**Marple and Rose Hill Train Counts 2018**

**Summary of Findings**

1. **Introduction**

The Friends of Marple Station and Friends of Rose Hill Station both undertook passenger boarding and alighting counts during November 2018. These counts provide information on current levels of rail usage at the two stations in Marple. This paper summarises the way that the work was undertaken and sets out the main results. Results are presented for the two stations individually, followed by information on the combined travel to and from both of them. The paper also provides a comparison with previous surveys undertaken on similar dates since 2015, although the significance of any changes should not be over-estimated given day to day variations in demand and service performance.

Finally, the note records changes in station usage as recorded by the Office of Rail and Road’s (ORR’s) station entry and exit data.

1. **Survey Method**

The following information was collected during the survey:

* Passengers boarding each train during the survey period;
* Passengers alighting each train during the survey period;
* Train punctuality;
* Number of cycles taken on and off trains (Marple only);
* Periodic counts of car park utilisation (Rose Hill only).

The surveys were undertaken as follows:

* Rose Hill – Thursday 1st November from first to last train;
* Marple – Thursday 16th November from first train to 21.30.

For comparability, the results showing results for both stations relate to the period up to 21.30 (there is only one arrival at Rose Hill after this time). Comparison with previous years is for the period up to 19.45, as Marple surveys finished at this time.

There was no severe weather or significant disruption on either survey day, although strong winds were experienced elsewhere in England. The overall results should therefore be reasonably representative of typical weekdays.

1. **Rose Hill Ridership**

The November 2018 passenger count results for Rose Hill are shown in Figures 1 and 2 below, for departures and arrivals respectively, with a comparison with the surveys carried out in November 2016 and 2017. The charts plot usage for half hour periods rather than individual trains to illustrate the overall pattern of demand. In total there has been an increase in ridership as shown below.

**Table 1: Total November Weekday Usage of Rose Hill Station**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Departing Passengers** | **Arriving Passengers** | **All Passengers** |
| 2015 | 350 | 339 | 689 |
| 2016 | 393 | 380 | 773 |
| 2017 | 450 | 410 | 860 |
| 2018 | 474 | 436 | 910 |

6% more passengers used the station than in 2017. As in previous years, there were more departing than arriving passengers, suggesting that the lack of a later evening service is leading some people to find alternative ways of returning to Marple (possibly by travelling to Marple station). It is noticeable that the difference between departing and arriving passenger numbers has been higher in 2017 and 2018 than in previous years.

**Figure 1: Rose Hill Departures**

**Figure 2: Rose Hill Arrivals**

The diagrams show a typical commuter pattern of an outbound peak in the morning, with passengers returning in the evening peak and a much lower level of inter peak demand. However there is high inbound demand on the 07.59 arrival and a heavy outbound flow on the 15.14 departure. This largely comprises students travelling to and from Marple Hall High School and Marple College. This flow seems to be increasing. Although overall ridership has increased it appears to be more evenly spread during the peaks, possibly because the interval between trains has been made more even.

The station car park was full by 08.45 and remained so, although possibly with some turnover of vehicles, until mid-afternoon.

1. **Marple Ridership**

Total ridership at Marple station for the last four years is summarised below and a detailed comparison of journeys on a half hourly basis for the Manchester direction is shown in Figures 3 and 4.

**Table 2: Total November Weekday Usage of Marple Station (to 19.45)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Departing Passengers** | **Arriving Passengers** | **All Passengers** |
| 2015 | 873 | 728 | 1601 |
| 2016 | 836 | 713 | 1549 |
| 2017 | 872 | 754 | 1626 |
| 2018 | 870 | 707 | 1577 |
| 2018 (to 21.30) | 880 | 768 | 1648 |

Total ridership to 19.45 was a little lower than in 2017, due to a reduction in arriving passengers. This may reflect the better evening service introduced in May 2018 leading to some people staying later in Manchester. As in 2017, 95% of passengers were travelling to or from the Manchester direction.

**Figure 3: Marple Departures Towards Manchester**

**Figure 4: Marple Arrivals from Manchester Direction**

As at Rose Hill, the pattern of ridership is typical of a commuter station. There have been some changes in the level of ridership in particular half hour periods during the peak, but this may reflect changes in the timings of trains rather than an underlying demand shift.

In total, 17 people boarded with cycles during the survey period and 15 alighted. All were travelling to or from the Manchester direction. This is slightly lower than in 2017. Table 3 shows cycle use by time period.

**Table 3: Cycle Use at Marple by Time Period**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| Before 07.00 | 0 | 1 | 1 |
| 07.00 – 09.29 | 7 | 2 | 9 |
| 09.30 - 15.59 | 3 | 2 | 5 |
| 16.00 – 18.59 | 5 | 9 | 14 |
| 19.00 – 21.30 | 2 | 1 | 3 |
| Total | 17 | 15 | 32 |

1. **Results – Overall Usage**

In total, 2452 passengers boarded or alighted at the two stations during the period up to 19.45, with a total of 1340 boarding and 1112 alighting during this period, thus showing a relatively high level of rail usage. Total passenger numbers are slightly lower than the figure of 2469 recorded in 2017. However boardings have increased by 2%, while alightings have dropped by 3%, increasing the difference between them to 228 passengers. This may be partly due to the improved evening service encouraging passengers to travel back later. In the period to 21.30, total ridership was 2546 with 1354 boarding and 1192 alighting. In total, 162 more passengers boarded than alighted. 12 passengers alighted from the only train at Rose Hill after 21.30. In order for the number of passengers to balance over the day, 150 passengers would need to return to Marple after 21.30 (plus any passengers who board after this time). This implies that there may be significant numbers of passengers alighting at Marple after the survey period.

The great majority of passengers were travelling to or from the Manchester direction, with only 85 (3%) travelling to or from the Sheffield direction.

Table 4 summarises the to/from Manchester results by time of day.

**Table 4: Manchester Direction Trips by Time of Day**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| Before 07.00 | 70 | 1 | 71 |
| 07.00 – 09.29 | 719 | 115 | 834 |
| 09.30 - 15.59 | 403 | 193 | 596 |
| 16.00 – 18.59 | 108 | 648 | 756 |
| 19.00 – 19.44 | 10 | 105 | 115 |
| 19.45 - 21.30 | 12 | 77 | 89 |
| Total | 1322 | 1139 | 2461 |

The table shows strong peak demand to Manchester in the morning, returning in the evening. Contra-peak travel to Marple is relatively low. It increased between 2015 and 2017 but has remained stable for the past year. Observations suggest this is mostly travel to educational establishments. While off peak demand is lower than the peak, it remains significant. Interestingly more people board than alight during the inter peak period. This implies that they are returning in the evening peak or later. Compared to 2017, station usage has increased in the inter peak, reversing a decline last year. There has been a slight decline in AM peak boardings and an increase in PM peak alightings, with the latter likely to be due to people returning from outbound journeys in the inter peak. This suggests that the impact of imposing peak fares in the PM peak may be declining.

Table 5 shows demand in the two peak hours.

**Table 5: Manchester Direction Peak Hour Demand**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| 07.31 – 08.30 | 460 | 93 | 553 |
| 17.01 – 18.00 | 37 | 286 | 323 |

Overall, more passengers travel in the morning peak hour than the evening peak hour. The imbalance between the 2 peaks has increased since 2015. In 2018, 71% more passengers travelled in the morning peak hour than in the evening peak hour. This has grown from 41% in 2017, 36% in 2016 and 11% in 2015. The evening peak has become less concentrated over the past four years.

Table 6 shows total usage by station.

**Table 6: Manchester Direction Trips by Time of Day and Station**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Marple** | **Rose Hill** | **Marple Share (%)** |
| Before 07.00 | 48 | 23 | 68 |
| 07.00 – 09.29 | 514 | 320 | 62 |
| 09.30 - 15.59 | 343 | 253 | 58 |
| 16.00 – 18.59 | 508 | 248 | 67 |
| 19.00 – 19.44 | 84 | 31 | 73 |
| 19.45 – 21.30 | 66 | 23 | 74 |
| **Total** | **1563** | **898** | **64** |

Overall, more passengers use Marple than Rose Hill in each period, although the difference is greater in the peak than the off peak. Reasons for Rose Hill’s better performance in the off peak may include a more equal distribution of services (2 trains/ hour from each station) and slightly better car parking availability at Rose Hill, although this is now a problem at both stations. Compared to 2017, there has been a 3% decrease at Marple and a 4% increase at Rose Hill during the period to 19.45. This compares with a 5% increase at Marple and a 12% increase at Rose Hill between 2016 and 2017. The growth at Rose Hill has been wholly outside the peaks and may partly reflect the rather better early morning and early evening service introduced in May 2018.

Examining results by direction, the only period where Rose Hill had more passengers than Marple was inbound in the morning peak. This may be due to students travelling to Marple Hall High School and Marple 6th Form College, which are closer to Rose Hill. This flow has increased relative to previous years.

Trains where 50 or more passengers boarded or alighted are shown below.

**Table 7: Busiest Trains – Boarding and Alighting**

|  |  |  |
| --- | --- | --- |
| **Station** | **Train Time** | **Number of Passengers** |
| **Boarding** |  |  |
| Marple | 07.47 | 105 |
| Rose Hill | 07.43 | 87 |
| Marple | 07.31 | 87 |
| Marple | 07.58 | 75 |
| Rose Hill | 15.14 | 65 |
| Marple | 07.02 | 64 |
| Marple | 08.32 | 54 |
| Marple | 08.09 | 53 |
| Rose Hill | 08.20 | 53 |
| **Alighting** |  |  |
| Marple | 17.11 | 71 |
| Marple | 17.43 | 69 |
| Rose Hill | 07.59 | 66 |
| Marple | 18.11 | 65 |
| Marple | 17.53 | 56 |
| Marple | 16.43 | 52 |

In total there were 15 trains with more than 50 people boarding or alighting in 2018, compared to 16 in 2017, 12 in 2016 and 13 in 2015. At Marple, there is a marked peak between 07.30 and 08.00 with over 75 passengers boarding each of the three trains at this time. The busiest train from Rose Hill was the 07.43 service with 87 passengers, a reduction compared to 2016. The number of passengers alighting at Marple in the evening peak is more even with typically 50 – 70 using each service. No Rose Hill trains arriving in the evening peak carried more than 50 passengers. The other notable feature is the impact of school trips to Rose Hill, resulting in both the 07.59 arrival and 15.14 departure carrying more than 60 passengers.

 As noted above, demand in the Sheffield direction is much lower than towards Manchester. Results by period are shown below. The total is similar to 2017, although there were fewer boardings and more alightings than in 2017. So far, the improved off peak service seems to have had little impact, perhaps due to service unreliability.

**Table 8: Sheffield Direction Boarding and Alighting**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| Before 07.00 | 0 | 0 | 0 |
| 07.00 – 09.29 | 10 | 8 | 18 |
| 09.30 - 15.59 | 14 | 14 | 28 |
| 16.00 – 18.59 | 6 | 26 | 32 |
| 19.00 – 19.44 | 0 | 2 | 2 |
| 19.45 – 21.30 | 2 | 3 | 5 |
| **Total** | **32** | **53** | **85** |

As the survey was carried out on a weekday in November, the number of leisure trips to stations in the Peak District National Park could be expected to be low.

**6. Results – Punctuality**

The table below shows service punctuality on the survey days.

**Table 7 Service Punctuality**

|  |  |  |
| --- | --- | --- |
|  | **From Manchester** | **To Manchester** |
| **Marple** |  |  |
| Average Lateness | 3.9 | 4.2 |
| Maximum Lateness | 15 | 16 |
| % right time | 15 | 29 |
| No. of trains >5 minutes late | 9 | 9 |
| **Rose Hill** |  |  |
| Average Lateness | 2.8 | 1.3 |
| Maximum Lateness | 11 | 8 |
| % right time | 38 | 66 |
| No. of trains >5 minutes late | 6 | 3 |

The overall position at Marple appears better than on the survey day in 2017, when several trains were cancelled. Excluding cancelled trains, average lateness at Marple in 2017 was 3.1 minutes in the To Manchester direction and 4.2 minutes in the From Manchester direction, with maximum lateness of 18 and 10 minutes respectively. This is similar to 2018.

Punctuality at Rose Hill is worse than last year in both directions with average lateness increasing by around 1 minute in each direction. Elimination of the relatively long turn round times at Rose Hill in the previous timetable has reduced opportunities for late running incoming trains to catch up and depart on time.

Trains from Sheffield were, on average, 8.1 minutes late compared to an average of 1.1 minutes for Manchester-bound trains starting from New Mills Central or Marple. As in 2016 and 2017, the Sheffield services were much less reliable than shorter distance services. This is likely to reflect pathing constraints in the Hope Valley.

Overall 88% of trains were less than 5 minutes late, a slight improvement on the 86% in 2017 but down from 92% in 2016. Only 22% of trains at Marple and around 38% at Rose Hill were on time arriving at the station. Overall, less than 40% of trains were on time departing. This shows that there is a lot of minor delay to the services on these routes and Northern Rail’s Right Time initiative still has a long way to go, with little improvement on last year.

Clearly, it would be wrong to read too much into results from a one day survey, but there is little evidence to suggest that performance is improving on the route.

**7. ORR Entry and Exit Data**

Total usage of each station is reported annually by ORR. This is based on ticket sales, plus an adjustment for passengers who do not appear in the ticket sales data (such as Greater Manchester Concessionary Pass holders). The trend since 1998 is shown below.

**Figure 5: ORR Station Usage Data**

Total usage of Marple was 480,000 with 174,000 using Rose Hill. The combined total of 654,000 is the highest figure recorded in the ORR data, which dates back to 1998. Since then ridership at both stations has more than doubled. Rose Hill’s share continues to increase and is now 27% of the total.

The continuing growth is a little surprising given the RMT strikes in 2017/18. As their dispute with Northern has escalated in 2018/19, there is likely to be a greater impact when the 2018/19 results are published.

1. **Key Findings**

Key conclusions from the survey include:

* Train services from the Marple area are well used;
* Most trips are in the Manchester direction, with only 3% in the Sheffield direction;
* There is a high level of peak commuting, but also significant off peak use;
* The number of inbound trips to Marple, on weekdays, seems to be relatively low, with the main flow being trips to Marple Hall High School and Marple College;
* 64% of journeys counted on the survey days were from Marple with the remainder from Rose Hill;
* The number of people taking cycles on trains is low; and
* On the survey day 88% of trains were less than 5 minutes late but less than 40% were on time.

Overall usage on the survey days has increased by 8% since 2015, with Rose Hill growing more rapidly than Marple. Punctuality has not improved compared to previous years.

The results indicate that more people are returning later from Manchester than in previous years, perhaps because of the better evening service. However Rose Hill still suffers from a very early finish, with the last departure from Manchester at 21.09. The improved Sheffield service seems to have had little impact so far, perhaps due to the wider problems Northern has been experiencing.