

TCF draft speech by Jonathan Roberts
22 September 2021
Transport Card Forum, Brighton.

1 INTRO

Good afternoon. As a first time visitor it's been a fascinating and informative day and a half.

Particularly, thanks to Smartex for inviting me as a commentator to cover the TfL slot.

There's plenty of slides to run through, within about 25 minutes.

Some are detailed and best read afterwards at your leisure, so I shall skip several and be brief about others.

And let's first answer the question implied in the agenda – is there a future for transport in London?

Yes there is a future. The Government actuary has projected an 85 million British population by 2085. That's 20 million more than now.

Where are they to be housed? Cover over the green fields? Don't think so, more likely to be, mainly, higher density in cities.

So this points to a strong need for more and better public transport, starting now.

2 TOPICS

There are four topics. These run sequentially from pre-Covid, through the last 18 months to now.

Then we look ahead, and anticipate the coming months and years.

There are two specific ticketing projects for the London and Home Counties areas which I'll then refer to.

3 SECTION A - PRE-COVID

Let's begin with how things were, less than two years ago.

4 A1 - 2005 HISTOGRAM

This map shows public transport boardings in Britain as long ago as 2005. Smart transport cards were just beginning, with London's Oyster.

We see that Greater London included about half of all 7 billion boardings. Oyster was about to have a major formative rôle.

It's worth remembering that shape of that histogram. Actual demand volumes have changed in subsequent years, but the broad shape hasn't changed radically.

5 A2 - 2019 LONDON & HOME COUNTIES VOLUMES

On to 2019. TfL was then handling about 10 million transactions every weekday across the London area networks, with around 4.4 billion journeys on different transport modes. More accurately we should call them journey stages, rather than journeys, as many journeys used more than one mode.

London buses top the list, with over 2 bn journeys –about the same as across the whole of the rest of England, if you count together the mets and shires.

- Tubes carried 1.4 bn
- national rail in London another half a billion
- and under half a billion on other TfL operations.

Ticketing which is only smart in part, is seen on the Home Counties rail network. That totalled another 600 million journeys if you exclude rail travel originating in London.

6 A3 - CONTEXT PRE-COVID (i)

What journeys were made, why, is relevant. Already some trends were emerging which are more prevalent post-Covid.

There were lengthier commuting distances - though also high density re-growth in inner cities. Season ticket use was declining, and their use was more discriminatory, with for example Thursdays increasingly being the new Friday.

Across the whole of England – London and elsewhere – buses struggled to attract and retain passengers, though there were exceptional areas such as Brighton & Hove and in Nottingham and, we have just heard, some recovery in the West Midlands. Also journeys were becoming more diverse in origin and destination.

7 A3 - CONTEXT PRE-COVID (ii)

Passengers and potential passengers were becoming choosier.

Quality public transport was having to market itself better and harder.

There were important policy goals emerging about sustainability and Net Zero.

8 A4 - PRE-COVID FORWARD PROJECTIONS (i)

On the budgeting and financial front, TfL was shedding costs and simultaneously striving for better outputs. (Not easy to do both.) It was not expecting revenue growth, but it did plan for more travel.

Getting Crossrail open was important for revenue raising, which will be referenced again later, but that scheme was facing a crisis. It's only now getting over that.

Crossrail 2's progress could best be described as glacial.

9 A4 - PRE-COVID FORWARD PROJECTIONS (ii)

The two slides which follow summarise TfL's plans, and demand and revenue projections, for the pre-Covid 5 year Business Plan, 2020-21 to 2024-25.

Please read them later. I'll just draw out several points.

10 A4 - PRE-COVID FORWARD PROJECTIONS (iii)

On the first slide, top left there is the decline in TfL external funding, and top right the high dependence on fares income (50 > 64%), one of the most extreme fares reliance in the whole western world.

11 A4 - PRE-COVID FORWARD PROJECTIONS (iv)

On the second slide, there is reliance on Crossrail to start turning a coin (£0.4 billion projected in 24/25, top right), compared with the big annual investment numbers required to maintain existing performance (£1.4 bn) and another £3 bn annually to improve performance and achieve the Mayor's transport strategy.

Highlighted in red are the elements which include investment in technical and technology features, amongst which are the smart ticketing systems.

Much of these now need renewal within London, because the initial rounds of smart ticketing investment were in the 1980s to 2000s, and they are now life-expired and technically obsolescent.

12 SECTION B - IMPACTS DURING COVID

Well what has happened in the last 18 months? We know how much public transport has lost in passengers and revenue, but what else has changed?

13 B1 - NEW ISSUES AND PRIORITIES

There's as much lost again in terms of:

- distrust of public transport
- reluctance to visit city centres rather than suburban supermarkets
- avoidance of offices and encouragement of home working
- and a preference for cars (and, one positive, more cycling).

Public transport survival has been utterly dependent on the Government, and we all have to thank DfT for what they have felt able to finance – and thank HM Treasury too... As BR Chairman Peter Parker used to point out, you can see straight through DfT to HMT!

14 B2 - BUS & TUBE TRAVEL VOLUMES

These screen shots show in detail the day by day use of tube and bus in London. The pre-Covid to now comparison shows the overall outcome: HIGHLIGHT RESULT between end Jan.20 and 9 Sep.21 - Bus 70%, Tube 52%.

15 B2 - NATIONAL RAIL VOLUMES *via* LONDON TERMINI

For main lines, the tube entry/exit volume at railway termini is a good proxy. The main line results are very similar to the Underground, at 49% recovery to 9/9/21.

Greater travel recovery is expected, now that schools are back. [It may only be anecdotal but the incoming trains I saw on Southern yesterday morning at Victoria were quite crowded.]

16 B3 - OPPORTUNISTIC CHANGE

Government and the transport industry have seized opportunities to make some changes during Covid.

Terms and conditions for financial support packages are obvious examples, eg for TfL, and for shire bus operators to collaborate more with LAs and their transport plans.

Actions on national railways have also been taken in hand, some major capital works accelerated, and others reprioritised or deferred

(for example, the Croydon area track remodelling) which we might come to regret in future years.

17 SECTION C - PROJECTIONS FOR COVID 'NORMALISED'

Let's now look forwards. What can be expected to be a new 'normality'? Let's first understand Covid itself.

18 C1 - WHAT IS COVID UP TO?

This diagram looks like a smart ticketing back office. Actually it's the history of the Covid genomes in Britain, and their proclivity to reproduce and mutate powerfully.

The virus certainly hasn't finished. Think of it as a living Microsoft, having just launched its operational version of Windows 1.0, with many follow-up adaptations!

19 C2 - WHAT DOES THIS MEAN FOR US & FOR

PUBLIC TRANSPORT ? (i) – getting real about Covid

So Covid is NOT going to go away, it will adapt further, and hopefully will decline in severity of harmful effects, but we as humans and we as an economic society will ourselves have to adapt.

We've seen how the virus has shaken political foundations. That creates an uncertain legacy about political and financial stability.

Making the right choices about public transport for the future is an important part of defining futures and how stable they will be. It's our job to assist that.

20 C2 - WHAT DOES THIS MEAN FOR US & FOR

PUBLIC TRANSPORT ? (ii) – strategic choices

Let's say the obvious. Pre-Covid trends which I covered a little earlier, have been accelerated in many cases. We should ask ourselves questions about whether the portents for future demand are solid or

ephemeral. We are now all so indebted as a nation state, with our futures deeply mortgaged.

Even if Saturday is the new Monday, Covid has created demand gaps, without in the short term refilling the empty seats with different types of demand.

Public transport has to offer cost efficient solutions, with that efficiency releasing budget commitments. Quality and stable investment is then more affordable in future years.

We've already discussed 'sweet spots'. Well the sweet spot here is to involve all parties in responding strongly to the loss of trust in public transport - and to create new baselines for joined-up travel solutions – whether a MaaS at once or in phases.

For example, Centre for London, a policy think tank, argued the other year for a mobility wallet which incorporated road pricing in a wider London travel package, not just a unified public transport card.

Londoners would be encouraged to have a 'total travel' account, not just financial but (in my view) possibly also including a sustainability budget. That could get overdrawn – just as we have been doing to the planet as a whole – but in the end there would be a reckoning. Of course, with that, sustainability and Net Zero would be the background policies.

As Simon Ardron said yesterday, there are also significant options for DfT and Great British Railways to be strong players in the reshaping of perceived public transport accessibility. I'll cover that shortly.

21 C2 - WHAT DOES THIS MEAN FOR US & FOR PUBLIC TRANSPORT ? (iii) – TfL projections

Please read this and the next slide later.

Here TfL is forecasting demand, in its latest board report, to be about 76% of pre-pandemic levels by the end of this financial year. Likely to be more on buses, less on rail.

22 C2 - WHAT DOES THIS MEAN FOR US & FOR PUBLIC TRANSPORT ? (iii) – NR projections

As another litmus test, Network Rail produced a range of forecasts in April this year for the Anglia Medium Term study, with a post-Covid reduction in demand of -5% to -35% by 2031, depending on your pessimism.

However that has to be overlaid on pre-pandemic forecasts for economic and population growth – if you believe those travel propensities will still exist in the same proportions...! (I don't necessarily...)

So, as an exemplar, that puts the 2031 answer into the -15% to +26% demand zone, compared to 2016.

23 C3 - MOVING FROM GUESSTIMATES TO DELIVERY - TfL revised plans at July 2021

We'll pass by this slide, which is a summary of TfL's latest budget and forecasts in July 2021. Please read it later.

24 C3 - MOVING FROM GUESSTIMATES TO DELIVERY - TfL 'must haves'

What that previous slide explains, is TfL's dependence on two 'must haves'.

Crossrail is a vital 'cash cow', if it can be both cause and consequence of Central London economic recovery. It also creates more elbow room – breathing room and travel space if you like. It helps kick start TfL's ability to afford other significant renewal and upgrading projects.

And TfL still has to keep heavily focused on more and more operational efficiencies.

This is where improved ticketing is an essential element – including:

- renewal of obsolete ticketing kit
- upgrading the back office systems to be fully fit for future needs, in technical liaison with GBR
- also the potential for further smart ticketing integration in the Home Counties.

25 SECTION D - FORESEEABLE SMARTCARD PROJECTS

Let's now focus on two big smart ticketing projects for London and the Home Counties, where preparations are under way and 'London style' ticketing will be expanded.

As Simon intimated yesterday, the detail is where projects will succeed or struggle.

26 D1 - TfL SMART TICKETING UPGRADE (i)

TfL's primary objective is to update and expand its smart ticketing capabilities, under the name '*Project Proteus*'.

I checked up on Proteus. He is the "[Old Man of the Sea](#)". He can foretell the future but will change his shape to avoid doing so; he answers only to those who are capable of capturing him.

So perhaps the "Old Man of the Sea [C]" also stands for contactless !

I've provided a link to several public and technical documents on Proteus, including an OJEU prior information notice.

The scale of the project is large, about £1.1 bn, though not all to be incurred at once.

27 D1 - TfL SMART TICKETING UPGRADE (ii)

Bear in mind that expanding and improving back office capabilities is a vital element, to be able to interface in future with GBR's smart ticketing objectives, and maybe with other local transport ticket products.

Let's look particularly at the passenger-facing implications of this project.

Have season tickets now lost their validity? Use of these tickets has declined from about 50% to, now, probably nearer 20%.

Essentially, season tickets provided a guaranteed paper-based cap on pricing for period travel. That can now be guaranteed through electronic media.

28 D1 - TfL SMART TICKETING UPGRADE (iii)

Paper and magnetic stripe media might drop further down the scale of usage, even if they don't disappear altogether.

The original Oyster devotees (I'm one) should be pleased that they'll get a better back office and more user flexibility. We'll probably have to migrate to a more modern card, to help the system upgrade.

But the real jewel in TfL's crown is now Contactless. It is nearing 45% of all ticket use around London, so approaching 4½ million transactions every weekday. This is far more than elsewhere on UK public transport.

Because Contactless is generic, relying on EMV smart capabilities, it is also more flexible for PAYG use and across different transport operators.

It also offers great potential, not just for known public transport passengers, but also for many non-public transport users, who in a

Net Zero world need to be persuaded to try public transport in future years.

29 D2 - DfT AND GBR ENGAGEMENT WITH TfL (i)

This leads onto the second big smart ticketing project for London and the Home Counties. This is 'Project Oval'.

The December 2019 General Election included a Conservative manifesto commitment – SPELL OUT from slide.

This is on DfT's must do list, and, for one understandable political reason, it has to be delivered by the end of 2024...

Think of it as a larger Oyster. Actually, why don't we call it the Lobster – the London and Outer Boroughs Oyster !

The only practical way to deliver this quickly and reliably is to work in concert with TfL's PAYG system, and use that as the baseline for expansion.

As we see, DfT is already talking to the market place about the detail.

30 D2 - DfT AND GBR ENGAGEMENT WITH TfL (ii)

Its geography is interesting.

~200 stations in the Home Counties represent some but not all of the possible stations.

There are different ways of defining useful catchments.

31 D2 - DfT AND GBR ENGAGEMENT WITH TfL (iii)

- Options for 30-50 mile radius catchments

Do you choose to prioritise a dense zone of stations within a 30 mile radius, or be selective, possibly by corridor, within a wider 50 mile

radius – that could include Brighton? Here is one map showing that range.

Perhaps it could depend on the strengths of different sub-regional geographies, such as embracing also an Oxford-Cambridge East-West Rail, with the DLUHC plans for much housing along that corridor?

32 D2 - DfT AND GBR ENGAGEMENT WITH TfL (iv)
- Options for TTWA / journey time catchments

A different way of cutting the cake is to focus on travel-to-work-areas. Here is another map, highlighting journey times within 70 minutes of London (and taking ‘Southern Electric’ for granted).

You may find some features of interest – for example, contrast the extent of access to/from Anglia and to/from the East and West Midlands.

As for HS2... Crewe, anyone? In about the same journey time as London-Brighton.

33 D2 - DfT AND GBR ENGAGEMENT WITH TfL (v)
- Procurement choices for DfT

As we see, there are choices to be faced by the DfT.

The TfL system works, and if selected will guarantee reliability, which is important for passenger trust.

DfT will have to decide on the best procurement mechanism.

34 D2 - DfT AND GBR ENGAGEMENT WITH TfL (vi)
- GBR complexities, and Oval/Proteus overlaps

The Lobster also overlaps with GBR’s single contactless intentions. Which itself is a large logistical exercise.

There will be £100 Contactless availability shortly, in line with changes to general commercial rules. So that will cover a wide range of fares.

I'll point out several TECHNICAL points of complexity and overlap between Lobster and Proteus. [Especially funding and installation issues, and the timing and project scope overlaps. The details must be got right.]

35 D3 - MEDIUM-TERM 'ISLANDS AND BRIDGES'

Islands and Bridges – self-explanatory from the histogram.

'Islands' are the City regions defined by travel volumes.

'Bridges' link the City regions, possibly with different ticketing products, eg digital/airline style, not just Contactless.

Unclear how the shires and rural areas might be handled. [They may not be able to afford a high cost solution, but their need with Net Zero for public transport accessibility is unquestionable.]

As a commentator, I'll just ask the obvious question. How many different back office systems do we really need, if the London technology already handles about half of all public transport journeys in Britain? It's a different story about front-facing and apps.

On the railways, the formative processes with GBR mean they need all the help they can get for smart ticketing.

TfL acknowledged in July this year that it was "in discussion" with DfT, and with the rail industry.

36 D4 - KNOCK-ON OPPORTUNITIES

Strong marketing scope.

Net Zero one year nearer already...

Will integration actually reach the Home Counties?

This could help Patrick's decarbonisation goal in Brighton & Hove.

Reading at last – a natural ally to the London region?

Can poor Windsor be helped along?

37 SUMMARY OF PRESENTATION

As set out in the slide.