**Marple Area Train Counts 2019**

**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 2019. 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;
* Periodic counts of car park utilisation (Rose Hill only).

The surveys were undertaken as follows:

* Rose Hill – Thursday 21st November from first to last train;
* Marple – Thursday 24th November from first train to 19.45.

For comparability, results for both stations relate to the period up to 19.45.

There was no severe weather or significant disruption on the Rose Hill survey day, so the results should therefore be reasonably representative of typical weekdays. However it was rainy throughout the Marple survey day, with very heavy rain in the afternoon. As a result, leisure travel may have been suppressed and there was considerable service disruption in the afternoon and evening. This should be recognised when interpreting the results.

1. **Rose Hill Ridership**

The November 2019 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 for the three previous years. 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** | **Change from Previous Year (%)** |
| 2015 | 350 | 339 | 689 | - |
| 2016 | 393 | 380 | 773 | +12 |
| 2017 | 450 | 410 | 860 | +11 |
| 2018 | 474 | 436 | 910 | +6 |
| 2019 | 509 | 478 | 987 | +8 |

8% more passengers used the station than in 2018. 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). The difference between departing and arriving passenger numbers has been between 30 and 40 for each of the past 3 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 increased markedly in 2018 as a result of the revised timetable and has continued to grow. 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. Usage of the 07.43 departure has fallen, probably because this train suffered serious overcrowding.

Six passengers boarded and six alighted with cycles over the course of the day. Table 2 shows cycle use by period.

**Table 2: Cycle Use at Rose Hill by Time Period**

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| Before 07.00 | 1 | 0 | 1 |
| 07.00 – 09.29 | 3 | 1 | 4 |
| 09.30 - 15.59 | 2 | 2 | 4 |
| 16.00 – 18.59 | 0 | 3 | 3 |
| 19.00 – 21.30 | 0 | 0 | 0 |
| Total | 6 | 6 | 12 |

The station car park was full by 08.45 and remained so, although possibly with some turnover of vehicles, until early afternoon. There was substantial use of the area by the roundabout from at least Midday until around 17.30, indicating that it operates as an overflow car park. This occurs even after the main car park has started to empty, because of cars that arrived when it was full.

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** | **Change from Previous Year (%)** |
| 2015 | 873 | 728 | 1601 | - |
| 2016 | 836 | 713 | 1549 | -3 |
| 2017 | 872 | 754 | 1626 | +5 |
| 2018 | 870 | 707 | 1577 | -3 |
| 2019 | 699 | 655 | 1354 | -14 |

Total ridership to 19.45 in 2018 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. There was a further substantial reduction in 2019 affecting both directions, perhaps because of the adverse weather conditions on the survey day. In addition, the number of passengers boarding the 09.38 departure to Manchester was not recorded. The preceding 09.17 departure was heavily delayed and ran shortly after this service, with only 2 people boarding at Marple. 94% of passengers were travelling to or from the Manchester direction, slightly lower than in previous years.

**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. In the To Manchester direction, the negligible ridership in the hour commencing 09.00 is due to the 09.17 being delayed and boardings on the 09.38 not being recorded. In the From Manchester direction, the busiest half hour in the evening peak occurred 30 minutes later than previously. This was due to the 17.43 and 17.54 arrivals being so late that they arrived in the following half hour.

In total, 12 people boarded with cycles during the survey period and 9 alighted, with about three quarters travelling to or from the Manchester direction. The overall number of cyclists fell by around one third, possibly due to the weather. 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 | 3 | 3 | 6 |
| 09.30 - 15.59 | 4 | 0 | 4 |
| 16.00 – 18.59 | 5 | 4 | 9 |
| 19.00 – 19.45 | 0 | 1 | 1 |
| Total | 17 | 9 | 21 |

1. **Results – Overall Usage**

In total, 2341 passengers boarded or alighted at the two stations during the period up to 19.45, down from 2452 in 2018. This may be due to adverse weather suppressing ridership on the day of the Marple count. In total 1208 passengers boarded and 1133 alighted during this period. The number of people boarding was significantly lower than the 1340 recorded in 2018, while the number alighting showed a slight increase from 1112. A possible explanation is that poor weather deterred some people from travelling from Marple, and may have encouraged others to return early. The overall impact would be to reduce the number of passengers returning after the survey period and thus the imbalance between departing and arriving trips.

The great majority of passengers were travelling to or from the Manchester direction, with only 77 (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 | 41 | 6 | 47 |
| 07.00 – 09.29 | 718 | 117 | 835 |
| 09.30 - 15.59 | 315 | 202 | 517 |
| 16.00 – 18.59 | 85 | 618 | 703 |
| 19.00 – 19.44 | 4 | 122 | 126 |
| Total | 1163 | 1065 | 2228 |

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 and has increased further between 2018 and 2019 but has remained stable for the past year. Observations suggest this is mostly travel to educational establishments, which generate inbound trips in the morning peak, and outbound ones before the start of the evening commuter peak. While off peak demand is lower than the peak, it remains significant. Interestingly more people board than alight during the inter peak period. Previously, it was suggested that his implies that they are returning in the evening peak or later. However it now appears that most of the difference is due to students returning from school or college. Compared to 2018, station usage has fallen in the inter peak, perhaps due to adverse weather. AM peak boardings are very similar to 2018 but PM peak alightings have decreased slightly, perhaps because there were fewer people returning from outbound journeys in the inter peak.

Table 5 shows demand in the morning and evening peak hours. In previous years these were 07.31 to 08.30 and 17.01 to 18.00. However in 2019, the morning peak hour was 07.01 to 08.00 and the evening peak hour was 17.46 to 18.45. To aid comparability, both hours are shown for each peak.

In the morning, the 06.36 train from Marple was cancelled and 14 of the 28 people who arrived for this train waited for the 07.02 departure (the remainder either went to Rose Hill or took a taxi to Stockport). Even ignoring them, the hour commencing 07.01 would still be the busiest, suggesting that the morning peak is gradually become earlier. The evening peak was disrupted by the weather on the day of the Marple survey, resulting in no trains arriving between 17.11 and 18.01 and this probably explains the later PM peak hour.

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Period** | **Boarding** | **Alighting** | **Total** |
| 07.01-08.00 | 458 | 103 | 561 |
| 07.31 – 08.30 | 436 | 102 | 538 |
| 17.01 – 18.00 | 29 | 168 | 197 |
| 17.46-18.45 | 30 | 314 | 344 |

Travel in the 2 peak hours was slightly higher than in the (different) peak hours in 2018. In the morning peak, this relates mainly to additional inbound trips to Rose Hill. In the evening peak it may be more related to service disruption resulting in extra passengers being concentrated on a small number of trains. Overall, more passengers travel in the morning peak hour than the evening peak hour. The imbalance between the 2 peaks has increased since 2015, although the imbalance dropped from 71% in 2018 to 63% in 2019. However it has grown from 41% in 2017, 36% in 2016 and 11% in 2015. The evening peak seems to have become less concentrated over the past five 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 | 21 | 25 | 46 |
| 07.00 – 09.29 | 489 | 346 | 59 |
| 09.30 - 15.59 | 225 | 292 | 44 |
| 16.00 – 18.59 | 470 | 233 | 67 |
| 19.00 – 19.44 | 71 | 55 | 56 |
| **Total** | **1277** | **951** | **57** |

Overall, more passengers use Marple than Rose Hill. However more passengers used Rose Hill than Marple before 07.00 (probably due to the cancellation of the 06.36 from Marple) and in the inter peak. The latter is probably due to a combination of growing school traffic from Rose Hill and poor weather on the Marple survey day. Nonetheless, it appears that Rose Hill is continuing to benefit from the improved train service introduced in 2018. This is the first time that Rose Hill has had higher patronage in any period since these surveys began.

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** |  |  |
| Rose Hill | 15.14 | 100 |
| Marple | 07.31 | 88 |
| Marple | 07.58 | 83 |
| Marple | 07.02 | 79 |
| Marple | 07.47 | 78 |
| Rose Hill | 07.43 | 71 |
| Rose Hill | 08.20 | 60 |
| Rose Hill | 07.11 | 59 |
| Marple | 08.09 | 56 |
| Marple | 08.32 | 51 |
| **Alighting** |  |  |
| Marple | 17.43 | 120 |
| Rose Hill | 07.59 | 85 |
| Marple | 18.11 | 63 |
| Marple | 16.43 | 54 |

In total there were 14 trains with more than 50 people boarding or alighting in 2019, compared to 15 in 2018, 16 in 2017, 12 in 2016 and 13 in 2015. The highest number of boardings was on the 15.14 from Rose Hill, which carries a large number of school students and this is matched by a high number of alighting passengers at 07.59. At Marple, there is a marked peak between 07.00 and 08.00 with over 75 passengers boarding each of the four trains at this time. The second busiest train from Rose Hill was the 07.43 service with 71 passengers, a reduction compared to 2018. In 2018, the number of passengers alighting at Marple in the evening peak was more even with typically 50 – 70 using each service. In 2019, this was much more concentrated on the late running 17.43 arrival.

As noted above, demand in the Sheffield direction is much lower than towards Manchester. Results by period are shown below. The total is 9% lower than in 2018, possibly due to the weather. 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 | 3 | 0 | 3 |
| 07.00 – 09.29 | 13 | 3 | 16 |
| 09.30 - 15.59 | 12 | 12 | 24 |
| 16.00 – 18.59 | 14 | 17 | 31 |
| 19.00 – 19.44 | 0 | 3 | 3 |
| **Total** | **42** | **35** | **77** |

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 and poor weather may have reduced this further.

**6. Results – Punctuality**

The table below shows service punctuality on the survey days.

**Table 7 Service Punctuality**

|  |  |  |
| --- | --- | --- |
|  | **From Manchester** | **To Manchester** |
| **Marple** |  |  |
| Average Lateness | 6.3 | 6.4 |
| Maximum Lateness | 46 | 28 |
| % right time | 20 | 29 |
| No. of trains >5 minutes late | 12 | 9 |
| **Rose Hill** |  |  |
| Average Lateness | 2.2 | 1.6 |
| Maximum Lateness | 27 | 29 |
| % right time | 73 | 89 |
| No. of trains >5 minutes late | 2 | 2 |

The overall position at Marple is much worse than in 2018, with average lateness increasing by more than 2 minutes in each direction. The longest delays were caused by cancellations (where it is assumed that the delay is equal to the time to the next service). Excluding these, three trains towards Manchester were more than 20 minutes late. It is recognised that adverse weather affected performance in the afternoon. However average delay up to Midday was 4.8 minutes towards Manchester and 4.1 minutes towards Sheffield, compared to 4.2 and 3.9 minutes respectively in 2018. This suggests that underlying performance is no better than in 2018 and may be worse.

Compared to 2018, punctuality at Rose Hill is better in the “from Manchester” direction but worse towards Manchester. This seems to be due to a small number of cancelled or late trains in combination with the short turn rounds at Rose Hill preventing recovery from delayed arrivals. However the percentage of right time arrivals and departures has improved substantially in both directions.

Trains from Sheffield were, on average, 12.3 minutes late compared to an average of 2.7 minutes for Manchester-bound trains starting from New Mills Central or Marple. As in previous years, the Sheffield services were much less reliable than shorter distance services. This is likely to reflect pathing constraints in the Hope Valley.

Overall 78% of trains were less than 5 minutes late, compared to 88% in 2018, 86% in 2017 and 92% in 2016. Only 23% of trains at Marple but around 81% at Rose Hill were on time arriving or departing.

Clearly, it would be wrong to read too much into results from a one day survey, but it appears that punctuality on the Rose Hill service is better than at Marple and is improving. The punctuality of Marple services seems to be significantly affected by delays on the Hope Valley.

**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. This is published in January, based on usage in the year to the end of the previous March. Accordingly the latest data is for the period to March 2019 and is more comparable to the November 2018 train counts than to those reported above.

The trend since 1998 is shown below.

**Figure 5: ORR Station Usage Data**

Total usage of Marple was 512,000 with 211,000 using Rose Hill. The combined total of 723,000 is the highest figure recorded in the ORR data, which dates back to 1998. It is the first time Marple ridership has exceeded 500,000 and Rose Hill usage has exceeded 200,000. Since 2000 ridership at Marple has more than doubled and at Rose Hill it has more than tripled. Rose Hill’s share continues to increase and is now 29% of the total.

Last year’s Summary noted that “The continuing growth [reported in the Note] 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.” While industrial action ceased towards the end of the 2018/19 year, it still affected the majority of the period. At first sight, it is therefore very surprising that usage at Rose Hill grew by 21% and at Marple by 7%. However the accompanying methodology report highlights that Concessionary travel data for Greater Manchester became available in 2018/19 and this led to an additional 3.6 million journeys across the conurbation being included for the first time. Accordingly the apparent growth may be more to do with the correction of past under reporting than actual growth. Comparison of the 2018 and 2017 train counts (which relate to a comparable period) show 6% growth at Rose Hill and 3% decline at Marple. This suggests that there was underlying growth at Rose Hill but not Marple.

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. This flow primarily to Rose Hill is continuing to grow;
* 57% of journeys to or from the Manchester direction 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 78% of trains were less than 5 minutes late. Around three quarters of trains at Rose Hill, but only a quarter at Marple arrived or departed on time. However this was affected by adverse weather on the day of the Marple survey

Overall usage on the survey days has increased by 8% since 2015, with Rose Hill growing more rapidly than Marple (this year’s decrease at Marple may be due to the weather). Punctuality has not improved compared to previous years.