

GREATER MANCHESTER INTEGRATED TRANSPORT AUTHORITY**REPORT FOR INFORMATION**

COMMITTEE: Rail and Metrolink Networks
DATE: 4th December 2009
SUBJECT: Metrolink Service Performance
REPORT OF: Metrolink Director, GMPTE

PURPOSE OF REPORT

To inform Members of the service performance and developments which affect the Metrolink system over recent months.

RECOMMENDATIONS

Members are invited to consider the report and to:

- Note the performance of Metrolink services.

BACKGROUND DOCUMENTS

Report to Rail and Metrolink Networks Committee – 2nd October 2009

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1. Introduction

- 1.1 This report contains Metrolink performance during each reporting Period. A reporting Period is a consecutive period of 28 days in line with the contract between GMPTC and Stagecoach. There are 13 Periods in a year and all performance charts will show a summary of the last 13 Periods along with the Moving Annual Average (MAA) for the year. A list of Period dates can be found in Appendix 3 of this report.
- 1.2 This report contains Metrolink performance summaries for Periods 4, 5 and 6 of Stagecoach operations (Monday 27th July – Sunday 18th October 2009). Also detailed are results for Metqual inspections for the same Periods.

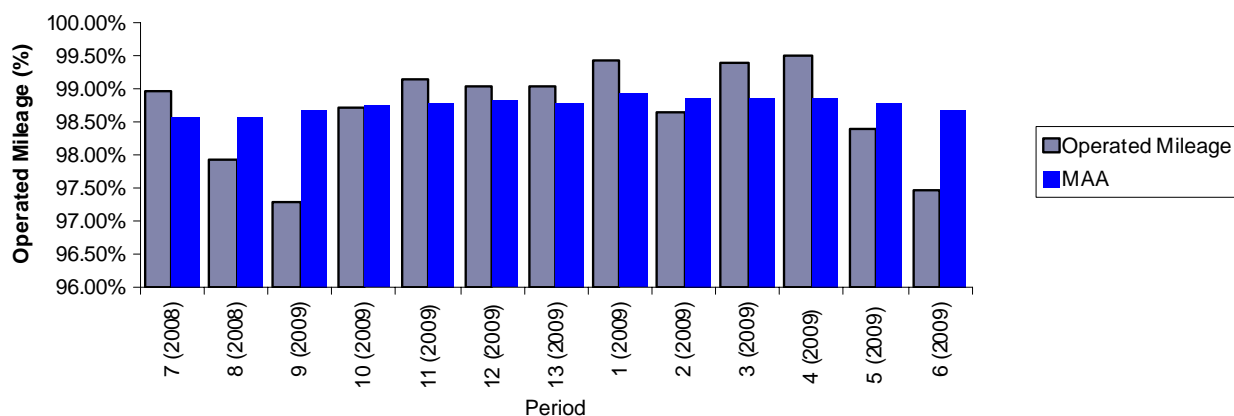
2. Executive Summary

- 2.1 Performance as measured by Operated Mileage has declined over the last 3 Periods from 99.49% in Period 4, to 98.40% in Period 5 down to 97.46% in Period 6 (See Chart 1 in section 3). The Moving Annual Average of 98.50% has remained above 98% for the 30th consecutive Period. The majority of miles lost in Period 4 and 5 were due to vehicle reliability caused by a number of failures including compressor faults, motors, cab heaters and life-expired electronic components. All these issues are being addressed through a series of reliability improvement measures, more details of which are set out in section 3.4. Lost miles in Period 6 can be attributed to servers failing in the control room on two occasions. New hard drives have been installed and as a result of changes made to the software, the back-up server will now activate if the main server fails in future. Section 3.4 of the report also contains details of the causes of the recent disruptions to service.
- 2.2 There were 7 major incidents during Periods 4, 5 and 6 which caused delays in service of over 30 minutes and impacted on performance. These are highlighted in section 3.3.
- 2.3 The Altrincham and Eccles lines were closed for the majority of Period 4 and the beginning of Period 5, in order to predominantly facilitate the replacement of the overhead line between Cornbrook and Altrincham. Replacement bus services were procured and a simplified fare structure was implemented. Brief details of the services that were offered can be found in Appendix 5.
- 2.4 The City Centre track remained closed during the Periods which are being reported on, however it successfully reopened on Monday 2nd November as planned.
- 2.5 Patronage has remained in line with budget assumptions and has started to increase again following the re-opening of the Altrincham and Eccles services.

2.6 Customer complaints rose over the 3 periods covered by this report as a result of disruptions to service and the lack of availability of TVM's due to the server failure.

3. Service Performance

Chart 1 - Operated Mileage



Scheduled mileage	Mileage which Stagecoach Metrolink is contracted to operate to run the timetable.
Operated Mileage	Actual miles operated and as a percentage of scheduled mileage
MAA	Moving Annual Average over the last 13 Periods (The sum of operated mileage over the last 13 Periods, divided by 13 to obtain the rolling annual average for operated mileage).

3.1 Operated Mileage

3.1.1 Stagecoach is measured according to the Operated Mileage figure for each Period.

3.1.2 Operated Mileage as shown in Chart 1 above, illustrates the actual miles operated as a proportion of the scheduled mileage and therefore better reflects the service delivered to passengers.

3.1.3 Operated Mileage for the past year has been consistently good. The MAA of 98.50% remains above 98% for the 30th consecutive Period. Operated mileage in Period 4 finished at 99.49%, Period 5 at 98.40% and Period 6 at 97.46%. Vehicle reliability and server failures were the main causes of lost mileage during these Periods. Listed below are the incidents which impacted on performance during Periods 4, 5 and 6;

- 7th August – Due to a points failure at Victoria, Bury services had to be turned at Queens Road Depot. The points were repaired 1 hour later and normal service resumed.
- 11th September – Vehicle 1021/1018 inbound at GMEX was emitting thick smoke. The Fire service attended along with vehicle technicians who reported a compressor failure.

Services operated between Old Trafford and Altrincham and between Salford Quays to Eccles. 1 hour later permission was given for the tram to depart for Timperley.

- 20th September – Vehicle 1020/1021 arrived at Altrincham emitting smoke. Fire services were called to attend and stopped all movements into Altrincham and requested that the overhead line be isolated. Services to Altrincham resumed after approximately 1hr and 40 minutes.
- 22nd September – The drivers experienced difficulties coupling vehicles 1010 and 1015 at Victoria at 16.38. This was followed by a failure of the leading vehicle, and caused a delay in departures of 32 minutes.
- 30th September – Vehicle 1022 failed at GMEX at 07.00hrs due to an electronics fault. The driver was unable to rectify the problem and vehicle technicians had to be despatched from the Depot. The vehicle was coupled and moved to St Peter's Square at 07.58 hrs

On the same day at 21.46 hrs the servers controlling the signalling system failed, which meant that no routes could be set. All services were stopped and arrangements were put in place for passengers to use their Metrolink tickets on Arriva and First Bus services. After one hour, services resumed on the Bury line and after a further 15 minutes Altrincham services reformed.

- 3rd October – At 17.05 the control room servers failed, as a consequence, the Operator was unable to set routes or operate points throughout the system. All services were stopped and Metrolink passengers were able to use the 135, 263 and 33 bus services. Staff were deployed at major junctions in order to operate the points, and services recommenced two hours later albeit disrupted. The server was rebooted at 23.35hrs allowing the Bury line controller to set routes. Altrincham services recommenced at 00.35 and the last departures from the City ran to timetable.

3.2 Vehicle Availability

3.2.1 For the duration of the City Centre track renewals from the 6th April, the target availability for Mon – Fri morning peak operations has changed from 29 vehicles to 24.

3.2.2 The service requirement for the majority of Period 4 and the beginning of Period 5 was reduced further to 8 vehicles due to services only operating between Bury and Victoria as a result of the blockade of the Altrincham and Eccles lines.

The vehicle availability against these revised targets was 99.9% in Period 4 and 93.32% in Period 5.

3.2.3 During Period 6 the total vehicle availability against the morning peak target (24 vehicles) was 95.83%. All are shown in the charts below.

During normal operations the target availability is lower on Saturday and Sunday. However the Operator has been running extra vehicles and thus increasing the frequency of service at the weekend, rather than the trams remaining stationary at platforms and increase the risk of vandalism.

Chart 2A Period 4 – Vehicle availability in the morning peak (07:30hrs)

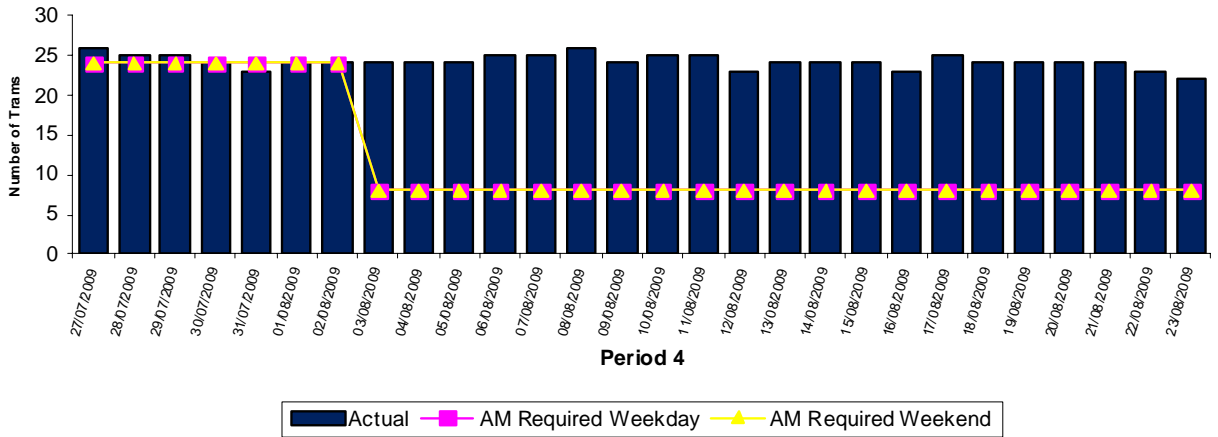


Chart 2B Period 5 – Vehicle availability in the morning peak (07:30hrs)

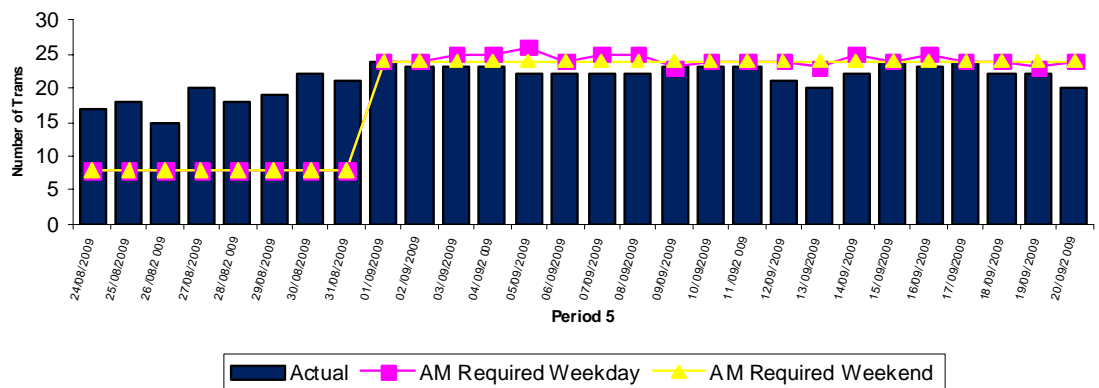
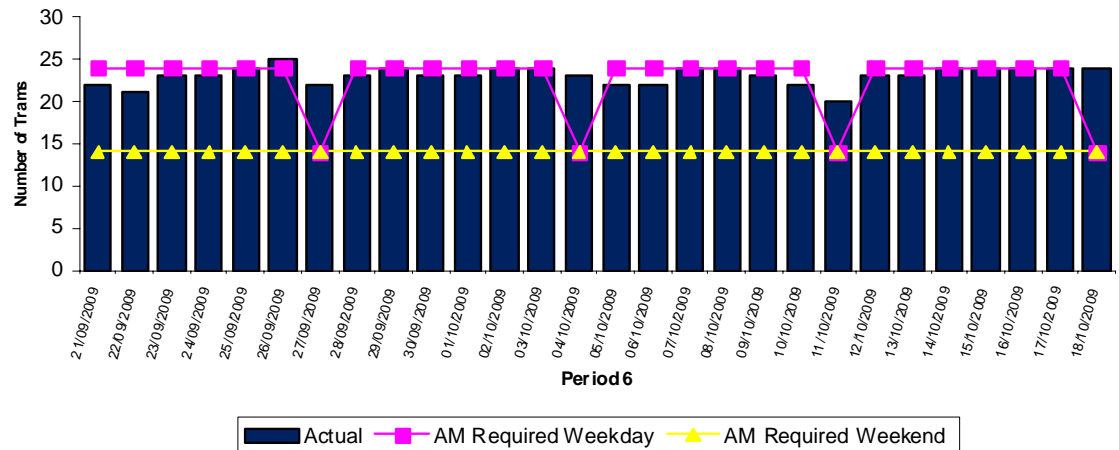


Chart 2C Period 6– Vehicle Availability in the morning Peak (07.30hrs)



3.2.3 Five vehicles were out of service during Periods 4, 5 and 6.

- 2005 was withdrawn from service in Period 4 and 1005 in Period 5 both to have a centre bogies replaced.
- 1025 and 1003 received special project modifications in Periods 5 and 6.
- Vehicle 2001 remains long term out of service. Following testing by an external resource funded by the Operator, the ongoing fault has been identified. A further visit has been planned in order to try and resolve the issue.

3.3 Complaints

3.3.1 There was a decrease in complaints from 297 in Period 3 to 245 in Period 4. The majority of complaints early in Period 4 were in relation to the City Centre upgrades and the Altrincham bus replacement service. The bus service was amended in recognition of the number of complaints received.

53% of complaints in Period 4 related to Ticket Vending Machines. A communications failure caused problems with machines on the Bury line during this period.

3.3.2 Period 5 saw a significant increase in complaints to 517. The majority of complaints were due to service disruptions. Ticket Vending Machines accounted for 40% of complaints for this period.

3.3.3 Period 6 saw a further increase in customer complaints, with a rise to 725. The majority of complaints related to TVMs and service disruption

on Phase 1 due to the servers failing. The increase in complaints was due mainly to the fact that the disruptions occurred when Manchester United were playing at home and the service was being used by fans travelling to the games.

TVM complaints were lower for Period 6 accounting for 27% of the total number of customer complaints. Exact fare complaints still represent the highest proportion of TVM complaints, and so greater emphasis is being placed on refloating the machines.

The first of the new TVMs have been installed at St Peter's Square and Piccadilly Gardens in time for the reopening of the City Centre track on Monday 2nd November.

3.4 Service Disruption

- 3.4.1 Since the re-opening of the City Centre track on Monday 2nd November 2009, the service provided to customers has suffered more disruption and delays than normal. This is partly as a result of a number of one off incidents and partly due to the reliability of the tram fleet. Action is being taken jointly with Stagecoach to rectify the underlying problems as explained below.

The causes of the disruption and delays are summarised as follows:

Tram failures

The availability and reliability of trams has affected the operated service. The cause of each failure is reported by the Operator on a rolling basis which then informs the basis of future reliability projects. As each fault occurs, an investigation of the cause of the fault takes place which then informs the basis of future reliability improvement projects.

A number of longer term projects are currently underway including fitting new speed probes, new motor cooling air intake cowlings, new compressors, a motor modification to inverter fans, cab heaters (to allow de-misting of the windscreen), rear view CCTV and the planned re-conditioning of problematic electronics cards. The improvement projects vary in duration depending on their work content and the introduction of the new M5000 trams will enable the existing trams to spend more time in the depot undergoing modification.

A short term vehicle reliability improvement programme has also been established to look at a number of areas such as changes to the maintenance regime.

The Operator produces a weekly report which monitors the progress of the reliability improvement projects and the GMPTE engineering team is working closely with the Operator's engineering team on these improvements.

Road traffic accidents involving cars

On the 2nd November, a collision between a motor cycle and a car detained a tram and caused disruption to Eccles services during the

evening peak. The following day, again during the evening peak, a car collided with a tram on Mosley Street.

Traffic light failures

There have been repeated failures of traffic lights at locations across the City Centre. This has the effect of delaying tram services and causing road vehicle congestion.

A meeting is being organised between the PTE, GMUTC and the Operator to identify and implement measures that will resolve these failures.

Emergency Medical Attention

On two occasions, services have had to be halted whilst emergency services attended to passengers who had fallen ill on trams (on both occasions, the illness was unrelated to the trams).

Cable theft

Thieves stole cable from the system causing signalling to fail. As a consequence, all trams were required to proceed with caution through signals at danger. This affected all services through this location for two days whilst rectification work was carried out.

The Operator has employed Carlyle Security to patrol the affected area during the night.

Body at Crumpsall

The discovery of a body at Crumpsall on 16th November disrupted services on the Bury line for 7.5 hours and the effects were felt across the system. Services ran between Bury and Crumpsall and all services from the south of the City were turned back at Victoria.

The Operator organised replacement bus services and deployed staff at key locations to provide customer care.

United Utilities Power Outage on 17th November

The outage affected homes and businesses in the Radcliffe area and also affected services on the Bury line.

The Operator responded with an emergency generator to ensure services to Bury were resumed as soon as possible, and staff hand operated points to keep services running. Arrangements were made to provide replacement buses for affected passengers and staff were deployed at key locations to provide advice to customers on their journeys.

4 Metrolink Performance Monitoring

- 4.1 The contractual performance regime with the Operator measures several aspects of performance including reliability (headway between trams), capacity (number of trams run each service hour) and the punctuality of the first and last trams of the day.

4.2 The results for MetQual inspections carried out during the Periods being reported on are attached.

5. Patronage

5.1 Background

Patronage is being derived initially from sales via Ticket Vending Machines (TVM) and the range of season tickets offered from weekly to annual (ST). These are the highest patronage generating areas and most sensitive areas to change.

During November and December patronage KPI's and targets are being established and agreed for the three years from 2010/11 to 2012/13. Work on developing and validating the methodology for measuring other patronage areas and refining current assumptions will be done in conjunction with the setting of these targets.

5.2 Data

Monthly patronage 2008/09 using updated assumptions

Month	Actual 2008/09	
	TVM 000s	ST 000s
April	872	265
May	959	207
June	882	236
July	882	226
August	896	204
September	866	307
October	913	273
November	866	264
December	942	166
January	819	354
February	826	258
March	883	271
Total	10,606	3,031

Monthly patronage 2009/10 using updated assumptions

Month	Actual 2009/10		
	TVM 000s	ST 000s	Bus Replacement 000s
April	746	222	
May	730	187	
June	759	208	
July	717	152	
August	269	115	269 *
September	643	249	
October	770	222	

* this figure is additional to the patronage derived from the TVM's

5.3 Effects of City Centre Track work

City Centre track work commenced on 6 April 2009.

The effect on budgeted patronage numbers caused by the reduced services during the period of these works has been estimated as part of the 2009/10 budget process. Performance against this budget will be monitored and the effect of the works on patronage will be assessed on an ongoing basis, as data is collated.

6 Other Metrolink Issues

6.1 City Centre Track Renewals

6.1.1 The City Centre Track Renewals Programme commenced on the 6th April 2009. The service being operated is as follows:

- Altrincham to St Peter's Square, 12 minute frequency with double units;
- Eccles to St Peter's Square, 12 minute frequency; and

Bury Line Service:

- Mondays – Fridays: Single trams every 7 minutes 7am – 10am and 4pm – 7pm, every 12 minutes at all other times. 1 double tram from Bury at 8.03am daily.
- Saturdays: Single trams every 7 minutes 10am – 5pm, every 12 minutes at all other times.
- Sundays: Single trams every 12 minutes.

BUS LINK: This service connects Victoria, Piccadilly Gardens, Piccadilly Station and St Peter's Square and runs in both directions.

This service runs;

- Every 12 minutes until 7pm on Mondays to Saturdays
- Every 20 minutes after 7pm Mondays to Saturdays and all day on Sundays.

6.2 August Blockade

- 6.2.1 During the closure of the Altrincham and Eccles lines in August, tram replacement bus services were operated, further details of which are set out in Appendix 4.
- 6.2.2 The services were revised to reflect experience gained during the first days of operation including supplementing peak services with additional buses, and operating a shuttle service between Piccadilly and Victoria to ensure that the X5 service was not delayed on its route through the City Centre.

6.3 Special Events

- 6.3.1 There have been 24 special events which have taken place over the last 3 Periods, notably more so during Period 6, as the football season has started.
- 6.3.2 The Travel Safe Officer (TSO) review group is continuing to meet on a weekly basis following the completion of August improvement works and the City centre track renewals. The group is focused on improving the effectiveness of the TSO role, incorporating the three aspects of the TSO role; Revenue protection, Safety and Customer Service. Ticket machine data and revenue protection statistics are being analysed, revenue losses subsequently identified and specific operations planned to target evasion hotspots.
- 6.3.3 Work is ongoing for Bury, GMEX, Salford Quays and Timperley to be the next stops to achieve secure station accreditation. Passenger surveys and crime statistics have been collated in readiness for the assessments. Site evaluation visits are due to be carried out to identify any changes and additions to signage and station equipment at these selected stops.

7 RAIB Report on Derailment at St. Peter's Square (29th June 2008)

- 7.1 The final version of the RAIB report into the derailment on the 29th June 2008 was received on the 16th September by letter (dated 15/9/2009) stating that the report would be published on the 17th September 2009.
- 7.2 A meeting has been held with the RAIB to further understand their expectations to ensure the close out of actions is undertaken in an effective manner.
- 7.7.1 The 5 recommendations are progressing in line with the report submitted to the Rail and Metrolink Networks Committee in October 2009

8 Festive Timetables

- 8.1 The timetable operated for Christmas and New Year in 2008 proved to be very successful and the intention therefore is to operate a very similar timetable this year with earlier start times for the service on Boxing Day. Further detail can be found in Appendix 5.

9.0 Recommendations

- 9.1 Recommendations appear at the front of this report.

Philip Purdy
Metrolink Director

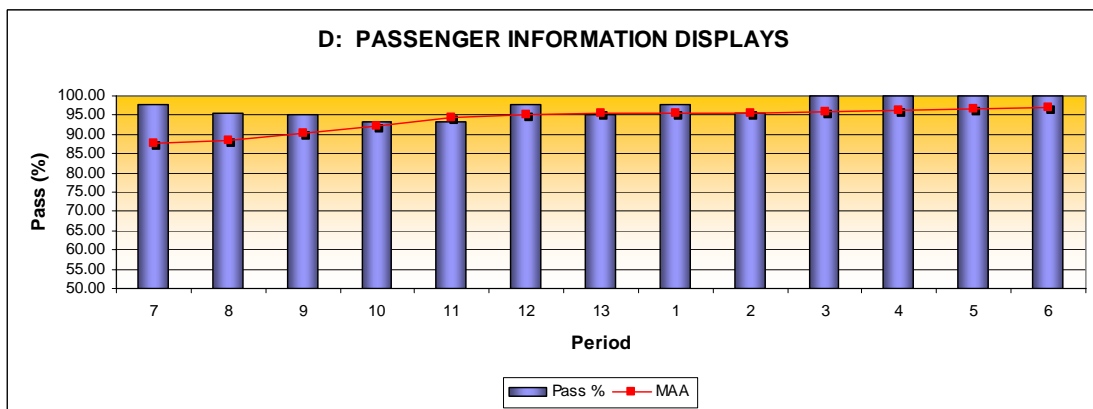
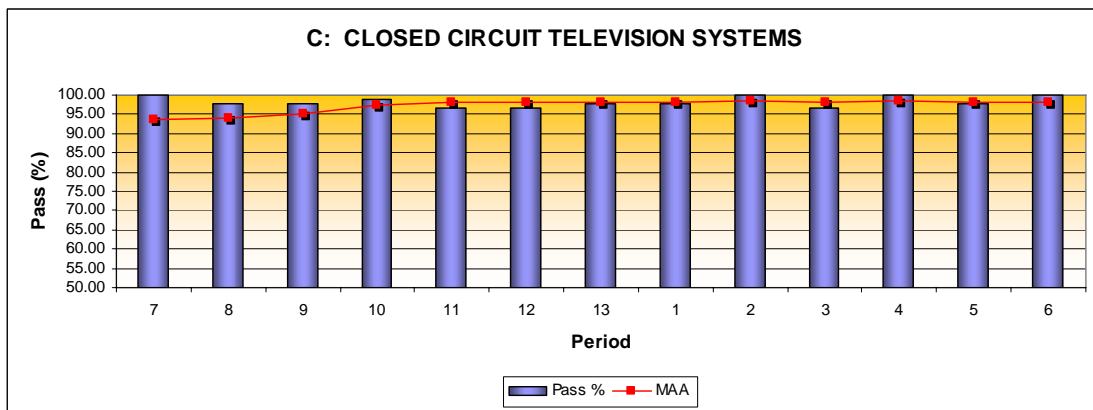
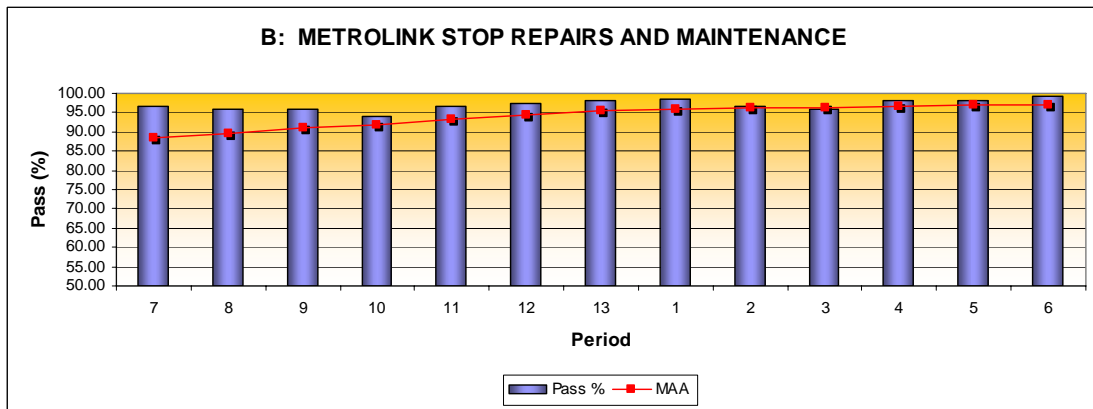
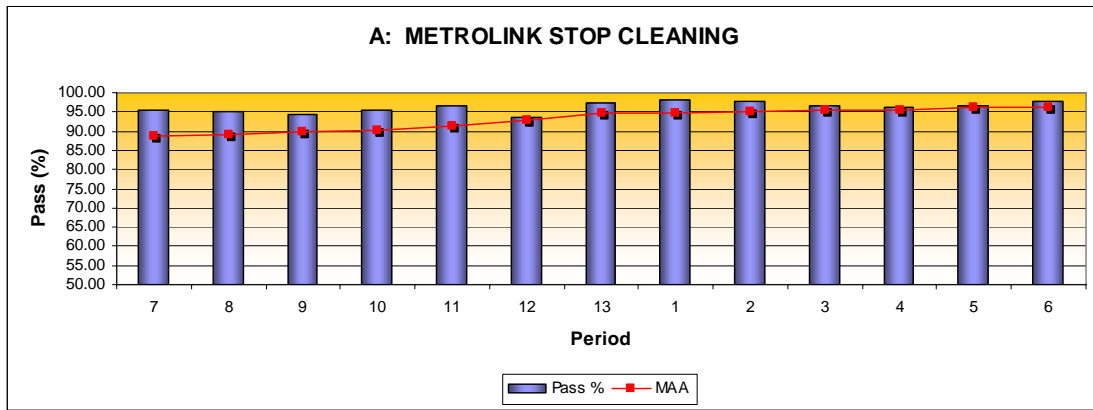
METQUAL PERFORMANCE BY SCHEDULE

Schedule A - Cleaning	Period 4	MAA %	Period 5	MAA %	Period 6	MAA %
Platform Canopies	93.75	90.25	90.91	92.34	95.45	93.39
Shelters, Seating & Waiting Room	90.91	97.23	100.00	97.23	100.00	97.67
Poster Cases & Signage	88.64	91.64	90.20	91.77	96.15	92.07
Lifts & Escalators	91.67	97.31	100.00	97.82	100	98.33
Embankments & Ramps	97.30	86.35	88.10	87.27	93.02	87.45
Stairs, Subways, Footbridges & Foyers	97.22	93.35	92.86	93.88	95.35	94.59
Platforms	95.45	91.96	98.04	92.55	96.15	92.55
Car Parks	100	93.81	93.33	94.26	93.75	94.75
Cycle Parking	94.74	98.90	100.00	99.25	100.00	99.25
Ticket Vending Machines(TVMs)	100.00	98.67	100.00	98.67	98.08	98.52
Public/Staff Phones	100.00	99.70	100.00	99.70	98.08	99.56
Rail Track	100.00	99.77	100.00	99.70	100.0	99.70
Platform Mirrors	100.00	100.00	100.00	100.00	100.00	100.00
Newspaper Dispensers	100.00	100.00	100.00	100.00	100.00	100.00

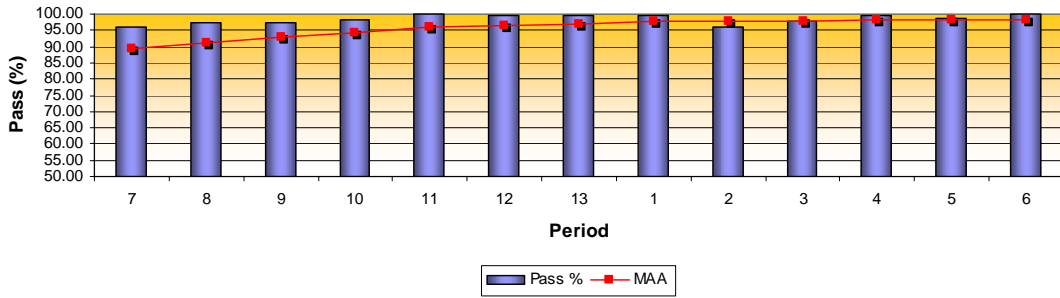
Schedule B - Maintenance	Period 4	MAA %	Period 5	MAA %	Period 6	MAA %
Platform Canopies	100.00	91.67	90.00	91.67	100.00	92.44
Shelters Seating	100.00	99.41	100.00	99.41	100.00	99.41
Lifts & Escalators – Maintenance/Repairs	100.00	98.97	100.00	98.97	100.00	98.97
Lifts & Escalators – Availability	100.00	82.38	100.00	84.43	100.00	85.97
Embankments & Ramps	89.19	95.95	97.62	96.84	97.67	97.38
Stairs, Subways, Footbridges & Foyers	97.22	96.75	95.24	96.57	95.35	96.21
Platforms	97.73	95.98	96.08	96.12	100.00	96.27
Car Parks	100.00	97.95	100.00	98.46	100.00	98.97
Cycle Parking	100.00	98.60	100.00	98.60	100.00	98.60
TVM Maintenance & Repairs	93.18	97.06	96.08	96.76	94.23	96.31
TVM Presentation	97.73	97.90	100.00	98.20	100.00	98.20
Public & Staff Phones – Operation	100.00	100.00	100.00	100.00	100.00	100.00
Public & Staff Phones – Presentation	100.00	100.00	100.00	100.00	100.00	100.00
Platform Mirrors	100.00	100.00	100.00	100.00	100.00	100.00

All Schedules C - K	Period 4	MAA%	Period 5	MAA%	Period 6	MAA %
Sched C – CCTV	100.00	98.36	97.73	98.27	100.00	98.27
Sched D - Pass Information Screens	100.00	96.14	100.00	96.84	100.00	97.51
Sched E – Fares & Timetables	100.00	100.00	100.00	100.00	100.00	100.00
Sched E – Other Information	100.00	99.56	100.00	99.56	100.00	99.56
Sched E – Poster Cases	97.73	94.88	96.08	94.73	100.00	95.03
Sched E - TVM Information	100.00	100.00	100.00	100.00	100.00	100.00
Sched E - Stop Signing	100.00	96.89	98.04	97.48	100.00	97.62
Sched F – Operation PA System	100.00	99.85	100.00	99.85	100.00	99.85
Sched G - Tram P.A.	96.91	94.72	92.40	94.65	92.97	94.40
Sched H - Tram Dest. Displays	100.00	98.41	100.00	98.72	100.00	99.09
Sched I - Tram Cleaning Internal	97.47	83.67	90.27	84.71	77.67	84.31
Sched I - Tram Cleaning External	93.43	94.00	93.06	94.00	100.00	94.53
Sched J - Tram Saloon Environment	99.02	97.66	98.83	97.84	98.83	97.99
Sched K - Line of Route Info	100.00	99.53	100.00	99.92	100.00	99.92

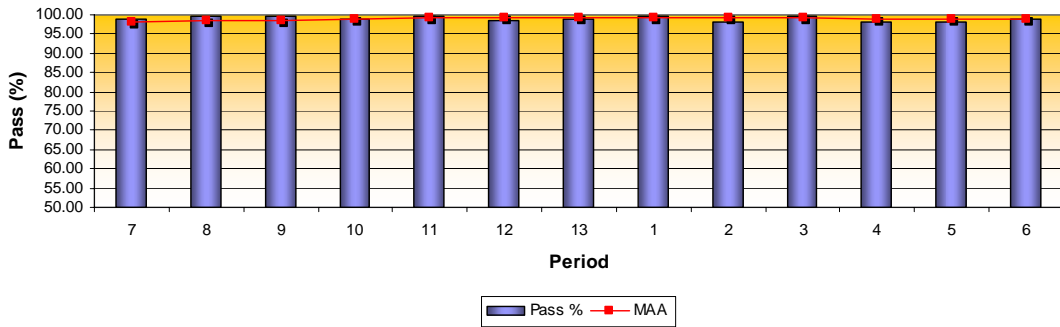
METQUAL BY SCHEDULE:



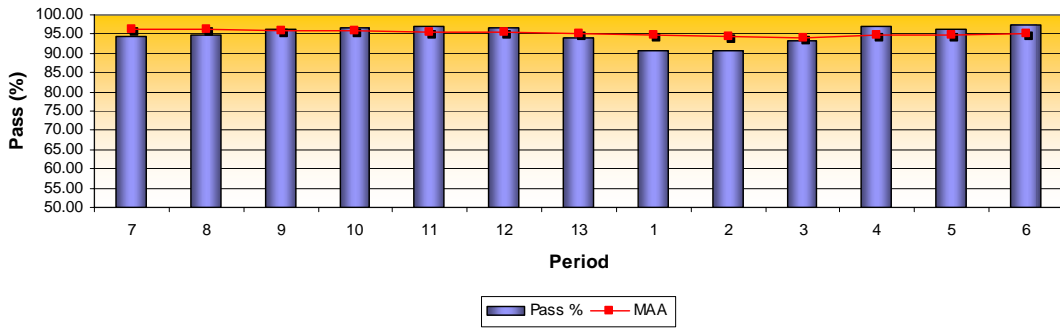
E: POSTER CASES, SIGNAGE AND PRINTED METROLINK SERVICE INFORMATION



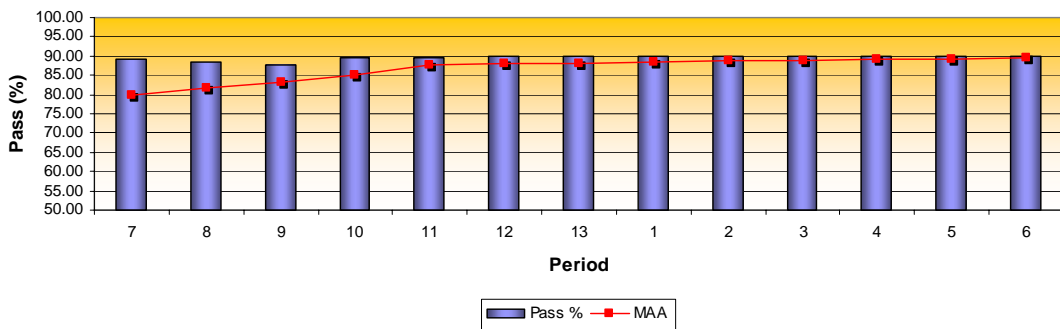
F: PUBLIC ADDRESS SYSTEM AND HELP POINTS AT METROLINK STOPS

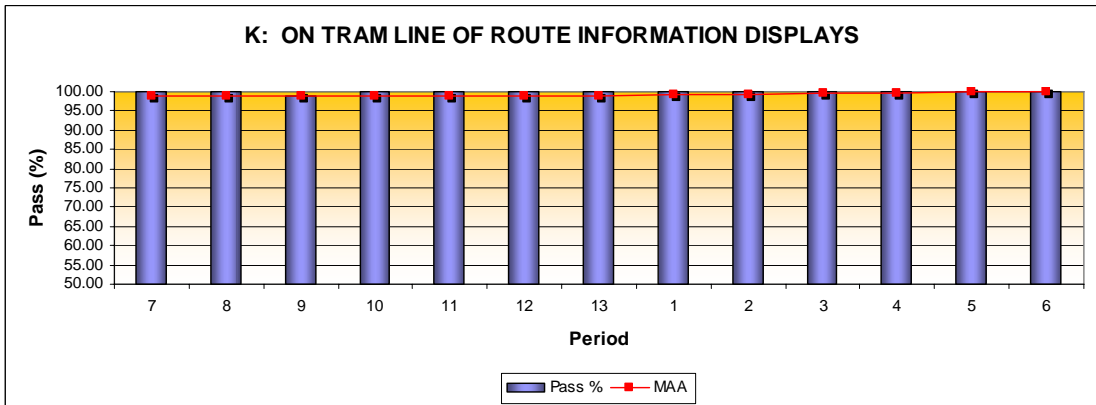
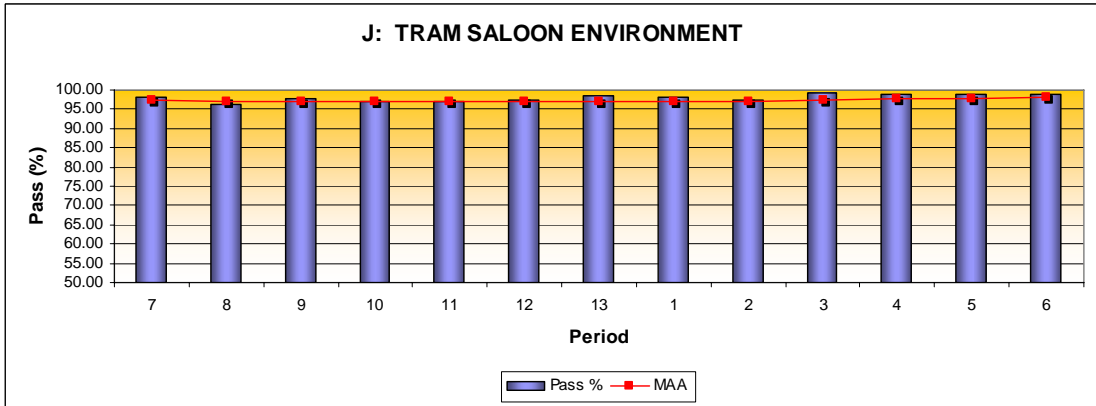
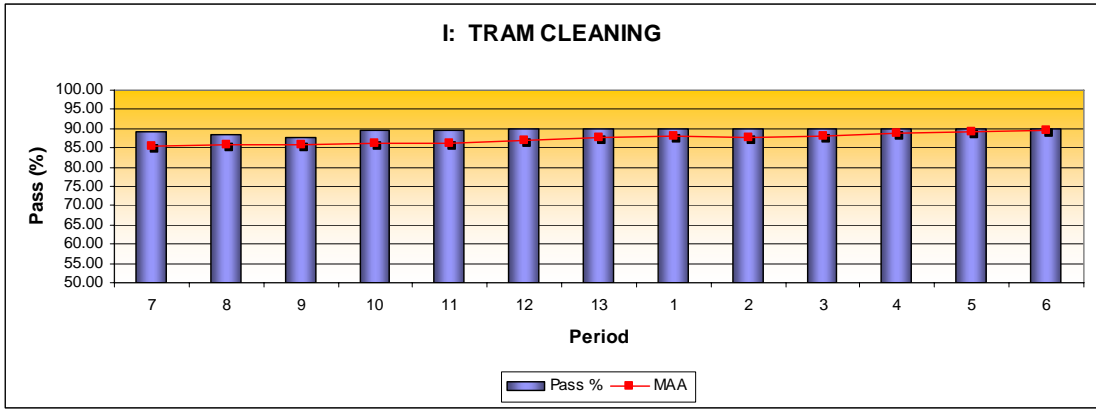


G: TRAM PUBLIC ADDRESS ANNOUNCEMENTS



H: DESTINATION AND STOPPING PATTERN DISPLAYS ON TRAM





PERIOD SCHEDULE:

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

August Bus Replacement Services;

X5 Altrincham - Victoria

The X5 Metrolink replacement bus service operated from Altrincham through to Victoria, incorporating the city centre replacement bus service.

The service ran at a 10 minute frequency Monday – Saturday throughout the day and at a 15 minute frequency at all other times.

X6 Brooklands – Piccadilly Station

The X6 service operates from Brooklands to Piccadilly Station.

This service ran half hourly Monday – Saturday throughout the day, boosted in peak periods to a 10 minute service. The X6 service provided additional capacity in the peaks and during the day on the main road south of Stretford, to deal with anticipated passenger demand.

On the journey into Manchester, the X6 started at Brooklands and proceeded down the main road. On its return the service served Dane Road, Sale and Brooklands stops.

200 Eccles – Piccadilly Station

The 200 service operated from Eccles to Piccadilly Station.

This service ran at a 10 minute frequency Monday – Saturday throughout the day and at a 15 minute frequency at all other times.

Stagecoach Metrolink 2009/10**Times for Metrolink Festive Schedules****Thursday 24/12/09***Bury – Altrincham*

0600-2100 12 minutes service via Piccadilly

0930-1800 12 minutes service direct (no doubles)

Eccles Line

0600-2100 12 minute service

Friday 25/12/09

No service

Saturday 26/12/09*Bury - Altrincham*

0700-2000 15 minute service direct

Eccles Line

0700-2000 15 minute service

Sunday 27/12/09*Sunday service***Monday 28/12/09***Saturday service (Monday finish times)*

0600 – 2345 6 minute peak, 12 minute off-peak service

Doubles on the Altrincham line for MUFC v Wigan

Tuesday 29/12/09*Saturday service (Tuesday finish times)*

0600 – 2345 6 minute peak, 12 minute off-peak

Wednesday 30/12/09*Saturday service (Wednesday finish times)*

0600 – 2345 6 minute peak, 12 minute off-peak service

Thursday 31/12/09*Saturday service*

0600 – 0030 6 minute peak, 12 minute off-peak service

Friday 1/1/10*Bury – Altrincham*

0900-2100 12 minute service via Piccadilly

Eccles Line

0900-2100 12 minute service

Saturday 2/1/10

Normal service is resumed

Start times are from terminal stations and finish times are from the city centre to terminal stations, times are approximate.