



TAY CITIES PASSENGER RAIL USAGE SURVEY REPORT



SYSTRA

TAY CITIES PASSENGER RAIL USAGE

SURVEY REPORT

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1. INTRODUCTION

1.1 Scope

1.1.1 In August 2018, Tayside and Central Scotland Transport Partnership (TACTRAN) commissioned SYSTRA Limited (SYSTRA) to provide assistance in analysing and reporting on the outcomes from rail passenger travel surveys.

1.1.2 The surveys were undertaken at eleven stations in the Tayside area, including: Arbroath, Blair Atholl, Broughty Ferry, Carnoustie, Dundee, Dunkeld & Birnam, Invergowrie, Monifieth, Montrose, Perth, and Pitlochry. The surveys were conducted in parallel with further surveys conducted across partner authority Sustran area at Cupar, Ladybank and Leuchars stations.

1.1.3 This Report provides analysis of the collected survey data for the Tactran rail stations.

1.2 Purpose

1.2.1 The purpose of the project was to analyse the outcomes from passenger interviews conducted at rail stations in the Tayside and Fife areas, the results of which will provide an understanding of passenger numbers and travel habits.

1.2.2 The results of the surveys will also help inform the development of a Tay Cities regional transport model that is currently under development.

2. FORMAT OF RAIL SURVEYS

2.1 Survey Overview

- 2.1.1 Rail passenger surveys were undertaken at each station during the mid-week period (Tues, Wed, Thurs) between the dates: 20 March 2018 - 25 April 2018. The surveys were conducted by transportation survey specialists Streetwise Services Ltd. The surveys were carried out between 06:00 to 19:00 in order to determine the travel habits of rail passengers from stations in the Tayside and Fife areas.

2.2 Survey Programme

- 2.2.1 The survey programme included two elements:

- Passenger Questionnaires:
Undertaken with passengers on the platform as they waited for their train in order to identify travel habits. The survey included a total of 20 questions, provided on a post card. The questionnaires were handed to passengers on arrival at the station and collected by survey staff at the platform before they boarded train.

A copy of the questionnaire is included in Appendix A.
- Passenger Counts:
To supplement data obtained through face to face passenger surveys, passenger counts were undertaken to determine the number of passengers boarding and alighting from each rail service.

2.3 General Data Protection Regulations (GDPR)

- 2.3.1 It should be noted that in analysing the results of the surveys, due consideration was given to the implications of the General Data Protection Regulations (GDPR). The data supplied to SYSTRA was processed by Transport Scotland to remove those responses which could identify a singular address and/or person.
- 2.3.2 Consequently, in analysing the processed data for some responses, it was not possible to track parts of the journey reported i.e. in some cases the responses had been anonymised to such an extent as to included only partial postcode information. The partial information made it difficult to collate the responses and/or plot graphically. The information contained herein should be interpreted in this context.

3. RESULTS OF RAIL PASSENGER SURVEYS

3.1 Overview

- 3.1.1 This section summarises what key statistics were derived from the outcomes of the face-to-face passenger surveys. It should be noted that some of the passengers chose not to answer some questions.
- 3.1.2 A copy of the questionnaire is contained in Appendix A. At Perth station, a slightly modified version of the questionnaire was given to the participants, this involved separating the options for the station car park locations into two specific answers i.e. the Leonard Street car park and the Glasgow Road car park.
- 3.1.3 The data derived from the surveys is provided in a Microsoft Excel Spreadsheet (included as Appendix B). The results of the surveys are summarised for each station in the following sections. These include:
- Train departure time as recorded by survey company
 - Interview survey sample rate
 - Passenger demographics (Q1)
 - Time of departure as reported by respondents(Q2)
 - Destination Station (Q3)
 - Journey leg (Q4)
 - Reason for travelling (Q5)
 - Origin of passengers travelling to rail station (Q6 & Q7)
 - Mode of transport from journey origin to rail station (Q8)
 - Parking location (Q8a)
 - Reason for parking location choice (Q8b)
 - Reason for station choice (Q9)
 - Onward destination of passengers travelling from rail station (Q10 & Q11)
 - Mode of transport from station to onward destination (Q12)
 - Passenger journey frequency (Q13)
 - Ticket type used to make the journey (Q14)
 - Class of travel (Q14a)
 - Number of vehicles available to household (Q15)
 - Number of adults and children living within household (Q16)

4. ARBROATH RAILWAY STATION

- 4.1.1 Arbroath Rail Station is located in the centre of the town with an unattended, charged, 18 space car park provided. This includes parking spaces for blue badge holders.
- 4.1.2 Train operators Abellio ScotRail and (formerly) Virgin Trains provide train services calling at Arbroath providing connections to Aberdeen to the north and Edinburgh, Glasgow and beyond to the south. Office of Rail Regulation figures show that a total of 361,000 passengers travelled to and from Arbroath Rail Station during 2016/17 reporting period.
- 4.1.3 Table 1 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 1. Train Departure Times at Arbroath Station

Destination	Services							
Edinburgh	6:03	7:07	7:11	7:38	8:24	8:29	9:34	10:18
	10:29	11:29	12:22	12:37	13:20	13:33	14:18	14:34
	15:17	15:33	16:51	17:17	17:33	18:23	18:47	
Glasgow QS	6:04	6:50	7:56	8:17	8:53	9:54	10:54	11:50
	12:13	12:53	13:54	14:53	15:13	15:51	16:49	17:47
	18:55							
Aberdeen	6:25	6:42	7:26	8:42	9:07	9:40	10:05	10:35
	11:03	11:46	12:02	12:38	13:03	13:38	14:05	14:38
	15:03	15:48	16:01	16:39	17:02	17:46	18:04	18:48
London King's Cross	9:06	11:08	16:08					
Carnoustie	6:33	18:34						

Source: Boarding and Alighting information, Streetwise, Appendix B

4.2 Survey Sample Rate

- 4.2.1 Over the survey period, 434 passengers were observed boarding train services. Of the 434 boarding passengers, 220 were interviewed, giving an effective sample rate of 51% as shown in Table 2.

Table 2. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Arbroath	377	434	220	51%

4.3 Passenger Demographics (Q1)

- 4.3.1 In terms of passenger demographics, a 45.3%/54.7% split was recorded for male and female respectively, for those interviewed boarding trains at Arbroath. The majority of passengers were aged between 16 and 60, with 8% aged over 60. A full breakdown of passenger age ranges is shown in Table 3.

Table 3. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	1	44	51	34	50	16
Overall Proportion	1%	22%	26%	17%	26%	8%

4.4 Train Departures (Q2)

4.4.1 Figure 1 summarises the specified departure time of the outward leg of the journey given by respondents.

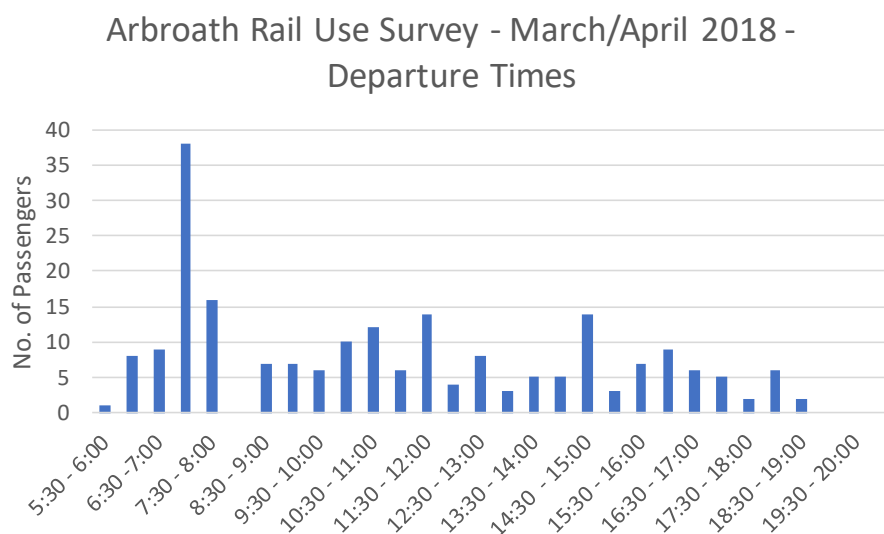


Figure 1. Time of Departure (Outward Leg)

4.4.2 Figure 1 suggests that the time period between 07:00 – 07:30 was the busiest time at the station, showing 38 people departing at this time. The graph also shows peaks of 14 passengers travelling at mid-day and the time period between 14:30 – 15:00.

4.5 Destination Station (Q3)

4.5.1 Table 4 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 4. Destination Station

Place	No. of Passengers	Percentage
DUNDEE	57	30%
ABERDEEN	25	13%
EDINBURGH	25	13%
CARNOUSTIE	11	6%
GLASGOW	10	5%
PERTH	10	5%
MONTROSE	8	4%
DYCE	6	3%
STIRLING	5	3%
ARBROATH	4	2%
BROUGHTY FERRY	4	2%
BRIDGE OF ALLAN	2	1%
LAURENCEKIRK	2	1%
STONEHAVEN	2	1%
YORK	2	1%
AIRDRIE	1	1%
AYR	1	1%
BISHOPBRIGGS	1	1%
CUPAR	1	1%
ELGIN	1	1%
HARTLEPOOL	1	1%
INVERGORDON	1	1%
INVERURIE	1	1%
KIRKCALDY	1	1%
LANCASTER	1	1%
LARBERT	1	1%
LINLITHGOW	1	1%
LIVERPOOL LIME ST	1	1%
LONDON KINGS CROSS	1	1%
MONIFIETH	1	1%
MOTHERWELL	1	1%
NEWCASTLE	1	1%
NEWTONGRANGE	1	1%

4.5.2 Table 4 confirms, of those interviewed, the greatest proportion of passengers (30%) are reported to travel to Dundee (57 people). Another 25 people were going to Aberdeen (13%). 25 people interviewed were going southbound to Edinburgh stations (13%).

4.6 Journey Type (Q4)

4.6.1 Figure 2 illustrates what leg of their journey passengers were on, of those interviewed at Arbroath station.

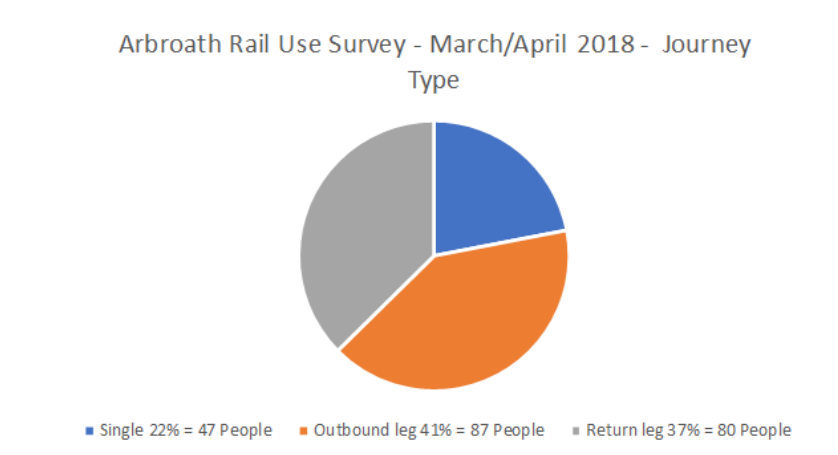


Figure 2. Journey Leg

4.6.2 Figure 2 shows the greatest proportion of passengers interviewed, 87 people, were on the outbound leg of their journey (41%). 37% reported to be on the return leg of their journey with a further 22% were making just a one-way trip.

4.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of each passenger's trip is as follows (Q4a):

- 140 people had the other leg of their journey, or were doing so, on the same day (88%)
- 20 people surveyed said that they were travelling on another weekday (13%).

4.6.4 Figure 3 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Arbroath Rail Use Survey - March/April 2018 - Other Journey Leg Time

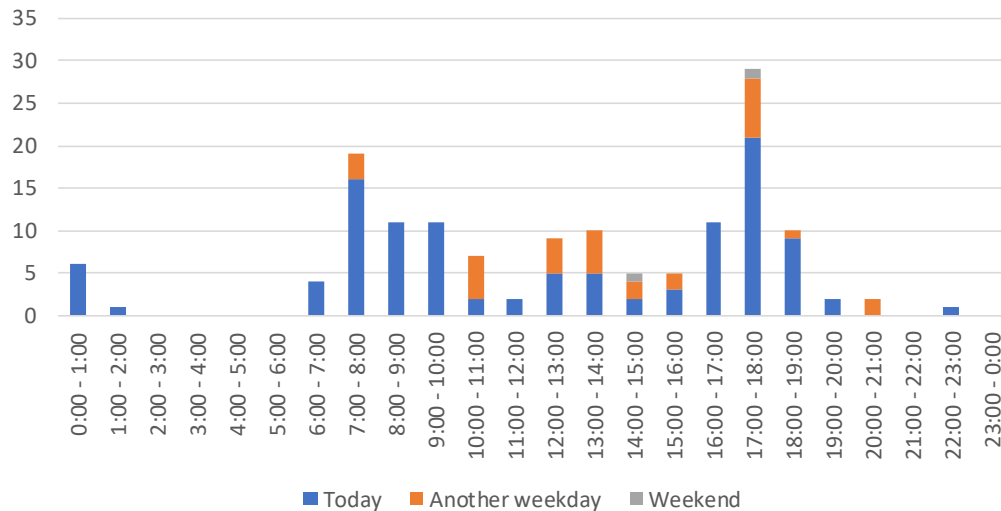


Figure 3. Time of Other Leg

4.6.5 Figure 3 suggests that there were two distinct peaks (morning and evening). Between 17:00 and 18:00 was the busiest time of day, with 21 passengers travelling on the same day, 7 passengers travelling on another weekday, and 1 passenger travelling on a weekend. There was an earlier peak between 7:00 and 8:00. At this time of day, 16 were travelling on the same day and 3 travelling on another weekday

4.7 Journey Reason (Q5)

4.7.1 Figure 4 shows the reason for making this particular journey from Arbroath station.

Arbroath Rail Use Survey - March/April 2018 - Journey Reason



Figure 4. Reason for Making This Journey

4.7.2 Figure 4 shows that 92 people were making this journey to get either to or from work (44%). Another 25 people were travelling for education reasons (12%). 24 people at Arbroath station were travelling due to employer's business (11%).

4.8 Journey Origin (Q6)

4.8.1 Figure 5 summarises how passengers surveyed at Arbroath station would categorize their journey origin.

Arbroath Rail Use Survey - March/April 2018 - Journey Origin

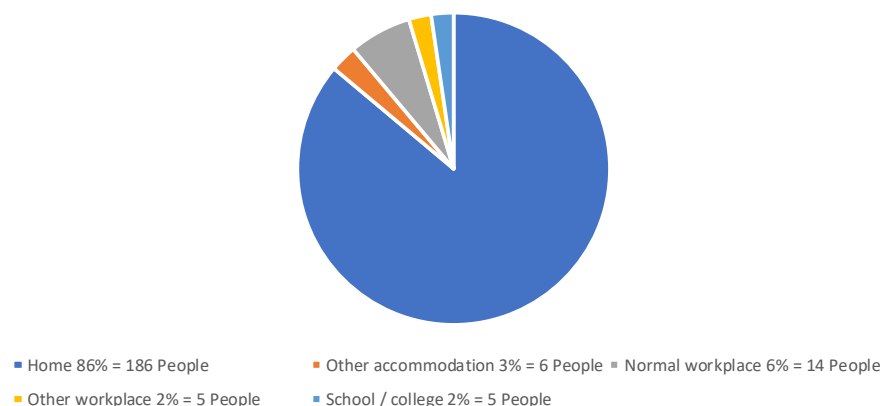


Figure 5. Passenger Origins

Figure 5 confirms the vast majority of passengers surveyed were at their respective homes prior to coming to Arbroath station (86%). A total of 14 people were coming from their normal workplace (6%), with another 6 people travelling from 'other' accommodation (3%).

4.9 Start of Journey (Q7)

4.9.1 Table 5 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 5. Origin of Trips made to Arbroath Station

Location	No. of Passengers	%age
Arbroath	116	61%
Dundee	7	4%
Forfar	7	4%
Letham Grange, St Vigeans, Kinblethmont, Colliston	7	4%
Carmyllie, Redford, Woodville	6	3%
Montrose	6	3%
Aberdeen	4	2%
Broughty Ferry	4	2%
Carnoustie	4	2%
Edinburgh	4	2%
Monifieth	4	2%
Seaton	4	2%
Colliston	3	2%
Cupar	2	1%
Airdrie	1	1%
Bonnybridge	1	1%
Caird Park	1	1%
Froichheim	1	1%
Hillside, Logie Pert, Craigo	1	1%
Kingsmuir, Letham	1	1%
Kirriemuir	1	1%
Laurencekirk	1	1%
Leuchars	1	1%
Marykirk, Auchenblae, Fettercairn	1	1%
Perth	1	1%
Stirling	1	1%
Westhill	1	1%

4.9.2 Table 5 indicates that, of those interviewed, the greatest proportion of passengers (61%) reported to start their journey at Arbroath. Of the neighbouring areas, Montrose and Forfar displayed notable catchment numbers.

4.9.3 Figure 6 illustrates the origin of journeys made to Arbroath station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 6. Origin of Trips Made to Arbroath Station

4.10 Mode: Methods of Transport from Origin to Station (Q8)

4.10.1 Figure 7 illustrates the methods of transport passengers used to get to Arbroath station during the survey period (for interviewed passengers only).

4.10.2 All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Arbroath Rail Use Surveys - Mode Split for Travel to Station

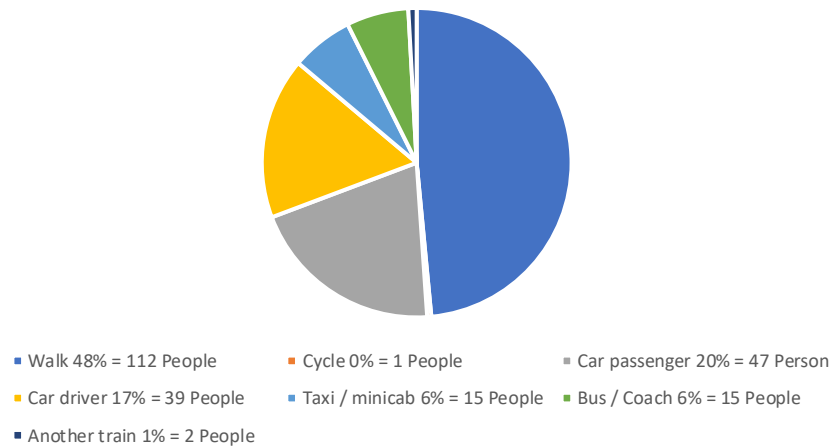


Figure 7. Mode Split of Passengers Travelling to Arbroath Station

4.10.3 Figure 7 suggests that the greatest proportion of interviewed passengers walked to the rail station (48%) with a further total 37% arriving using a car, as either a driver or passenger.

4.11 Parking Location (Q8a)

4.11.1 Figure 8 shows the parking location of vehicles used to travel to Arbroath station.

Arbroath Rail Use Surveys - March/April 2018 - Parking Location

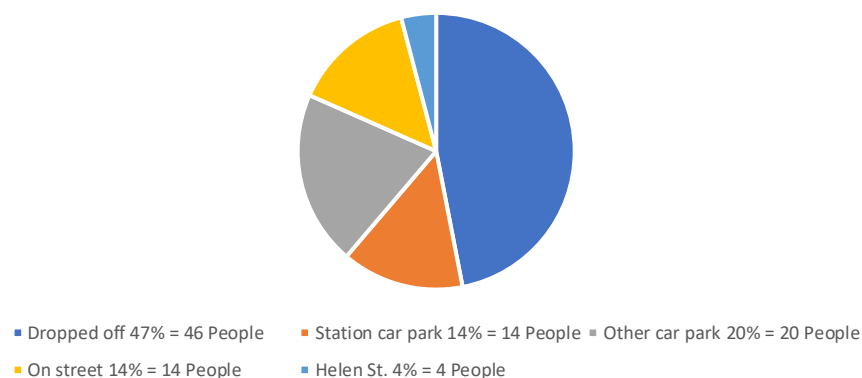


Figure 8. Parking Location

4.11.2 Figure 8 confirms that of the passengers interviewed, the greatest proportion (47%) were dropped off at the station, with a further 20% parking at another car park rather than the car park located at the station. The most notable location, specified by 4 people, was Helen Street, located on the other side of the station from the station car park.

4.12 Reason for Parking Location (Q8b)

4.12.1 Figure 9 shows the reason behind the parking location choice that the passengers made. Passengers were asked to select all reasons that applied and therefore multiple answers were logged per singular survey participant.

Arbroath Rail Use Surveys - Reason for Parking Location

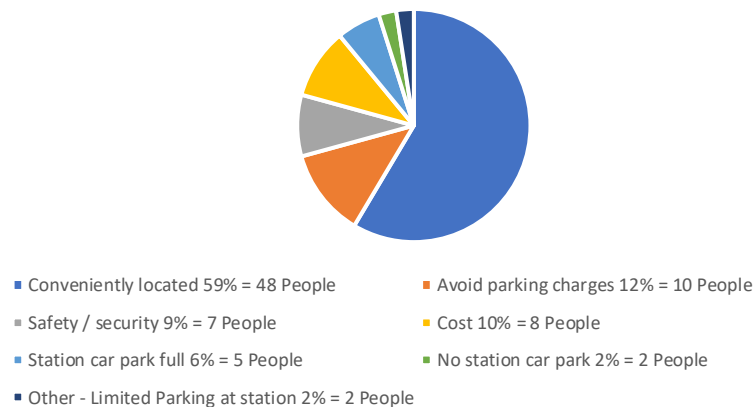


Figure 9. Reasoning for Parking Location

4.12.2 Figure 9 shows that, of the multiple answers for each participant, most selected that they chose their parking location because it was conveniently located (59%). While the second largest, in terms of parking consideration, was avoiding the parking charges (12%). Similarly, 8 people took into account the cost of parking when making their decision (10%).

4.13 Reason for Travelling from Arbroath Station (Q9)

4.13.1 Figure 10 shows the breakdown of the reasons considered by passengers in deciding to travel from Arbroath station over other stations. All reasons that are applicable for choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Arbroath Rail Use Surveys - Reason for Station Choice

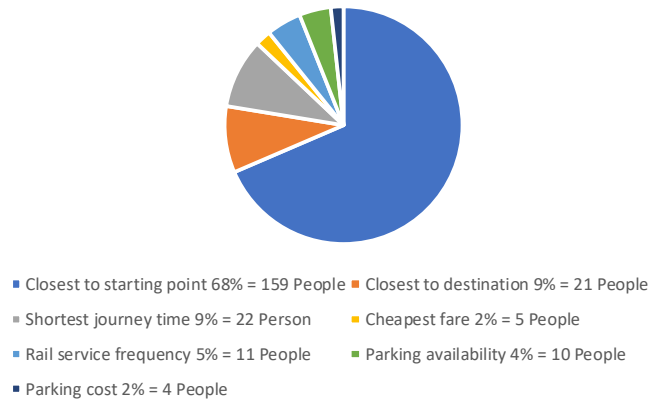


Figure 10. Reason for Station Selection

4.13.2 Figure 10 indicates that the majority of people surveyed said that they chose Arbroath station because it was closest to their starting point (68%). 21 passengers chose this station because it was closest to their onward destination (9%). Another 9% of the responses selected by passengers were people looking for the shortest journey time.

4.14 End of Journey (Q10)

4.14.1 Table 6 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 6. Final Destination of Trips made from Arbroath Station

Area	No. of Passengers	Percentage
Dundee	52	31%
Aberdeen	21	13%
Arbroath	16	10%
Glasgow	16	10%
Edinburgh	13	8%
Carnoustie	8	5%
Montrose	6	4%
Perth	6	4%
Inverness	3	2%
London	3	2%
Stirling	3	2%
Dyce	2	1%
Forfar	2	1%
York	2	1%
Cupar	1	1%
Airdrie	1	1%
Bridge of Allan	1	1%
Hartlepool	1	1%
Inverurie	1	1%
Lancashire	1	1%
Larbert	1	1%
Laurencekirk	1	1%
Liverpool	1	1%
Livingston	1	1%
Manchester	1	1%
Methlick	1	1%
Monifieth	1	1%
Stonehaven	1	1%
Westhill	1	1%

- 4.14.2 Table 6 indicates that, of those interviewed, the greatest proportion of passengers, 52 people, reported to finish their journey in Dundee (31%). 21 passengers finished their journey in Aberdeen (13%).

4.15 Journey Destination (Q11)

4.15.1 Figure 11 shows where passengers are looking to get to via Arbroath station.

Arbroath Rail Use Surveys - March/April 2018 - Journey Destination

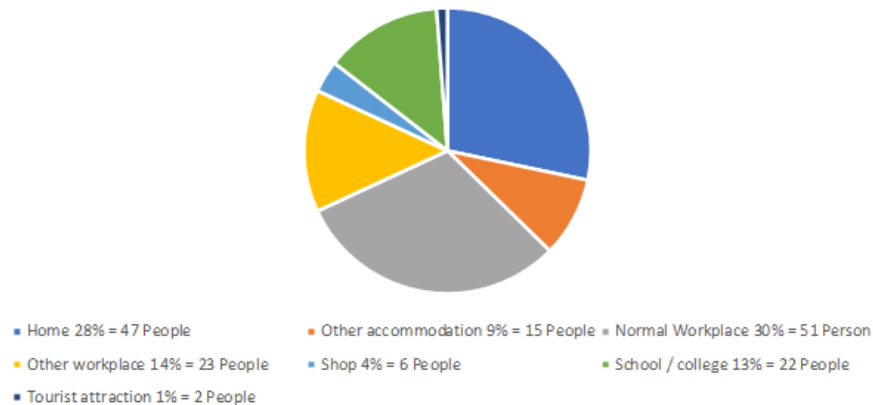


Figure 11. Journey Destination of Passengers

4.15.2 Figure 11 shows that 51 people were travelling to a normal workplace (30%). 47 people were travelling home from Arbroath station (28%). 23 of the passengers surveyed at Arbroath station had a destination that was an atypical workplace (14%).

4.16 Mode: Journey from Station to Onward Destination (Q12)

4.16.1 Figure 12 shows the method of transport used to travel from the station to the onward destination. Those surveyed were asked to select all modes used to reach their final destination. Therefore, multiple answers were recorded for individual survey participants.

Arbroath Rail Use Surveys - March/April 2018 - Mode from Station to Destination

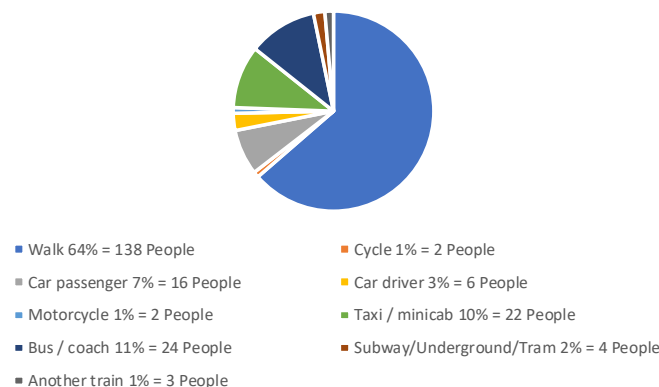


Figure 12. Mode of Transport from Station to Onward Destination

4.16.2 Figure 12 shows that over half (68%) would be walking for a considerable part of their journey from Arbroath station to reach their final destination point. 10% of those surveyed would be travelling by car, either by being a passenger or driver.

4.17 Journey Frequency (Q13)

4.17.1 Table 7 shows an estimation of how many trips passengers make from Arbroath rail station summarized into six categories. These categories range, from left to right, with most frequent to least frequent.

Table 7. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	54	24	15	28	45	28
Overall Proportion	28%	12%	8%	14%	23%	14%

4.17.2 Table 7 indicates that 54 of the people surveyed said that they travel from Arbroath station more than five times per week (28%). 45 people reported to travel fairly infrequently, just more than once each year (23%).

4.18 Ticket Type (Q14)

4.18.1 Figure 13 demonstrates the breakdown of ticket types used to travel from Arbroath station (interviewed passengers only).

Arbroath Rail Use Surveys - March/April 2018 - Ticket Type

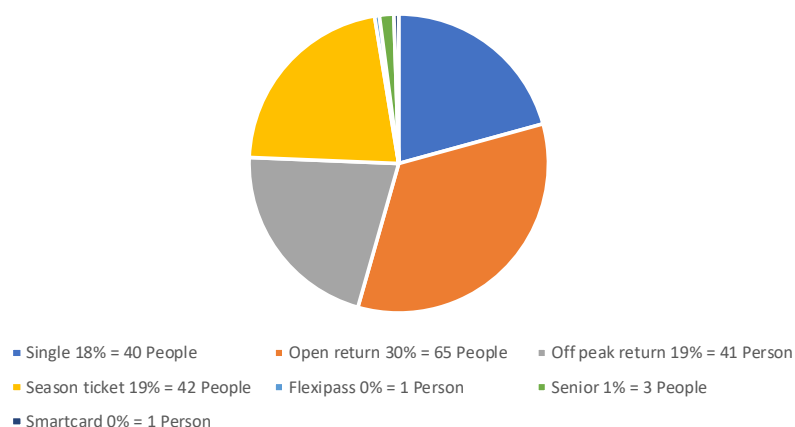


Figure 13. Ticket Type

4.18.2 Figure 13 demonstrates that the survey participants were predominantly travelling on open return tickets (30%). A further 19% were travelling on an off-peak return ticket, followed by 18% travelling on a single ticket type.

4.18.3 The numbers using a seasonal ticket type are as follows:

- 12 people were travelling using a weekly pass
- 16 people were travelling using a monthly pass.

4.18.4 The split of business to standard class can be seen below (Q14a):

- 4 People (3%) were travelling in Business/First class
- 155 People (97%) were travelling in standard class.

4.19 Number of Vehicles Available to Household (Q15)

4.19.1 Table 8 shows the number of vehicles owned or available to the survey participant.

Table 8. Number of Vehicles Available to Household

	Number of Vehicles						
	0	1	2	3	4	5	6
Passengers Surveyed	30	73	55	21	4	1	1
Overall Proportion	16%	39%	30%	11%	2%	1%	1%

4.19.2 Table 8 demonstrates that 16% of people do not have access to a vehicle, whilst a greater proportion (39%) have access to 1 vehicle. 55 people surveyed had 2 vehicles available to them (30%).

4.20 Number of Adults in Household (Q16)

4.20.1 Table 9 shows the number of adults within each household.

Table 9. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Passengers Surveyed	36	102	35	9	6
Overall Proportion	19%	54%	19%	5%	3%

4.20.2 Table 9 shows over half of those surveyed, 102 people, live in a household of 2 adults (54%). 36 participants have only 1 adult living within their household (19%). Another 19% have 3 adults.

4.21 Number of Children in Household (Q16)

4.21.1 Table 10 summarises the number of children reported within each household.

Table 10. Number of Children Within Household

	Number of Children			
	0	1	2	3
Number of Passengers Surveyed	123	29	22	2
Overall Proportion	70%	16%	13%	1%

4.21.2 Table 10 shows that most respondents, 123 people, reported to not having any family (70%).

5. BLAIR ATHOLL RAILWAY STATION

- 5.1.1 Blair Atholl Rail Station is located in the western edge of town with an unattended, free of charge, 6 space car park is provided at the station adjacent to the two platforms. This does not include dedicated parking spaces for blue badge holders.
- 5.1.2 Abellio ScotRail operates train services at Blair Atholl providing connections to Inverness to the north and Edinburgh, Glasgow and beyond to the south. Office of Rail Regulation figures show that a total of 17,589 passengers travelled to and from Blair Atholl Rail Station during 2016/17.
- 5.1.3 Table 11 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 11. Train Departure Times at Blair Atholl Station

Destination	Services						
Inverness	6:24	8:54	10:32	12:34	13:54	15:33	16:57
Edinburgh	7:11	11:15	14:22	17:25			

Source: Boarding and Alighting Information, Streetwise, Appendix B

5.2 Survey Sample Rate

- 5.2.1 Over the survey period, 25 passengers were observed boarding train services. Of the 25 boarding passengers, 15 were interviewed, giving an effective sample rate of 60% as shown in Table 12.

Table 12. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Blair Atholl	25	25	15	60%

5.3 Passenger Demographics (Q1)

- 5.3.1 In terms of passenger demographics, a 50%/50% split was recorded for male and female respectively, of those interviewed boarding trains at Blair Atholl. The majority of passengers were aged between 16 and 60, with 7% aged over 60. A full breakdown of passenger age ranges is show in Table 13.

Table 13. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
No. of Passengers	0	1	5	1	6	1
Overall Proportion	0%	7%	36%	7%	43%	7%

5.4 Train Departures (Q2)

5.4.1 Figure 14 summarises the specified departure time of the outward leg of the journey given by respondents.

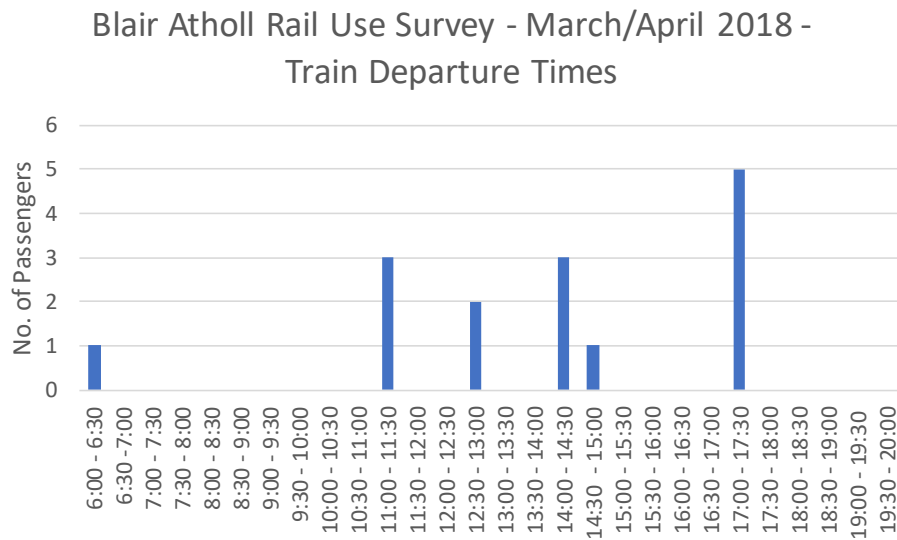


Figure 14. Time of Departure (Outward Leg)

5.4.2 Figure 14 suggests that the time period between 17:00 – 17:30 was the busiest time at the station, showing 38 people departing at this time. The graph also shows peaks of 3 passengers travelling at 11:00 – 11:30 and the time period between 14:00 – 14:30.

5.5 Destination Station (Q3)

5.5.1 Table 14 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 14. Destination Station

Place	No. of Passengers	Percentage
PITLOCHRY	4	29%
DALWHINNIE	2	14%
EDINBURGH WAVERLEY	2	14%
PERTH	2	14%
BLAIR ATHOLL	1	7%
DUNKELD	1	7%
GLASGOW	1	7%
KIRKCALDY	1	7%

5.5.2 Table 14 confirms, that 4 people were going to Pitlochry Station (29%). The next most popular destinations were, equally, Dalwhinnie, Edinburgh Waverley, and Perth (with 2 passengers each).

5.6 Journey Type (Q4)

5.6.1 Figure 15 illustrates what leg of their journey passengers were on for those interviewed at Blair Atholl.

Blair Atholl Rail Use Survey - March/April 2018 -
Journey Type

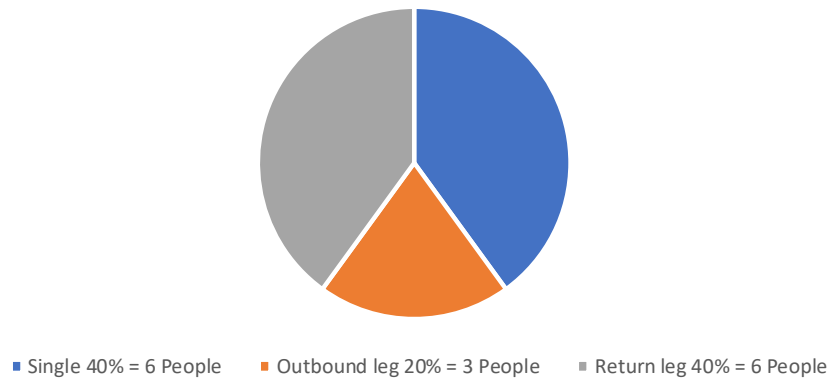


Figure 15. Journey Leg

5.6.2 Figure 15 shows that 6 passengers interviewed (40%) were on a single one-way trip. Another 40% reported to be on the return leg of their journey with a final 20% travelling on the outbound leg.

5.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of each passenger's trip is as follows (Q4a):

- 8 people (8%) were commencing the other leg of their journey on the same day
- 2 people (2%) were commencing the other leg of their journey on another weekday

5.6.4 Figure 16 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Blair Atholl Rail Use Survey - March/April 2018 - Other Journey Leg

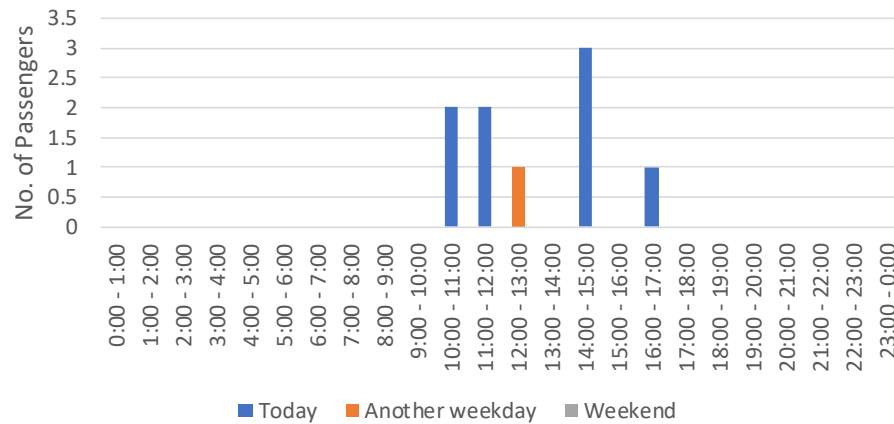


Figure 16. Time of Other Leg

5.6.5 Figure 16 suggests that between 14:00 and 15:00 was busiest time for those travelling on the same day (3 people). 1 Person travelled on another weekday.

5.7 Journey Reason (Q5)

5.7.1 Figure 17 shows the reason for making this particular journey from Blair Atholl rail station.

Blair Atholl Rail Use Survey - March/April 2018 - Journey Reason

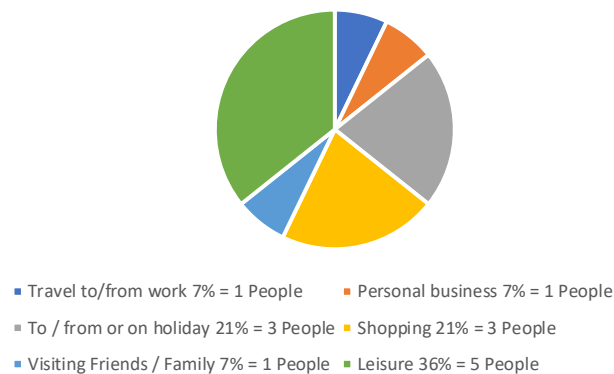


Figure 17. Reason for Making This Journey

5.7.2 Figure 17 shows that 5 people are travelling via Blair Atholl station for leisure, with another 3 people surveyed saying that they are going shopping.

5.8 Journey Origin (Q6)

5.8.1 Figure 18 summarises how passengers categorized their journey origin.

Blair Atholl Rail Use Survey - March/April 2018 - Journey Origin

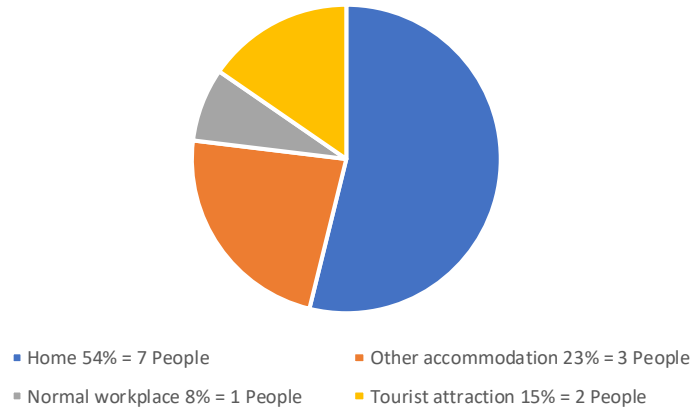


Figure 18. Passenger Origin

5.8.2 Figure 18 shows that 7 people were travelling from their home via Blair Atholl rail station (54%). A further 3 people were travelling from other accommodation (23%).

5.9 Start of Journey (Q7)

5.9.1 Table 15 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 15. Origin of Trips made to Blair Atholl Station

Location	No of Passengers	%age
Blair Atholl, Calvine	7	78%
Kirkcaldy	1	11%
Glenrothes	1	11%

5.9.2 Table 15 indicates that the greatest proportion of passengers, around 7 people, started their trip in Blair Atholl.

5.9.3 Figure 19 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 19. Origin of Trips Made to Blair Atholl Station

5.10 Mode: Method of Transport from Origin to Station (Q8)

5.10.1 Figure 20 illustrates the methods of transport passengers used to get to Blair Atholl station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Blair Atholl Rail Use Surveys - March/April 2018 -Mode Split
for Travel to Station

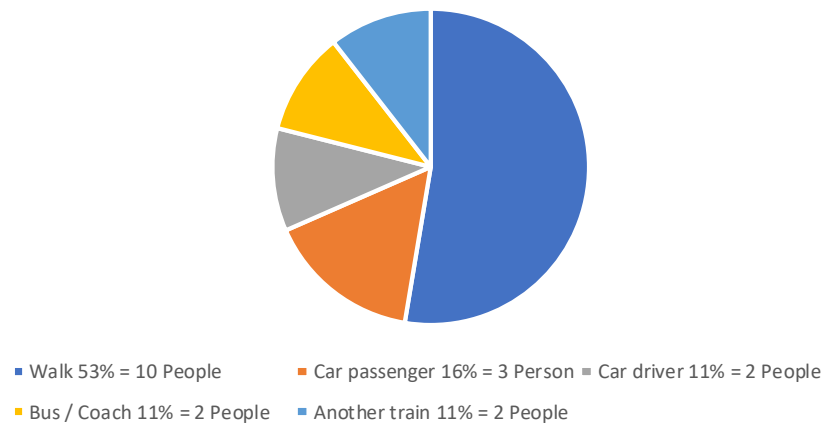


Figure 20. Mode Split of Passengers Travelling to Blair Atholl Station

5.10.2 Figure 20 suggests that the greatest proportion of interviewed passengers walked to the rail station (53%) with a further total 27% arriving using a car, as either a driver or passenger.

5.11 Parking Location (Q8a)

5.11.1 Figure 21 shows the parking location of vehicle used to travel to Blair Atholl station.

Blair Atholl Rail Use Surveys - March/April 2018
Parking Location

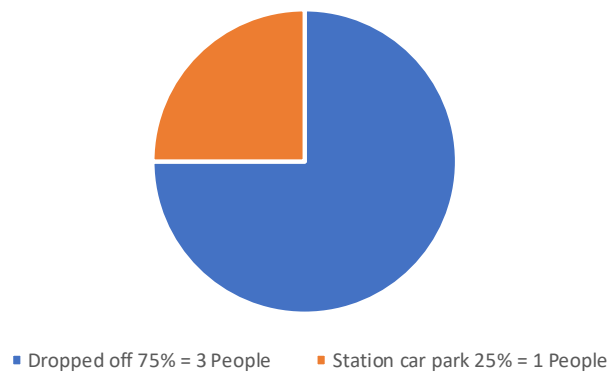


Figure 21. Parking Location

5.11.2 Figure 21 confirms that of the passengers interviewed, the greatest proportion (75%) were dropped off at the station, with a further 25% parked at the car park located at the station.

5.12 Reason for Parking Location (Q8b)

5.12.1 Figure 22 shows the reason behind that parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged per singular survey participant.

Blair Atholl Rail Use Surveys - March/April 2018 - Reason
for Parking Location

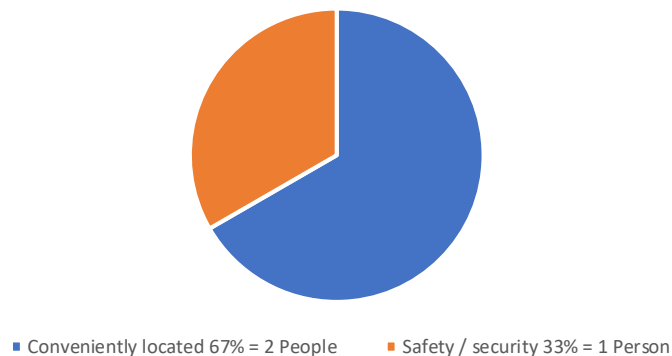


Figure 22. Reasoning for Parking Location

5.12.2 Figure 22 shows that there was two unique entries in the survey noting that they decided to park where they did due to it being conveniently located. While there was also one entry noting the safety and security of the parking location itself.

5.13 Reason for Travelling from Blair Atholl Station (Q9)

5.13.1 Figure 23 shows the breakdown of the reasons considered by passengers in deciding to travel from Blair Atholl rail station over other stations. All reasons that are applicable for choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Blair Atholl Rail Use Surveys - March/April 2018 - Reason for Station Choice

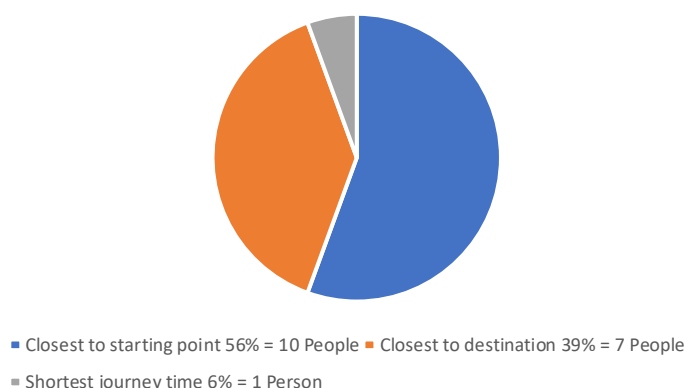


Figure 23. Reason for Station Selection

5.13.2 Figure 23 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (56%). Alternatively, 39% said that they chose to travel from Blair Atholl station because it was closest to their destination.

5.14 End of Journey (Q10)

5.14.1 Table 16 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 16. Final Destination of Trips made from Blair Atholl Station

Area	No. of Passengers	Percentage
Pitlochry	3	25%
Dalwhinnie	2	17%
Perth	1	8%
Dunkeld	1	8%
Kirkcaldy	1	8%
Glenrothes	1	8%
Glasgow	1	8%
Liverpool	1	8%
Newtonards	1	8%

5.14.2 Table 16 indicates that, of those interviewed, the greatest proportion of passengers (25%) reported to end their journey in Pitlochry. 2 passengers finished their journey in Dalwhinnie (17%).

5.15 Journey Destination (Q11)

5.15.1 Figure 24 shows where passengers are looking to get to via Blair Atholl station.

Blair Atholl Rail Use Surveys - March/April 2018 - Journey Destination

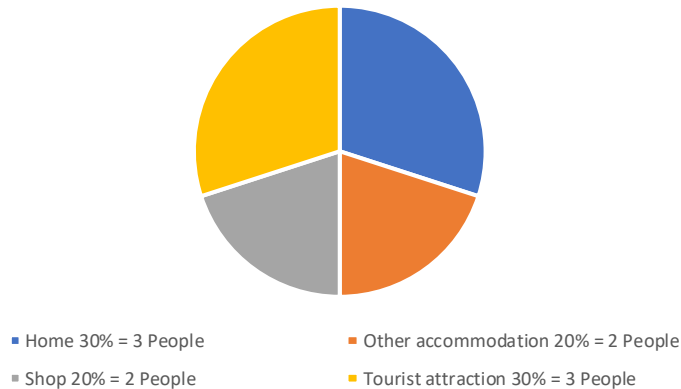


Figure 24. Journey Destination of Passengers

5.15.2 Figure 24 shows 3 people (30%) were travelling home from Blair Atholl station. Another 3 people were travelling to a tourist attraction (30%).

5.16 Mode: Journey from Station to Onward Destination (Q12)

5.16.1 Figure 25 demonstrates the method of transport used to travel from Blair Atholl station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Blair Atholl Rail Use Surveys - March/April 2018 - Mode from Station to Destination

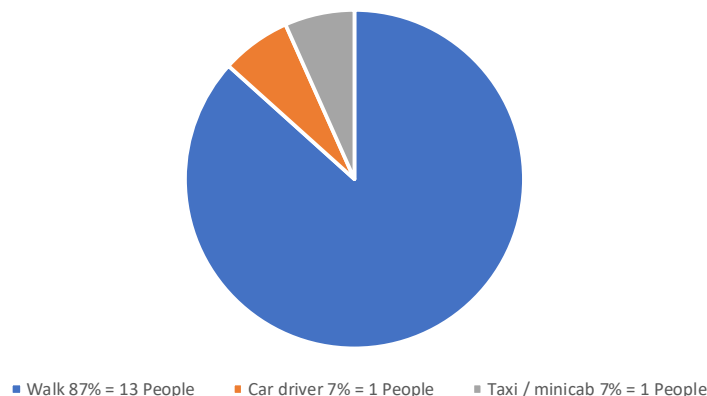


Figure 25. Mode of Transport from Station to Onward Destination

5.16.2 Figure 25 shows that over half (87%) would be walking for a considerable part of their journey from Blair Atholl station to reach their final destination point. With 1 response each for both taking a taxi and driving to the passenger's destination.

5.17 Journey Frequency (Q13)

5.17.1 Table 17 shows an estimation of how many trips passengers make from Blair Atholl rail station summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 17. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	0	0	1	2	1	10
Overall Proportion	0%	0%	7%	14%	7%	71%

5.17.2 Table 17 indicates that 10 people surveyed said that they travel from Blair Atholl station fewer than once a year (71%). Notably none of the 13 survey responses from this station said that they travelled more than 3 times per week.

5.18 Ticket Type (Q14)

5.18.1 Figure 26 demonstrates the breakdown of ticket types used to travel from Blair Atholl station (Interviewed passengers only).

Blair Atholl Rail Use Surveys - March/April 2018 - Ticket Type

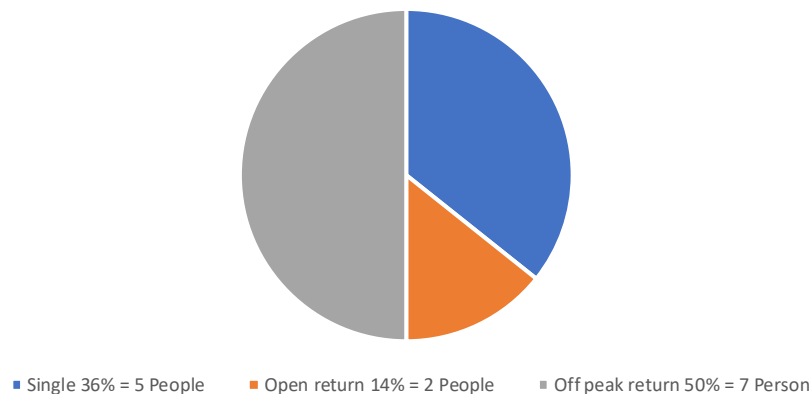


Figure 26. Ticket Type

5.18.2 Figure 26 shows that the survey participants were predominantly travelling on open return tickets (30%). A further 19% were travelling on an off-peak return ticket, followed by 18% travelling on a single ticket type.

5.18.3 The split of passengers travelling on standard class as opposed to business or first class can be seen below (Q14a):

- There no passengers travelling on business or first class
- 11 people (100%) were in standard class

5.19 Number of Vehicles Available to Household (Q15)

5.19.1 Table 18 shows the number of vehicles owned or available to the household.

Table 18. Number of Vehicles Available to Household

	Number of Vehicles				
	0	1	2	3	4
Number of Passengers Surveyed	2	4	7	0	1
Overall Proportion	14%	29%	50%	0%	7%

5.19.2 Table 18 shows that 16% of people do not have access to a vehicle, whilst a greater proportion (39%) have access to 1 vehicle.

5.20 Number of Adults in Household (Q16)

5.20.1 Table 19 shows how many adults are living within the surveyed passenger's household.

Table 19. Number of Adults in Household

	Number of Adults		
	1	2	3
Number of Passengers Surveyed	2	10	2
Overall Proportion	14%	71%	14%

5.20.2 Table 19 Shows that 10 of those surveyed have 2 adults living at their home (71%). Equally, there was 2 responses for both 1 and 3 adults living with the household.

5.21 Number of Children in Household (Q16)

5.21.1 Table 20 shows the number of children that are living at the surveyed passenger's household.

Table 20. Number of Children in Household

	Number of Children		
	0	1	2
Number of Passengers Surveyed	12	2	0
Overall Proportion	86%	14%	0%

5.21.2 Table 20 confirms that there is a positively skewed distribution amongst the results, and that 12 of those surveyed said that they didn't have any children (86%). The other 14% had only one child living at their household. Nobody interviewed at Blair Atholl rail station had more than one child.

6. BROUGHTY FERRY RAILWAY STATION

- 6.1.1 Broughty Ferry Rail Station is located in the southern edge of the town with an unattended, charged, 78 space car park is provided at the station adjacent to the two platforms. This includes dedicated parking spaces for blue badge holders.
- 6.1.2 Abellio ScotRail operates train services at Broughty Ferry providing connections to Arbroath and Aberdeen to the north and Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of 40,718 passengers travelled to and from Broughty Ferry Railway Station during 2016/17.
- 6.1.3 Table 21 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 21. Train Services Departing from Broughty Ferry Station

Destination	Services		
Inverurie	6:32	9:48	
Glasgow	7:49	10:48	16:37
Aberdeen	11:17	15:09	
Edinburgh	15:10	18:37	
Arbroath	17:55		
Carnoustie	19:03		

Source: Boarding and Alighting Information, Streetwise, Appendix B

6.2 Survey Sample Rate

- 6.2.1 Over the survey period, 57 passengers were observed boarding train services. Of the 57 boarding passengers, 40 were interviewed, giving an effective sample rate of 70% as shown in Table 22.

Table 22. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Broughty Ferry	72	57	40	70%

6.3 Passenger Demographics (Q1)

- 6.3.1 In terms of passenger demographics, a 39.5%/60.5% split was recorded for male and female respectively, of those interviewed boarding trains at Broughty Ferry. The majority of passengers were aged between 16 and 60, with 31% aged over 60. A full breakdown of passenger age ranges is show in Table 23.

Table 23. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Number of Passengers Surveyed	0	5	3	7	10	11
Overall Proportion	0%	14%	8%	19%	28%	31%

6.4 Train Departures (Q2)

6.4.1 Figure 27 summarises the specified departure time of the outward leg of the journey given by respondents.

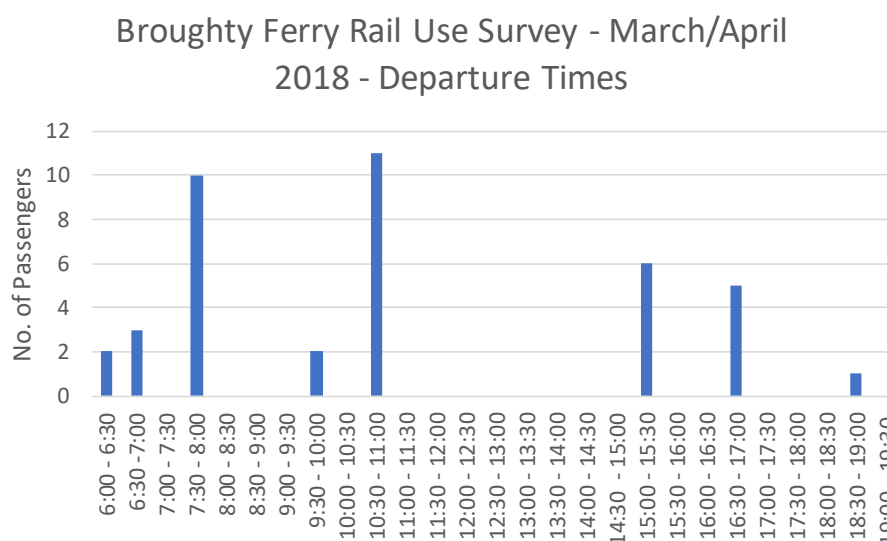


Figure 27. Time of Departure (Outward Leg)

6.4.2 Figure 27 suggests that the period between 10:30 – 11:00 was the busiest time at the station, showing 11 people departing at this time. The graph also shows a slightly smaller peak of 10 passengers travelling between 07:30 – 08:00.

6.5 Destination Station (Q3)

6.5.1 Table 24 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 24. Destination Station

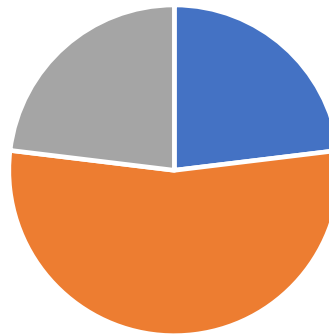
Place	No. of Passengers	Percentage
GLASGOW	7	21%
DUNDEE	6	18%
PERTH	6	18%
ABERDEEN	5	15%
EDINBURGH	4	12%
STIRLING	3	9%
LADYBANK	1	3%
NEW CUMNOCK	1	3%

6.5.2 Table 24 demonstrates that the greatest proportion of passengers were heading to Glasgow (21%). 6 Passengers were heading to Dundee (18%).

6.6 Journey Type (Q4)

6.6.1 Figure 28 illustrates what leg of their journey passengers were on for those interviewed at Broughty Ferry station during the survey period.

Broughty Ferry Rail Use Survey - March/April 2018 - Journey Type



■ Single 23% = 9 People ■ Outbound leg 54% = 21 People ■ Return leg 23% = 9 People

Figure 28. Journey Leg

6.6.2 Figure 28 shows that 21 passengers interviewed (54%) were on the outbound leg of their trip. Equally, 9 people were either on the return leg or just taking a single trip, both 23%.

6.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of each passenger's trip is as follows (Q4a):

- 28 people (93%) were commencing the other leg of their journey on the same day
- 2 people (7%) were commencing the other leg of their journey on another weekday

6.6.4 Figure 29 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Broughty Ferry Rail Use Survey - March/April 2018 - Other Journey Leg

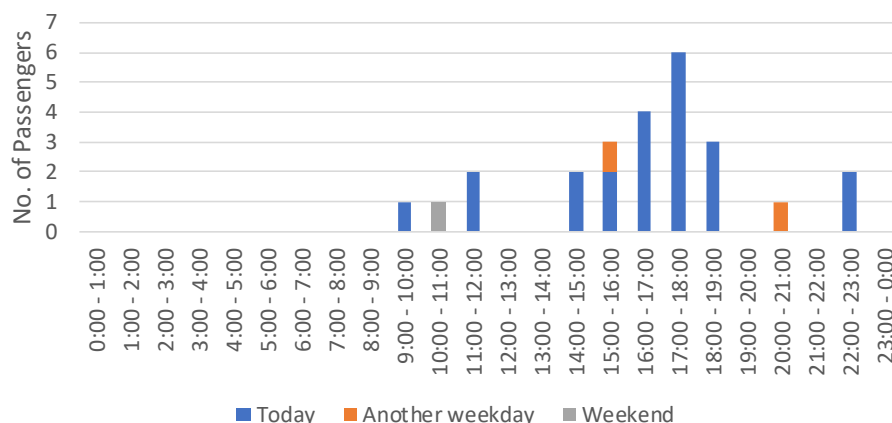


Figure 29. Time of Other Leg

6.6.5 Figure 29 suggests that between 17:00 and 18:00 was the busiest time of day for passenger's other leg to their journey. At this time 6 people were travelling on the same

day of the week. 2 people reported their times for the other leg being on another weekday. One travelled between 20:00 and 21:00. The other travelled at 15:00 – 16:00.

6.7 Journey Reason (Q5)

6.7.1 Figure 30 shows the reason for making this particular journey from Broughty Ferry rail station.

Broughty Ferry Rail Use Survey - March/April 2018 - Journey Reason

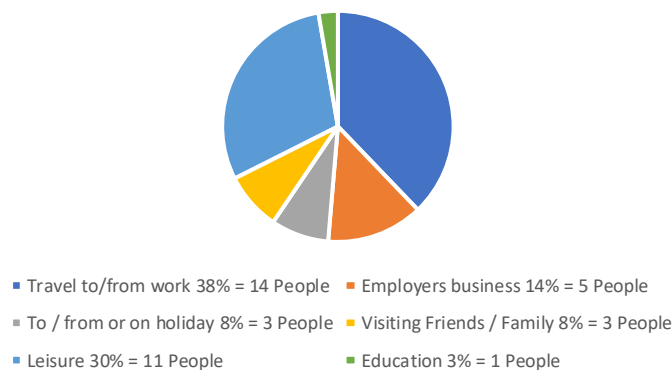


Figure 30. Reason for Making This Journey

6.7.2 Figure 30 shows that 38% of those surveyed are travelling to or from work, with a further 14% to something work related however not their typical workplace.

6.8 Journey Origin (Q6)

6.8.1 Figure 31 summarises how passengers categorised where their journey originated when surveyed travelling from Broughty Ferry railway station.

Broughty Ferry Rail Use Survey - March/April 2018 - Journey
Origin

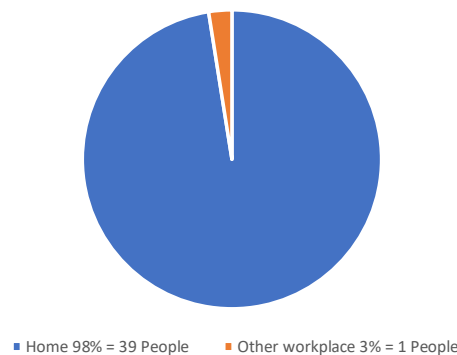


Figure 31. Passenger Origin

6.8.2 Figure 31 shows that the majority of people were travelling from their home via Broughty Ferry rail station (98%). With the other 3% of people travelling from an atypical workplace (1 person).

6.9 Start of Journey (Q7)

6.9.1 Table 25 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 25. Origin of Trips made to Broughty Ferry Station

Location	No. of Passengers	%age
Broughty Ferry, Barnhill	32	82%
Monifieth	3	8%
Dundee	2	5%
Edinburgh	1	3%
West Ferry	1	3%

6.9.2 Table 25 indicates that, of those interviewed, the greatest proportion of passengers started their journey in the Broughty Ferry area.

6.9.3 Figure 32 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 32. Origin of Trips Made to Broughty Ferry Station

6.10 Mode: Method of Transport from Origin to Station (Q8)

6.10.1 Figure 33 illustrates the methods of transport passengers used to get to Broughty Ferry station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Broughty Ferry Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

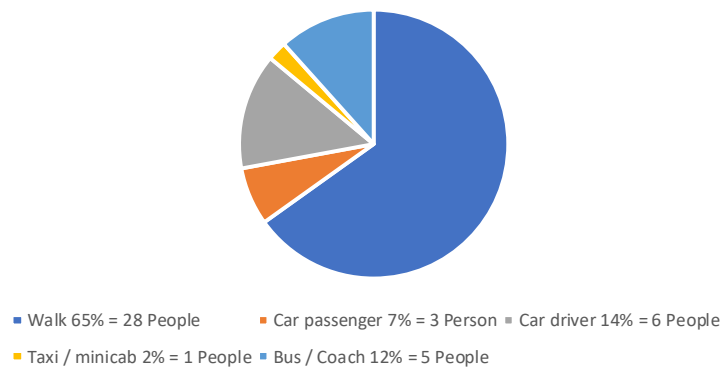


Figure 33. Modes Split of Passengers Travelling to Broughty Ferry Station

6.10.2 Figure 33 suggests that the greatest proportion of interviewed passengers walked to the railway station (65%). 6 people arrived by driving a car (14%), with another 3 people arriving as a car passenger (7%).

6.11 Parking Location (8a)

6.11.1 Figure 34 shows the parking location of vehicle used to travel to Broughty Ferry station (interviewed passengers only).

Broughty Ferry Rail Use Surveys - March/April 2018 -
Parking Location

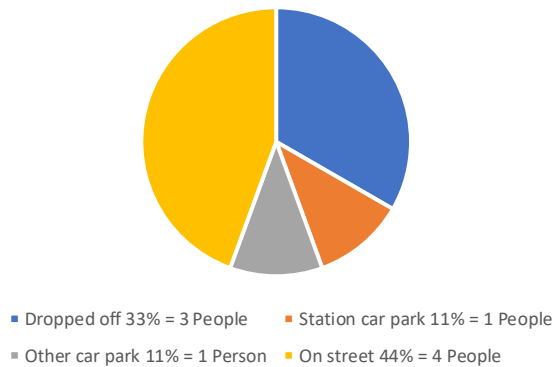


Figure 34. Parking Location

6.11.2 Figure 34 confirms that of the passengers interviewed, the greatest proportion (44%) were parked on the street, with another 33% being dropped off at the station. Only 1 person reported to parking at the station car park.

6.12 Reason for Parking Location (Q8b)

6.12.1 Figure 35 shows the reason behind that parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged per singular survey participant.

Broughty Ferry Rail Use Surveys - March/April 2018 -
Reason for Parking Location

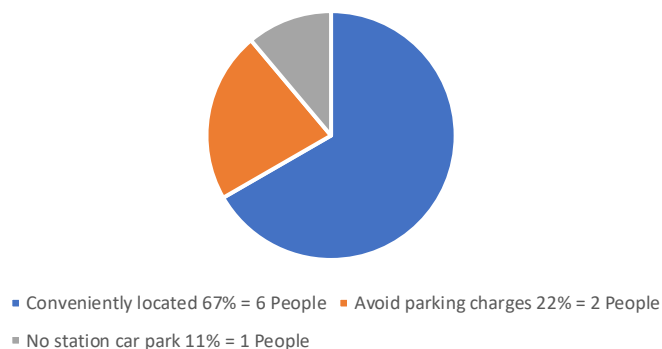


Figure 35. Reasoning for Parking Location

6.12.2 Figure 35 shows that there was 6 unique entries in the survey noting that they decided to park where they did due to it being conveniently located. Also, there was 2 entries noting that they were avoiding parking charges (22%).

6.13 Reason for Travelling from Broughty Ferry Station (Q9)

6.13.1 Figure 36 shows the breakdown of the reasons considered by passengers in deciding to travel from Broughty Ferry railway station over other possible stations. All reasons that are applicable for choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Broughty Ferry Rail Use Surveys - March/April 2018 - Reason for Station Choice

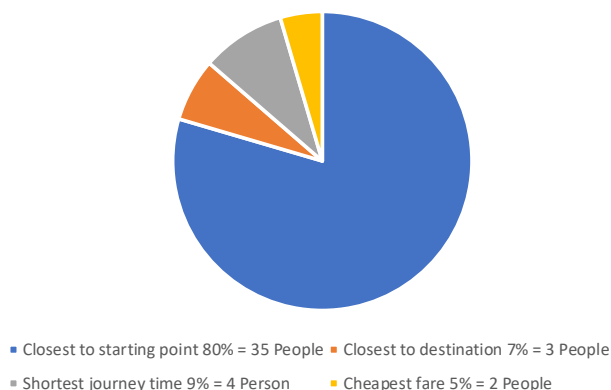


Figure 36. Reason for Station Selection

6.13.2 Figure 36 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (80%). Alternatively, 7% said that they chose to travel from Blair Atholl station because it was closest to their destination.

6.14 End of Journey (Q10)

6.14.1 Table 26 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 26. Final Destination of Trips made from Broughty Ferry Station

Area	No. of Passengers	Percentage
Dundee	11	30%
Perth	7	19%
Glasgow	6	16%
Aberdeen	4	11%
Edinburgh	4	11%
Arbroath	1	3%
Stirling	1	3%
Ladybank	1	3%
Kilmarnock	1	3%
Cumnock	1	3%

6.14.2 Table 26 indicates that, of those interviewed, the greatest proportion of passengers (30%) reported to finish their journey in Dundee. 7 passengers reported that they would be finishing their journey in Perth (19%).

6.15 Journey Destination (Q11)

6.15.1 Figure 37 shows where passengers are looking to get to via Broughty Ferry railway station.

Broughty Ferry Rail Use Surveys - March/April 2018 - Journey Destination

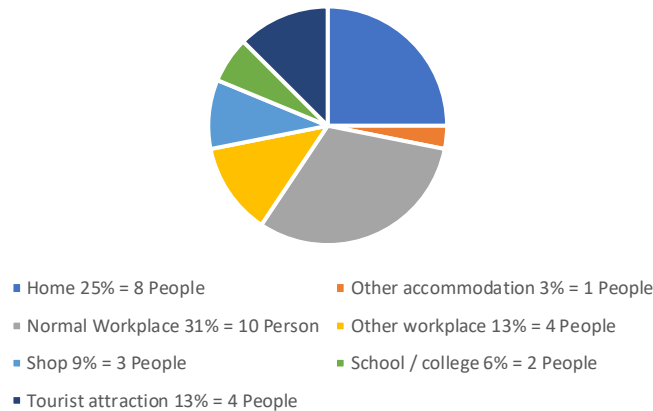


Figure 37. Journey Destination of Passengers

6.15.2 Figure 37 shows that 10 people were travelling to their normal workplace (31%). It also shows 8 people (25%) were travelling home from Broughty Ferry station.

6.16 Mode: Journey from Station to Onward Destination (Q12)

6.16.1 Figure 38 demonstrates the method of transport used to travel from Broughty Ferry station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Broughty Ferry Rail Use Surveys - March/April 2018 - Mode from Station to Destination

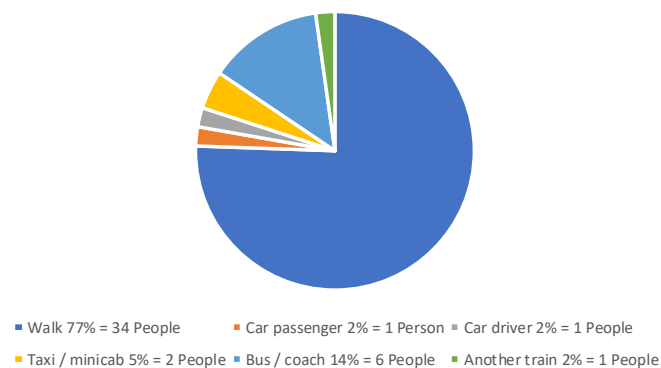


Figure 38. Mode of Transport from Station to Onward Destination

6.16.2 Figure 38 shows that over half (77%) would be walking for a considerable part of their journey from Broughty Ferry station to reach their final destination point. With 1 response each for either driving or being a car passenger. A total of 16% would be using public transport to reach their destination.

6.17 Journey Frequency (Q13)

6.17.1 Table 27 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 27. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	5	1	9	9	10	6
Overall Proportion	13%	3%	23%	23%	25%	15%

6.17.2 Table 27 indicates that most were less frequent travellers. 10 people surveyed said that they travel from this station a few times per year (25%). 23% travel from this station a couple of times per week (9 people).

6.18 Ticket Type (Q14)

6.18.1 Figure 39 demonstrates the breakdown of ticket types used to travel (interviewed passengers only).

Broughty Ferry Rail Use Surveys - March/April 2018 - Ticket Type

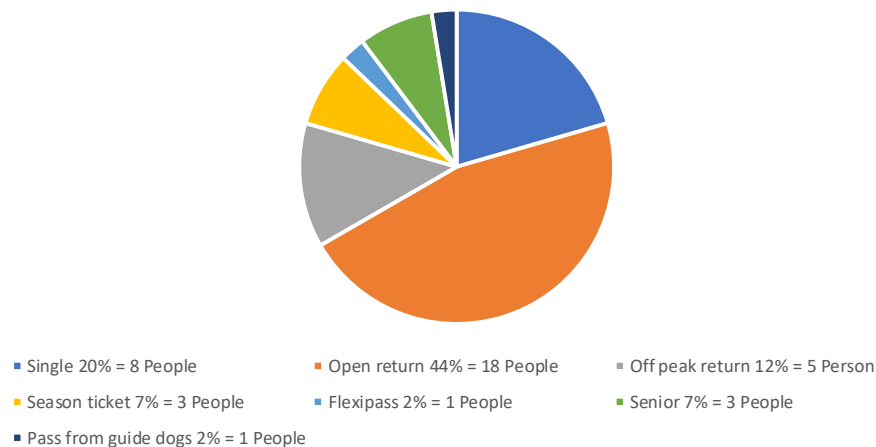


Figure 39. Ticket Type

6.18.2 Figure 39 shows that the survey participants were predominantly travelling on open return tickets (44%). A further 20% were travelling on a single ticket, followed by 12% travelling on a off-peak ticket type.

6.18.3 Of those travelling on a seasonal ticket types, all 3 were using monthly passes.

6.18.4 The split of passengers travelling on standard class as opposed to business or first class can be seen below (Q14a):

- 2 people (6%) were travelling on business/first class
- 31 people (94%) were in standard class.

6.19 Number of Vehicles Available to Household (Q15)

6.19.1 Table 28 shows the number of vehicles that the passenger either owns or is available to them.

Table 28. Number of Vehicles Available to Household

	Number of Vehicles				
	0	1	2	3	4
Number of Passengers Surveyed	10	14	13	2	1
Overall Proportion	25%	35%	33%	5%	3%

6.19.2 Table 28 has shown 35% of people have access to 1 vehicle. 13 participants have 2 vehicles (33%). One quarter don't own a vehicle (10 people).

6.20 Number of Adults Within Household (Q16)

6.20.1 Table 29 shows how many adults are living within the surveyed passenger's household.

Table 29. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Number of Passengers Surveyed	7	27	4	0	1
Overall Proportion	18%	69%	10%	0%	3%

6.20.2 Table 29 shows that 27 of those surveyed have 2 adults living at their home (69%). The next largest proportion was the number of households with only 1 adult (18%).

6.21 Number of Children Within Household (Q16)

6.21.1 Table 30 shows the number of children that are living at the surveyed passenger's household.

Table 30. Number of Children Within Household

	Number of Children		
	0	1	2
Number of Passengers Surveyed	30	1	8
Overall Proportion	77%	3%	21%

Table 30 confirms that of those surveyed, 30 said that they didn't have any children (77%). 21% of those surveyed said that they have 2 children (8 people).

7. CARNOUSTIE RAILWAY STATION

7.1.1 Carnoustie Rail Station is located in the southern edge of town on the waterfront, with an unattended, free of charge, 17 space car park provided at the station. This includes dedicated parking spaces for blue badge holders.

7.1.2 Abellio ScotRail operates train services at Carnoustie providing connections to Arbroath and Aberdeen to the north and Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of 120,000 passengers travelled to and from Carnoustie Railway Station during 2016/17.

7.1.3 Table 31 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 31. Train Departures from Carnoustie Station

Destination	Services							
Inverurie	6:40							
Edinburgh	6:46	8:10	17:05	18:27				
Aberdeen	7:06	9:16	11:24	13:12	15:18	16:21	17:20	18:16
Glasgow	7:40	8:39	9:40	10:39	11:37	12:39	14:42	15:39
	18:40							
Arbroath	18:05							
Dyce	7:44							

Source: Boarding and Alighting Information, Streetwise, Appendix B

7.2 Survey Sample Rate

7.2.1 Over the survey period, 170 passengers were observed boarding train services. Of the 170 boarding passengers, 66 were interviewed, giving an effective sample rate of 39% as shown in Table 32.

Table 32. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Carnoustie	148	170	66	39%

7.3 Passenger Demographics (Q1)

7.3.1 In terms of passenger demographics, a 50.8%/49.2% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Carnoustie. The majority of passengers were aged between 16 and 60, with 16% aged over 60. A full breakdown of passenger age ranges is show in Table 33.

Table 33. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Number of Passengers Surveyed	1	11	12	14	13	10
Overall Proportion	2%	18%	20%	23%	21%	16%

7.4 Train Departures (Q2)

7.4.1 Figure 40 summarises the specified departure time of the outward leg of the journey given by respondents.

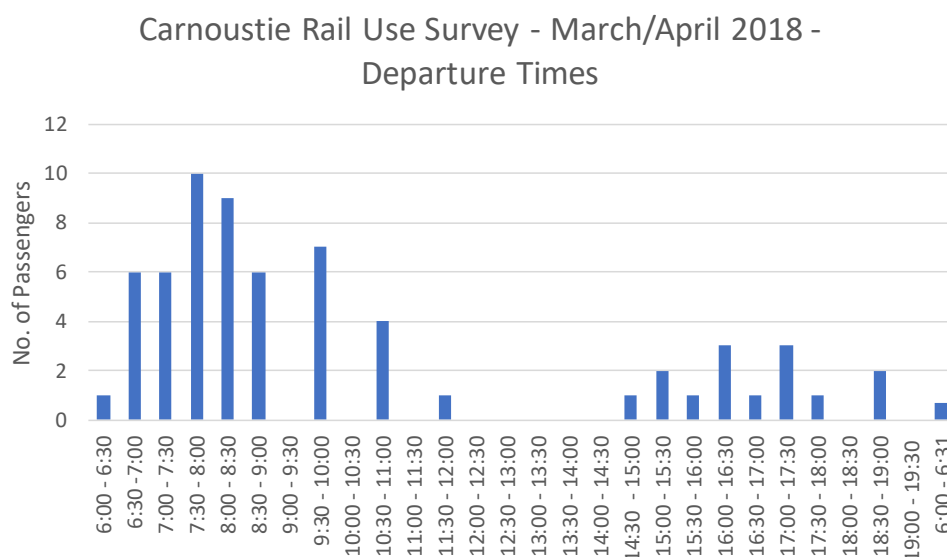


Figure 40. Time of Departure (Outward Leg)

7.4.2 Figure 40 suggests that the time period between 07:30 – 08:00 was the busiest time at the station, showing 10 people departing at this time. The graph also seems to steadily decline from this point until 11:00. After that time we see few passengers departing.

7.5 Destination Station (Q3)

7.5.1 Table 34 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 34. Destination Station

Place	No. of Passengers	Percentage
DUNDEE	17	29%
ABERDEEN	11	19%
GLASGOW	10	17%
EDINBURGH	5	8%
PERTH	4	7%
ARBROATH	3	5%
CARNOUSTIE	2	3%
DYCE	2	3%
BURNTISLAND	1	2%
GLENEAGLES	1	2%
KIRKCALDY	1	2%
MONTROSE	1	2%
STONEHAVEN	1	2%

7.5.2 Table 34 shows that the greatest proportion of those travelling from Carnoustie station are going to Dundee (29%). Following that, 11 people stated travelling to Aberdeen (19%).

7.6 Journey Type (Q4)

7.6.1 Figure 41 illustrates what leg of their journey passengers were on for those interviewed at Carnoustie Station during the survey period.

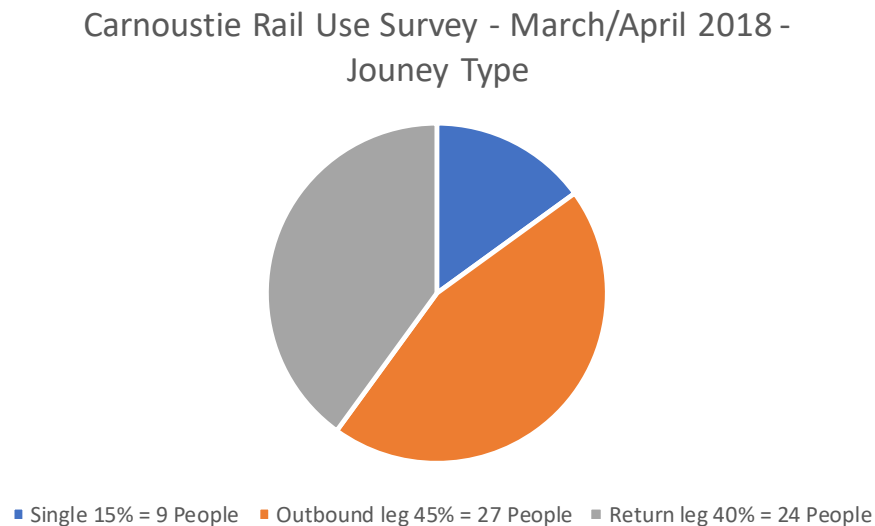


Figure 41. Journey Leg

7.6.2 Figure 41 shows that 27 passengers interviewed (45%) were on the outbound leg of their trip. Followed by 24 people reporting to being on the return leg of their trip (40%). With the final 15% just being a one-way journey.

7.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of each passenger's trip is as follows:

- 45 people (94%) were commencing the other leg of their journey on the same day
- 3 people (6%) were commencing the other leg of their journey on another weekday

7.6.4 Figure 42 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Carnoustie Rail Use Survey - March/April 2018 - Other Journey Leg

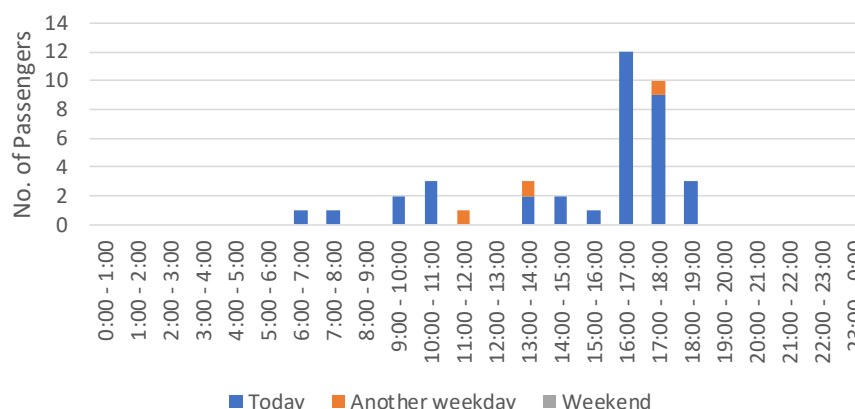


Figure 42. Time of Other Leg

7.6.5 Figure 42 suggests that the busiest time of day for the passenger's other journey leg was from 16:00 to 17:00. 12 Passengers travelled at this time on the same day. 9 passengers travelled during the next hour (on the same day of their journey) – with a further one person travelling at this time on another weekday.

7.7 Journey Reason (Q5)

7.7.1 Figure 43 shows the reason for making this particular journey from Carnoustie railway station.

Carnoustie Rail Use Survey - March/April 2018 - Journey Reason

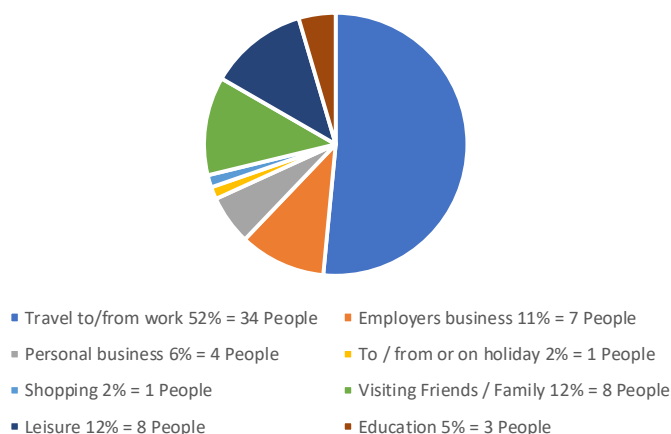


Figure 43. Reason for Making This Journey

7.7.2 Figure 43 shows that over half (54%) of those surveyed are travelling to or from work, with a further 7% to something work related, however not their typical workplace. There was 8 responses each for both visiting someone or a leisure activity (12% each).

7.8 Journey Origin (Q6)

7.8.1 Figure 44 summarises how passengers categorised where their journey originated when surveyed travelling from Carnoustie railway station.

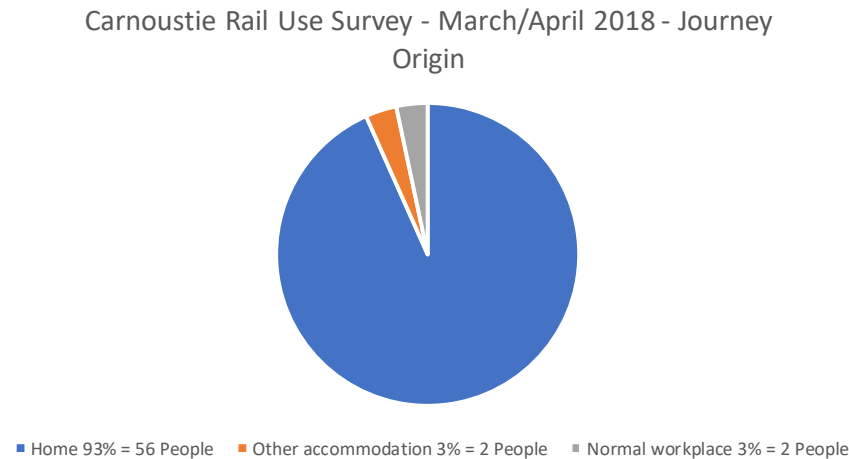


Figure 44. Passenger Origin

7.8.2 Figure 44 shows that the majority of people were travelling from their home via Carnoustie rail station (93%). With the final portion being split equally with 2 responses each for both alternative accommodation and people coming from a typical workplace (3% each).

7.9 Start of Journey (Q7)

7.9.1 Table 35 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 35. Origin of Trips made to Carnoustie Station

Location	No. of Passengers	%age
Carnoustie	48	79%
Arbroath	2	3%
Baldovie, Balumbie	2	3%
Barry	2	3%
Barnhill	1	2%
Burntisland	1	2%
Forfar	1	2%
Kelty	1	2%
Paisley	1	2%
Tilliecultry	1	2%
Perth	1	2%

7.9.2 Table 35 indicates that, of those interviewed, the greatest proportion of passengers (around 79%) reported starting their journey in Carnoustie.

7.9.3 Figure 45 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.

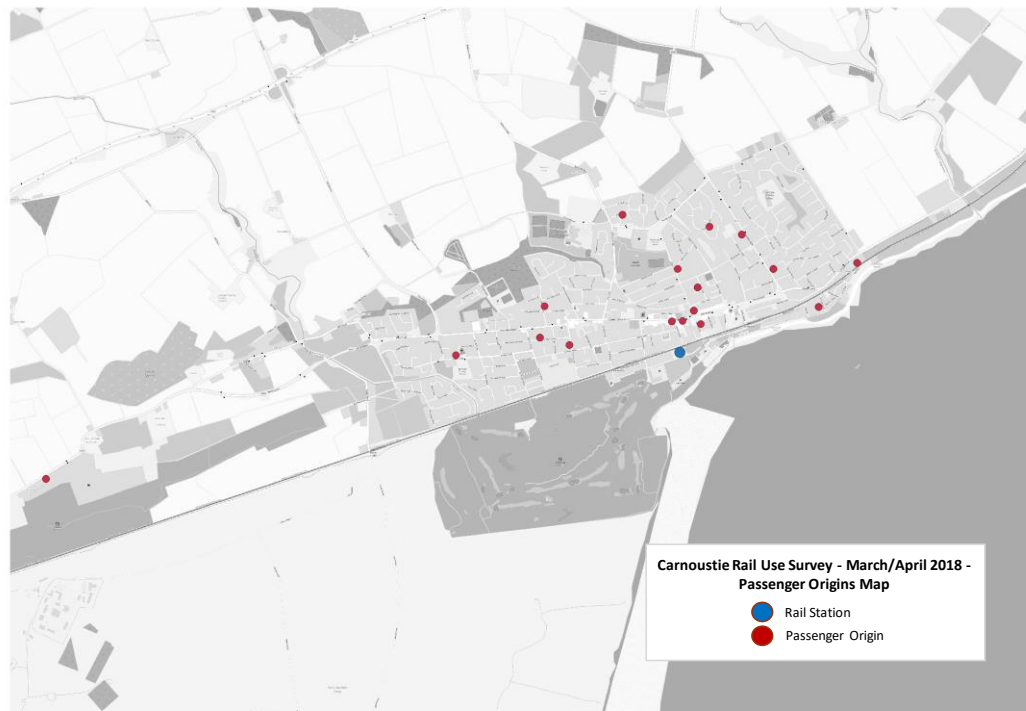


Figure 45. Origin of Trips Made to Carnoustie Station

7.10 Mode: Methods of Transport from Origin to Station (Q8)

7.10.1 Figure 46 illustrates the methods of transport passengers used to get to Carnoustie station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Carnoustie Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

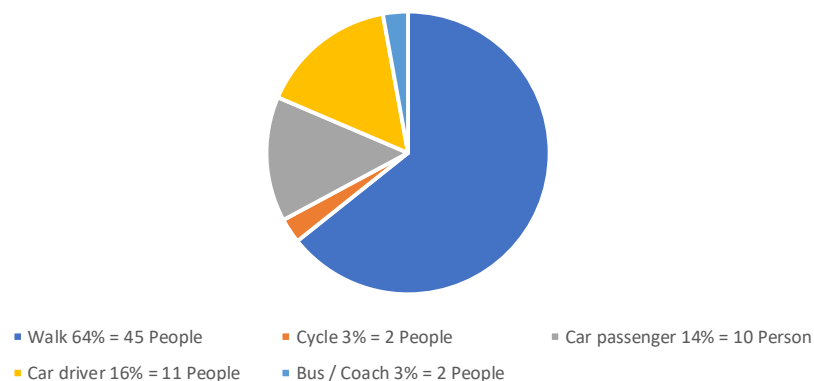


Figure 46. Mode Split of Passengers Travelling to Carnoustie Station

7.10.2 Figure 46 suggests that the greatest proportion of interviewed passengers walked to the railway station (64%). 11 people arrived by driving a car (16%), with another 10 people arriving as a car passenger (14%).

7.11 Parking Location (Q8a)

7.11.1 Figure 47 shows the parking location of vehicles used to travel to Carnoustie station.

Carnoustie Rail Use Surveys - March/April 2018 - Parking Location

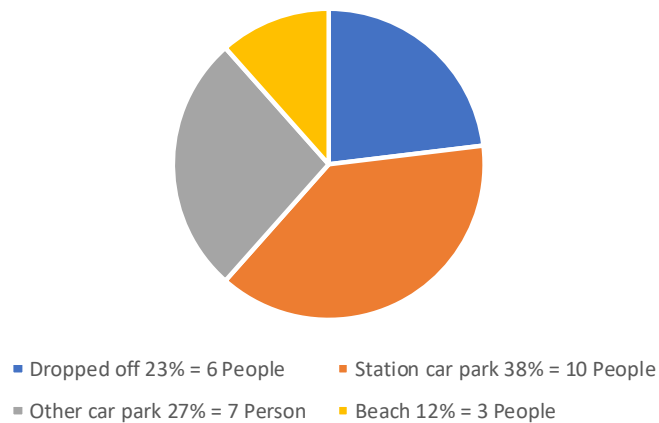


Figure 47. Parking Location

7.11.2 Figure 47 shows that the station car park was used by 10 people (38%). Following that, the next biggest proportion used an alternative car park (27%). Notably 3 people reported to have parked at the waterfront by the beach (12%).

7.12 Reason for Parking Location (Q8b)

7.12.1 Figure 48 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged for each individual survey participant.

Carnoustie Rail Use Surveys - March/April 2018 - Reason for Parking Location

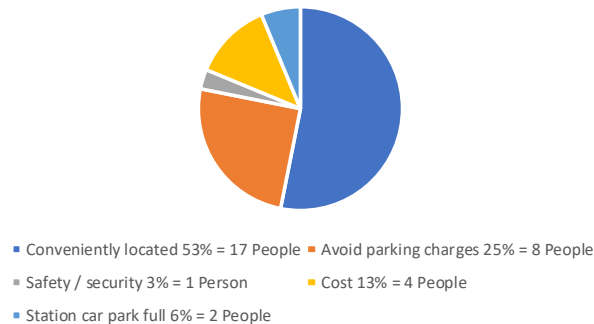


Figure 48. Reasoning for Parking Location

7.12.2 Figure 48 shows that there was 17 unique entries in the survey noting that they decided to park where they did due to it being conveniently located (53%). Also, there were 8 entries noting that they were avoiding parking charges (25%).

7.13 Reason for Travelling from Carnoustie Station (Q9)

7.13.1 Figure 49 shows the breakdown of the reasons considered by passengers in deciding to travel from Carnoustie railway station over other possible stations. All reasons that are applicable for choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Carnoustie Rail Use Surveys - March/April 2018 - Reason for Station Choice

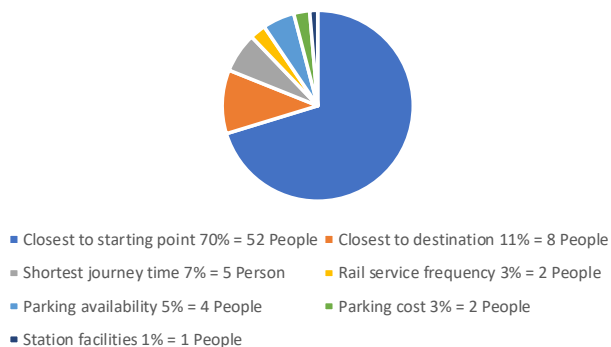


Figure 49. Reason for Station Selection

7.13.2 Figure 49 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (70%). Alternatively, 8 people said that they chose to travel from this station because it was closest to their destination (11%).

7.14 End of Journey (Q10)

7.14.1 Table 36 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 36. Final Destination of Trips made from Carnoustie Station

Area	No. of Passengers	Percentage
Dundee	14	26%
Aberdeen	12	23%
Glasgow	8	15%
Carnoustie	4	8%
Edinburgh	4	8%
Dyce	2	4%
Stonehaven	1	2%
Arbroath	1	2%
Forfar	1	2%
Perth	1	2%
Tillicoultry	1	2%
Kelty	1	2%
Johnstone	1	2%
Leeds	1	2%
London	1	2%

7.14.2 Table 36 indicates that, of those interviewed, the greatest proportion of passengers (26%) reported to finish their journey in Dundee. 12 passengers reported that they would finish their journey in Aberdeen (23%).

7.15 Journey Destination (Q11)

7.15.1 Figure 50 shows where passengers are looking to get to via Carnoustie station.

Carnoustie Rail Use Surveys - March/April 2018 - Journey Destination

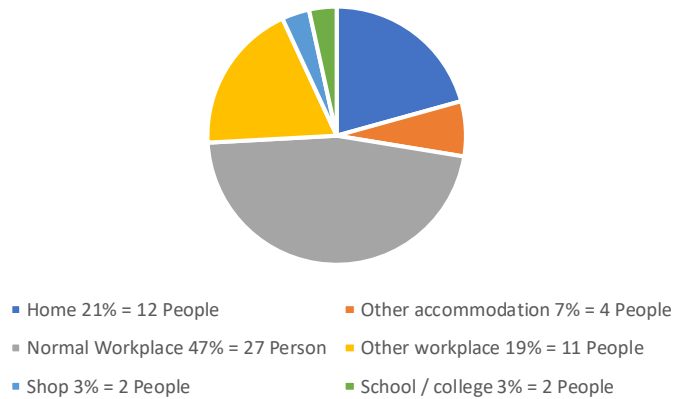


Figure 50. Journey Destination of Passengers

7.15.2 Figure 50 shows that 27 people were travelling to their normal workplace (47%). While 12 people were going home from the station (21%). It also shows 8 people (25%) were travelling to an atypical workplace.

7.16 Mode: Journey from Station to Onward Destination (Q12)

7.16.1 Figure 51 demonstrates the method of transport used to travel from Carnoustie station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Carnoustie Rail Use Surveys - March/April 2018 - Mode from Station to Destination

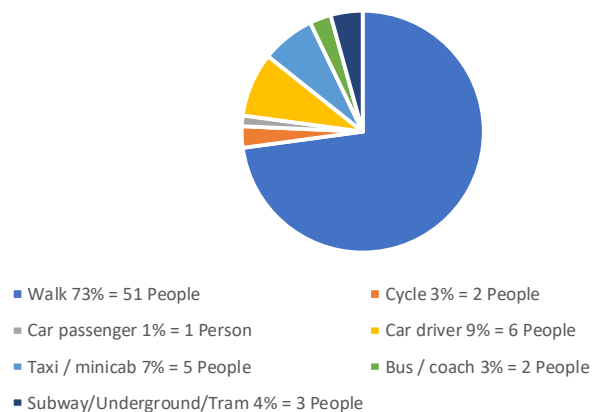


Figure 51. Mode of Transport from Station to Onward Destination

7.16.2 Figure 51 shows that over half (73%) would be walking for a considerable part of their journey from Carnoustie station to reach their final destination point. With 6 responses for car drivers (9%). 5 people also reported to be using a taxi to reach their destination (7%)

7.17 Journey Frequency (Q13)

7.17.1 Table 37 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 37. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	26	3	5	11	15	4
Overall Proportion	41%	5%	8%	17%	23%	6%

7.17.2 Table 37 indicates 41% were frequent travellers from this station, going 5 times or more per week. The next largest proportion of passengers (15 people) only travelled from this station a couple of times each year.

7.18 Ticket Type (Q14)

7.18.1 Figure 52 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Carnoustie Rail Use Surveys - March/April 2018 - Ticket Type

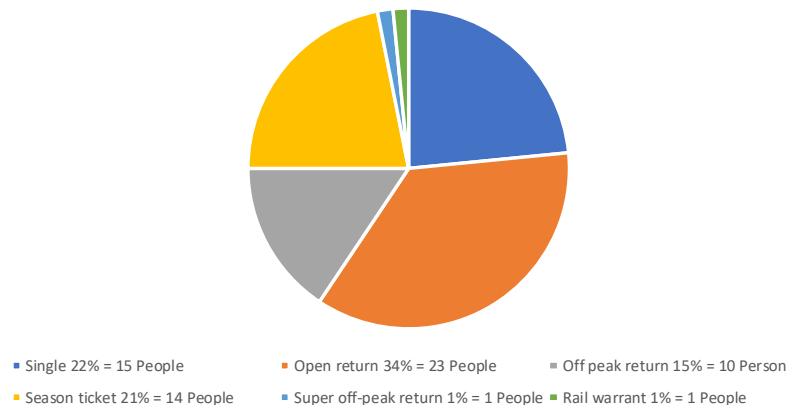


Figure 52. Ticket Type

7.18.2 Figure 52 demonstrates that surveyed passengers were predominantly travelling on open return tickets (34%). A further 22% were travelling on a single ticket (14 people), followed by 21% travelling on a season ticket.

7.18.3 The breakdown of those travelling on a seasonal ticket type is as follows:

- 2 people cited that they were travelling using a weekly pass
- 3 people cited that they were travelling using a monthly pass.

7.18.4 The split of passengers travelling on standard class as opposed to business or first class can be seen below (Q14a):

- None of passengers surveyed were travelling in business/first class
- 52 people (100%) were in standard class.

7.19 Number of Vehicles Available to Household (Q15)

7.19.1 Table 38 shows the number of vehicles that the passenger either owns or is available to them.

Table 38. Number of Vehicles Available to Household

	Number of Vehicles						
	0	1	2	3	4	5	6
Passengers Surveyed	10	29	19	1	2	0	1
Overall Proportion	16%	47%	31%	2%	3%	0%	2%

7.19.2 Table 38 shows 47% of people have access to 1 vehicle. 19 participants have 2 vehicles (31%). After that, 10 people don't have access to a vehicle (16%).

7.20 Number of Adults Within Household (Q16)

7.20.1 Table 39 shows how many adults are living within the surveyed passenger's household.

Table 39. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Passengers Surveyed	8	38	7	7	0
Overall Proportion	13%	63%	12%	12%	0%

7.20.2 Table 39 shows that 38 of those surveyed have 2 adults living at their home (63%). The next largest proportion was the number of households with only 1 adult (13%).

7.21 Number of Children Within Household (Q16)

7.21.1 Table 40 shows the number of children that are living at the surveyed passenger's household.

Table 40. Number of Children Within Household

	Number of Children			
	0	1	2	3
Number of Passengers Surveyed	37	10	13	1
Overall Proportion	61%	16%	21%	2%

7.21.2 Table 40 confirms that there is a positively skewed distribution amongst the results, and that 37 of those surveyed said that they didn't have any children (61%). 21% of those surveyed said that they have 2 children (13 people).

8. DUNDEE RAILWAY STATION

- 8.1.1 Dundee Rail Station is located in the city centre, on the waterfront, with a 9 space car park provided at the station. This includes parking spaces for blue badge holders.
- 8.1.2 Abellio ScotRail operates train services at Dundee providing connections to Aberdeen and Arbroath to the north and Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of 1,815,000 passengers travelled to and from Dundee Railway Station during 2016/17.
- 8.1.3 Table 41 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 41. Train Services Departing from Dundee Station

Destination	Services							
Edinburgh	6:03	7:07	7:11	7:38	8:24	8:29	9:34	10:18
	10:29	11:29	12:22	12:37	13:20	13:33	14:18	14:34
	15:17	15:33	16:51	17:17	17:33	18:23	18:47	
Glasgow QS	6:04	6:50	7:56	8:17	8:53	9:54	10:54	11:50
	12:13	12:53	13:54	14:53	15:13	15:51	16:49	17:47
	18:55							
Aberdeen	6:25	6:42	7:26	8:42	9:07	9:40	10:05	10:35
	11:03	11:46	12:02	12:38	13:03	13:38	14:05	14:38
	15:03	15:48	16:01	16:39	17:02	17:46	18:04	18:48
London King's Cross	9:06	11:08	16:08					
Arbroath	17:49							
Carnoustie	6:33	18:34						

Source: Boarding and Alighting Information, Streetwise, Appendix B

8.2 Survey Sample Rate

- 8.2.1 Over the survey period, 2,322 passengers were observed boarding train services. Of the 2,322 boarding passengers, 883 were interviewed, giving an effective sample rate of 38% as shown in Table 42.

Table 42. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Dundee	2219	2322	883	38%

8.3 Passenger Demographics (Q1)

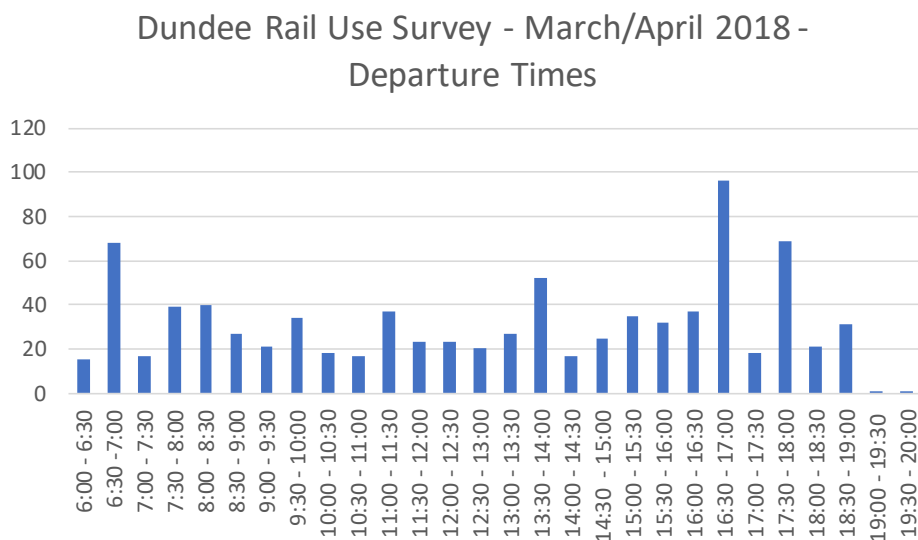
- 8.3.1 In terms of passenger demographics, a 43.7%/56.3% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Dundee. The majority of passengers were aged between 16 and 60, with 1% aged over 60. A full breakdown of passenger age ranges is show in Table 43.

Table 43. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	0	219	44	8	105	4
Overall Proportion	0%	58%	12%	2%	28%	1%

8.4 Train Departures (Q2)

8.4.1 Figure 53 summarises the specified departure time of the outward leg of the journey given by respondents.


Figure 53. Time of Departure (Outward Leg)

8.4.2 Figure 53 suggests that there were two main spikes in the number of departures per interval. 68 people were departing between 6:30 and 7:00. There was also an evening peak where 96 people were departing between 16:30 and 17:00. The half hour after this time period saw an immediate drop off.

8.5 Destination Station (Q3)

8.5.1 Table 44 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 44. Destination Station

Place	No. of Passengers	Percentage
EDINBURGH	167	22%
GLASGOW	93	12%
PERTH	79	10%
ABERDEEN	67	9%
DUNDEE	61	8%
ARBROATH	47	6%
CARNOUSTIE	31	4%
FALKIRK	30	4%
KIRKCALDY	30	4%
KEITH	16	2%
MONTROSE	16	2%
STIRLING	16	2%
CUPAR	15	2%
HARTWOOD	15	2%
INVERURIE	15	2%
LADYBANK	15	2%
LEEDS	15	2%
LEUCHARS	15	2%
MARKINCH	15	2%
RAITH	15	2%

8.5.2 Table 44 shows that the greatest proportion of those travelling from Dundee station are going to Edinburgh (22%). The next largest proportion, 93 passengers, are travelling to Glasgow (12%). 79 people surveyed were travelling to Perth (10%).

8.6 Journey Type (Q4)

8.6.1 Figure 54 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

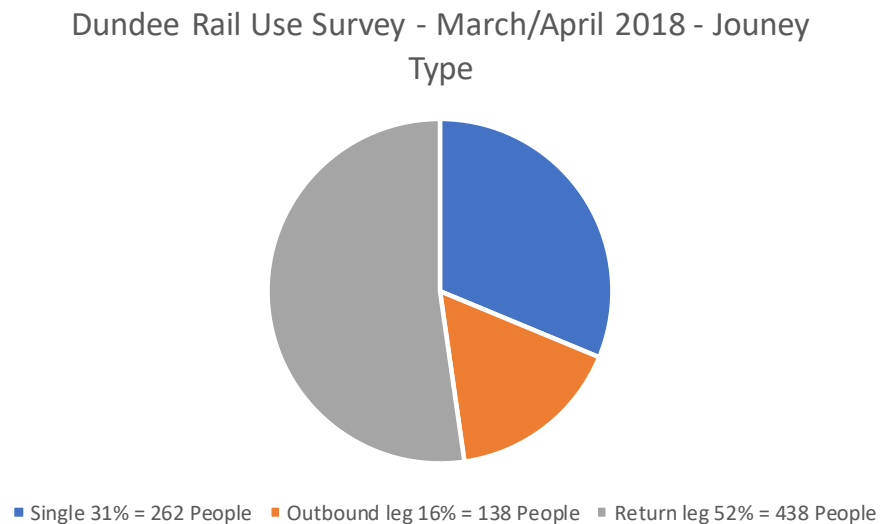


Figure 54. Journey Leg

8.6.2 Figure 54 shows that 438 passengers interviewed (52%) were on the return leg of their trip. Followed by 262 people reporting to being on a single (31%). With the final 16% just being on the outbound leg.

8.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of each passenger's trip is as follows (Q4a):

- 406 people (73%) were commencing the other leg of their journey on the same day
- 138 people (25%) were commencing the other leg of their journey on another weekday
- 16 people (3%) were commencing the other leg of their journey on a weekend

8.6.4 Figure 55 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Dundee Rail Use Survey - March/April 2018 - Other Journey
Leg Time

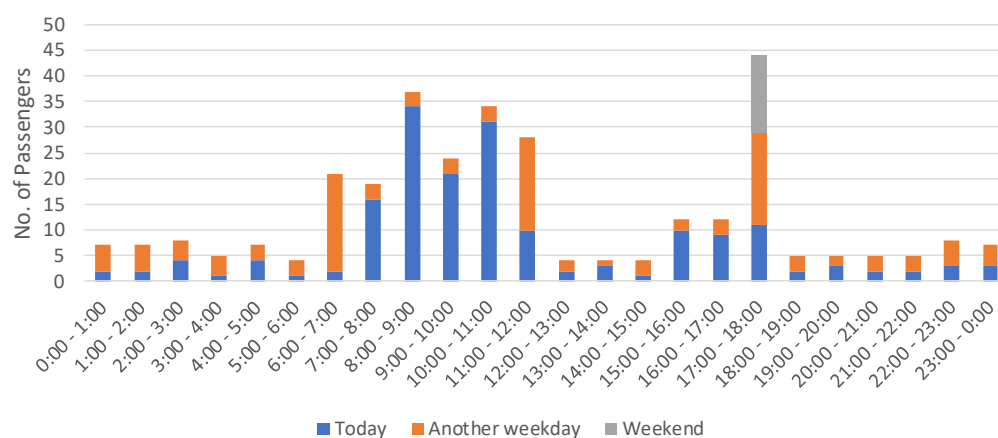


Figure 55. Time of Other Leg

8.6.5 Figure 55 suggests that there was a spread out peak in the morning, however there was large, shorter peak in the evening. In the evening peak time period: 11 people were travelling at this time on the same day, 18 people were travelling at this time on another weekday, and 15 people were travelling at this time on a weekend.

8.7 Journey Reason (Q5)

8.7.1 Figure 56 shows the reason for making this particular journey from Dundee railway station.

Dundee Rail Use Survey - March/April 2018 - Journey Reason

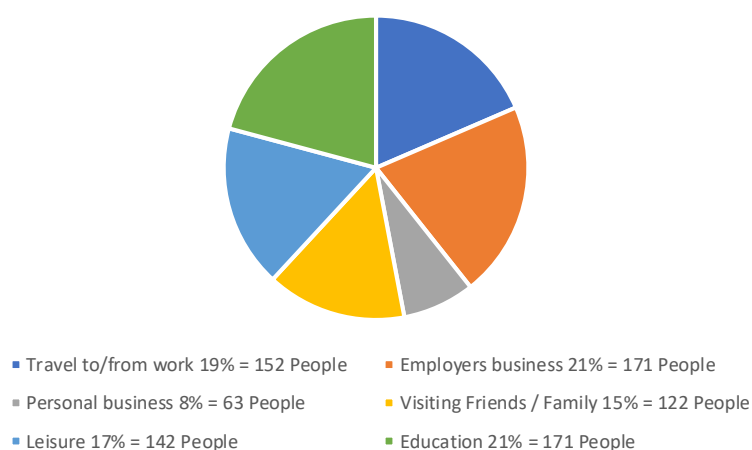


Figure 56. Reason for Making This Journey

8.7.2 Figure 56 shows that 171 reported to be traveling for employer's business (21%). With another 152 people travelling to or from work (19%).

8.8 Journey Origin (Q6)

8.8.1 Figure 57 summarises how passengers categorised where their journey originated when surveyed travelling from Dundee railway station.

Dundee Rail Use Survey - March/April 2018 - Journey Origin

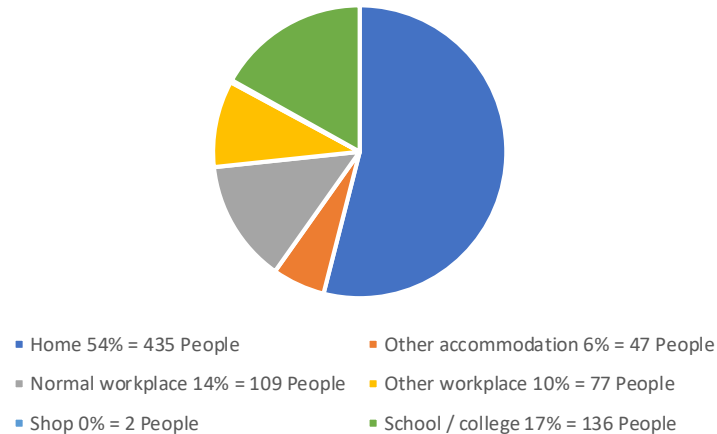


Figure 57. Passenger Origin

8.8.2 Figure 57 shows that the majority of people were travelling from their own homes via the station (54%). Of those surveyed, 136 people said to be travelling from school or college (17%).

8.9 Start of Journey (Q7)

8.9.1 Table 45 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 45. Origin of Trips made to Dundee Station

Location	No. of Passengers	%age
Dundee City Centre	163	22%
Dundee*	156	21%
Edinburgh	40	5%
Arbroath	37	5%
Glasgow	34	5%
Invergowrie	28	4%
Broughty Ferry	24	3%
Aberdeen	22	3%
Perth	20	3%
Strathmartine	19	3%
Newport-on-Tay	15	2%
Montrose	14	2%
Carnoustie	13	2%
Lochee	11	1%
Monifieth	11	1%
Caird Park	10	1%
St Andrews	9	1%
Kirkcaldy	7	1%
Bridgefoot	6	1%
Cupar	5	1%
Forfar	5	1%
Stirling	5	1%
Auchterhouse	4	1%
Blairstown	4	1%
Kellas	4	1%
Bow of Fife	3	0%
Dunfermline	3	0%
Kirriemuir	3	0%
Tayport	3	0%
Airdrie	2	0%
Barnhill	2	0%
Barry	2	0%
Brechin	2	0%
Denhead of Gray	2	0%
Dyce	2	0%

Falkirk	2	0%
Fochabers	2	0%
Glenrothes	2	0%
Inverkeithing	2	0%
Kingennie, Murroes	2	0%
Larbert	2	0%
Leuchars	2	0%
Oathlaw	2	0%
St Cyrus	2	0%
Stonehaven	2	0%
Alloa	1	0%
Auchterarder	1	0%
Baldovie	1	0%
Beith	1	0%
Bridge of Allan	1	0%
Callander	1	0%
Crieff	1	0%
Cumbernauld	1	0%
Ellon	1	0%
Fern	1	0%
Freuchie	1	0%
Glenogilvy	1	0%
Guardbridge	1	0%
Hamilton	1	0%
Inchture	1	0%
Inverarity	1	0%
Inverness	1	0%
Larkhall	1	0%
Laurencekirk	1	0%
Leven	1	0%
Menstrie	1	0%
Motherwell	1	0%
Peterborough	1	0%
Portlethen	1	0%
Prestwick	1	0%
Scone	1	0%
Strathdon	1	0%
Strathhaven	1	0%
Westhill	1	0%

*Dundee is classified as the area between the A90 Kingsway and the A991 ring road. Lochee postcodes are those outwith those classed as Dundee.

- 8.9.2 Table 45 indicates that, of those interviewed, the greatest proportion of passengers started their journey in Dundee. The largest participating area was the centre of Dundee.
- 8.9.3 Figure 58 illustrates the origin of journeys made to the station on the day or survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.

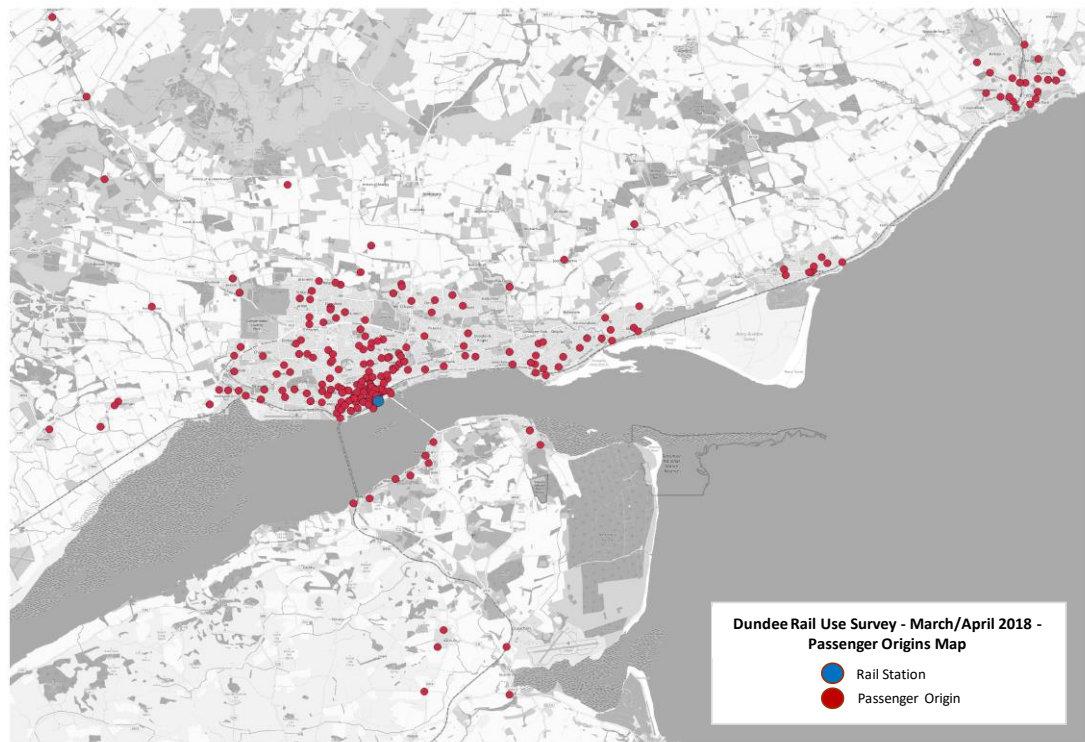


Figure 58. Origin of Trips Made to Dundee Station

8.10 Mode: Methods of Transport from Origin to Station (Q8)

8.10.1 Figure 59 illustrates the methods of transport passengers used to get to Dundee station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Dundee Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

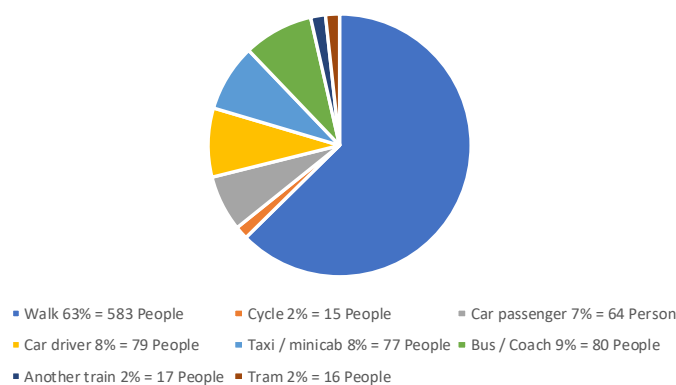


Figure 59. Mode Split of Passengers Travelling to Dundee Station

8.10.2 Figure 59 confirms that the greatest proportion of interviewed passengers walked to the railway station (63%). 80 people arrived by use of a bus service (9%), with another 79 people arriving as a car driver (8%).

8.11 Parking Location (Q8a)

8.11.1 Figure 60 shows the parking location used for passengers travelling from Dundee station.

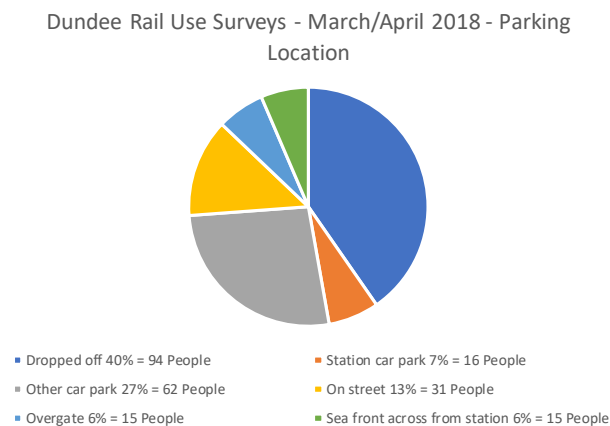


Figure 60. Parking Location

8.11.2 Figure 60 shows that 94 people were dropped off at the station (40%). 62 people made use of other car parks near the station (27%). Most notably were Overgate car park and the Discovery car park with 15 people each (6%). 16 people used the car park located at the station.

8.12 Reason for Parking Location (Q8b)

8.12.1 Figure 61 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged for each individual survey participant.

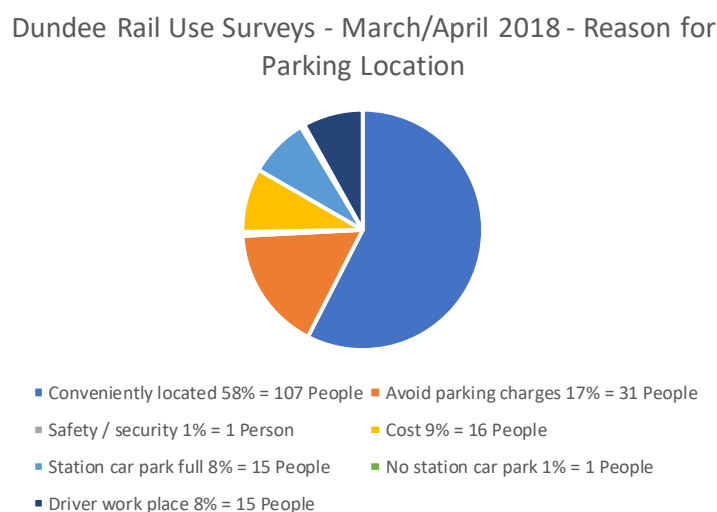


Figure 61. Reasoning for Parking Location

8.12.2 Figure 61 shows that there was 107 unique entries in the survey noting that they made their parking decision due to it being conveniently located (58%). Also, there were 31 entries noting that they were avoiding parking charges (17%).

8.13 Reason for Travelling from Dundee Station (Q9)

8.13.1 Figure 62 shows the breakdown of the reasons considered by passengers in deciding to travel from Dundee railway station over other possible stations. All reasons that are applicable for choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Dundee Rail Use Surveys - March/April 2018 - Reason for Station Choice

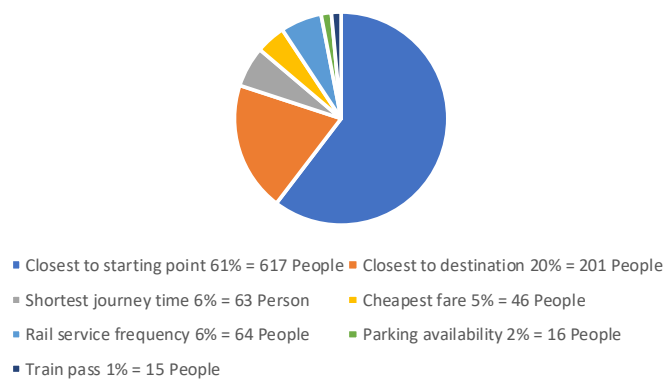


Figure 62. Reason for Station Selection

8.13.2 Figure 62 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (61%). Alternatively, 201 said that they chose to travel from this station because it was closest to their destination (20%).

8.14 End of Journey (Q10)

8.14.1 Table 46 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 46. Final Destination of Trips made from Dundee Station

Area	No. of Passengers	Percentage
Edinburgh	138	21%
Dundee	123	18%
Perth	94	14%
Arbroath	47	7%
Glasgow	45	7%
Montrose	31	5%
Cupar	31	5%
Falkirk	30	4%
London	28	4%
Aberdeen	27	4%
Carnoustie	17	3%
Belfast	15	2%
Leeds	15	2%
Inverurie	15	2%
Stafford	4	1%
Laurencekirk	1	0%
Banchory	1	0%
Westhill	1	0%
Alford	1	0%
Aboyne	1	0%
Ballater	1	0%
Strathdon	1	0%
St. Andrews	1	0%

8.14.2 Table 46 indicates that, of those interviewed, the greatest proportion of passengers reported to end their journey in Edinburgh.

8.15 Journey Destination (Q11)

8.15.1 Figure 63 shows where passengers are looking to get to via Dundee station.

Dundee Rail Use Surveys - March/April 2018 - Journey Destination

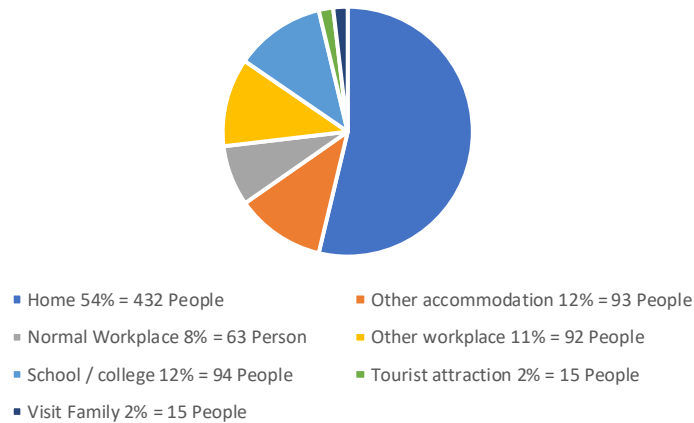


Figure 63. Journey Destination of Passengers

8.15.2 Figure 63 shows that 432 people were travelling home (54%). While around 12% were travelling to other accommodation. Another 12% were travelling to either school of college. 92 people were travelling to an atypical workplace (11%).

8.16 Mode: Journey from Station to Onward Destination (Q12)

8.16.1 Figure 64 demonstrates the method of transport used to travel from Dundee station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Dundee Rail Use Surveys - March/April 2018 - Mode from Station to Destination

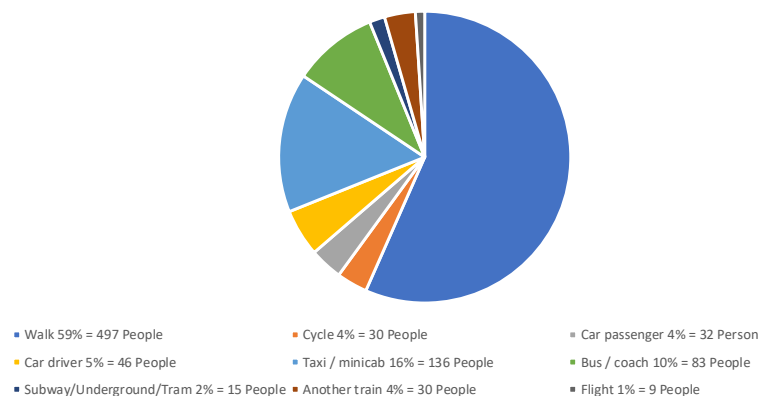


Figure 64. Mode of Transport from Station to Onward Destination

8.16.2 Figure 64 shows that over half (59%) would be walking for a considerable part of their journey from the station to reach their final destination point. With another 136 people reporting to be getting a taxi to reach their destination (16%).

8.17 Journey Frequency (Q13)

8.17.1 Table 47 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 47. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	129	82	77	165	187	175
Overall Proportion	16%	10%	9%	20%	23%	21%

8.17.2 Table 47 shows that 187 people travel from this station a few times per year (23%). The next largest proportion of passengers (175 people) only travelled infrequently, less than once a year (21%).

8.18 Ticket Type (Q14)

8.18.1 Figure 65 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Dundee Rail Use Surveys - March/April 2018 - Ticket Type

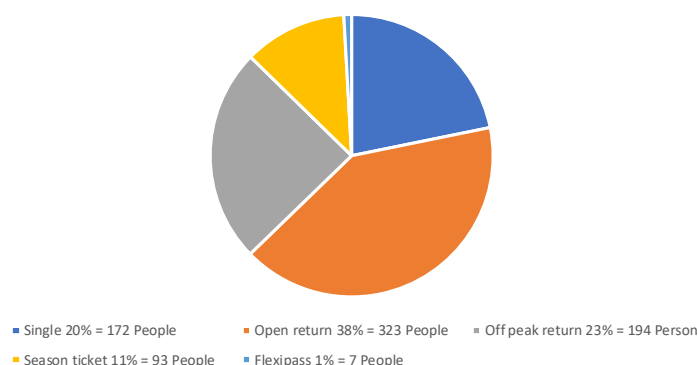


Figure 65. Ticket Type

8.18.2 Figure 65 demonstrates that surveyed passengers were predominantly travelling on open return tickets (38%). A further 23% were travelling on a off-peak return ticket (194 people), followed by 172 people travelling on a single ticket (20%).

8.18.3 The breakdown of those travelling on a seasonal ticket type is as follows:

- 19 people cited that they were travelling using a weekly pass
- 38 people cited that they were travelling on a monthly pass
- 6 people cited that they were travelling on a yearly pass.

8.18.4 The split of passengers travelling on standard class as opposed to business or first class is as follows (Q14a):

- 21 people (3%) were travelling on business/first class
- 636 people (97%) were in standard class.

8.19 Number of Vehicles Available to Household (Q15)

8.19.1 Table 48 shows the number of vehicles that the passenger either owns or has available to them.

Table 48. Number of Vehicles Available to Household

	Number of Vehicles						
	0	1	2	3	4	5	6
Passengers Surveyed	181	309	228	48	18	5	2
Overall Proportion	23%	39%	29%	6%	2%	1%	0%

8.19.2 Table 48 shows 39% of people have access to 1 vehicle. 228 participants have 2 vehicles (29%). After that, 181 people don't have access to a vehicle (23%).

8.20 Number of Adults Within Household (Q16)

8.20.1 Table 49 shows how many adults are living within the surveyed passenger's household.

Table 49. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Number of Passengers Surveyed	104	443	142	70	11
Overall Proportion	14%	58%	18%	9%	1%

8.20.2 Table 49 shows that 443 of those surveyed have 2 adults living at their home (58%). The next largest proportion was the number of households with 3 adults (18%). Following that 14% have only one adult living in the household.

8.21 Number of Children Within Household (Q16)

8.21.1 Table 50 shows the number of children that are living at the surveyed passenger's household.

Table 50. Number of Children Within Household

	Number of Children						
	0	1	2	3	4	5	6
Passengers Surveyed	558	123	70	18	5	0	2
Overall Proportion	72%	16%	9%	2%	1%	0%	0%

8.21.2 Table 50 confirms that of those surveyed, 558 said that they didn't have any children (72%). 16% of those surveyed said that they have 1 child within their household (123 people).

9. DUNKELD & BIRNAM RAILWAY STATION

9.1.1 Dunkeld & Birnam Rail Station is located on the south side of the river Tay. It features a free of charge, 30 space car park provided at the station. This does not include parking spaces for blue badge holders.

9.1.2 Abellio ScotRail operates train services at Dunkeld & Birnam providing connections to Inverness to the north and Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of 32,878 passengers travelled to and from Dunkeld & Birnam Railway Station during 2016/17.

9.1.3 Table 51 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 51. Train Services Departing Dunkeld & Birnam Station

Destination	Services					
Inverness	5:57	8:31	11:38	13:31	15:09	16:35
Edinburgh	7:39	8:31	11:39	12:37	14:44	17:47
Glasgow	10:35	16:35				

Source: Boarding and Alighting Information, Streetwise, Appendix B

9.2 Survey Sample Rate

9.2.1 Over the survey period, 42 passengers were observed boarding train services. Of the 42 boarding passengers, 26 were interviewed, giving an effective sample rate of 62% as shown in Table 52.

Table 52. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Dunkeld & Birnam	53	42	26	62%

9.3 Passenger Demographics (Q1)

9.3.1 In terms of passenger demographics, a 48%/52% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Dunkeld & Birnam. The majority of passengers were aged between 16 and 60, with 12% aged over 60. A full breakdown of passenger age ranges is shown in Table 53.

Table 53. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	0	3	5	3	12	3
Overall Proportion	0%	12%	19%	12%	46%	12%

9.4 Train Departures (Q2)

9.4.1 Figure 66 summarises the specified departure time of the outward leg of the journey given by respondents.

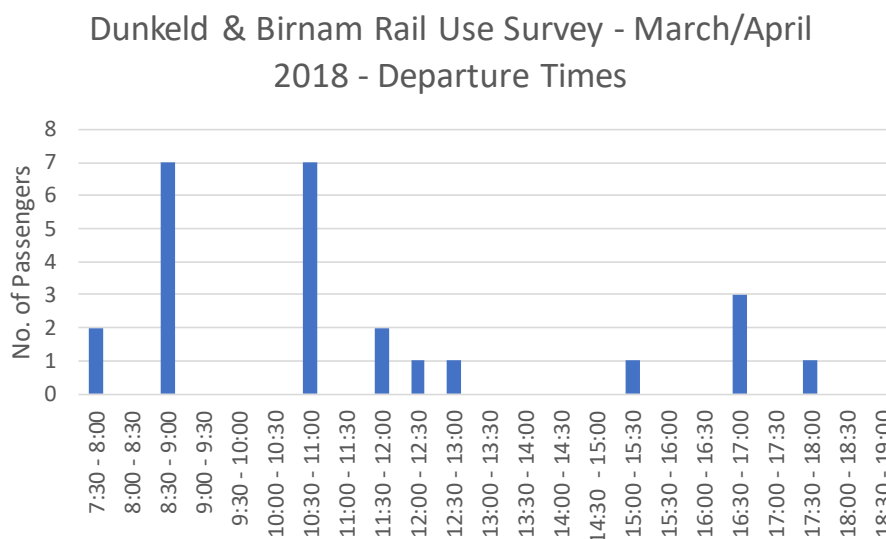


Figure 66. Time of Departure (Outward Leg)

9.4.2 Figure 66 suggests that the two busiest times were from 08:30 – 09:00 and from 10:30 – 11:00. 7 passengers were departing at each of those aforementioned time periods.

9.5 Destination Station (Q3)

9.5.1 Table 54 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 54. Destination Station

Place	No. of Passengers	Percentage
EDINBURGH	8	35%
GLASGOW	3	13%
PERTH	3	13%
INVERNESS	2	9%
STIRLING	2	9%
BRIDGE OF ALLAN	1	4%
DINGWALL	1	4%
GLENEAGLES	1	4%
KENDAL	1	4%
PITLOCHRY	1	4%

9.5.2 Table 54 shows that the greatest proportion of those travelling from Dunkeld & Birnam station were travelling to Edinburgh (35%). Following that, 3 people were travelling to Glasgow and another 3 were travelling to Perth (13% each).

9.6 Journey Type (Q4)

9.6.1 Figure 67 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Dunkeld & Birnam Rail Use Survey - March/April
2018 - Journey Type

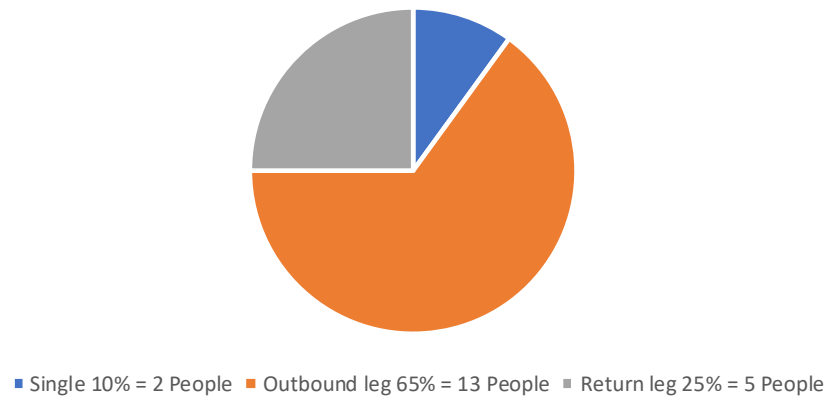


Figure 67. Journey Leg

9.6.2 Figure 67 shows that 13 passengers interviewed (65%) were on the outbound leg of their trip. Followed by 5 people reporting to being on the return leg of their journey (25%). With the final 10% just being a single, one-way trip.

9.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows (Q4a):

- 17 people (94%) were commencing the other leg of their journey on the same day
- 1 person (6%) was commencing the other leg of their journey on another weekday

9.6.4 Figure 68 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Dunkeld & Birnam Rail Use Survey - March/April 2018 - Other Journey Leg Time

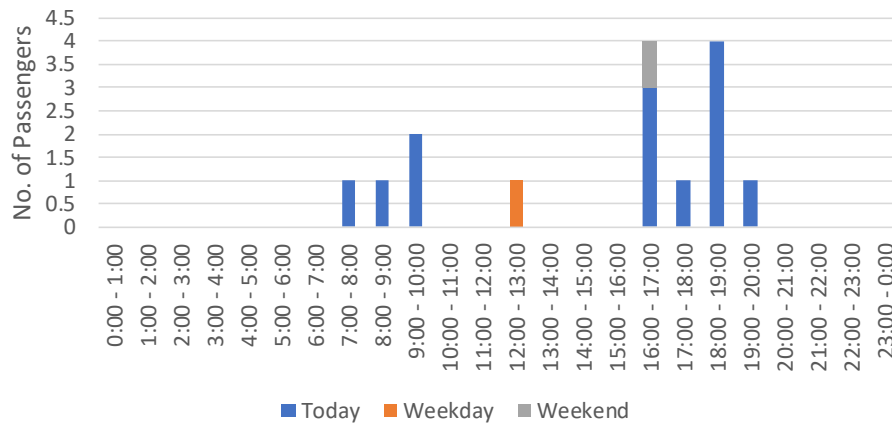


Figure 68. Time of Other Leg

9.6.5 Figure 68 suggests that 16:00 to 17:00 was the busiest time for passengers to travel their other leg of the journey. At this time: 3 people were travelling on the same day and 1 other person was travelling at this time on a weekend. 4 people had the other leg of their journey between 18:00 and 19:00.

9.7 Journey Reason (Q5)

9.7.1 Figure 69 shows the reason for making this particular journey from Dunkeld & Birnam railway station.

Dunkeld & Birnam Rail Use Survey - March/April 2018 - Journey Reason

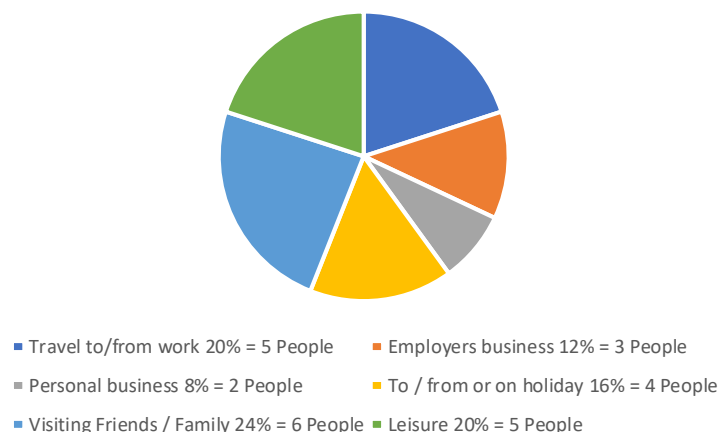


Figure 69. Reason for Making This Particular Journey

9.7.2 Figure 69 shows that 6 people were visiting someone (24%). Then there were 5 people travelling to or from work (20%).

9.8 Journey Origin (Q6)

9.8.1 Figure 70 summarises how passengers categorised their journey origin.

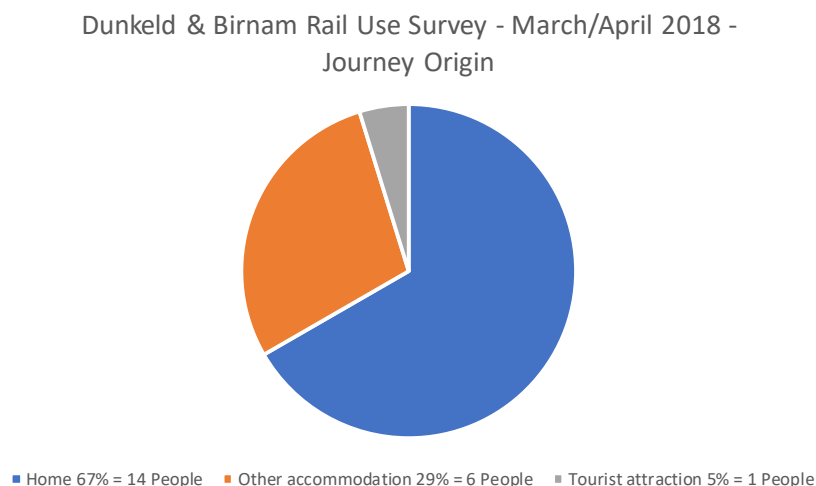


Figure 70. Passenger Origin

9.8.2 Figure 70 shows that the majority of people were travelling from their own homes via the station (67%). Of those surveyed, 6 people said to be travelling from some other form of accommodation (29%). The final 1 person was visiting a tourist attraction.

9.9 Start of Journey (Q7)

9.9.1 Table 55 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 55. Origin of Trips made to Dunkeld & Birnam Station

Location	No. of Passengers	%age
Dunkeld	16	67%
Edinburgh	2	8%
Aberfeldy	1	4%
Bankfoot	1	4%
Melrose	1	4%
Muirton or Ardblair, Carsie	1	4%
Perth	1	4%
Pitlochry	1	4%

9.9.2 Table 55 indicates that, of those interviewed, the greatest proportion of passengers (67%) reported starting their journey in the Dunkeld area.

9.9.3 Figure 71 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 71. Origin of Trips to Dunkeld & Birnam Station

9.10 Mode: Methods of Transport from Origin to Station (Q8)

9.10.1 Figure 72 illustrates the methods of transport passengers used to get to Dunkeld & Birnam station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Dunkeld & Birnam Rail Use Surveys - March/April 2018 -
Mode Split for Travel to Station

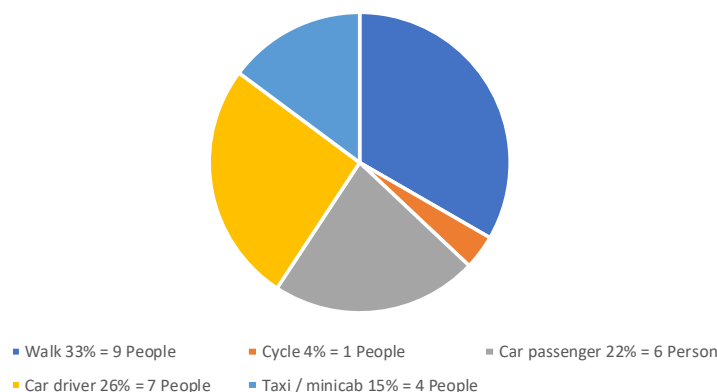


Figure 72. Mode Split of Passengers Travelling to Dunkeld& Birnam Station

9.10.2 Figure 72 confirms that the greatest proportion of interviewed passengers walked to the railway station (33%). 7 people arrived by driving themselves (26%), with another 6 people arriving as a passenger in a car (22%).

9.11 Parking Location (8a)

9.11.1 Figure 73 shows the parking location used for passengers travelling from Dunkeld & Birnam station.

Dunkeld & Birnam Rail Use Surveys - March/April
2018 - Parking Location

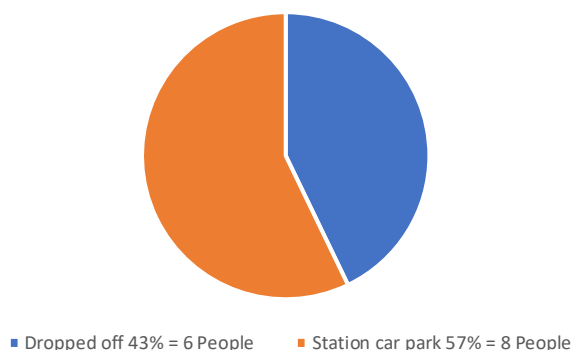


Figure 73. Parking Location

9.11.2 Figure 73 shows that 8 parked in the car park located at the station (57%). With the other 43% being dropped off.

9.12 Reason for Parking Location (8b)

9.12.1 Figure 74 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged for each individual survey participant.

Dunkeld & Birnam Rail Use Surveys - March/April 2018 -
Reason for Parking Location

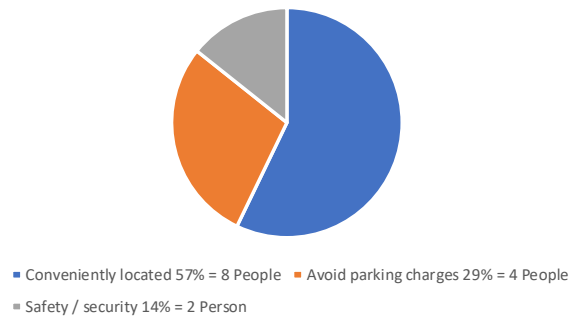


Figure 74. Reasoning for Parking Location

9.12.2 Figure 74 shows that there was 8 unique entries in the survey noting that they made their parking decision due to it being conveniently located (57%). Also, there were 4 entries noting that they were avoiding parking charges (29%).

9.13 Reason for Travelling from Dunkeld & Birnam Station (Q9)

9.13.1 Figure 75 shows the breakdown of the reasons considered by passengers in deciding to travel from Dunkeld & Birnam railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Dunkeld & Birnam Rail Use Surveys - March/April 2018 - Reason
for Station Choice

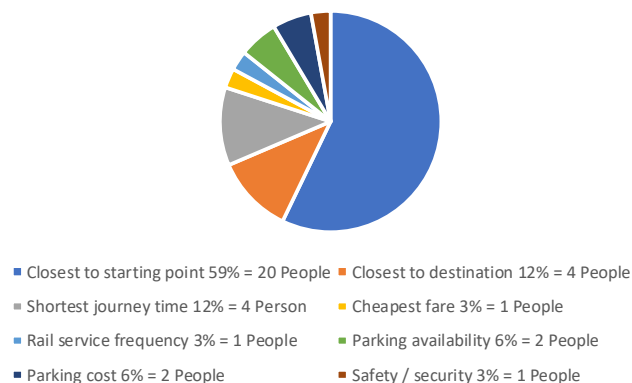


Figure 75. Reason for Station Selection

9.13.2 Figure 75 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (59%). Alternatively, 4 people said that they chose to travel from this station because it was closest to their destination (12%). Another 4 said that it was the shortest journey time (12%).

9.14 End of Journey (Q10)

9.14.1 Table 56 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 56. Final Destination of Trips made from Dunkeld & Birnam Station

Area	No. of Passengers	Percentage
Edinburgh	9	39%
Glasgow	3	13%
Dunkeld & Birnam	2	9%
Pitlochry	2	9%
Bridge of Allan	1	4%
Stirling	1	4%
Inverness	1	4%
Kendal	1	4%
Perth	1	4%
Auchterarder	1	4%
Aberfeldy	1	4%

9.14.2 Table 56 indicates that, of those interviewed, the greatest proportion of passengers (39%) reported finishing their journey in Edinburgh.

9.15 Journey Destination (Q11)

9.15.1 Figure 76 shows where passengers are looking to get to via Dunkeld & Birnam station.

Dunkeld & Birnam Rail Use Surveys - March/April 2018 - Journey Destination

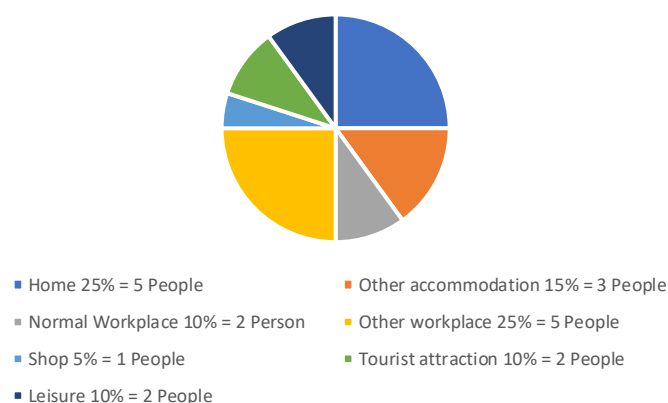


Figure 76. Journey Destinations of Passengers

9.15.2 Figure 76 shows that 5 people were travelling home (25%). While another 5 people were travelling to some other workplace (25%). 3 people were travelling to other accommodation.

9.16 Mode: Journey from Station to Onward Destination (Q12)

9.16.1 Figure 77 demonstrates the method of transport used to travel from Dunkeld & Birnam station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Dunkeld & Birnam Rail Use Surveys - March/April 2018 - Mode from Station to Destination

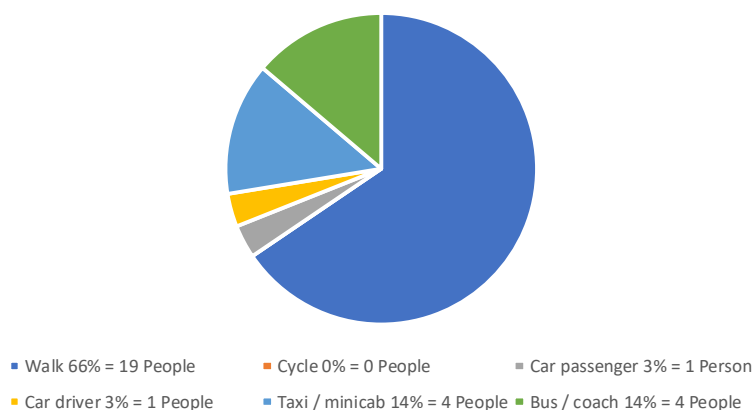


Figure 77. Mode of Transport from Station to Onward Destination

9.16.2 Figure 77 shows that over half (66%) would be walking for a considerable part of their journey from the station to reach their final destination point. 4 people would be travelling by bus service (14%), also 4 would be taking a taxi (14%).

9.17 Journey Frequency (Q13)

9.17.1 Table 57 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 57. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	0	3	2	2	7	12
Overall Proportion	0%	12%	8%	8%	27%	46%

9.17.2 Table 57 shows that 12 people travel from this station infrequently, less than once each year (46%). 7 passengers use this station slightly more so, travelling more than once a year (27%).

9.18 Ticket Type (Q14)

9.18.1 Figure 78 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Dunkeld & Birnam Rail Use Surveys - March/April 2018 - Ticket Type

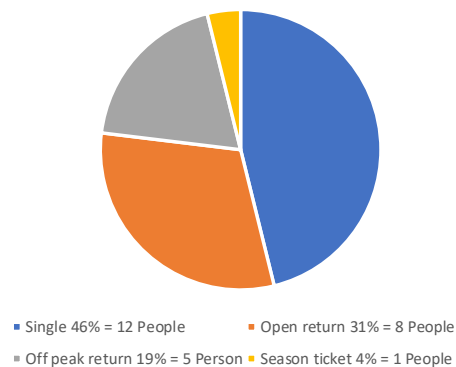


Figure 78. Journey Type

9.18.2 Figure 78 demonstrates that surveyed passengers were predominantly travelling on single tickets (46%). A further 31% were travelling on an open return ticket (8 people), followed by 5 people travelling on an off-peak ticket (20%).

9.18.3 The passenger did not specify what kind of seasonal ticket they were using (monthly, weekly etc.)

9.18.4 The split of passengers travelling on standard class as opposed to business or first class is as follows (Q14a):

- 1 person (5%) was travelling on business/first class
- 21 people (95%) were in standard class.

9.19 Number of Vehicles Available to Household (Q15)

9.19.1 Table 58 shows the number of vehicles that the passenger either owns or has available to them.

Table 58. Number of Vehicles Available to Household

	Number of Vehicles					
	0	1	2	3	4	5
Passengers Surveyed	5	11	9	0	0	1
Overall Proportion	19%	42%	35%	0%	0%	4%

9.19.2 Table 58 shows 35% of people have access to 1 vehicle. 9 participants have 2 vehicles (35%). After that, 5 people don't have access to a vehicle (19%).

9.20 Number of Adults Within Household (Q16)

9.20.1 Table 59 shows how many adults are living within the surveyed passenger's household.

Table 59. Number of Adults Within Household

	Number of Adults			
	1	2	3	4
Number of Passengers Surveyed	5	18	3	0
Overall Proportion	19%	69%	12%	0%

9.20.2 Table 59 shows that 18 of those surveyed have 2 adults living at their home (69%). The next largest proportion was the number of households with 1 adult (19%). Following that 12% have 3 adults living in the household.

9.21 Number of Children Within Household (Q16)

9.21.1 Table 60 shows the number of children that are living at the surveyed passenger's household.

Table 60. Number of Children Within Household

	Number of Children		
	0	1	2
Number of Passengers Surveyed	20	5	1
Overall Proportion	77%	19%	4%

9.21.2 Table 60 confirms that there is a positively skewed distribution amongst the results, and that 20 of those surveyed said that they didn't have any children (77%). 5 of those surveyed said that they have 1 child within their household (19%).

10. INVERGOWRIE RAILWAY STATION

10.1.1 Invergowrie Rail Station is located just to the west of Dundee. It does not feature a car park.

10.1.2 Abellio ScotRail operates train services at Invergowrie providing connections to Dundee to the east and Perth and Glasgow to the west and south. Office of Rail Regulation figures show that a total of 4,308 passengers travelled to and from Invergowrie Railway Station during 2016/17.

10.1.3 Table 61 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 61. Train Services Departing Invergowrie Station

Destination	Services		
Dundee	8:06	9:47	10:38
Glasgow QS	8:22		

Source: Boarding and Alighting Information, Streetwise, Appendix B

10.2 Survey Sample Rate

10.2.1 Over the survey period, 13 passengers were observed boarding train services. Of the 13 boarding passengers, 9 were interviewed, giving an effective sample rate of 69% as shown in Table 62.

Table 62. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Invergowrie	1	13	9	69%

10.3 Passenger Demographics (Q1)

10.3.1 In terms of passenger demographics, a 75%/25% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Invergowrie. The majority of passengers were aged between 16 and 60, with 0% aged over 60. A full breakdown of passenger age ranges is shown in Table 63.

Table 63. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	0	2	3	2	2	0
Overall Proportion	0%	22%	33%	22%	22%	0%

10.4 Train Departures (Q2)

10.4.1 Figure 79 summarises the specified departure time of the outward leg of the journey given by respondents.

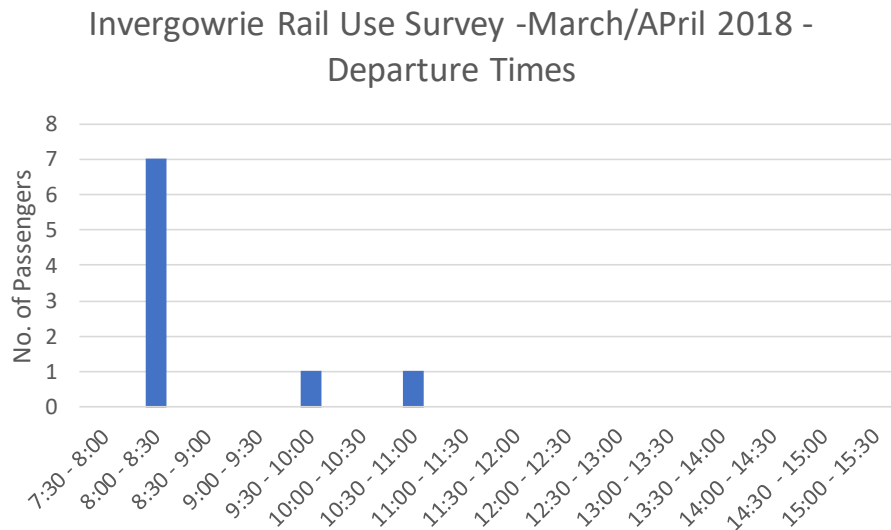


Figure 79. Time of Departure (Outward Leg)

10.4.2 Figure 79 suggests that the most popular departure time was in the morning around 08:00 – 08:30. 7 passengers reported to depart at this time.

10.5 Destination Station (Q3)

10.5.1 Table 64 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 64. Destination Station

Place	No. of Passengers	Percentage
DUNDEE	3	50%
GLASGOW QUEEN ST.	1	17%
GLENEAGLES	1	17%
PERTH	1	17%

10.5.2 Table 64 shows that the greatest proportion of those travelling from Invergowrie station are going to Dundee (50%).

10.6 Journey Type (Q4)

10.6.1 Figure 80 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Invergowrie Rail Use Survey - March/April 2018 - Journey Type

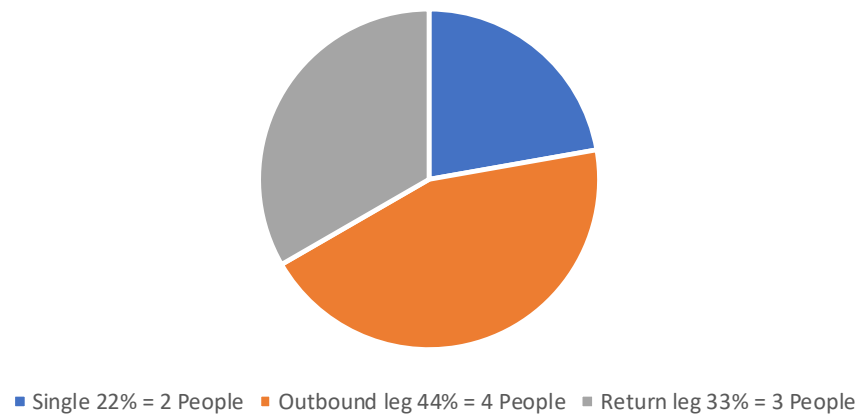


Figure 80. Journey Leg

- 10.6.2 Figure 80 shows that 4 passengers interviewed (44%) were on the outbound leg of their trip. Followed by 3 people reporting to being on the return leg of their journey (33%). With the final 22% just being a single, one-way trip.
- 10.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows (Q4a):
- 5 people (100%) were commencing the other leg of their journey on the same day
- 10.6.4 Figure 81 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Invergowrie Rail Use Survey - March/April 2018 - Other Journey Leg Time

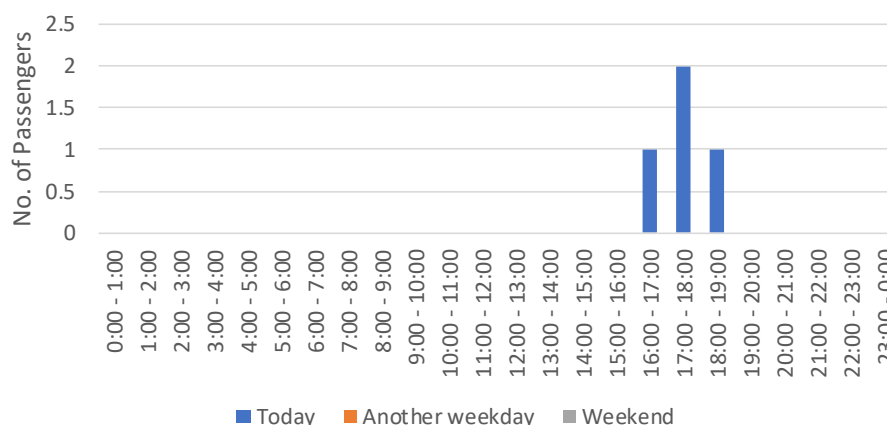


Figure 81. Time of Arrival (Return Leg)

10.6.5 Figure 81 suggests that passengers were only having the other leg of their journey on the same day and between 16:00 and 19:00. 2 people were travelling from 17:00 – 18:00.

10.7 Journey Reason (Q5)

10.7.1 Figure 82 shows the reason for making this particular journey from Invergowrie railway station.

Invergowrie Rail Use Survey - March/April 2018 - Journey Reason

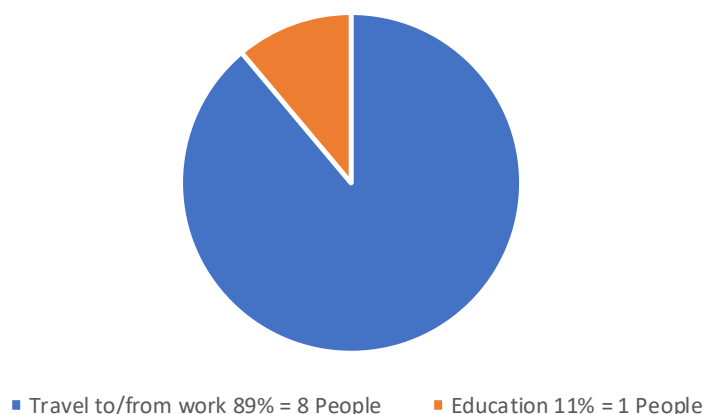


Figure 82. Reason for Making this Journey

10.7.2 Figure 82 shows that 8 people were travelling to or from work (24%). Then there was 1 person making this journey due to education (11%).

10.8 Journey Origin (Q6)

10.8.1 Figure 83 summarises how passengers categorised where their journey originated when surveyed travelling from Invergowrie railway station.

Invergowrie Rail Use Survey - March/April 2018 -
Journey Origin

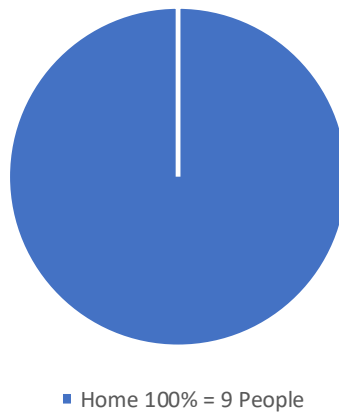


Figure 83. Passenger Origin

10.8.2 Figure 83 shows that 100% of people interviewed were coming from their home.

10.9 Start of Journey (Q7)

10.9.1 Table 65 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 65. Origin of Trips made to Invergowrie Station

Location	No. of Passengers	%age
Invergowrie	4	44%
Ballumbie	1	11%
Centre Dundee	1	11%
Claverhouse, Strathmartine	1	11%
Lochee	1	11%
Dundee	1	11%

10.9.2 Table 65 indicates that, of those interviewed, the greatest proportion of passengers started their journey in Invergowrie. Other notable areas were in and around Dundee itself.

10.9.3 Figure 84 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 84. Origin of Trips Made to Invergowrie Station

10.10 Mode: Methods of Transport from Origin to Station (Q8)

10.10.1 Figure 85 illustrates the methods of transport passengers used to get to Invergowrie station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Invergowrie Rail Use Surveys - March/April 2018 -
Mode Split for Travel to Station

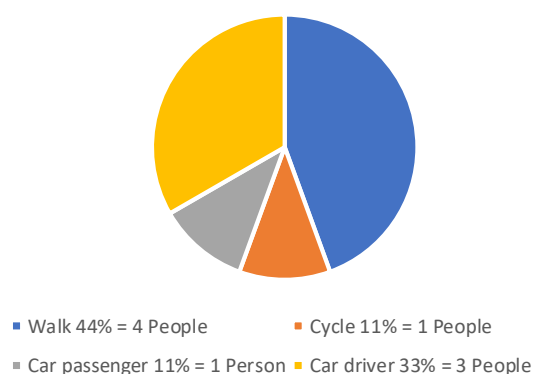


Figure 85. Mode Split of Passengers Travelling to Invergowrie Station

10.10.2 Figure 85 confirms that the greatest proportion of interviewed passengers walked to the railway station (44%). 3 people arrived by driving themselves (33%), with another 1 cyclist and 1 car passenger.

10.11 Parking Location (Q8a)

10.11.1 Figure 86 shows the parking location used for passengers travelling from Invergowrie station.

Invergowrie Rail Use Surveys - March/April 2018 -
Parking Location

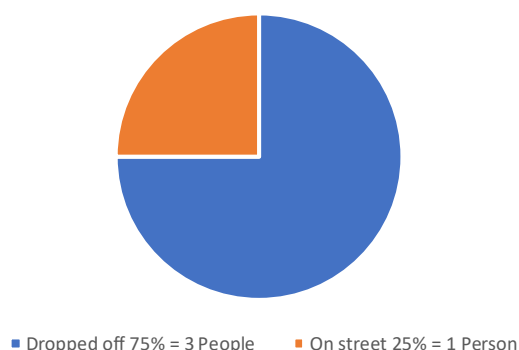


Figure 86. Parking Location

10.11.2 Figure 86 shows that 3 people were dropped off (75%) and the one other person who answered parked on the street.

10.12 Reason for Parking Location (Q8b)

10.12.1 Figure 87 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged for each individual survey participant.

Invergowrie Rail Use Surveys - March/April 2018 - Reason for Parking Location

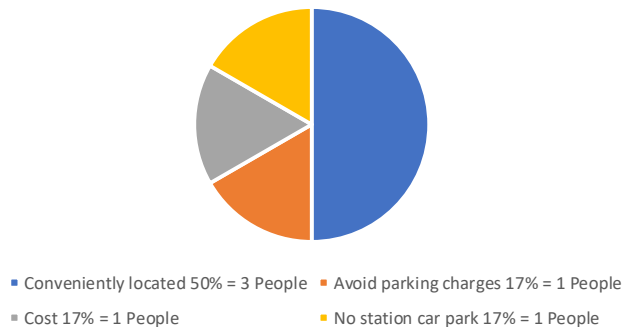


Figure 87. Reason for Parking Location

10.12.2 Figure 87 shows that there was 3 unique entries in the survey noting that they made their parking decision due to it being conveniently located (50%). Also, there were an equal number of responses for avoiding parking charges, the cost, and there not being a station car park.

10.13 Reason for Travelling from Invergowrie Station (Q9)

10.13.1 Figure 88 shows the breakdown of the reasons considered by passengers in deciding to travel from Invergowrie railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Invergowrie Use Surveys - March/April 2018 - Reason for Station Choice

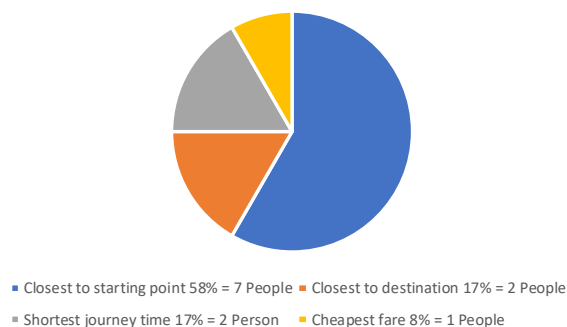


Figure 88. Reason for Station Selection

10.13.2 Figure 88 indicates that the majority of people surveyed said that they chose this station because it was closest to their starting point (58%). Alternatively, 2 people said that they chose to travel from this station because it was closest to their destination (17%). Another 2 said that it was the shortest journey time (17%).

10.14 End of Journey (Q10)

10.14.1 Table 66 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 66. Final Destination of Trips made from Invergowrie Station

Area	No. of Passengers	Percentage
Dundee	5	63%
Perth	3	38%

10.14.2 Table 66 indicates that, of those interviewed, the greatest proportion of passengers (63%) reported to end their journey in Dundee. The other 38% of respondents said they would end in Perth.

10.15 Journey Destination (Q11)

10.15.1 Figure 89 shows where passengers are looking to get to via Invergowrie station.

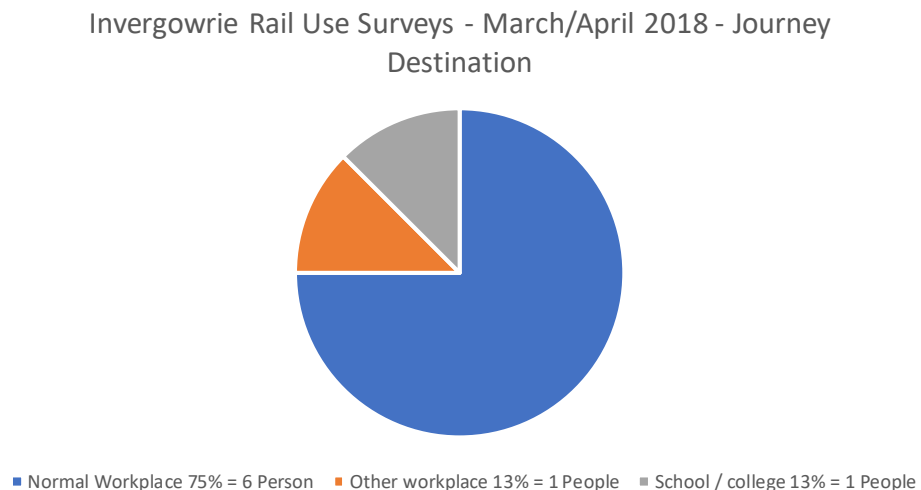


Figure 89. Journey Destination of Passengers

10.15.2 Figure 89 shows that 6 people were travelling to their normal workplace (75%). 1 person was going to some other place of work. The last person was attending school or college.

10.16 Mode: Journey from Station to Onward Destination (Q12)

10.16.1 Figure 90 demonstrates the method of transport used to travel from Invergowrie station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Invergowrie Rail Use Surveys - March/April 2018 - Mode from Station to Destination

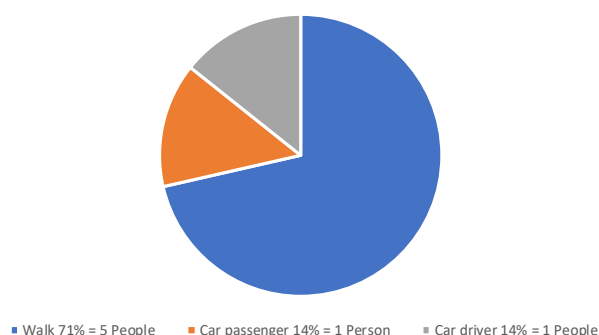


Figure 90. Mode of Transport from Station to Onward Destination

10.16.2 Figure 90 shows that over half (71%) would be walking for a considerable part of their journey from the station to reach their final destination point. The rest would be arriving by car.

10.17 Journey Frequency (Q13)

10.17.1 Table 67 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 67. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	6	1	0	0	1	0
Overall Proportion	75%	13%	0%	0%	13%	0%

10.17.2 Table 67 shows that 6 of those surveyed travel from this station frequently, 5 times or more each week (75%).

10.18 Ticket Type (Q14)

10.18.1 Figure 91 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Invergowrie Rail Use Surveys - March/April 2018 - Ticket Type

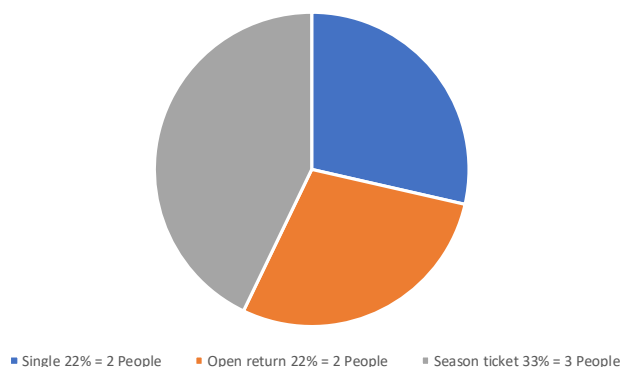


Figure 91. Ticket Type

10.18.2 Figure 91 demonstrates that surveyed passengers were predominantly travelling on season tickets (33%). A further 31% were travelling on an open return ticket (8 people), followed by 5 people travelling on an off-peak ticket (20%).

10.18.3 The breakdown of those travelling on a seasonal ticket is as follows:

- 1 person cited travelling on a weekly ticket
- 1 person cited travelling on a monthly ticket.

10.18.4 The split of passengers travelling on standard class as opposed to business or first class is as follows (Q14a):

- 1 person (20%) was travelling on business/first class
- 4 people (80%) were in standard class.

10.19 Number of Vehicles Available to Household (Q15)

10.19.1 Table 68 shows the number of vehicles that the passenger either owns or has available to them.

Table 68. Number of Vehicles Available to Household

	Number of Vehicles			
	0	1	2	3
Number of Passengers Surveyed	2	4	1	0
Overall Proportion	29%	57%	14%	0%

10.19.2 Table 68 shows 57% of people have access to 1 vehicle. 2 participants don't have access to a vehicle (29%). After that, 1 person have access to one vehicle (14%).

10.20 Number of Adults Within Household (Q16)

10.20.1 Table 69 shows how many adults are living within the surveyed passenger's household.

Table 69. Number of Adults Within Household

	Number of Adults			
	1	2	3	4
Number of Passengers Surveyed	1	3	3	0
Overall Proportion	14%	43%	43%	0%

10.20.2 Table 69 shows that 3 of those surveyed have 2 adults living at their home (43%). Also, 3 responses mentioned having 3 adults within their household (43%). Following that, 14% have 1 adult living in the household.

10.21 Number of Children in Household (Q16)

10.21.1 Table 70 shows the number of children that are living at the surveyed passenger's household.

Table 70. Number of Children in Household

	Number of Children		
	0	1	2
Number of Passengers Surveyed	5	1	1
Overall Proportion	71%	14%	14%

10.21.2 Table 70 confirms that there is a positively skewed distribution amongst the results, and that 5 of those surveyed said that they didn't have any children (71%).

11. MONIFIETH RAILWAY STATION

11.1.1 Monifieth Rail Station is located in the centre of the town. It features an unmanned 20 space car park, but does not have dedicated spaces for blue badge holders.

11.1.2 Abellio ScotRail operates train services at Monifieth providing connections to Arbroath to the north and Dundee and Edinburgh to the south. Office of Rail Regulation figures show that a total of 5,830 passengers travelled to and from Monifieth Railway Station during 2016/17.

11.1.3 Table 71 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 71. Train Services Departing Monifieth Station

Destination	Services	
Edinburgh	8:15	18:32
Arbroath	17:57	

Source: Boarding and Alighting Information, Streetwise, Appendix B

11.2 Survey Sample Rate

11.2.1 Over the survey period, 9 passengers were observed boarding train services. Of the 9 boarding passengers, 7 were interviewed, giving an effective sample rate of 78% as shown in Table 72

Table 72. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Monifieth	3	9	7	78%

11.3 Passenger Demographics (Q1)

11.3.1 In terms of passenger demographics, a 33.3%/66.7% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Monifieth. The majority of passengers were aged between 16 and 60, with 0% aged over 60. A full breakdown of passenger age ranges is shown in Table 73.

Table 73. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	0	0	0	1	3	0
Overall Proportion	0%	0%	0%	25%	75%	0%

11.4 Train Departures (Q2)

11.4.1 Figure 92 summarises the specified departure time of the outward leg of the journey given by respondents.

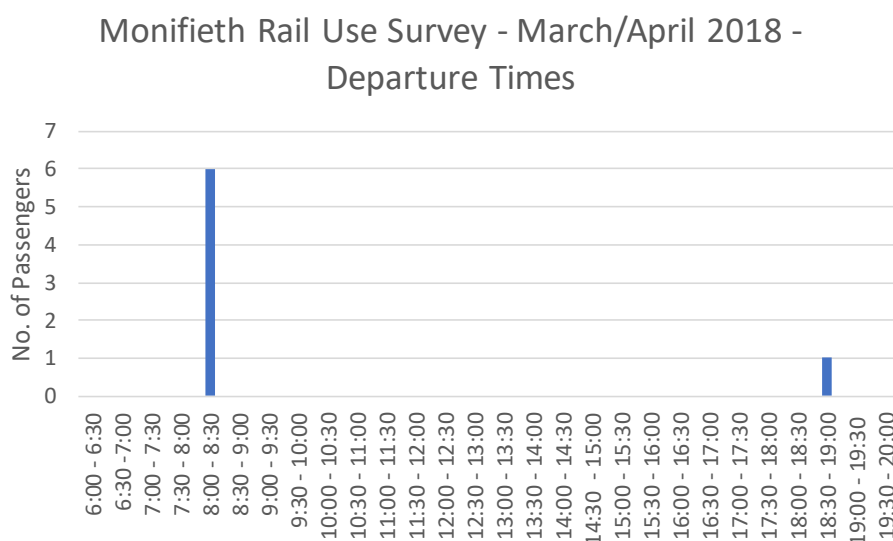


Figure 92. Time of Departure (Outward Leg)

11.4.2 Figure 92 suggests that 6 passengers were departing from Monifieth station between 08:00 – 08:30. 1 other passenger was departing at the end of the survey period.

11.5 Destination Station (Q3)

11.5.1 Table 74 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 74. Destination Station

Place	No. of Passengers	Percentage
EDINBURGH	2	50%
DUNDEE	1	25%
JORDANHILL	1	25%

11.5.2 Table 74 shows that equal counts for passengers travelling to Dundee and Jordanhill, however there were 2 passengers going to Edinburgh stations.

11.6 Journey Type (Q4)

11.6.1 Figure 93 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Monifieth Rail Use Survey - March/April 2018 -
Journey Type

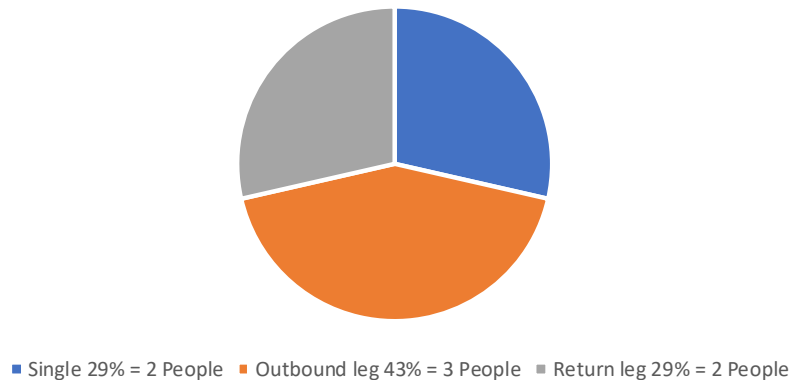


Figure 93. Journey Leg

11.6.2 Figure 93 shows that 3 passengers interviewed (43%) were on the outbound leg of their trip. Followed by 2 people reporting to being on the return leg of their journey (29%). With another 2 people taking a single trip (29%).

11.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows:

- 6 people (100%) were commencing the other leg of their journey on the same day

11.6.4 Figure 94 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Monifieth Rail Use Survey - March/April 2018 - Other Journey Leg Time

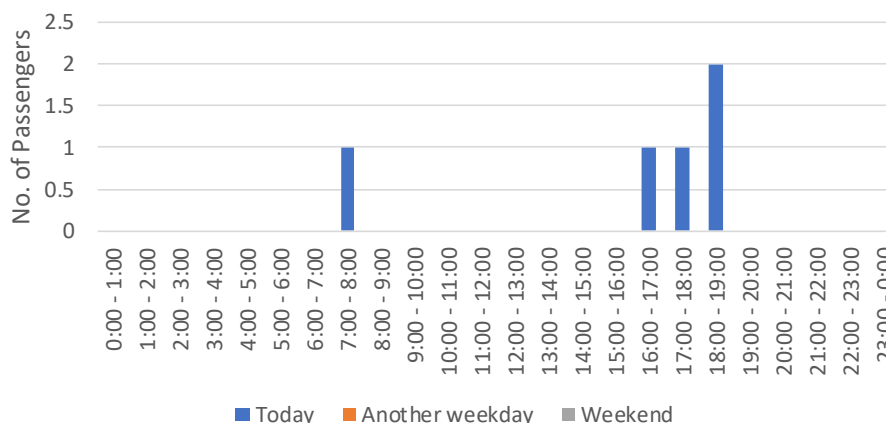


Figure 94. Time of Other Leg

11.6.5 Figure 94 suggests that most passengers there were surveyed at Monifieth said they had the other leg of their journey between 16:00 and 19:00. All responses from this station said they were travelling on the same day.

11.7 Journey Reason (Q5)

11.7.1 Figure 95 shows the reason for making this particular journey from Monifieth railway station.

Monifieth Rail Use Survey - March/April 2018 - Journey Reason

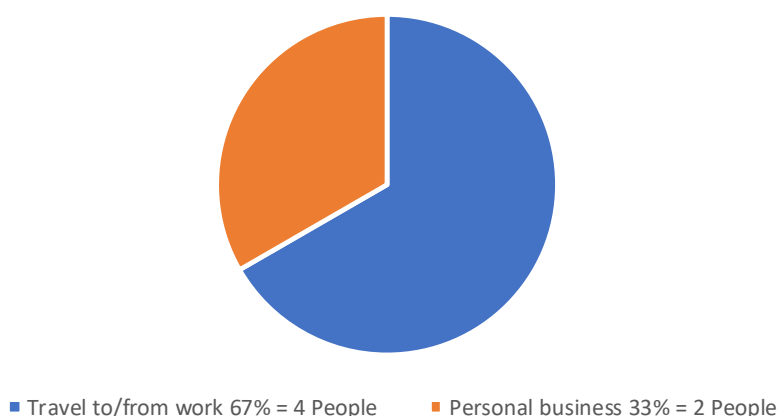


Figure 95. Reason for Making this Journey

11.7.2 Figure 95 shows that 4 people were travelling to or from work (67%). There were 2 passengers travelling due to personal business (33%).

11.8 Journey Origin (Q6)

11.8.1 Figure 96 summarises how passengers categorised where their journey originated when surveyed travelling from Monifieth railway station.

Monifieth Rail Use Survey - March/April 2018 - Journey Origin

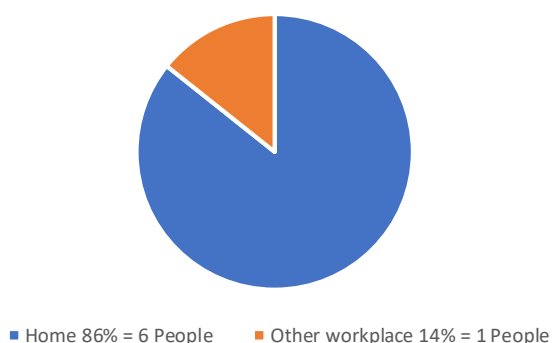


Figure 96. Passenger Origin

11.8.2 Figure 96 shows that 6 of the people interviewed were coming from their home (86%). The other 14% were coming from an atypical workplace.

11.9 Start of Journey (Q7)

11.9.1 Table 75 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 75. Origin of Trips made to Monifieth Station

Location	No. of Passengers	%age
Monifieth	4	67%
Broughty Ferry	1	17%
Glasgow	1	17%

11.9.2 Table 75 indicates that, of the responses, 4 people said that they were starting their journey in Monifieth. 1 passenger started their journey from Broughty Ferry.

11.9.3 Figure 97 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 97. Origin of Trips Made to Monifieth Station

11.10 Mode: Methods of Transport from Origin to Station (Q8)

11.10.1 Figure 98 illustrates the methods of transport passengers used to get to Monifieth station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Monifieth Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

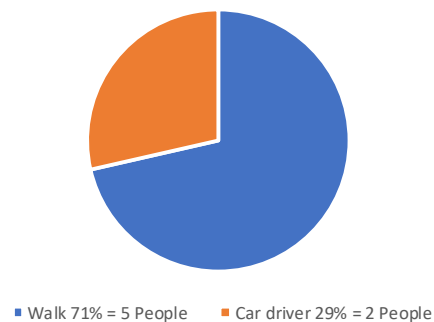


Figure 98. Mode Split of Passengers Travelling to Monifieth Station

11.10.2 Figure 98 confirms that the greatest proportion of interviewed passengers walked to the railway station (71%). 3 people arrived by driving themselves (29%).

11.11 Parking Location (Q8a)

11.11.1 Figure 99 shows the parking location used for passengers travelling from Monifieth station.

Monifieth Rail Use Surveys - March/April 2018 - Parking Location

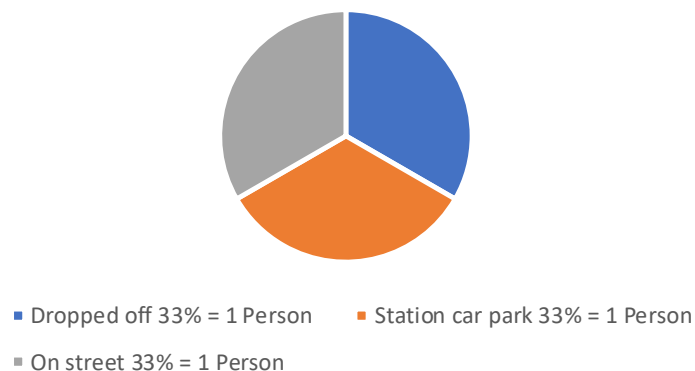


Figure 99. Parking Location

11.11.2 Figure 99 shows an equal number of responses for being dropped off at the station, parking at the station, and parking on the street.

11.12 Reason for Parking Location (Q8b)

11.12.1 Figure 100 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged for each individual survey participant.

Monifieth Rail Use Surveys - March/April 2018 -
Reason for Parking Location



Figure 100. Reasoning for Parking Location

11.12.2 Figure 100 shows that there was 2 unique entries in the survey noting that they made their parking decision due to it being conveniently located (100%). The same 2 interviewees did not choose any other additional reasons for their parking location.

11.13 Reason for Travelling from Monifieth Station (Q9)

11.13.1 Figure 101 shows the breakdown of the reasons considered by passengers in deciding to travel from Monifieth railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected for each individual participant.

Monifieth Rail Use Surveys - March/April 2018 -
Reason for Station Choice

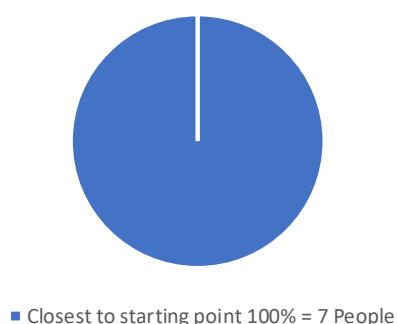


Figure 101. Reason for Station Selection

11.13.2 Figure 101 indicates that 7 the of people surveyed said that they chose this station because it was closest to their starting point (100%). All 7 interviewees did not choose any other additional reasons.

11.14 End of Journey (Q10)

11.14.1 Table 76 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 76. Final Destination of Trips made from Monifieth Station

Area	No. of Passengers	Percentage
Dundee	5	71%
Edinburgh	1	14%
Glasgow	1	14%

11.14.2 Table 76 indicates that, of those interviewed, the greatest proportion of passengers (71%) reported to finish their journey in Dundee.

11.15 Journey Destination (Q11)

11.15.1 Figure 102 shows where passengers are looking to get to via Monifieth station.

Monifieth Rail Use Surveys - March/April 2018 -
Journey Destination

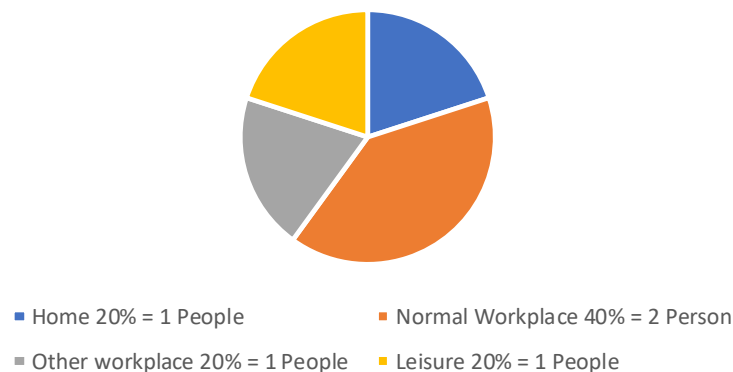


Figure 102. Journey Destinations of Passengers

11.15.2 Figure 102 shows that 2 people were travelling to their normal workplace (40%). There was an equal number of responses for passengers travelling home, to another workplace, and for a leisure activity.

11.16 Mode: Journey from Station to Onward Destination (Q12)

11.16.1 Figure 103 demonstrates the method of transport used to travel from Invergowrie station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Monifieth Rail Use Surveys - March/April 2018 - Mode
from Station to Destination

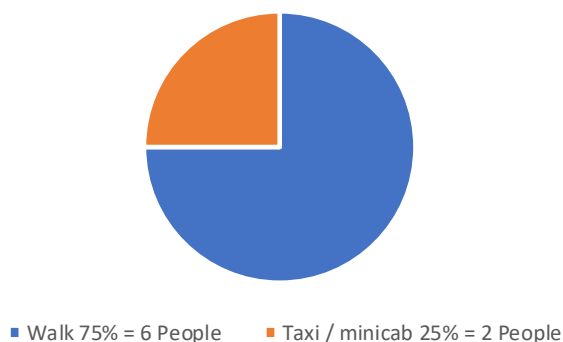


Figure 103. Mode of Transport from Station to Onward Destination

11.16.2 Figure 103 shows that over half (75%) would be walking for a considerable part of their journey from the station to reach their final destination point. Another 2 responses said to be getting a taxi to reach their destination.

11.17 Journey Frequency (Q13)

11.17.1 Table 77 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 77. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	1	0	2	1	2	1
Overall Proportion	14%	0%	29%	14%	29%	14%

11.17.2 Table 77 shows that 2 passengers travelled a couple of times each week. Additionally, another 2 passengers said they travel infrequently, more than once each year.

11.18 Ticket Type (Q14)

11.18.1 Figure 104 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Monifieth Rail Use Surveys - March/April 2018 -
Ticket Type

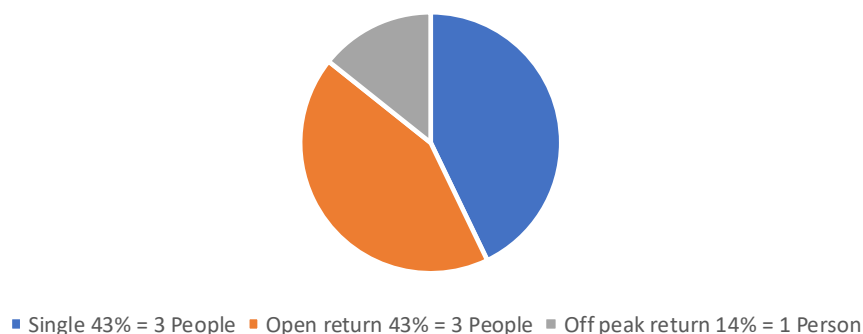


Figure 104. Ticket Type

11.18.2 Figure 104 demonstrates that 3 passengers were travelling on an open return ticket (43%). Another 3 passengers were travelling on a single ticket (43%).

11.18.3 The split of passengers travelling on standard class as opposed to business or first class is as follows (Q14a):

- 1 person (17%) were travelling on business/first class
- 5 people (83%) were in standard class.

11.19 Number of Vehicles Available to Household (Q15)

11.19.1 Table 78 shows the number of vehicles that the passenger either owns or has available to them.

Table 78. Number of Vehicles Available to Household

	Number of Vehicles			
	0	1	2	3
Number of Passengers Surveyed	0	5	2	0
Overall Proportion	0%	71%	29%	0%

11.19.2 Table 78 confirms that 71% of people have access to one vehicle. 2 participants have access to two vehicles (29%).

11.20 Number of Adults Within Household (Q16)

11.20.1 Table 79 shows how many adults are living within the surveyed passenger's household.

Table 79. Number of Adults Within Household

	Number of Adults			
	1	2	3	4
Number of Passengers Surveyed	1	4	0	2
Overall Proportion	14%	57%	0%	29%

11.20.2 Table 79 shows that 4 of those surveyed have 2 adults living at their home (57%). Also, 2 responses mentioned having 4 adults within their household (29%). The next largest proportion was those with 1 adult living in the household (14%).

11.21 Number of Children (Q16)

11.21.1 Table 80 shows the number of children that are living at the surveyed passenger's household.

Table 80. Number of Children Within Household

	Number of Children		
	0	1	2
Number of Passengers Surveyed	4	3	0
Overall Proportion	57%	43%	0%

11.21.2 Table 80 confirms that of those surveyed, 4 said that they didn't have any children (57%). The next largest proportion is of those passengers with 1 child within their household (43%).

12. MONTROSE RAILWAY STATION

- 12.1.1 Montrose Rail Station is located in the centre of town. It features an unmanned, 50 space car park including spaces for blue badge holders.
- 12.1.2 Abellio ScotRail operates train services at Montrose providing connections to Aberdeen to the north and Dundee, Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of around 354,000 passengers travelled to and from Montrose Railway Station during 2016/17.
- 12.1.3 Table 81 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 81. Train Services Departing Montrose Station

Destination	Services							
Glasgow	6:14	7:15	8:17	9:18	10:17	11:15	12:15	13:22
	15:15	16:12	17:08	18:23				
Edinburgh	6:26	7:48	9:46	11:46	13:48	14:18	17:50	
Inverness	6:26	16:38						
Aberdeen	6:49	7:16	7:26	9:38	10:42	11:07	11:44	12:18
	12:35	13:34	14:33	15:42	16:24	17:35		
Dyce	7:57							
London	8:34	10:34	15:34					
Truro	9:00							
Inverurie	7:04	9:14	14:10	17:11	18:12			

Source: Boarding and Alighting Information, Streetwise, Appendix B

12.2 Survey Sample Rate

- 12.2.1 Over the survey period, 472 passengers were observed boarding train services. Of the 472 boarding passengers, 195 were interviewed, giving an effective sample rate of 41% as shown in Table 82.

Table 82. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Montrose	361	472	195	41%

12.3 Passenger Demographics (Q1)

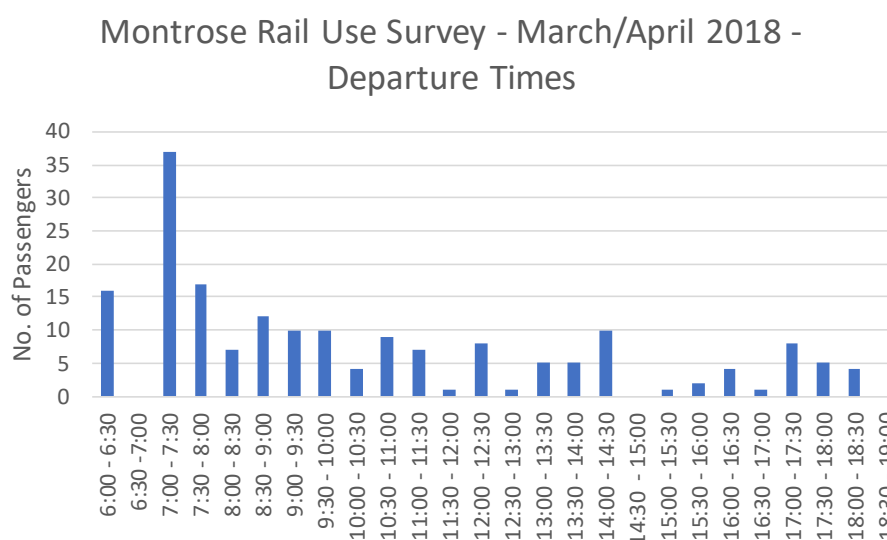
- 12.3.1 In terms of passenger demographics, a 48.6%/51.4% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Montrose. The majority of passengers were aged between 16 and 60, with 12% aged over 60. A full breakdown of passenger age ranges is show in Table 83.

Table 83. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	1	29	28	39	58	21
Overall Proportion	1%	16%	16%	22%	33%	12%

12.4 Train Departures (Q2)

12.4.1 Figure 105 summarises the specified departure time of the outward leg of the journey given by respondents.


Figure 105. Time of Departure (Outward Leg)

12.4.2 Figure 105 suggests that the time period between 07:00 – 07:30 was the busiest time at the station, showing 37 people departing at this time. The graph then declines and the number of people departing remains steady throughout the day.

12.5 Destination Station (Q3)

12.5.1 Table 84 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 84. Destination Station

Place	No. of Passengers	Percentage
ABERDEEN	54	31%
DUNDEE	38	22%
EDINBURGH	19	11%
GLASGOW	15	9%
DYCE	8	5%
ARBROATH	7	4%
PERTH	6	3%
MONTROSE	3	2%
BROUGHTY FERRY	2	1%
CARNOUSTIE	2	1%
INVERNESS	2	1%
INVERURIE	2	1%
LAURENCEKIRK	2	1%
LIVERPOOL	2	1%
LONDON	2	1%
MILTON KEYNES	2	1%
NEWCASTLE	2	1%
YORK	2	1%
LANGSIDE	1	1%
MARKINCH	1	1%
PARTICK	1	1%
PRESTON	1	1%
STONEHAVEN	1	1%

12.5.2 Table 84 confirms, of those interviewed, the greatest proportion were travelling northbound to Aberdeen (31%). 38 passengers were travelling southbound to Dundee (22%). 19 people were travelling to Edinburgh stations (11%).

12.6 Journey Type (Q4)

12.6.1 Figure 106 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Montrose Rail Use Survey - March/April 2018 -
Journey Type

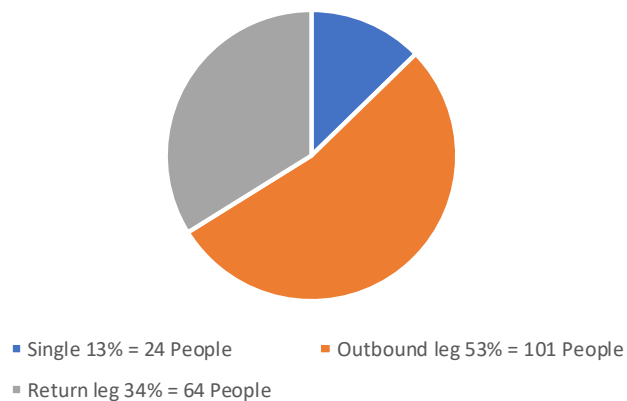


Figure 106. Journey Leg

12.6.2 Figure 106 shows that 101 passengers interviewed (53%) were on the outbound leg of their trip. Next, 64 people reported to being on the return leg of their journey (34%). The final 13% were just on a one-way journey.

12.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows (Q4a):

- 6 people (100%) were commencing the other leg of their journey on the same day
- 30 people (20%) were commencing the other leg of their journey on another weekday
- 3 people (2%) were commencing the other leg of their journey on a weekend

12.6.4 Figure 107 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Montrose Rail Use Survey - March/April 2018 - Other Journey Leg Time

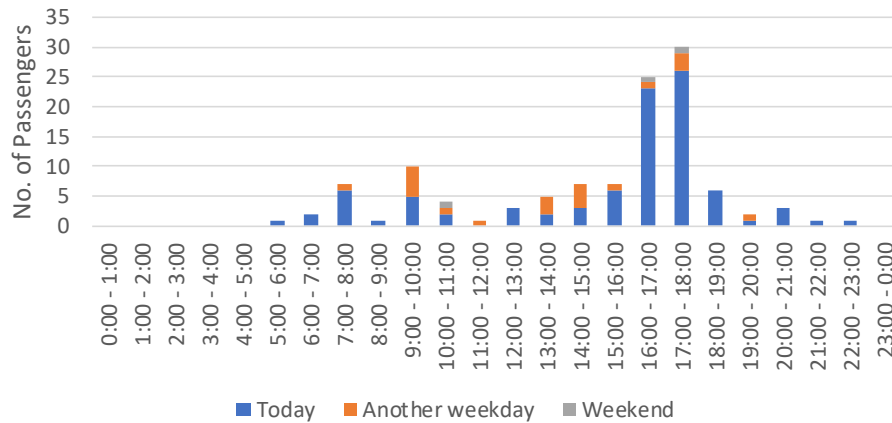


Figure 107. Time of Other Leg

12.6.5 Figure 107 suggests that between 17:00 and 18:00 was the busiest time of day for the other leg of passenger's journeys. At this time of day: 26 people would be travelling on the same day, 3 people would be travelling on another weekday, and one person would be travelling at the weekend.

12.7 Journey Reason (Q5)

12.7.1 Figure 108 shows the reason for making this particular journey from Montrose railway station.

Montrose Rail Use Survey - March/April 2018 - Journey Reason

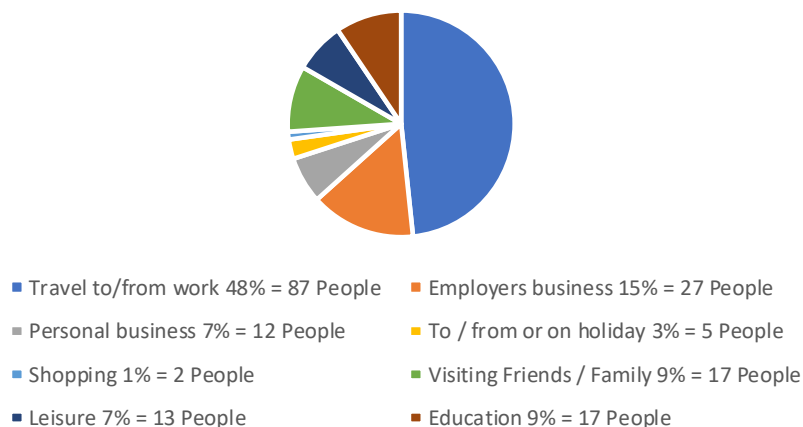


Figure 108. Reason for Making This Journey

12.7.2 Figure 108 shows that 87 people were travelling to or from work (48%). There were 27 passengers travelling due to personal business (15%). 17 passengers were travelling from this station so that they could attend school or college (9%).

12.8 Journey Origin (Q6)

12.8.1 Figure 109 summarises how passengers categorised where their journey originated when surveyed at Montrose railway station.

Montrose Rail Use Survey - March/April 2018 - Journey Origin

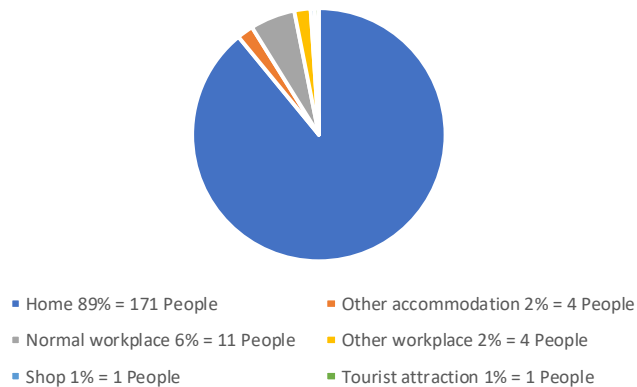


Figure 109. Passenger Origin

12.8.2 Figure 109 shows that the majority of those interviewed, 171 people, were coming from their home (89%). 11 people were travelling from their normal workplace (6%).

12.9 Start of Journey (Q7)

12.9.1 Table 85 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 85. Origin of Trips made to Montrose Station

Location	No. of Passengers	%age
Montrose	88	52%
Brechin, Menmuir, Careston, Arrat	20	12%
Dun, Tayock, Muirton of Ballochy, Kirkhill	10	6%
Hillside, Cairgo	6	4%
Laurencekirk, Luthermuir	6	4%
St Cyrus	5	3%
Aberdeen	4	2%
Dundee	4	2%
Ferryden, Fishtown of Usan	4	2%
Arbroath	2	1%
Edinburgh	2	1%
Inverkeilor	2	1%
Johnshaven	2	1%
Kirkton of Craig	2	1%
Arbuthnott, Fordoun	1	1%
Dubton	1	1%
Dyklands, Marykirk	1	1%
Forfar, Kingsmuir, Reswallie, Auchterforfar	1	1%
Glasgow	1	1%
Glenrothes	1	1%
Gourdon	1	1%
Inverbervie	1	1%
Kingennie	1	1%
Marykirk	1	1%
Monifieth	1	1%
Stonehaven	1	1%

- 12.9.2 Table 85 indicates that, of those interviewed, the greatest proportion of passengers (52%) reported starting their journey in the Montrose area. The next most popular starting point was Brechin (around 12%).
- 12.9.3 Figure 110 illustrates the origin of journeys made to the station on the day or survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 110. Origin of Trips Made to Montrose Station

12.10 Mode: Methods of Transport from Origin to Station (Q8)

12.10.1 Figure 111 illustrates the methods of transport passengers used to get to Montrose station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Montrose Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

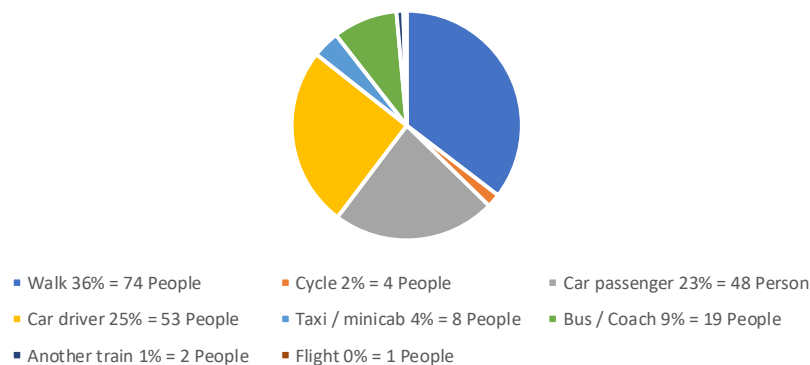


Figure 111. Mode Split of Passengers Travelling to Montrose Station

12.10.2 Figure 111 confirms that the greatest proportion of interviewed passengers walked to the railway station (36%). 53 people reported to arriving at the station by driving themselves (25%). Another 48 people arrived as a car passenger (23%).

12.11 Parking Location (Q8a)

12.11.1 Figure 112 shows the parking location used for passengers travelling from Montrose station.

Montrose Rail Use Surveys - March/April 2018 - Car Park Location

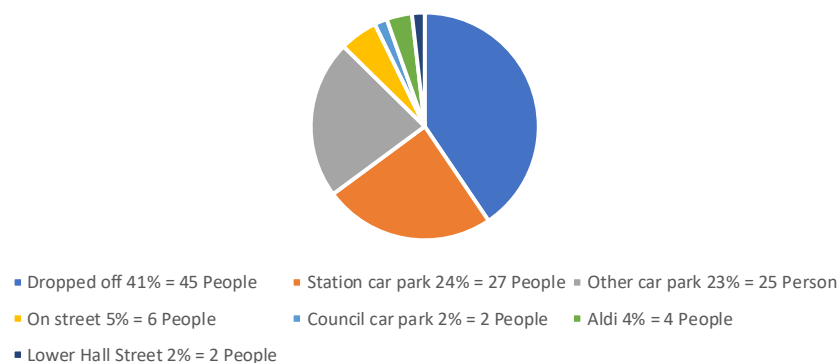


Figure 112. Parking Location

12.11.2 Figure 112 shows that 45 passengers chose to get dropped off (41%). 27 people made use of the station car park (24%). Another 25 passengers parked at another car park (23%).

12.12 Reason for Parking Location (8b)

12.12.1 Figure 113 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged by individual survey participants.

Montrose Rail Use Surveys - March/April 2018 - Reason for Parking Location

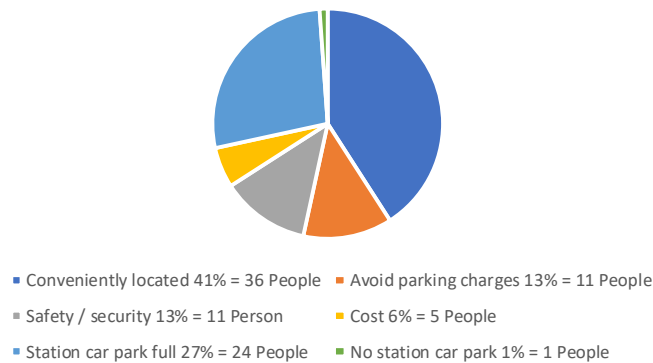


Figure 113. Reasoning for Parking Location

12.12.2 Figure 113 shows that there was 36 unique entries in the survey noting that they made their parking decision due to it being conveniently located (41%). 24 passengers took into account that the station car park was full when making their decision (27%).

12.13 Reason for Travelling from Montrose Station (Q9)

12.13.1 Figure 114 shows the breakdown of the reasons considered by passengers in deciding to travel from Montrose railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected by individual participants.

Montrose Rail Use Surveys - March/April 2018 - Reason for Station Choice

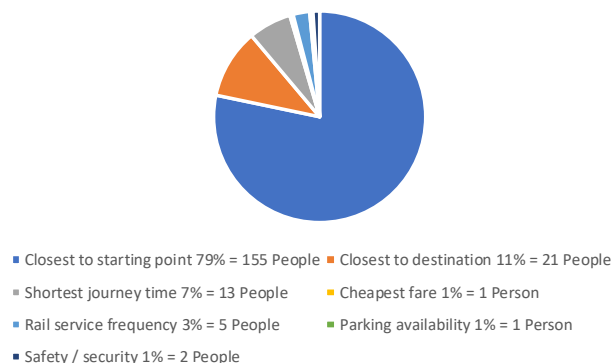


Figure 114. Reason for Station Selection

12.13.2 Figure 114 indicates that 155 the of people surveyed said that they chose this station because it was closest to their starting point (79%). Alternatively, 21 people chose to travel from this station because it was closest to their destination (11%).

12.14 End of Journey (Q10)

12.14.1 Table 86 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 86. Final Destination of Trips made from Montrose Station

Area	No. of Passengers	Percentage
Aberdeen	50	33%
Dundee	24	16%
Montrose	14	9%
Glasgow	14	9%
Edinburgh	10	7%
Arbroath	9	6%
Perth	7	5%
Dyce	4	3%
Brechin	2	1%
Laurncekirk	2	1%
Inverurie	2	1%
York	2	1%
Bristol	1	1%
Birmingham	1	1%
Broughty Ferry	1	1%
Stonehaven	1	1%
Carnoustie	1	1%
Newport-on-Tay	1	1%
Loughborough	1	1%
Milton Keynes	1	1%
Jordanhill	1	1%
Newcastle	1	1%
Stonhaven	1	1%
Glenrothes	1	1%
Lincoln	1	1%

12.14.2 Table 86 indicates that, of those interviewed, the greatest proportion of passengers (33%) reported to end their trip in Aberdeen. 24 responses said they finished their trip in Dundee (16%).

12.15 Journey Destination (Q11)

12.15.1 Figure 115 shows where passengers are looking to get to via Montrose station.

Montrose Rail Use Surveys - March/April 2018 - Journey Destination

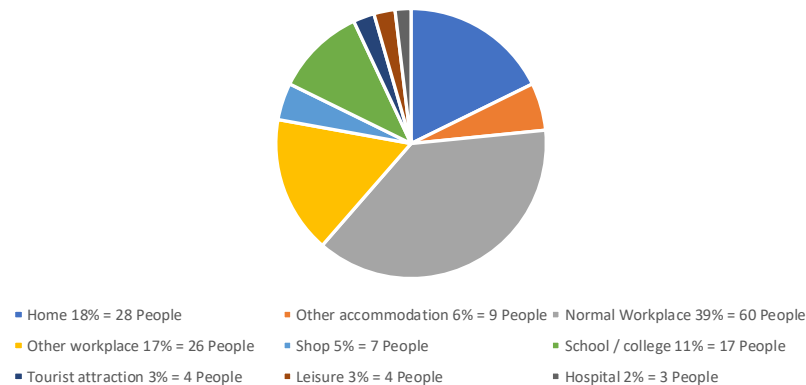


Figure 115. Journey Destinations of Passengers

12.15.2 Figure 115 shows that largest proportion, 60 people, were travelling to their normal workplace (39%). 28 passengers were travelling home via this station (18%). Another 26 passengers were travelling to an alternative workplace (17%).

12.16 Mode: Journey from Station to Onward Destination (Q12)

12.16.1 Figure 116 demonstrates the method of transport used to travel from Montrose station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Montrose Rail Use Surveys - March/April 2018 - Mode from Station to Destination

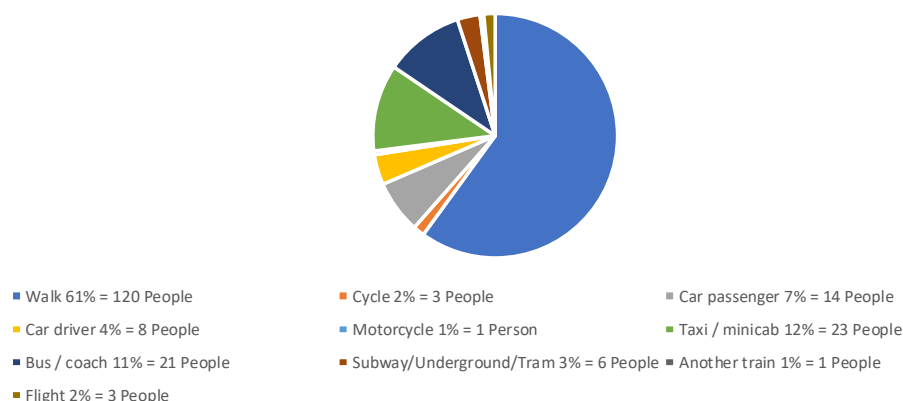


Figure 116. Mode of Transport from Station to Onward Destination

12.16.2 Figure 116 shows that over half (61%) would be walking for a considerable part of their journey from the station to reach their final destination point. Another 23 people would be using a taxi service to reach their destination (12%). 21 would be making use of a bus service (11%).

12.17 Journey Frequency (Q13)

12.17.1 Table 87 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 87. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	49	25	11	26	42	27
Overall Proportion	27%	14%	6%	14%	23%	15%

12.17.2 Table 87 shows that 49 passengers travelled from this station very frequently (27%). 42 passengers travelled from this station fairly infrequently, more than once each year (23%).

12.18 Ticket Type (Q14)

12.18.1 Figure 117 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Montrose Rail Use Surveys - March/April 2018 - Ticket Type

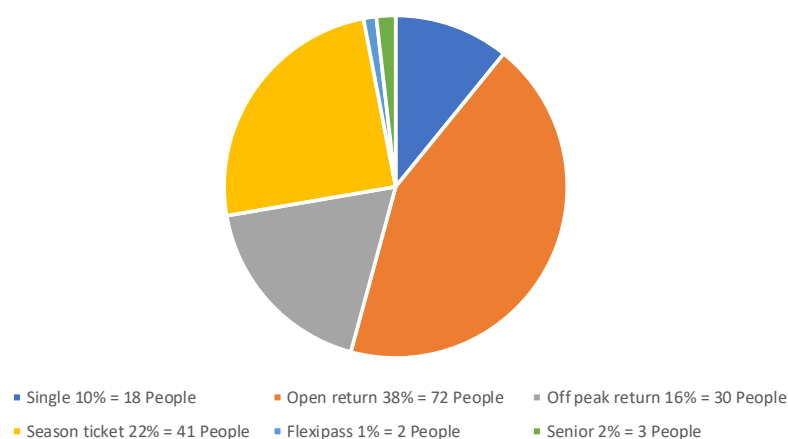


Figure 117. Ticket Type

12.18.2 Figure 117 demonstrates that 72 passengers were travelling on an open return ticket (38%). Another 41 passengers were travelling on a season ticket (22%).

12.18.3 The breakdown of those travelling on seasonal ticket types is as follows:

- 9 people cited that they were travelling on a weekly pass
- 14 people cited that they were travelling on a monthly pass
- 2 people cited that they were travelling on a yearly pass.

12.18.4 The split of passengers travelling on standard class as opposed to business or first class is as follows (Q14a):

- 6 people (5%) were travelling in business/first class
- 125 people (95%) were in standard class.

12.19 Number of Vehicles Available to Household (Q15)

12.19.1 Table 88 shows the number of vehicles that the passenger either owns or has available to them.

Table 88. Number of Vehicles Available to Household

	Number of Vehicles						
	0	1	2	3	4	5	6
Passengers Surveyed	26	57	65	15	1	1	1
Overall Proportion	16%	34%	39%	9%	1%	1%	1%

12.19.2 Table 88 confirms that 39% of people have access to 2 vehicles. 57 participants have access to just 1 vehicles (34%). 26 participants don't have access to a vehicle (16%).

12.20 Number of Adults Within Household (Q16)

12.20.1 Table 89 shows how many adults are living within the surveyed passenger's household.

Table 89. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Passengers Surveyed	32	96	25	9	5
Overall Proportion	19%	57%	15%	5%	3%

12.20.2 Table 89 shows that 96 of those surveyed have 2 adults living at their home (57%). Also, 32 responses mentioned having 1 adult within their household (19%). The next largest proportion was those with 3 adults living in the household (25%).

12.21 Number of Children Within Household (Q16)

12.21.1 Table 90 shows the number of children that are living at the surveyed passenger's household.

Table 90. Number of Children Within Household

	Number of Children				
	0	1	2	3	4
Passengers Surveyed	130	16	15	3	1
Overall Proportion	79%	10%	9%	2%	1%

12.21.2 Table 90 confirms that of those surveyed, 130 said that they didn't have any children (79%). The next largest proportion is of those passengers with 1 child within their household (16%).

13. PERTH RAILWAY STATION

- 13.1.1 Perth Rail Station is located to the southwest of the city centre. It features two, unmanned, car parks: one at the main entrance (accessed from Leonard Street), and another at the back of the station (accessed from Glasgow Road). There is a total of 60 spaces, including depicted spaces for blue badge holders and electric car charging points.
- 13.1.2 Abellio ScotRail operates train services at Perth providing connections to Aberdeen and Inverness to the north and Edinburgh, Glasgow and beyond to the south. Office of Rail Regulation figures show that a total of around 121,000 passengers travelled to and from Perth Railway Station during 2016/17.
- 13.1.3 Table 91 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 91. Train Services Departing Perth Station

Destination	Services							
Aberdeen	6:00	7:01	8:44	9:42	10:40	11:47	12:38	13:43
	14:41	15:40	16:37	17:41	18:55			
Inverness	6:06	8:11	9:50	11:26	11:55	13:14	14:52	16:16
	18:02							
Edinburgh	6:13	6:39	6:56	8:00	8:51	10:07	11:01	12:02
	13:01	14:21	15:04	15:59	17:03	18:11		
Glasgow QS	6:19	7:01	7:14	8:18	8:40	9:16	10:15	10:55
	11:16	12:12	12:37	13:15	14:18	15:16	15:37	16:13
	16:54	17:11	18:14					
Dundee	7:46	9:16	10:15					
London Kings Cross	10:04							
Carnoustie	18:28							

Source: Boarding and Alighting Information, Streetwise, Appendix B

13.2 Survey Sample Rate

- 13.2.1 Over the survey period, 1494 passengers were observed boarding train services. Of the 1494 boarding passengers, 521 were interviewed, giving an effective sample rate of 35% as shown in Table 92

Table 92. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Perth	1542	1494	521	35%

13.3 Passenger Demographics (Q1)

- 13.3.1 In terms of passenger demographics, a 46.1%/53.9% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Montrose. The majority of passengers were aged between 16 and 60, with 19% aged over 60. A full breakdown of passenger age ranges is show in Table 93.

Table 93. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	4	75	81	86	137	89
Overall Proportion	1%	16%	17%	18%	29%	19%

13.4 Train Departures (Q2)

13.4.1 Figure 118 summarises the specified departure time of the outward leg of the journey given by respondents.

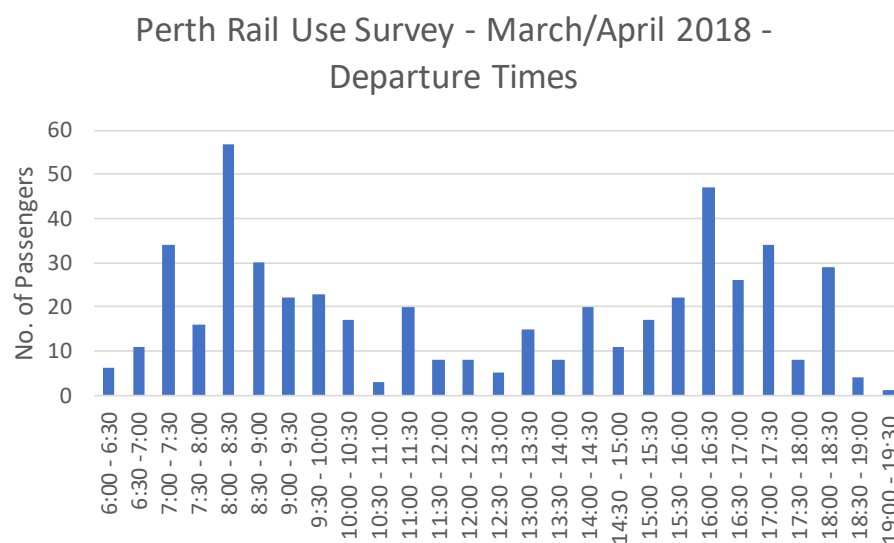


Figure 118. Time of Departure (Outward Leg)

13.4.2 Figure 118 shows two distinct busy half hour sections. The first, 08:00 – 08:30, displays 57 passengers departing at this time. The second, 16:00 – 16:30, displays 47 passengers departing in that half hour.

13.5 Destination Station (Q3)

13.5.1 Table 94 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 94. Destination Station

Place	No. of Passengers	Percentage
GLASGOW	96	21%
EDINBURGH	83	19%
DUNDEE	79	18%
INVERNESS	35	8%
ABERDEEN	22	5%
STIRLING	21	5%
KIRKCALDY	16	4%
PITLOCHRY	11	2%
ARBROATH	8	2%
AVIEMORE	7	2%
DUNKELD & BIRNAM	6	1%
LONDON	6	1%
MARKINCH	5	1%
MONTROSE	5	1%
CARNOUSTIE	4	1%
DUNBLANE	4	1%
PERTH	4	1%
LADYBANK	3	1%
BRIDGE OF ALLAN	2	0%
FALKIRK	2	0%
PAISLEY GILMOUR ST	2	0%
STONEHAVEN	2	0%
WIGAN	2	0%
YORK	2	0%
ALLOA	1	0%
ALNMOUTH	1	0%
BRANCHTON	1	0%
CAMELON	1	0%
CUPAR	1	0%

DINGWALL	1	0%
DUNBAR	1	0%
GLENEAGLES	1	0%
HELENSBURGH	1	0%
INVERKEITHING	1	0%
KYLE OF LOCHALSH	1	0%
LENZIE	1	0%
LEUCHARS	1	0%
MANCHESTER PICADILLY	1	0%
NORTH QUEENSFERRY	1	0%
NOTTINGHAM	1	0%
RADLEY	1	0%
READING	1	0%
SINGER	1	0%
STRATHCARRON	1	0%

13.5.2 Table 94 shows that the largest proportion, 96 passengers, were travelling to Glasgow (21%). Another 83 passengers were travelling to Edinburgh from Perth railway station (19%). 79 passengers, were looking to travel northbound to Dundee station (18%).

13.6 Journey Type (Q4)

13.6.1 Figure 119 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Perth Rail Use Survey - March/April 2018 - Journey Type

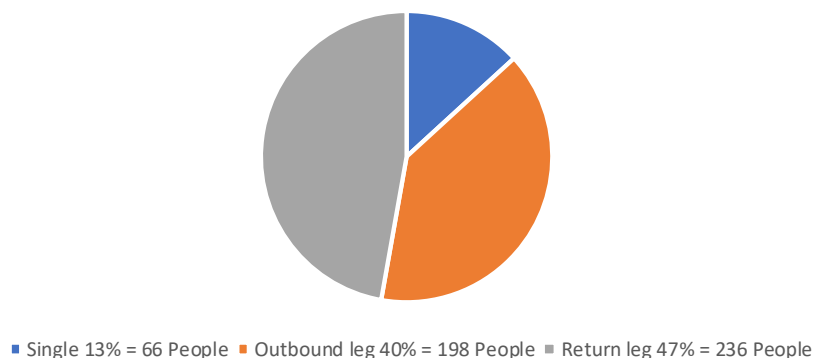


Figure 119. Journey Leg

13.6.2 Figure 119 shows that 236 passengers interviewed (47%) were on the outbound leg of their trip. Next, 198 people reported to being on the outbound leg of their journey (40%). The final 13% were just on a one-way journey.

13.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows (Q4a):

- 359 people (85%) were commencing the other leg of their journey on the same day

- 62 people (15%) were commencing the other leg of their journey on another weekday
- 1 person (<1%) were commencing the other leg of their journey on a weekend

13.6.4 Figure 120 summarises the specified time of the return leg of the journey given by respondents (where applicable).

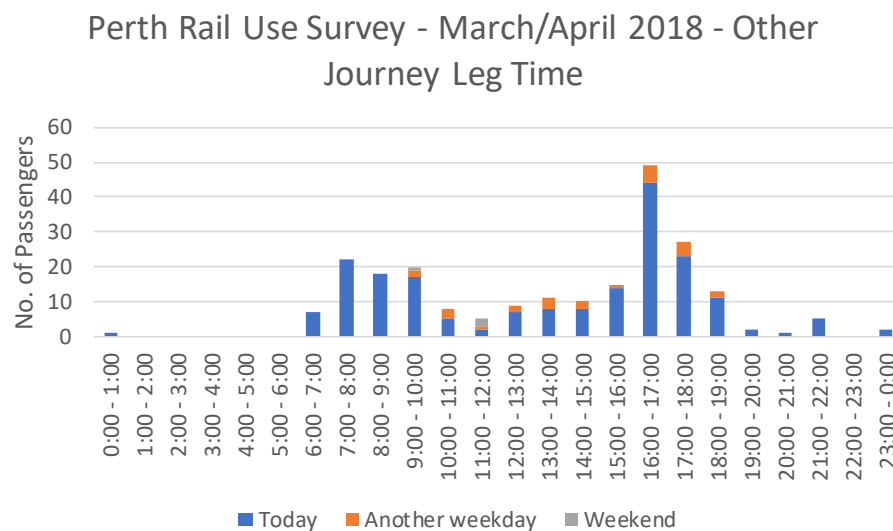


Figure 120. Time of Other Leg

13.6.5 Figure 120 suggests that between 16:00 and 17:00 was the busiest time of day for those making a two-way trip. At this time: 44 people travelled on the same day, and 5 people travelled on another weekday. The second busiest time of day was between 17:00 and 18:00. At this time of day: 23 people travelled on the same day, and 4 people travelled in another weekday.

13.7 Journey Reason (Q5)

13.7.1 Figure 121 shows the reason for making this particular journey from Perth railway station.

Perth Rail Use Survey - March/April 2018 - Journey Reason

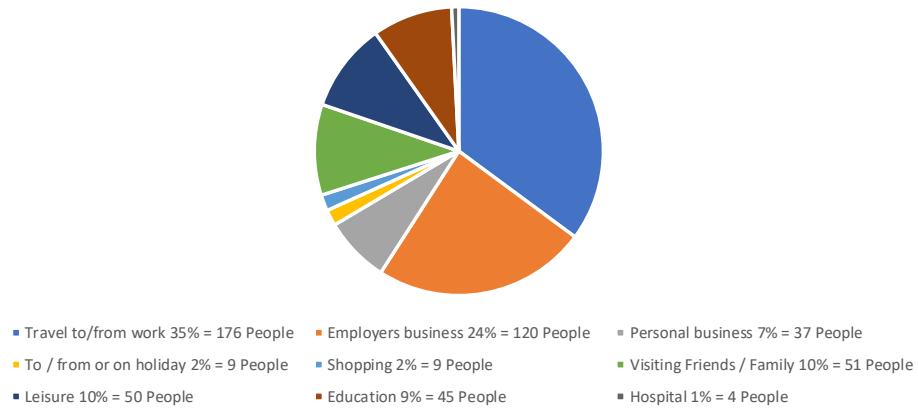


Figure 121. Reason for Making This Journey

13.7.2 Figure 121 shows that 176 people were travelling to or from work (35%). There were 120 passengers travelling due to employer's business (24%). There were 51 and 50 responses for leisure activities and visiting someone respectively (around 10% each).

13.8 Journey Origin (Q6)

13.8.1 Figure 122 summarises how passengers categorised where their journey originated when surveyed at Perth railway station.

Perth Rail Use Survey - March/April 2018 - Journey Origin

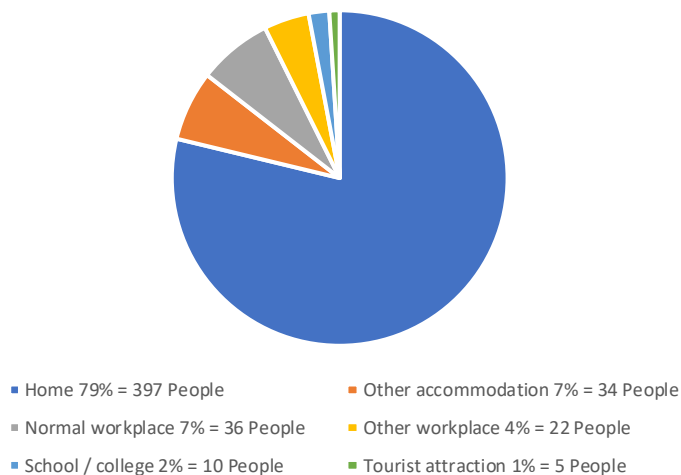


Figure 122. Passenger Origin

13.8.2 Figure 122 shows that the majority of those interviewed, 397 people, were coming from their home (79%). 36 people were travelling from their normal workplace (7%).

13.9 Start of Journey (Q7)

13.9.1 Table 95 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 95. Origin of Trips made to Perth Station

Location	No. of Passengers	%age
Perth	182	40%
Edinburgh	42	9%
Dundee	19	4%
Glasgow	18	4%
Scone	15	3%
Blairgowrie	10	2%
Inverness	10	2%
Pitlochry	9	2%
Stirling	8	2%
Aberdeen	6	1%
Bridge of Earn, Forgandenny	5	1%
Carnoustie	5	1%
Dunkeld	5	1%
Glenfarg	5	1%
Montrose	5	1%
Balbeggie, Kinrossie	4	1%
Dunblane	4	1%
Falkirk	4	1%
Stanley, Murthly	4	1%
Alyth	3	1%
Arbroath	3	1%
Auchterarder	3	1%
Bridge of Allan	3	1%
Cupar	3	1%
Glenrothes	3	1%
Inchture	3	1%
Kinross	3	1%
Kirkcaldy	3	1%
Newburgh	3	1%
Aberfeldy	2	0%
Abernethy	2	0%
Broughty Ferry	2	0%
Craigend	2	0%
Crieff	2	0%
Dunning	2	0%
Leven	2	0%
Monifieth	2	0%

Paisley	2	0%
St Madoes	2	0%
Stonehaven	2	0%
Wick	2	0%
Auchterhouse	1	0%
Aviemore	1	0%
Bankfoot	1	0%
Caputh	1	0%
Carlisle	1	0%
Comrie	1	0%
Coupar Angus	1	0%
Denny	1	0%
Elgin	1	0%
Ellon	1	0%
Forfar Area	1	0%
Friarton	1	0%
Friockheim	1	0%
Galashiels	1	0%
Glendoick	1	0%
Grantown-on-Spey	1	0%
Guildtown, Cargill	1	0%
Inverbervie	1	0%
Invergordon	1	0%
Invergowrie Area	1	0%
Kilmarnock	1	0%
Kinfauns	1	0%
Kingseat	1	0%
Kingussie	1	0%
Kirriemuir	1	0%
Leuchars	1	0%
Livingston	1	0%
Lochgelly	1	0%
Markinch	1	0%
Meikle	1	0%
Peterborough	1	0%
Pitcairngreen, Almondbank, Luncarty	1	0%
Port of Monteith	1	0%
St Andrews	1	0%
Strathpeffer	1	0%
Tilliecultry	1	0%
Wormit, Newport on Tay	1	0%
Dunfermline	1	0%

13.9.2 Table 95 indicates that, of those interviewed, the greatest proportion of passenger start points was from the Perth Area (around 40%). Edinburgh, Dundee and Glasgow were the next most common areas that passengers said the started from. 15 passengers started their journey in Scone (3%).

13.9.3 Figure 123 illustrates the origin of journeys made to the station on the day or survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.



Figure 123. Origin of Trips Made to Perth Station

13.10 Mode: Methods of Transport from Origin to Station (Q8)

13.10.1 Figure 124 illustrates the methods of transport passengers used to get to Perth station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

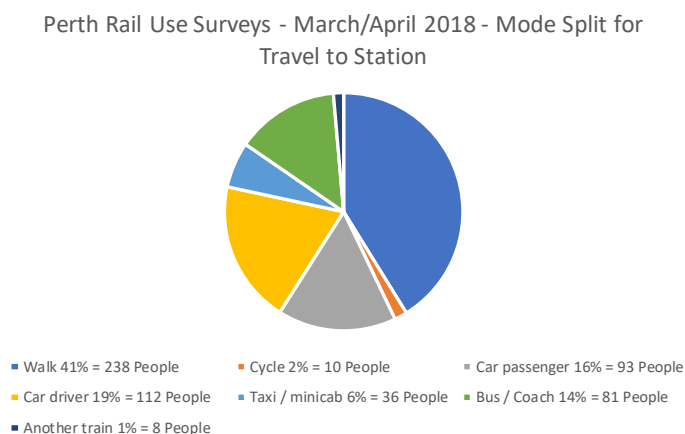


Figure 124. Mode Split of Passengers Travelling to Perth Station

13.10.2 Figure 124 confirms that the greatest proportion of interviewed passengers walked to the railway station (41%). 112 people reported to arriving at the station by driving themselves (19%). Another 93 people arrived as a car passenger (16%).

13.11 Parking Location (Q8a)

13.11.1 Figure 125 shows the parking location used for passengers travelling from Perth station.

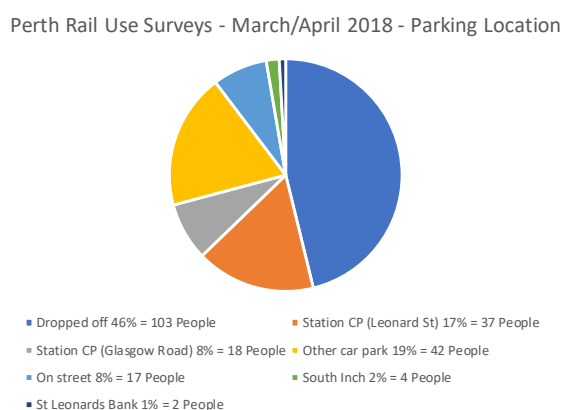


Figure 125. Parking Location

13.11.2 Figure 125 shows that 103 passengers chose to get dropped off (46%). 42 interviewees said they parked in an alternative car park. However, 37 noted parking in the Leonard Street car park (17%) while only 18 people reported to have parked in the other station car park on Glasgow Road (8%). Other places of interest include those that parked at the South Inch (4 people).

13.12 Reason for Parking Location (Q8b)

13.12.1 Figure 126 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged by individual survey participants.

Perth Rail Use Surveys - March/April 2018 - Reason for Parking Location

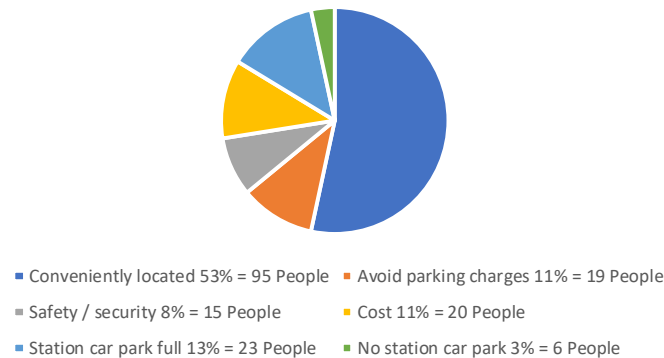


Figure 126. Reasoning for Parking Location

13.12.2 Figure 126 shows that there was 95 unique entries in the survey noting that they made their parking decision due to it being conveniently located (53%). 23 passengers took into account that the station car park was full when making their decision (13%). There were 19 responses for passengers wanting to avoid parking charges (11%).

13.13 Reason for Travelling from Perth Station (Q9)

13.13.1 Figure 127 shows the breakdown of the reasons considered by passengers in deciding to travel from Perth railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected by individual participants.

Perth Rail Use Surveys - March/April 2018 - Reason for Station Choice

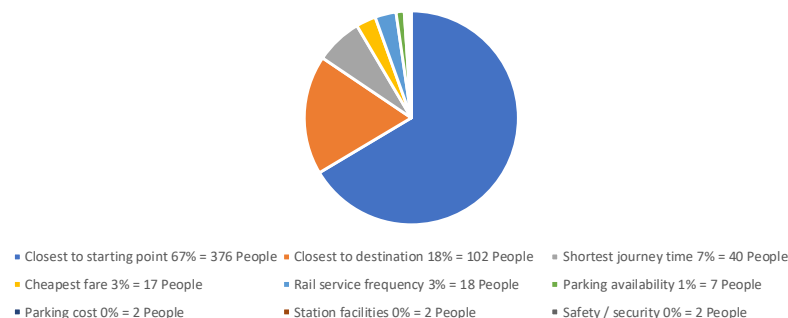


Figure 127. Reason for Station Selection

13.13.2 Figure 127 indicates that 376 of the people surveyed said that they chose this station because it was closest to their starting point (67%). Alternatively, 102 people chose to travel from this station because it was closest to their destination (18%). There were 40 responses for passengers wanting a minimal journey time (7%).

13.14 End of Journey (Q10)

13.14.1 Table 96 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 96. Final Destination of Trips made from Perth Station

Area	No. of Passengers	Percentage
Glasgow	80	18%
Edinburgh	72	17%
Dundee	65	15%
Perth	34	8%
Inverness	30	7%
Aberdeen	19	4%
Stirling	13	3%
Falkirk	12	3%
Arbroath	10	2%
Pitlochry	8	2%
Aviemore	5	1%
Dunkeld	5	1%
Blairstown	5	1%
London	4	1%
Helensburgh	3	1%
Montrose	3	1%
Muir of Ord	3	1%
Dunfermline	3	1%
Glenrothes	3	1%
York	3	1%
Stonehaven	2	0%
Carnoustie	2	0%
Clydebank	2	0%

Cupar	2	0%
St. Andrews	2	0%
Leven	2	0%
Markinch	2	0%
Montrose	2	0%
Oxford	2	0%
Kilmarnock	2	0%
Paisley	2	0%
Newcastle	2	0%
Ellen	1	0%
Ballindoch	1	0%
Alnmouth	1	0%
Newport-on-Tay	1	0%
Broughty Ferry	1	0%
Camelon	1	0%
Dingwall	1	0%
Elgin	1	0%
Bolton	1	0%
Middlewich	1	0%
Denny	1	0%
Alloa	1	0%
Alva	1	0%
Tilliecultry	1	0%
Strathpeffer	1	0%
Kinross	1	0%
Lochgelly	1	0%
Port of Monteith	1	0%
Portree	1	0%
Scone	1	0%
Warrington	1	0%
Weybridge	1	0%
Aberfeldy	1	0%
Loughborough	1	0%
Wick	1	0%
Greenock	1	0%
Auchterarder	1	0%
Reading	1	0%
Stockport	1	0%
Pontefract	1	0%
Wigan	1	0%

13.14.2 Table 96 indicates that, of those interviewed, the greatest proportion of passengers (80 passengers) reported to end their trip in Glasgow (18%).

13.15 Journey Destination (Q11)

13.15.1 Figure 128 shows where passengers are looking to get to via Perth station.

Perth Rail Use Surveys - March/April 2018 - Journey Destination

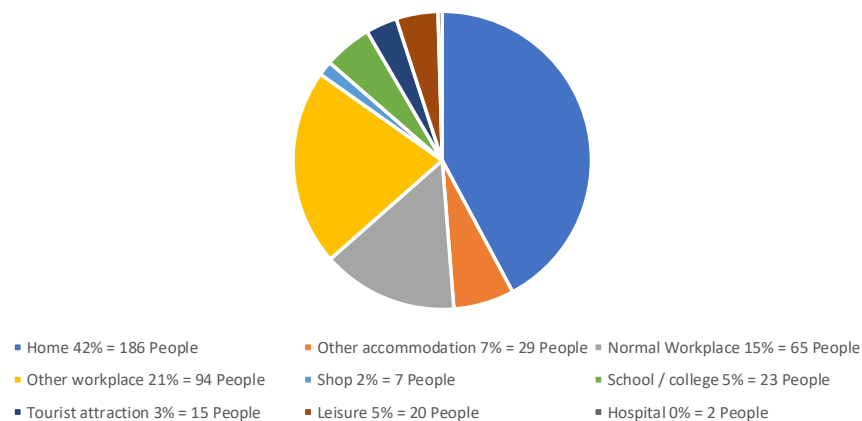


Figure 128. Journey Destination of Passengers

13.15.2 Figure 128 shows that largest proportion, 186 people, were travelling to their home (42%). 94 passengers were travelling to an atypical workplace (21%). However, 65 passengers were travelling to their normal place of work (15%).

13.16 Mode: Journey from Station to Onward Destination (Q12)

13.16.1 Figure 129 demonstrates the method of transport used to travel from Perth station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Perth Rail Use Surveys - March/April 2018 - Mode from Station to Destination

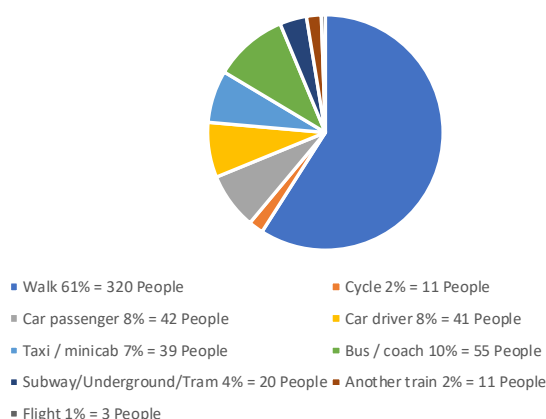


Figure 129. Mode of Transport from Station to Onward Destination

13.16.2 Figure 129 shows that over half (61%) would be walking for a considerable part of their journey from the station to reach their final destination point. 55 people would be using a bus service to reach their destination (10%).

13.17 Journey Frequency (Q13)

13.17.1 Table 97 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 97. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	65	59	37	105	136	91
Overall Proportion	13%	12%	8%	21%	28%	18%

13.17.2 Table 97 shows that 136 passengers travelled from this station fairly infrequently, more than once each year (28%). 105 passengers travelled from this station more than once each month (21%). For 18% of those surveyed it was uncommon that they made this journey.

13.18 Ticket Type (Q14)

13.18.1 Figure 130 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Perth Rail Use Surveys - March/April 2018 - Ticket Type

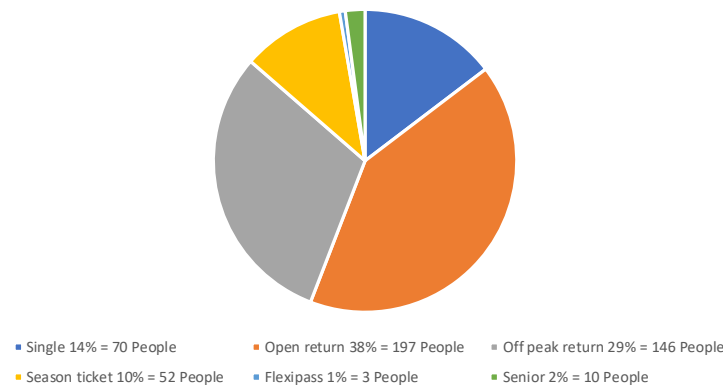


Figure 130. Ticket Type

13.18.2 Figure 130 demonstrates that 197 passengers were travelling on an open return ticket (38%). Another 41 passengers were travelling on a season ticket (22%).

13.18.3 The breakdown of those travelling on seasonal ticket types is as follows:

- 13 people cited that they were travelling on a weekly pass
- 21 people cited that they were travelling on a monthly pass.

13.18.4 The split of passengers travelling on standard class, as opposed to business or first class, is as follows (Q14a):

- 12 people (3%) were travelling in business/first class
- 403 people (97%) were in standard class.

13.19 Number of Vehicles Available to Household (Q15)

13.19.1 Table 98 shows the number of vehicles that the passenger either owns or has available to them.

Table 98. Number of Vehicles Available to Household

	Number of Vehicles				
	0	1	2	3	4
Passengers Surveyed	0	183	153	34	8
Overall Proportion	0%	48%	40%	9%	2%

13.19.2 Table 98 confirms that 48% of people have access to 1 vehicle. 153 participants have access to just 2 vehicles (40%). 34 participants had 3 vehicles available to them (9%). All of those surveyed at Perth station did have access to a vehicle.

13.20 Number of Adults Within Household (Q16)

13.20.1 Table 99 shows how many adults are living within the surveyed passenger's household.

Table 99. Number of Adults Within Household

	Number of Adults				
	1	2	3	4	5
Passengers Surveyed	70	278	70	31	9
Overall Proportion	15%	61%	15%	7%	2%

13.20.2 Table 99 shows that 278 of those surveyed have 2 adults living at their home (61%). There was an equal number of responses for those households with 1 adult, and for those with 3 adults (15% each).

13.21 Number of Children Within Household (Q16)

13.21.1 Table 100 shows the number of children that are living at the surveyed passenger's household.

Table 100. Number of Children Within Household

	Number of Children				
	0	1	2	3	4
Passengers Surveyed	334	65	51	11	2
Overall Proportion	72%	14%	11%	2%	0%

13.21.2 Table 100 confirms that there is a positively skewed distribution amongst the results, and that 334 of those surveyed said that they didn't have any children (72%). The next largest proportion is of those passengers with 1 child within their household (14%).

14. PITLOCHRY RAILWAY STATION

14.1.1 Pitlochry Rail Station is located to the southwest of the town centre. It features a charged but unmanned car park. There is a total of 60 spaces, including dedicated spaces for blue badge holders.

14.1.2 Abellio ScotRail operates train services at Pitlochry providing connections to Inverness to the north and Edinburgh and Glasgow to the south. Office of Rail Regulation figures show that a total of around 121,000 passengers travelled to and from Pitlochry Railway Station during 2016/17.

14.1.3 Table 101 summarises the train departure times as captured by the survey company on day of survey between 06:00 – 19:00.

Table 101. Train Services Departing Pitlochry Station

Destination	Services						
Inverness	6:14	8:44	10:21	11:51	13:44	15:22	16:48
Edinburgh	8:18	10:21	11:24	11:26	14:32	16:22	17:35
London	9:25						

Source: Boarding and Alighting Information, Streetwise, Appendix B

14.2 Survey Sample Rate

14.2.1 Over the survey period, 115 passengers were observed boarding train services. Of the 115 boarding passengers, 46 were interviewed, giving an effective sample rate of 40% as shown in Table 102.

Table 102. Face to Face Passenger Survey Sample Rate

Station	Passengers Alighting	Passengers Boarding	Interviews	Sample Rate
Pitlochry	71	115	46	40%

14.3 Passenger Demographics (Q1)

14.3.1 In terms of passenger demographics, a 48.9%/51.1% split was recorded for male and female passengers respectively, of those interviewed boarding trains at Pitlochry. The majority of passengers were aged between 16 and 60. However with 31% aged over 60 it was the most common age range. A full breakdown of passenger age ranges is shown in Table 103.

Table 103. Age Ranges of Passengers

	Age Range					
	<= 15	16 - 24	25 - 35	36 - 45	46 - 60	over 60
Passengers Surveyed	0	5	9	6	11	14
Overall Proportion	0%	11%	20%	13%	24%	31%

14.4 Train Departures (Q2)

14.4.1 Figure 131 summarises the specified departure time of the outward leg of the journey given by respondents.

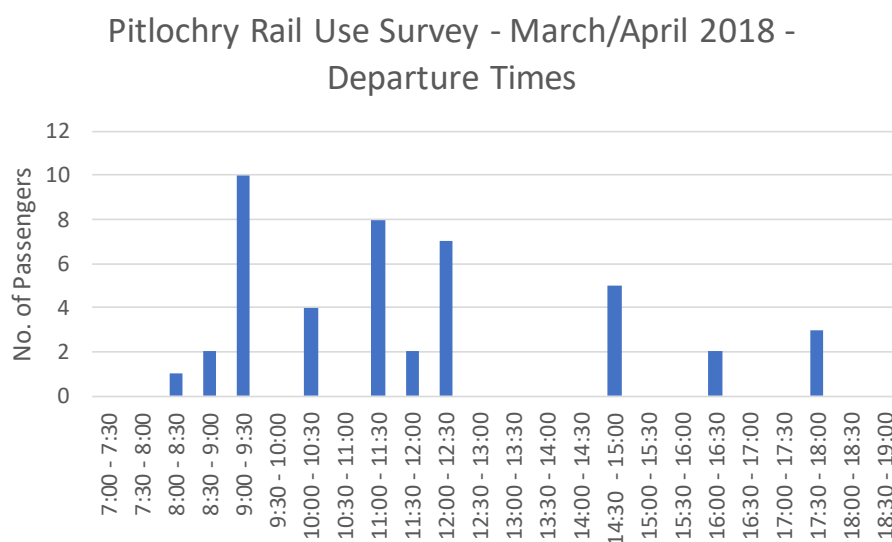


Figure 131. Time of Departure (Outward Leg)

14.4.2 Figure 131 shows that 10 passengers were departing between 09:00 – 09:30. Also another 8 passengers had their train departing in the half hour between 11:00 – 11:30.

14.5 Destination Station (Q3)

14.5.1 Table 104 shows the destination of passengers travelling from this particular station (of those interviewed). To note that not all respondents chose to answer the question.

Table 104. Destination Station		
Place	No. of Passengers	Percentage
EDINBURGH	11	28%
GLASGOW	7	18%
PERTH	7	18%
DUNKELD	3	8%
INVERNESS	3	8%
LONDON	3	8%
YORK	2	5%
ABERDOUR	1	3%
BLAIR ATHOLL	1	3%
INVERKEITHING	1	3%

14.5.2 Table 104 confirms that the greatest proportion were travelling to Edinburgh (28%). 7 passengers were looking to travel southbound to Glasgow (18%). Another 7 passengers were travelling to Perth railway station.

14.6 Journey Type (Q4)

14.6.1 Figure 132 illustrates what leg of their journey passengers were on for those interviewed at this station during the survey period.

Pitlochry Rail Use Survey - March/April 2018 -
Journey Type

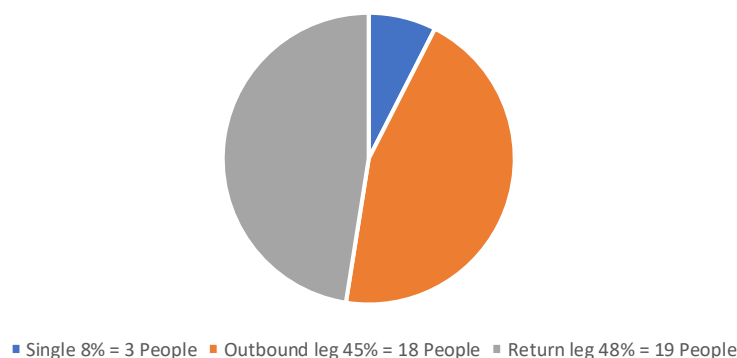


Figure 132. Journey Leg

14.6.2 Figure 132 shows that 19 passengers (47%) were on the return leg of their trip. Next, 18 people reported to being on the return leg of their journey (45%). The final 8% were just on a one-way journey.

14.6.3 Whether prior to the survey or yet to be complete, the breakdown for the occurrence of the other leg of their trip is as follows (Q4a):

- 20 people (59%) were commencing the other leg of their journey on the same day
- 10 people (29%) were commencing the other leg of their journey on another weekday
- 4 people (12%) were commencing the other leg of their journey on a weekend

14.6.4 Figure 133 summarises the specified time of the other leg of the journey given by respondents (where applicable).

Pitlochry Rail Use Survey - March/April 2018 - Other Journey Leg Time

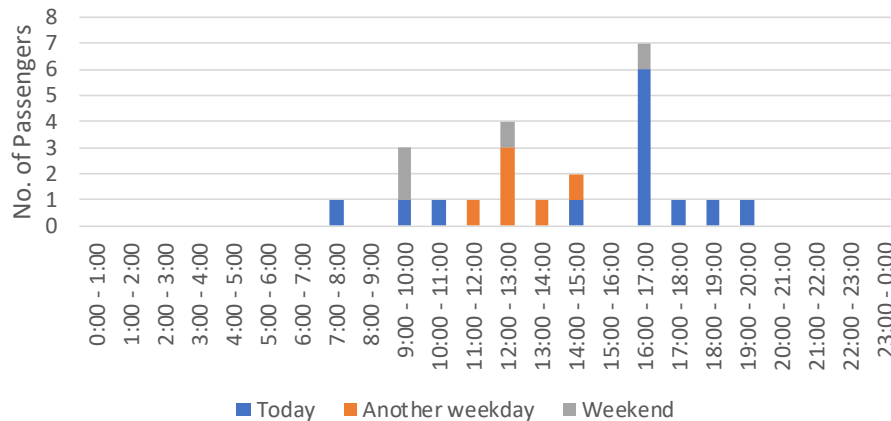


Figure 133. Time of Other Leg

14.6.5 Figure 133 suggests that between 16:00 and 17:00 was the busiest time of the day for those making a two-way trip. 6 passengers reported travelling at this time on the same day as their other leg. There was 1 passenger that reported travelling at this time, however made the other leg of their trip on a weekend.

14.7 Journey Reason (Q5)

14.7.1 Figure 134 shows the reason for making this particular journey from Pitlochry railway station.

Pitlochry Rail Use Survey - March/April 2018 - Journey Reason

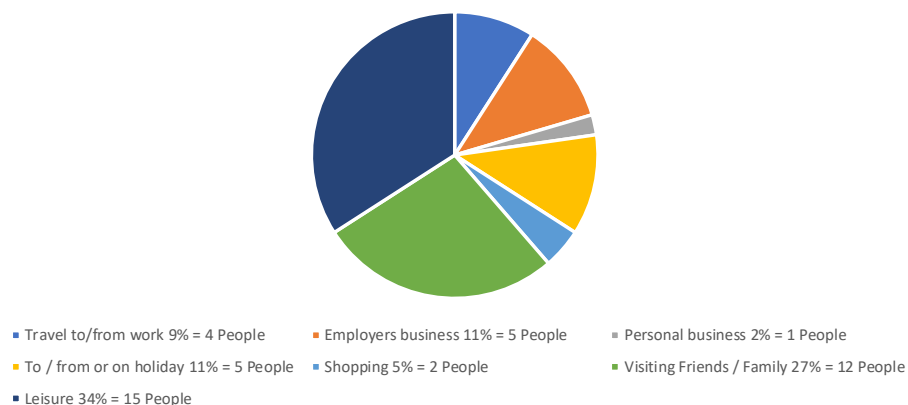


Figure 134. Reason for Making This Journey

14.7.2 Figure 134 shows that 15 people were travelling for a leisure activity (34%). There were 12 passengers travelling to visit someone (27%). 5 passengers were travelling because of a holiday, and another 5 were travelling from this station for an employer's business (both 11%).

14.8 Journey Origin (Q6)

14.8.1 Figure 135 summarises how passengers categorised where their journey originated when surveyed at Perth railway station.

Pitlochry Rail Use Survey - March/April 2018 - Journey Origin

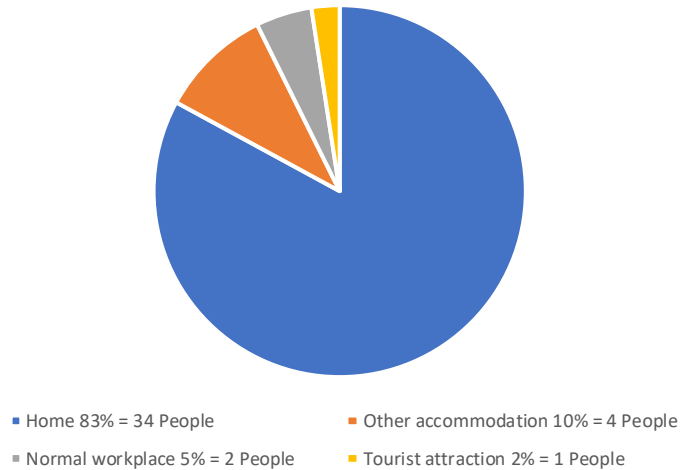


Figure 135. Passenger Origin

14.8.2 Figure 135 shows that the majority of those interviewed, 34 people were coming from their home (83%). 4 people were travelling from some other accommodation (10%).

14.9 Start of Journey (Q7)

14.9.1 Table 105 summarises the location of the start of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 105. Origin of Trips made to Pitlochry Station

Location	No. of Passengers	%age
Pitlochry	23	61%
Aberfeldy	6	16%
Edinburgh	2	5%
Glasgow	2	5%
Aviemore	1	3%
Cupar	1	3%
Larkhall	1	3%
Loch Rannoch	1	3%
Tummel Bridge	1	3%

14.9.2 Table 105 indicates that, of those interviewed, the greatest proportion of passengers started their journey in Pitlochry (61%). Another notable area was Aberfeldy, which represented (16%) of the passengers interviewed.

14.9.3 Figure 136 illustrates the origin of journeys made to the station on the day of survey. In order to display the map at a reasonable scale, outlying journey origins have been excluded.

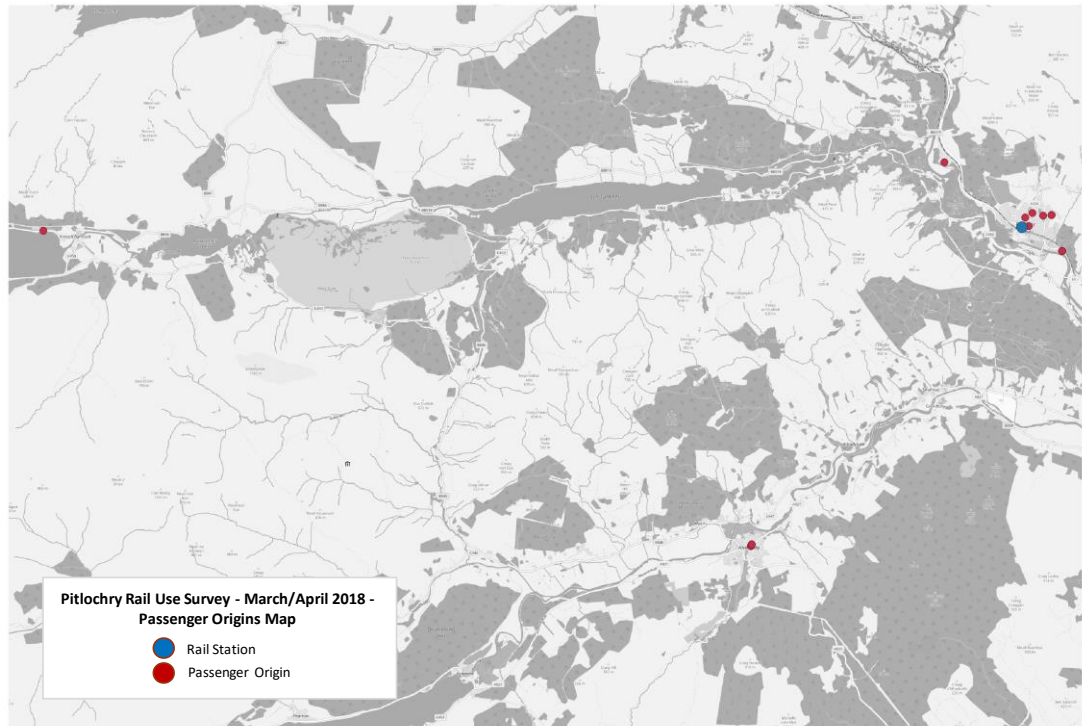


Figure 136. Origin of Trips Made to Pitlochry Station

14.10 Mode: Mode of Transport from Origin to Station (Q8)

14.10.1 Figure 137 illustrates the methods of transport passengers used to get to Pitlochry station during the survey period (for interviewed passengers only). All methods of transport used prior to arriving at the station were recorded, so multiple answers were selected for each individual participant.

Pitlochry Rail Use Surveys - March/April 2018 - Mode Split for Travel to Station

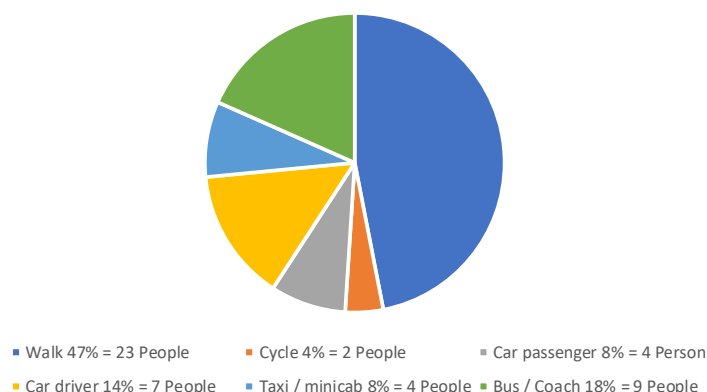


Figure 137. Mode Split of Passengers Travelling to Pitlochry Station

14.10.2 Figure 137 confirms that the greatest proportion of interviewed passengers walked to the railway station (47%). 9 people reported to arriving at the station by bus (18%). Only 7 people drove to the station (14%).

14.11 Parking Location (Q8a)

14.11.1 Figure 138 shows the parking location used for passengers travelling from Pitlochry station.

Pitlochry Rail Use Surveys - March/April 2018 - Parking Location

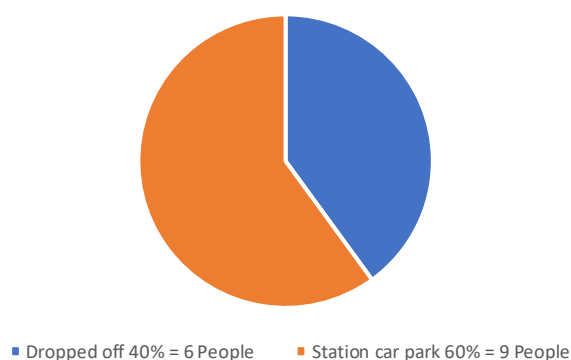


Figure 138. Parking Location

14.11.2 Figure 138 shows that 9 passengers chose to use the station car park (60%). The other 40% were dropped off.

14.12 Reason for Parking Location (Q8b)

14.12.1 Figure 139 shows the reasons behind the parking location choice that the passengers made. Passengers were asked to select all reasons that apply therefore multiple answers were logged by individual survey participants.

Pitlochry Rail Use Surveys - March/April 2018 - Reason for Parking Location

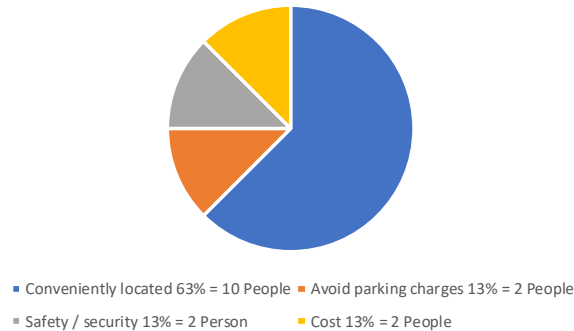


Figure 139. Reasoning for Parking Location

14.12.2 Figure 140 shows that there was 10 unique entries in the survey noting that they made their parking decision due to it being conveniently located (63%). There were an equal number of responses for people considering avoiding parking charges, the safety of the location, and the cost itself (13% each).

14.13 Reason for Travelling from Pitlochry Station (Q9)

14.13.1 Figure 140 shows the breakdown of the reasons considered by passengers in deciding to travel from Perth railway station over other possible stations. All of the reasons passengers found applicable when choosing this particular station were recorded, so multiple answers were selected by individual participants.

Pitlochry Rail Use Surveys - March/April 2018 - Reason for Station Choice

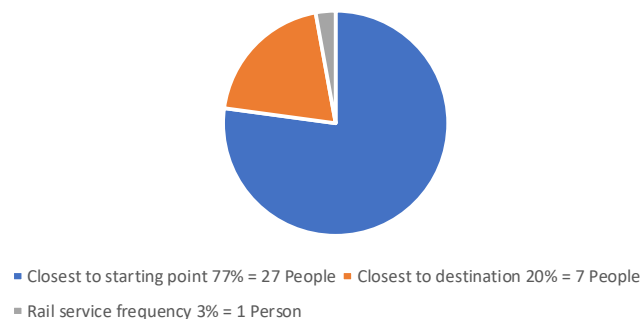


Figure 140. Reason for Station Selection

14.13.2 Figure 140 indicates that 27 the of people surveyed said that they chose this station because it was closest to their starting point (77%). Alternatively, 7 people chose to travel from this station because it was closest to their destination (20%).

14.14 End of Journey (Q10)

14.14.1 Table 106 summarises the location of the destination of the journey captured on the day of survey. To note that not all respondents chose to answer the question.

Table 106. Final Destination of Trips made from Pitlochry Station

Area	No. of Passengers	Percentage
Edinburgh	7	21%
Dunkeld	4	12%
Pitlochry	4	12%
Perth	3	9%
Glasgow	3	9%
London	2	6%
Inverness	1	3%
Cupar	1	3%
Largs	1	3%
Leith	1	3%
Muir of Ord	1	3%
Aberfeldy	1	3%
Dunfermline	1	3%
Burntisland	1	3%
Oxford	1	3%
Greenock	1	3%

14.14.2 Table 106 indicates that, of the responses, the greatest proportion of passengers (21%) finished their journey in Edinburgh. The next two most popular end points were Pitlochry and Dunkeld with 4 passengers each (12%).

14.15 Journey Destination (Q11)

14.15.1 Figure 141 shows where passengers are looking to get to via Pitlochry station.

Pitlochry Rail Use Surveys - March/April 2018 - Journey Destination

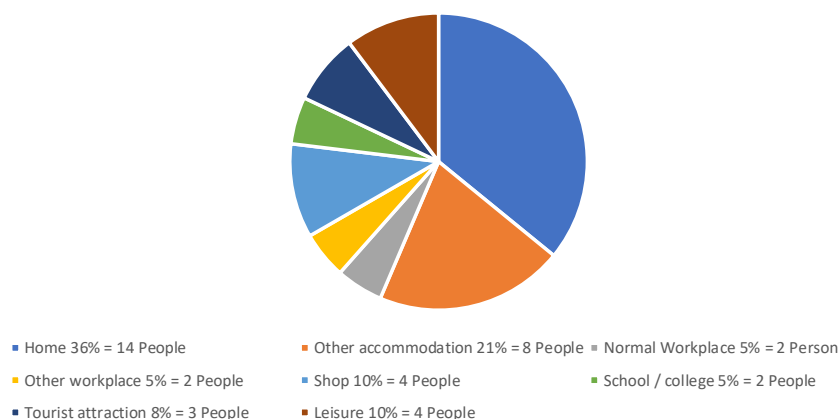


Figure 141. Journey Destination of Passengers

14.15.2 Figure 141 shows that largest proportion, 14 people, were travelling to their home (36%). 8 passengers were travelling to other accommodation (14%).

14.16 Mode: Journey from Station to Onward Destination (Q12)

14.16.1 Figure 142 demonstrates the method of transport used to travel from Pitlochry station to the onward destination. Those surveyed were asked to select all modes that apply, therefore multiple responses were logged for each survey participant.

Pitlochry Rail Use Surveys - March/April 2018 - Mode from Station to Destination

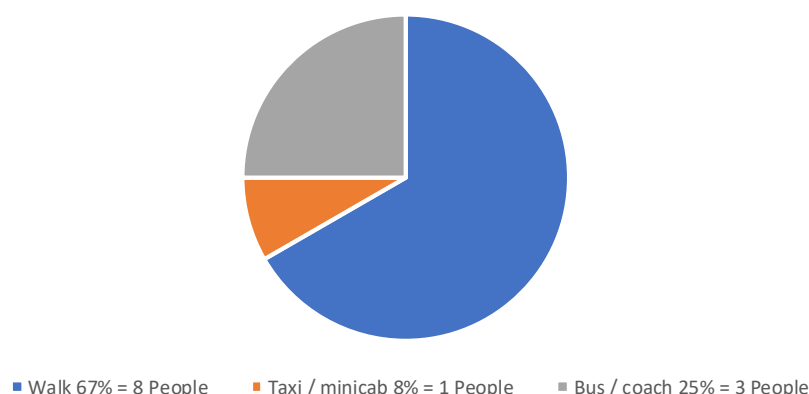


Figure 142. Mode of Transport from Station to Onward Destination

14.16.2 Figure 142 shows that over half (67%) would be walking for a considerable part of their journey from the station to reach their final destination point. 3 people would be using a bus service to reach their destination (25%). Finally, the last person would be taking a taxi (8%).

14.17 Journey Frequency (Q13)

14.17.1 Table 107 shows an estimation of how many trips passengers make from this rail station, summarized into 6 categories. These categories range, from left to right, with most frequent to least frequent.

Table 107. Journey Frequency

	Journey Frequency					
	≥ 5 times a week	3/4 times a week	> once per week	> once per month	> once per year	< once per year
Passengers Surveyed	1	2	5	8	14	15
Overall Proportion	2%	4%	11%	18%	31%	33%

14.17.2 Table 107 shows a negatively skewed distribution, when arranged in order of frequency from highest to lowest. With the most common result being passengers travelling infrequently (less than once per year). The next most common, cited by 14 passengers, being those travelling more than once per year (31%). Tapering off with less frequent travellers.

14.18 Ticket Type (Q14)

14.18.1 Figure 143 demonstrates the breakdown of ticket types used to travel from this railway station (Interviewed passengers only).

Pitlochry Rail Use Surveys - March/April 2018 - Ticket Type

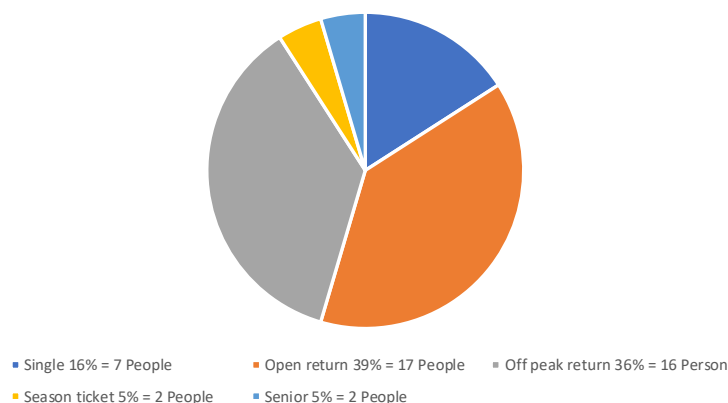


Figure 143. Ticket Type

14.18.2 Figure 143 demonstrates that 17 passengers were travelling on an open return ticket (39%). 16 passengers were travelling on an off-peak ticket (36%).

14.18.3 No passengers specified what kind of seasonal ticket (monthly, weekly etc.).

14.18.4 The split of passengers travelling on standard class, as opposed to business or first class, is as follows (Q14a):

- 1 person (3%) was travelling in business/first class.
- 39 people (98%) were in standard class.

14.19 Number of Vehicles Available to Household (Q15)

14.19.1 Table 108 shows the number of vehicles that the passenger either owns or has available to them.

Table 108. Number of Vehicles Available to Household

	Number of Vehicles				
	0	1	2	3	4
Passengers Surveyed	14	16	9	0	1
Overall Proportion	35%	40%	23%	0%	3%

14.19.2 Table 108 confirms that 40% of people have access to 1 vehicle. 14 participants don't have access to a vehicle (35%). 9 participants had 3 vehicles available to them (23%).

14.20 Number of Adults Within Household (Q16)

14.20.1 Table 109 shows how many adults are living within the surveyed passenger's household.

Table 109. Number of Adults Within Household

	Number of Adults			
	1	2	3	4
Number of Passengers Surveyed	5	26	6	2
Overall Proportion	13%	67%	15%	5%

14.20.2 Table 109 shows that 26 of those surveyed have 2 adults living at their home (67%). The next largest proportion were those that cited having 3 adults living within their household (15%). 5 passengers have only 1 adult living in their home (13%).

14.21 Number of Children Within Household (Q16)

14.21.1 Table 110 shows the number of children that are living at the surveyed passenger's household.

Table 110. Number of Children Within Household

	Number of Children				
	0	1	2	3	4
Passengers Surveyed	30	6	3	1	0
Overall Proportion	75%	15%	8%	3%	0%

14.21.2 Table 110 confirms that there is a positively skewed distribution amongst the results, and that 30 of those surveyed said that they didn't have any children (75%). The next largest proportion is of those passengers with 1 child within their household (15%).

15. FINDINGS

15.1 Summary

15.1.1 Tayside and Central Scotland Transport Partnership (TACTRAN) commissioned SYSTRA Limited to analyse and report on mid-week rail passenger travel surveys using data collected by Streetwise Services Limited. The surveys were undertaken at all 11 railway stations in the Tayside area including: Arbroath, Blair Atholl, Broughty Ferry, Carnoustie, Dundee, Dunkeld & Birnam, Invergowrie, Monifieth, Montrose, Perth, and Pitlochry.

15.1.2 This Report summarises a number of key observations from the passenger travel habit survey data. More analysis of collected data can be undertaken by analysing the dataset included in Appendix B.

15.2 Arbroath Station

- Out of the 434 boarding passengers, 220 were interviewed, giving an effective sample rate of 51%
- A 45.3%/54.7% split was recorded for male and female respectively. 91% were between the ages 16-60
- 87 people, were on the outbound leg of their journey (41%). 88% had the other leg of their journey on the same day
- 44% were making this journey to get either to or from work
- 86% started their journey from home
- 48% walked to the rail station for some of their journey from the origin
- 47% were dropped off at the station, with a further 20% parking at another car park rather than the car park located at the station
- Most chose their parking location because it was conveniently located (59%).
- 68% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 30% were going to a normal workplace. 28% were travelling home from Arbroath station
- Over half (68%) would be walking for a considerable part of their journey from the station to their destination
- 28% travel from Arbroath station at least 5 times per week. 23% reported to travel fairly infrequently, just more than once each year
- 30% were travelling on open return tickets. 97% were in standard class, with the other 3% in business/first class
- 39% have access to 1 vehicle. 30% have access to 2 vehicles, however 16% do not have a vehicle
- 54% have 2 adults living within their home. 19% of participants have 1 adult living within their household. Another 19% have 3 adults.
- 70% don't have any children, with 16% having one child.

15.3 Blair Atholl Station

- Out of the 25 boarding passengers, 15 were interviewed, giving an effective sample rate of 60%
- A 50%/50% split was recorded for male and female respectively. 93% were between the ages 16-60
- 40% were on the outbound leg of their journey. 80% had the other leg of their journey on the same day
- 31% were making this journey for leisure
- 54% started their journey from home
- 53% walked to the rail station for some of their journey from the origin
- 75% were dropped off at the station, with a further 25% parking at the station
- Most chose their parking location because it was conveniently located, 67%
- 56% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 30% were going home
- Over half, 87%, would be walking for a considerable part of their journey from the station to their destination
- 71% travel from the station fewer than once each year
- 36% were travelling on single tickets. 100% were in standard class
- Half have access to 2 vehicles. However, 14% do not have a vehicle
- 71% have 2 adults living within their home. 14% of participants have 1 adult living within their household
- 86% don't have any children, with 14% having one child.

15.4 Broughty Ferry Station

- Out of the 57 boarding passengers, 40 were interviewed, giving an effective sample rate of 70%
- A 39.5%/60.5% split was recorded for male and female respectively. 89% were between the ages 16-60
- 54% were on the outbound leg of their journey. 93% had the other leg of their journey on the same day
- 38% were making this journey to get either to or from work. 30% for leisure
- 98% started their journey from home
- 68% walked to the rail station for, some of their journey, from the origin
- 44% were parked on the street
- Most chose their parking location because it was conveniently located, 67%
- 80% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 31% were going to a normal workplace . 25% were travelling home
- Over half, 77%, would be walking for a considerable part of their journey from the station to their destination
- 25% travel more than once per year. 23% reported to travel more than once per month
- 44% were travelling on open return tickets. 94% were in standard class, with the other 6% in business/first class
- 35% have access to 1 vehicles. However, 25% do not have a vehicle
- 69% have 2 adults living within their home.
- 77% don't have any children, with 21% having two children.

15.5 Carnoustie Station

- Out of the 170 boarding passengers, 66 were interviewed, giving an effective sample rate of 39%
- A 50.8%/49.2% split was recorded for male and female respectively. 82% were between the ages 16-60
- 45% were on the outbound leg of their journey. 94% had the other leg of their journey on the same day
- 52% were making this journey to get either to or from work
- 93% started their journey from home
- 64% walked to the rail station, for some of their journey, from the origin
- 38% were parked in the station car park, with a further 27% parking at another car park
- Most chose their parking location because it was conveniently located, 53%
- 70% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 47% were going to a normal workplace . 21% were travelling home from the station
- Over half, 73%, would be walking for a considerable part of their journey from Arbroath station to their destination
- 41% travel from the station more than 5 times per week. 23% reported to travel fairly infrequently, just more than once each year
- 34% were travelling on open return tickets. 100% were in standard class
- 47% have access to 1 vehicles. 31% have 2 vehicles, however, 16% do not have a vehicle
- 63% have 2 adults living within their home. 13% of participants have 1 adult living within their household. Another 12% have 3 adults.
- 61% don't have any children, with 16% having one child.

15.6 Dundee Station

- Out of the 2322 boarding passengers, 883 were interviewed, giving an effective sample rate of 38%
- A 43.7%/56.3% split was recorded for male and female respectively. 96% were between the ages 16-60
- Over half were on the return leg of their journey (51%). 73% had the other leg of their journey on the same day
- 21% stated "employers business" as their reason for travelling
- 54% started their journey from home
- 63% walked to the rail station for some of their journey from the origin
- 40% were dropped off at the station, with a further 27% opting to use other car parks
- Most chose their parking location because it was conveniently located (58%).
- 61% of passengers chose this station because it was closest to their starting point. 20% reported that they chose because it was closer to the end point
- For the destination of passengers: 54% were going home
- Over half (59%) would be walking for a considerable part of their journey from the station to their destination
- Most were infrequent travellers and so reported on that side of the spectrum. 23% travelling more than once per year

- 38% were travelling on open return tickets. 97% were in standard class, with the other 3% in business/first class
- 39% have access to 1 vehicles. 29% have access to 2 vehicles, however 23% do not have a vehicle
- 58% have 2 adults living within their home. 18% of participants have 3 adults living within their household
- 72% don't have any children, with 16% having one child.

15.7 Dunkeld & Birnam Station

- Out of the 42 boarding passengers, 26 were interviewed, giving an effective sample rate of 62%
- A 48%/52% split was recorded for male and female respectively. 97% were between the ages 16-60
- 65% were on the outbound leg of their journey. 94% had the other leg of their journey on the same day
- 24% were making this journey to because they were visiting friends
- 67% started their journey from home
- 33% walked to the rail station for some of their journey from the origin
- 57% were parked in the station car park during the survey period. 43% were dropped off
- Most chose their parking location because it was conveniently located (57%).
- 59% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: a quarter were going home. Another quarter were travelling to an atypical workplace
- Over half (66%) would be walking for a considerable part of their journey from Arbroath station to their destination
- 46% travel very infrequently, less than once each year. 12% travel 3 or 4 times each week
- 46% were travelling on single tickets. 95% were in standard class, with the other 5% in business/first class
- 42% have access to 1 vehicles. 35% have access to 2 vehicles, however 19% do not have a vehicle
- 69% have 2 adults living within their home. 19% of participants have 1 adult living within their household. Another 12% have 3 adults.
- 77% don't have any children, with 19% having one child.

15.8 Invergowrie Station

- Out of the 13 boarding passengers, 9 were interviewed, giving an effective sample rate of 69%
- A 75%/25% split was recorded for male and female respectively. 100% were between the ages 16-60
- 44% were on the outbound leg of their journey, 33% were on the return leg. 100% had the other leg of their journey on the same day
- 89% were making this journey to get either to or from work
- 100% started their journey from home
- 44% walked to the rail station for some of their journey from the origin
- 75% were dropped off at the station, with a further 25% parked on the street

- Half chose their parking location because it was conveniently located (50%).
- 58% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 75% were going to a normal workplace
- Over half (71%) would be walking for a considerable part of their journey from the station to their destination
- 75% travel from Invergowrie station at least 5 times per week
- 33% were travelling on seasonal tickets. There was one monthly ticket used and one weekly ticket used. 80% were in standard class
- 57% have access to 1 vehicles. 29% do not have access have access to a vehicle
- 43% have 2 adults living within their home. 43% of participants have 3 adults living within their household
- 71% don't have any children, with 14% having one child.

15.9 Monifieth Station

- Out of the 9 boarding passengers, 7 were interviewed, giving an effective sample rate of 78%
- A 33.3%/66.7% split was recorded for male and female respectively. 100% were between the ages 16-60
- 43% were on the outbound leg of their journey. 29% on the return leg. 100% had the other leg of their journey on the same day
- 67% were making this journey to get either to or from work
- 86% started their journey from home
- 71% walked to the rail station for some of their journey from the origin
- There were an equal number of responses for those dropped off at the station, those parked in the station car park, and those on the street
- All chose their parking location because it was conveniently located (100%).
- 100% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 40% were going to a normal workplace. 20% were travelling home to an atypical workplace
- Over half (75%) would be walking for a considerable part of their journey from the station to their destination
- 29% travel from the station more than once per week
- 43% were travelling on open return tickets. 83% were in standard class
- 71% have access to 1 vehicle. 29% have access to 2 vehicles. All of those surveyed at this station had access to a vehicle
- 57% have 1 adult living within their home.
- 57% don't have any children, with the other 43% having one child.

15.10 Montrose Station

- Out of the 472 boarding passengers, 195 were interviewed, giving an effective sample rate of 41%
- A 48.6%/51.4% split was recorded for male and female respectively. 88% were between the ages 16-60
- Over half were on the outbound leg of their journey (53%). 34% were on the return leg. 78% had the other leg of their journey on the same day
- 48% were making this journey to get either to or from work
- 89% started their journey from home

- 36% walked to the rail station for some of their journey from the origin
- 41% were dropped off at the station, with a further 24% parking at the station car park
- Most chose their parking location because it was conveniently located (41%).
- 79% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 39% were going to a normal workplace. 18% were travelling home from Montrose station
- Over half (61%) would be walking for a considerable part of their journey from the station to their destination
- 27% travel from the station at least 5 times each week. 23% reported to travel fairly infrequently (more than once each year)
- 38% were travelling on open return tickets. 95% were in standard class, with the other 5% in business/first class
- 39% have access to 2 vehicles. 34% have access to 1 vehicle, however 16% do not have a vehicle
- 57% have 2 adults living within their home. 19% of participants have only 1 adult living within their household. Another 15% have 3 adults.
- 79% don't have any children, with 16% having one child.

15.11 Perth Station

- Out of the 1494 boarding passengers, 521 were interviewed, giving an effective sample rate of 35%
- A 46.1%/53.9% split was recorded for male and female respectively. 80% were between the ages 16-60
- 47% were on the return leg of their journey. 40% were on the outbound leg. 85% had the other leg of their journey on the same day
- 35% were making this journey to get either to or from work
- 79% started their journey from home
- 41% walked to the rail station for some of their journey from the origin
- 46% were dropped off at the station. 17% chose to park in the Leonard St. car park. 8% chose to park in the Glasgow Road car park
- Most chose their parking location because it was conveniently located (53%).
- 67% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 42% were going to a home. 21% were travelling to an atypical workplace
- Over half (61%) would be walking for a considerable part of their journey from the station to their destination
- 28% travel from the station more than once each. 13% were made that journey frequently (at least 5 times per week)
- 38% were travelling on open return tickets. 97% were in standard class, with the other 3% in business/first class
- 48% have access to 1 vehicles. 40% have access to 2 vehicles. All of the responses reported that they did have a vehicle
- 61% have 2 adults living within their home. 15% of participants have 1 adult living within their household. Another 15% have 3 adults.
- 72% don't have any children, with 14% having one child.

15.12 Pitlochry Station

- Out of the 115 boarding passengers, 46 were interviewed, giving an effective sample rate of 40%
- A 48.9%/51.1% split was recorded for male and female respectively. 69% were between the ages 16-60
- 45% were on the outbound leg of their journey. 59% had the other leg of their journey on the same day
- 34% were making this journey for leisure
- 83% started their journey from home
- 47% walked to the rail station for some of their journey from the origin
- 60% were parked in the station car park, with a further 40% being dropped off
- Most chose their parking location because it was conveniently located (63%).
- 77% of passengers chose this station because it was closest to their starting point
- For the destination of passengers: 36% were going home. 21% were to other accommodation
- Over half (67%) would be walking for a considerable part of their journey from the station to their destination
- 33 travel from the station fewer than once each year. 31% reported to travel fairly infrequently, just more than once each year
- 39% were travelling on open return tickets. 98% were in standard class, with the other 2% in business/first class
- 40% have access to 1 vehicles. 35% did not have access to a vehicle
- 67% have 2 adults living within their home. 15% of participants have 1 adult living within their household
- Most of those surveyed at Pitlochry station said that they did not have any children.

A FACE-TO-FACE QUESTIONNAIRE

Survey Station :		Date :		Serial Number:	
1. About You		Male <input type="checkbox"/> Female <input type="checkbox"/>		15 or under <input type="checkbox"/> 16-24 <input type="checkbox"/> 25-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-60 <input type="checkbox"/> Over 60 <input type="checkbox"/>	
2. What time does your train depart?		3. What station are you travelling to?		4. What type of journey is this	
Hour <input type="text"/> Minute <input type="text"/>				One-way <input type="checkbox"/> Single Two-way <input type="checkbox"/> Outbound leg <input type="checkbox"/> Return leg	
4a. If this is a Two-way trip, what time will (or did) the other leg happen?		1 <input type="checkbox"/> Today 2 <input type="checkbox"/> Another Weekday 3 <input type="checkbox"/> Weekend		at Hour <input type="text"/> Minute <input type="text"/>	
5. Why are you making this journey?		6. Where have you come from?		7. Where did you start <u>this journey</u> ?	
<i>Tick main reason</i> 1 <input type="checkbox"/> Travel to / from work 2 <input type="checkbox"/> Employers Business 3 <input type="checkbox"/> Personal Business 4 <input type="checkbox"/> To / From or On Holiday 5 <input type="checkbox"/> Shopping 6 <input type="checkbox"/> Visiting Friends / Family 7 <input type="checkbox"/> Leisure 8 <input type="checkbox"/> Education 9 <input type="checkbox"/> Other _____		<i>Tick one box</i> 1 <input type="checkbox"/> Home 2 <input type="checkbox"/> Other Accommodation 3 <input type="checkbox"/> Normal workplace 4 <input type="checkbox"/> Other workplace 5 <input type="checkbox"/> Shop 6 <input type="checkbox"/> School / College 7 <input type="checkbox"/> Tourist Attraction 8 <input type="checkbox"/> Other _____		Postcode or address <input type="text"/> House number or business name _____ Street name _____ Town _____	
8. What methods did you use to <u>get to</u> the railway station? <i>Tick ALL that apply</i>		8a. If you travelled by car (as driver or passenger), where is the car parked?		8b. What was the main reason for parking there? <i>Tick ALL that apply</i>	
1 <input type="checkbox"/> Walk 2 <input type="checkbox"/> Cycle 3 <input type="checkbox"/> Car Passenger 4 <input type="checkbox"/> Car Driver 5 <input type="checkbox"/> Motorcycle 6 <input type="checkbox"/> Taxi / Minicab 7 <input type="checkbox"/> Bus / Coach 8 <input type="checkbox"/> Another train 9 <input type="checkbox"/> Other _____		1 <input type="checkbox"/> Dropped off 2 <input type="checkbox"/> Station Car Park 3 <input type="checkbox"/> Other Car Park (Specify) 4 <input type="checkbox"/> On-Street (specify) Street / Car Park Name _____		1 <input type="checkbox"/> Conveniently located 2 <input type="checkbox"/> Avoid parking charges 3 <input type="checkbox"/> Safety/security 4 <input type="checkbox"/> Cost 5 <input type="checkbox"/> Station car park full 6 <input type="checkbox"/> No station car park 7 <input type="checkbox"/> Other _____	
9. Why did you choose to travel from this station? <i>Tick ALL that apply</i>		10. Where will you finish <u>this journey</u> ?		11. Where are you travelling to?	
1 <input type="checkbox"/> Closest to starting point 2 <input type="checkbox"/> Closest to destination 3 <input type="checkbox"/> Shortest journey time 4 <input type="checkbox"/> Cheapest fare 5 <input type="checkbox"/> Rail service frequency 6 <input type="checkbox"/> Parking availability 7 <input type="checkbox"/> Parking cost 8 <input type="checkbox"/> Station facilities 9 <input type="checkbox"/> Safety/security 10 <input type="checkbox"/> Other _____		Postcode or address <input type="text"/> House number or business name _____ Street name _____ Town _____		<i>Origin (Q6) and destination should not be the same.</i> <i>It is specific to this journey</i> 1 <input type="checkbox"/> Home 2 <input type="checkbox"/> Other Accommodation 3 <input type="checkbox"/> Normal workplace 4 <input type="checkbox"/> Other workplace 5 <input type="checkbox"/> Shop 6 <input type="checkbox"/> School / College 7 <input type="checkbox"/> Tourist Attraction 8 <input type="checkbox"/> Other _____	
12. What methods do you intend to use to get there, <u>from the</u> railway station? <i>Tick ALL that apply</i>		13. How often do you make this journey?		14. What type of ticket are you using today? <i>Tick one box</i>	
1 <input type="checkbox"/> Walk 2 <input type="checkbox"/> Cycle 3 <input type="checkbox"/> Car Passenger 4 <input type="checkbox"/> Car Driver 5 <input type="checkbox"/> Motorcycle 6 <input type="checkbox"/> Taxi / Minicab 7 <input type="checkbox"/> Bus / Coach 8 <input type="checkbox"/> Subway / Underground / Tram 9 <input type="checkbox"/> Another train 10 <input type="checkbox"/> Other _____		<i>Tick one box</i> 1 <input type="checkbox"/> 5 times a week or more 2 <input type="checkbox"/> 3 or 4 times a week 3 <input type="checkbox"/> more than once a week 4 <input type="checkbox"/> more than once a month 5 <input type="checkbox"/> more than once a year 6 <input type="checkbox"/> less than once a year		1 <input type="checkbox"/> Single 2 <input type="checkbox"/> Open Return 3 <input type="checkbox"/> Off peak return 4 <input type="checkbox"/> Season ticket Specify duration: e.g. weekly, monthly etc _____ 5 <input type="checkbox"/> Flexipass 6 <input type="checkbox"/> Other _____	
15. How many vehicles are owned (or available for use) within your household?		Number:			
16. How many people live in your household?		No. of Adults		No. of Children (15 and under)	

FACE-TO-FACE QUESTIONNAIRE (PERTH STATION)

Survey Station : Perth		Date :		Serial Number:	
1. About You		Male <input type="checkbox"/>	Female <input type="checkbox"/>	15 or under <input type="checkbox"/>	16-24 <input type="checkbox"/>
		25-35 <input type="checkbox"/>	36-45 <input type="checkbox"/>	46-60 <input type="checkbox"/>	Over 60 <input type="checkbox"/>
2. What time does your train depart?		3. What station are you travelling to?		4. What type of journey is this	
Hour <input type="text"/> Minute <input type="text"/>				One-way <input type="checkbox"/> Single Two-way <input type="checkbox"/> Outbound leg <input type="checkbox"/> Return leg	
4a. If this is a Two-way trip, what time will (or did) the other leg happen?		1 <input type="checkbox"/> Today 2 <input type="checkbox"/> Another Weekday 3 <input type="checkbox"/> Weekend		at Hour <input type="text"/> Minute <input type="text"/>	
5. Why are you making this journey?		6. Where have you come from?		7. Where did you start <u>this journey</u> ?	
Tick main reason 1 <input type="checkbox"/> Travel to / from work 2 <input type="checkbox"/> Employers Business 3 <input type="checkbox"/> Personal Business 4 <input type="checkbox"/> To / From or On Holiday 5 <input type="checkbox"/> Shopping 6 <input type="checkbox"/> Visiting Friends / Family 7 <input type="checkbox"/> Leisure 8 <input type="checkbox"/> Education 9 <input type="checkbox"/> Other _____		Tick one box 1 <input type="checkbox"/> Home 2 <input type="checkbox"/> Other Accommodation 3 <input type="checkbox"/> Normal workplace 4 <input type="checkbox"/> Other workplace 5 <input type="checkbox"/> Shop 6 <input type="checkbox"/> School / College 7 <input type="checkbox"/> Tourist Attraction 8 <input type="checkbox"/> Other _____		Postcode or address <input type="text"/> House number or business name _____ Street name _____ Town _____	
8 What methods did you use to <u>get to</u> the railway station? Tick ALL that apply		8a. If you travelled by car (as driver or passenger), where is the car parked?		8b. What was the main reason for parking there? Tick ALL that apply	
1 <input type="checkbox"/> Walk 2 <input type="checkbox"/> Cycle 3 <input type="checkbox"/> Car Passenger 4 <input type="checkbox"/> Car Driver 5 <input type="checkbox"/> Motorcycle 6 <input type="checkbox"/> Taxi / Minicab 7 <input type="checkbox"/> Bus / Coach 8 <input type="checkbox"/> Another train 9 <input type="checkbox"/> Other _____		1 <input type="checkbox"/> Dropped off 2 <input type="checkbox"/> Station Car Park (Leonard Street) 3 <input type="checkbox"/> Station Car Park (Glasgow Road) 4 <input type="checkbox"/> Other Car Park (Specify) 5 <input type="checkbox"/> On-Street (specify) Street / Car Park Name _____		1 <input type="checkbox"/> Conveniently located 2 <input type="checkbox"/> Avoid parking charges 3 <input type="checkbox"/> Safety/security 4 <input type="checkbox"/> Cost 5 <input type="checkbox"/> Station car park full 6 <input type="checkbox"/> No station car park 7 <input type="checkbox"/> Other _____	
9. Why did you choose to travel from this station? Tick ALL that apply		10. Where will you finish <u>this journey</u> ?		11. Where are you travelling to?	
1 <input type="checkbox"/> Closest to starting point 2 <input type="checkbox"/> Closest to destination 3 <input type="checkbox"/> Shortest journey time 4 <input type="checkbox"/> Cheapest fare 5 <input type="checkbox"/> Rail service frequency 6 <input type="checkbox"/> Parking availability 7 <input type="checkbox"/> Parking cost 8 <input type="checkbox"/> Station facilities 9 <input type="checkbox"/> Safety/security 10 <input type="checkbox"/> Other _____		Postcode or address <input type="text"/> House number or business name _____ Street name _____ Town _____		Origin (Q6) and destination should not be the same. It is specific to this journey 1 <input type="checkbox"/> Home 2 <input type="checkbox"/> Other Accommodation 3 <input type="checkbox"/> Normal workplace 4 <input type="checkbox"/> Other workplace 5 <input type="checkbox"/> Shop 6 <input type="checkbox"/> School / College 7 <input type="checkbox"/> Tourist Attraction 8 <input type="checkbox"/> Other _____	
12. What methods do you intend to use to get there, <u>from the</u> railway station? Tick ALL that apply		13. How often do you make this journey? Tick one box		14. What type of ticket are you using today? Tick one box	
1 <input type="checkbox"/> Walk 2 <input type="checkbox"/> Cycle 3 <input type="checkbox"/> Car Passenger 4 <input type="checkbox"/> Car Driver 5 <input type="checkbox"/> Motorcycle 6 <input type="checkbox"/> Taxi / Minicab 7 <input type="checkbox"/> Bus / Coach 8 <input type="checkbox"/> Subway / Underground / Tram 9 <input type="checkbox"/> Another train 10 <input type="checkbox"/> Other _____		1 <input type="checkbox"/> 5 times a week or more 2 <input type="checkbox"/> 3 or 4 times a week 3 <input type="checkbox"/> more than once a week 4 <input type="checkbox"/> more than once a month 5 <input type="checkbox"/> more than once a year 6 <input type="checkbox"/> less than once a year		1 <input type="checkbox"/> Single 2 <input type="checkbox"/> Open Return 3 <input type="checkbox"/> Off peak return 4 <input type="checkbox"/> Season ticket Specify duration: _____ e.g. weekly, monthly etc 5 <input type="checkbox"/> Flexipass 6 <input type="checkbox"/> Other _____	
14a. What class are you travelling in		15. How many vehicles are owned (or available for use) within your household?		16. How many people live in your household?	
1 <input type="checkbox"/> Business / First 2 <input type="checkbox"/> Standard		Number: <input type="text"/>		No. of Adults <input type="text"/> No. of Children (15 and under) <input type="text"/>	

B PASSENGER SURVEY DATA

Provided in a Microsoft Excel Spreadsheet.

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

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