

**Greater Manchester Transport Committee**

Date: 21 February 2020

Subject: Metrolink Quarterly Performance Report

Report of: Daniel Vaughan, Chief Operating Officer, TfGM

---

**PURPOSE OF REPORT**

Provide an overview of the operational performance of Metrolink services.

**RECOMMENDATIONS:**

Members are asked to note the performance of Metrolink services.

**CONTACT OFFICERS:**

Daniel Vaughan                      Head of Metrolink                      0161 244 1519  
[daniel.vaughan@tfgm.com](mailto:daniel.vaughan@tfgm.com)

Victoria Mercer                      Metrolink Service Delivery                      0161 244 1737  
Manager                      [victoria.mercer@tfgm.com](mailto:victoria.mercer@tfgm.com)

Risk Management – n/a

Legal Considerations – n/a

Financial Consequences – Revenue – n/a

Financial Consequences – Capital – n/a

Number of attachments included in the report: 2

- Appendix 1: Period date listing
- Appendix 2: Metrolink Performance

**BACKGROUND PAPERS:**

- Metrolink Annual Performance Report – 11 October 2019

<b>TRACKING/PROCESS</b>		
Does this report relate to a major strategic decision, as set out in the GMCA Constitution		No
<b>EXEMPTION FROM CALL IN</b>		
Are there any aspects in this report which means it should be considered to be exempt from call in by the relevant Scrutiny Committee on the grounds of urgency?		N/A
GMTC	Overview & Scrutiny Committee	
N/A	N/A	

## **1 ABOUT METROLINK**

- 1.1 Metrolink is the largest urban light rail network in the UK. It provides a fast, frequent service which is fully accessible to all, running 7 days a week, 364 days of the year.
- 1.2 The Metrolink network is owned by TfGM and is operated on TfGM's behalf through a contract with KeolisAmey Metrolink (KAM).
- 1.3 The network uses high-floor trams with raised platform stops and currently carries over 45 million passengers each year.
- 1.4 There are currently 120 trams serviced from two depots with 103 required to operate the weekday morning peak service.
- 1.5 Trams service 93 stops covering routes totalling just under 100 Km. When the Trafford Park Line opens in 2020, an additional 6 stops will open, and the network will expand to cover 102.5 km. Metrolink is the most accessible of the public transport networks in Greater Manchester, providing step free access to all stops.

## **2 QUARTERLY PERFORMANCE SUMMARY**

- 2.1 The Metrolink Quarterly Performance Report provides a performance summary for the rolling 12-month period through to 04 January 2020, with a focus on the quarter covering period 8 (13 October 2019) through to period 10 (04 January 2020).
- 2.2 Metrolink continues to grow, with 45.5 million trips recorded on the network for the 12-month period leading up to the end of December 2019, an increase of 2.7 million trips compared to the equivalent period in December 2018 (42.8 million trips).
- 2.3 January 2020 marks the one-year anniversary of the introduction of the six-minute service on the Ashton line, with patronage on the reaching the highest point since 2017 in December 2019.
- 2.4 98.9% of scheduled miles were operated during the 12 months to December 2019 against a performance target of 99.4%, with target being missed for period 8, period 9 and period 10 (13 October through 04 January 2019).
- 2.5 Punctuality on the network was 90.4% for the rolling 12 months to December 2019 against a target of 90%. Performance was below target in period 9 and period 10, as a result of road traffic collisions, signal failure and driver availability.
- 2.6 Vehicle availability was adversely affected by road traffic collisions, which continue to impact on longer term vehicle availability. 6 vehicle collisions were recorded in period 8 and a further 2 occurred in period 9. Work is continuing through a vehicle availability

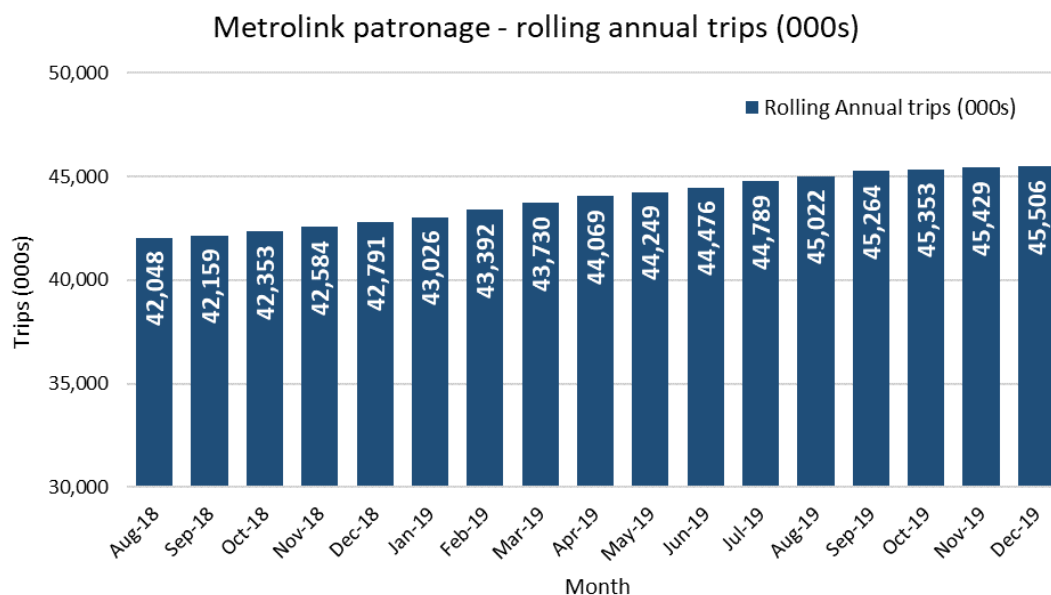
improvement plan to review the processes regarding vehicle repair and implement and identified efficiencies.

- 2.7 A system wide network control failure on the 23rd October 2019 (period 8) caused significant disruption to services on the network. Although services recommenced within 30 minutes of the failure, a number of lines were adversely affected for the majority of the day. TfGM has started a procurement exercise to renew the core network control infrastructure.
- 2.8 GMP's Transport Unit launched on 18 November. The team provides both overt and covert operations covering bus, tram, road and supported the Christmas Metrolink service enhancement, with resource on the tram services later into the evening in the run up to Christmas. This has been well received by both customers and staff.
- 2.9 Recorded incidents of crime and anti-social behaviour on the network increased by a significant amount in November (to 181 incidents), but then decreased significantly in December 2019 (105) to the lowest number of incidents recorded since November 2018. Incidents of crime and ASB will be monitored closely in the forthcoming months to establish whether this reduction is sustained following the introduction of the GMP Transport Unit.
- 2.10 A number of high-profile crime incidents took place on the network during the year. Work continues in partnership with KAM, TfGM and GMP to address crime and anti-social behaviour on the network.
- 2.11 The number of recorded customer contacts remained at around the annual average (11,000) for periods 9 and 10, having reduced significantly in period 8. The average number of customer contacts per 10,000 journeys decreased to 326 from 460 contacts per 10,000 journeys in period 5 through period 7. A reduction in queries regarding ticketing was the major contributor to this reduction in contacts.
- 2.12 The volume of customer complaints has also reduced significantly over duration of period 8 through period 10. The number of complaints has returned to a similar level recorded prior to the introduction of contactless payment on the network (period 4, June 2019 circa 500 complaints).
- 2.13 KAM continues to drive social value through the Metrolink contract, with an improved approach to environmental management, engagement with schools and youth groups as well as 28 new apprentices and trainees from diverse backgrounds across Greater Manchester. More than 40% of procured products and services are now sourced within a 25-mile radius of Greater Manchester.
- 2.14 Work continues at pace to ensure that the Trafford Park Line is ready for operational service. The line is scheduled to open to passengers in April 2020 initially operating between Cornbrook and the Trafford Centre, opening fully to Crumpsall by the end of the calendar year 2020, and will benefit from the phased introduction of 27 new trams from Summer 2020 and throughout 2021.

### 3 PATRONAGE

3.1 Patronage measures the number of trips that are being made on the network.

3.2 The rolling annual patronage to the end of December 2019 was circa 45.5 million trips, with the annual target of 45 million trips reached in August 2019.



3.3 The network has continued to see significant growth which is in the region of 2.7 million trips higher than the equivalent 12-month period to the end of December 2018.

(12 months to December)	2015	2016	2017	2018	2019
Metrolink Patronage (000 trips)	33,400	37,000	40,800	42,800	45,500

3.4 Year on year there has been a healthy patronage increase on all lines, as the demand for additional capacity continues to increase across the network. However, further patronage growth on some lines is constrained by available capacity.

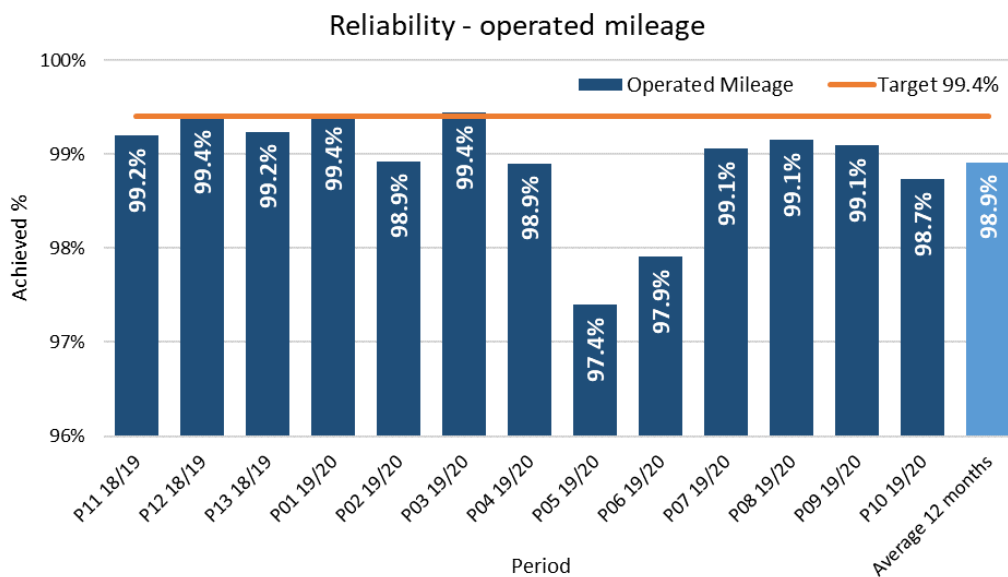
3.5 Quarter 3 (October through to December) represents the busiest quarter on the transport network in Greater Manchester. Approximately 12 million trips were made on Metrolink network during this period, an increase of 300,000 trips on Period 3 2018/19 when 11.7 million trips took place.

3.6 January 2020 marks the one-year anniversary of the introduction of the six-minute service on the Ashton line with rolling annual patronage in Q3 (October – December) 2019/20 reaching 2.7 million.

## 4 OPERATIONAL PERFORMANCE

### Reliability

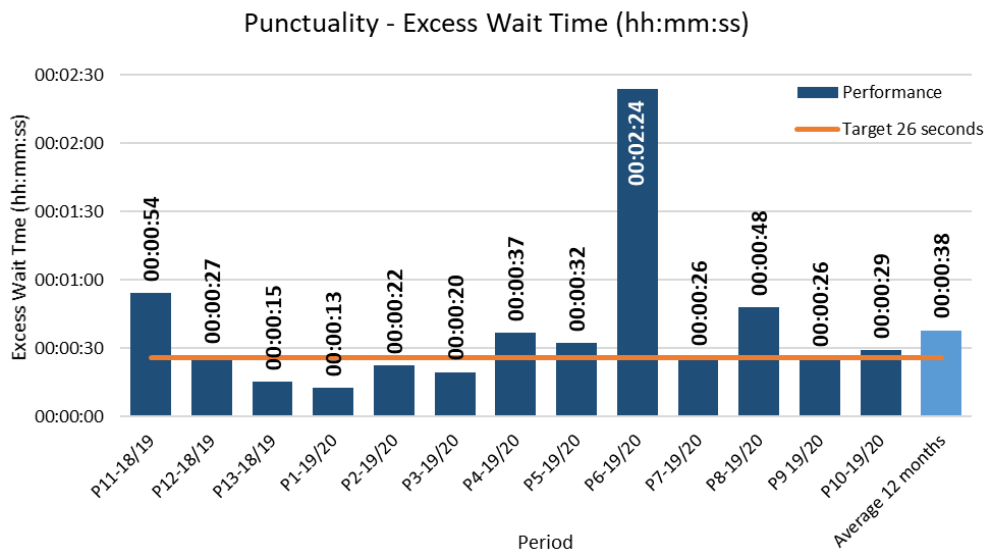
- 4.1 Reliability is measured by operated mileage. Operated mileage is the number of tram vehicle miles operated versus the number of scheduled miles.
- 4.2 A miles operated target of 99.4% was set for the year 2019/20, with the annual average reliability measure being missed by 0.5% on a rolling 12 months basis.



- 4.3 Although network reliability improved significantly from period 5 and period 6 19/20, performance in period 8 through period 10 continued to fall short of the annual target. A combination of factors influenced operational shortfalls during these periods, including:
- Vehicle availability issues in period 8 as a result of side skirt failures and road traffic collisions
  - Signal failures at Victoria, a road traffic collision with a pedestrian, and driver availability issues in period 9.
  - Road traffic collision with a cyclist, driver availability issues on 3 dates over the Christmas period, and a number of minor vehicle faults in period 10.
- 4.4 KAM has undertaken an organisational restructure in Period 9 and period 10 introducing 6 Network Incident Officer roles, and 9 Driver Team Managers to improve operational performance
- 4.5 In 2018, pedestrian movements in and around the Christmas markets impacted on the service reliability in the City Centre. Work was undertaken to plan and improve the interface with MCC for the safe management of pedestrians throughout the Christmas Markets, with no reports on any service disruption as a result of the markets being in place in 2019. Further requirements and proposed improvements will be taken forward into planning for Christmas 2020.

## Punctuality - Excess Wait Time

- 4.6 Excess Wait Time (EWT) is a measure of punctuality. It is the average time passengers wait over what would have been expected if the service was running exactly as scheduled. For Metrolink, Excess Wait Time will be 3 minutes +x seconds for 6 minute, or 6 minutes +x seconds for 12-minute service frequency.
- 4.7 The EWT average performance for the 12 months to December 2019 was 38 seconds, significantly skewed by performance in period 6 and period 8 19/20, and period 11 2018/19.

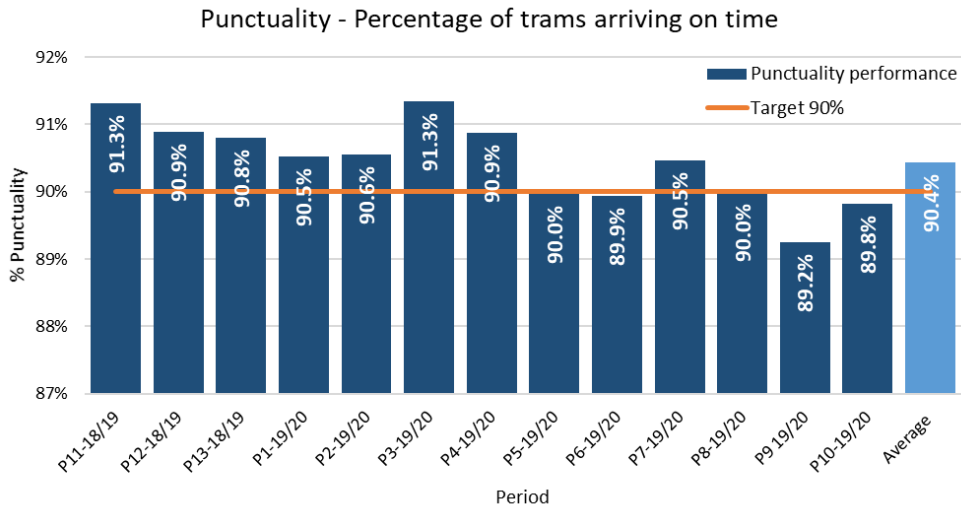


- 4.8 The impact of a tram pantograph fault resulting in OHLE repair was the significant underlying influence in the period 6 performance result. Removing this outlier from the figures would result in an EWT annual average of 29 seconds.
- 4.9 A network control failure on the 23<sup>rd</sup> October 2019 (period 8) caused significant disruption to services on the network. Although services recommenced within 30 minutes of the failure, a number of lines were adversely affected for the majority of the day. Additional contributing factors during the period included 6 road traffic collisions.
- 4.10 EWT in period 9 19/20 hit the performance target of 26 seconds, with period 10 performance missing the target by 3 seconds. Significant events contributing to this delay included a tram fault at Droylsden on 12/12/19, a points failure at Rochdale 10/12/19 and driver sickness and absence during December 2019.

### Punctuality - Percentage of trams operating to time.

4.11 TfGM also reports on the percentage of trams arriving at stops within the 6- or 12-minute service frequency. This measure is reported publicly on the tfgm.com website and broken down on a line by line basis (see Appendix 2).

4.12 The annual average punctuality performance covering the 12 months (13 periods) between January and December 2019 was marginally better than the 90% performance target at 90.4%.

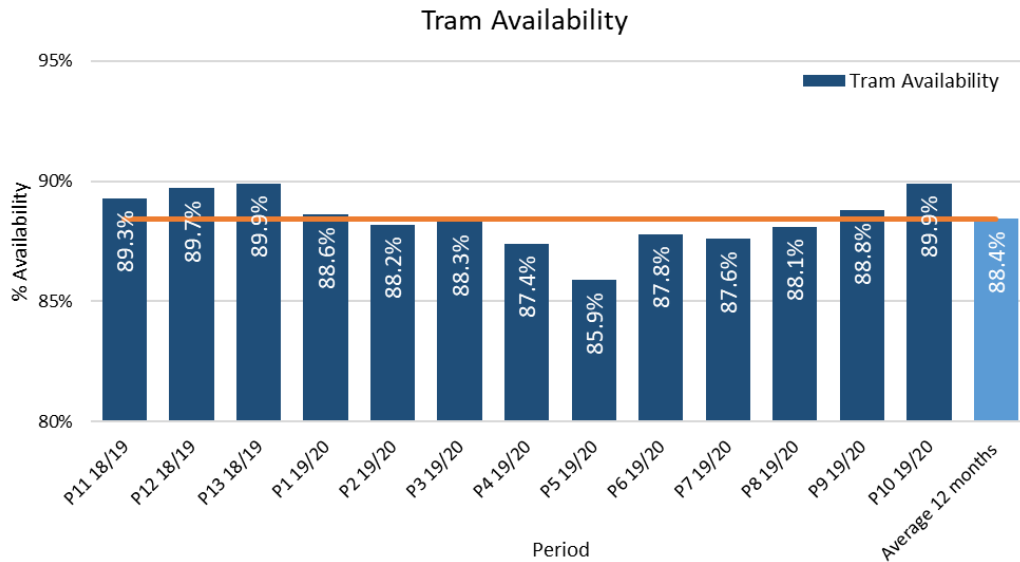


4.13 Although period 8 was challenging in relation to Excess Wait time, the 90% performance target was achieved. Punctuality performance fell short of target on 14 days in both period 9 and period 10, with a points failure to Victoria having the biggest impact on punctuality in period 9 and driver availability due to sickness and absence being a significant contributor in period 10.



## Asset reliability - Trams

4.14 Tram availability shows the percentage of the fleet that has been available during each period.



4.15 33 service affecting vehicle failures were reported in Period 8, 34 in Period 9 and 30 in Period 10 against an annual average of 32 failures.

4.16 Contributing factors in period 8 included 4 side skirt failures whereby components were loose or defective; damage to axle bearings in period 9 requiring work with Bombardier to determine the root cause, and minor operational failures to wiper blades and mirrors in period 10.

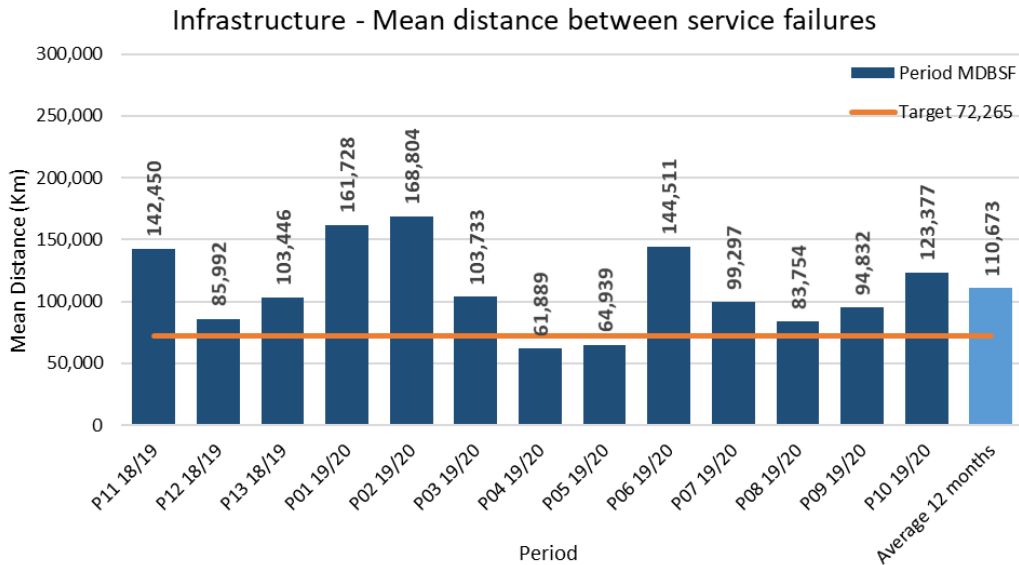
4.17 3 to 4 trams per period were awaiting repair due to road traffic collisions. Work continued to progress actions identified within the Vehicle Availability Improvement Plan, implemented in Period 5 19/20. Work has also continued with a number of GM Local Authorities making improvements to junctions and road markings identified as being at risk of road traffic collisions. KAM has also entered into closer collaboration and partnership with Brodie Engineering to provide support to return RTC damaged trams to service, minimising turnaround times.

4.18 Performance has improved for 3 consecutive periods, with vehicle availability returning to the rolling 12-month average in P9 19/20.

4.19 Vehicle reliability levels have impacted on performance in the period. KAM has implemented a vehicle availability improvement plan, to maximise vehicle availability in the run up to the opening of the Trafford Park Line.

## Asset reliability - Infrastructure

4.20 Infrastructure reliability performance, in terms of service distance travelled between failures, was well in excess of the annual target, only falling below target twice during the periods shown.



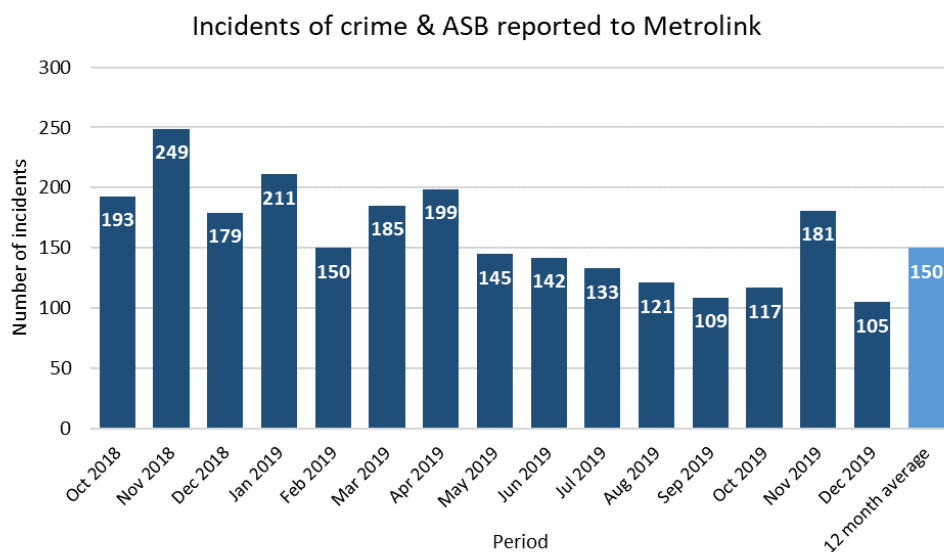
4.21 Period 8 had several challenging issues in the Infrastructure space; repeat signalling failures at Newbold, repeat points failure at Rochdale Town Centre (unrelated to inclement weather conditions) and the first network control failure in 27 months.

4.22 A signalling failure at Victoria was the main infrastructure issue experienced in P9. Following hardware checks, wiring tests and software analysis, investigations are ongoing to review the anomaly.

4.23 Performance improved again in P10, with Monsall Points failing during the period. Engineering delivery teams utilised the network closure on Christmas Day to reset points at Eccles, re-railing a previous rail break at Aytoun St, and points works through Cornbrook and Deansgate-Castlefield.

## Crime & Anti-Social Behaviour

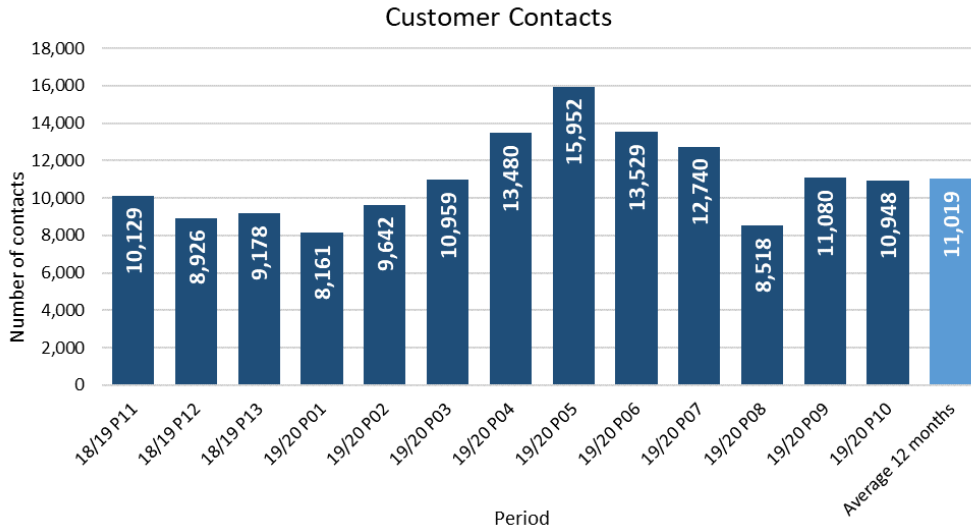
- 4.25 On average, 150 incidents of crime and anti-social behaviour per month were reported to Metrolink across the duration of the year, the majority occurring at night.
- 4.26 Incidents of crime and antisocial behaviour recorded on the network fell to 105 in December 2019 (period 10), the lowest number of incidents recorded since November 2017 (86).
- 4.27 A significantly higher number of incidents (181) were reported in November (period 8), with incidents of crime and anti-social behaviour reported in the City (64) being the reason behind the increase.



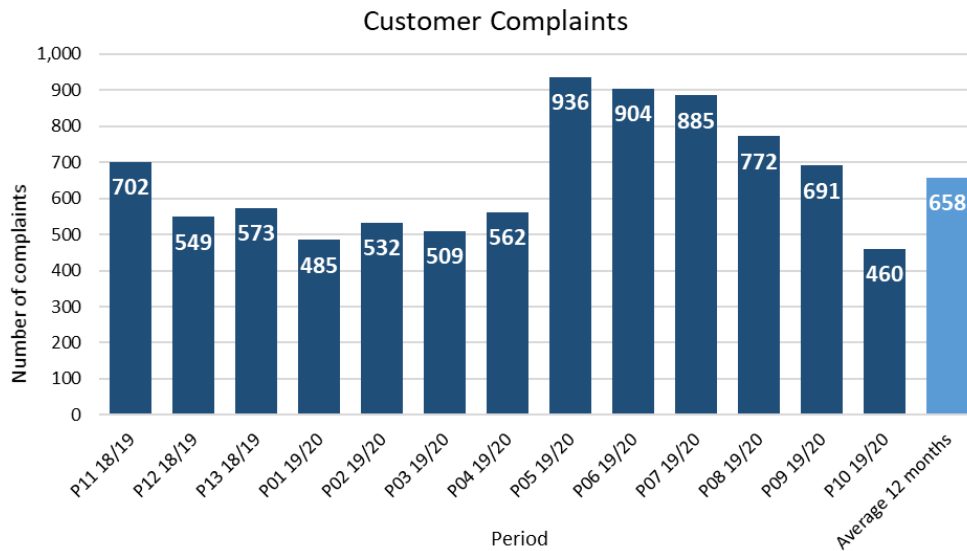
- 4.28 GMP's Transport Unit launched on 18 November (period 8). The team provides both overt and covert operations covering bus, tram, road and supported the Christmas Metrolink service enhancement, with resource on the tram services later into the evening in the run up to Christmas. This has been well received by both customers and staff.
- 4.29 The team has made a number of arrests on the network since launch and has also been investigating the high-profile reports of sexual assaults on the network at Trafford Bar, Ashton West and Holt Town during period 9.
- 4.30 KAM and TfGM were actively involved in Operation Sycamore in period 9, a joint 4-week Operation with Greater Manchester Police aimed at reducing crime and anti-social behaviour on the Oldham Rochdale line. 17 incident of crime and ASB were reported on the line in December 2019, the lowest number recorded since January 2017 (14 incidents).

## Customer contacts and complaints

- 4.31 143,200 customer contacts were dealt with over the duration of the year, averaging at just over 11,000 customer contacts per period (excludes twitter contact).



- 4.32 The category of contacts varies by period, but general enquiries about the network typically account for a third of contacts. Following the change to zonal fares in January 2019, and contactless payment, customer contacts regarding tickets has increased to over 24% of enquiries between periods 8 and 10 compared to 17% in the same periods in 2018.
- 4.33 Complaints account for 1 in every 16 customer contacts. As per enquiries, the category of complaint varies on a period basis, but cash lost in Ticket Vending Machines is consistently the highest complaint category, followed by service disruption and inappropriate behaviour on the network.
- 4.34 The spike in complaints recorded in period 5 (936, July 2019) coincided with the launch of contactless payment on the network. The number of complaints has reduced on a period by period basis and returned to pre-contactless launch levels in period 10 (460, December 2019).



## 5 CAPITAL PROGRAMME

### Trafford Park Line

- 5.1 The Trafford Park Line project made excellent progress during the year with most of the civil engineering and highway works completed ahead of schedule.
- 5.2 The main electrical, overhead line and control systems work is now complete with trams being tested on the live system in December and continuing through to the opening date in April.
- 5.3 Works to transform the highway network to facilitate the Trafford Park Line are also complete with testing underway.
- 5.4 Improvement works have been completed at Crumpsall Metrolink stop in preparation for the start of the new Trafford Park Line service during 2020.

### Fares and Ticketing

- 5.5 Following the introduction contactless payment in July 2019, usage has continued to increase with the one millionth journey achieved in November 2019.
- 5.6 As at the end of December 2019 over 1.3 million journeys had been made using contactless payment; consequently, TVM usage has dropped by approx. 8% and is continuing to reduce. While the system is a success, there remains a significant number of customers failing to “touch off” at platform validators to complete their journey resulting in some overcharge. TfGM provides refunds where applicable and is looking at ways to make touching out more consistent.
- 5.7 Following a review, the annual Metrolink fare increase was agreed at 2.3%, and this increase has now been implemented across all retail channels across the network.

- 5.8 Plans are in place regarding the withdrawal of the single product from the GetMeThere App. This will close a fare evasion loophole whereby passengers are purchasing a single ticket via the App when CSRs board trams.

#### **New trams**

- 5.9 An order for 27 new Bombardier M5000 trams was placed during the year. The trams will start to arrive and enter passenger service from Summer 2020.
- 5.10 Several infrastructure changes are required to facilitate the additional capacity that the trams will bring such as new substations, depot stabling facilities and park and ride enhancements at Whitefield and Radcliffe.

#### **Other enhancements**

- 5.11 A trial, coating a tram with a protective coating (wash-reduction product) commenced on the 19<sup>th</sup> November. The vehicle has currently 65+ days without requiring an external wash. Recommendations will be put forward regarding application of the coating to the new 27 trams and potentially the rest of the fleet in 2020.
- 5.12 Several other significant enhancements were completed across the network including upgrades to passenger facilities at Cornbrook and Shudehill tram stops.
- 5.13 Progress has also been made with respect to upgrading Heaton Park and Whitefield stops, with the aim of completing improvement works in 2020.
- 5.14 During 2020, work will be undertaken to add an additional deck to the existing park & ride infrastructure at Radcliffe and Whitefield sites, significantly increasing the capacity at each of these busy stops.

## **6 Corporate Social Responsibility**

- 6.1 KAM has broadened the scope of the customer facing Ambassador role over the past 12 months. The role prioritises customer engagement and forges links with local communities.
- 6.2 A bespoke programme of activity has been delivered with local schools and several initiatives have been undertaken with the wider community. The following are just a few examples of activities which have taken place in the past year:
- Sponsorship of six mentees at Chorlton High School;
  - Continuing engagement with the “Women in Engineering” campaign;
  - Close partnership working with youth offending teams to deliver presentations on the impact of anti-social behaviour and crime, and implement restorative justice sessions where appropriate; and

→ Ongoing work with food bank centres and homeless charities across Greater Manchester.

- 6.3 KAM has committed to apprenticeships within the local community, employing 28 new apprentices and trainees from underprivileged backgrounds across Greater Manchester in the last year.
- 6.4 During the period a new waste contract has been negotiated and signed between KAM and Environmental Waste Controls Ltd (EWC) following a formal tender process. The new contract aims to increase efficiency, improve data quality, increase KAM's recycling rate in line with the joint 3-year business plan.
- 6.5 More than 40% of procured products and services are now sourced within a 25-mile radius of Greater Manchester, ensuring that we continue to support industry and employment within and around the region.
- 6.6 These activities are designed to showcase the Metrolink brand in a positive light by educating a diverse range of the Manchester community on behaviours and safety, as well as supporting projects which champion local vulnerable communities.

**Danny Vaughan**  
**Head of Metrolink**

## Appendices

### Appendix 1 – Period date listing

*This report details the highlighted Period/s*

Financial Year	Period	Start Date	End Date
2018/19	1	01-Apr-18	28-Apr-18
2018/19	2	29-Apr-18	26-May-18
2018/19	3	27-May-18	23-Jun-18
2018/19	4	24-Jun-18	21-Jul-18
2018/19	5	22-Jul-18	18-Aug-18
2018/19	6	19-Aug-18	15-Sep-18
2018/19	7	16-Sep-18	13-Oct-18
2018/19	8	14-Oct-18	10-Nov-18
2018/19	9	11-Nov-18	08-Dec-18
2018/19	10	09-Dec-18	05-Jan-19
2018/19	11	06-Jan-19	02-Feb-19
2018/19	12	03-Feb-19	02-Mar-19
2018/19	13	03-Mar-19	30-Mar-19
2019/20	1	01-Apr-19	28-Apr-19
2019/20	2	28-Apr-19	25-May-19
2019/20	3	26-May-19	22-Jun-19
2019/20	4	23-Jun-19	20-Jul-19
2019/20	5	21-Jul-19	17-Aug-19
2019/20	6	18-Aug-19	14-Sep-19
2019/20	7	15-Sep-19	12-Oct-19
2019/20	8	13-Oct-19	09-Nov-19
2019/20	9	10-Nov-19	07-Dec-19
2019/20	10	08-Dec-19	04-Jan-20
2019/20	11	05-Jan-20	01-Feb-20
2019/20	12	02-Feb-20	29-Feb-20
2019/20	13	01-Mar-20	31-Mar-20



# Metrolink Performance Network Summary

KeolisAmey Metrolink aim to deliver a reliable service to our customers. We want to share with you how we are performing.

This report covers our four-week period between: **09 December 2019 until 04 January 2020**

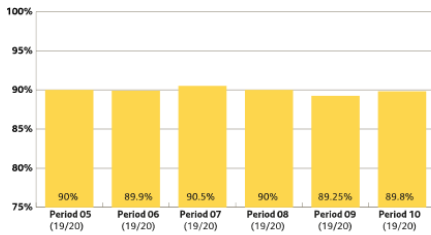
## How we performed



### Punctuality

Percentage of trams departing less than two minutes late.

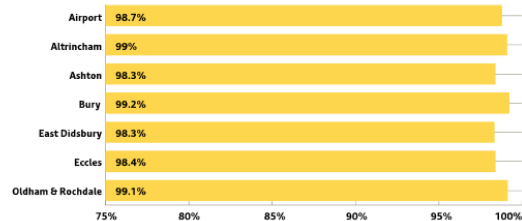
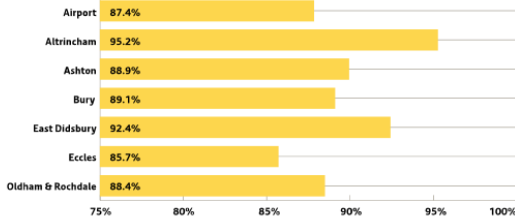
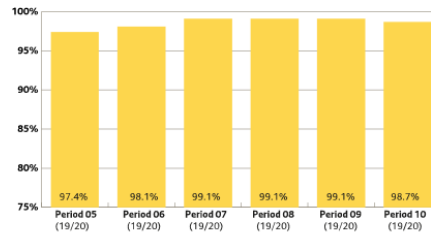
**89.9%**



### Reliability

Percentage of planned miles operated.

**98.7%**



### Cancellations

Journeys cancelled.

**0.95%** of all planned journeys.



### Short journeys

Incomplete journeys.

**0.48%** of all planned journeys.

Issued on 17 January 2020

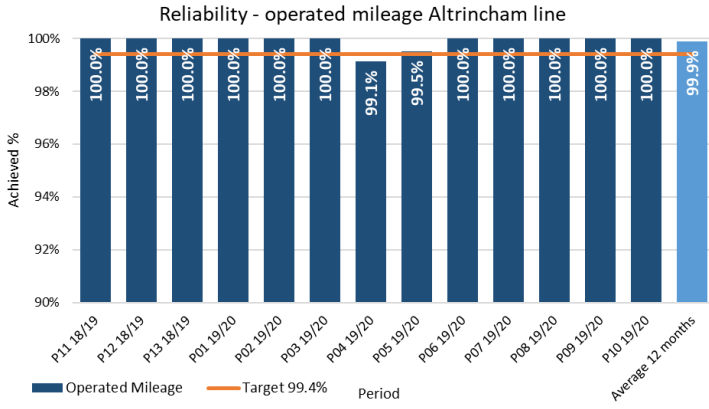


Metrolink is operated on behalf of Transport for Greater Manchester by **KEOLIS amey** Metrolink

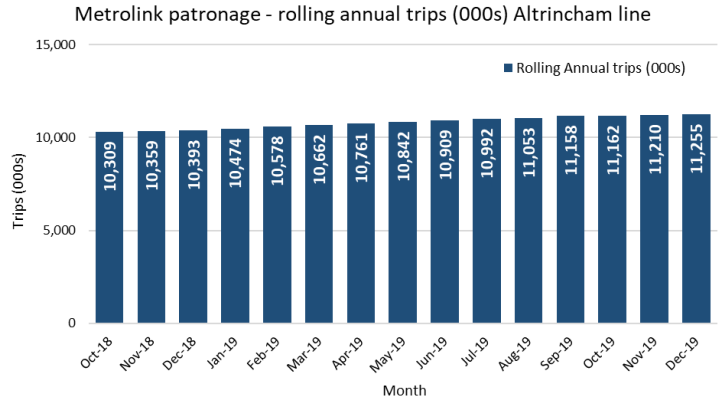
## Appendix 3 – Metrolink Performance breakdown by line

# Altrincham line

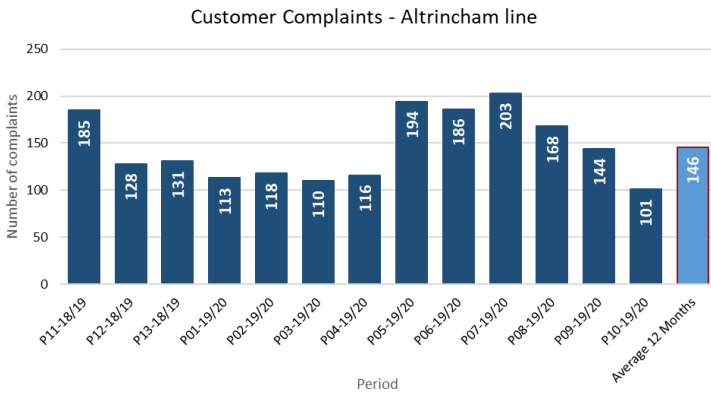
## Reliability



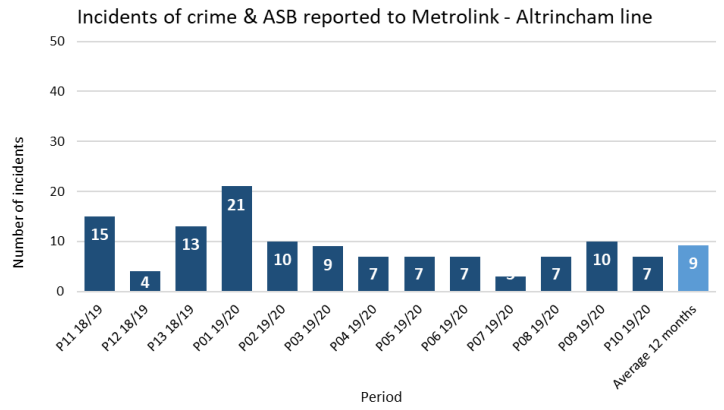
## Patronage



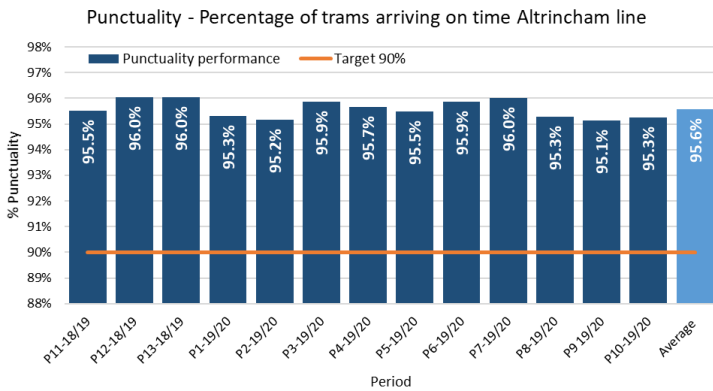
## Complaints



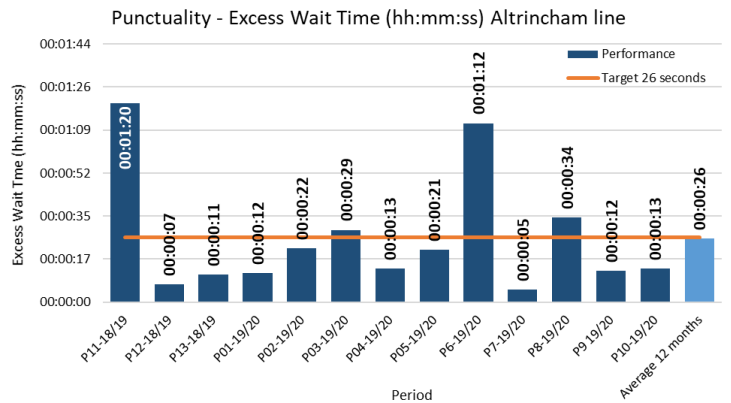
## Crime & Anti-Social Behaviour



## Punctuality

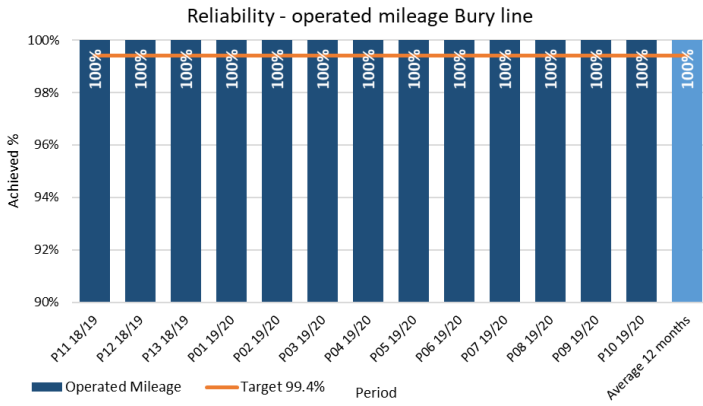


## Punctuality (Excess Wait Time)

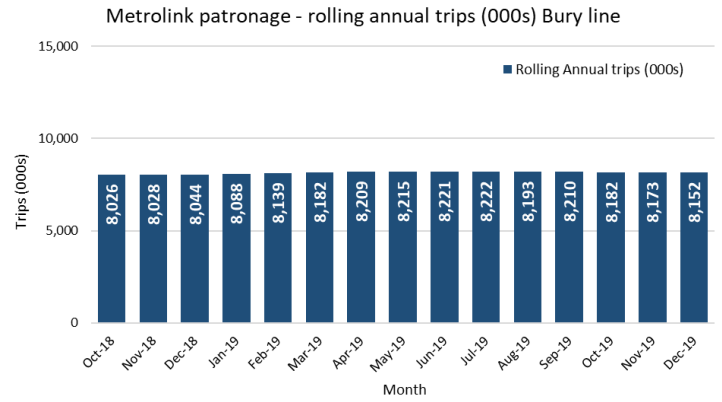


# Bury line

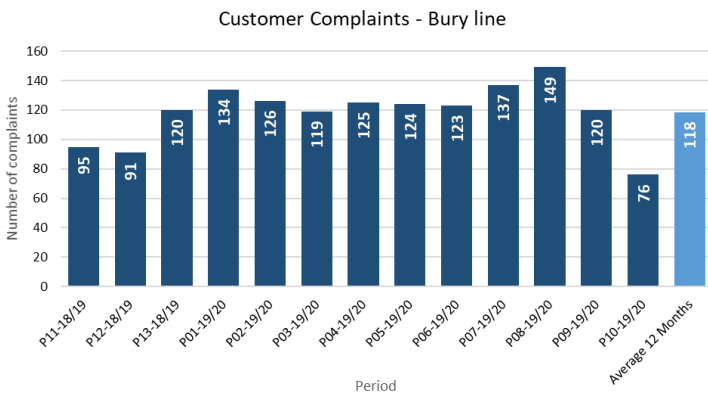
## Reliability



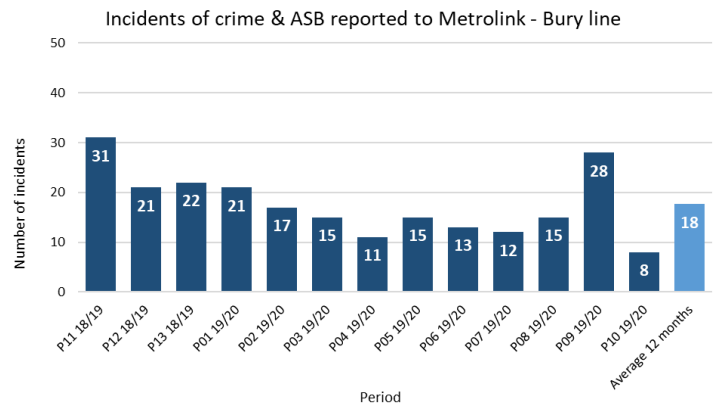
## Patronage



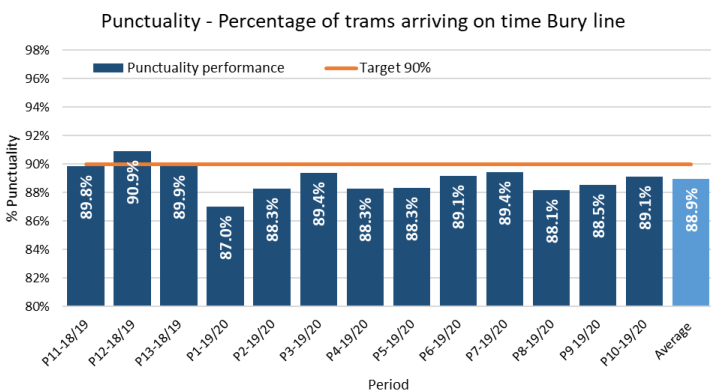
## Complaints



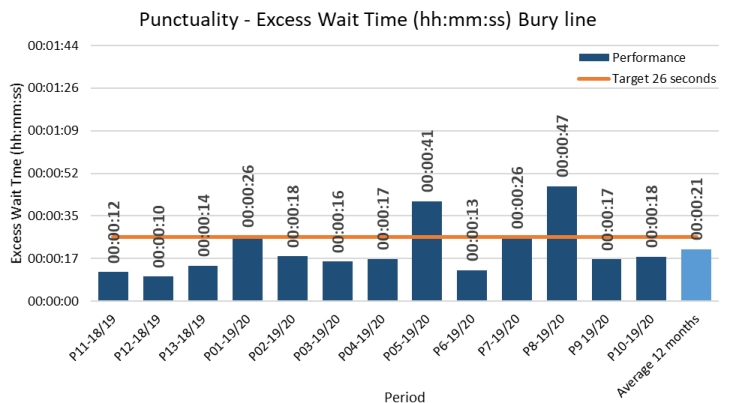
## Crime & Anti-Social Behaviour



## Punctuality

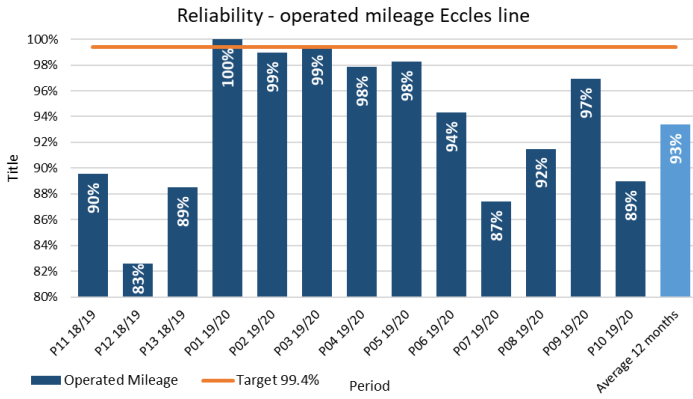


## Punctuality (Excess Wait Time)

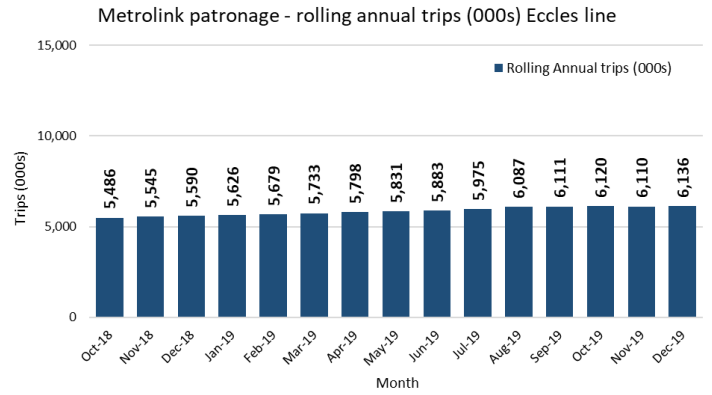


# Eccles line

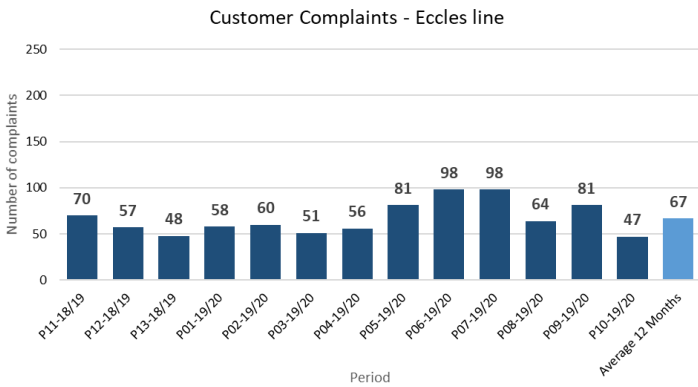
## Reliability



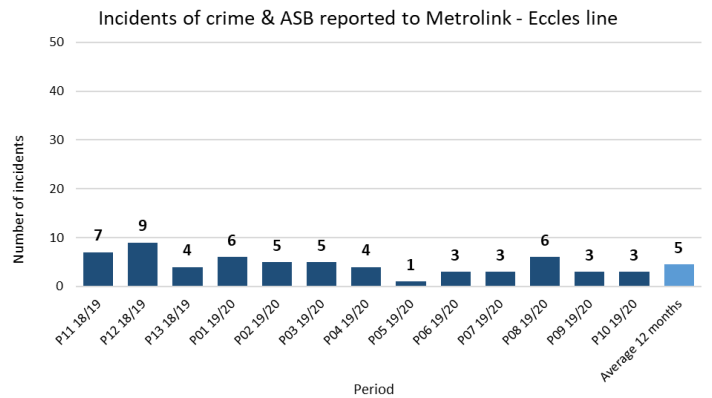
## Patronage



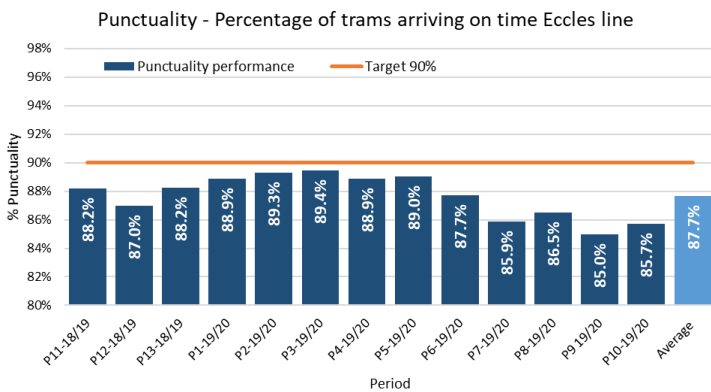
## Complaints



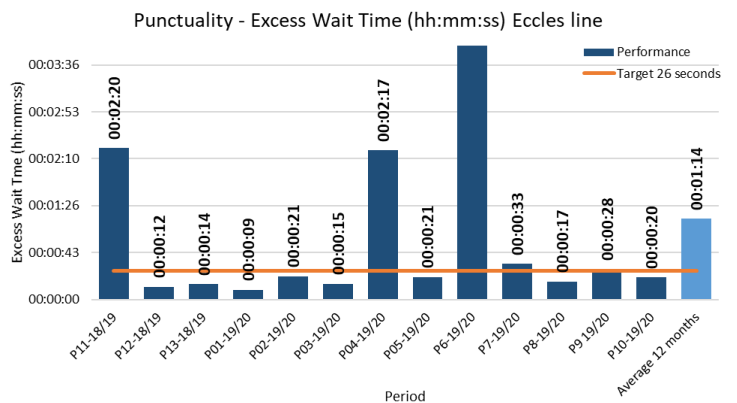
## Crime & Anti-Social Behaviour



## Punctuality

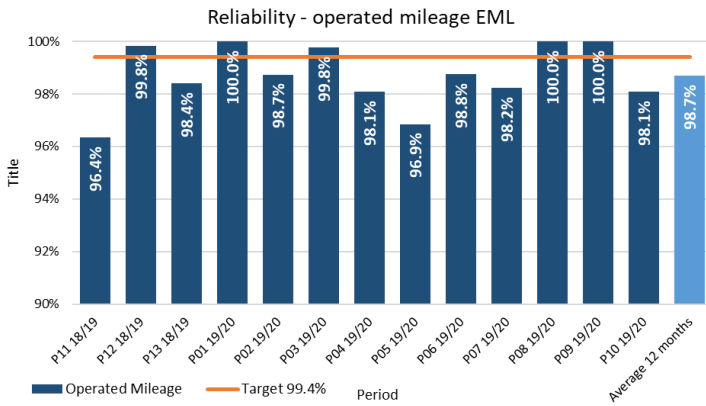


## Punctuality (Excess Wait Time)

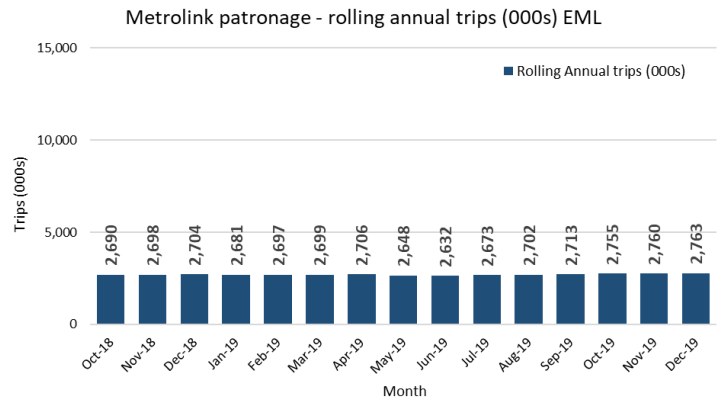


# Ashton (East Manchester) line

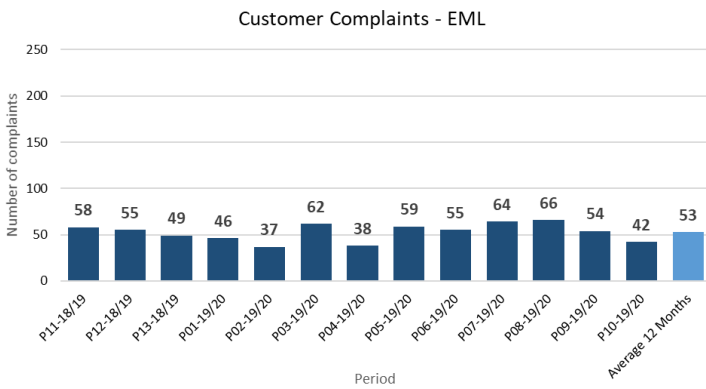
## Reliability



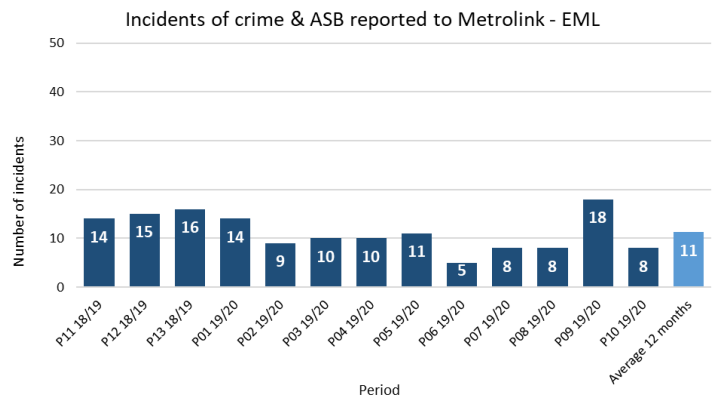
## Patronage



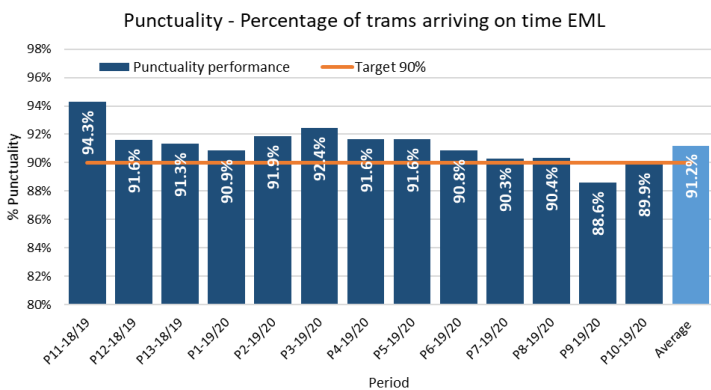
## Complaints



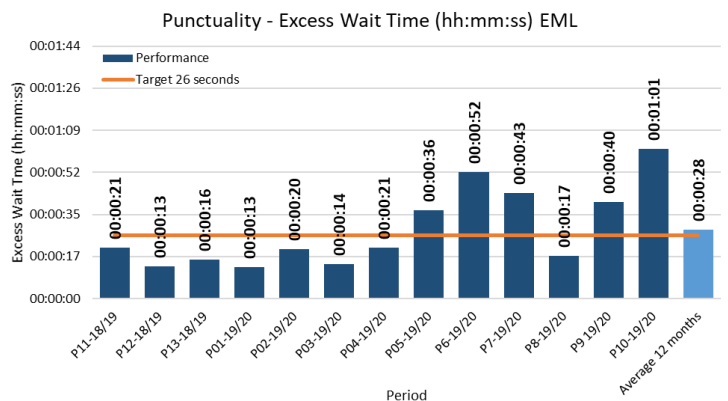
## Crime & Anti-Social Behaviour



## Punctuality

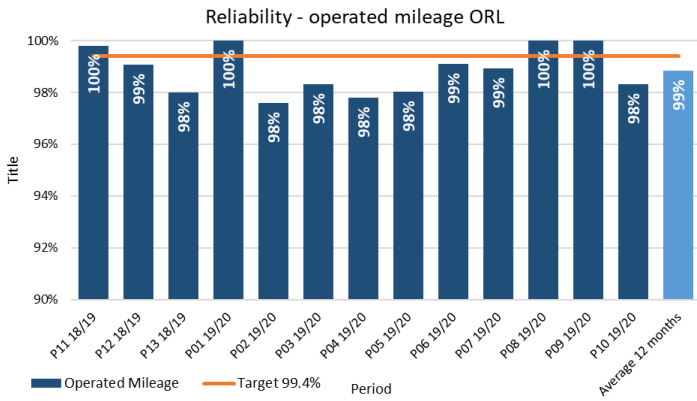


## Punctuality (Excess Wait Time)

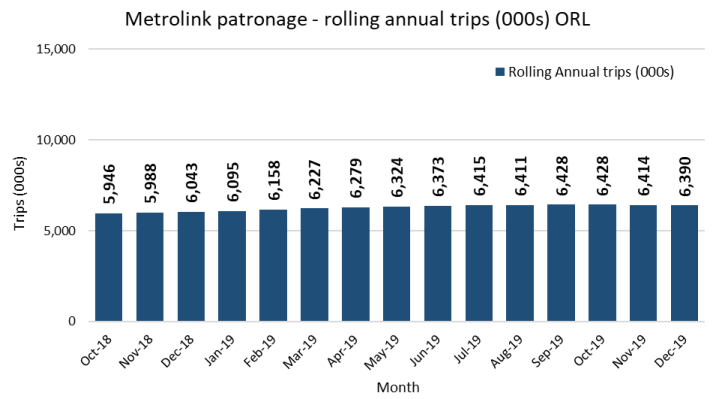


# Oldham Rochdale line

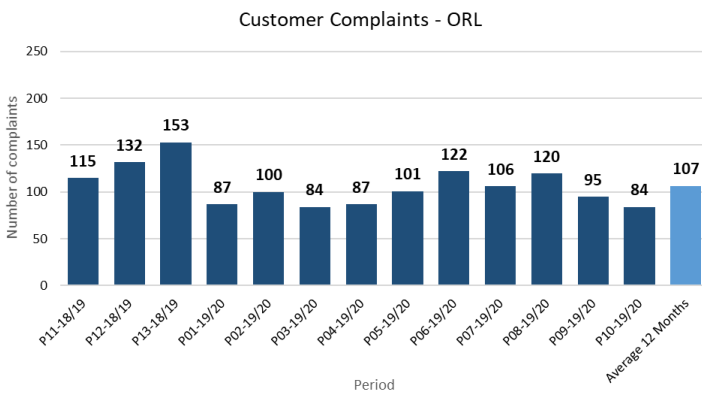
## Reliability



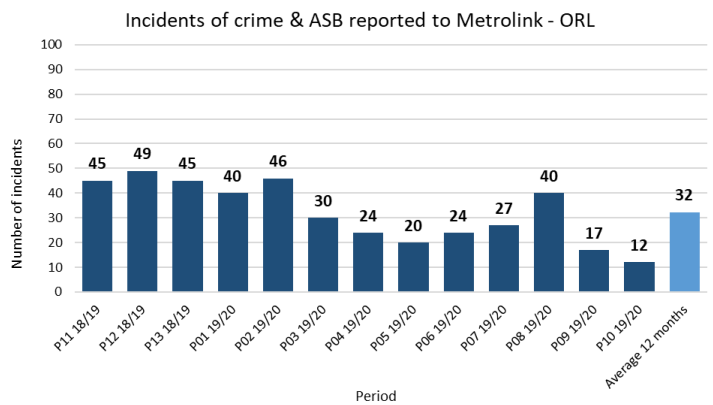
## Patronage



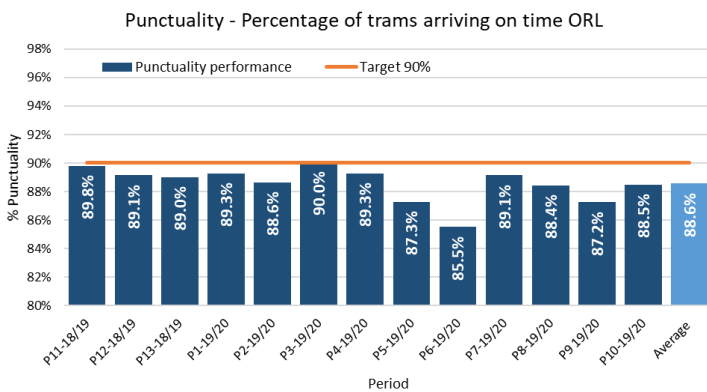
## Complaints



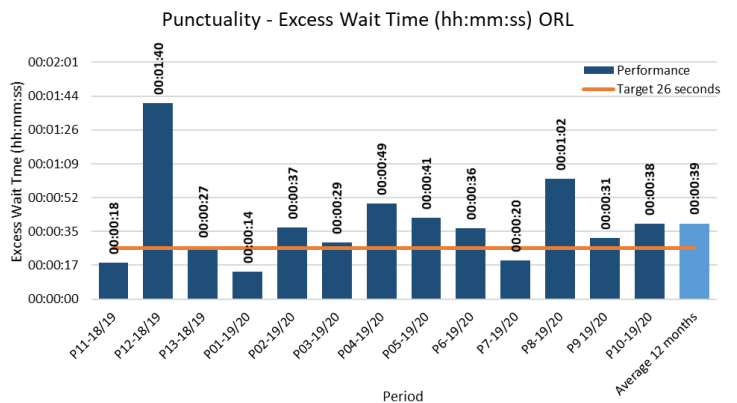
## Crime & Anti-Social Behaviour



## Punctuality

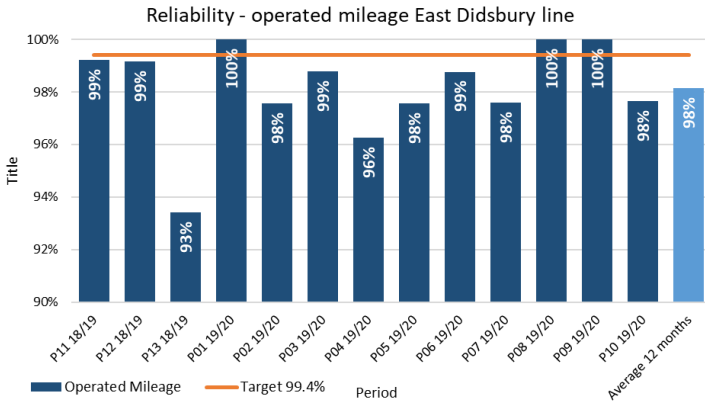


## Punctuality (Excess Wait Time)

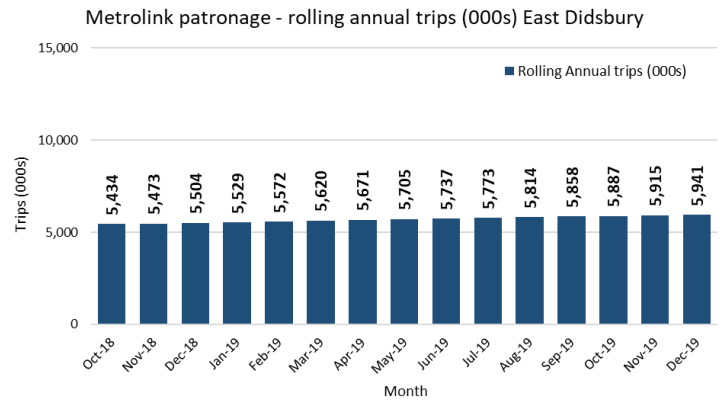


# East Didsbury line

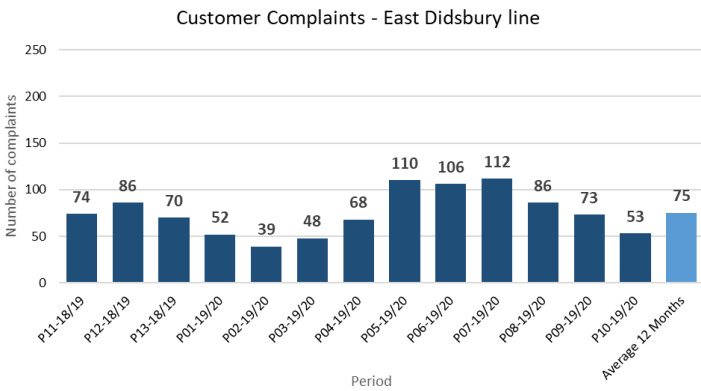
## Reliability



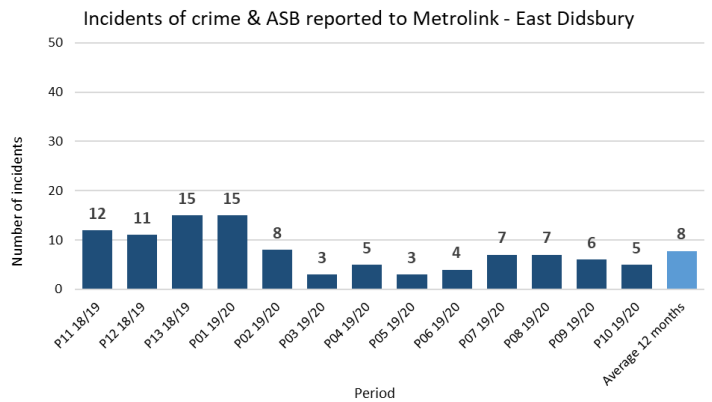
## Patronage



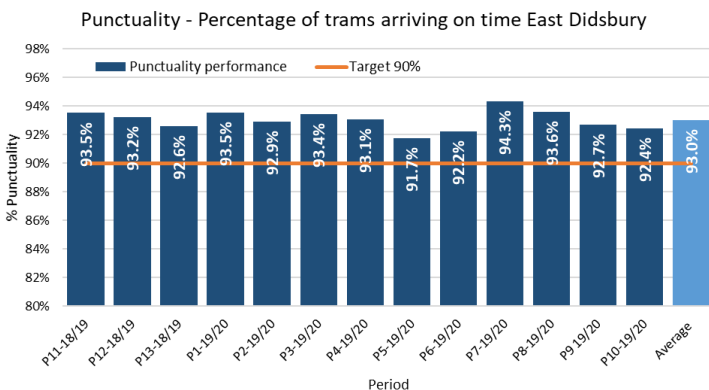
## Complaints



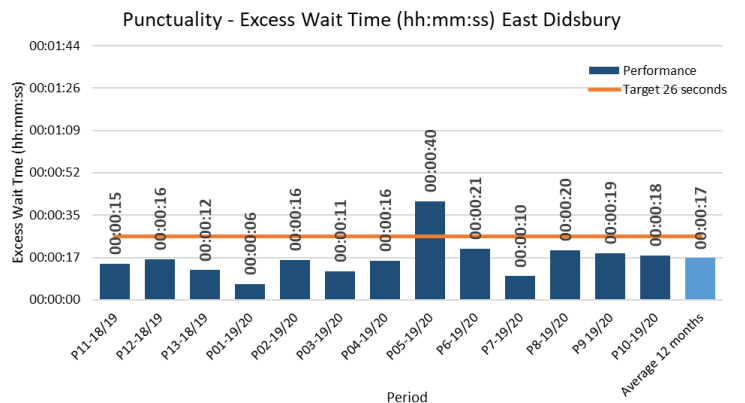
## Crime & Anti-Social Behaviour



## Punctuality



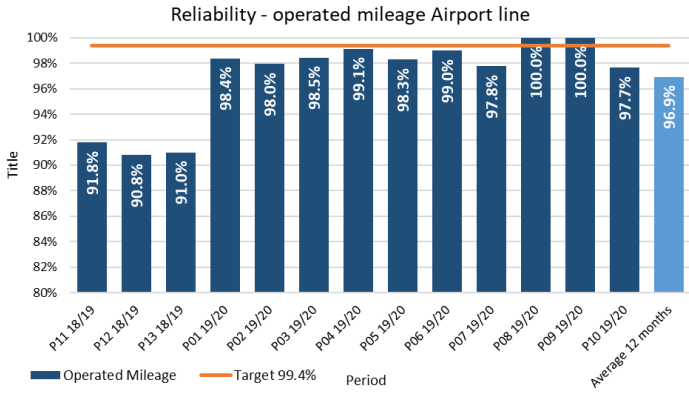
## Punctuality (Excess Wait Time)



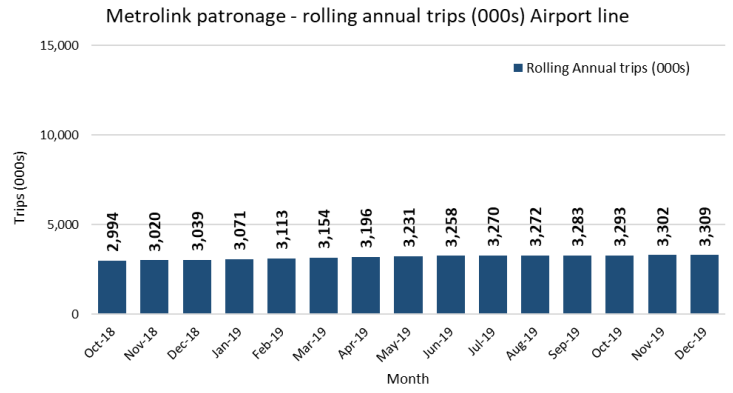


# Manchester Airport line

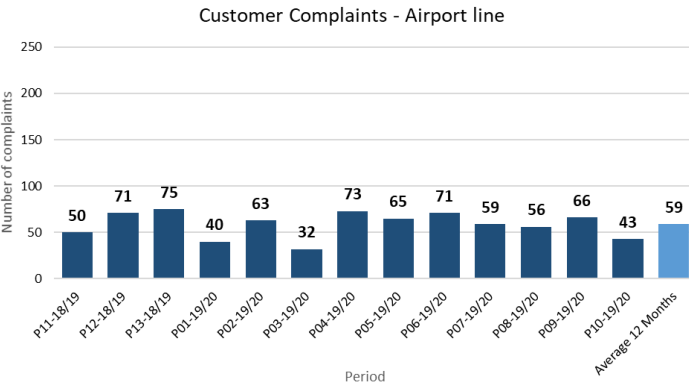
## Reliability



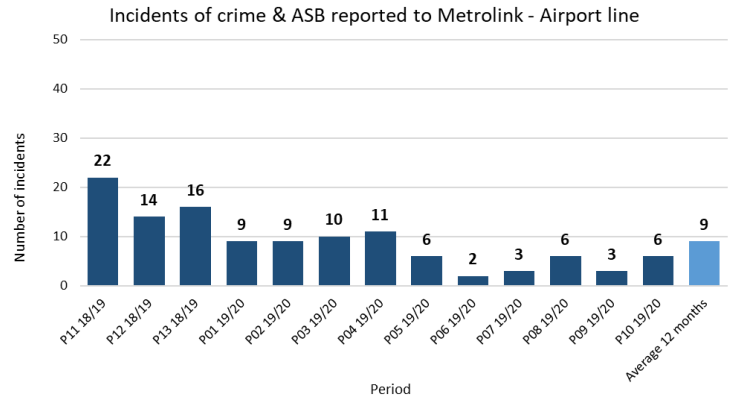
## Patronage



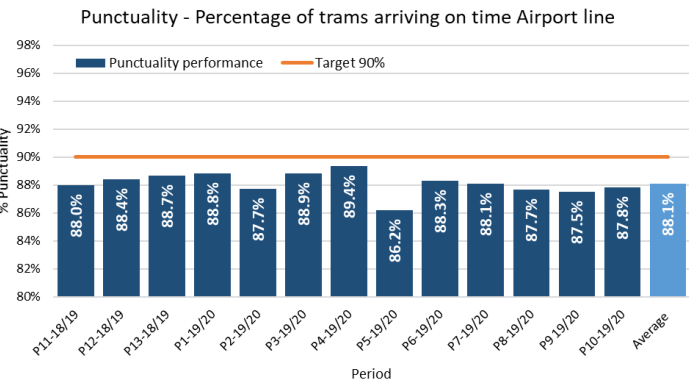
## Complaints



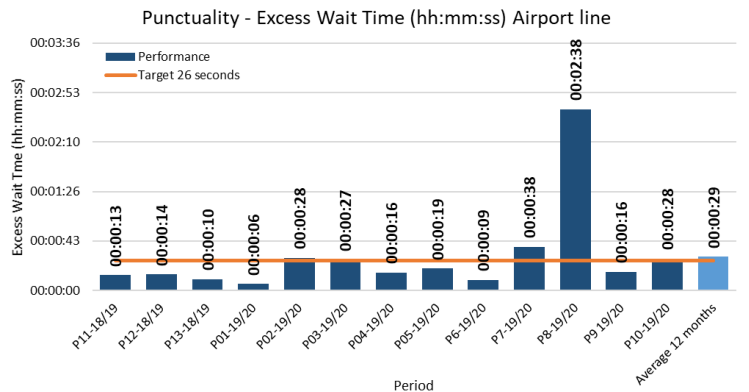
## Crime & Anti-Social Behaviour



## Punctuality

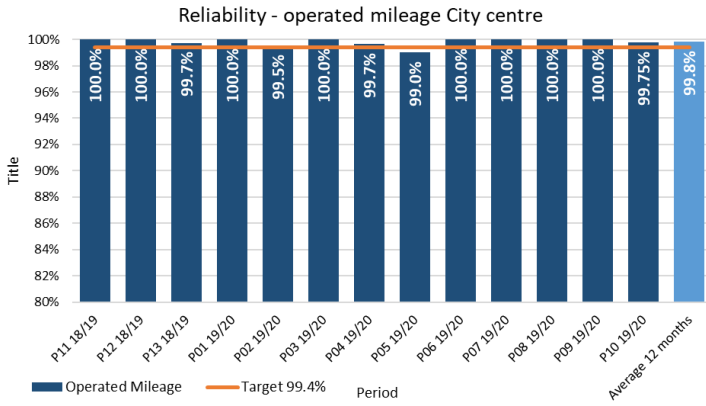


## Punctuality (Excess Wait Time)

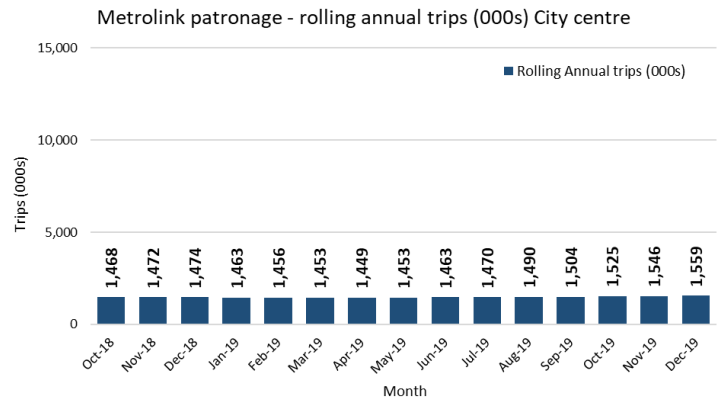


# Manchester City Centre

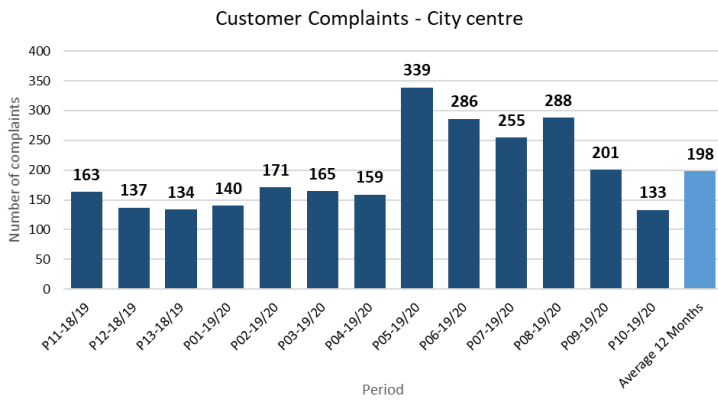
## Reliability



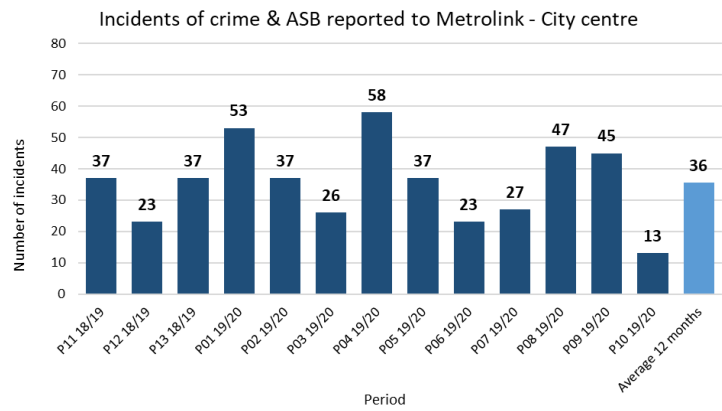
## Patronage



## Complaints



## Crime & Anti-Social Behaviour



\* Punctuality and Excess wait time statistics are not available for City Centre stops