Building Back Better: Restoring and Enhancing the Train Service between Manchester and Rose Hill via Hyde

October 2020

A paper by Friends of Rose Hill Station and Goyt Valley Rail Users' Association





Summary

Prior to the Covid-19 pandemic, the rail service from Manchester Piccadilly to Rose Hill Marple via Hyde operated at a half hourly frequency on Mondays to Saturdays. The first train left Rose Hill at 06.20 (07.13 on Saturday) and the last train back from Manchester departed at 21.09. There was no Sunday service.

The service is currently reduced to a minimal service of three trains per day in each direction, only stopping at some stations. We understand that Northern Trains propose to increase the daytime service to a train every 90 minutes from 26th October and hourly from 14th December. No date has been set for the resumption of the full half hourly service, but we have been told that this will not be before May 2021 "at the earliest". Friends of Rose Hill Station and Goyt Valley Rail Users' Association are very concerned that the reduced service will be maintained indefinitely and this will hinder efforts to rebuild ridership as Britain recovers from the pandemic. This will reduce the value of the line and make it vulnerable to total closure as a cost saving measure. Northern Trains and others deny that this is an objective, but it could be an unintended consequence of their actions.

While the long term travel implications of the pandemic are not yet clear it seems very probable that there will be a reduction in daily commuting and shopping, so that a service which only operates over limited hours to meet these needs will not meet its potential. We have reviewed services on the route over the past 50 years and this shows that it has never had a Sunday service and the evening provision has been limited, apart from a short period between 1977 and 1982. Recent timetable changes have improved the daytime service provision and the latest change, in 2018, provided a better service in the early evening. These changes have led to strong ridership growth with usage of the stations only served by Rose Hill trains more than doubling in the past decade. There has not been significant diversion from other stations, which would have occurred if they provided a good alternative. This demonstrates that the rail market on the route is responsive to service improvements.

Assessment of the socio-demographic characteristics of the areas served shows a marked contrast between them. In the relatively wealthy areas of Rose Hill and Woodley, rail is competing with car for a range of work and leisure related journeys. Increasing rail use is important to meeting Transport for Greater Manchester's target that 50% of journeys should be made by modes other than car by 2040. In contrast, the Hyde area experiences high levels of deprivation and low car ownership. Good public transport links are important in improving the socio-economic conditions in the area. In both areas, a service operating over longer hours, seven days a week is needed.

We consider that the full timetable needs to be restored as soon as possible. Beyond this, we have identified three specific gaps in service provision that need to be addressed to grow rail use and meet economic and environmental needs:

- Fairfield and Hyde North stations only have an hourly service, while all the other stations are served half hourly, meaning these stations are not realising their full potential despite significant recent ridership growth at Fairfield. While Rose Hill trains are largely suspended, a service to Gorton is being provided by stopping Glossop/ Hadfield bound trains there. We believe this should continue, allowing all Rose Hill trains to stop at both Hyde North and Fairfield, while maintaining current overall journey times.
- 2. The last train to Rose Hill departs at 21.09. This is much earlier than other routes in Greater Manchester. As a result people working late in Manchester, connecting from long distance services in the evening, or taking part in evening activities in the city do not have a rail

service available. We consider that extra trains from Manchester should operate at 22.09 and 23.09 and from Rose Hill at 22.13 from December 2021. This could be introduced initially for a three year trial period to confirm the demand potential.

3. There is no Sunday service on the route. We believe an hourly service between 08.00 and 23.00 should be introduced, again for a trial period, from December 2021.

1. Introduction

Prior to the Covid-19 pandemic, the rail service from Manchester Piccadilly to Rose Hill Marple via Hyde operated at a half hourly frequency on Mondays to Saturdays. The first train left Rose Hill at 06.20 (07.13 on Saturdays) and the last train back from Manchester departed at 21.09. There was no Sunday service.

When British society entered lockdown in March 2020, the service was reduced to hourly. From September 14th it was further reduced to a minimal service of three trains per day in each direction, with only half of these stopping at stations on the Hyde Loop. Northern Trains plan to increase the service with a daytime train every 90 minutes from 26th October (but with no evening service). We understand that they propose to provide an hourly service from 14th December. No date has been set for the resumption of the full half hourly service, but we have been told that this will not be before May 2021 "at the earliest".

Northern's rationale for reducing the service is to free up resources for a major driver training programme. The Rose Hill route was selected for service reductions because Northern consider it to be lightly used and because "excellent" alternatives exist from neighbouring stations. As we show in this paper, these statements are inaccurate and/or outdated.

Friends of Rose Hill Station and Goyt Valley Rail Users Association are very concerned that the reduced service may be maintained indefinitely and this will hinder efforts to rebuild ridership as Britain recovers from the pandemic. This will reduce the value of the line and make it vulnerable to total closure as a cost saving measure. Northern Trains and others deny that this is an objective, but it could be an unintended consequence of their actions. By contrast, the purpose of this paper is to set out the case for the full service to be reinstated as soon as possible and enhanced by the addition of late evening and Sunday trains.

After this Introduction, the paper contains 5 further sections covering:

- The potential impacts of Covid-19 on rail ridership to set the scene;
- The history of rail services on the route showing that the Rose Hill via Hyde service has been more limited than on neighbouring lines;
- The impacts of service improvements in recent years in starting to overcome these shortcomings and growing ridership;
- The socio-demographic characteristics of the communities served and the social case for service enhancements; and
- Our proposed way forward.

2. Impact of Covid-19 on Rail Ridership

Rail ridership grew almost continuously for around 25 years up to the start of 2020. Since then the Covid-19 pandemic has had a dramatic impact on rail demand. National Rail ridership fell to 5% of its previous level in early April and remained at less than 40% of pre-pandemic levels in mid-September. The additional social restrictions introduced in late September can be expected to lead to another reduction in ridership, although probably not to the April level.

Clearly, rail ridership will not fully recover until after social and economic restrictions are lifted. This is unlikely to occur until the level of infection is brought down to a very low level for an extended period, either through control measures or the development of an effective vaccine. We do not know when this will happen, but have made the working assumption that it will be within the next two years.

While lifting restrictions will increase rail ridership, as work, shopping and leisure travel grows, it is unlikely that the pattern of demand will be the same as before the pandemic. While it is uncertain how the social changes accelerated by the pandemic will affect ridership, certain trends are already obvious. The most relevant of these for a suburban rail service are:

- 1. There will be *a shift to more flexible patterns of work*, with more home-working. This will reduce peak ridership and may bring the remaining morning peak forward as those unable to work from home, e.g. in construction, typically start work earlier than office staff. This may be mitigated to some extent by city centre residents relocating to the suburbs to find homes with gardens and good access to green space. There may also be an increase in daytime off peak travel as people spend part of their work day at the office and part at home.
- 2. A *rapid increase in on-line retail* is occurring. While there may be some increase in physical shopping trips when the virus is brought under control, it appears that the total number of shopping trips will be lower than before the pandemic. However the scale of the impact on major centres, such as Manchester, is less clear. They have been hit hard by the virus, but once this has passed city centres with their broad retail offering and availability of niche and unique products may have a stronger future than other locations.
- 3. Other *leisure travel will revive.* There is significant suppressed demand for travel to sporting events, for entertainment, to green spaces such as National Parks and to visit friends and relatives. These activities will resume when restrictions are lifted and people feel safe undertaking them and travel may increase if their value has come to be better recognised.

The implications of these changes are that future demand patterns are uncertain and a rail service which is restricted to serving traditional commuter and weekday shopping markets is unlikely to realise its full potential. It implies that late evening and Sunday trips are likely to be relatively more important than in the past and, conversely, that the Monday to Friday morning and evening peaks will become less intense.

Beyond these specific Covid-19 impacts, the need to switch to more sustainable travel modes due to the *climate emergency* is as critical as before. The Greater Manchester Mayor has set a 2038 target for the conurbation to become net carbon neutral, ahead of the UK-wide target of 2050. Transport for Greater Manchester aims to reduce the modal share of car to 50% by 2040. Rail has an important role to play in decarbonising transport, especially on radial corridors from suburbs to city centres. This requires attractive services to be offered, capable of attracting users travelling for a wide range of purposes.

Accordingly the rail industry needs to adapt with less need to focus on high levels of peak commuter demand and an increased need to provide an attractive service from early morning to late evening, seven days a week.

3. History of Rail Services on the Route

Following a series of rail closures in the 1960s, the present day rail network in South East Manchester came into existence in January 1970, when the lines from New Mills to Hayfield and Rose Hill to Macclesfield closed. This ended a period of uncertainty during which both the New Mills and Rose Hill services were threatened with closure. The route network relevant to this paper is shown diagrammatically in Figure 1 below. It should be noted that the route from Manchester to Rose Hill via Hyde is 3 miles longer, at 12.5 miles, than via Bredbury, 9.5 miles.



Figure 1: Route Diagram

Tables 1 to 3 chart the evolution of services on the route served by present day Rose Hill trains at 10 year intervals since 1970. Table 1 shows the number of trains from Manchester Piccadilly to Rose Hill on weekdays, identifying those routed via Bredbury and Hyde separately. In the reverse direction the service pattern was generally similar, but with some differences in particular years. Since the Hyde Loop has, at various times, also been served by trains to Marple or New Mills, the total number of trains calling at Hyde Central is also shown. Table 2 documents the times of first and last trains to and from Rose Hill, split by departures from Rose Hill and Manchester Piccadilly. Table 3 provides the same information for Hyde Central.

Year		Total to Hyde		
	Via Bredbury	Via Hyde	Total	Central
1970	16	3	19	17
1980	6	19	25	28
1990	14	12	26	25
2000	0	17	17	17
2010	1	17	18	17
2020 (1)	0	29	29	29

Table 1: Trains from Manchester Piccadilly to Rose Hill and Hyde Central (Monday to Friday)

(1) Pre-pandemic

Table 2: First and Last Trains To and From Rose Hill

Year		oound nchester Piccadilly)		ound ng Rose Hill)
	First Train	Last Train	First Train	Last Train
1970	06.28	20.33	06.58	21.05
1980	06.30	22.57	06.26	22.41
1990	06.21	23.10(1)	06.26	19.32
2000	06.32	20.29	06.35	21.10
2010	06.24	20.36	06.32	21.12
2020	06.34	21.09	06.20	21.13

(1) Single late evening service, previous train departed at 18.53

Table 3: First and Last Trains To and From Hyde Central

Year	Outbound (time leaving Manchester Piccadilly) First Train Last Train			ound Hyde Central)
			First Train	Last Train
1970	06.00	22.30	06.26	21.29
1980	06.00	22.20	06.28	22.53
1990	06.21	23.10(1)	06.38	19.35
2000	06.32	20.29	06.46	21.21
2010	06.24	20.36	06.43	21.23
2020	06.34	21.09	06.32	21.25

(1) Single late evening service, previous train departed at 18.53

In 1970, the basic off peak service pattern comprised hourly services to Rose Hill and to Marple, both via Bredbury, and a two hourly service to New Mills Central via Hyde. There were, however, some variations through the day and additional peak services. The first departure from Rose Hill was at 06.58 and the last departure from Manchester Piccadilly to Rose Hill was at 20.33, giving an effective service day of about 13.5 hours. Hyde Central had a rather longer service day, although a lower daytime off peak frequency. There was no Sunday service at Rose Hill or Hyde, though New Mills was served via Bredbury – a situation that continues today.

The relatively short service day meant that passengers wishing to return in the late evening, either from an event in Manchester or as the last leg of a longer journey, did not have a service available. Accordingly potential passengers were lost. In most cases both the outward journey leg – made when the service was operating – as well as the return leg would be lost as people chose to travel by other modes, or in some cases not travel at all. Similarly, the potential Sunday market was also lost.

By 1980 the service pattern had changed so that most Rose Hill trains were routed via Hyde, although some – mainly at peak times – continued to use the Bredbury route. The basic off peak

service pattern was now an hourly train to Rose Hill via Hyde and a half hourly service to New Mills via Bredbury. The operating day had been extended to 16.5 hours with a first departure from Rose Hill at 06.26 and a last train from Manchester at 22.57. This service pattern had been introduced in 1977 and lasted until 1982. In that year the evening service was cut back so there was only one train at each station after 19.30 – a 23.00 train to Marple via Hyde and a 23.05 to Rose Hill via Bredbury.

By 1990, the service pattern had changed again. There was an hourly service to Sheffield calling only at Hyde Central before Romiley and hourly trains to Rose Hill and New Mills Central via Bredbury. There were also occasional off peak stopping trains to Rose Hill via Hyde. The evening peak service to Rose Hill was more frequent than previously with 10 departures from Manchester between 16.00 and 18.59. Seven of these trains, including all those between 16.15 and 18.15 operated via Bredbury, with three fringe-of-peak services via Hyde. There was a single late evening departure from Manchester to Rose Hill via Hyde, at 23.10. This left a gap of more than four hours from the previous departure at 18.53. Excluding the single late train, the effective operating day was only 12.5 hours. By 1990 a marked difference had emerged between the Monday to Friday and Saturday service patterns. On Saturday Rose Hill got 2 trains/hour alternately routed via Bredbury and Hyde.

There was a further major service revision from July 1991¹. From this time, Rose Hill was served almost exclusively via the Hyde Loop except on Saturdays. At this time, stops at Fairfield were moved from Glossop/ Hadfield trains to Rose Hill services (previously trains routed via Hyde ran non-stop to Guide Bridge). In this timetable there were 18 trains/ day with a first inbound departure from Rose Hill at 06.24 and a last outbound departure from Manchester at 18.50. The service was hourly with some additional peak trains. In addition the Sheffield service continued to operate via Hyde, calling at Hyde Central. The Saturday service did not change significantly, except for the loss of the late evening train, with alternate services via Bredbury and Hyde.

The financial year 1997/8 is the first year of the Office of Rail and Road's annual estimates of station usage. So this is the first year from which it is possible to track the relationship between service levels and ridership. In that year, a total of 19 trains operated in each direction between Rose Hill and Manchester, all via Hyde. The service was hourly in the off peak and half hourly inbound in the morning peak. Five extra outbound trains operated in the evening peak at a somewhat irregular frequency but, on average, providing a better than half hourly headway. By 1997 the Sheffield service had been diverted via Bredbury, reducing the number of trains calling at Hyde Central. The first train from Rose Hill was at 06.42 and the last departure from Manchester was at 20.20. However there was a one hour 44 minute gap from the previous departure at 18.36. The Saturday service via Bredbury had also disappeared and the Saturday service was now similar to the Monday to Friday off peak.

This service pattern continued broadly unchanged until December 2010. However the number of extra outbound evening peak trains reduced from five in 1997 to three in 2000 and two by 2010. Conversely the 2010 timetable included a 08.35 departure from Rose Hill via Bredbury, with a shorter journey time than via Hyde.

There was a significant change from December 2010. Five additional off peak services were provided between Rose Hill and Manchester via Bredbury. Outbound they called at Romiley only, while inbound they stopped additionally at Ryder Brow, Belle Vue and Ashburys. The pattern of departures was unbalanced with trains leaving Manchester at 20 minutes past the hour via Bredbury and 36

¹ The start of the 1991 Summer timetable was postponed from the normal date in May to align with the completion of the East Coast Main Line electrification project

minutes past via Hyde. Inbound, this imbalance was less severe with departures via Bredbury at 30 minutes past the hour and via Hyde at 51 minutes past. The total number of trains increased to 24 outbound and 25 inbound on Mondays to Fridays. The additional services also operated on Saturdays.

There was a further significant change from December 2012. A half hourly service from Rose Hill was provided throughout the day, routed via Hyde; with the exception of one inbound morning peak train via Bredbury. In the evening peak there was, however, a gap in the standard pattern of departures from Manchester at 05 and 35 minutes past the hour. There were trains at 16.05, 16.48, 17.21 and 18.05 thus creating gaps of around 45 minutes between trains. In total there were 25 outbound and 27 inbound services on Mondays to Fridays. The effect of this new service pattern was to provide a half hourly service on the Hyde Loop. However only alternate trains called at Fairfield and Hyde North so they did not enjoy an increased frequency. Stops at Gorton were added, allowing these to be removed from Glossop/ Hadfield trains except in the evening. The first departure from Rose Hill was at 06.31 and the last trains from Manchester were at 18.35 and 20.35. The previous Saturday pattern of alternating trains between the Bredbury and Hyde routes continued, leaving the Hyde Loop with only an hourly Saturday service.

However this was rectified from May 2013. From then, a half hourly inbound service was provided from Rose Hill via Hyde on Saturdays. Outbound, one train ran to Rose Hill via Hyde, one to Rose Hill via Bredbury and one to Marple via Hyde. Combined with the hourly Sheffield service via Bredbury, this provided 2 trains/ hour on each route on Saturdays.

There was a further change in May 2018, when the timetable operating immediately before the pandemic was introduced. This filled the gap in the evening peak outbound service pattern and provided a half hourly service in both directions, with all Rose Hill trains routed via Hyde (except one inbound contra-peak service on Mondays to Fridays). The level of service after 19.00 was also increased with the previous single departure from Manchester replaced by trains at 19.09, 19.39, 20.09 and 21.09. In total there were 29 outbound trains on Mondays to Fridays. The first inbound departure was at 06.20 and the final departure from Manchester at 21.09, giving an effective operating day of nearly 15 hours. The Saturday service pattern was also changed, with all trains routed to Rose Hill via Hyde.

Overall, this provided a better service to Rose Hill, Woodley and Hyde Central than at any time in the past 50 years, with a consistent half hourly service throughout the day on Mondays to Saturdays. There were, however, three significant gaps in provision:

- 1. Unlike other stations on the route, Fairfield and Hyde North were only served hourly;
- 2. The last train from Manchester was at 21.09, meaning there was no service for people engaged in the thriving evening economy of Manchester as consumers or employees; and
- 3. There was still no service on Sundays.

In the following sections, we discuss the impact of these limitations on the use of the railway and on the communities it serves.

4. Ridership Impact of Service Improvements

4.1 Introduction

In this Section, we first consider the potential impacts of filling the gaps in service provision highlighted above and the challenges in quantifying the increase in ridership that would result. We then review evidence on the effects of recent service improvements on the route both at specific stations and across the route as a whole. Finally we address the myth that there are adequate public transport alternatives to the service.

4.2 Measuring Ridership Change

As Section 3 has shown, the Rose Hill service finishes relatively early on weekdays and there are no trains on Sundays. This will suppress ridership compared to a more comprehensive service:

- *Directly* because journeys at times when there is no service cannot be made by train; and
- **Indirectly** because passengers whose return journey is not possible are likely to choose another route or mode for the outward leg of their journey, or not travel at all. Similarly people making the outward leg of their journey on a Sunday are unlikely to travel by train and therefore will not use the Rose Hill service for the return leg, even if this is made on a weekday.

Accordingly, providing a late evening and Sunday service would increase ridership. However the extent of this, and any possible diversion from other stations, is hard to estimate.

The rail industry typically uses the MOIRA software package to assess the expected ridership and revenue impacts of service changes. However it has two key drawbacks which make it unsuitable for assessing the impact of late evening and Sunday services on this route. Firstly, the structure of the model means that it cannot assess any potential switching between stations. More importantly, a key component of MOIRA is profiles of the pattern of underlying demand by time of day and day of week. These are important because it is implausible to expect that the ridership impact of an extra train would be the same at, say, 08.00 and 23.00. Unfortunately the profiles for regional services incorporated in MOIRA pre-date privatisation and are now 30 years out of date. Whether they ever reflected the conditions in major conurbations with strong evening economies is uncertain. But, more definitely, there have been significant changes in ridership patterns since then with markedly increased use of local services in the evenings and on Sundays. This reflects wider social changes, including in licensing laws and the growth of Sunday shopping. This has reached the point where, pre-Covid-19, crowding was a major and increasing problem on the Sheffield – Manchester stopping service on Sundays, with growing demand for shopping trips to Manchester as well as days out in the Peak District.

An alternative approach would be to undertake market research to assess the potential. However this is both expensive and fraught with methodological challenges, which would create much uncertainty about the robustness of the findings.

Accordingly there is no readily available tool to reliably assess the specific effects of late evening and Sunday services. However, the station usage statistics produced by the Office of Rail and Road (ORR)² do provide evidence on whether ridership on the route in general responds to improved

² It should be noted that these data are collated for financial years (April-March) not calendar years

service levels. This indicates whether there was previously suppressed demand that has been won to rail. If it demonstrates this, this indicates that further service improvements would have an impact.

4.3 Quantifying the Impact of Past Changes at Individual Stations.

There are a number of challenges in interpreting the ORR statistics:

- 1. Rail ridership has been growing for the past 25 years. Although this has partly been due to service improvements, there has also been underlying background growth due to other factors.
- 2. This background growth has not been entirely uniform and ridership at individual stations may be affected by local factors, such as the construction of a new housing estate.
- 3. Ridership changes do not occur in full as soon as a service change is made. It takes time for people to learn about the new opportunities and modify their travel patterns to take advantage of them. Typically this can take 3 to 5 years, with the great majority of the impact in the first 2 years.
- 4. Where stations are close together, improved services at one station may lead to passengers transferring from the neighbouring one. We consider this further in Section 4.5.

Bearing these factors in mind, we have assessed the effects of the following significant changes in service level on the route since 1997:

- 1. Increased off peak services at Rose Hill in December 2010, assessed by comparing ridership in 2009/10 (before the change) with 2012/13 (two years after it).
- 2. Increased off peak frequency at Hyde Central and Woodley from December 2012, assessed by comparing ridership in 2011/12 with 2014/15.
- 3. Introduction of the pre-pandemic timetable in May 2018. This provided a more regular timetable through the day, an additional evening peak train and more trains in the early to mid-evening. Ideally this would be assessed by comparing 2017/18 and 2019/20 ridership. However the latter is not available yet (and will be affected by Covid-19 when it is published), so the "after" data relates to 2018/19 and contains less than 11 months of the new service.

Table 4 shows the results.

Station	ation Overall Growth 2009/10 to 2018/19		-		Growth in 2018/19	
	Trips	%	Trips	%	Trips	%
Hyde Central	55,250	103	20,904	32	6,726	7
Woodley	43,108	121	5,610	12	15,298	24
Rose Hill	113,124	116	38,336	39	36,598	21

Table 4: Growth at Selected Stations on Rose Hill via Hyde Route

(1) Improvements in December 2010 at Rose Hill, December 2012 at Hyde Central and Woodley

The table shows that ridership has more than doubled at each of the three stations over the decade to 2019. At Rose Hill and Hyde Central, there was growth of 39% and 32% respectively in the two years after service improvements in 2010 (Rose Hill) and 2012 (Hyde Central). There was lower growth at Woodley, and ridership actually fell in 2012/13. As the service improvement only occurred towards the end of that financial year, its impact on ridership that year would have been limited. Comparing 2012/13 with 2014/15 shows growth of 7,952 trips equating to 19% growth.

The most recent service changes in May 2018 also appear to have had a positive impact with growth continuing in 2018/19. Although ORR data are not available for 2019/20, Friends of Rose Hill Station undertakes regular passenger counts at the station. Comparing these counts for November 2018 (six months after the May 2018 timetable change) and November 2019 (18 months after it) shows that ridership increased by 8%, indicating that growth was continuing, beyond the 21% shown in the ORR data in 2018/19.

Ridership data for Northern as a whole is not available for 2009/10, but is available from 2010/11 onwards. Over the 2010/11 to 2018/19 period total ridership grew by 17%, compared to 84% at Rose Hill, Woodley and Hyde Central combined.

The overall conclusion of this assessment is that service improvements on the route over the past 10 years have caused a significant increase in ridership, showing that there was suppressed demand potential. This suggests that further improvements would result in more growth.

4.4 Is the Route Lightly Used?

A key argument put forward by Northern for suspending the Rose Hill service and only partially reinstating it by December 2020 is that the line is lightly used. Northern have suggested that ridership on the New Mills via Bredbury route is three times that on the Rose Hill via Hyde service. Even if true, this would not be an entirely fair comparison as the Rose Hill service does not operate in the late evening or on Sunday – it would be more valid to compare ridership over the time period when both services operate.

We do not have access to detailed information on ridership by time of day, but we have used the ORR station usage data to compare total usage on the two routes in 2018/19. To investigate whether this has changed over the past 10 years, we have repeated this analysis for 2009/10. It should be borne in mind that this takes no account of the shorter hours operated by the Rose Hill service.

In making the assessment, we have allocated all passengers to the respective service at stations where only one service group calls. For example all ridership at Marple is allocated to New Mills via Bredbury and all ridership at Hyde Central is allocated to the Rose Hill service. Where more than one service group calls at a station (for example Romiley), we have allocated passengers in proportion to the number of trains calling at the station on Mondays to Fridays.

The resulting proportions are shown below. They differ between the two years as the service pattern has changed between them.

Station		Allocation to Se	ervice Group (%)				
	New Mills via Bredbury	Rose Hill via Hyde	Glossop	Total			
2018/19 Allocation							
Romiley	58	42	-	100			
Guide Bridge	-	42	58	100			
Gorton	-	80	20	100			
Ashburys	31	17	52	100			
Ardwick	25	25	50	100			
		2009/10 Allocation					
Romiley	73	27	-	100			
Guide Bridge	-	31	69	100			
Gorton	-	-	100	100			
Ashburys	40	3	57	100			
Ardwick	50	50	-	100			

Table 5: Allocation of Ridership at Stations Served by More than One Service

The results are shown in Tables 6 and 7.

Table 6: Estimated Ridership by Route 2018/19

Station	New Mills via	Rose Hill via	Other	Total
	Bredbury	Hyde		
New Mills Central	213,872			213,872
Strines	27,710			27,710
Marple	511,900			511,900
Bredbury	232,302			232,302
Brinnington	98,004			98,004
Reddish North	226,612			226,612
Ryder Brow	31,368			31,368
Belle Vue	6,820			6,820
Sub-total	1,348,588			1,348,588
Rose Hill		210,904		210,904
Woodley		78,852		78,852
Hyde Central		108,708		108,708
Hyde North		48,836		48,836
Fairfield		41,296		41,296
Sub-total		488,596		488,596
Romiley	221,783	160,601		382,384
Guide Bridge		160,668	221,874	382,542
Gorton		98,118	24,530	122,648
Ashburys	34,982	19,184	58,680	112,846
Ardwick	310	310	619	1,238
Sub-total	257,074	438,881	305,703	1,001,658
Overall Total	1,605,662	927,477	305,703	2,838,842
Split by Route	63	37		
(%)				

Station	New Mills via	Rose Hill via	Other	Total
	Bredbury	Hyde		
New Mills Central	140,558			140,558
Strines	9,476			9,476
Marple	407,170			407,170
Bredbury	158,626			158,626
Brinnington	70,816			70,816
Reddish North	119,690			119,690
Ryder Brow	22,892			22,892
Belle Vue	12,256			12,256
Sub-total	941,484			941,484
Rose Hill		97,780		97,780
Woodley		35,744		35,744
Hyde Central		53,458		53,458
Hyde North		34,614		34,614
Fairfield		10,832		10,832
Sub-total		232,428		232,428
Romiley	184,553	68,259		252,812
Guide Bridge		64,943	144,551	209,494
Gorton			99,472	99,472
Ashburys	27,423	2,057	39,078	68,558
Ardwick	377	377		754
Sub-total	212,353	135,636	283,101	631,090
Overall Total	1,153,837	368,064	283,101	1,805,002
Split by Route (%)	76	24		

Table 7: Estimated Ridership by Route 2009/10

Table 6 confirms that ridership on the New Mills via Bredbury route is higher than on the Rose Hill service, but the difference is very much less than Northern assert. It is estimated that 63% use the New Mills route and 37% the Rose Hill route, a ratio of 1.7 to 1. This is much less than the 3:1 ratio claimed by Northern. However Table 7 shows that in 2009/10, before the service improvements of the last decade, the ratio was indeed 3:1. This suggests that Northern have not recognised the success story that is the Rose Hill service – a success story that is now being undermined by the service suspension.

Comparing Tables 6 and 7, ridership on the Rose Hill route rose from 368,000 in 2009/10 to 927,000 in 2018/19. Although this is partly due to Rose Hill trains providing a higher proportion of services at stations served by more than one route, there was strong growth at the stations served only by Rose Hill trains. Ridership at these stations grew by 110%, compared to 43% at stations served only by the New Mills route. Four of the five stations shown in the above tables with the highest percentage growth were on the Rose Hill route: Rose Hill, Woodley, Hyde Central and Fairfield. The only other station in the top five was Strines, where new housing has greatly expanded the catchment population.

4.5 Neighbouring Stations

Northern argue, that the inconvenience of the service suspension to passengers will be limited due to the availability of other public transport services, including "nearby stations". In reality the

walking distance³ to the nearest stations to those served exclusively by the Rose Hill via Hyde service are:

- Rose Hill to Marple 1.7 kilometres;
- Woodley to Bredbury 1.5 kilometres;
- Hyde Central to Newton for Hyde 1.6 kilometres;
- Hyde North to Flowery Field 0.8 kilometres;
- Fairfield to Gorton 1.9 kilometres.

In addition there is a steep hill between Marple and Rose Hill. The generally accepted maximum walking distance to a station is 800 metres. This provides the primary catchment area for a suburban station. Clearly all the above stations, except Hyde North, are further than this from their nearest alternative and there is little or no overlap between their primary catchment areas. This means that most passengers who wish to continue to use rail will need to either drive or catch a bus to the station, making the journey less convenient. This will result in a net loss of rail ridership and increased car use, with consequent pollution and congestion impacts.

The lack of significant overlap between catchments is confirmed by analysis of the station usage statistics. If there was significant overlap, trips would have been abstracted from neighbouring stations, when the Rose Hill service was improved and ridership would have fallen as a result.

Table 8 provides the same information as Table 4 above, but for the stations from which ridership could potentially be abstracted.

Station	Overall Growth 2009/10 to 2018/19		Growth 2 Years after Service Improvements (1)		Growth in 2018/19	
	Trips	%	Trips	%	Trips	%
Newton for Hyde	59,646	37	1,662	1	43,708	25
Bredbury	73,676	46	27,486	15	16,504	8
Marple	104,730	26	30,756	8	31,776	7

Table 8: Growth at Selected Stations Subject to Abstraction to the Rose Hill via Hyde Route

(1) Improvements in December 2010 at Rose Hill leading to possible abstraction from Marple, December 2012 at Hyde Central and Woodley, leading to possible abstraction from Newton and Bredbury.

The table shows that ridership grew significantly at all three stations over the 10 year period and in the years following specific improvements to the Rose Hill service. The only one of these stations where abstraction might have taken place was at Newton for Hyde after the service to Hyde Central was improved, as ridership only grew by 1% over the two following years. However growth stalled at a number of stations in the area at this time with, for example, no growth at the adjacent station of Godley. Overall it appears that significant abstraction did not occur, providing more evidence that the stations serve largely separate local markets. Accordingly the service improvements provided a net benefit to rail and the communities served.

This confirms that the so-called "nearby" stations are not adequate substitutes for the Rose Hill service. If the line is closed or the service remains reduced there will be a significant net loss of ridership. Conversely improved services will lead to a net gain.

³ From Google Maps

4.6 Conclusions

This Section has shown that improved rail services, including lengthening the periods of operation, would lead to increased ridership. There are significant problems with quantifying this in advance and the current rail industry tools are not adequate for the task. However, analysis of recent ridership trends shows that the improvements to the Rose Hill via Hyde service over the past decade have more than doubled ridership, while the service level has grown by about 60%. This shows that ridership potential has been suppressed by a poor service level and indicates there would be further potential from providing late evening and Sunday services.

The assertion that the service is lightly used is not correct, though there may have been some justification for this in the past, when a poor service provided little incentive to travel by train. The claim that services from neighbouring stations provide an adequate alternative is also not correct. There is little or no overlap between their primary catchment areas and improvements to the Rose Hill via Hyde service have not led to appreciable abstraction from other stations.

5. Catchment Areas of Stations

5.1 Introduction

As we showed in Section 4, the rapid growth in ridership over the last decade demonstrates that the Rose Hill via Hyde service is meeting a real need for travel, albeit only over a limited time period on weekdays. Providing late evening and Sunday services would widen the range of journeys catered for. However it is also important to understand the characteristics of the communities served and the social and environmental case for improved services. These characteristics are described below.

The analysis is based on data extracted from the 2011 Census and mid-2019 population estimates⁴ for the catchment areas of the stations only served by the Rose Hill service: Rose Hill, Woodley, Hyde Central, Hyde North and Fairfield. Data were extracted at Census Lower layer Super Output Areas (LSOA). These are geographical units typically containing 900 to 1,400 residents. Unfortunately the LSOA boundaries do not map closely to the catchment areas of stations, so there is inevitably some approximation in deciding which to include in a station catchment area. The LSOAs which we have included for each station are shown below.

Station	LSOAs
Rose Hill	E01005878, E01005879, E01005882, E01005884, E01005911
Woodley	E01005745, E01005746, E01005747, E01005748
Hyde Central	E01006029, E01006039, E01006040, E01006041, E01006043
Hyde North (*)	E01006031
Fairfield	E01005961, E01005999

Table 9: Correlation of Station Catchment Areas and LSOAs

(*) constrained by nearby Flowery Field station

5.2 Catchment Population

The 2019 population of each station catchment area is shown in Table 10, based on 2019 population estimates. Table 11 shows the ethnicity of residents from the 2011 Census. Clearly the dates of these sources are not wholly consistent, but it is unlikely that the ethnic mix of the areas changed very significantly between 2011 and 2019.

 $^{^{4}\} https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualsmallareapopulationestimates/mid2019$

Population	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
Residents				·		
Under 16	1297	881	1992	481	1076	1405707
16 to 64	3944	3356	5366	1182	3190	4560378
65 and over	1870	1452	1066	220	659	1375111
Total	7111	5689	8424	1883	4925	7341196
Residents (%)	•		•	•	·	
Under 16	18	15	24	26	22	19
16 to 64	55	59	64	63	65	62
65 and over	26	26	13	12	13	19
Gender (%)	•			·		
Male	48	50	49	47	50	49
Female	52	50	51	53	50	51

Table 10: Catchment Populations by Age and Gender

Percentages may not sum to 100 due to rounding

Table 11: Ethnicity	of Catchment I	Populations (%)

Ethnic Group	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
White	97	98	66	86	91	90
Mixed Ethnicity	1	1	2	2	2	2
Asian	2	1	32	12	3	6
Afro- Caribbean	-	-	1	1	3	1
Other	-	-	-	-	1	1

Percentages may not sum to 100 due to rounding

Clearly the estimates of total population may be affected by the approximation inherent in basing the analysis on aggregations of LSOAs. However this is less likely to impact significantly on estimates of the composition of the population. This shows that the population served by Rose Hill and Woodley is significantly older than at the other stations, with more than 25% of residents aged over 65 and less than 20% under 16. Conversely Hyde Central, Hyde North and Fairfield all have more children than senior citizens and a higher percentage of working age adults than Rose Hill or Woodley. Clearly these differences will affect the number and types of trip made.

There is a large population of Asian heritage in the catchment areas of Hyde Central and, to a lesser extent, Hyde North. Apart from this, the population is overwhelmingly White, especially at Rose Hill and Woodley.

5.3 Housing

Tables 12 and 13, from the 2011 Census, show the mix of housing types and housing tenure in the station catchment areas.

Housing Type	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
Detached	29	15	7	2	7	18
Semi-detached	46	50	23	26	38	36
Terrace	17	16	57	49	37	30
Flat	8	19	12	23	18	16
Mobile/	-	-	1	-	-	-
Caravan						

Table 12: Housing Types in Catchment Areas (%)

Percentages may not sum to 100 due to rounding

Housing Tenure	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
Owned Outright	44	37	26	16	27	31
Owned with Mortgage	36	35	39	26	34	34
Shared Ownership	1	1	1	-	-	1
Social Rented	12	19	14	46	17	18
Private Rented	6	7	21	11	20	15
Rent Free	1	1	1	1	1	-

Table 13: Housing Tenure in Catchment Areas (%)

Percentages may not sum to 100 due to rounding

The majority of homes are detached or semi-detached houses in the catchment areas of Rose Hill and Woodley stations. Conversely terraced properties are the most common housing type around the two Hyde stations. The mix of housing types in the Fairfield catchment is more varied.

The majority of residents own their homes, either outright or with a mortgage, in all the catchment areas except Hyde North, where social rented property is most common. In total 57% of homes in the Hyde North catchment area are rented, compared to 37% at Fairfield, 35% at Hyde Central, 26% at Woodley and only 18% at Rose Hill. The relatively high proportion of homes that are owned outright at Rose Hill and Woodley may reflect an older population, where more people will have been able to pay off their mortgage.

5.4 Economic Activity and Socio-Economic Status

Table 14 sets out the employment status of residents from the 2011 Census.

Status	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
Full Time	38	39	35	32	41	38
Employed						
Part Time	15	14	14	14	14	14
Employed						
Self-employed	10	9	7	5	7	8
Unemployed	2	3	6	6	5	5
Student	3	3	3	3	3	9
Retired	20	19	11	13	14	15
Other	12	13	24	27	16	12

Table 14: Employment Status of Catchment Area Residents (%)

Percentages may not sum to 100 due to rounding

The table shows that a higher proportion of adults (over 60%) are employed or self-employed at Rose Hill, Woodley and Fairfield, compared to Hyde Central (56%) and Hyde North (51%). Conversely unemployment is highest in Hyde. Not surprisingly, more people are retired at Rose Hill and Woodley, where there is a larger elderly population. It is noticeable that the proportion of people who are not in the labour force for other reasons is higher in Hyde. This will include people who are not working because they are home makers, or have health problems or are long term unemployed. To some extent, this may reflect lack of perceived opportunities as well as barriers that make it impossible to work.

The socio-economic status of people is shown in Table 15 based on their current employment (or last job for those who are retired).

Status	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
1. Higher Managerial/ Professional	13	10	5	3	6	9
2. Lower Managerial/ Professional	25	23	15	11	18	19
3. Intermediate	15	17	13	11	16	13
4. Small Employers & Own Account	9	10	8	7	9	9
5. Supervisory & Technical	6	7	9	11	9	7
6.Semi-routine	13	14	16	20	16	15
7. Routine	7	10	12	19	13	12
8. Long Term Unemployed	4	4	12	12	7	6
Not Classified	7	7	9	6	7	9

Table 15: Socio-economic Status of Catchment Area Residents (%)

Percentages may not sum to 100 due to rounding

The table shows a high proportion of people in the Rose Hill and Woodley catchments in managerial and professional positions. Conversely over half those in the Hyde North catchment are in routine or

semi-routine occupations, or are long term unemployed. The Hyde Central and Fairfield catchments are between these points, but noticeably with few people in senior managerial or professional roles.

Another indicator, which may partly explain these differences is educational attainment. This is shown in Table 16. This provides six levels of educational attainment, from 0 representing no qualifications to 4 representing degree level education. Those who have served an apprenticeship are categorised separately and are positioned in the centre of the table.

Education Attainment Level	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
0	21	23	29	37	29	25
1	12	15	18	18	16	14
2	15	17	18	16	17	16
Apprenticeship	4	4	3	3	4	4
3	12	14	12	11	12	13
4	32	23	14	10	18	24
Other	4	4	6	5	4	5

Table 16: Educational Attainment in Catchment Areas (%)

Percentages may not sum to 100 due to rounding

This shows that residents in the Rose Hill catchment area are much more likely to be educated to degree level, than elsewhere. The proportion with a degree is more than twice as high as in the Hyde Central catchment and more than three times as high as in the Hyde North catchment. Conversely more than a third of residents in the Hyde North catchment have no qualifications. This result is particularly striking given that the population of Rose Hill is older than average and higher education has expanded rapidly in recent years. This implies that the level of educational attainment is particularly high in relation to people in the same age group. The high level of attainment at Rose Hill, and to a lesser extent Woodley, is probably one reason for the higher proportion of people in senior managerial roles in these areas. Age may also be a factor, as older workers may have had more opportunity to be promoted to these positions.

A further piece of evidence on the socio-economic position of residents is the Government's Index of Multiple Deprivation, which ranks every LSOA in England against a number of criteria, of which income, employment, education and health are the most important. In order to give a broad understanding of relative deprivation each LSOA is both ranked individually and put in one of 10 bands, where Band 1 contains the most deprived 10% of areas and Band 10 the least deprived 10%. It is not possible to combine the LSOAs in a particular catchment area to provide a single deprivation rating. In any case, this would disguise the fact that a particular station catchment may contain pockets of deprivation alongside areas of greater prosperity.

There are 5 LSOAs in the Rose Hill catchment area in Bands 3, 5, 7, 9 and 10, so none of the catchment area is categorised as highly deprived. There is however a wide range between the most and least deprived neighbourhoods. This is even more pronounced at Woodley, where the 4 LSOAs in the catchment area are in Bands 1, 5, 8 and 9. The Hyde Central catchment is much more deprived with the 5 LSOAs in Bands 1, 2 (two LSOAs) and 3 (two LSOAs). The one LSOA in the Hyde North catchment is in Band 1. Finally, the 2 LSOAs in the Fairfield catchment are in Bands 2 and 6.

5.5 Vehicle Ownership

Table 17 shows the proportion of households in differing vehicle ownership categories.

Vehicles per Household	Rose Hill	Woodley	Hyde Central	Hyde North	Fairfield	North West Region
0	18	21	30	46	30	28
1	41	42	46	40	46	43
2 or more	41	37	24	14	24	29

Table 17: Vehicle Ownership by Catchment Area (%)

Percentages may not sum to 100 due to rounding

This shows that car ownership, and especially multiple car ownership in a household, is very high in the Rose Hill and Woodley catchments, but much lower elsewhere, especially at Hyde North.

Differing levels of car ownership can have significant impacts on people's need to make use of rail:

- In households without a car, residents often have no choice but to use public transport for work or leisure trips;
- In households with one car many family leisure trips can be made using it. However it may not always be available for all household members for work or leisure trips. Even if available it may not always be the preferred choice, for example for trips to Central Manchester;
- In multi-car households the number of occasions when a vehicle is not available will typically be less, but again it may not always be the preferred choice.

There is also a need to encourage more journeys to transfer to sustainable modes, including rail, to achieve Greater Manchester's ambition to achieve a target of 50% of trips to be made by modes other than car by 2040.

5.6 Summary

The analysis above shows clear differences between the catchment areas of the stations in Stockport – Rose Hill and Woodley – and those in Hyde. The Fairfield catchment sits between them on many indicators.

The population of the Rose Hill and Woodley catchment areas is older than the average for the North West region, less ethnically diverse and more likely to live in larger detached or semi-detached homes. The proportion of households who own their property outright is high, especially in the Rose Hill catchment. The proportion of retired people is high, but the number who are economically inactive for other reasons is low. The proportion of residents in professional and managerial jobs is high, as is the proportion with a degree level education at Rose Hill. The number of households with two or more vehicles is high, and the proportion living in households with no vehicle is low.

Conversely, the socio-demographic profile of residents of the two Hyde stations is very different. It is significantly younger and there is a high proportion of people of Asian heritage, especially in the Hyde Central catchment. Terraced housing is the most common accommodation type. Home ownership is in line with the regional average in the Hyde Central catchment, but low at Hyde North. The proportion of people in full time work is low and the proportion who are unemployed is significantly higher than in the Rose Hill and Woodley catchments. The proportion of people who are economically inactive for reasons such as caring for others or long term sickness is very high, and double the regional average. The number of people in professional and managerial occupations is

low and the proportion educated to degree level is also markedly below the regional average. Vehicle ownership is much lower than in the Rose Hill and Woodley catchments.

The population of the Fairfield catchment area is also younger than the average for the North West region. The area is characterised by a low percentage of detached property, an above average proportion of people living in private rented accommodation and a high percentage in full time employment. While levels of educational attainment are higher than in Hyde, they are below the regional average. An above average proportion are employed in Intermediate, Supervisory and Technical jobs. Vehicle ownership is slightly above the regional average.

Clearly these are averages across the catchment areas and there may be pockets of deprivation even in the wealthiest areas. In the Rose Hill area there is one LSOA within the most deprived 30% in England, alongside another in the least deprived 10%. Even more markedly at Woodley, there is one LSOA in the most deprived 10%. The ranking of LSOAs in the Hyde catchments is more consistent, with all LSOAs in the most deprived 30%, showing a very high overall level of deprivation.

5.7 Travel Implications

These results indicate that residents of the Rose Hill and Woodley catchments are much more likely to have a car available and have sufficient wealth to travel for a range of business and leisure purposes. In order to attract them to use rail, they need a comprehensive and high quality rail service operating for extended hours seven days a week to make rail a realistic option for as many journeys as possible. With an ageing population, an increasing number of households may stop driving and become public transport dependent.

Residents of Hyde are more likely to depend on public transport for all or some of their journeys. In order to counter the high levels of unemployment and economic inactivity, they need good access to the employment and education opportunities in Manchester City Centre. As many of these opportunities involve evening or shift work, a comprehensive seven day per week service is needed here too. Access to leisure opportunities by public transport is also important in overcoming social exclusion and deprivation, again requiring a rail service operating over an extended operating period daily.

6. The Way Forward

This paper has shown that the route from Manchester Piccadilly to Rose Hill via Hyde has suffered from a relatively poor service operating for limited hours on weekdays for most of the past 50 years. Timetable changes over the past decade culminating in the new timetable introduced in May 2018 resolved many of the problems, but there are three significant remaining gaps:

- 1. Fairfield and Hyde North stations only have an hourly service, while all the other stations are served half hourly, meaning these stations are not realising their full potential despite significant recent ridership growth at Fairfield.
- 2. The last train to Rose Hill departs at 21.09. This is much earlier than other routes in Greater Manchester. As a result people working late in Manchester, connecting from long distance services in the evening or taking part in evening activities in the city do not have a rail service available.
- 3. There is no Sunday service on the route.

We consider that the first priority is to restore the full scheduled pre-pandemic service as soon as possible. The longer a reduced service operates the more ridership will be lost and the harder it will be to win it back in future.

While the Rose Hill service has been largely suspended, Gorton has been partly served by inserting an extra hourly stop on the Glossop/ Hadfield service. We consider this should continue when the full service resumes, but with the original half-hourly frequency. This would allow all trains to call at both Fairfield and Hyde North while retaining the same overall journey time, addressing Gap 1 above. This would also create a benefit by providing a direct connection between Gorton and Hattersley – communities with strong historical links.

From the December 2021 timetable change we believe that additional trains from Manchester to Rose Hill should be provided at 22.09 and 23.09, and a Rose Hill to Manchester service at 22.13, addressing Gap 2 above. This could be trialled initially for a three year period to confirm that there is sufficient ridership potential for this to be made permanent.

Finally, an hourly service should be provided on Sundays from around 08.00 to 23.00, addressing Gap 3. Again this could be for an initial three year trial period.

Looking beyond these specific enhancements, our longer term vision is for a frequent "turn up and go" service on the route operating between 06.00 and Midnight daily.