

2012 OLYMPICS AND PARALYMPICS & LONDON UNDERGROUND

by Mark Curran, Senior Planner, LU Access & Olympics Planning
A report of the LURS meeting at All Souls Club House on 10 January 2012

Mark works for London Underground and is a member of a team of 5 who are tasked with planning LU's response to the Olympics and Paralympics. The Olympics run from 27 July until 12 August and the Paralympics from 29 August until 9 September.

Transport for London's (TfL) aim is to "keep London moving". Not just people involved with or spectating at the events but commuters, tourists, business and everyday travellers. Currently LU transports an average of 4 million customers per day with 528 trains operating during the peak timetable.

The Olympics and Paralympics will see the largest peacetime logistical exercise in London's history with an expected cumulative total of 9 million spectators travelling to events along with the competitors, officials and sponsors. This will mean up to 1 million passengers every day. Events take place in sessions (of up to 4 per day) which can start as early as 08.0 and some will not finish until late into the evening. However, the majority start and finish at the same time as peak travel (10.00 and 16.30). The arranging of start time has not been the choice of the ODA but has been "dictated" to them by sponsors and TV schedulers. It is also very likely that spectators will not stay within one venue for the whole day and may well need to travel between venues to attend different events. The Olympic Delivery Authority (ODA) and London Underground have an operating grant arrangement of about £30million pounds to assist with this aim, with funding for a complementary travelcard to accompany every ticket purchased for an Olympic/Paralympic event.

To give an idea of the scale of the logistical issues: the Olympic Park itself comprises three main venues (Stadium with a capacity of 80,000, Swimming Centre with capacity of 17,000 and the Cycling Velodrome which holds 6,000) along with other smaller venues and big screens, etc. This could mean that 150,000 spectators will be in the area at any one time. So, if you include the staff and officials, this means that up to 500,000 people will travel to and from the site each day of events.

Other venues are (with capacity per day):

ExCel Centre (Judo, etc)	100,000 +
O2 Arena (Gymnastics, etc)	20,000
Greenwich Park (Equestrian events)	Up to 75,000
Wimbledon (Tennis)	30,000 (which is actually less than the attendance at the annual Championships)
Wembley Stadium (Football)	90,000
Horse Guards Parade (Beach Volleyball)	60,000 (but with 4 different sessions and sets of ticket holders per day)
Hyde Park (Triathlon, and concerts, big screens, fun fair, etc)	Up to 80,000
Earls Court (Volleyball)	13,000
Lords Cricket Ground (Archery)	6,500 (which is less than for international cricket matches)

From this list it can be seen that there is a concentration of venues at the eastern end of the Jubilee Line and so LU, Docklands Light Railway (DLR) and London Overground (LO) are planning to run over 150 trains per hours into Stratford and adjacent stations.

Line upgrades for the Jubilee, Victoria and Central lines had already been planned but have been brought forward to be ready in time for this summer. The eastern end of the Jubilee will have its capacity per hour increased to 30 trains, Central Line trains have been refreshed with new moquette and improved waterproofing, and the Victoria Line will have train frequency improved and new 2009 Tube Stock trains provided. The DLR have brought forward the completion of the "3 car" project so that all trains will have been lengthened with associated increase in capacity.

The Westfield Shopping Centre was originally planned to open between 2013 and 2015. This is now fully opened ahead of schedule with associated improvements to Stratford station (platforms resurfaced and passenger routes through the station altered) and the opening of Stratford

International. Another issue at Stratford station is that it usually handles 170,000 passengers per day, with three-quarters (130,000) of them interchanging between LU, DLR and LO and never leaving the station itself. During the Olympics it is anticipated that over 500,000 people will want to enter or exit the station per day.

The Javelin train will run from St. Pancras to Stratford International and then on to Ebbsfleet International. It operates with Class 395 HS1 rolling stock which, with 12 carriages, has a loading level of 1,100 passengers per train. The line's capacity is for only be 8 trains per hour and so this will not be enough to meet the expected demand. This places a great importance upon the Central, Jubilee and DLR services into Stratford and West Ham.

Mark's main task is Demand Modelling. This involves the use of computer software [Emme/2 and Railplan] to understand how many people will be coming to London, where they will commence their journey and to which station they are travelling to. This is very much predicting the unpredictable as the two variables are people and the future! The travel models produced have modified as tickets have been bought and sold. The expected services are as follows:

CENTRAL, JUBILEE AND HAMMERSMITH & CITY LINES		
27 July (Olympics Opening Ceremony)	Last train departing Stratford at 02.30	Close of traffic 03.30
Sunday	45 minute earlier start to services than usual and peak level timetable Last train leaves Stratford at 01.30	Close of traffic 02.30
Days 1-6	Last train leaves Stratford at 01.30	Close of traffic 02.30
Days 7-16 (Athletic events held at Olympic Stadium)	Peak level services in morning, afternoon and from 22.00 until close of traffic	Close of traffic 02.30
ALL OTHER LINES		
27 July	Close of traffic 03.30	
Sundays	30-45 minutes earlier start but off-peak level timetable	Close of traffic 02.30
Days 1-16	Close of traffic 02.30	

In addition:

- All District Line trains will run to Plaistow or Barking with no Mansion House or Tower Hill terminators.
- Hainault – Woodford and Heathrow Terminal 4 loop will both close at usual time (not close of traffic).

Those stations effected are not just those nearest venues, but also interchanges and ones where trains will pass through already full of passengers from further down the line (expected to be St. Pauls, Chancery Lane, Canada Water, and Gloucester Road).

Every station has a "Congestion Control and Emergency Plan" and those expected to be affected in any way by this summer's events have had their plans reviewed and updated as required. Changes will include exit or entry only operation; one way routes, opening 'firemans lifts' to public use, and new Olympic/Paralympic specific signage. These signs are white lettering (New Johnston) on pink backgrounds with the 2012 logo and will be consistent across all LU, DLR, LO, Heathrow Express and main-line stations. The overall aim is to getting passengers out of stations as quickly as possible.

West Ham station has been adapted to act as a "gateway" station to relieve pressure on Stratford. It is about 1km from the Olympic Park. Manor Road will be closed to all traffic and a temporary footbridge and entrance, new lighting and signage have been installed to direct spectators on to the Greenway footpath. Upon return, they will queue along the footpath and enter via the temporary entrance.

Earl's Court station will change to entry only from Warwick Road and exit via Earl's Court Road. There will be extensive signage and marshals employed to direct spectators to the entrance to the

Volleyball venue entrance which is on Brompton Road. This entrance is located opposite West Brompton station but due to this station having only three exit gates and a wooden footbridge it is totally unable to accommodate the passenger numbers anticipated!

Hyde Park Corner and Marble Arch stations will operate as exit only between 10.00 and 22.00 each day and may be closed completely at short notice if congestion reaches danger levels.

On the DLR, Pudding Mill Lane will be closed throughout the period of the Olympics and Paralympics as it is actually situated within the security cordon. Shadwell will be one-way operation and Cutty Sark station will close to entry or exit during Equestrian events in Greenwich Park as the station and area outside are too small to handle the crowds expected.

Another part of Mark's work is "Travel Demand Management". This splits in to three areas:

- Advice to business – travel planning for staff to adjust their start and finish times. Hundreds of London's biggest employers have "signed up" to this scheme.
- Spectator Information Services – specific journey planners will go on line via the Olympics/Paralympics websites to give spectators routes around the most congested stations and direct them to the gateway stations such as West Ham. Leaflets specific to each venue will be produced.
- Londoner Influence Campaign – this launches in February with a series of advertisements to inform and influence Londoners to the serious message that this summer is going to be the busiest every on LU.

Graphs have been published on the TfL website showing what is anticipated to happen if Londoners do not adapt their usual travel patterns. One example is that London Bridge station is likely to have waits of over 30 minutes between 17.00 and 21.00. Mark hopes that Londoners will not suffer "Olympic fatigue" and become tired of being told what to do and where they can and cannot travel to/through.

On the upgrade/maintenance front: from 27 June no signalling upgrades will be implemented nor any works which could risk an operational failure. Between 17 July and 9 September there will be no planned closures – work on the Victoria Station Upgrade and CrossRail will be suspended and only critical maintenance will be undertaken. The daily close-down during the Olympic period will be only two hours per night and track walks and train preparation must continue. To achieve this, staff who would have been working on planned maintenance projects will be reassigned to routine maintenance. The Emergency Response Unit will have four vehicles in operation (instead of the usual three) and some of these vehicles will have Police drivers who can operate under "blues and twos" to get response to issues quicker. Temporary spares depots will be established across London to enable quicker access to equipment.

The contractors for escalators, lifts and ticket machines (Thales/Connect, Powerlink and Prestige) have all had their contracts enhanced during the Olympic period to provide faster services.

Staff from Special Requirements Teams and Revenue Control Inspectors will be reassigned to station duties along with all the 2,000 – 2,500 staff from HQ offices who are customer service trained. They will all receive specific training and a series of articles have appeared in "On the Move" and on the LU Intranet.

The issue of union unrest has been in the media; but agreement has been reached to suspend some usual working patterns under the "Professional Train Operators' Agreement", and compensation is being paid to drivers accordingly.

Additional coordination rooms have been established for the period and these will allow co-ordination of all existing London control rooms, not just of trains but streets, buses, Police, security services and even COBRA (the Government's Emergency Control Centre in Downing Street). These include the Transport Coordination Centre (TCC), in TfL's Palestra office, and the Olympic Park Transport Integration Centre (OPTIC) in the ODA's transport office at Stratford station.

The Paralympics in late August and early September take place once most the schools have returned from holiday but it is still expected that spectator numbers will be similar to the Olympics, although with fewer venues. Trains will run to the same extended close of traffic hours but with slightly fewer operating in peak hours (expected level of 20 trains per hour).

Mark finished by summarising that a lot has already been done to meet the unprecedented demand anticipated this summer but there is still lots to do to keep London moving. However, it must be remembered that this is a summer to enjoy sport, and success is keeping transport off the front pages.

The meeting thanked Mark in the usual manner, following which a number of questions were asked.

Amanda Day
