relation to accessing a bus stop, some specific questions about this were included in the questionnaire.

3.25 The respondents were asked to consider which of two hypothetical bus stops they would use if the first stop is situated 2 minutes away offering less favourable conditions (either on route or at the stop) the second (with favourable conditions) is 3 minutes away. The question was then repeated, with the distance to the second stop increased to 5 and then 7 minutes.

3.26 The trade-off questions covered:

1. Stop up a steep hill, or on the flat;
2. Marked bus stop or a stop with a shelter and or seating;
3. Cross a busy road without a pedestrian crossing, or cross a road with a pedestrian crossing;
4. Poorly lit quiet road, or a well lit busy road.

3.27 A number of logic checks were carried out on the trade-off data. For example, when respondents answered '2 mins' to case 1, logically they should answer '2 min' to the remaining cases, rather than '5 min' or '7 min'. Similarly, if the respondents answered '3 min', followed by '2 min' where the alternative was 5 minutes, then they should not then answer '7 min' for the final case. If respondents followed this logical

response pattern, their answers were included in the analysis. However, if responses deviated from this pattern, they were excluded.

### A Bus Stop Situated up a Steep Hill or a Bus Stop Along A Flat Route?

3.28 Less than half of the respondents (n=371) correctly answered this trade-off question. The majority of the participants either: failed to answer the question; answered only two or three cases; provided an illogical response (e.g. said they would be prepared to walk 2 minutes up a steep hill and then 5 minutes along a flat route). Table 6 shows the demographic profile of respondents who answered this question correctly.

Table 6: Demographic profile of respondents answering the gradient question

	Demographic profile	Social groups					Total Sample N=371
		Young N=77	Older N=109	BME N=16	Unemployed N=18	Mobility Impaired N=87	
Age groups	16-24	100%	-	44%	39%	6%	21%
	25-59	-	-	44%	39%	37%	50%
	60+	-	100%	12%	22%	57%	29%
Sex	Male	31%	28%	31%	50%	38%	32%
	Female	60%	60%	44%	44%	54%	59%
	Missing	9%	12%	25%	6%	8%	9%
Ethnicity	White	90%	96%	-	89%	95%	94%
	Black	-	-	13%	-	-	1%
	Indian	-	-	-	-	-	-
	Pakistani	5%	-	50%	5%	1%	2%
	Bangladeshi	-	-	6%	5%	1%	(0.23%)
	Chinese	-	-	6%	-	-	(0.23%)
	Mixed Race	4%	-	25%	-	-	1%
	Other	-	-	-	-	-	-
Missing	1%	4%	-	-	2%	2%	
Employment status	Employed (F/P)	47%	6%	56%	-	9%	45%
	F-T Parent/Carer	9%	1%	12%	-	5%	9%
	Unemployed	9%	-	12%	100%	8%	5%
	Student	32%	-	12%	-	3%	7%
	Retired	-	92%	-	-	60%	29%
	Long term sick	-	-	-	-	10%	3%
	Missing	3%	1%	6%	-	5%	2%

\* Figures do not add up to 100% due to rounding

3.29 Overall, at the aggregate level, more respondents prefer to walk to the closest bus stop (see Figure 12) rather than to a bus stop along a flat route, implying that steep gradients are not a concern for over half of the respondents that answered this question. Generally, and not surprisingly, the older people group and people with mobility impairments are most likely to choose a bus stop along a flat route, for example 59% of older people said they would walk 3 minutes compared to 45% of young people or 25% of BME people. Similarly, BME people are least likely to walk

more than 2 minutes, regardless of gradient, indicating that time and the shortest route are more important factors for this group of people when choosing a route to a bus stop.

Figure 12: Total Sample

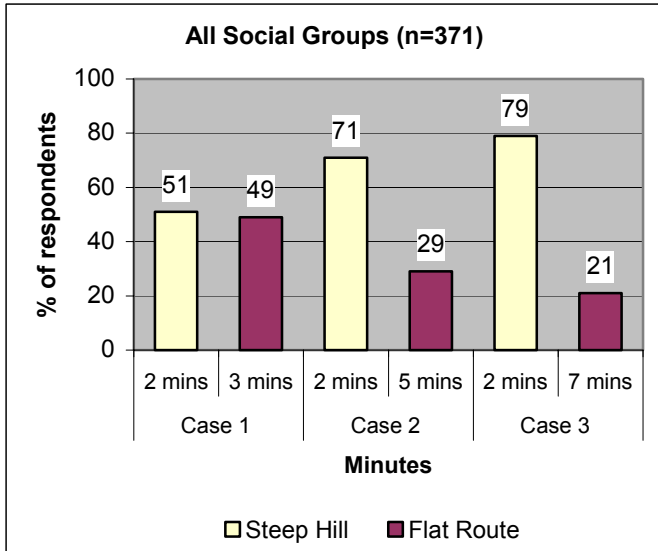
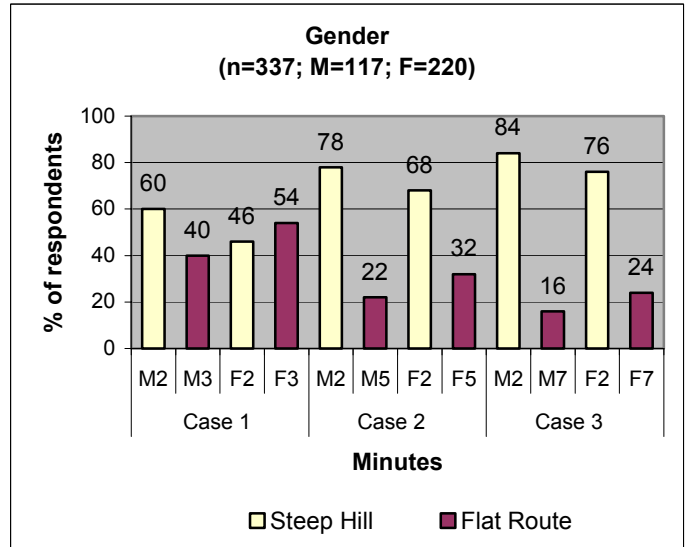


Figure 13: Gender

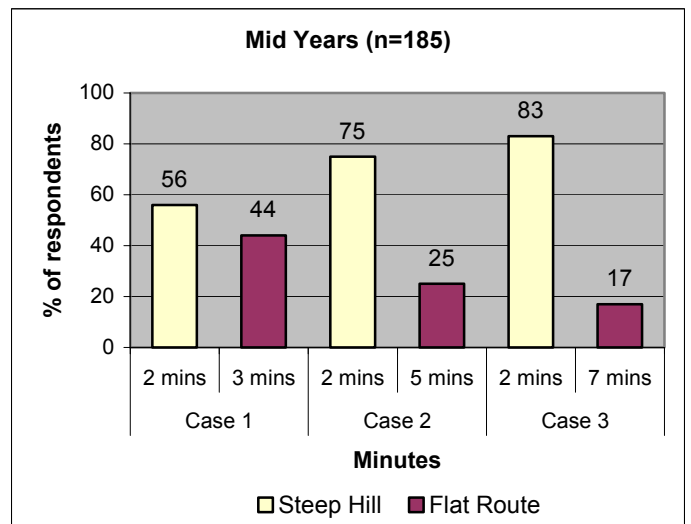


3.30 However, when the total sample is divided along gender lines, men are more likely to choose a closer bus stop that is up a steep hill than women (Figure 13). Nearly a quarter (n=52) of females said they would be prepared to walk 7 minutes along a flat route rather than 2 minutes up a steep hill, whereas 84% (n=98) of males chose the closest bus stop.

Figure 14: Young People (16-24)



Figure 15: People aged 25-59 years

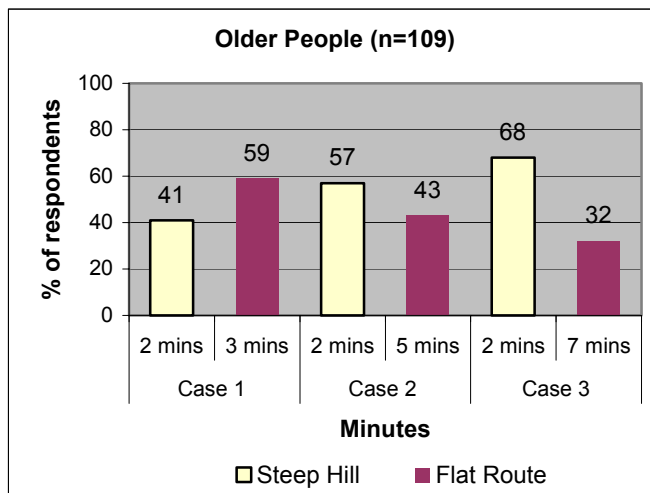


3.31 Responses of young people (Figure 14) and those between 25 and 59 (Figure 15) are broadly similar. In both cases, around 55% would rather walk 2 minutes up a steep hill to a bus stop than walk an extra minute (i.e. 3 minutes) along a flat route.

There were no gender differences amongst respondents within the young people group; however, 72% of women versus 81% of men in the mid years group said they would choose the closest bus stop than walk 5 minutes along the flat route.

3.32 Responses are rather different for the 60-plus age group (Figure 16). Here only 40% would opt for a 2 minute walk up a steep hill rather than a 3 minute walk on a flat route. And 51% of women compared to 32% of men in this group said they would prefer to walk 5 minutes along a flat route.

Figure 16: Older People (60+)



3.33 The data showed that a respondent's health condition (Figure 17) affects their choice of route, producing aggregate results similar to those for the 60-plus age group. Nearly a fifth of respondents aged between 25 and 59 years said they have a health condition, of which, 41% said they would be prepared to walk a maximum of 5 minutes along a flat route before switching to a bus stop that is up a steep hill. Interestingly, there is a gender difference amongst those respondents over the age of 60 with a health condition. Older women are less likely to choose a bus stop further away along a flat route than older men, whereas older men without a health condition are more likely than fit women to choose the closest bus stop.

Figure 17: Mobility Impaired

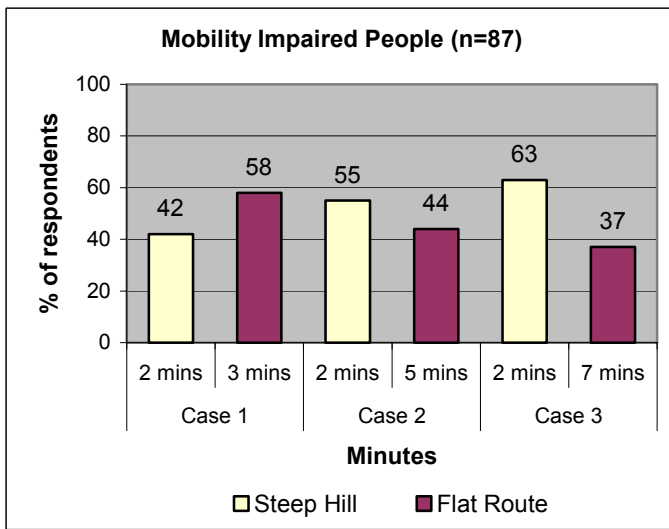
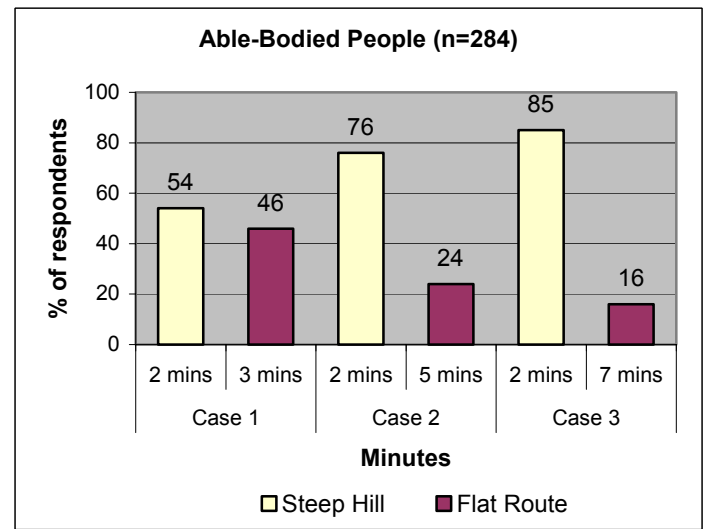


Figure 18: Able Bodied People



3.34 The aggregate results of the able-bodied group (Figure 18) mirror those of the 25-50 aged group. Able bodied women, in particular those over the age of 60 (86%), are more likely to walk to a bus stop along a flat route than able bodied men (69% of men over 60). These results are very different to those mentioned earlier whereby older women with a health condition are most likely to choose the closest stop.

Figure 19: BME People

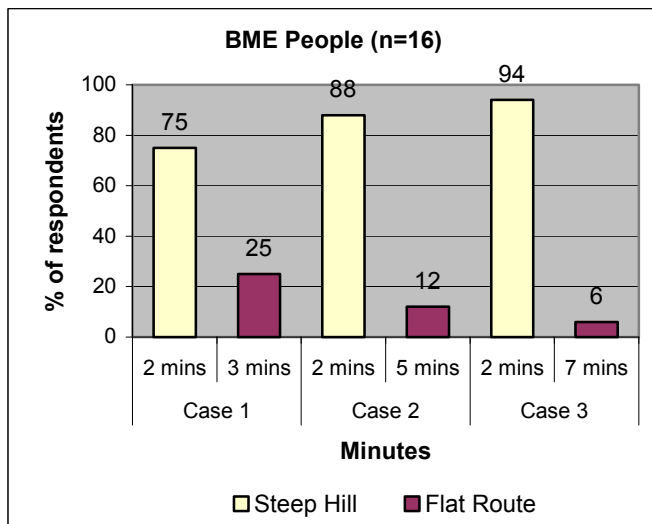


Figure 20: Unemployed People



3.35 Respondents from the BME group (Figure 19) are the least likely of all the groups to walk to a bus stop that is not their nearest stop. Once again, there is a slight difference between the genders within the BME group. All the male respondents said they would choose to walk up the steep hill, regardless of distance along the flat route, whereas a few women said they would be prepared to walk slightly further to avoid a steep hill.

3.36 The results for the unemployed group (Figure 20) give an even split at the 2 versus 3 minute option. They are also very interesting in that this is the only social group of

respondents where the female respondents are more likely to select the closer, steep hill option in all three cases than the men.

3.37 Figures 21 - 24 provide analyses of the two study areas at the 'All Group' and 'Gender' levels. The results show that there are slight differences between respondents living in Braithwaite and those in Riddlesden. Braithwaite respondents are more likely to select the nearest bus stop (Figure 21), whereas Riddlesden respondents prefer to walk further to a bus stop along the flat route (see Figure 22).

3.38 These area differences hold when looking at the two areas from a gender perspective. There are no real differences in responses between men and women living in Braithwaite (Figure 23), but at larger time differences, men living in Riddlesden are more likely to choose the nearest bus stop than women (Figure 24).

Figure 21: Braithwaite – All Groups

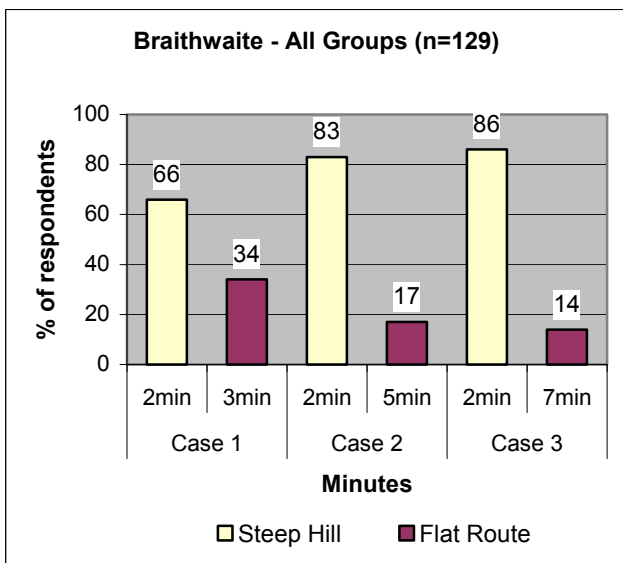


Figure 22: Riddlesden – All Groups

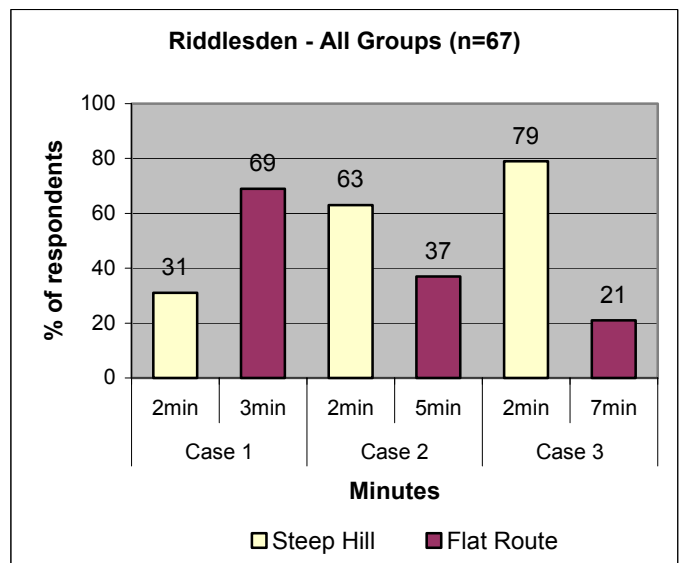


Figure 23: Braithwaite – Gender

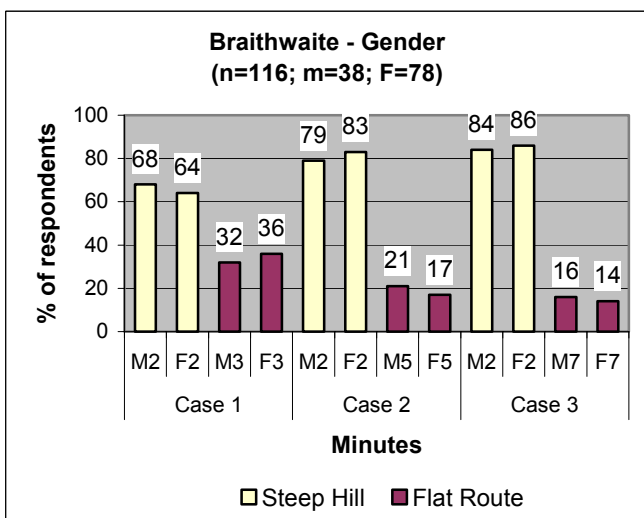
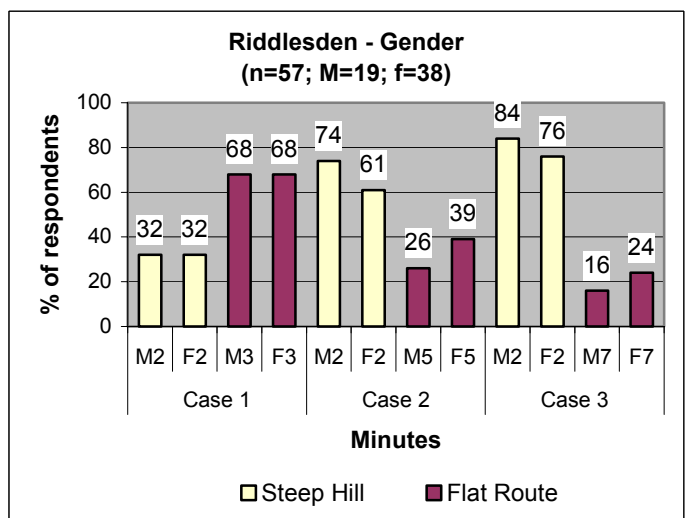


Figure 24: Riddlesden - Gender



A Marked Bus Stop or A Bus Stop With A Shelter and / or Seating?

3.39 Exploring the extra distance people are prepared to walk to access a bus stop with a shelter and / or seating was the subject of the second of the four trade-off questions. Respondents were asked which bus stop they would use if the choice was between a bus stop with just a marked post that is 2 minutes away from their home or varying distances (3 mins, 5 mins and 7 mins) to a bus stop with a shelter and / or seating.

3.40 Table 7 below shows the demographic profile of the respondents who answered this particular question.

Table 7: Demographic profile of respondents answering the bus stop facility question

	Demographic profile	Social groups					Total Sample N=401
		Young N=71	Older N=126	BME N=14	Unemployed N=21	Mobility Impaired N=98	
Age groups	16-24	100%	-	50%	33%	2%	18%
	25-59	-	-	36%	38%	41%	51%
	60+	-	-	14%	29%	57%	31%
Sex	Male	28%	25%	29%	43%	35%	31%
	Female	65%	64%	50%	52%	55%	60%
	Missing	7%	11%	21%	5%	10%	9%
Ethnicity	White	90%	98%	-	85%	95%	95%
	Black	-	-	-	-	-	-
	Indian	-	-	-	-	-	-
	Pakistani	4%	-	50%	5%	1%	2%
	Bangladeshi	-	-	7%	5%	1%	(0.24%)
	Chinese	-	-	7%	-	-	(0.24%)
	Mixed Race	6%	-	36%	5%	-	1%
	Other	-	-	-	-	-	-
	Missing	-	2%	-	-	3%	1% *
Employment status	Employed (F/P)	49%	6%	50%	-	13%	45%
	F-T Parent/Carer	11%	-	14%	-	5%	8%
	Unemployed	10%	-	22%	100%	6%	5%
	Student	30%	-	14%	-	1%	6%
	Retired	-	92%	-	-	59%	32%
	Long term sick	-	-	-	-	10%	3%
	Missing	-	2%	-	-	5%	1% *

\* Figures do not add up to 100% due to rounding

3.41 Overall (Figure 25), over 70% of the respondents indicated a preference for the closest bus stop, rather than a stop with shelter and/or seating, if the latter involved an additional 1 minute walk. There is only a slight gender difference between the respondents in this respect (Figure 26). Women are slightly more likely to walk further than men in all three cases: 30% of women compared to 27% of men are prepared to walk 3 minutes; 22% compared to 18% at 5 minutes and 15% vs. 13% at 7 minutes.



3.42 Fifteen percent of the respondents said they were travelling with young children on the day of the survey. Interestingly, these respondents were the most likely to select the 2 minutes marked stop option. It could be argued that the distance to a bus stop is more important to this group of people due to a number of different reasons: i) the walk speed of young children is slower than adults; ii) the effort involved in pushing a pram/buggy to a bus stop may result in a longer journey time; iii) an infant in a pram/buggy does not require additional seating/shelter or iv) the seating available at bus stops may not be suitable for young children (e.g. not low enough).

Figure 25: All Social Groups

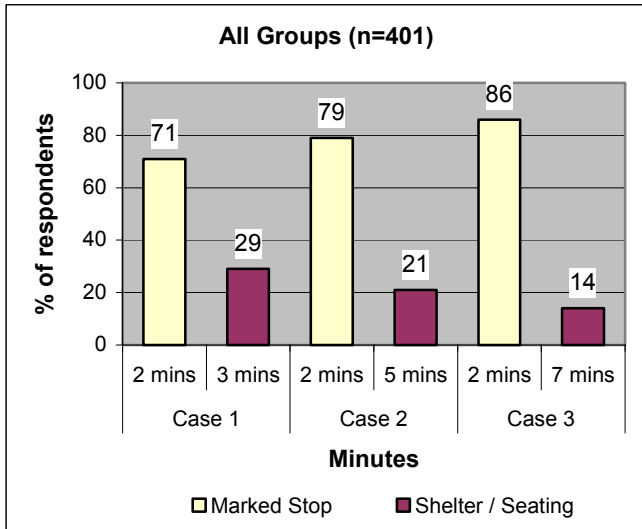
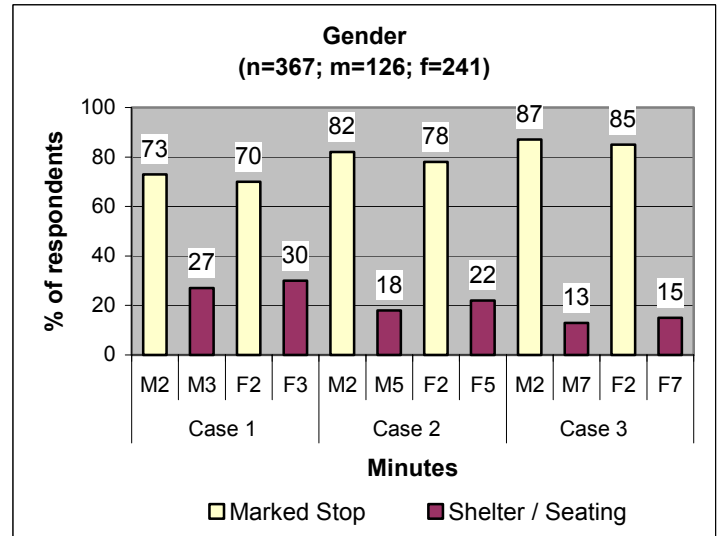


Figure 26: Gender



3.43 In the base case (i.e. 2 minutes versus 3 minutes), more young people (Figure 27) than people aged between 25 and 59 (Figure 28) select the shelter and/or seating option – but this difference disappears at higher levels of time differential. Over two thirds (70%) of the young people who answered the question were female. There was a slight gender difference, with more women opting to walk to the closest bus stop without facilities.

Figure 27: Young People (16-24)

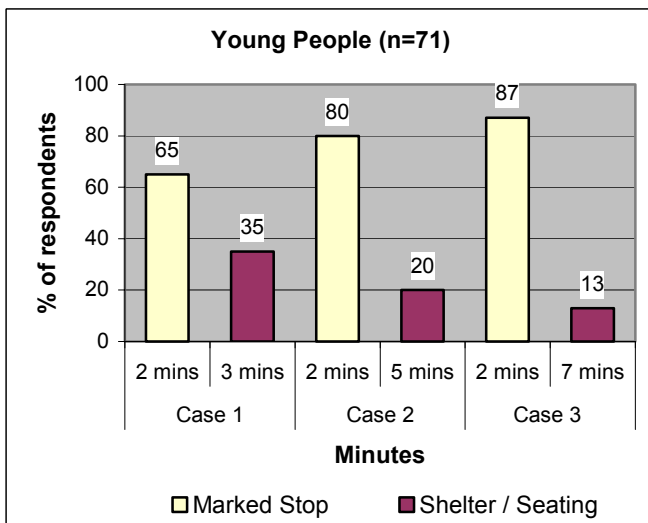
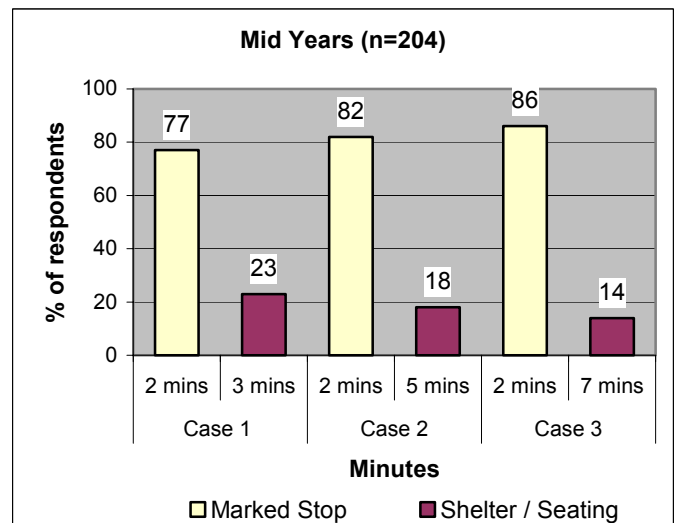
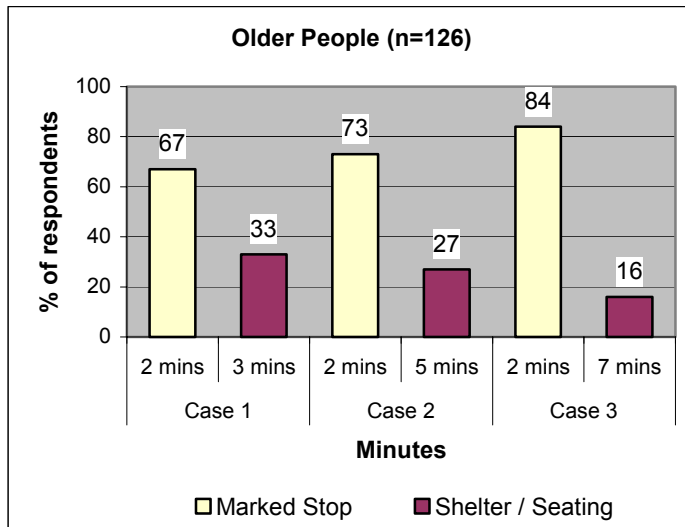


Figure 28: People aged between 25-59 years



3.44 Regardless of distance, older people are slightly more likely to choose to walk further to a bus stop with a shelter and / or seating than the younger age groups – but a clear majority still opt for the nearer stop without facilities. There is little gender difference in this respect among respondents aged over 60 years.

Figure 29: Older People



3.45 Over 60% of the mobility impaired group answered the question (n=98), compared with 48% of able-bodied people (n=303), perhaps indicating the greater importance of this issue to the former group. While around 60% of mobility impaired people indicated a preference to use the nearest stop without seating or shelter, rather than walk an additional minute to a stop so equipped (Figure 30), this is a lower percentage than for the other groups. For example, 22% of people with a health condition said they would be prepared to walk 7 minutes to a bus stop with a shelter and / or seating compared to 12% of people within the able-bodied group (Figure 31). Mobility impaired men (26%) are more likely than women (18%) to walk 7 minutes to a stop with shelter and/or seating; there was very little gender difference within the able-bodied group.

Figure 30: Mobility Impaired

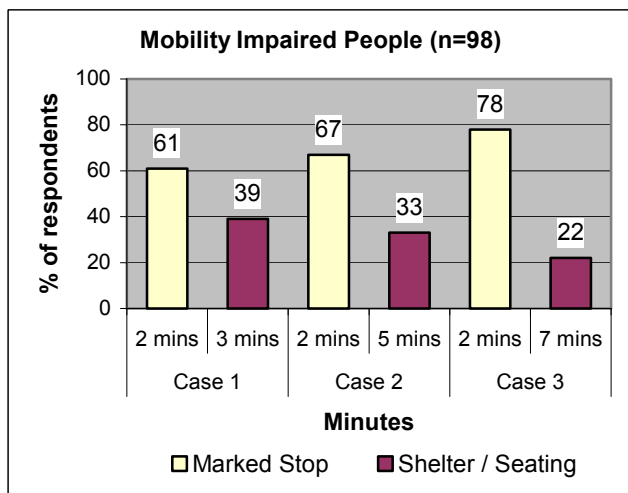
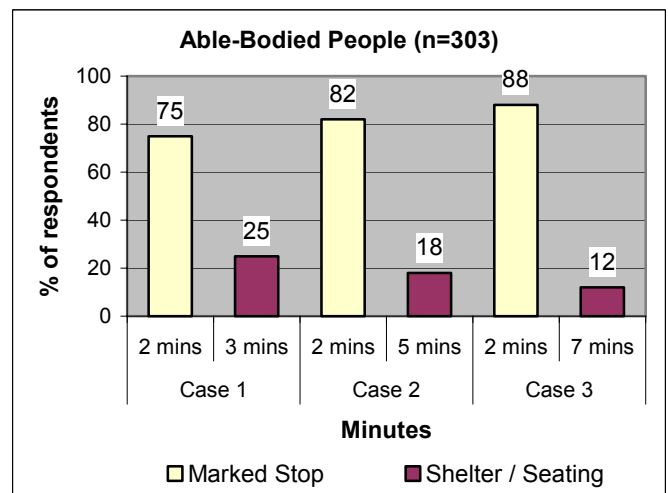


Figure 31: Able Bodied People



3.46 Over 60% of the respondents within the mobility impaired group were retired, and this group were most likely to value the provision of facilities at bus stops: 47% said they would be prepared to walk 3 minutes to a bus stop with a shelter and/or seating, 43% said they would walk 5 minutes and 26% said 7 minutes. These results can be compared to the retired respondents within the able-bodied group, where the corresponding figures were: 23% (3 min), 14% (5 min) and 9% (7 min).

Figure 32: BME People

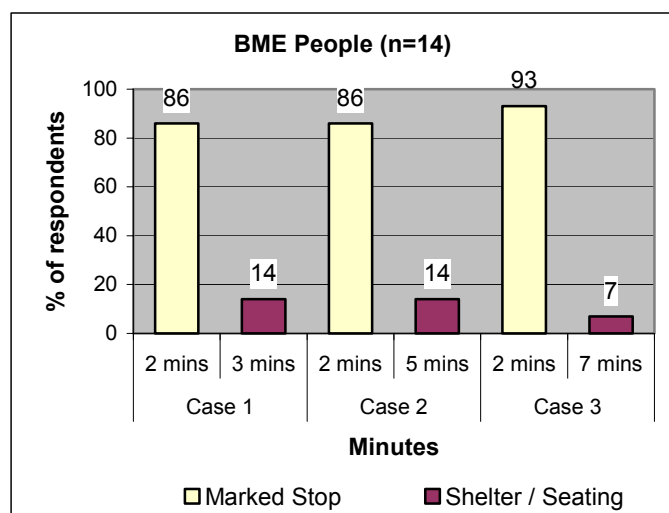


Figure 33: Unemployed People



3.47 Only 4% (n=14) of the total sample of respondents who answered this question stated that they were from an ethnic minority background (Figure 32). When comparing the results of the BME respondents against those of the total sample population, BME people are least likely to walk further to a bus stop with facilities. There is very little gender difference within the BME group.

3.48 Forty five percent of unemployed people (n=21) answered this question (Figure 33). The results indicate that three-quarters of unemployed people prefer to use the closest bus stop, rather than walk further to a stop with a seat or a shelter. Within the unemployed group, women are more likely to opt for a walk of 2 minutes to a marked stop without facilities than men.

3.49 Figures 34 - 37 summarise results for the two study areas at the 'All Groups' and 'Gender' levels. The results show some differences between respondents living in Braithwaite (Figure 34) and those from Riddlesden (Figure 35), with the latter being relatively more willing (43%) to walk an additional minute to access a seat and/or shelter than the former (at only 15%). However, in both areas, majorities opt for the closer bus stop without facilities.

3.50 When looking at the two areas from a gender perspective, the results show that the respondents in Braithwaite provide very similar responses, regardless of their gender, whereas women living in Riddlesden are relatively more likely to walk further to access a bus stop with a shelter and or seating than men – though, again, the majority opt for the nearer stop.

Figure 34: Braithwaite – All Groups

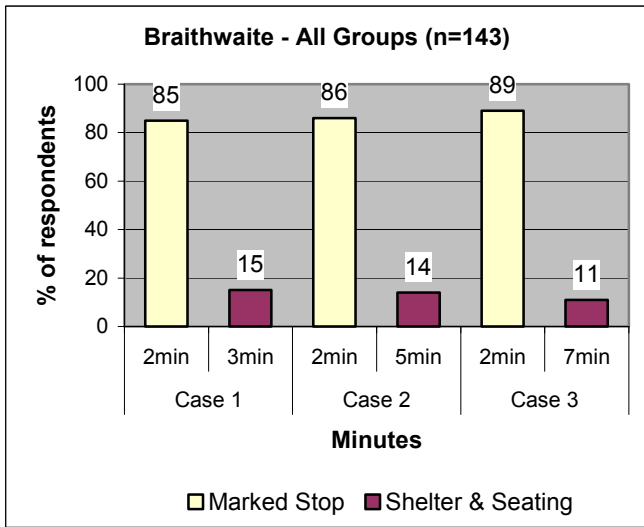


Figure 35: Riddlesden – All Groups

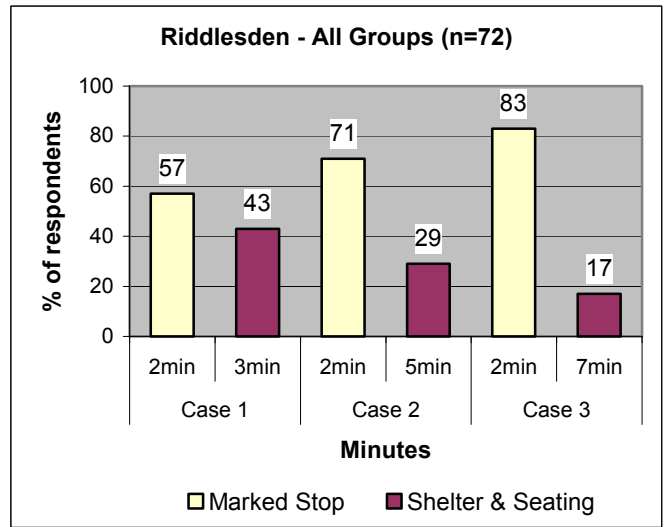


Figure 36: Braithwaite - Gender

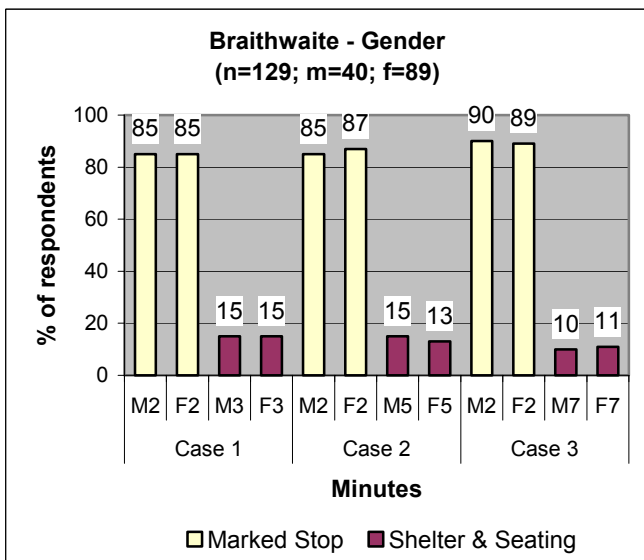
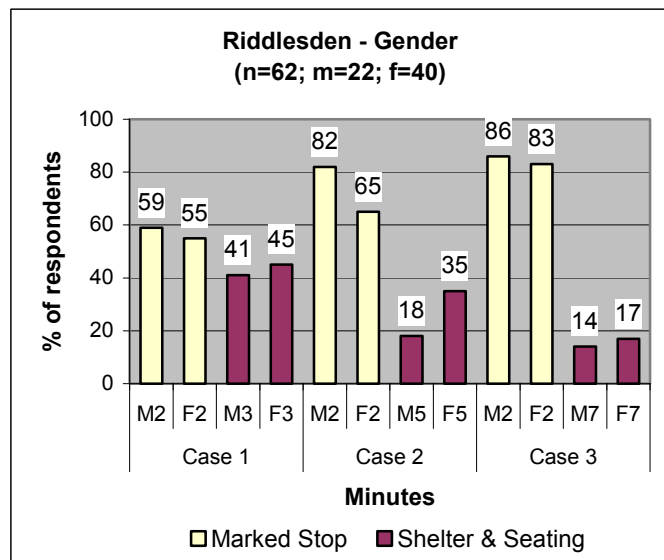


Figure 37: Riddlesden - Gender



Crossing A Busy Road Without A Pedestrian Crossing Or Avoid Crossing The Road?

3.51 Respondents were asked which bus stop they would use if they had a choice between a stop that is 2 minutes away from their home, but involves crossing a busy road without a pedestrian crossing or a stop that is further away (3 mins, 5 mins or 7 mins) and avoids crossing a busy road.

3.52 Table 8 shows the demographic profile of the respondents who answered this question.

Table 8: Demographic profile of respondents answering busy road without crossing question.

	Demographic profile	Social groups					Total Sample N=338
		Young N=73	Older N=94	BME N=14	Unemployed N=21	Mobility Impaired N=75	
Age groups	16-24	100%	-	50%	43%	4%	21%
	25-59	-	-	50%	57%	37%	51%
	60+	-	100%	-	-	59%	28%
Sex	Male	32%	29%	21%	43%	37%	33%
	Female	60%	62%	57%	52%	56%	58%
	Missing	8%	9%	22%	5%	7%	9%
Ethnicity	White	89%	98%	-	85%	96%	94%
	Black	-	-	7%	-	-	(0.3%)
	Indian	1%	-	7%	-	-	(0.3%)
	Pakistani	3%	-	36%	5%	1%	1%
	Bangladeshi	-	-	7%	5%	1%	(0.3%)
	Chinese	-	-	7%	-	-	(0.3%)
	Mixed Race	6%	-	36%	5%	-	1%
	Other	-	-	-	-	-	-
	Missing	1%	2%	-	-	1%	3%
Employment status	Employed (F/P)	48%	6%	57%	-	9%	46%
	F-T Parent/Carer	10%	-	14%	-	4%	8%
	Unemployed	12%	-	21%	100%	9%	6%
	Student	29%	-	7%	-	1%	7%
	Retired	-	90%	-	-	59%	28%
	Long term sick	-	1%	-	-	12%	3%
	Missing	1%	2%	-	-	5%	2%
		*		*	*	*	

\* Figures do not add up to 100% due to rounding

Figure 38: All Social Groups

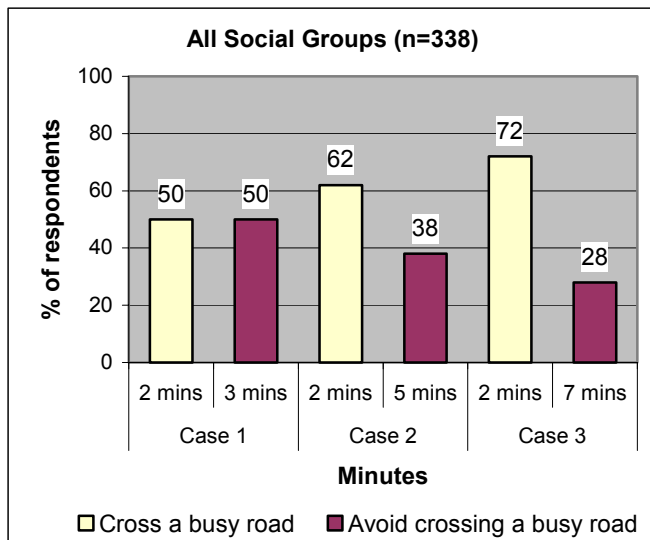
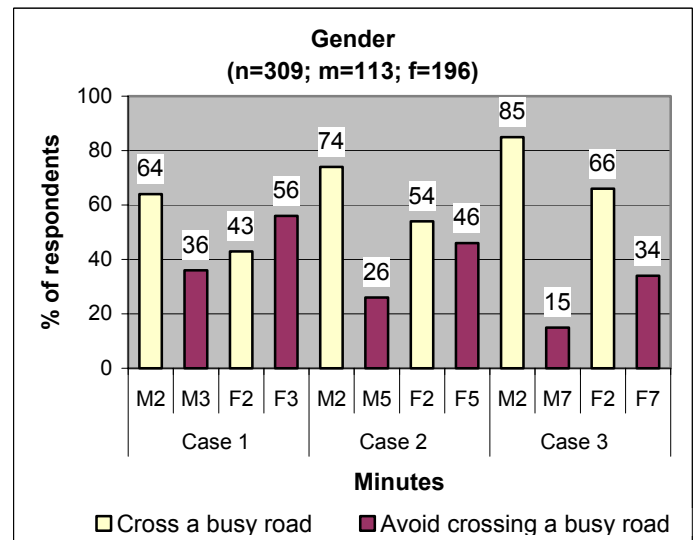


Figure 39: Gender



- 3.53 Overall, 42% (n=338) of the respondents answered the question, of which 58% (n=196) were female and 33% (n=113) were male, while 9% failed to state their gender. The results indicate that the sample is evenly split when the choice is between a 2 minute walk to access a bus across a busy main road without a pedestrian crossing, or walking an extra minute to a stop to avoid a busy road (Figure 38). Even a journey of 5 minutes (i.e. an additional walk of 3 minutes) is an attractive choice for 38% of the respondents.
- 3.54 Men appear to be much less concerned about crossing a busy main road without a pedestrian crossing than women (Figure 39). For example, 34% of women said they would be prepared to walk 7 minutes to a bus stop to avoid a main road, compared to 15% of men.
- 3.55 Sixteen percent of the respondents said they were travelling with young children on the day of the survey. Unlike the other trade-off questions, there was little difference between the distances people travelling with young children were prepared to walk and those without.
- 3.56 When we compare responses by age group, we can see a clear gradation of responses, from young to old. Among young people aged 16-24 (Figure 40), 60% opt for the 2 minute walk across a busy main road; for the mid-aged group from 25-59 years, this drops to half (Figure 41), and for those in the 60-plus group, only 42% opt for the shorter, but busier route (Figure 42). This pattern is also evident for the 5 minute and 7 minute trade-offs too.

Figure 40: Young People (16-24)

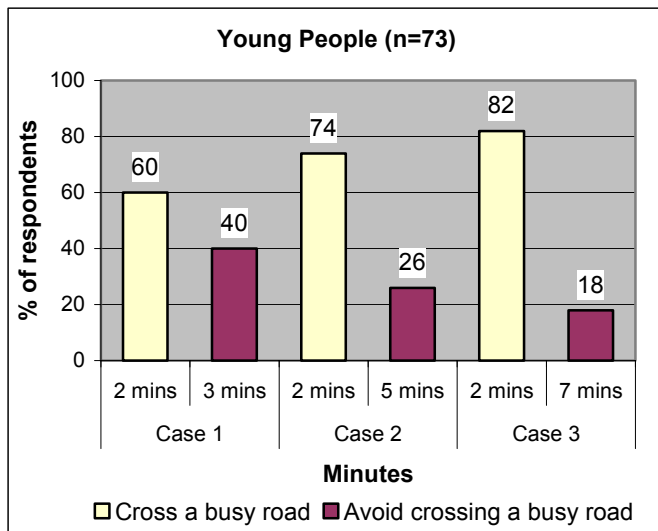
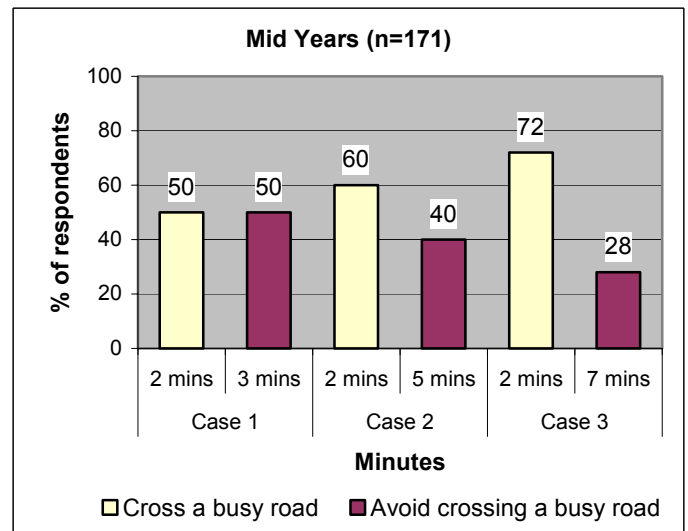
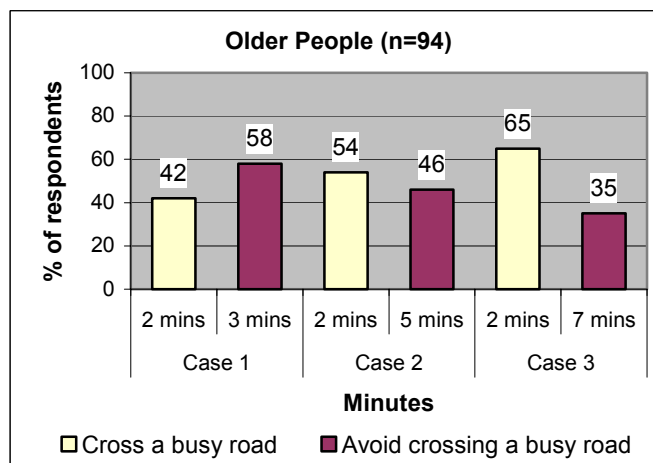


Figure 41: People aged between 25-59 years



3.57 Over half of the respondents within the three different age groups were female (60%, 55% and 62%, respectively). Across all the different age groups, women are more likely to walk further to avoid crossing a busy road without a pedestrian crossing than men. For example, 43% of older women are prepared to walk as far as 7 minutes compared to 15% of older men, and 34% of young women. These results indicate that older women have a greater aversion to the volume of traffic or the lack of a pedestrian crossing than males, or younger age groups.

Figure 42: Older People



3.58 Respondents with a health condition that affects their mobility are less likely to cross a busy road without a pedestrian crossing (Figure 43) than those within the able-bodied group (Figure 44). Indeed, with 63% of the mobility impaired grouped being prepared to walk an extra minute to avoid a busy main road (compared to 46% of able-bodied people), and 56% prepared to walk an extra 3 minutes (i.e. 5 minutes in total), this group shows the highest willingness to avoid the main road.

3.59 There are differences between the respondents in different age groups who have a health condition that affects their mobility. Older people with a mobility impairment

are more likely to walk 7 minutes (48%) to a bus stop than those without a health condition (24%). As the age of the respondent with a health condition increases they are more likely to avoid crossing a busy road without a pedestrian crossing.

Figure 43: Mobility Impaired People

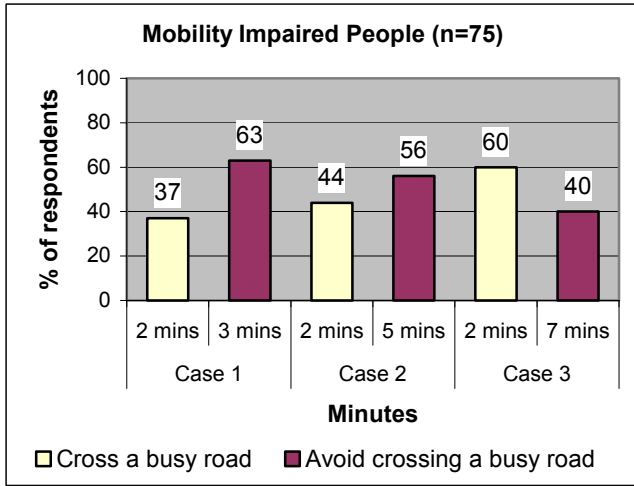
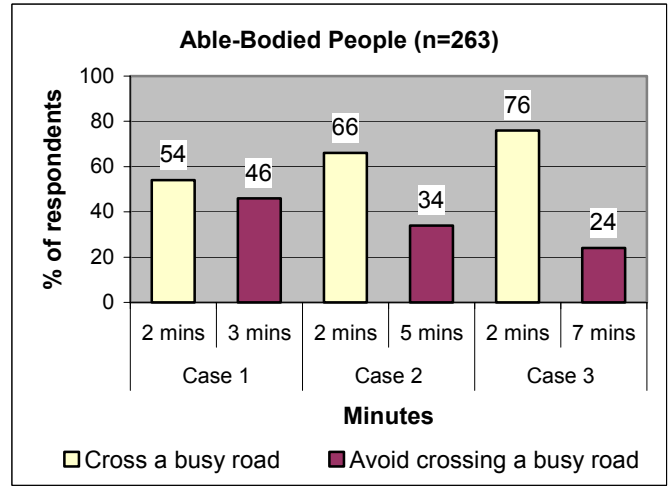


Figure 44: Able-Bodied People



3.60 There are gender differences among both able bodied and mobility impaired groups. More women with a health condition said they would be prepared to walk 5 minutes (62%) to avoid a busy main road compared to men (43%). Similarly, able-bodied women are more likely than men (54% and 31%, respectively) to walk an extra minute.

Figure 45: BME People

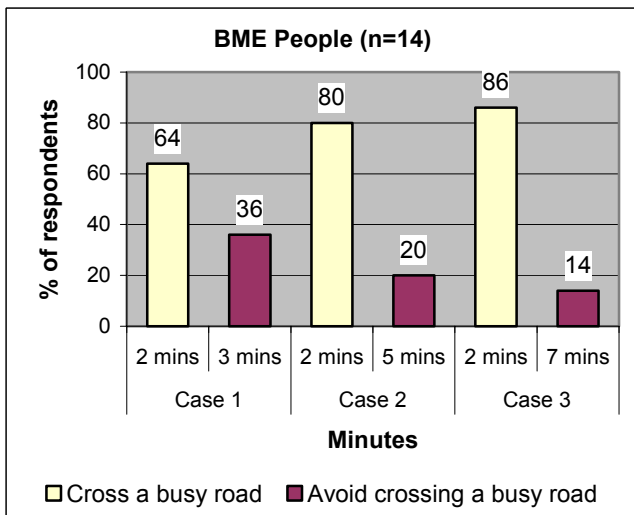
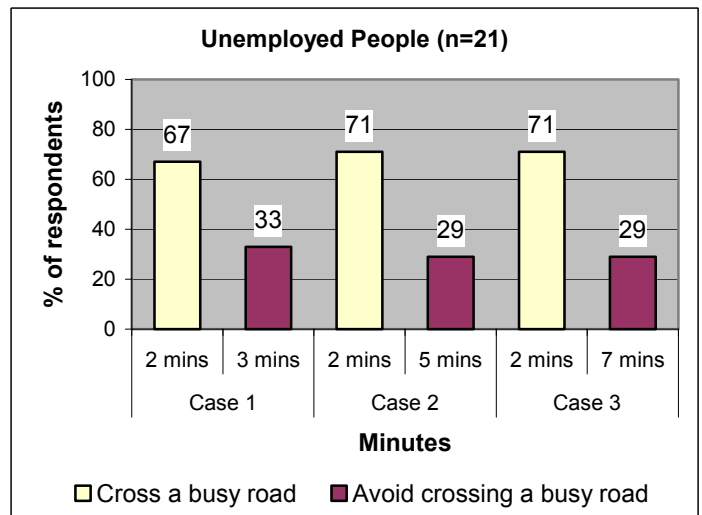


Figure 46: Unemployed People



3.61 Only 4% (n=14) of the respondents who answered the question said they were from an ethnic minority background (Figure 45). At all distances, respondents within the BME group are more likely to choose a bus stop that is 2 minutes away from their home than the sample of white people.

3.62 Forty five percent (n=21) of unemployed people (Figure 46) answered this question. As can be seen, unemployed people are more likely than the total sample of



respondents to choose a bus stop that is closest to their home, despite the need to cross a busy main road.

3.63 Figures 47 and 48 provide an analysis of the reactions to the busy main road trade-offs for the two study areas, at the 'All Group' level.

Figure 47: Braithwaite – All Groups

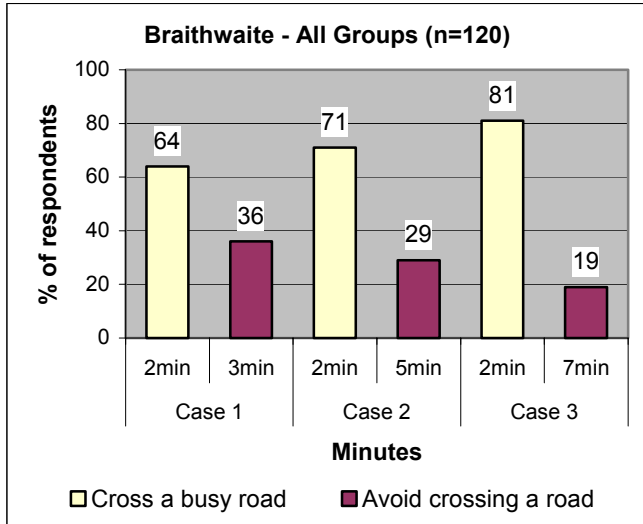
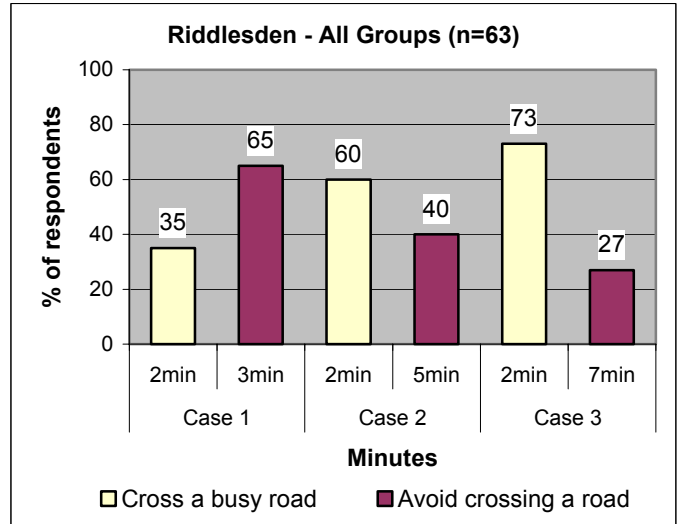


Figure 48: Riddlesden – All Groups



3.64 The results show that there are marked differences between respondents living in Braithwaite and Riddlesden, with the latter being more cautious about crossing busy roads and being prepared to walk further to access a pedestrian crossing. Indeed, about two-thirds of Riddlesden respondents are willing to walk at least an extra 1 minute to avoid crossing a main road without a pedestrian crossing.

3.65 Unlike the previous question, there are gender differences within the two study areas. In both Braithwaite (see Figure 49) and particularly Riddlesden (Figure 50), men are more likely to cross a busy road without a pedestrian crossing than women.

Figure 49: Braithwaite - Gender

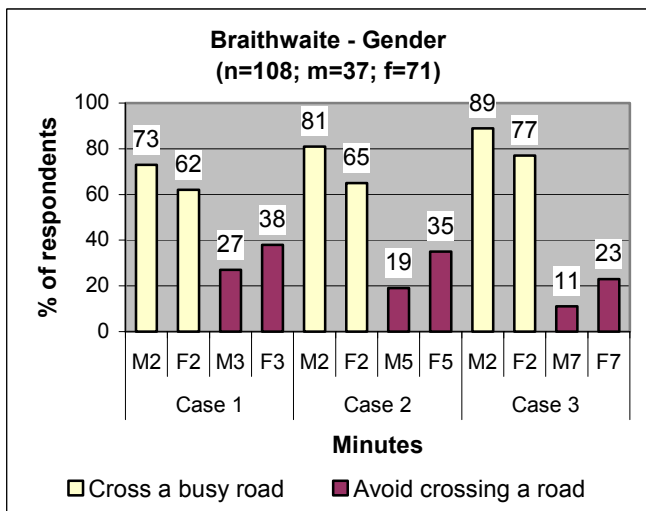
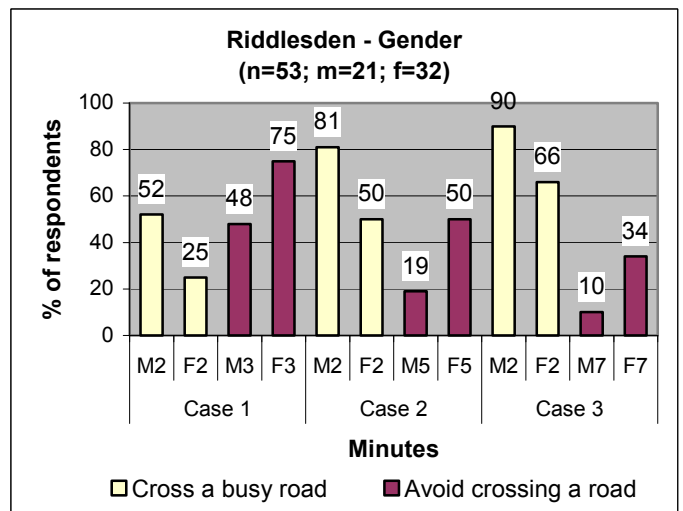


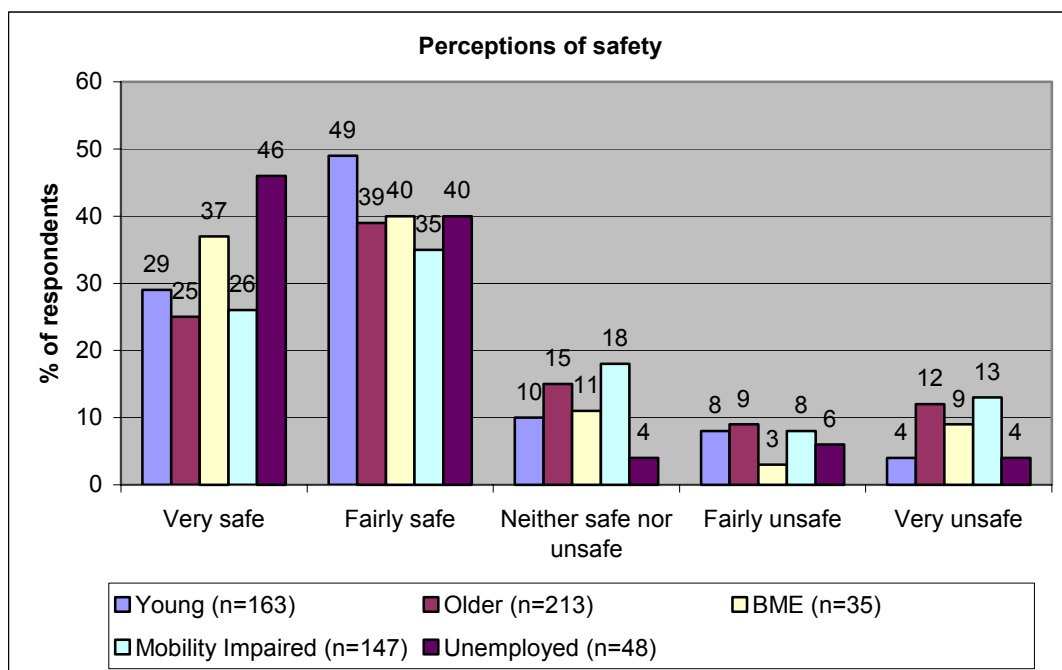
Figure 50: Riddlesden – Gender



### Perception of Personal Safety by Each Group

- 3.66 Respondents were asked to indicate how safe they feel when walking to and from their usual bus stop at night. Sixty nine percent of the total sample said that they feel 'very' or 'fairly' safe when walking to and from their usual bus stop at night, of which 31% felt 'very' safe. However, 13% of the respondents said they feel 'very' or 'fairly' unsafe, of which older people (21%) were more likely to state that they have concerns than young people (12%). Thirteen percent of the respondents said they feel neither safe nor unsafe and 5% failed to answer the question.
- 3.67 Figure 51 disaggregates these results by social group. The results suggest that the highest proportion of the groups that feel safe are the unemployed people (86% of them), and that the lowest proportion is found among the mobility impaired group (61%) – though still a majority. Conversely, the older age group and the mobility impaired are the groups with the highest percentages feeling unsafe (both at 21%).

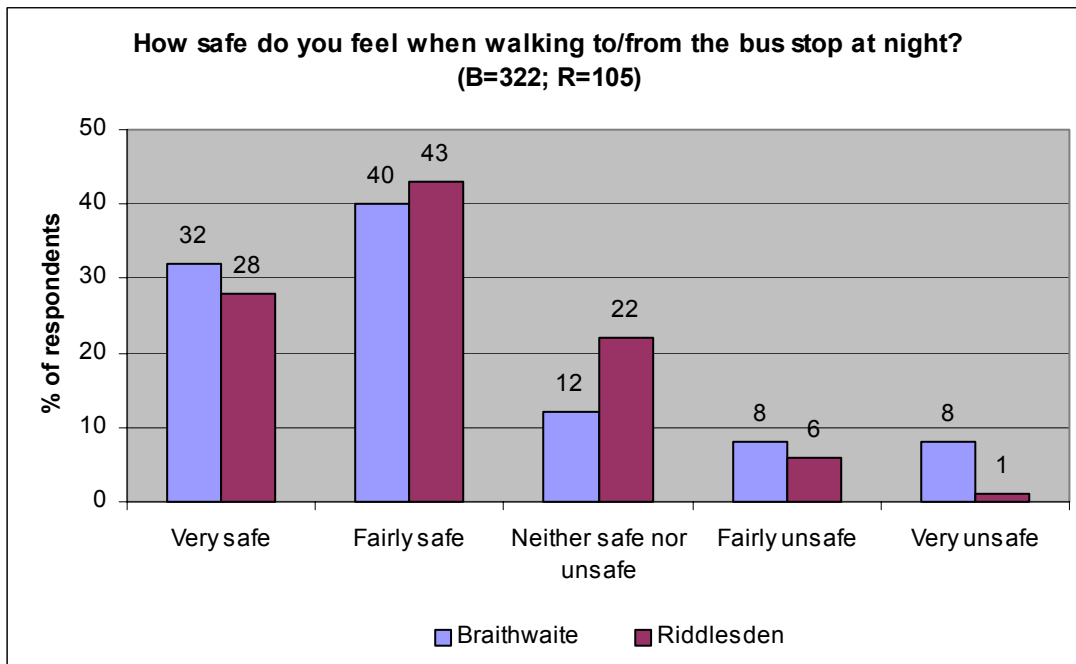
Figure 51: Perception of safety by each group



- 3.68 There is also a clear gender difference amongst the respondents, with more women (17%) than men (10%) feeling unsafe when travelling to and from bus stops at night. Interestingly, there is little difference between those respondents travelling with and without young children.

3.69 The differences between Braithwaite and Riddlesden respondents (Figure 52), are relatively small. The results show that over 70% of the respondents from both areas indicated that they feel safe when walking to or from the bus stop at night. Respondents from the Braithwaite area were more likely to say that they feel unsafe (16%) than those people from Riddlesden 7%), who were more likely to state that they feel neither safe nor unsafe when walking at night (22% vs 12%).

Figure 52: Perception of safety per area



*A Bus Stop Along a Poorly Lit Quiet Road or a Stop Along a Well Lit, Busy Road?*

3.70 Respondents were asked which bus stop they would use at night, involving a trade-off between distance and lighting levels, or whether they would prefer to stay at home and not make the trip. The respondents could choose between i) a bus stop that is 2 minutes along a poorly lit quiet road or ii) a stop that is 3, 5 or 7 minutes further away along a well lit, busy road or iii) not make the trip at all.

3.71 Table 9 below shows the demographic profile of the respondents who answered this question. Overall, 61% (n=485) of the respondents answered this question.

Table 9: Demographic profile of respondents answering level of lighting question

	Demographic profile	Social groups					Total Sample N=485
		Young N=112	Older N=135	BME N=19	Unemployed N=34	Mobility Impaired N=91	
Age groups	16-24	100%	-	53%	38%	4%	23%
	25-59	-	-	47%	62%	36%	49%
	60+	-	100%	-	-	59% *	28%
Sex	Male	34%	26%	42%	53%	35%	32%
	Female	59%	64%	37%	38%	58%	61%
	Missing	7%	10%	21%	9%	7%	7%
Ethnicity	White	57%	97%	-	94%	95%	95%
	Black	-	-	11%	-	-	(0.41%)
	Indian	-	-	-	-	-	-
	Pakistani	2%	-	47%	3%	1%	2%
	Bangladeshi	-	-	11%	3%	1%	2%
	Chinese	-	-	-	-	-	-
	Mixed Race	4%	-	26%	-	-	1%
	Other	-	-	5%	-	-	(0.21%)
Missing	37%	3%	-	-	3%	- *	
Employment status	Employed (F/P)	47%	6%	58%	-	10%	46%
	F-T Parent/Carer	11%	-	10%	-	4%	7%
	Unemployed	12%	-	10%	100%	8%	7%
	Student	30%	-	21%	-	3%	8%
	Retired	-	91%	-	-	60%	28%
	Long term sick	-	-	-	-	10%	2%
	Missing	-	3%	-	-	4%	2%

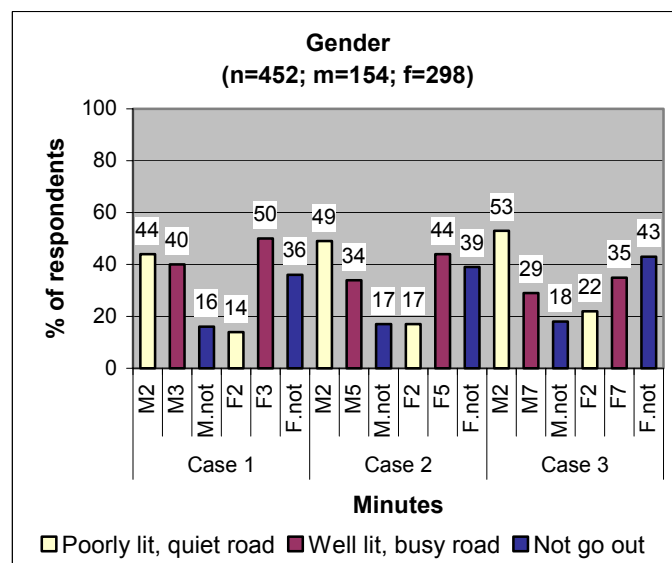
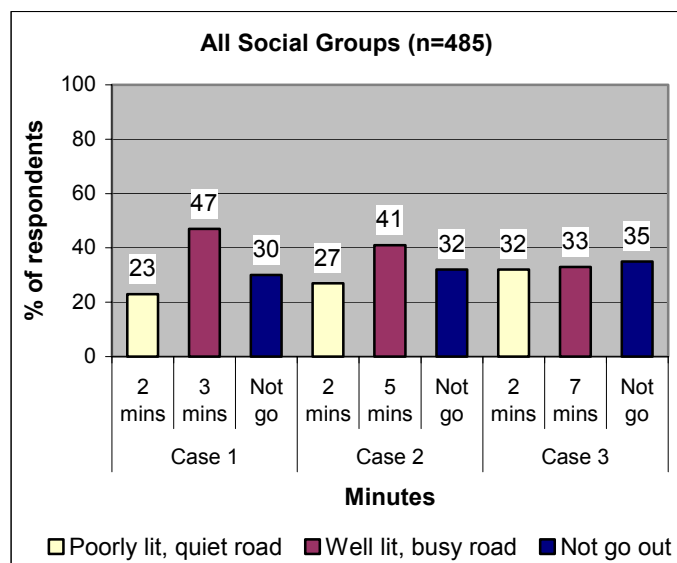
\* Figures do not add up to 100% due to rounding

3.72 Looking first at the 'All Groups' sample (Figure 53), less than a quarter said that they would choose a bus stop 2 minutes away that is situated along a poorly lit road in a quiet area, in preference to walking 3 minutes to a bus stop on a busy, well lit route. As the distance to the bus stop along a well lit road in a busy area increases, more respondents switch to using either the poorly lit stop or decide not to make a trip at night. The proportion indicating that they would not travel at night increases from 30% at 2 vs 3 minutes, to 35% at 2 vs 7 minutes, where it (just) becomes the most common response.

3.73 The majority of the respondents who answered the question were female (61%), while 32% were male and 7% failed to state their gender (Figure 54). There are clear gender differences, with women both being prepared to walk further than men to enjoy a safer route, and being more willing to stay at home at night. At a 2 vs 3 minute trade-off, 36% of women and 16% of men said they would not be prepared to go out at night. When the distance is increased to 7 minutes, the gender gap widens, with 43% of women saying that they would prefer not to go out, while only 18% of men – hardly any change on the base level - selected this option.

Figure 53: All Social Groups

Figure 54: Gender



3.74 For those who do state an intention to travel at night, women are more likely to choose a 'safer' route to a bus stop that is slightly further away from their home than men, who prefer the shortest route regardless of how busy and well lit the area is – even when the alternative route only involves an extra minute walk (i.e. 3 minutes vs. 2 minutes).

3.75 There is very little difference between those respondents travelling with young children and those without; both groups prefer the bus stop that is further way along a well lit, busy road.

3.76 Of all the social groups, young people (Figure 55) are the least likely to state that they would not go out at night: only 9% did so at the 2 vs. 3 minute trade-off, rising to just 14% at the 2 vs 7 minute trade-off. The likelihood of not going out at night increases with age, varying between 21% and 28% for the 25-59 age group (Figure 56), and rising sharply to 61-64% among the 60-plus age group (Figure 57).

3.77 While young people are the most likely not to be deterred from travelling by bus at night, they are also more likely than the mid-aged group to choose the longer, well lit route to a bus stop, at all the time trade-off values. Although the 60-plus age group are most likely to be deterred from going out, those that do are more likely to choose the shorter, less safe route, than the younger respondents.

3.78 There is a gender difference in behaviour between the respondents across all three age groups. Men are less likely to indicate a preference for not going out at night

and are more likely to choose the shortest route along a poorly lit quiet road. When comparing the two groups, young women are more likely to walk to a bus stop along a well lit busy road and women over the age of 25 are more likely to stay home at night, if the journey time to a bus stop along a busy road is 5 minutes or more. These results support the findings of the earlier question about perceptions of safety when walking to and from bus stops at night.

Figure 55: Young People (16-24)

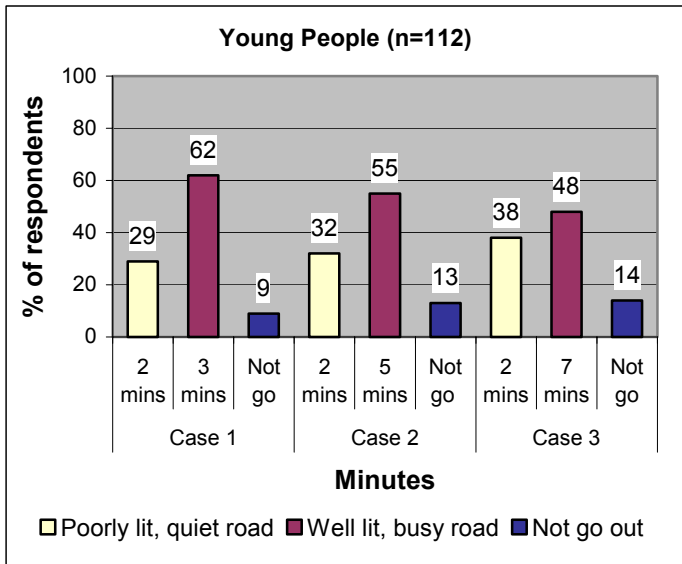


Figure 56: People aged between 25-59

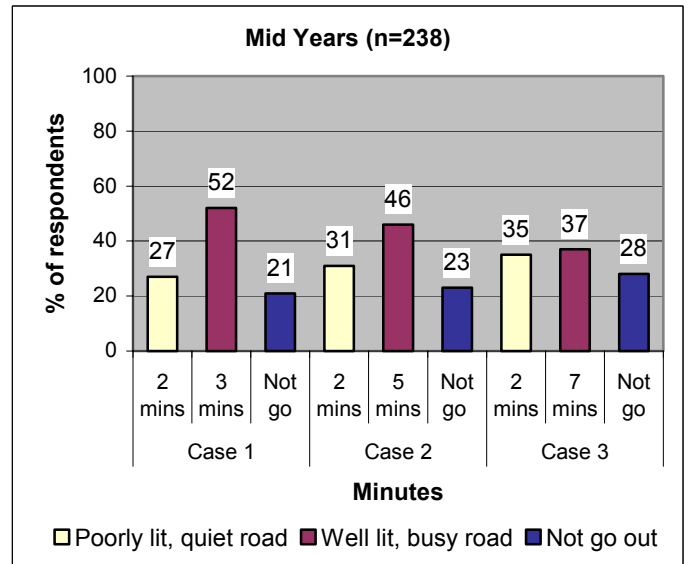
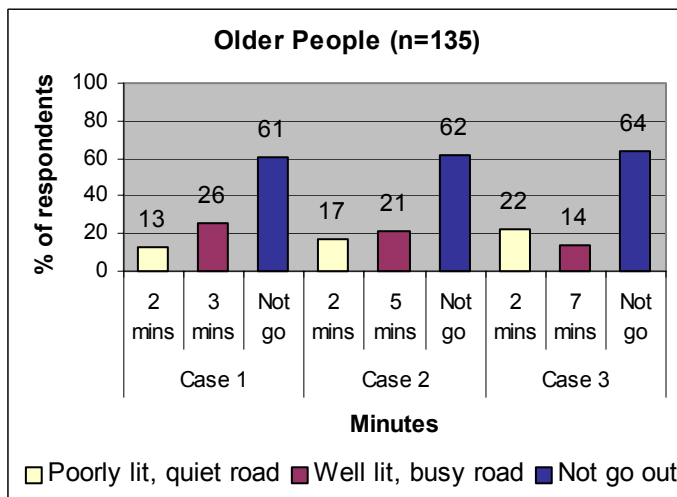


Figure 57: Older People

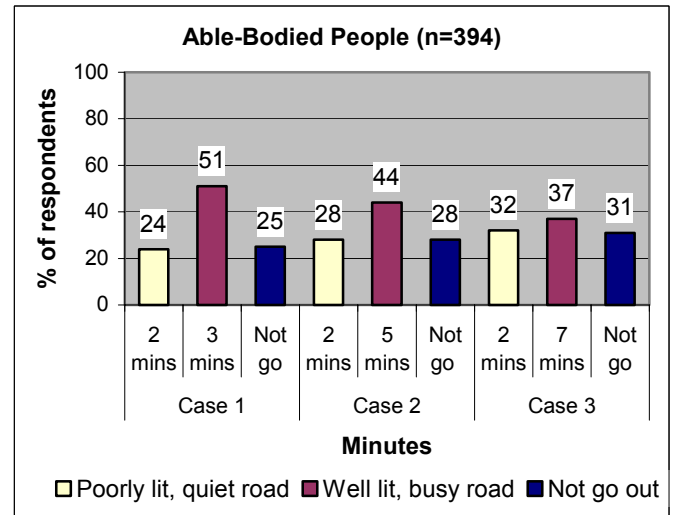
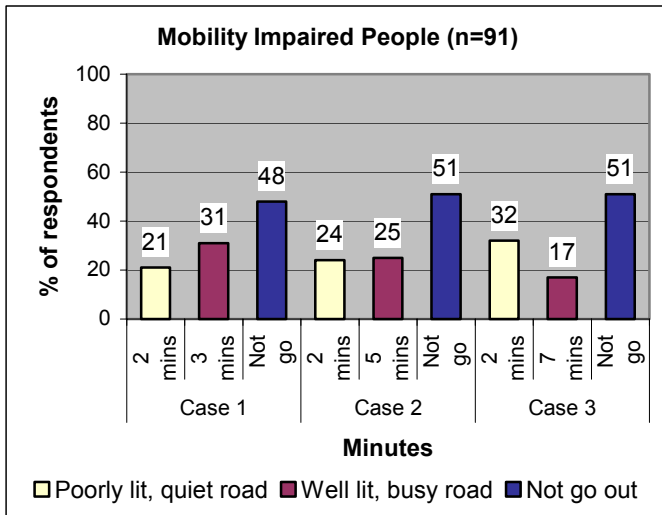


3.79 Respondents with a health condition (Figure 58) are almost twice as likely to say that they would not travel by bus at night, than able-bodied people (Figure 59). When asked if they would be prepared to walk 3 minutes to a bus stop along a well lit road, 31% of mobility impaired respondents said 'yes', 21% opt for the shorter route and 48% said they would prefer to stay at home. However, among the

respondents who opt for going out at night, those in the able-bodied group are more likely to walk along a well lit busy road to access a bus stop at night than those within the mobility impaired group. Once again, there are gender differences amongst the respondents within the two groups, as more women stated a preference for not making a trip at night. Among those who do go out, men are more likely to walk to a bus stop along a poorly lit quiet road and women prefer the longer well lit route.

Figure 58: Mobility Impaired People

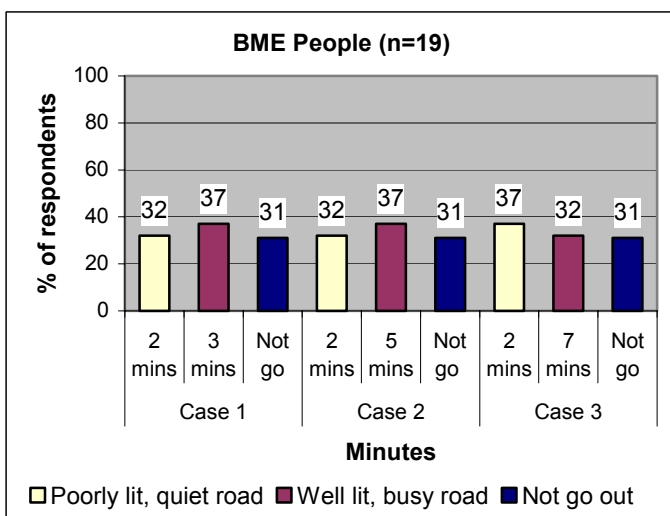
Figure 59: Able-Bodied People



3.80 Amongst the BME group (Figure 60), there is a surprisingly even split of around one-third each for the three sets of responses, and these do not vary much for the different trade-off values. The proportion saying that they would not go out at night remains at 31% across all three trade-off levels, and the short vs long route balance shifts from 32%:37% to 37%:32%, as the longer route increases from 3 to 7 minutes. In contrast, white people are more likely to state a preference for walking slightly further distances along a well lit and busy road than 2 minutes along a poorly lit road.

Figure 60: BME People

Figure 61: Unemployed People



3.81 The proportions of unemployed people saying they would not go out at night is relatively low (Figure 61), ranging from 12% to 18%, and they are more likely to opt for the shorter route. Within this group, more women (23%) than men (6%) are likely to avoid making a trip at night if the journey to the bus stop along a well lit road is more than 5 minutes.

3.82 Figures 62 – 65 show further analysis of the two study areas at the ‘All Group’ and ‘Gender’ levels. The results show that there are only minor differences between respondents living in Braithwaite (Figure 62) and those from Riddlesden (Figure 63), with the former group being slightly more likely to choose the shorter route, and to go out at night.

Figure 62: Braithwaite – All Groups

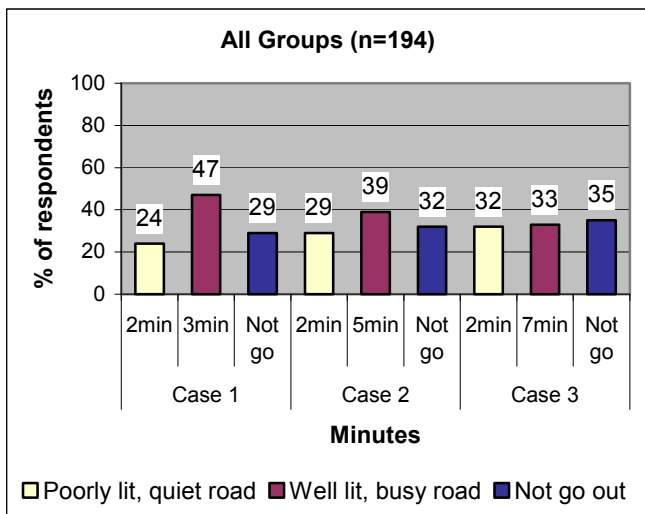
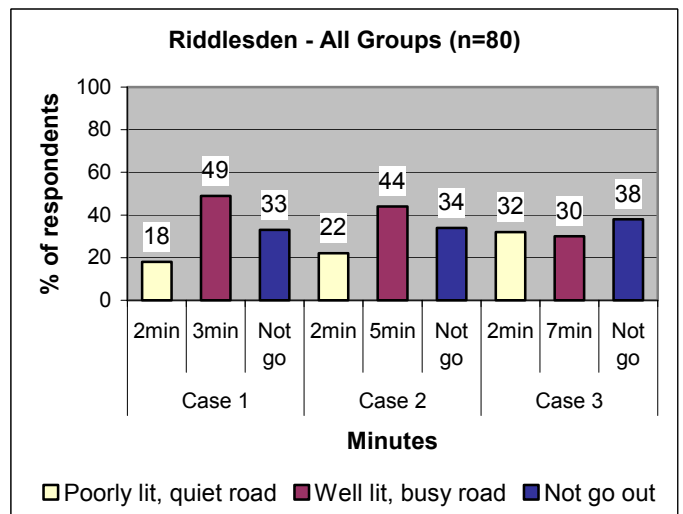


Figure 63: Riddlesden – All Groups



3.83 There are gender differences within the two study areas. In both Braithwaite (Figure 64) and Riddlesden (Figure 65), women are more likely to walk further along a well lit busy road, and much more likely to select the ‘not go out’ option than men.

Figure 64: Braithwaite – Gender

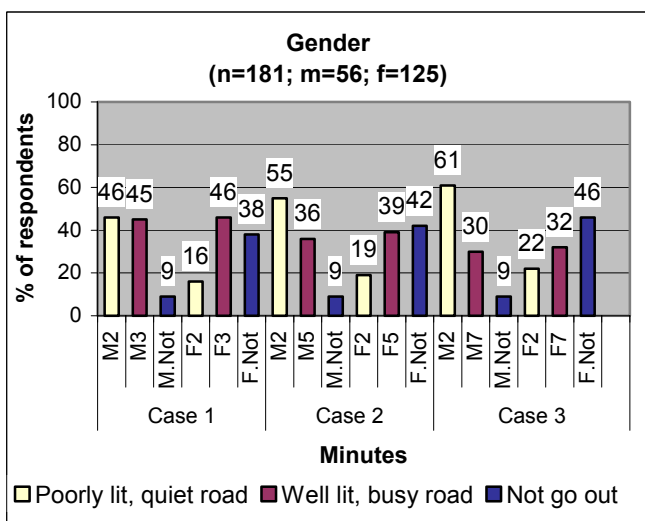
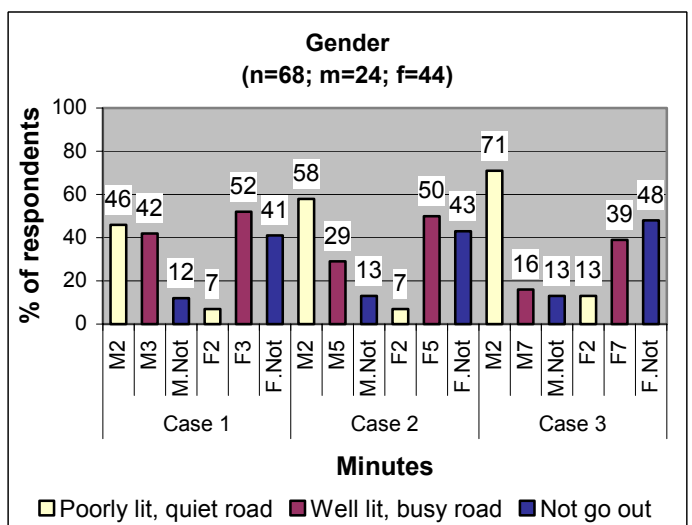


Figure 65: Riddlesden - Gender





## 4 FOLLOW-UP INTERVIEWS

### Methodology

- 4.1 A sample of respondents from the on-bus survey were invited to attend a follow-up interview with a researcher to discuss, in more depth, their journey to/from the bus stop, any concerns they might have and some trade-off questions about different scenarios.
- 4.2 The sample of respondents were selected based on the following criteria:
- They agreed on the self completion questionnaire to provide further assistance;
  - They lived in Keighley;
  - They were over the age of 16;
  - They spent longer than 2 minutes walking to/from their usual bus stop.
- 4.3 The sample was further refined by including people who mentioned at least one of the following:
- A difficulty or concern in getting to/from their bus stops;
  - A concern about their personal safety when walking to/from home to the bus stop at night.

### Results

- 4.4 A total of 103 respondents were contacted, 42 people agreed to take part in the interview and 31 people attended. Twenty two participants lived in Braithwaite and nine lived in Riddlesden. Table 8 gives a breakdown of the participants' age and gender by residential area.

Table 8: Age and gender of sample by residential area

	Braithwaite					Riddlesden				
	16-24	25-44	45-59	60+	Total	16-24	25-44	45-59	60+	Total
Male	2	2	2	3	9	0	0	0	1	1
Female	5	2	1	5	13	0	1	1	6	8
Total	7	4	3	8	22	0	1	1	7	9

#### Frequent Bus Journey

- 4.5 Access to shopping facilities (n=20), social/leisure (n=6) and work/education (n=5) locations were the main reasons why the participants said they travel by bus each week. All the participants who travel by bus for work/education purposes said they make this trip four or more times a week. Nearly three quarters of the participants said 'shopping' was their most popular journey purpose, and 50% percent of those who use the bus to access social/leisure facilities said they carry out this activity four or more times a week.
- 4.6 The time of day people travel by bus is different according to the type of destination they need to access. For example, those participants who travel to access work or educational facilities are more likely to make a trip early in the morning and return

home in the early evening. Shopping journeys are mainly conducted between early morning and lunchtime. Whereas those who travel for social/leisure purposes are more likely to leave home during the mid-morning and return at lunchtime. Three people said young children usually accompany them when they go shopping. Three quarters of the participants said they travelled by bus for other journey purposes at least once a week and the main reasons for travelling were: 'visit family and friends' (n=4); 'healthcare' (n=3); 'leisure/social' (n=3); 'shopping' (n=2).

## Walk route TO and FROM the bus stop

4.7 Respondents were shown a map of their local area and were asked to mark the following locations on the map:

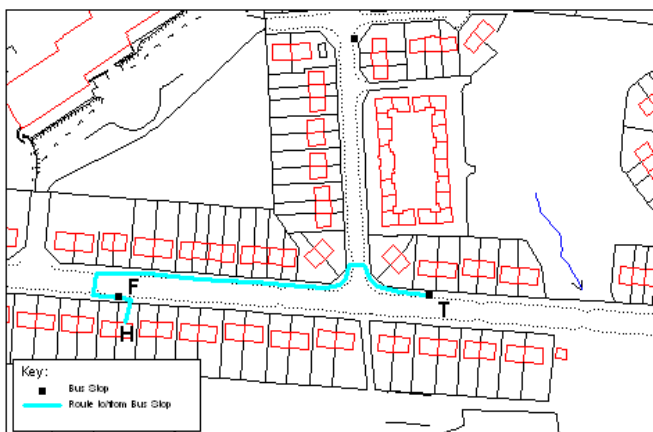
- home (H)
- the bus stop at which they board a bus TO their most frequent journey purpose (T), and
- the bus stop at which s/he alights FROM their most frequent journey purpose (F)

4.8 The respondents were then asked to mark on the map the routes they take to and from their usual bus stop, including the following points of reference (where applicable): zebra crossing; pelican crossing; lights at a junction; central refuge; footbridge; subway and any other relevant conditions.

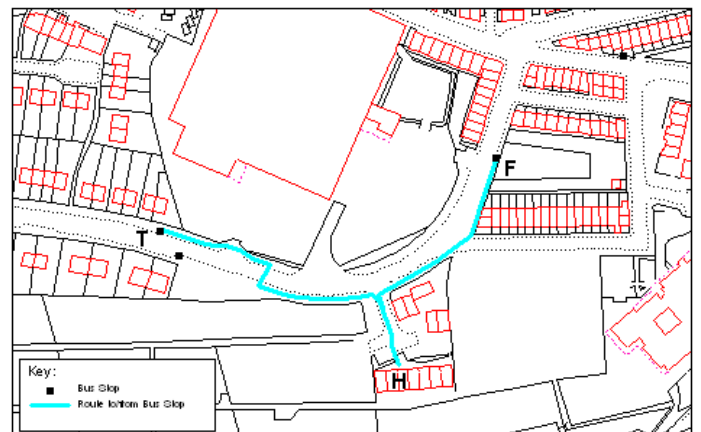
4.9 Examples of completed maps are shown in Figures 66 and 67, for Braithwaite and Riddlesdon, respectively.

Figure 66: Examples of routes participants take to and from bus stops in Braithwaite

**Respondent A**



**Respondent B**

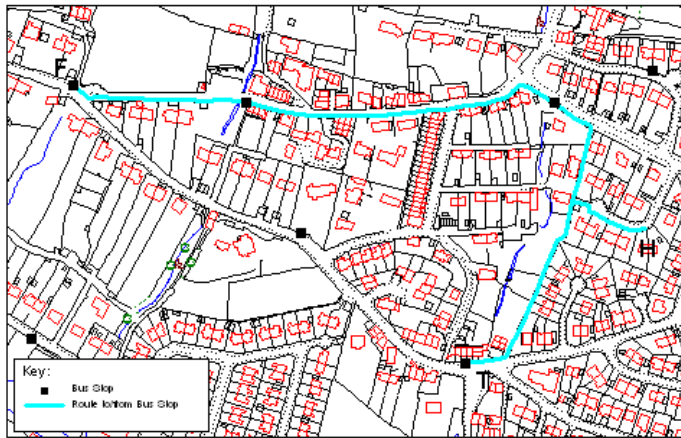


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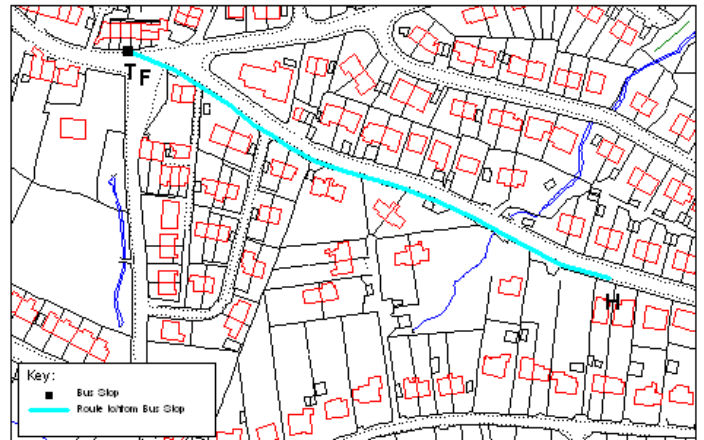
4.8 Respondent 'A' stated that s/he usually crosses the road outside his/her house (H) in the opposite direction of the bus stop (T) due to a caravan parked on the pavement obstructing his/her line of vision. Respondent 'B' stated that s/he usually gets off the bus (bus stop F) and walks down the hill to his/her home.

Figure 67: Examples of routes participants take to and from bus stops in Riddlesden

**Respondent C**



**Respondent D**



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4.9 Respondent ‘C’ said that s/he prefers to walk down a footpath to bus stop ‘T’ early in the morning as the stop is served by a more regular bus service. However, when returning home in the evening, the participant stated that s/he alights the bus at stop ‘F’ using an infrequent service serving the bus stops closer to his/her home. Respondent ‘D’ said s/he uses the same stop to board and alight the bus because it is his/her nearest stop.

4.10 When asked how long it takes them to walk from home ‘TO’ their usual bus stop, 84% (n=26) of the participants said they could reach their usual bus stop in less than 5 minutes. Five participants (four people from Braithwaite and one person from Riddlesden) said the walk to their usual bus stop takes them a minute longer because they do not use their nearest bus stop, and the reasons why not include: ‘easier to get to’ (n=2); ‘more choice of bus routes’ (n=1); ‘feel safer walking there’ (n=1) and ‘prefer to walk into town’ (n=1).

4.11 The participants were asked to rate their walk to the bus stop, in terms of ‘ease of access’, ‘lighting’, ‘condition of footways/pavements’, ‘steepness of route’, ‘volume of road traffic’, ‘safety from road traffic’ and ‘personal safety’ on a scale of very good to very poor. Eighty eight percent (n=27) of the participants said that their overall walk was ‘good’ (of which seven people said ‘very good’). However, when asked if they have any concerns about their walk 12 respondents said ‘yes’ and the reasons include:

- The volume of traffic in their local area (n=5);
- Steep hills (n=3);
- Feel unsafe walking to/from the bus stop because of poor visibility due to parked cars and speeding motorists (n=2); and
- Feel unsafe walking around the local area at night (n=2).

3.84 Figures 68 and 69 below show the postcodes of respondents who said they do not feel safe because of: personal safety concerns; general safety concerns; poor accessibility (in terms of gradients and ability to cross a busy road) and poor lighting.

Figure 68: Braithwaite respondents who feel unsafe

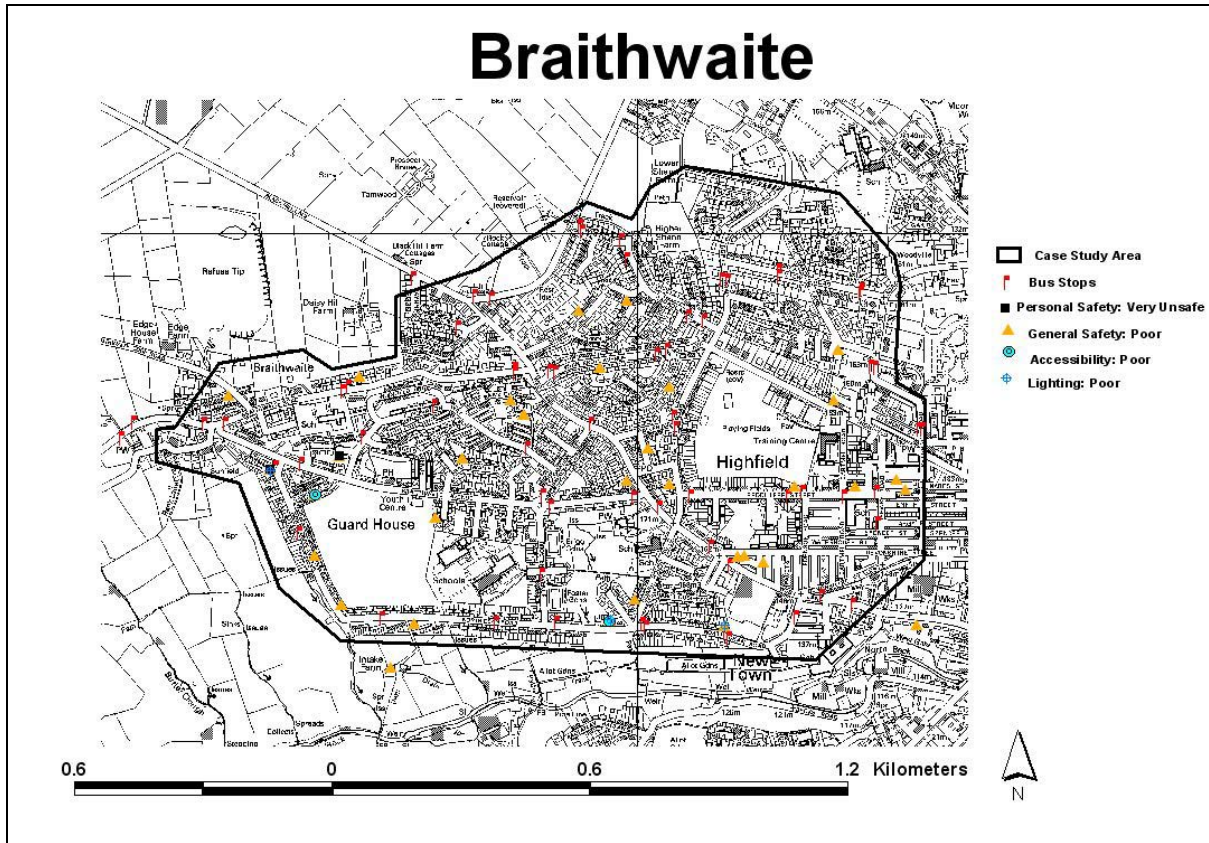
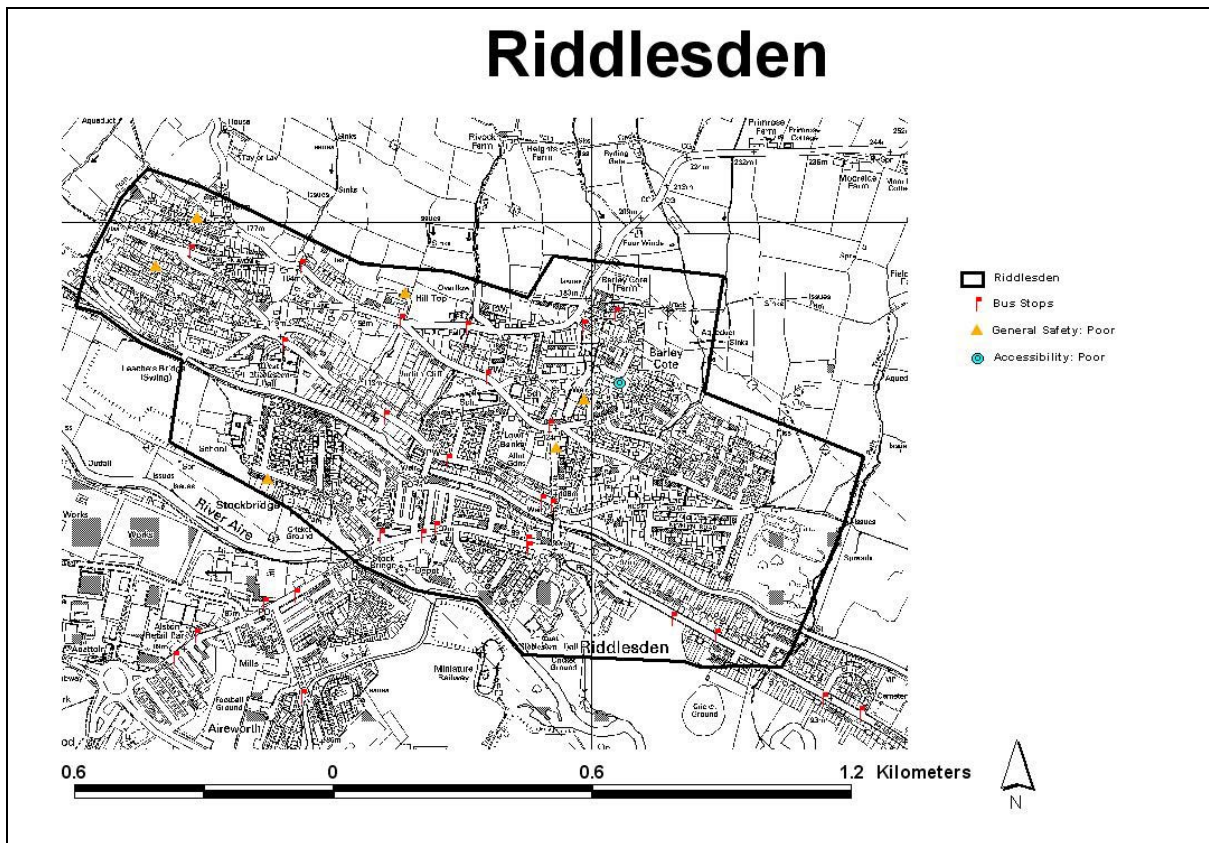


Figure 69: Riddlesden respondents who feel unsafe





- 4.12 Participants were then asked how long it takes them to walk from their usual bus stop to their home if they were catching a bus FROM their most frequent journey purpose destination. Once again, they were asked to rate their walk on a scale of very good to very poor, using the same conditions as the walk TO the bus stop. Overall 87% (n=27) of the participants took 5 minutes or less to walk from their usual bus stop to their home. When asked if the bus stop they usually use is the stop nearest to their home, only four participants 'no' and the reasons why not include: 'avoid steep hills' (n=3) and 'more choice of services' (n=1). Six participants said they would rate their journey from their usual bus stop differently to that of their journey to the bus stop. For example, two participants said their overall ease of access was better coming home from the bus stop than going to their usual stop.

## **Bus Stop Conditions**

- 4.13 Participants were asked about the conditions at their usual boarding bus stop and asked if they have any of the following facilities: e.g. shelter, seating, lighting, timetable information or real time information. If so, they were then asked to indicate how satisfied they are with them and if not, would they be prepared to walk further to a stop that has the relevant facility.
- 4.14 Shelter and seating were the two main facilities that were lacking at most of the participants' bus stops. For example, 87% (n=27) stated there was no shelter at their bus stop, of which, five people (all female) said they were prepared to walk further (maximum of 6 minutes) to a stop with one. Similarly, 84% of the participants said there was no seating available at their bus stop, but only one participant said she would be prepared to walk further to a bus stop with a seat (maximum of 15 minutes). Fifteen participants said there was no lighting at their usual bus stop and only two people (both female) said they would be prepared to walk a maximum of 10 minutes to reach a stop with a light.
- 4.15 Over 90% of the participants (n=29) said they had access to timetable information at their usual bus stop, of which 83% (n=24) were satisfied with the information that was provided. Several participants mentioned that the public transport authority (METRO) had recently installed new timetables at their bus stops. There was no real-time (e.g. countdown) information at any of the bus stops used by the participants, although several participants mentioned that they thought it would be useful. Only three participants said they would be prepared to walk further (maximum of 10 minutes) to a bus stop that has this facility.
- 4.16 When asked which facilities at a bus stop they consider to be most important, on a scale of 1 (very important) to 5 (not at all important), 87% (n=27) of the participants mentioned timetable information (rather than real time information (n=11)), followed by lighting (n=25), a bus shelter (n=21) and seating (n=18). Men were more likely to consider a shelter (n=8), seating (n=8) and timetable information (n=9) as being more important, whereas women placed more emphasis on lighting (n=18) and real time information (n=9).

## Walk Access Trade-offs

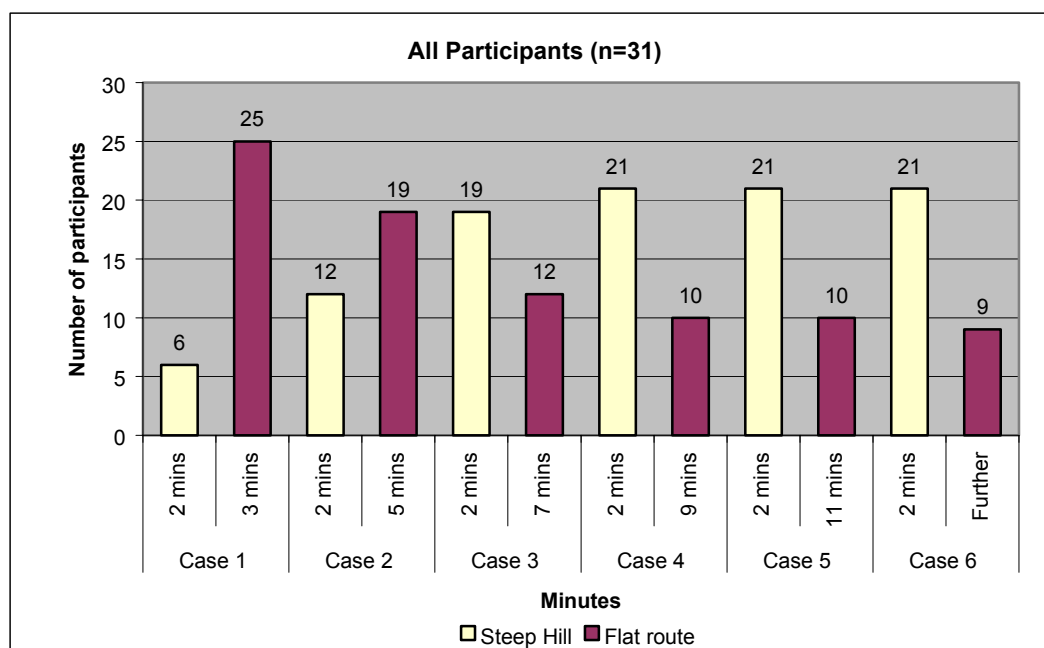
4.17 Analysis of the on-bus survey results showed that some respondents supplied conflicting answers to some of the ‘trade-off’ questions. The research team decided to repeat the questions (except the marked post vs. shelter and/or seating) and include three extra cases (i.e. 9 min, 11 min and 12+ mins). The interviewers were asked to carefully explain the different scenarios and how to respond.

### Flat route .v. steep hill

4.18 Twenty five of the 31 participants seemed to prefer to walk 3 minutes along a flat route rather than 2 minutes up a steep hill (see Figure 70). As the time it takes to walk along the flat route increases, the percentage of people willing to walk to the further bus stop decreases. For example, thirteen participants who said they were prepared to walk 3 minutes are not prepared to go as far as 7 minutes. There was very little difference between the age and gender of the participants and their choice of bus stop, although two people over the age of 60 years stated that they would prefer to walk to a bus stop along the flat route, regardless of distance, than up a steep hill.

4.19 When comparing the results of the on-bus passenger survey with that of the interview, nine participants provided the same answers to this question. Eleven people gave slightly different answers: six people said they would be prepared to walk slightly further (1 male and 5 females) and five people opted for slightly shorter distances (1 male and 4 females). The results of the remaining participants could not be compared due to a missing or incorrect response in the first survey.

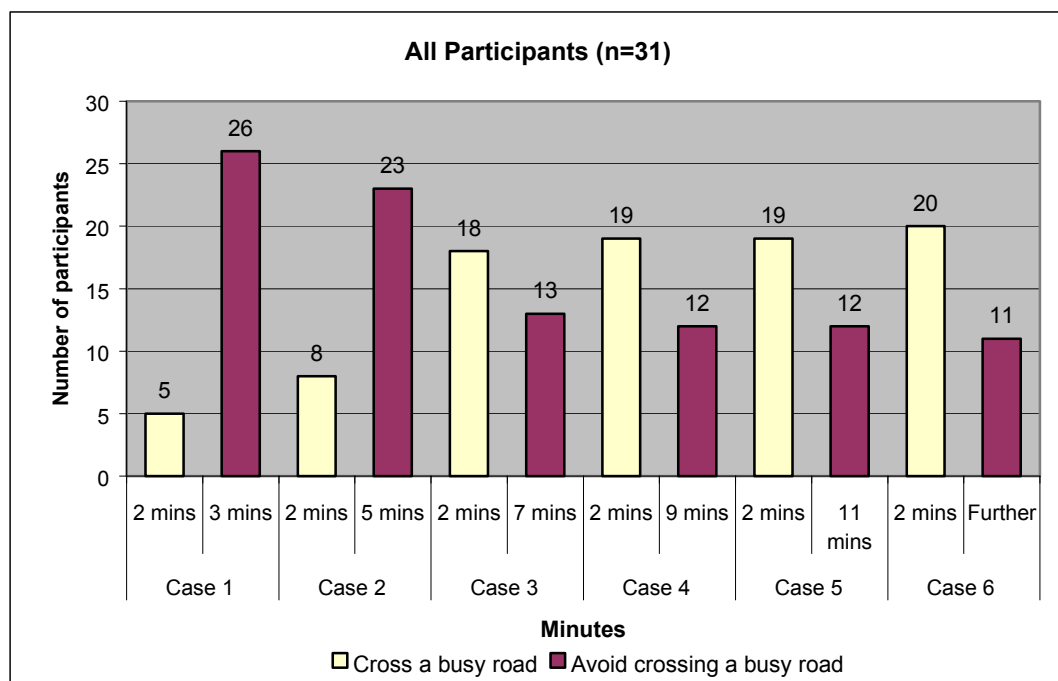
Figure 70: Steep hill or flat route



Crossing a busy road 'v' avoid crossing busy road

- 4.20 The majority of participants (84%) said they would prefer to walk 3 minutes to a bus stop, which does not involve crossing a busy road, than 2 minutes to a stop on a busy road without a pedestrian crossing (see Figure 71). Once again, as the time it takes to walk to a bus stop that avoids crossing a busy road increases, so does the percentage of people willing to walk to the 2 minute bus stop (e.g. thirteen people who said they would be prepared to walk 3 minutes said they would not be prepared to go as far as 7 minutes). One woman over the age of 60 years stated that she could not place a time limit on the distance she would be prepared to walk to find a safe point to cross a busy road.
- 4.21 When comparing the results of the two surveys, eight participants provided the same answers to this question, ten people gave slightly different answers as eight people said they would be prepared to walk slightly further (2 males and 6 females) and two people said slightly shorter distances (both female). The results of the remaining participants could not be compared due to a missing or incorrect response in the first survey.

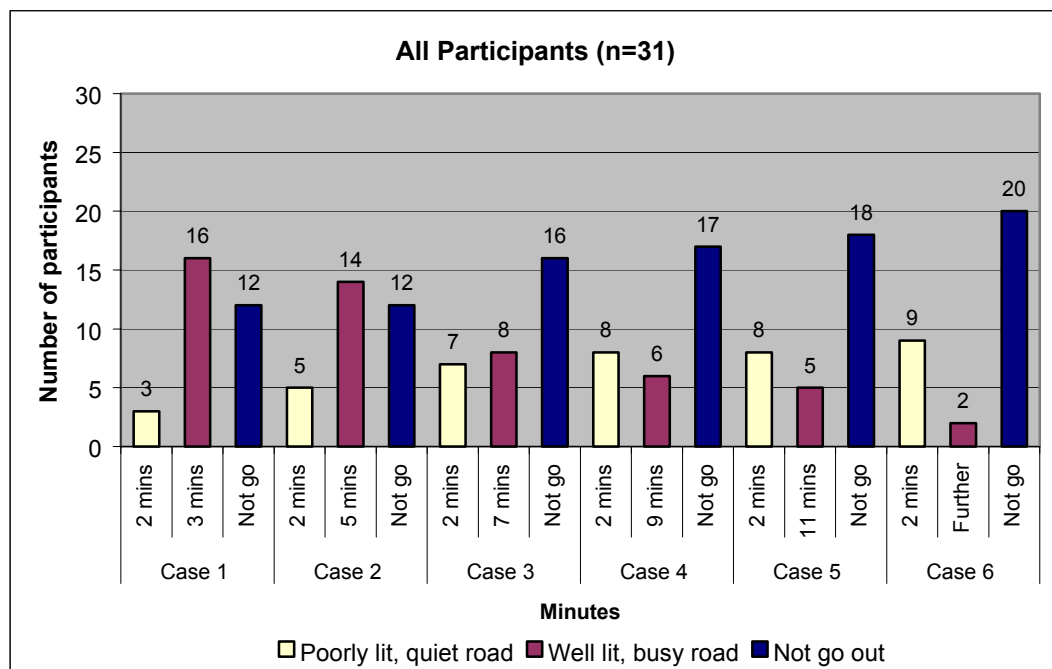
Figure 71: Crossing a busy road or avoid crossing a busy road



Poorly lit quiet road 'v' well lit busy road

- 4.22 When travelling at night, 53% of the participants (n=16) said they preferred to walk 3 minutes to a bus stop along a well-lit busy road, rather than 2 minutes to a stop along a poorly lit, quiet road (10%) (see Figure 72); the remaining participants said they preferred not to travel at night and would rather stay at home. The percentage of participants choosing not to travel at night rises as the distance to the bus stop along the well-lit, busy road increases (i.e. stay at home instead of a 5 min walk (n=12), 7 min (n=16), 9 min (n=17), 11 min (n=18) and 12+ minutes (n=20)). There was also a slight increase in the number of participants who stated a preference for the 2 minute bus stop along a poorly lit quiet road as the alternative distance increased (i.e. 2 minute bus stop instead of a 5 min walk (n=5), 7 min (n=7), 9 min (n=8), 11 min (n=8) and 12+ min walk (n=9)).
- 4.23 When comparing the results of the two surveys, twelve participants provided the same answers to this question, eleven people gave slightly different answers: seven people said they would be prepared to walk slightly further (3 males and 4 females) and four people said slightly shorter distances (2 males and 2 females). The results of the remaining participants could not be compared due to a missing or incorrect response in the first survey.

Figure 72: Poorly lit, quiet road or well lit, busy road or not go out at night

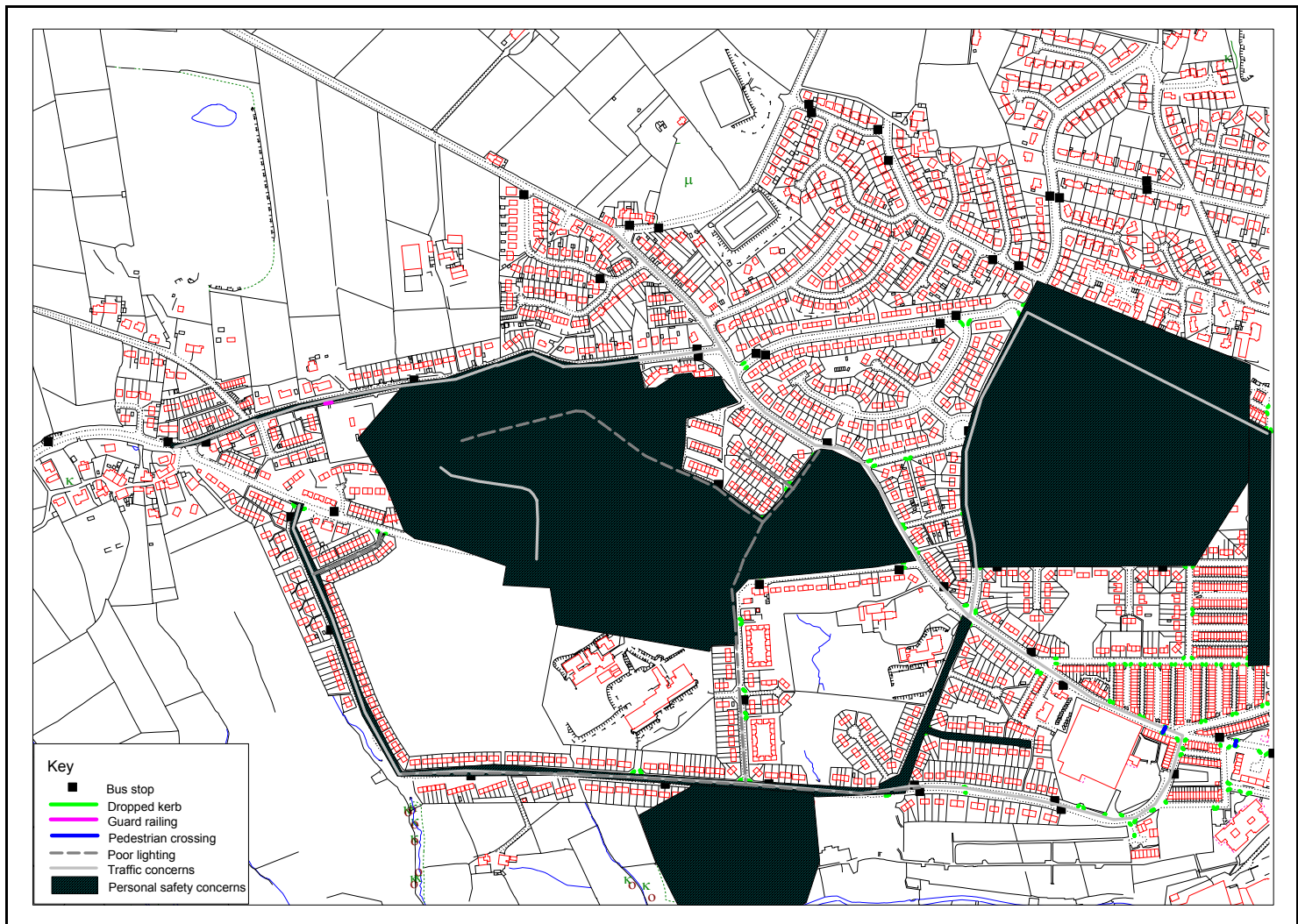




## General Neighbourhood Conditions

- 4.24 The last section of the interview consisted of a series of questions about general neighbourhood conditions. The respondents were asked to highlight on maps of their local areas particular streets and places where they felt unsafe because of poor lighting, traffic speeds, traffic volumes and/or fear of robbery or attack, when travelling during the daytime and at night (see Figures 73 and 74).
- 4.25 As shown in figure 73, some of the Braithwaite participants identified several areas where they were concerned about their personal safety or the level of lighting in some streets, and the volume of traffic and / or speeding cars in their local community. The majority of the participants (n=16) said they had concerns about the volume and traffic and / or the speed at which some people drive their cars within the local area.
- 4.26 Several people mentioned the problem of joyriders using the main roads as a racing track and then abandoning the stolen cars in their local area. Nine people stated that fear of attack or personal safety was their main concern when walking around the local area, in some cases, regardless of the time of day. Four people mentioned poor lighting and were particularly concerned about a footpath that is often used by children because it acts as a shortcut to their school.
- 4.27 Figure 74 shows the areas within Riddlesden where participants stated that they have concerns. For example, two people said they did not feel particularly safe walking around at night, because they were fearful of being attacked; another participant mentioned that s/he didn't feel safe because she thought the level of lighting in her street was poor, and one person said that speeding cars was their main concern.

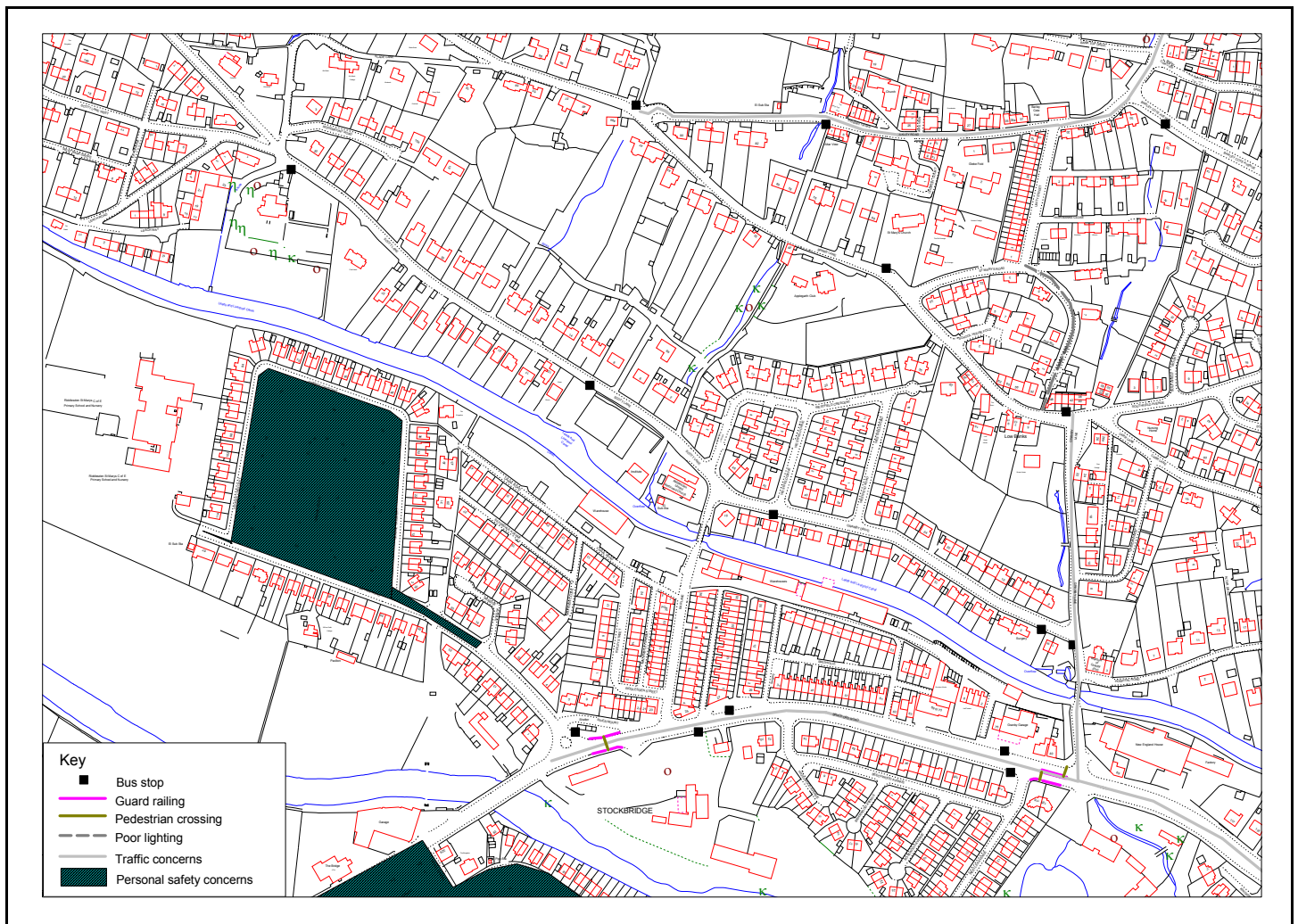
Figure 73: Braithwaite: areas of concern to residents



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- 4.28 Participants were then asked if they are deterred from travelling at night by bus because of concerns about getting to/from the bus stop and if so, what factors actually deter them from making a trip. Those participants who stated that they are reluctant to travel at night were then asked to give details about what they do instead.
- 4.29 Ten participants said that nothing deters them from travelling by bus at night and eleven people said that they had no need to travel at night. The remaining ten participants gave various reasons or stated their fears that deterred them from travelling at night, of which: four people stated that there were no buses at night; five people had fears for their own or travelling companion’s personal safety, or felt intimidated by young people hanging around on street corners; and one person said s/he lacked confidence to go out at night. Of those ten people, five participants said that they would use alternative transport (mainly lift by car or taxi) if they wanted to go out at night.

Figure 74: Riddlesden: areas of concern to residents



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- 4.30 Finally, respondents were asked how often they travel by bus at night and how many extra trips they would make each month by bus if they felt comfortable walking to/from the bus stop. Seven young people said they do not travel by bus at night because: they ‘don’t need to’ (n=6) and ‘personal safety’ concerns (n=1). These results can be compared to those of the older group of participants (n=15) who mentioned: they ‘don’t need to’ (n=8), ‘no bus service available at night’ (n=4) and ‘personal safety’ (n=3). Twenty six people said that they would not consider making any extra trips at night (6 participants in the 16-24 age group said they would not make any additional trips compared to 7 people from the 25-59 group and 13 older people).
- 4.31 Of the remaining five people who said they might go out more at night if their concerns were alleviated, one person (from the 60+ group) said s/he would make 3 extra trips per month, two people said 4 extra trips per month (one person from the 16-24 group and one person from the 60+ group), two people aged between 25 and 59 said they would go out more at night (5 and 16 extra trips per month, respectively). The results suggest that a small number of people may not be as active as they might like to be during the evening, due in large part to safety concerns and service availability.

## 5 SUMMARY AND CONCLUSIONS

- 5.1 This report has identified the main journey purposes for which different groups of people travel by bus; the time it takes them to walk to their usual bus stop; any concerns they might have with their journey, particularly at night; and, how far they are prepared to walk to different bus stops with a variety of conditions (e.g. up a steep hill or along a flat route; a marked post or a shelter and/or seating; along a busy road with or without a pedestrian crossing; along a poorly-lit quiet road or along a well-lit busy road).
- 5.2 The average walk time to the bus stop is 4 minutes, except for the BME and unemployed groups who spend an average of 5 minutes walking to their usual bus stop. It is worth noting that respondents within the BME and unemployed groups were most likely to state that they do not use their nearest bus stop, which could explain why their journey takes them slightly longer.
- 5.3 Gender: The results indicate that women are more likely to make a journey by bus to access shopping facilities, whereas men tend to use it for more social / leisure purposes. There are significant gender differences in the responses to the trade-off questions. Men are more likely to choose a bus stop that is up a steep hill, if it is the shortest route and women prefer to walk further to a bus stop, if it is along a flat route. There is no significant gender difference amongst the respondents when choosing either a marked bus stop or a stop with seating and/or a shelter. However, gender does have a very significant impact on whether someone is prepared to cross a busy road without a pedestrian crossing or not: men are more likely to cross the road whereas more women said they would prefer to walk further to avoid crossing the busy road. When travelling at night, women prefer to choose a bus stop that is along a well-lit busy road, even if it is slightly further away from their home than a stop along a poorly lit quiet road. However, if the preferred stop is more than 5 minutes away, women are more likely to avoid making a trip and remain at home. In the questionnaire trade-off exercise, women were much more likely to stay at home than men, and this increased as the distance using the safe route increased.
- 5.4 Age: Older respondents are more likely to use the bus for shopping related trips whereas young people (under 25) use it for work/education related trips. The age of a respondent has a significant impact on the distance s/he is prepared to walk to a bus stop under different gradient situations. Young people are more likely to walk to a closer stop that is up a steep hill and older people prefer to access a bus stop that is along a flat route. The provision of seating and/or a shelter at a bus stop becomes more important to respondents as they grow older, particularly for older women. Young people make more trips at night than any other group and older people are most likely to state a preference for staying at home, indicating that they are not as socially active in the evening, and more easily deterred from going out.
- 5.5 Ethnicity: When comparing the results of the actual journey times to regular bus stops with the times that respondents would be prepared to walk to hypothetical bus stops, the findings from the BME group are very interesting. Nearly three quarters of the respondents said they can access their regular bus stop within 5 minutes and 17% said they do not walk to their nearest bus stop. However, the answers to three of the four hypothetical scenario questions show that the respondents are least likely to be prepared to walk to a bus stop that is more than 2 minutes from their home. BME respondents are more likely to choose the shortest route along a poorly lit quiet road than white people, regardless of the distance along a well-lit busy road.

These results indicate that the BME respondents would prefer to access a bus stop that is nearer to their home as the shortest route is their main concern.

- 5.6 Health: Unlike the BME group, the respondents within the mobility impaired group are least likely to walk 2 minutes up a steep hill in preference to a longer walk on a flat route, more likely to walk further to a stop with shelter or seating, prefer to avoid crossing a busy main road without a pedestrian crossing, and to avoid walking to a bus stop along a poorly lit road. Respondents with a health condition are least likely to make a trip at night.
- 5.7 Status: Unemployed people are more likely to walk further to a bus stop along a flat route, or to a stop with a shelter and / or seating or cross a busy road without a pedestrian crossing than respondents within the 'other status' group.
- 5.8 Interestingly, for those people travelling with young children, the provision of seating and/or a shelter is not as important to them as the distance or the time it takes to walk to the bus stop.
- 5.9 Less than 15% of the respondents said they feel unsafe when walking to and from their regular bus stop at night. However, this figure could be higher as 5% of the respondents, mainly older people, failed to answer the question.
- 5.10 Area of residence: In general, respondents living in Riddlesden were more likely to choose longer routes than their Braithwaite counterparts. This was the case for: avoiding walking up a steep hill, walking further to access a bus stop with a seat or shelter, and avoiding crossing a busy main road without a crossing. In the case of lighting, responses in the two areas were similar. The first three differences might reflect the steeper hills, more exposed position coupled with less frequent bus service, and busier main road in the Riddlesden area.

## **APPENDICES**

**Appendix 1 –**  
Copy of the Questionnaire

## KEIGHLEY ON-BUS SURVEY

The University of Westminster (London) are carrying out some research into transport and accessibility issues in conjunction with METRO and Bradford Metropolitan District Council. Please answer the following questions and return the form to the interviewer on the bus. All the information will be treated confidentially.

**Q1. What is the main purpose of your journey by bus today? (Please tick correct box)**

- Work/Education
- Shopping
- Social/Leisure
- Visit Doctor / Hospital
- Other (please state) \_\_\_\_\_

**Q2. Did you walk from home to catch the bus today?**

**YES**  - How long did the walk to the bus stop take? \_\_\_\_\_ mins (Go to Q2a)

**NO**  (Go to Q4)

**Q2a** If Yes, did you walk to your NEAREST bus stop?

**YES**  (Go to Q3)

**NO**  (Go to Q2b)

**Q2b** If No, why did you choose a stop further away?

- More choice of buses
- Better facilities (e.g. shelter, seat, etc)
- Easier to get to (avoid main road, steep hill, etc)
- Feel safer walking there (e.g. better street lighting)
- Other (please state) \_\_\_\_\_

(Go to Q2c)

**Q2c** How long would it have taken you to walk from home to your nearest bus stop? \_\_\_\_\_ mins

**Q3** If you had a choice between walking to bus stops 'A' or 'B'. Both are on the same bus route with the same fare. Please tick 'A' or 'B' for EACH CASE:

**Which Bus Stop would you have used TODAY? Case 1 Case 2 Case 3**

Q3a	Bus Stop A is up a steep hill	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>
	Bus Stop B is along a flat route	OR B: 3 min <input type="checkbox"/>	OR B: 5 min <input type="checkbox"/>	OR B: 7 min <input type="checkbox"/>

**Which Bus Stop would you have used TODAY? Case 1 Case 2 Case 3**

Q3b	Bus Stop A is a marked stop, on a post	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>
	Bus Stop B has a shelter and seating	OR B: 3 min <input type="checkbox"/>	OR B: 5 min <input type="checkbox"/>	OR B: 7 min <input type="checkbox"/>

**Which Bus Stop would you have used TODAY? Case 1 Case 2 Case 3**

Q3c	Bus Stop A involves crossing a busy road without a pedestrian crossing	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>
	Bus Stop B avoids crossing a busy main road	OR B: 3 min <input type="checkbox"/>	OR B: 5 min <input type="checkbox"/>	OR B: 7 min <input type="checkbox"/>

**PLEASE TURN OVER**



**Q4. Do you have any difficulty or concern in getting to/from bus stops that prevents you from making some journeys by bus?** (e.g. broken pavements, difficulty crossing busy roads etc)  
 NO  YES  - Please explain \_\_\_\_\_

**Q5. How safe do/would you feel walking to/from home to your usual bus stop at night?**  
 Very safe  Fairly safe  Neither safe or unsafe  Fairly unsafe  Very unsafe

**Q6. Which bus stop would you use at night? Please tick 'A', 'B' or 'C' for EACH CASE:**

	Case 1	Case 2	Case 3
Bus Stop A is along a <b>poorly lit, quiet road</b>	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>	A: 2 min <input type="checkbox"/>
Bus Stop B is along a <b>well-lit, busy road</b>	B: 3 min <input type="checkbox"/>	B: 5 min <input type="checkbox"/>	B: 7 min <input type="checkbox"/>
C: Would <b>not</b> go out at night	C: not use <input type="checkbox"/>	C: not use <input type="checkbox"/>	C: not use <input type="checkbox"/>

**Q7. Do you live in Keighley?**  
 NO  YES  Please give your postcode or street name \_\_\_\_\_

**Q8. Are you:** Male  Female

**Q9. How old are you?**  
 Under 16 years old  16- 24 years  25-44 years  45-59 years  60 or above

**Q10. Do you have a health condition that limits your mobility?**  
 NO  YES  - Please give details \_\_\_\_\_

**Q11. Are you travelling with young children today?**  
 NO  YES

**Q12. Which best describes your situation:**  
 Employed full-time  Employed part-time  Full-time parent/carer  Looking for work  Student  Retired  Other (please state) \_\_\_\_\_

**Q13. To which ethnic group do you consider you belong:**  
 White  Black  Indian  Pakistani  Bangladeshi  Chinese  Mixed Race  Other (please state) \_\_\_\_\_

**Q14. FURTHER ASSISTANCE**  
 Researchers from the University would like to talk to bus users in more detail about their needs and experiences. This would take about 20 minutes, at a convenient location in central Keighley. We will pay you £5 for your assistance. If you would be willing to help, please indicate:

Your name \_\_\_\_\_ Contact Tel. No \_\_\_\_\_

**THANK YOU FOR YOUR ASSISTANCE.  
 PLEASE RETURN THIS FORM TO THE INTERVIEWER ON THE BUS**

## **Appendix 2 –**

Copy of the Follow-Up Questionnaire

## In-Depth Interview: Keighley

The University of Westminster (London) are carrying out some research into transport and accessibility issues in conjunction with METRO and Bradford Metropolitan District Council. The information obtained from this interview will be used by the University research team to inform transport professionals about the journeys people make to/from their bus stops and any particular concerns or problems they have. All the information will be treated confidentially.

### SECTION 1: YOUR MOST FREQUENT JOURNEY BY BUS:

**1) What is the MOST frequent journey you make by bus?**

(please tick one journey purpose)

- Work / education
- Shopping
- Social / leisure
- Visit Doctor / Hospital
- Other (please state) \_\_\_\_\_

**2) How often do you make this trip?**

- 4+ times a week       2-3 times per week       Once a week
- Once a fortnight       Once a month       Less often

**3) What time of day do you make this trip FROM home to the bus stop?**

- Early morning       Mid morning       Lunch time       Mid afternoon       Early evening       Night

**4) What time of day do you make the return trip TO your home from the bus stop?**

- Early morning       Mid morning       Lunch time       Mid afternoon       Early evening       Night

**5) Do you make this trip whilst travelling with young children OR with someone who has poor mobility OR whilst carrying heavy items?**

YES       NO

If yes, please give details \_\_\_\_\_

**6) Are there other journeys that you make by bus? (e.g. work / education, shopping, social / leisure, visit Doctor / Hospital)**

YES       NO

If yes, please indicate \_\_\_\_\_

**7) How often do you use the bus for these other journeys?**

- 4+ times a week       2-3 times per week       Once a week
- Once a fortnight       Once a month       Less often

## SECTION 2: WALK ROUTE TO YOUR USUAL BUS STOP:

### 8) Ask the respondent to locate on map:

Home location (H)

Bus stop at which s/he boards the bus to travel TO [most frequent journey purpose] (T)

Bus stop at which s/he alights the bus FROM [most frequent journey purpose] (F)

### 9) Ask the respondent to mark on the map walk routes TO / FROM their usual bus stop, including road crossing points

Use the following codes:

Z= Zebra

P= Pelican

L= Lights at junction

R= Central Refuge

N= No crossing facility

F= Footbridge

S= Subway

O= Other (give details)

[N.B If the respondent has fixed crossing points, mark these perpendicular to the kerb; if not (i.e. crosses at any point) then mark diagonally].

### 10) How long does it take you to walk from home 'TO' your usual bus stop if you are catching a bus TO [journey purpose e.g. work, shopping]? \_\_\_\_\_ mins

### 11) How would you rate your walk 'TO' your usual bus stop (at time of day normally used)

TO THE BUS STOP					
In terms of.....	On a scale of from .....to .....				
Ease of access	Very Good	Good	Neither	Poor	Very Poor
Lighting	Very Good	Good	Neither	Poor	Very Poor
Condition of footways / pavements	Very Good	Good	Neither	Poor	Very Poor
Steepness of route	Very steep uphill	Fairly steep uphill	Neither	Fairly steep downhill	Very steep downhill
Volume of road traffic (at busiest point)	Very heavy	Heavy	Neither	Light	Very light
Safety from road traffic	Very safe	Safe	Neither	Unsafe	Very unsafe
Personal Safety	Very safe	Safe	Neither	Unsafe	Very unsafe

## COMMENTS

### SECTION 3: WALK ROUTE FROM YOUR USUAL BUS STOP:

12) How long does it take you to walk FROM your usual bus stop to your home if you were catching a bus FROM [journey destination e.g. work, shopping]? \_\_\_\_\_ mins

12a) Would you rate the walk 'FROM' your usual bus stop (at time of day normally used) exactly the same as your walk TO the bus stop in terms of.....

YES

NO

*If yes, go to Question 13, if no complete the following question*

#### FROM THE BUS STOP

In terms of.....	On a scale from ..... to .....				
Ease of access	Very Good	Good	Neither	Poor	Very Poor
Lighting	Very Good	Good	Neither	Poor	Very Poor
Condition of footways / pavements	Very Good	Good	Neither	Poor	Very Poor
Steepness of route	Very steep uphill	Fairly steep uphill	Neither	Fairly steep downhill	Very steep downhill
Volume of road traffic (at busiest point)	Very heavy	Heavy	Neither	Light	Very light
Safety from road traffic	Very safe	Safe	Neither	Unsafe	Very unsafe
Personal Safety	Very safe	Safe	Neither	Unsafe	Very unsafe

### COMMENTS

## SECTION 4: BUS STOP CONDITIONS:

### 13) Ask respondents about the conditions at their usual boarding bus stop (HOME END)

Do you have the following facilities at your bus stop, if so, how satisfied are you?  
(please circle)

<b>Shelter</b>	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
<i>If YES:</i>	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	
<b>COMMENTS</b>						
<i>If NO:</i>	Would you be prepared to walk further to a stop with a shelter				YES <input type="checkbox"/>	NO <input type="checkbox"/>
	- How much <i>further</i> would you be prepared to walk? _____mins					

<b>Seating</b>	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
<i>If YES:</i>	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	
<b>COMMENTS</b>						
<i>If NO:</i>	If no, would you be prepared to walk further to a stop with a seat				YES <input type="checkbox"/>	NO <input type="checkbox"/>
	- How much <i>further</i> would you be prepared to walk? _____mins					

<b>Lighting</b>	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
<i>If YES:</i>	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	
<b>COMMENTS</b>						
<i>If NO:</i>	If no, would you be prepared to walk further to a stop with a light				YES <input type="checkbox"/>	NO <input type="checkbox"/>
	- How much <i>further</i> would you be prepared to walk? _____mins					

<b>Timetable information</b>	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
<i>If YES:</i>	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	
<b>COMMENTS</b>						
<i>If NO:</i>	If no, would you be prepared to walk further to a stop with a timetable				YES <input type="checkbox"/>	NO <input type="checkbox"/>
	- How much <i>further</i> would you be prepared to walk? _____mins					

<b>Real time information</b>	YES <input type="checkbox"/>	NO <input type="checkbox"/>				
<i>If YES:</i>	Very satisfied	Satisfied	Neither	Dissatisfied	Very dissatisfied	
<b>COMMENTS</b>						
<i>If NO:</i>	If no, would you be prepared to walk further to a stop with real time info				YES <input type="checkbox"/>	NO <input type="checkbox"/>
	- How much <i>further</i> would you be prepared to walk? _____mins					

## SECTION 5: NEAREST BUS STOP:

14) Ask the respondents if the bus stop they usually use is the stop nearest to their home:

To [Journey purpose] trips YES  NO  If no, go to 14a, b, c, d, e  
 From [journey purpose] trips YES  NO  If no, go to 14a, f, g, h  
 [N.B If the respondents answer 'YES GO TO SECTION 6].

14a) Ask respondent to mark on the map walk routes **TO & FROM** home and the nearest bus stop, including road crossing points

To [journey purpose] Nearest Bus Stop TN  
 From [journey purpose] Nearest Bus Stop FN

Use the following codes:

Z= Zebra P= Pelican L= Lights at junction  
 R= Central Refuge N= No crossing facility F= Footbridge  
 S= Subway O= Other (give details)

[N.B If the respondent has fixed crossing points, mark these perpendicular to the kerb; if not (i.e. crosses at any point) then mark diagonally].

14b) Ask the respondents why they do not use their nearest bus stop **TO THEIR HOME** – does their chosen stop offer them the following: (tick those that apply)

More choice of buses   
 Better facilities   
 Cheaper fares   
 Easier to get to   
 Feel safe walking there   
 Avoid steep hill   
 Other \_\_\_\_\_

14c) How long would it take you to walk from home to your nearest bus stop if you were catching a bus **TO** [journey purpose]? \_\_\_\_\_mins

14d) How would you rate your walk from home 'TO' your nearest bus stop (at time of day normally used)

TO THE BUS STOP					
In terms of.....	On a scale from..... to .....				
Ease of access	Very Good	Good	Neither	Poor	Very Poor
Lighting	Very Good	Good	Neither	Poor	Very Poor
Condition of footways / pavements	Very Good	Good	Neither	Poor	Very Poor
Steepness of route	Very steep uphill	Fairly steep uphill	Neither	Fairly steep downhill	Very steep downhill
Volume of road traffic (at busiest point)	Very heavy	Heavy	Neither	Light	Very light
Safety from road traffic	Very safe	Safe	Neither	Unsafe	Very unsafe
Personal Safety	Very safe	Safe	Neither	Unsafe	Very unsafe

COMMENTS

**14e). Does the bus stop have the following facilities? If yes, how satisfied are you?**

(please circle)

<b>Shelter</b> Very satisfied COMMENTS	YES Satisfied	NO Neither	Dissatisfied	Very dissatisfied
<b>Seating</b> Very satisfied COMMENTS	YES Satisfied	NO Neither	Dissatisfied	Very dissatisfied
<b>Lighting</b> Very satisfied COMMENTS	YES Satisfied	NO Neither	Dissatisfied	Very dissatisfied
<b>Timetable information</b> Very satisfied COMMENTS	YES Satisfied	NO Neither	Dissatisfied	Very dissatisfied
<b>Real time information</b> Very satisfied COMMENTS	YES Satisfied	NO Neither	Dissatisfied	Very dissatisfied

**14f) Ask the respondents why they do not use the nearest bus stop TO THEIR DESTINATION – does their chosen stop offer them the following: (tick those that apply)**

- More choice of buses
- Cheaper fares
- Easier to get from
- Feel safe walking back from there
- Avoid steep hill
- Other \_\_\_\_\_

**14g). How long would it take you to walk from the nearest bus stop TO YOUR HOME if you were catching a bus FROM [journey purpose]? \_\_\_\_\_ mins**

**14h). How would you rate your walk 'FROM' your nearest bus stop TO HOME (at time of day normally used)**

**FROM THE BUS STOP**

In terms of.....	On a scale of.....				
Ease of access	Very Good	Good	Neither	Poor	Very Poor
Lighting	Very Good	Good	Neither	Poor	Very Poor
Condition of footways / pavements	Very Good	Good	Neither	Poor	Very Poor
Steepness of route	Very steep uphill	Fairly steep uphill	Neither	Fairly steep downhill	Very steep downhill
Volume of road traffic (at busiest point)	Very heavy	Heavy	Neither	Light	Very light
Safety from road traffic	Very safe	Safe	Neither	Unsafe	Very unsafe
Personal Safety	Very safe	Safe	Neither	Unsafe	Very unsafe

COMMENTS





## SECTION 8: GENERAL NEIGHBOURHOOD CONDITIONS:

Ask the respondent to mark on the map the following:

Roads and footpaths where they feel unsafe because of:

- Poor lighting (PL)
- Traffic speeds (TS)
- Traffic volumes (TV)
- Fear of robbery or attack – daytime (FD)
- Fear of robbery or attack – evening (FE)

**17) Ask the respondent if s/he is deterred from travelling at night by bus because of concerns about getting to/from the bus stop.**

**17a) What deters you from travelling by bus at night?**

\_\_\_\_\_

**17b) What do you do instead of making these trips by bus?**

Use another method of travel \_\_\_\_\_ (please state)

Not make the trip at all \_\_\_\_\_ (please state)

Other \_\_\_\_\_

**17c) How often do you travel by bus at night?**

- Never
- Less than once a month
- Once a week to once a month
- More than once a week

**17d) How many extra trips per month would you make by bus if you felt comfortable walking to/from the bus stop? \_\_\_\_\_**

**18) As a point of clarification, do you use the same bus stops for other journey purposes?**

YES  NO

[N.B If no, ask the respondents if they would be prepared to fill out an additional questionnaire for the other journey purposes]

**19) FURTHER ASSISTANCE**

Researchers from the University are planning to organise some discussion groups later in the Autumn to discuss accessibility issues in more detail. Would you be interested in attending?

YES  NO