

Customer Service and Operational Performance Panel



Date: 13 July 2017

Item: Travel Demand Management

This paper will be considered in public

1 Summary

- 1.1 The purpose of this paper is to provide the Panel with an overview of TfL's Travel Demand Management (TDM) programme.

2 Recommendation

- 2.1 **The Panel is asked to note the paper.**

3 Background and Challenge

- 3.1 As London's integrated transport authority, our purpose is to keep London moving, working and growing, and to make life in our city better.
- 3.2 While major improvements to our transport networks are being delivered, we need to minimise recurring congestion, which results from demand exceeding capacity at certain times and places, and mitigate impacts on all our customers of planned and unplanned works and events.

4 TDM Programme Approach

- 4.1 The primary approach is to provide accurate and timely information for our customers and partners to influence travel behaviour and enable customers to make informed travel choices (Appendix 3).
- 4.2 We work with partners to:
- (a) understand the operational and customer impacts of passenger demand growth, large events (e.g. Prudential Ride London), engineering works and unplanned incidents;
 - (b) use those insights to develop information, advice and tools to help customers avoid disruption where they have the flexibility to do so;
 - (c) collaborate across the transport industry and Government to co-ordinate action; and
 - (d) ensure advice is carried across a wide range of communication channels.

5 Outcomes Delivered

5.1 Examples of TDM operating in practice include:

- (a) London 2012 Olympic Games – 35 per cent of regular travellers modified their travel behaviours on each weekday during the Olympics at a time when London Underground carried record numbers of passengers;
- (b) A406 Neasden road improvement works – 14 per cent of frequent drivers influenced to travel outside the busiest times, leading to a three per cent reduction in total traffic flows and saving over 50,000 hours of road users' time;
- (c) Tower Bridge Closure – drivers who received our messages were 6 percentage points more likely to retime their journeys to avoid the worst congestion in the AM peak;
- (d) Crowding at peak times on London Underground and Rail – up to 6 per cent of regular customers responded to this information by avoiding the very busiest times;
- (e) Tour de France – pre-event communications led to traffic levels in central London being 17 per cent lower than a typical day;
- (f) Walking Tube Map – a quarter of Londoners are aware of the map and over a third of those say they have been encouraged to walk more as a result of using it; and
- (g) Thameslink London Bridge – Demand at targeted London Overground stations down by between 10 per cent and 20 per cent during peak times.

6 Events, Planned Works and Unplanned Incidents

- 6.1 An integrated Travel Demand Management programme was developed for the London 2012 Olympic Games to avoid the unacceptable levels of queuing on public transport and road networks that had been predicted. Building on this, the programme has supported major events across London, including the Rugby World Cup 2015, Prudential Ride London, New Year's Eve celebrations, London Marathon, IAAF World Athletics and Para Athletics Championships 2017 and Lumiere.
- 6.2 The approach has also been applied more widely to provide improved customer information for major planned works on the rail, London Underground and road networks for which a travel behaviour change is necessary to mitigate the impacts on customers. Major works supported have included the 2015 Victoria line blockade, the Tower Bridge closure and Thameslink and SWT Waterloo blockades. A total of 50 events and works were subject to TDM campaigns in 2016/17 prioritised by the size and scale of the impact.
- 6.3 To achieve this we work closely with other agencies including the Metropolitan Police Service, Network Rail and Highways England to understand the impacts of planned works and planned and unplanned events on our customers. We then develop consistent travel advice, highlighting potential areas of delay or congestion and alternative travel options available. The aim is to encourage customers to

consider alternatives including re-timing their travel, re-routing and changing parts of their journey to walking and cycling where they have the flexibility to do so.

- 6.4 Case studies of previous TDM campaigns to support events and works are set out in Appendix 1.

7 Recurring Congestion

- 7.1 Research shows that customers want more information and advice to avoid the busiest times and places. In response, we are increasingly focused on providing information and travel advice around known congestion hotspots.
- 7.2 A key method used is to make our data on congestion and alternative travel options freely available to our customers through our Open Data policy, our own communication channels and by working with developers to incorporate data into their applications.
- 7.3 This has included integrating crowding information for all LU stations into Journey Planner, providing detailed information about the busiest 94 LU stations through web, poster and social media campaigns (see 5.1 above), and by releasing the data to external developers. This will be extended to include other TfL Rail modes, including DLR, later this year.
- 7.4 We are trialling a similar approach at some of our most critical and congested locations on the road network, including the Blackwall Tunnel, to encourage customers to travel outside the busiest times and consider alternative options.
- 7.5 Providing our customers new and useful information has been used to help spread travel demand and encourage more active travel. An example is the Walking Tube map mentioned in a paragraph 5.1.
- 7.6 We are also working with the business community to develop products and travel advice around recurrent congestion and alternatives which can be used by companies to support travel behaviour changes among their staff, customers and suppliers.
- 7.7 Case studies of previous TDM campaigns to support recurring congestion are set out in Appendix 2.

8 Measuring Outcomes

- 8.1 We use a combination of qualitative and quantitative measures to assess the success of the individual TDM campaigns. Our Key Performance Indicators are broadly split between attaining levels of awareness of our campaigns and achieving outcomes in terms of trips being retimed or rerouted.
- 8.2 The awareness level of campaigns is measured through 'click through' rates on emails, webpage visits and social media engagement and qualitative research, including a specific TDM tracker.
- 8.3 The retiming and rerouting outcomes are primarily measured through tracking the level of demand occurring at the very busiest times, changes in arrival times at LU stations, and the amount of 'regular' drivers through an area that are observed to retime or divert around planned works on the road network.

9 Financial Implications

9.1 The Travel Demand Management Programme budget in 2017/18 is £3.99m including all CAPEX and OPEX.

List of appendices to this report:

Appendix 1 – Disruption (Events, planned works and unplanned disruption)

Appendix 2 – Recurring congestion case studies

Appendix 3 – 2017/18 Programme on a page

List of Background Papers:

None

Contact Officer: Vernon Everitt, Managing Director, Customers, Communication and Technology
Number: 020 3054 7167
Email: VernonEveritt@tfl.gov.uk

Contact Officer: Stuart Reid, TDM Programme Director, Customers, Communication and Technology
Number: 020 30540184
Email: StuartReid@tfl.gov.uk



Travel Demand Management Appendices

ATTENTION!
LE TOUR DE FRANCE
MONDAY 7 JULY



Appendix I
TDM Disruption Project
Case Studies 16/17



3 A 406 Neasden

To support the major roadworks on the A406 North Circular Road at Neasden in 2015-16, we provided enhanced information and travel advice

Public

- 22,000+ letters to residents and businesses within a half mile radius of the works
- 10,000+ leaflets distributed at Brent Cross, IKEA and Tesco
- Bespoke email sent to 468,000 road users – 27% opened; also included in multi-modal email sent to 1,600,000 people – 48% opened
- Twitter posts with 250,000 impressions before the start of works
- Travel advice web page with 10,000 views before the start of works
- Adverts in the Evening Standard and other local press
- Digital adverts online, targeted by IP address to relevant locations
- Face to face local engagement to residents and business on directly affected frontages
- Travel Ambassadors provided travel advice to bus passengers and motorists
- Signage at affected bus stops
- Hoarding on Heras fencing around works compound
- VMS on TfL and Highways England networks

Stakeholder

- Face to face meetings with IKEA, Brent Cross, Tesco, Wembley Stadium (and the FA), Neasden Temple, Royal Mail, LB Brent
- Briefings to 17 local schools with emails/phone calls
- Press release and briefings to local media
- Weekly email bulletins:
 - Taxi and private hire bulletin (47,000 recipients)
 - Freight bulletin (10,000 recipients)
 - Business bulletins (1,820 mailed, some also phoned and visited)
- Brent Borough Members Bulletin

Outcomes

- Around 14% additional frequent drivers (over 1,000 per day), compared to similar works at a nearby control site on the A406, changed their time of travel or route through the road works, causing a traffic flow reduction of 3%.
- The monetised social benefit of that behaviour change, set against the cost of enhanced communications, generated a benefit: cost ratio of over 4:1.



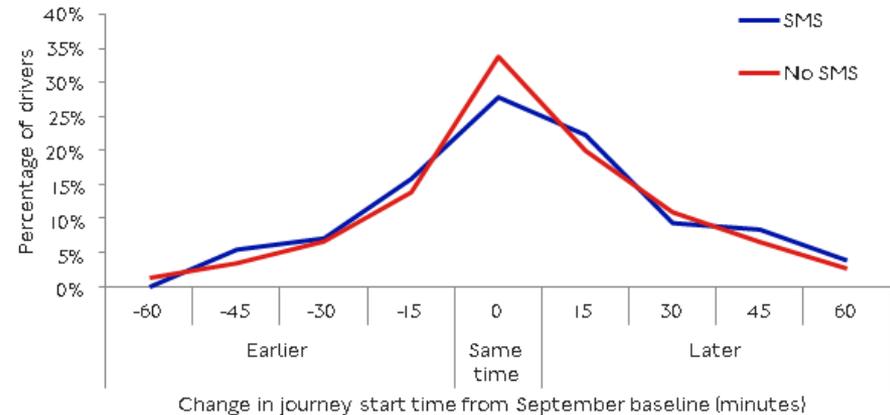
4 Tower Bridge

- A combined TfL communication and operational plan to support the City of London's closure of Tower Bridge in autumn 2016.
- We worked with Telefonica to monitor the behaviour change of customers and communicate directly with them using targeted SMS.

Outcomes:

- Our evaluation suggested that each of our objectives were met:
 - 1) Drivers changed to a number of different crossings, in line with advice, spreading demand and preventing congestion hotspots
 - 2) The diversion routes we promoted saw the largest increases in traffic flow
 - 3) During the AM peak (07:00-09:00), drivers receiving targeted SMS were 6 percentage points more likely to retime to avoid the worst congestion.

Change in start time of journeys during Tower Bridge closure



Additional benefits were:

- 90 per cent of media coverage was balanced, raising awareness without being a bad news story.
- Only 59 complaints were received (primarily about cyclists failing to dismount) despite an estimated 60,000 customers being directly affected by the closure every day.



5 Camden Points

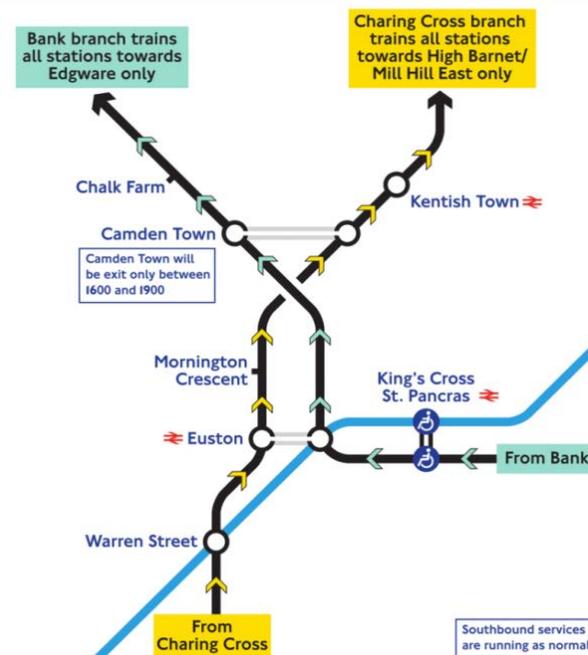
July – August 2016

- Five planned and four unplanned weekday changes to service patterns on the Northern line at peak times.
- Modelling predicted that without travel demand management , c 15,500 people would try to change to their correct branch at Camden Town each evening peak, potentially requiring trains to ‘non-stop’ to prevent overcrowding.
- Data also indicated that the majority of customers wait for the correct train to either Edgware or High Barnet, which meant we needed customers to start their journey on the correct branch to avoid interchange altogether.
- We identified key stations and developed simple travel advice as well as using creative graphics to explain these complicated changes and help customers complete their journeys.
- When the works unexpectedly overran we adapted the campaign to raise awareness and manage demand.

Outcome:

- The Northern line did not have to ‘non stop’ trains at any point during the closure

Changes to northbound Northern line trains Monday 1 August to Friday 5 August



Appendix 2
TDM Recurring Congestion
Project Case Studies 16/17



Crowding Communication on Rail and Underground (CCRU)

- Following a successful trial at 23 Tube stations in February 2016, which achieved a 3-5 per cent shift in customer behaviour, in September 2016 TfL focused our localised communications around a further 11 stations in the South-East London and Jubilee line corridor.
- Using localised busiest time station data and taking on board lessons learnt from the past trial, the communications encouraged customers to travel outside the busiest times and consider alternative routes and methods of transport where available, through a range of different channels and visuals
- This information has now been integrated into station pages for the 94 busiest stations, integrated into Journey Planner results for all LU stations and released as open data.

Outcomes:

- 18 per cent have seen our communications around the busiest time to travel; and
- 61 per cent of those who saw the campaign changed their travel as a result

London Bridge station

New or occasional customer at this station?

The busiest time on weekdays is:
17:30 - 18:00

If you travel outside of this time, your journey could be quicker and more comfortable.

Alternative travel options:

 Santander Cycles
 Walking

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 TfL Travel Alerts
@TfLTravelAlerts

Follow

The busiest time at #Waterloo station is between 08:30-08:45. Find out why we're improving station information tfl.gov.uk/improving-stat...

Waterloo Tube station
Busiest time to travel is 08:30 - 08:45 on weekdays



Typical morning peak travel times at this station

RETWEET 1 LIKES 4

12:00 pm - 30 Nov 2016

New or occasional customer at London Bridge Tube station?

Busiest time on weekdays
17:30 - 18:00



Typical evening peak travel times at this station

If you're able to travel outside of this time, your journey could be quicker and more comfortable.

Alternative travel options from this station  

To find out more, visit tfl.gov.uk

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Oxford Circus DMI: localised travel advice & analysis

- On a typical weekday during the evening peak, around 10,000 customers pass through Oxford Circus every 15 minutes. Seasonality data also shows that the station's busiest time is the run up to and during the festive season (late November to early January) when there is an average 7 per cent increase in customers.
- To support the station operations and a wider package of local customer communications, in December 2016 we trialled the provision of the travel advice and information via the Dot Matrix Indicator (DMI) at the entrance to the station.

Outcomes:

- Data analysis and research for the period of the trial showed that – in line with the travel advice given – Bond Street and Tottenham Court Road stations saw increased entries during closures at Oxford Circus, when the DMI messaging and additional communications including in-station vinyls were displayed.
- The trial was developed into Business as Usual and we will continue to use the DMI channel as a timely source of customer information which amplifies the other busiest times messages customers are exposed to.



9 Walking Tube maps

- We produced and released the 'Walking times between stations' map online in late 2015. Following this, a map indicating the number of steps between stations was released in 2016 along with a list of journeys which could be quicker to walk than to take the Tube.

Outcomes

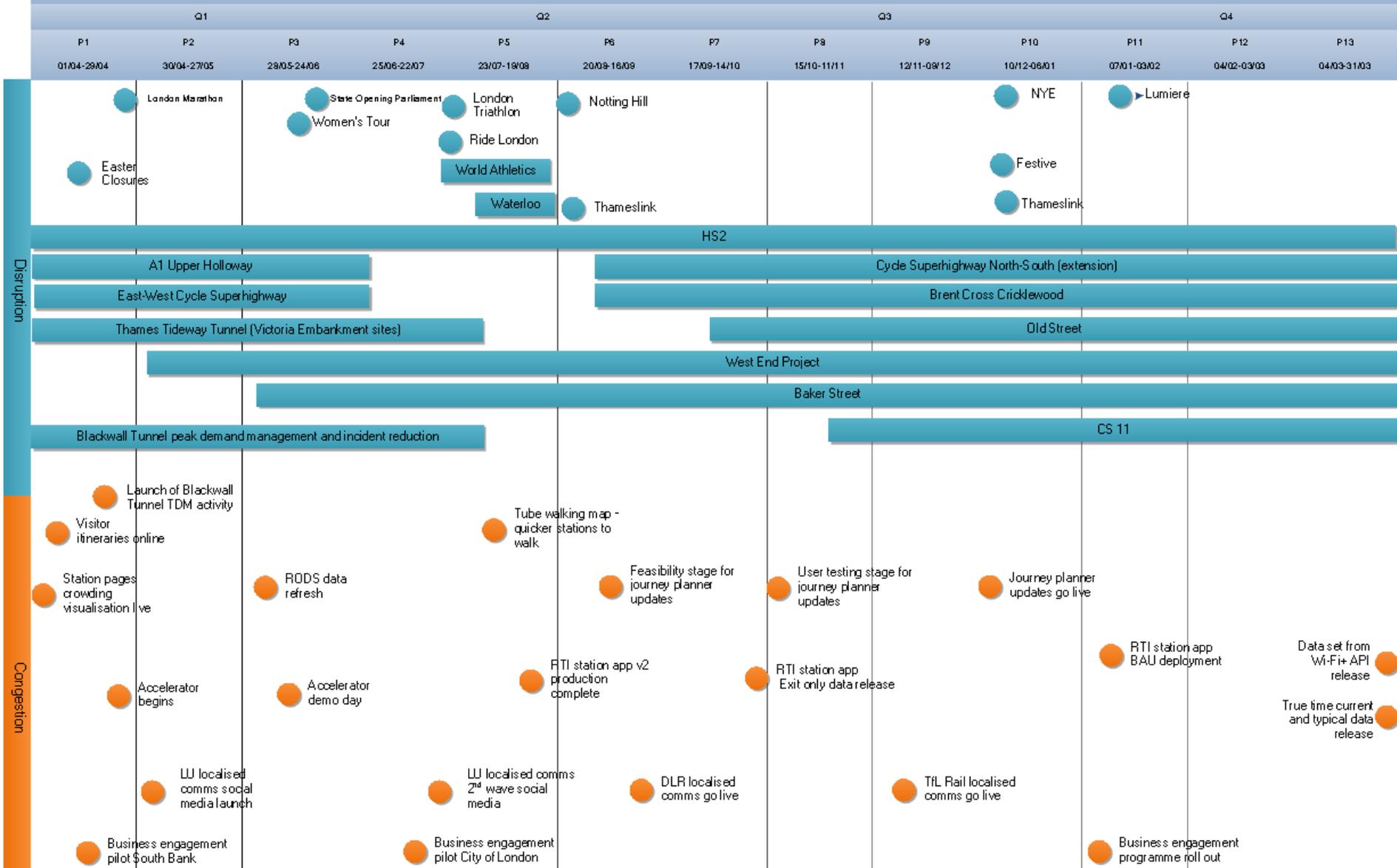
- TfL research ('Attitudes towards walking') indicated that a quarter of Londoners are aware of the map and four in ten of those aware say it has changed their perception of the distances between stations. Over a third (36 per cent) said that the map has encouraged them to walk instead of taking the Tube. Recent statistics below indicate the number of downloads from tfl.gov.uk additionally the map has been widely shared on social media:
 - Walking Tube map (from Nov 2015): 188,613 downloads
 - Steps version of walking Tube map (from Sept 2016): 44,058 downloads
 - Journeys that are quicker to walk (from Sept 2016): 19,609 downloads



Appendix 3



TDM Programme on a Page 17/18



Contact

Stuart Reid
StuartReid@tfl.gov.uk



**TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS