

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

**COMMITTEE:** Rail and Metrolink Networks  
**DATE:** 9<sup>th</sup> April 2010  
**SUBJECT:** Additional Metrolink Performance Measures  
**REPORT OF:** Metrolink Director, GMPTE

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**PURPOSE OF REPORT**

To inform Members of additional Metrolink service performance measures.

**RECOMMENDATIONS**

Members are invited to consider the report and to note the additional Metrolink performance measures.

**BACKGROUND DOCUMENTS**

**CONTACT OFFICERS**

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## 1. Background

- 1.1 As previously reported, 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.
- 1.2 The contract assumes that these elements will be accurately measureable. The ATRE (Automatic Tram Recording Equipment) does not have the capability to collect and analyse data accurately because of defects in the software that interrogates and sorts the data received from the detection points on the system.
- 1.3 A series of measures are currently in place to manage the performance of the Operator:
  - 1.3.1 Until such time as headways can be accurately measured, payments due to the Operator for this performance measure are limited each Period. We will be able to measure headways when the Tram Operating System (TOS) is implemented in 2010.
  - 1.3.2 Capacity is calculated manually using mutually agreed assumptions and calculations based on mileage and conversion into points via the contractual performance regime. This system is calculated by the Operator and audited and agreed by GMPTE on a periodic basis.
  - 1.3.3 The punctuality of the first and last tram is calculated manually. The Operator's Control Centre notes the time of the first and last trams each day and this is then audited by GMPTE using CCTV footage. This is an entirely accurate measurement against the contractual performance regime.
- 1.5 These interim solutions will continue to operate until the implementation of TOS in 2010 when the full automated measurement of all reliability elements of the performance regime will be in place.
- 1.6 For the purposes of reporting to Members, Operated Mileage has been used to indicate the levels of performance achieved by the Operator. Operated Mileage is the actual mileage operated by the Operator as a proportion of the mileage that the Operator was obliged to operate under the Agreement. The reported Operated Mileage takes into account the incidents that have occurred which are outside the control of the Operator, such as road traffic collisions where the tram driver was not at fault.

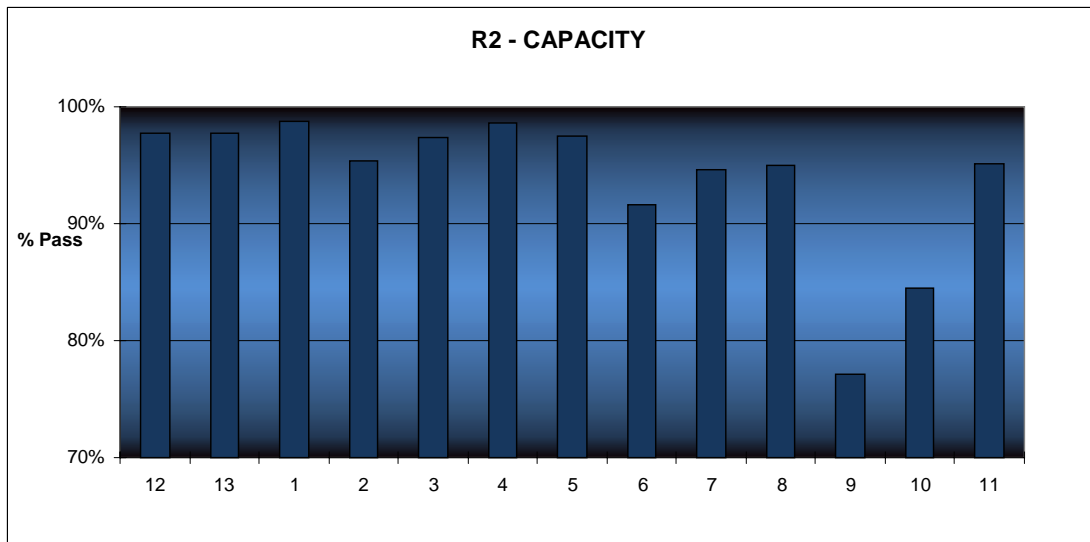
- 1.7 A request has been made by Members to provide further information on operator performance to include punctuality and frequency of services.
- 1.8 In light of the limitations described above, the following additional performance information is provided.

## **2. Service Intervals**

- 2.1 As reported above, service intervals cannot yet be accurately measured until TOS, and the associated measurement software, is implemented later this year. Payments to the Operator, therefore, are limited each Period.
- 2.2 Although the Operator is not obliged to accept the results, the PTE is undertaking manual surveys of headways or service intervals, to better understand this aspect of the Operator's performance. PTE staff are being located at specified stops on the system at specific times of the day. The staff then record the timings of trams arriving and departing. These timings are then converted to headways and service intervals
- 2.2 One such survey has been conducted but the results need to be validated by further surveys which are currently being undertaken, as the results may be misleading and unrepresentative. The results of the surveys will be included in the next report to the Committee.

## **3. Capacity**

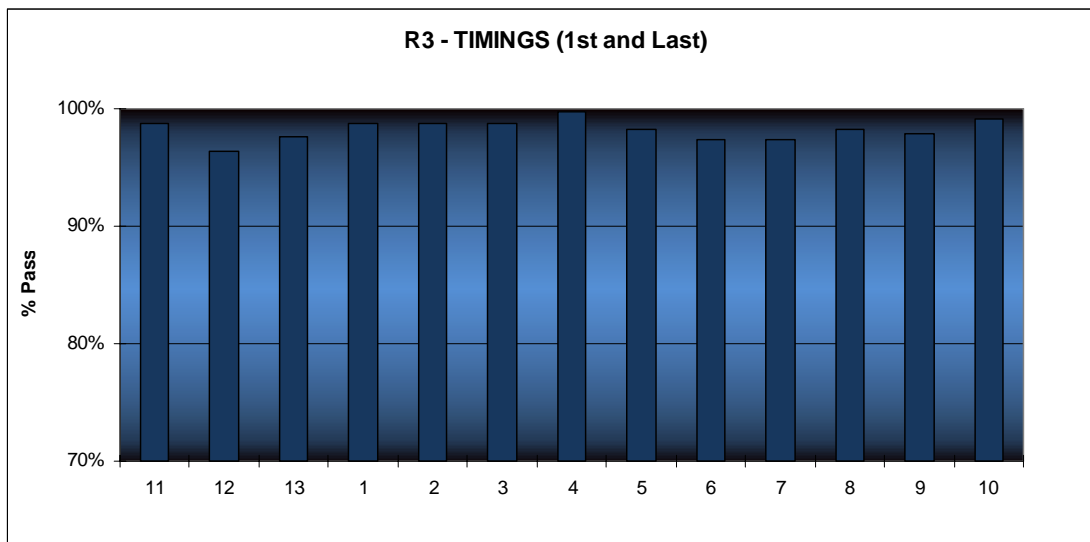
- 3.1 Under the Agreement, the Operator is required to operate a specified number of trams each hour. This requirement varies for peak and off-peak service hours and also for services between Altrincham and Bury and those for Eccles.
- 3.2 Using the model described in 1.3.2 above, the actual performance of the Operator compared to the contracted performance is as follows:



3.3 The decrease in performance during Periods 9 and 10 as a result of the adverse weather, demonstrates the sensitivity of this measure to disruptions in the service.

#### 4. Punctuality of First and Last Passenger Services

4.1 Again, under the Agreement, the first and last departures from each of the specified starting points are measured for punctuality. These points are Altrincham, Bury, Eccles, GMex and Victoria. The performance of the Operator compared to the contractual requirement is as follows:



4.2 The performance of the Operator in respect of Capacity and Punctuality will be included in future reports.

4.3 The measurement of service intervals, capacity and punctuality is intended to provide a complete picture of the performance of the

Metrolink system. Due to the constraints described above and reported previously to the Committee, alternative arrangements have been put in place to provide greater visibility of Operator performance.

## 5. Additional Performance Measures

- 5.1 Pending the introduction of TOS and the visibility that this will provide, further measures have been introduced to better understand the performance of the operation of the system and the impact on customers.
- 5.2 The actual number of trams in service during the course of each day has been tracked on an hour by hour basis and compared with the contractual requirement for trams in service.
- 5.3 The Operator is required to operate a certain number of trams, each hour, for both Phase 1 and Phase 2. This figure changes to allow for double units to be used during the peak, and is also altered at the weekend.
- 5.4 Monitoring the actual number of trams in service against the contractual requirement (shown in column 2) provides the results in the table below. For the purposes of this report, the results of this additional monitoring have been aggregated to provide a summary for Period 10. Due to the need to report average results, percentages have been used, as using absolute tram numbers leads to the reporting of parts of a tram in service.

Time	Required trams in service	Actual trams in service as a % of required trams in service (Mon – Fri)				
		11 <sup>th</sup> –17 <sup>th</sup> Jan	18 <sup>th</sup> –24 <sup>th</sup> Jan	25 <sup>th</sup> –31 <sup>st</sup> Jan	1 <sup>st</sup> –7 <sup>th</sup> Feb	Period
<b>0600-0700</b>	17	98.8%	100%	100%	100%	<b>99.7%</b>
<b>0800-0900</b>	29	66.6%	87.6%	95.2%	97.6%	<b>86.7%</b>
<b>1000-1500</b>	26	71.7%	98.5%	99.0%	99.4%	<b>92.1%</b>
<b>1600-1800</b>	29	73.8%	94.5%	98.3%	96.4%	<b>89.0%</b>
<b>1900-2400</b>	26	96.3%	100%	100%	100%	<b>99.5%</b>
<b>Daily</b>		<b>81.7%</b>	<b>97.0%</b>	<b>99.2%</b>	<b>98.8%</b>	<b>94.2%</b>

- 5.4 The performance for week 1 of Period 10 was very poor due to the legacy effect of the adverse weather conditions that were experienced in Period 9. The number of trams in service began to increase as the week progressed as a number of trams that had been withdrawn from service due to faults caused by the snow, returned to the system.
- 5.5 During week 2 of Period 10, there was a significant increase in the number of trams in service across the system. The trams in

service had increased to an average of 27 by the end of the week. There were enough trams to run a 6 minute service on Phase 1 but not enough to strengthen the service during peak hours with double units.

- 5.6 The number of trams in service continued to increase during week 3 of Period 10. During the peak hours of 8am and 9am and 4pm and 6pm the trams in service permitted, on average, 2 doubles to operate in the peak as opposed to 3.
- 5.7 The number of trams in service increased further in week 4 of Period 10. During peak times, the service was at full strength on Monday, Tuesday and Friday with 29 trams in service across the network.

## **6. Summary**

- 6.1 Pending the implementation of TOS and the associated measurement software this year, manual monitoring of Operator performance will continue and be reported to the Rail and Metrolink Network Committee.

## **6. Recommendations**

- 6.1 Recommendations appear at the front of this report

**Philip Purdy**  
**Metrolink Director**