

TRANSPORT FOR LONDON

FINANCE AND POLICY COMMITTEE

SUBJECT: TRENDS IN PASSENGER DEMAND - SUMMARY

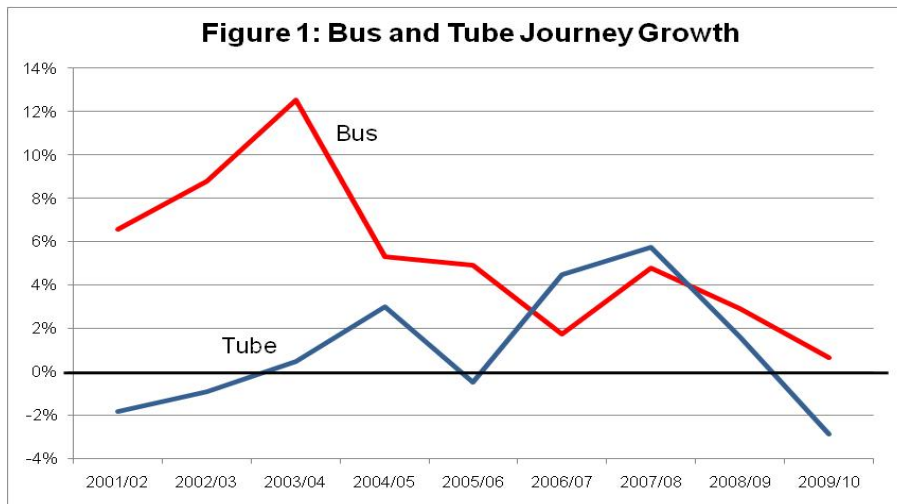
DATE: 21 JANUARY 2010

1 PURPOSE AND DECISION REQUIRED

- 1.1 This report summarises the trends in passenger journeys to the end of period 8 (14 November 2009), with data reported in the separate submissions from the operating modes. This takes no account of any impact on ridership due to the poor weather conditions experienced recently.
- 1.2 The Finance and Policy Committee is asked to note this report.

2 LONG TERM BUS AND TUBE TRENDS

- 2.1 Figure 1 shows journey growth each year since 2001 on bus and Tube. Bus journeys grew strongly in the earlier years because of increased service levels, improved service quality, lower fares and the congestion charge. Free child travel from 2005 also helped to boost numbers. Tube journey growth was lower, falling briefly after the terrorist bombs in 2005. Since then the strong London economy contributed to strong growth on both modes until the effects of the recession started to be felt in 2008.



3 EFFECTS OF THE RECESSION ON BUS AND TUBE

- 3.1 Tube journeys peaked at a little over 21m per week in late 2008. Then the economic climate deteriorated and Tube journeys decreased to less than 20m per week by summer 2009, at which point they were falling at around six per cent year-on-year. Demand since then has stabilised, with journeys 1.2 per cent down year-on-year in the four weeks ended 12 December. Tube journeys for 2009/10 as

a whole are now expected to be around three per cent down on last year.

- 3.2 Bus journey numbers continued growing until summer 2008, reaching around 45m per week, with growth approaching five per cent per annum. Growth then fell back as the economy worsened, dropping by summer 2009 to one or two per cent down year-on-year. Since then bus journeys have recovered somewhat with positive growth of up to one per cent. The total for 2009/10 is now expected to be around +½ per cent on last year.

4 LONDON RAIL

- 4.1 Trends are more difficult to establish on DLR, trams and the Overground because their smaller scale and network and changes to operational arrangements have led to greater volatility and uncertainty over the statistics. Nevertheless, they have mirrored the changes seen on bus and Tube, with the recession having a significant effect on DLR demand in particular.

5 DEMAND PROJECTIONS

- 5.1 The revised TfL Business Plan, published in November 2009 assumed that ridership, whilst continuing to fall, would fall less than the peak decline seen in the summer. Recent ridership figures have been in line with that prediction, which is set out in greater detail in Appendix 4. Fares revenue is therefore broadly in line with forecasts used in the Business Plan.

6 FURTHER DETAIL

- 6.1 Further detail can be found in Appendices 1-3, which include discussion of trends on London Underground (updated from the paper previously considered by the Rail Panel), London Buses and Rail/DLR/Trams respectively.
- 6.2 Also attached as Appendix 4 is the period 8 Passenger Demand Summary, which was circulated on 16 December to the Finance and Policy Committee members. The tables give year on year passenger demand assumptions for the business plan for London Underground and London Buses respectively and therefore provide useful content as to future assumptions.

7 RECOMMENDATIONS

- 7.1 Finance and Policy Committee Members are asked to NOTE this report

8 CONTACT

- 8.1 Contact: Shashi Verma, Director of Fares and Ticketing
Phone: 020 7126 4982
Email: ShashiVerma@tfl.gov.uk

LONDON UNDERGROUND

1 This report provides an analysis of changes in demand and passenger revenue for the last 18 months, from the start of 2008/09 to the end of period 8 2009/10.

2 SUMMARY

2.1 Demand in Quarter 2 showed a drop of around six per cent compared to the same quarter last year. So far, there has been some recovery in Quarter 3, with decline of less than five per cent. This is consistent with the forecasts used to generate the revenue projections that underpin the revision of the Business Plan in November 2009. On a de-seasonalised basis the low point was period 4 after which there has been some recovery.

2.2 The economic recession is the main feature of the decline in demand on London Underground. Other contributors to recent demand changes are:

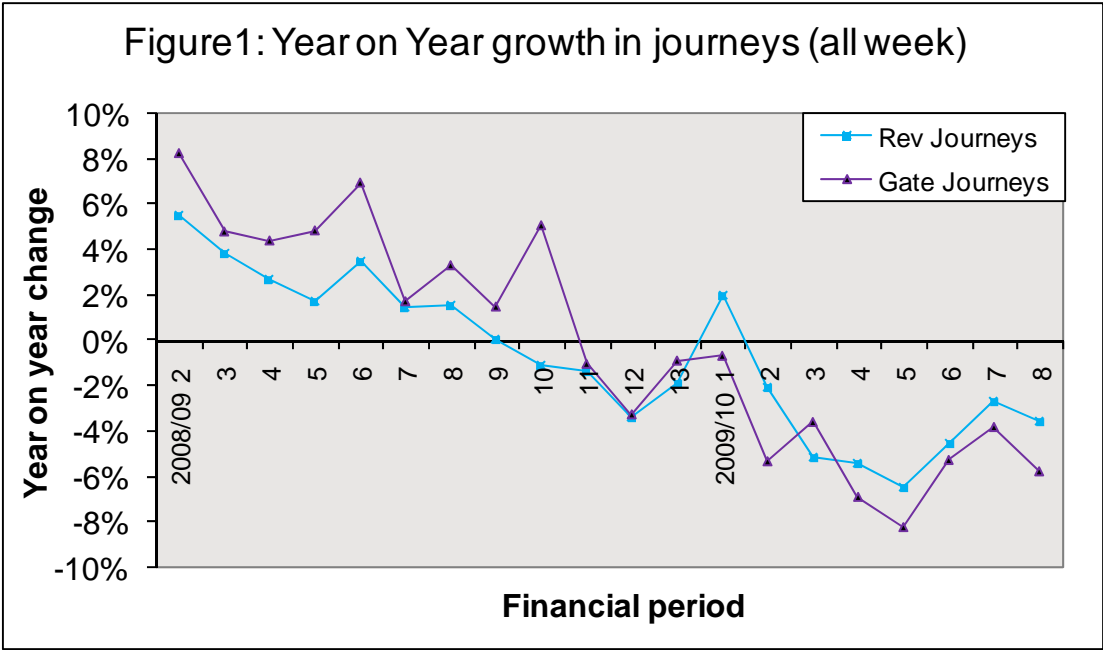
- (a) fall in demand at City stations, due to the economic conditions and station works;
- (b) fall in demand at the weekends; but
- (c) relative buoyancy in outer area (zones 4, 5 and 6) stations and midday off-peak travel.

2.3 Revenue shows a 2.6 per cent increase in period 8 and is in line with forecasts based on economic data. Total revenue in this period was £133.9m. The current forecasts stand at £1,614m for the year; (after taking account of the January 2010 fares increase) some £80m below budget.

3 TRENDS IN PASSENGER DEMAND

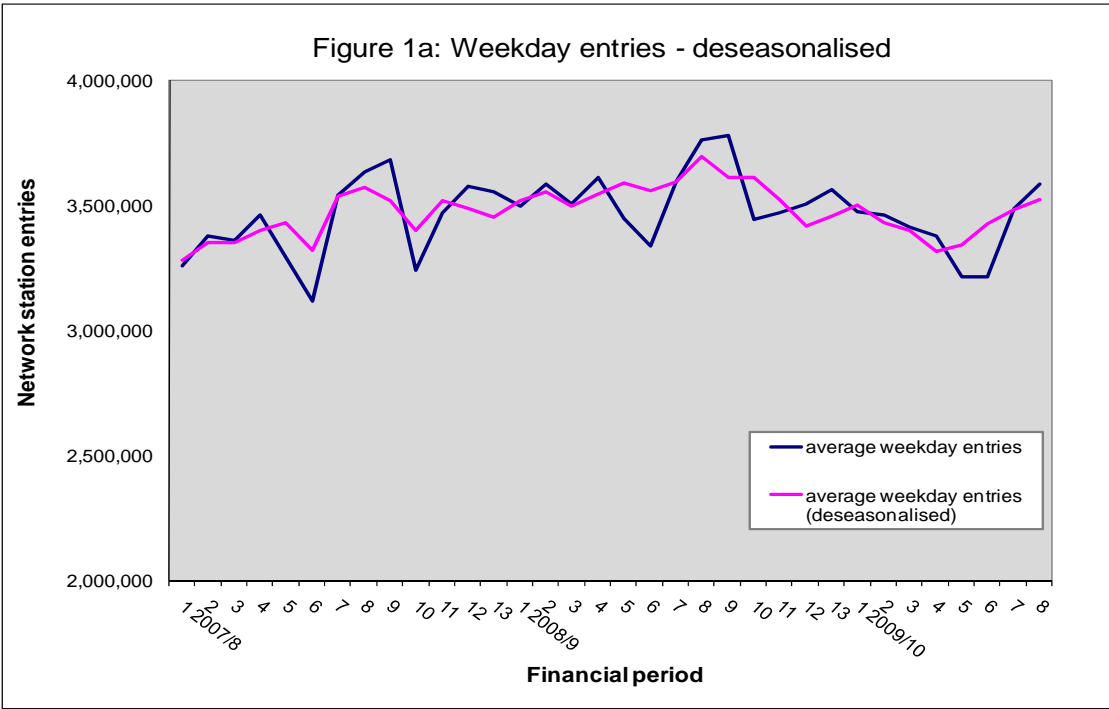
3.1 Demand figures are derived from two sources: revenue data, and counts of customer journeys through ticket gates. Typically these two methods produce slightly different results and the demand estimates in this report draw on both sets of data.

3.2 Figure 1 shows the year on year trend using both methods, with the gradual decline in demand evident in both.



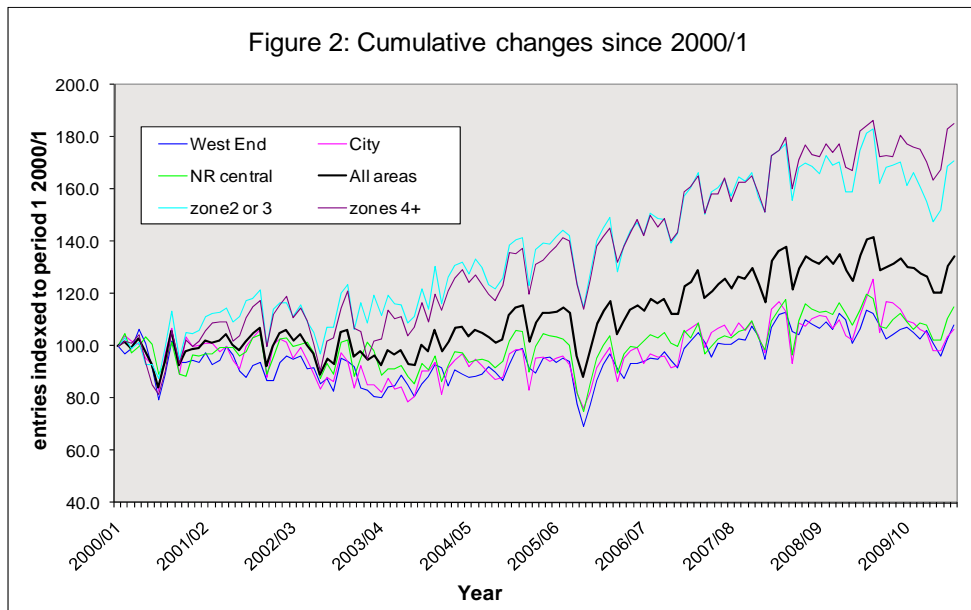
3.3 The effects of the economic downturn on demand have been felt since the start of the calendar year. From January through to March demand was starting to show a decline of around one per cent year on year. The decline became more pronounced in the first quarter of this financial year, and the second quarter is around six per cent down.

3.4 Figure 1a shows the average weekday counts de-seasonalised. Removing seasonality factors helps distinguish actual growth trends. The graph shows that the number of entries on the network on de-seasonalised basis has been increasing since the low point in period 4.



4 LONGER TERM TRENDS

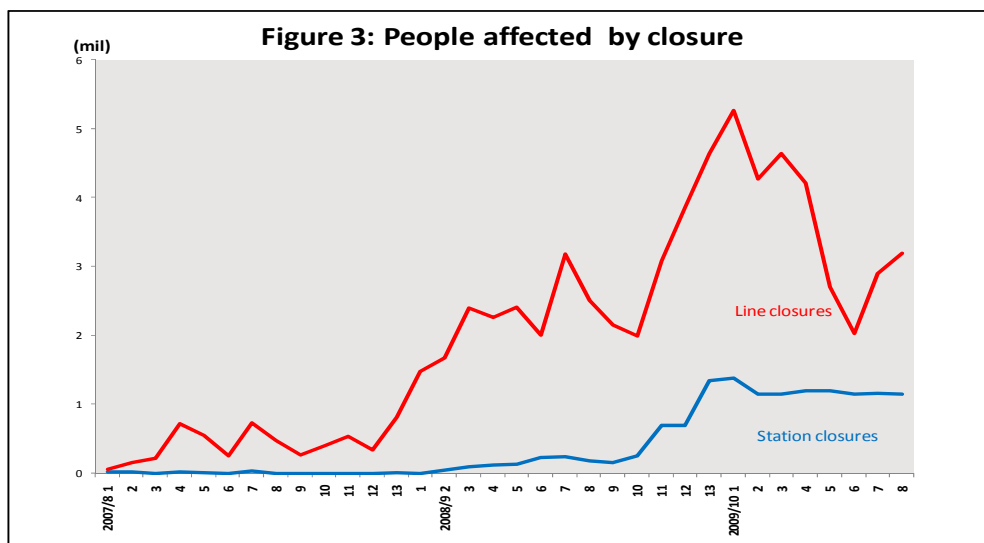
4.1 To put recent changes in longer term context, Figure 2 shows cumulative demand changes indexed to period 1 of 2000/01.



4.2 The figure shows a general increase of around 20 to 25 per cent with significant relative increases for Inner and Outer London (zones 2 and 3, zones 4, 5 and 6) and lower increases for central area stations.

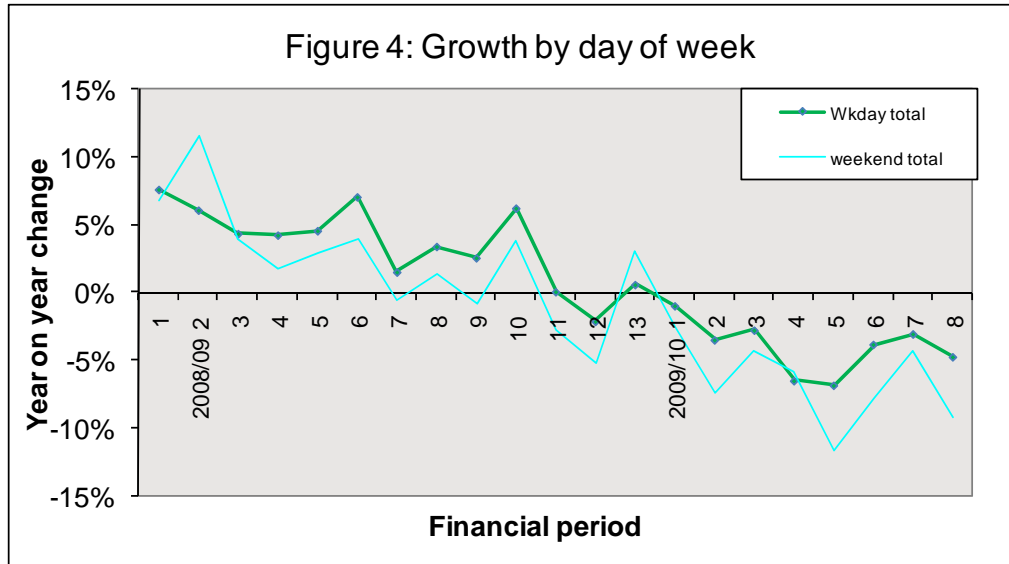
4.3 There is little difference by day of week or time of day (not shown in the figure) except that travel before 7 am has doubled since 2000/01 (from a low base to 3.2 per cent of weekday traffic).

4.4 Although the recession is the key feature of declining demand, the effect of closures has increased this year compared to prior years. This is shown in figure 3.



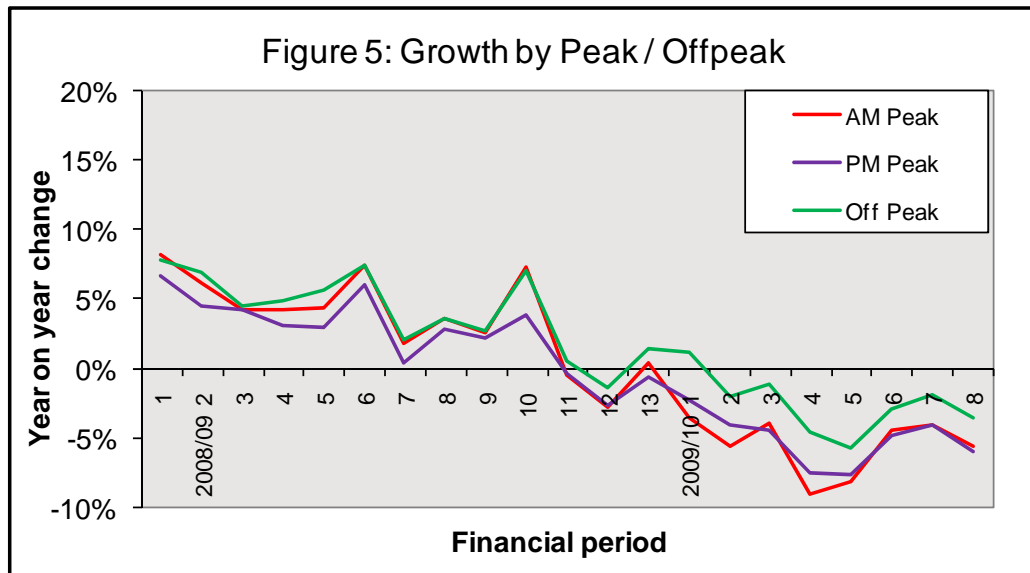
5 TRENDS IN DEMAND BY DAY

- 5.1 Figure 4 shows the year-on-year trend by weekday and weekend using gate data. It shows the weekend with around two per cent lower growth than weekday.



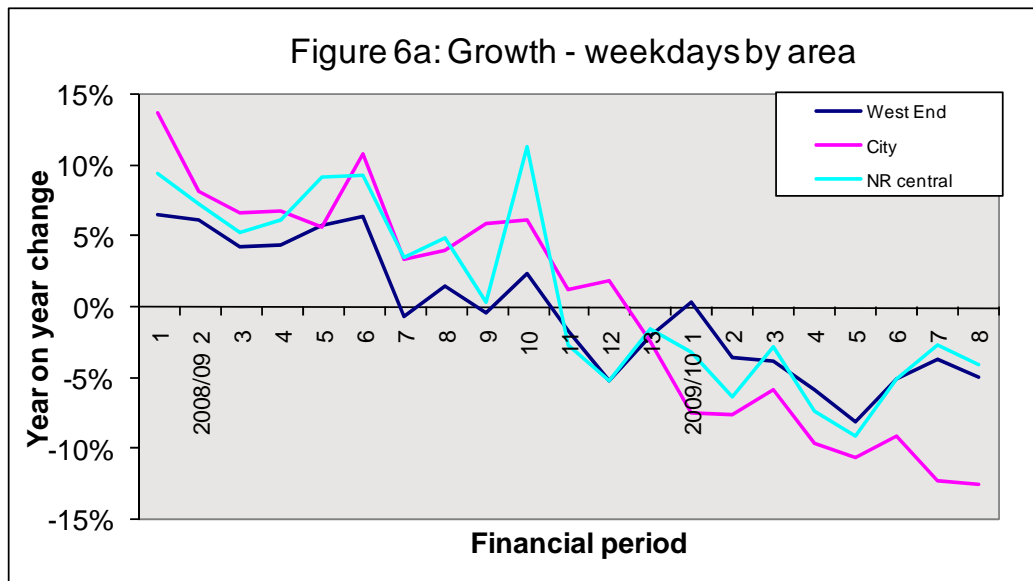
6 TRENDS IN DEMAND BY PEAK / OFF-PEAK

- 6.1 Figure 5 shows the year-on-year trend by weekday peak / off-peak. It shows the off-peak with rather higher growth than the peaks by around three per cent.

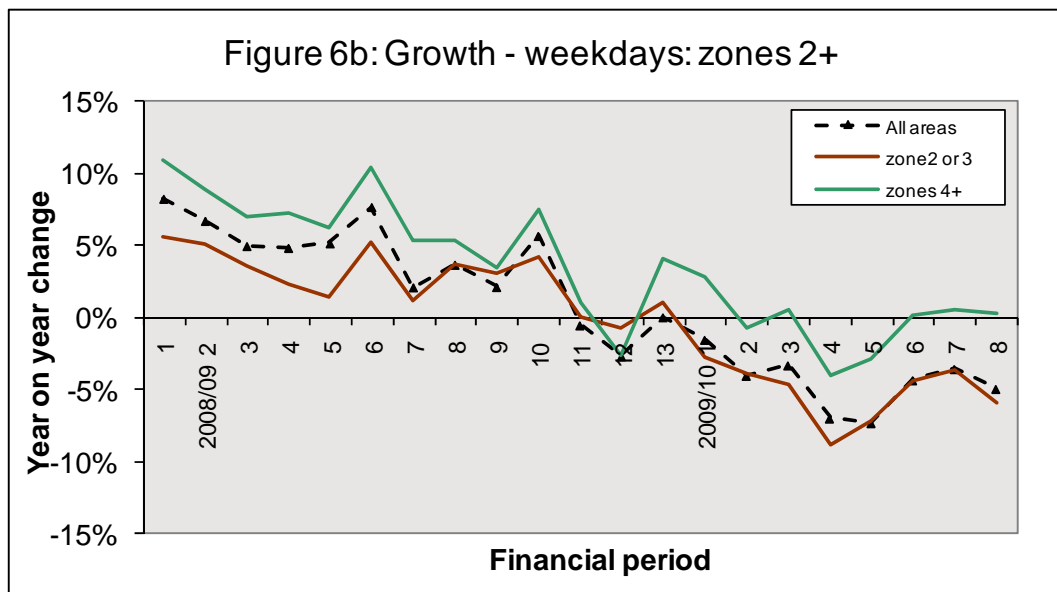


7 SPATIAL TRENDS

- 7.1 Figure 6a compares the weekday trend across different areas of Central London.
- 7.2 The decline is greatest at City stations in recent months. This is due to the economic climate, Bank escalator works and the Blackfriars closure affecting the year on year comparisons. The opening of the Westfield Shopping Centre at White City (Westfield) in Period 8 last year may have depressed demand in the West End by around five per cent.



- 7.3 Figure 6b compares the growth of the zones outside Central London.

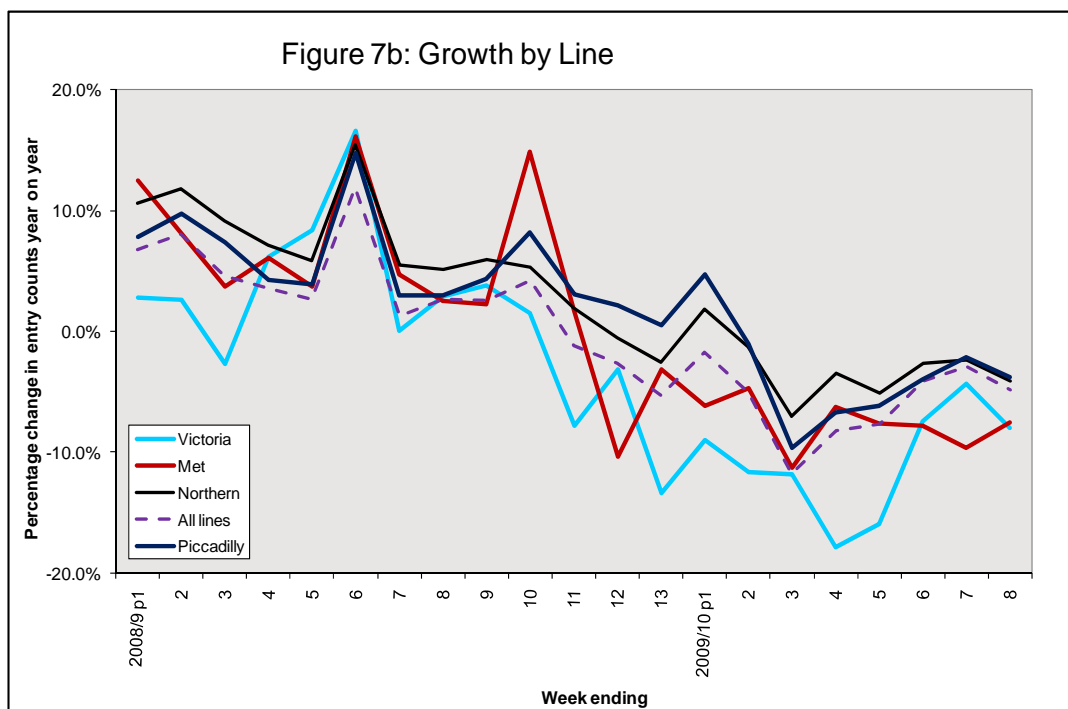
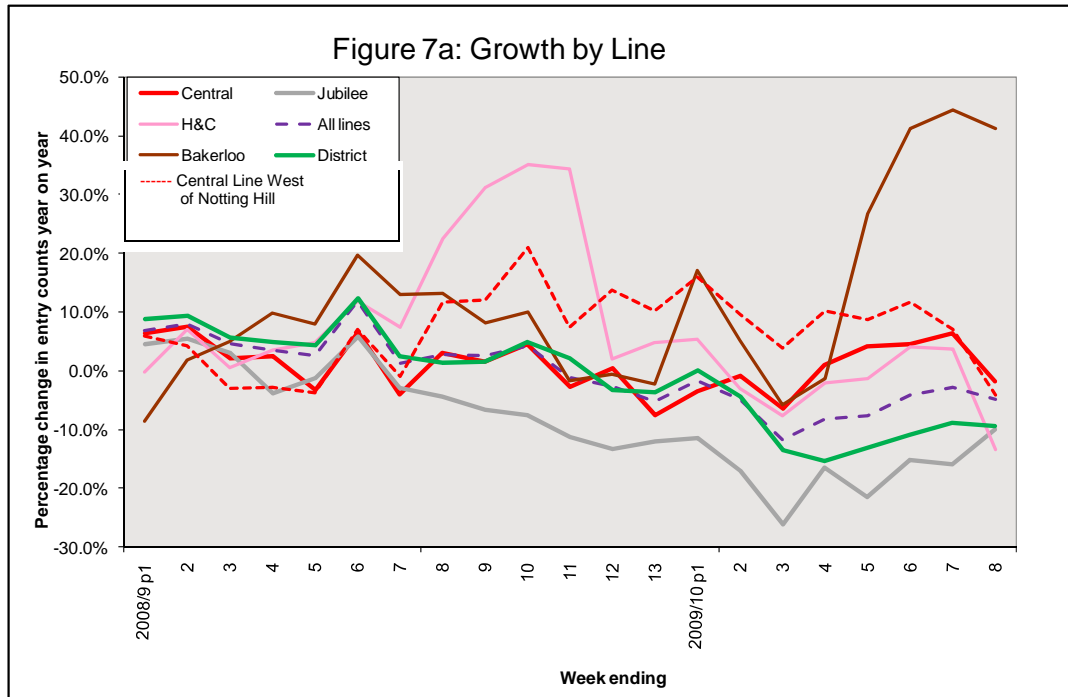


- 7.4 Journey demand from stations in zones 2 and 3 shows a decline in growth similar to the system average but lower than compared to journeys starting in zone 4, 5 and 6. The relative buoyancy for the outer zones continues the

long term trend. For the inner zones the decline is departing from long term trends; the reason is not known.

8 LINE TRENDS

8.1 Figures 7a and 7b compares the trend across different lines for the outer areas only (i.e. excluding the part of the line in zone 1).



8.2 The relative decline on the Victoria and Jubilee lines reflects the increased level of weekend works in preparation for the upgrades. To a lesser extent this also applies to the Metropolitan line.

- 8.3 The Bakerloo line shows a recent increase; this is likely to be because it is a useful alternative to the Jubilee line.
- 8.4 Although the Central line follows the general trend, the west end of the line shows an increase due to the opening of Westfield. The Westfield effect is also evident on the Hammersmith & City line where the rapid growth and decline aligns to the Christmas / New Year shopping period.

9 IMPACT OF HOT WEATHER ON REVENUE

- 9.1 An analysis was carried out in 2006 to establish the effect of hot weather on demand.
- 9.2 The analysis was based on Meteorological Office temperature data from 1 January 2003 to 31 July 2006 and was compared with information from gate counts. It compared the demand on the day with that expected at that time of year and sought to explain it by temperature difference from the seasonal norm.
- 9.3 It was possible to show that an increase of temperature in the summer months (June to August) of one degree related to a loss in demand of 0.215 per cent. This is consistent with analysis based on the 2007 Customer Priorities Survey.
- 9.4 Both the summers of 2008 and 2009 were fairly cool and it is not believed that this factor played any significant part in demand reductions since last year.

LONDON BUSES

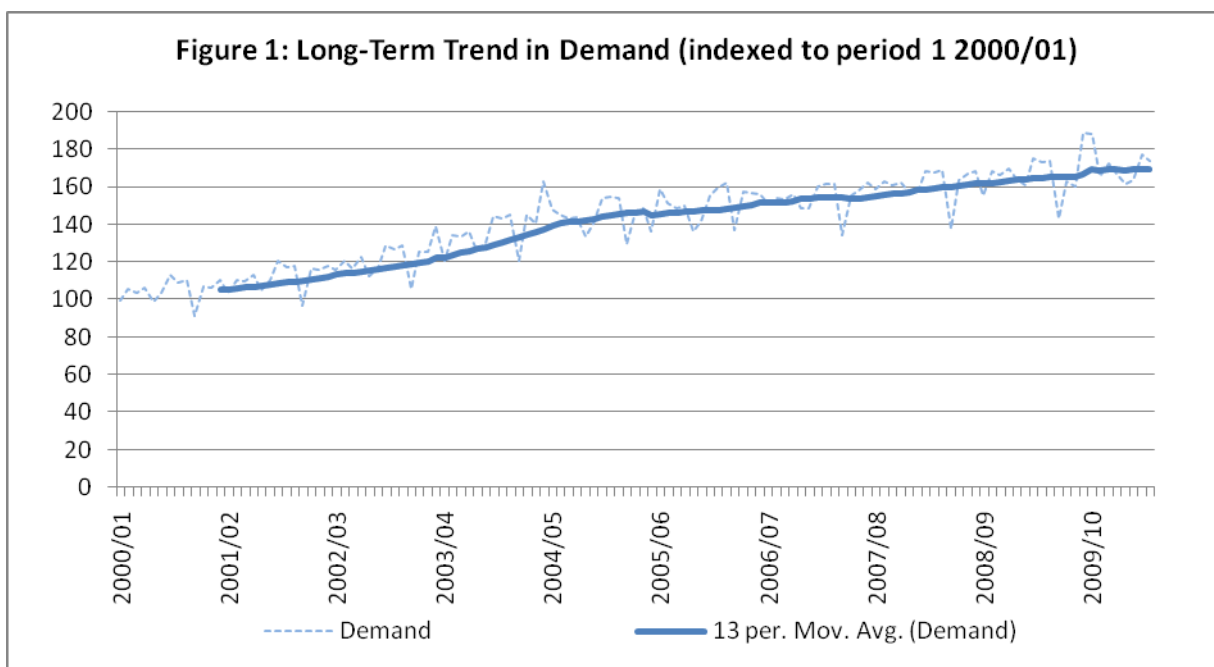
1 This report provides an analysis of changes in bus passenger journeys, the drivers of demand and trends in revenue over recent years.

2 SUMMARY

- 2.1 Bus patronage grew rapidly to 2004 and has since continued to grow steadily. It has remained resilient to date in the recession.
- 2.2 Generally, there have been similar trends across the different categories analysed: ticket type, time of day, day-type and geographical location. Usage of the outer London network has grown marginally faster than that in inner London in recent years.

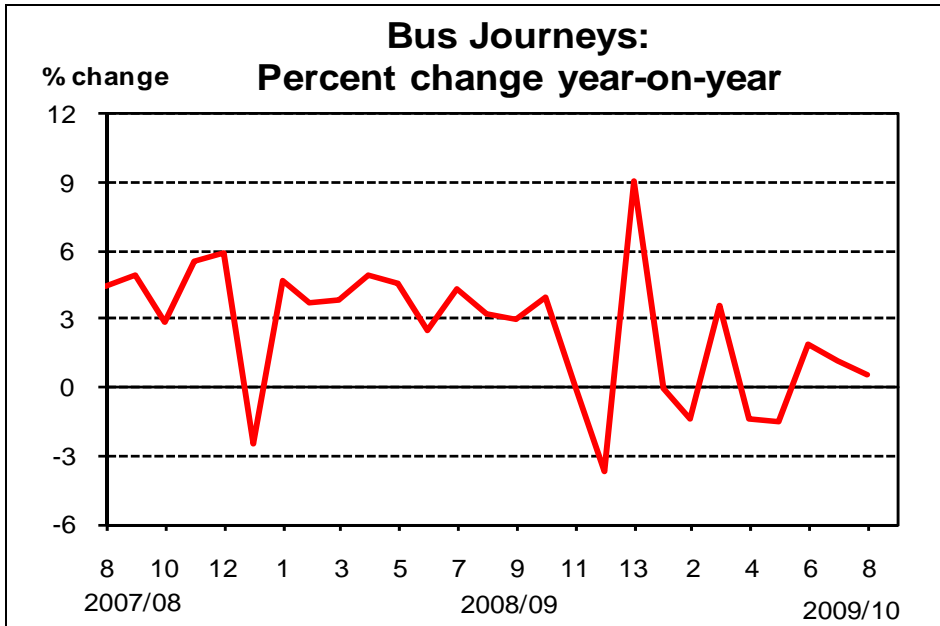
3 TREND IN TOTAL PASSENGER DEMAND SINCE 2000/01

- 3.1 The demand figures used are derived from surveys, ticket sales data and Oyster validations. The proportion of Oyster data in the total has increased over the period, reducing reliance on surveys to estimate the number of journeys undertaken.
- 3.2 Figure 1 shows the trend in total demand indexed to period 1 in 2000/01.



- 3.3 Figure 2 shows total patronage in each period since period 8 of 2007/08 compared to the same period in the prior year. The fluctuations in periods 12 and 13 are due to inconsistencies in period lengths around Easter in March and April 2010. The chart shows that the rate of growth has declined from around three per cent in 2007 and 2008 to around 0.5 per cent in 2009.

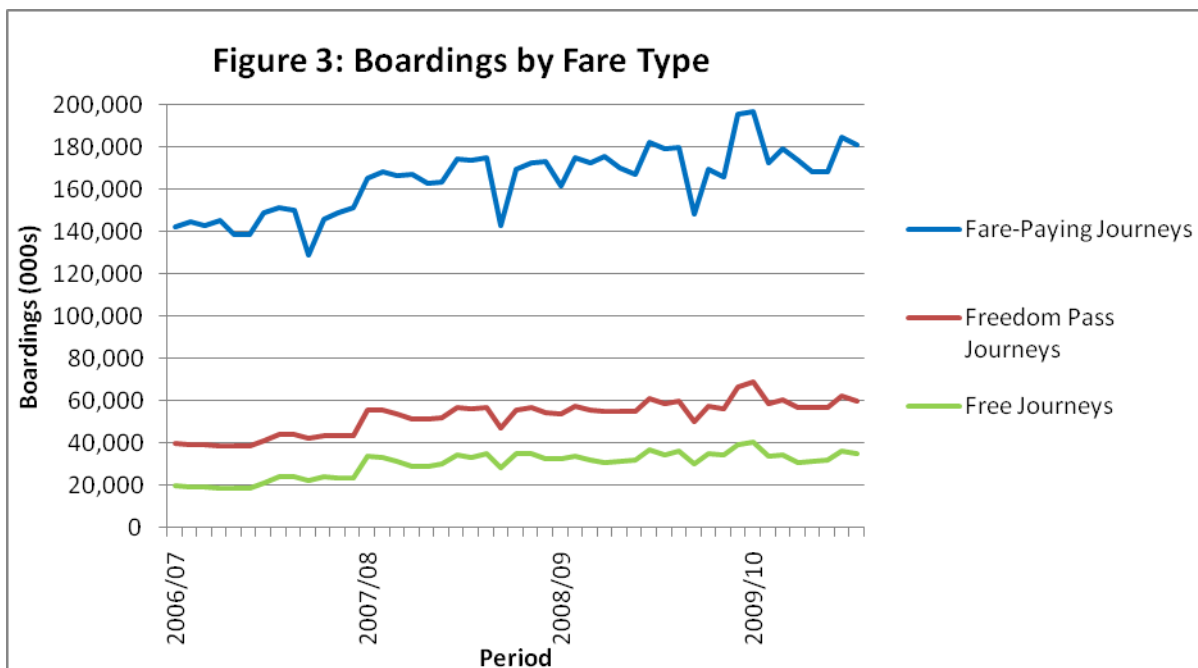
Figure 2: Bus Journeys - Percent Year on Year Change



4 DEMAND BY TICKET TYPE

4.1 In 2008/09, 22 per cent of bus trips are made using period travelcards, 21 per cent period bus passes, 18.5 per cent PAYG, ~2 per cent one-day travelcard, ~2 per cent one-day bus pass and 1.7 per cent cash. The remaining 33 per cent of journeys were free or made using Freedom Passes.

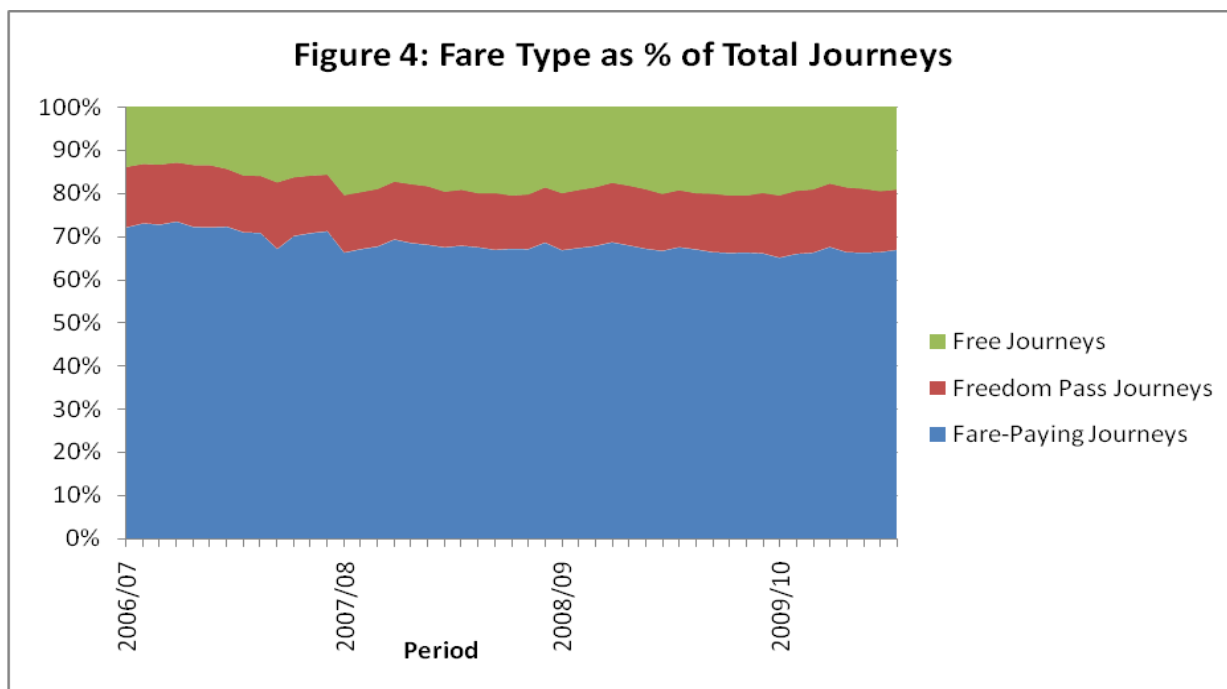
4.2 Figure 3 shows the trend by fare type, from Period 1 of 2006/07 to the present.



4.3 Free travel for children was introduced in January 2004 for under 11s, extended to 11-15 year-olds in September 2005 and to 16-18s in full-time education from September 2006. Children aged 11 and older have been

required to validate on boarding from June 2008.

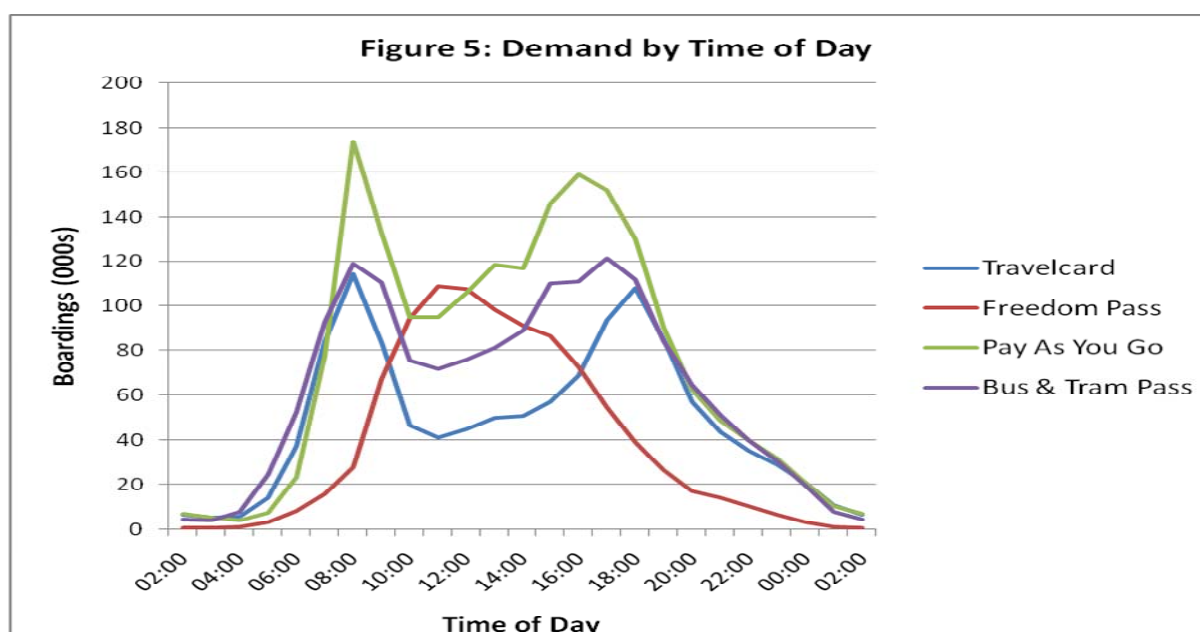
4.4 Figure 4 displays the changes in the proportion of journeys of each fare type since Period 1 of 2006/07.



4.5 Full fare-paying journeys now make up 67 per cent of all journeys, down from around 72 per cent in spring 2006. The proportion made using Freedom Passes has remained relatively stable, fluctuating between 13 per cent and 14 per cent of all journeys, while free journeys have increased from 14 per cent in spring 2006 to around 19 per cent in recent periods.

5 DEMAND BY TIME OF DAY

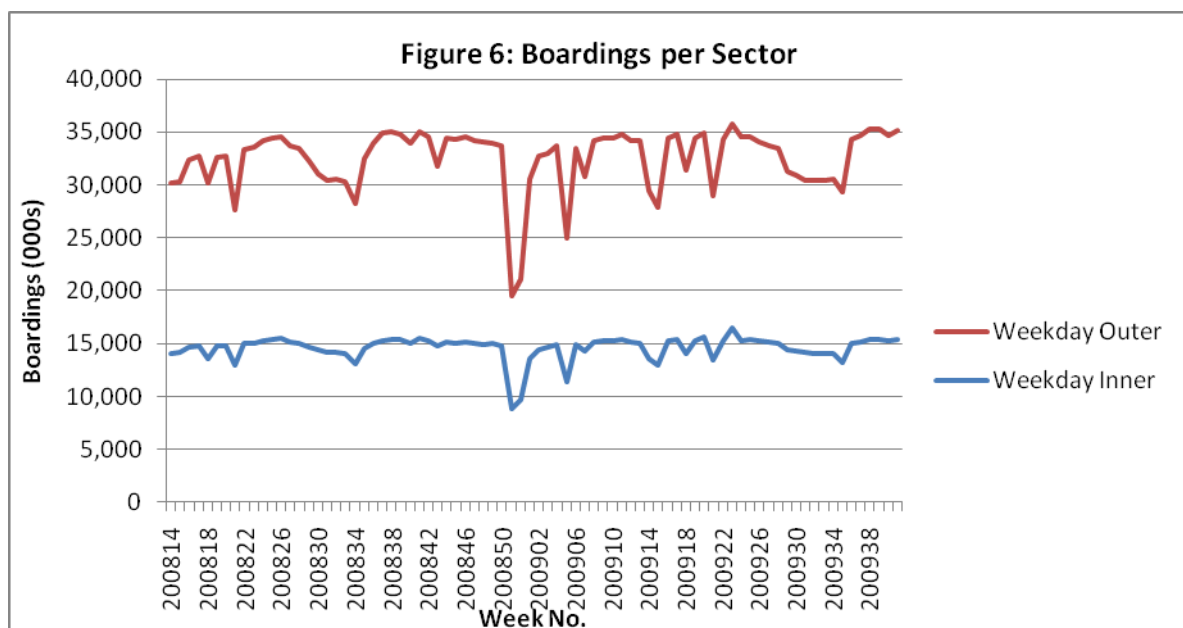
5.1 Figure 5 shows the demand by time of day, using Oyster validation data and split by ticket type, for an average week in December 2009.



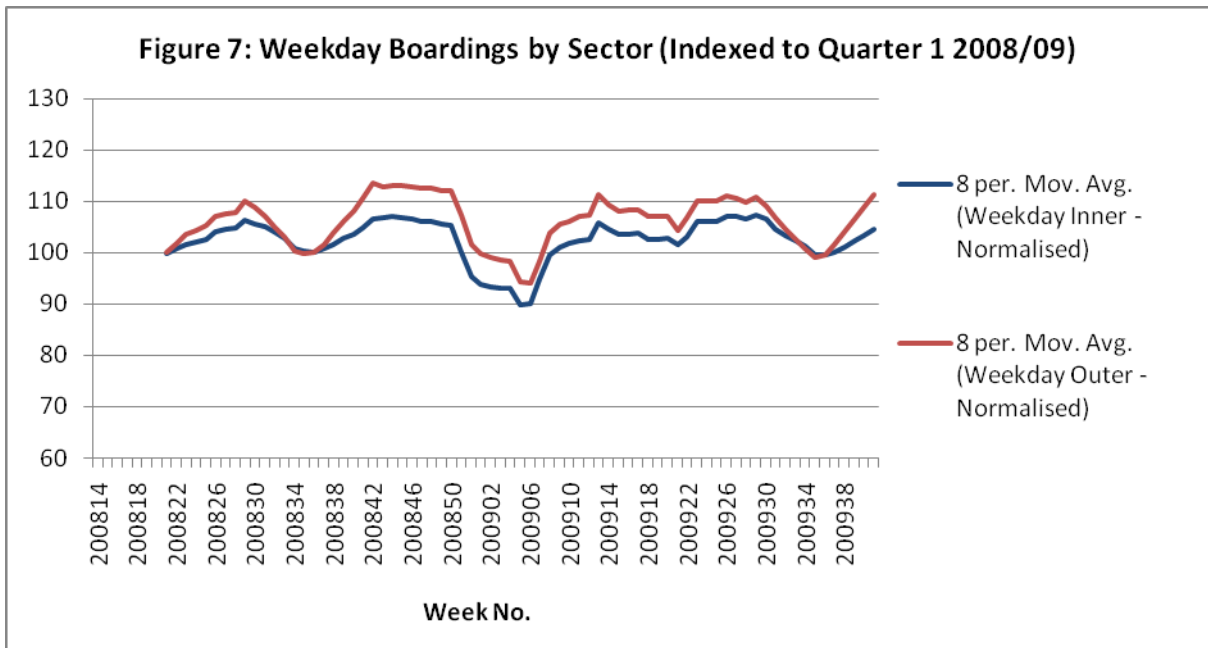
- 5.2 The morning peak in passenger boardings is between 0800 and 0900 for all ticket types except Freedom Passes. The afternoon/evening peak is longer, starting to build before 1500 and remaining in force until around 1900. There is a strong inter-peak. Freedom Passes have been valid 24 hours a day since January 2009. Prior to this date, Freedom Pass holders could only travel using their pass after 0900. Therefore these 'new' journeys prior to 0900 have either shifted from other ticket types or time shifted from later in the day. Despite this change the peak usage remains around midday.
- 5.3 The general pattern of usage across the day has been relatively stable over a number of years with a strong interpeak relative to rail modes. There has been a spreading of the afternoon peak and a strengthening of demand into the evening and night.

6 DEMAND BY LOCATION AND DAY OF WEEK

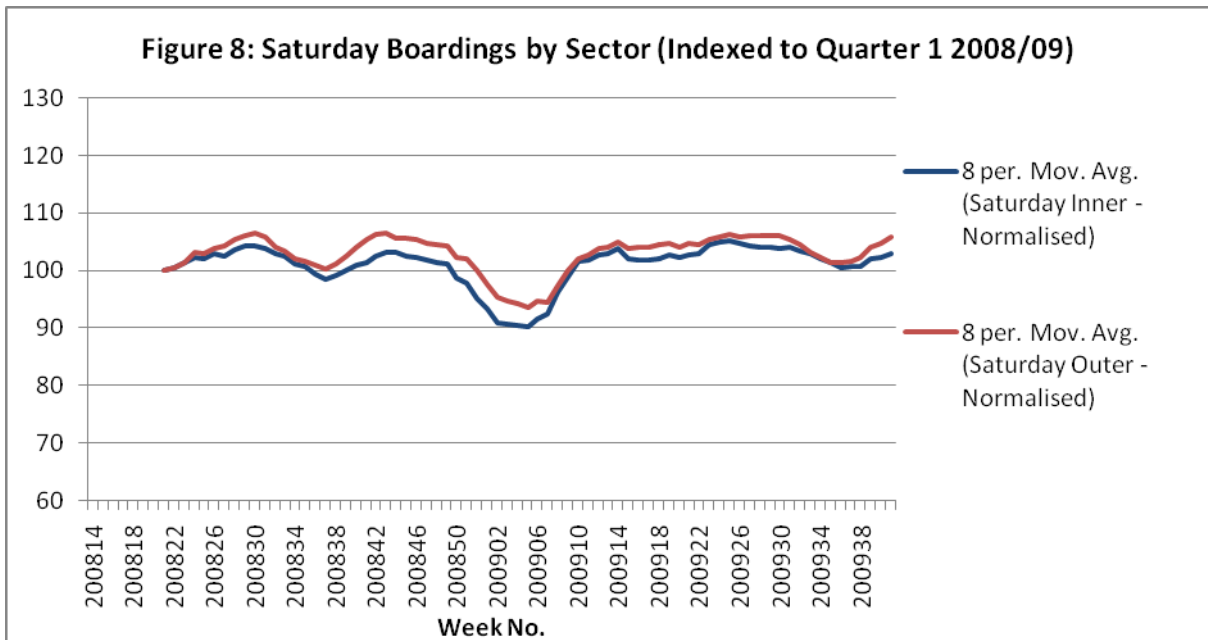
- 6.1 Figure 6 shows demand split between usage on routes serving inner and central London and the rest of the network since the spring 2008.



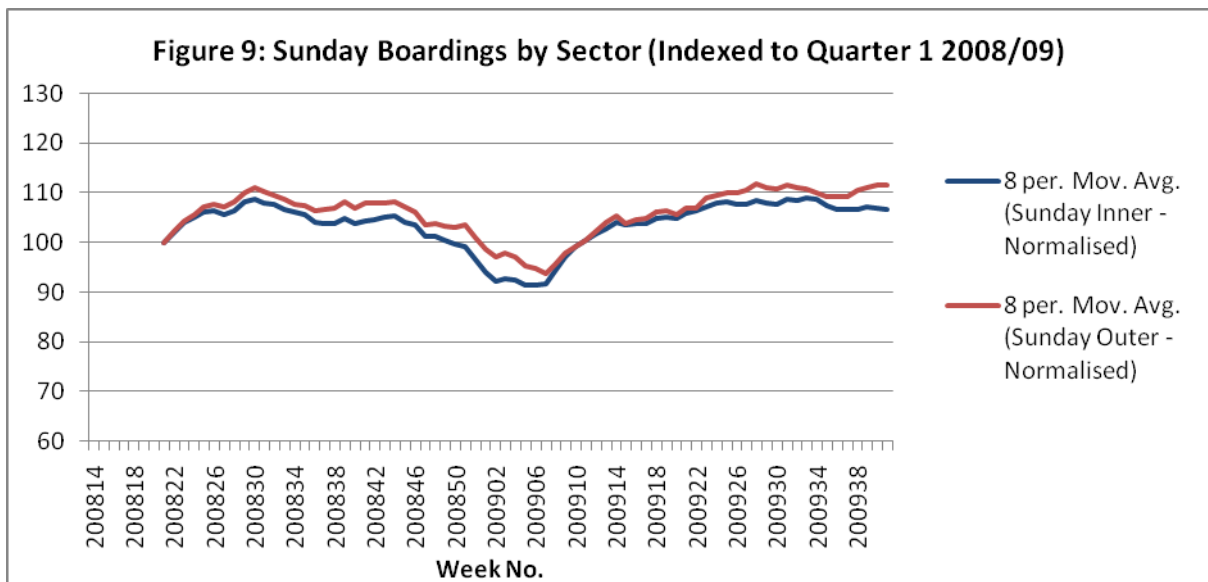
- 6.2 Figure 7 shows the Quarter 1 change in demand for each sector on weekdays indexed on Quarter 1 of 2008/09. The normal seasonal changes are apparent for both. Usage on routes serving inner/central London has grown a little less than usage on the remainder of the network.



6.3 Figures 8 and 9 give the same information for usage by sector at weekends.



Note: 8 per. Mov. Avg. is the 8 period moving average for Saturday demand data.



Note: 8 per. Mov. Avg. is the 8 period moving average for Sunday demand data.

7 DRIVERS OF DEMAND

- 7.1 The main drivers of bus demand are: population and jobs; service volume and quality (measured through operated and scheduled kilometres, and excess wait time); and fare levels.
- 7.2 Population and employment in London is forecast to continue the growth witnessed in recent years.
- 7.3 Operated kilometres have risen significantly since 2000/01 (by approximately 28 per cent to 485 million). The percentage of scheduled kilometres operated has been maintained at a high level (97-98 per cent) for several years. Traffic congestion has consistently been the biggest contributor to lost kilometres. Excess waiting time dropped rapidly in the first half of the decade and has since remained close to one minute with seasonal variations. Passenger journeys have increased by 66 per cent from 1,354 million to 2,246 million in this period.
- 7.4 Fares paid for bus travel decreased significantly in the early years of the decade and, since 2006, virtually all under 18s have travelled free on buses. Although fares for adults were increased in January 2009 and January 2010, the average fare paid by them today is only 69p, in real terms less than it was ten years ago.

LONDON RAIL

1 This report provides an overview of London Rail demand trends covering the period from the start of 2007-08 to the end of period 8 2009-10.

2 SUMMARY

2.1 London Rail revenue is £0.5m or five per cent ahead of forecast in the period, and £1.8m ahead of the Q2 forecast in the year to date.

3 TRENDS IN PASSENGER DEMAND

3.1 Dockland Light Railway (DLR)

In period 8, revenue is £0.2m ahead of forecast. To date it is £1.1m ahead.

Passenger numbers are recorded by infra red sensors mounted over the entrances and exits of DLR platforms.

Figures 1 & 2 show recent trends in volume. Demand dropped significantly in the second half of 2008-09 following the start of the banking crisis and the collapse of Canary Wharf based Lehman brothers. The financial sector has been one of the worst affected sectors in the downturn, to which DLR has a significant exposure.

Allowing for differences in period length, passenger numbers stabilised in the first half of 2009-10, driven by the opening of the Woolwich extension in January 2009-10 and reopening of Tower Gateway following refurbishment in March 2009. From period 6 the comparison is against the period of downturn in 2008-09, hence the improvement in the growth rate.

Figure 1

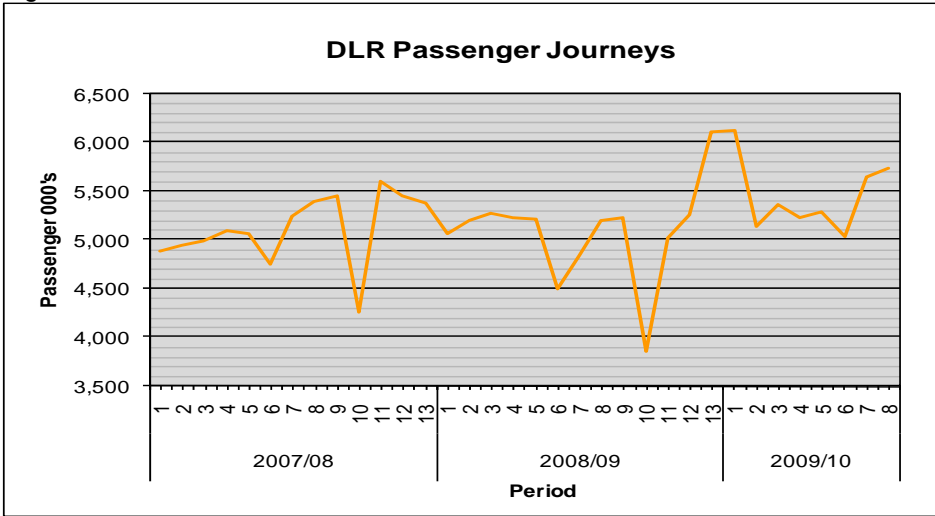
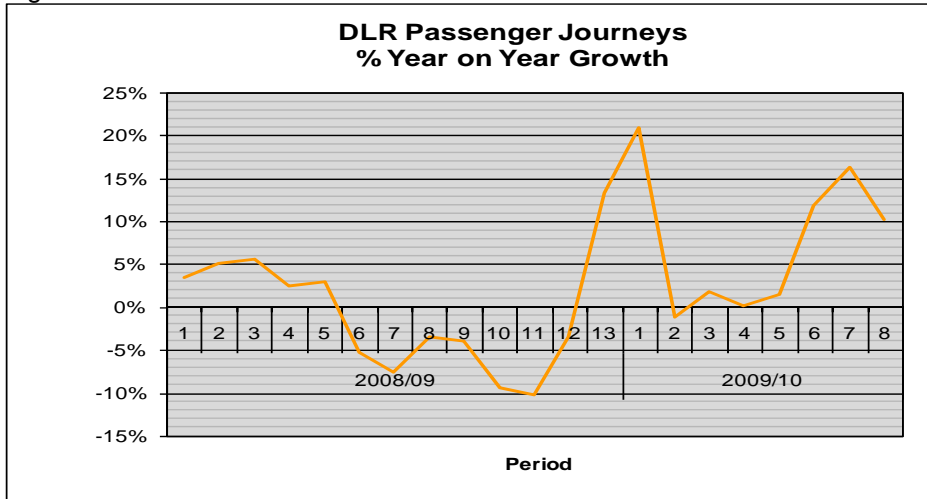


Figure 2



The latest full year forecast is for growth of four per cent in passenger numbers.

3.2 London Overground

In period 8, Overground revenue is £0.3m ahead of forecast. To date it is £0.8m ahead.

Volume trends are more difficult to establish for Overground services at present. Journey data is recorded by revenue allocation systems but revenue allocated by the Travelcard Diary Survey (accounts for 50 per cent of Overground revenue) is subject to a wide confidence interval and therefore this data is not a good indicator of actual volume trends.

Manual counts are undertaken twice a year in the Spring and Autumn. Results for Spring 2009 showed 3.5 per cent overall growth, driven by improvements to retailing, station environment, service patterns and the opening of Shepherds Bush station, following the commencement of the LOROL concession. Passenger numbers grew by four per cent in the am peak, zero per cent in the pm peak and nine per cent in the interpeak. The West London Line grew by 23.5 per cent following the opening of Shepherds Bush station. The results of the Autumn 2009 counts will be available during January.

New trains currently being delivered are fitted with load weighing equipment enabling continuous monitoring of passenger numbers. This data is being collected and analysed and from Q1 of 2010/11, when the fleet is fully delivered, it will possible to monitor aggregate trends in passenger numbers.

3.3 Trams

In period 8, revenue is £0.07m below. To date revenue is £0.2m below Q2 forecast.

Passenger numbers are recorded by infra red sensors mounted in the tram doors. Figures 3 & 4 show the trend in passenger numbers.

Demand grew strongly during the first half of 2008-09, but the rate of growth fell in the second half, as the economy began to deteriorate and the service frequency was reduced on one of the main routes after the removal of a tram following an accident. Demand in period 12 of that year was affected by severe weather when services were unable to operate for 2 days.

This year major engineering work affected periods 5, 6 & 7 with services through the centre of Croydon reduced and diverted. Counts are estimated for these periods due to a problem with downloading count data from the trams. Following the engineering work demand has continued to decline year on year, but the rate of decline is improving in the most recent periods.

The latest full year forecast for passenger numbers is a decline of 1.8 per cent.

Figure 3

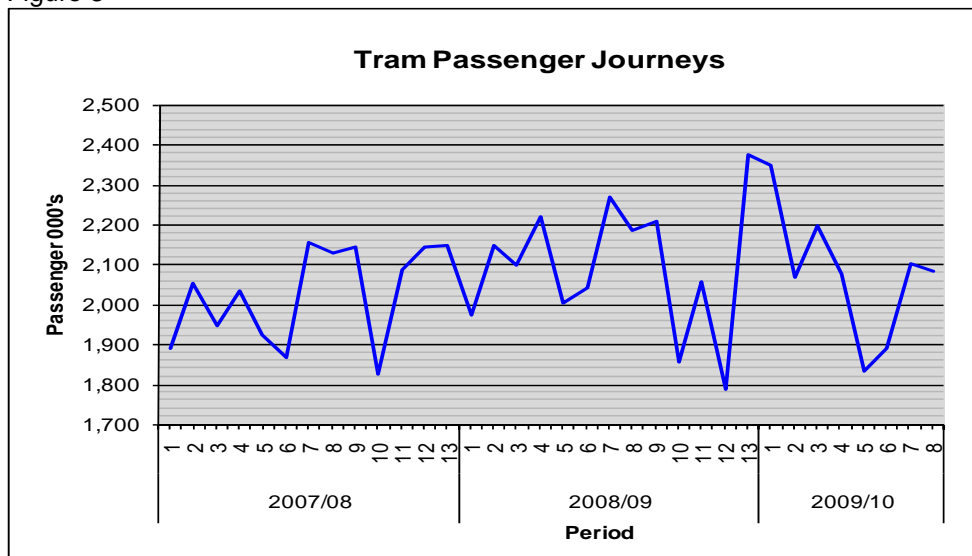
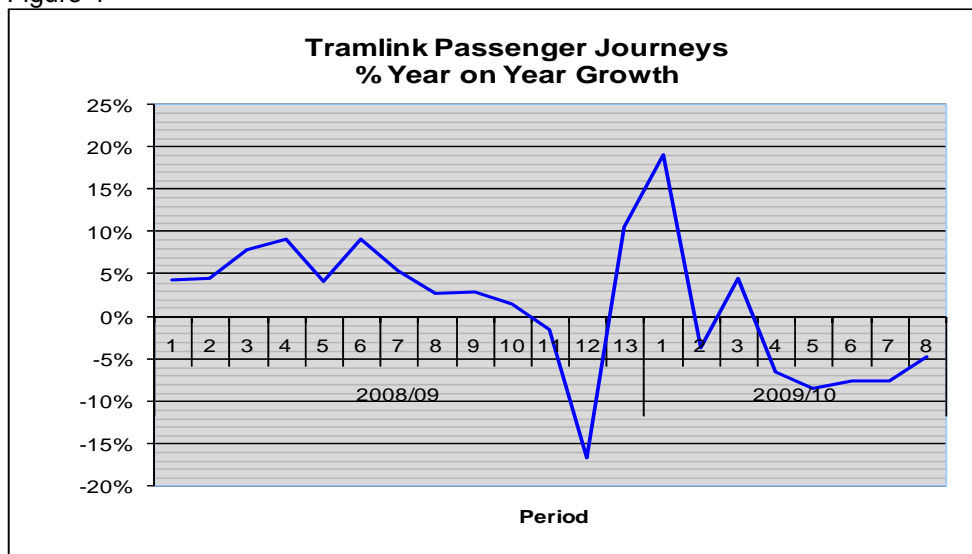


Figure 4

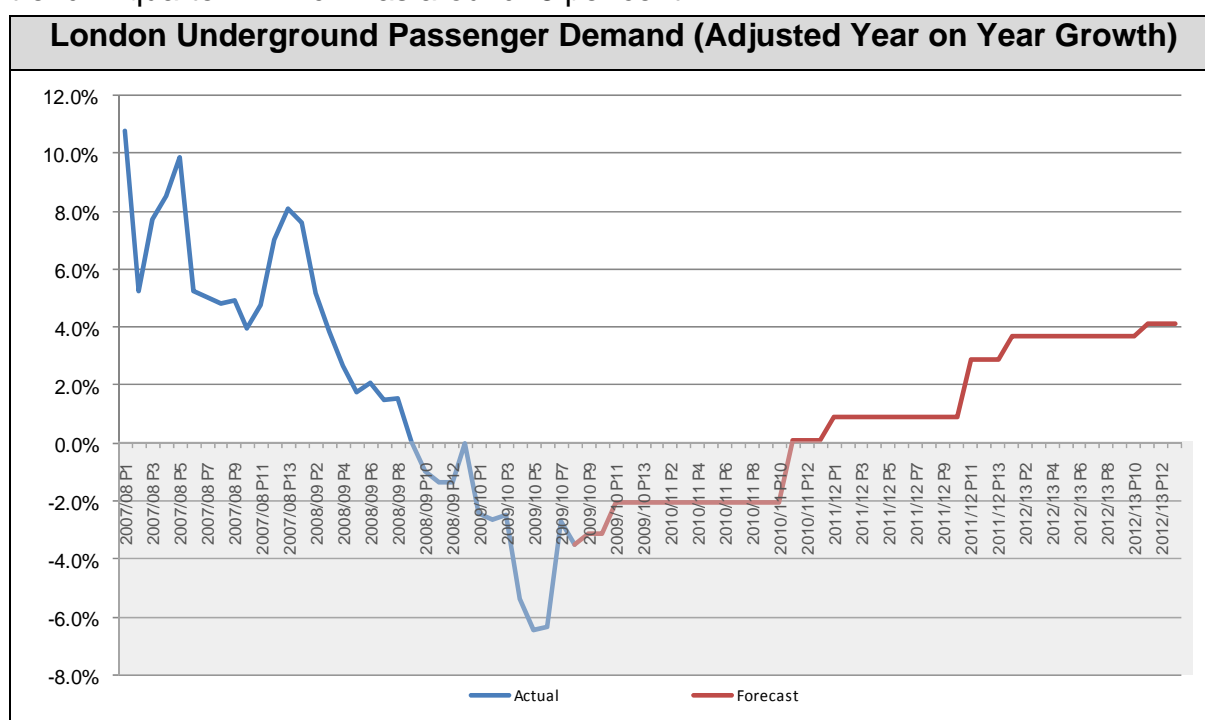


Passenger Demand – Period 8 2009/10

This report summarises the year on year changes and the variance to budget in passenger demand and fares income. Graph data is adjusted for the timing of public and school holidays, travelcard apportionment adjustments and other seasonal variations.

London Underground

Using adjusted data, passenger journeys declined by 3.5 per cent in period 8 compared to last year. This was slightly worse than in period 7, but better than the trend in quarter 2 which was around -6 per cent.

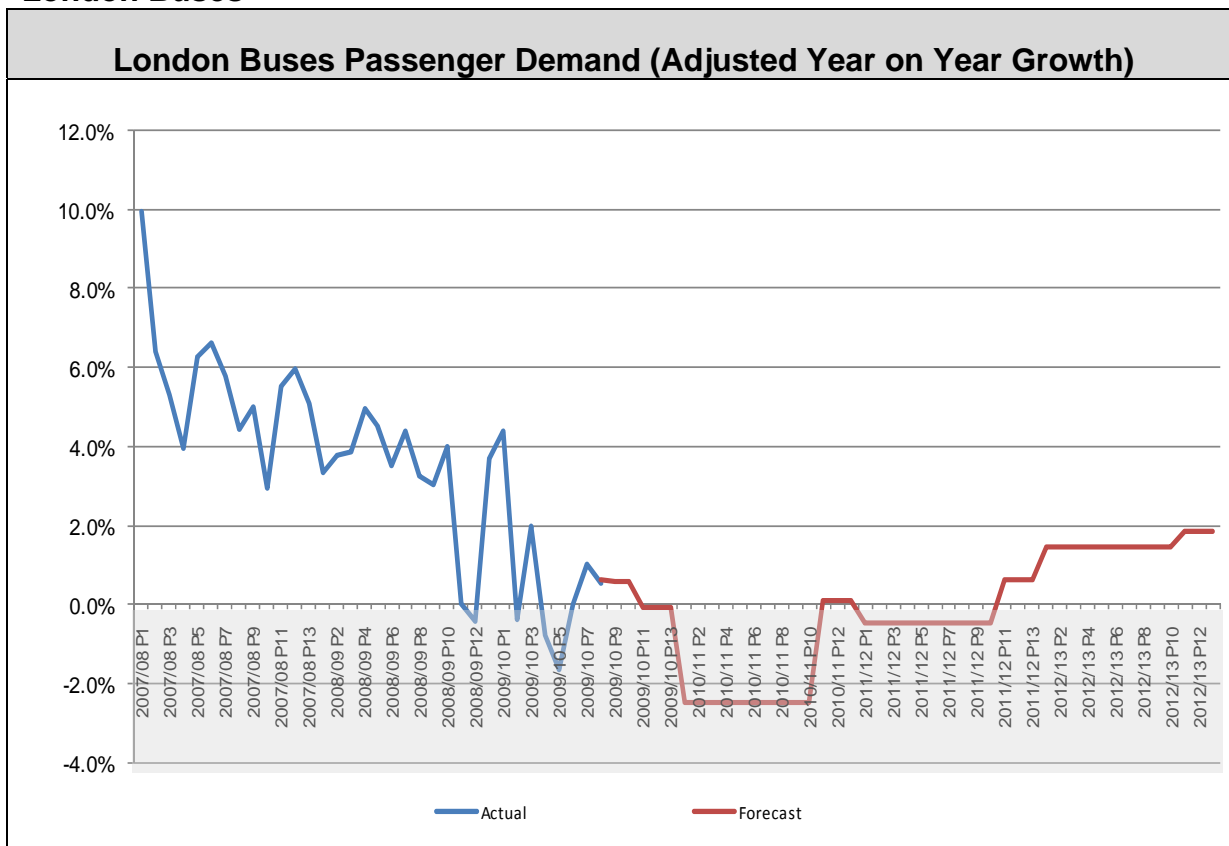


	Period			YTD			Full Year		
	Actual	Vs Target	Vs LY %	Actual	Vs Target	Vs LY %	Forecast	Vs Target	Vs LY %
Passenger Journeys m	85.7	(3.1)	-3.6%	654.9	(20.8)	-2.0%	1,045.0	(49.0)	-4.1%
	Actual	Vs Budget	Vs LY %	Actual	vs budget	Vs LY %	Forecast	Vs Budget	Vs LY %
Fares Income £m	134.5	(3.0)	3.0%	1,006.3	(42.9)	2.8%	1,609.0	(83.0)	-0.3%

Note: Income is shown as negative in the chart of accounts, although is presented as positive in this report for ease of comparison with related journey trends. Therefore, any variances in brackets or with a ‘-’ sign indicate lower income or passenger journeys.

When adjusted for retrospective Travelcard revenue payments and the 5.8 per cent fare rise in January 2009, fare income showed an underlying deterioration of 3.1 per cent in period 8, broadly in line with the passenger journey decline of 3.6 per cent. Period 8 included the highest ever weekly revenue of £34.0m for the week of half term (ended 31 October).

London Buses



	Period			YTD			Full Year		
	Actual	Vs Target	Vs LY %	Actual	Vs Target	Vs LY %	Forecast	Vs Target	Vs LY %
Passenger Journeys m	180.6	(1.5)	0.6%	1425.1	(0.4)	2.8%	2,252.0	(22.0)	0.2%
	Actual	Vs Budget	Vs LY %	Actual	Vs Budget	Vs LY %	Forecast	Vs Budget	Vs LY %
Fares Income £m	88.9	(1.5)	2.2%	691.5	(17.6)	3.1%	1,110.9	(13.1)	3.4%

After adjusting for the 6.3 per cent fares increase in January 2009 and retrospective adjustments to Freedom Pass payments in 2008, fare income declined by 1.1 per cent, while journeys increased by 0.6 per cent. This difference is the result of a significant increase in the proportion of Freedom Pass journeys (which is not reflected in revenue since the cost of those journeys paid for by London Councils is capped) and adverse Travelcard apportionment factor changes over the year.

DLR

	Period			YTD			Full Year		
	Actual	Vs Target	Vs LY %	Actual	Vs Target	Vs LY %	Forecast	Vs Target	Vs LY %
Passenger Journeys m	5.7	0.0	10.3%	43.8	1.3	8.0%	67.4	(3.6)	2.1%

The growth against last year was attributable to the effect of the closures for engineering works at Lewisham and Tower Gateway last year and the opening of Woolwich Arsenal in 2009. In period 8, demand increased further as the World Travel Market was held at the ExCel centre.

Tram

	Period			YTD			Full Year		
	Actual	Vs Target	Vs LY %	Actual	Vs Target	Vs LY %	Forecast	Vs Target	Vs LY %
Passenger Journeys m	2.1	(0.2)	-4.6%	16.6	0.1	-2.1%	27.3	(0.2)	1.0%

The economy and slower return of customers following engineering works is considered to have impacted the number of passenger journeys. (Note: the passenger journeys numbers were estimated in periods 4, 5 and 6, as actual count data was unavailable due to engineering works.)

London Overground

Passenger journey data for London Overground is not reported at present. The Oyster PAYG and Rail Settlement Plan (RSP) systems contain passenger data. The RSP passenger numbers are derived from revenue allocations which are based on passenger surveys. London Rail has no direct access to the RSP system to interrogate or validate the quality of this data.

Proportion of journeys made by non-fare paying passengers

% Free Journeys*	Period	Prior Year
Underground	0.3	0.3
Bus	19.0	19.3
TOTAL	13.0	12.6

Free journeys include journeys made by children on the Underground and Buses, and staff and police travel on Buses. They do not include journeys using a Freedom Pass as TfL receives payment from the Boroughs for these. The percentage of free journeys on the Underground has remained stable at 0.3 per cent during 2009/10. The percentage of free journeys made on Buses in period 8 fell slightly to 19.0, from 19.5 last period.

Fares income compared to budget in the period and year to date

Fares income	Period 8		Year to date	
	Actual	Variance to budget	Actual	Variance to budget
London Underground	134.5	(3.0)	1,006.3	(42.9)
Bus	88.9	(1.5)	691.5	(17.6)
DLR	6.2	0.0	48.2	2.6
Trams	1.3	(0.1)	9.8	(1.2)
London Overground	3.4	0.2	21.0	(2.3)
Total	234.2	(4.4)	1,776.8	(61.4)

Total fares income was 1.8 per cent lower than budget in period 8. This caused an improvement in the year to date variance to 3.3 per cent lower than budget.

Full Year Forecast

Fares income	Full year	
	Forecast	Variance to budget
London Underground	1,609.0	(83.0)
Bus	1,110.9	(13.1)
DLR	74.4	(1.8)
Trams	16.8	(1.0)
London Overground	35.5	(4.1)
Total	2,846.6	(103.0)

The fares income forecast has not changed since that published in the Q2 Operational and Financial Report.