



Appendix 4

Surface transport access to Heathrow Airport

**Presentation to the Assembly
Transport Committee**

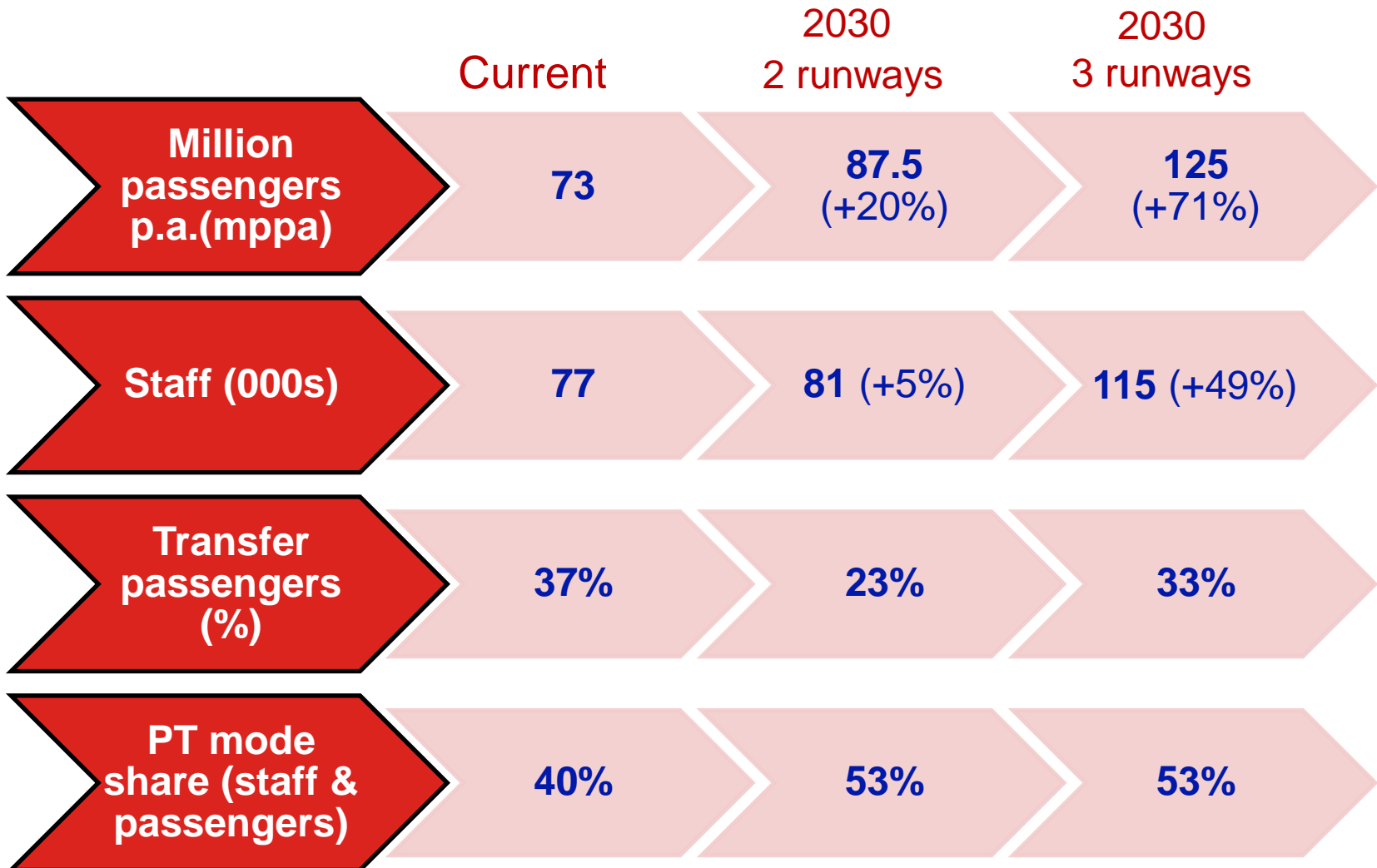
10 November 2015

Introduction

- Airports Commission's (AC's) Final Report published in July 2015
- AC recommended a 3rd runway at Heathrow with an integral package of conditions
- Government decision on airport expansion this year
- This presentation provides TfL's view on the AC's analysis and conclusions
- The presentation:
 - summarises the AC's assessment
 - identifies TfL's concerns
 - sets out TfL's conclusions on the implications for London

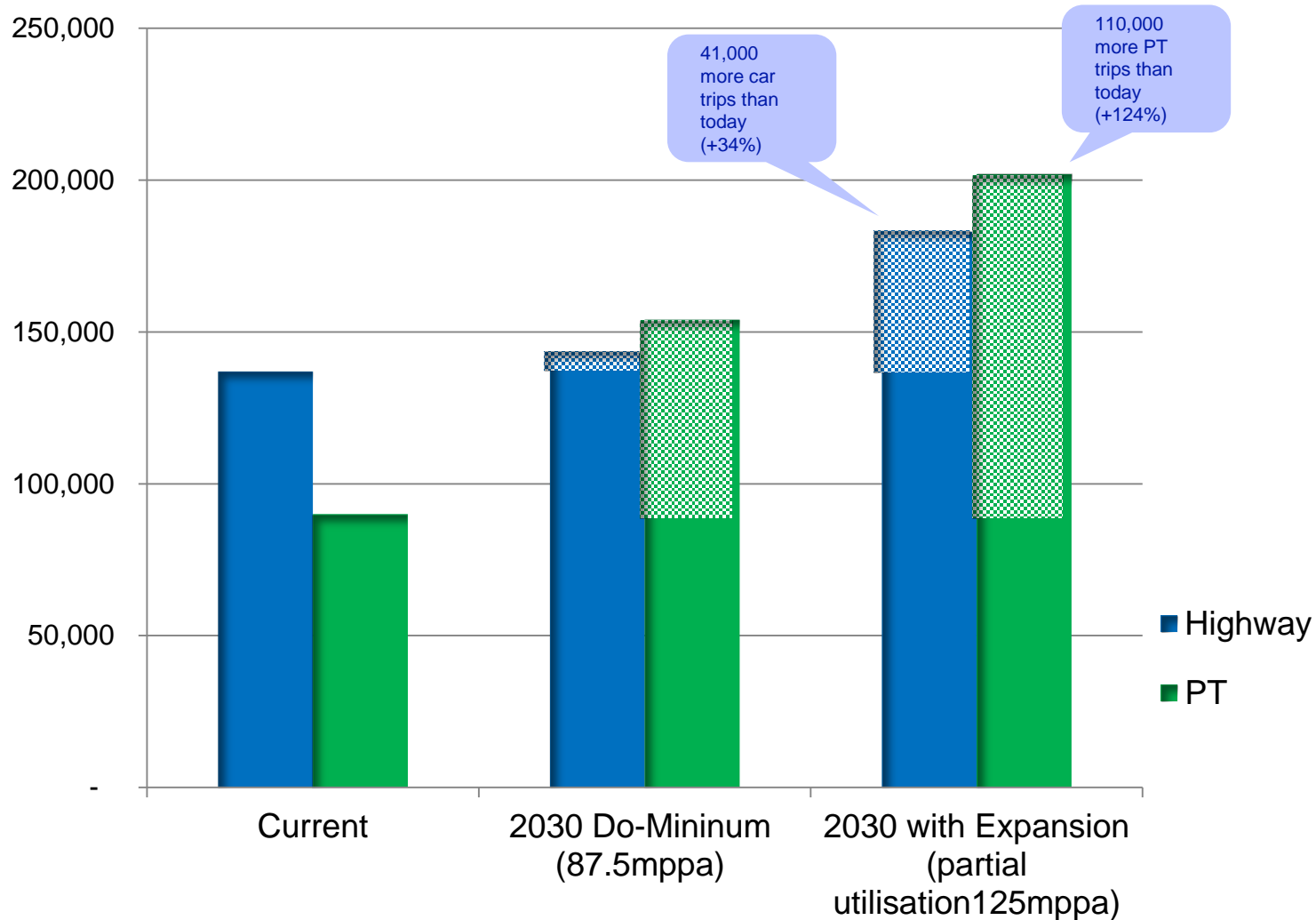
The Airports Commission's assessment

The AC uses a number of assumptions to assess the surface access impact of a 3 runway Heathrow



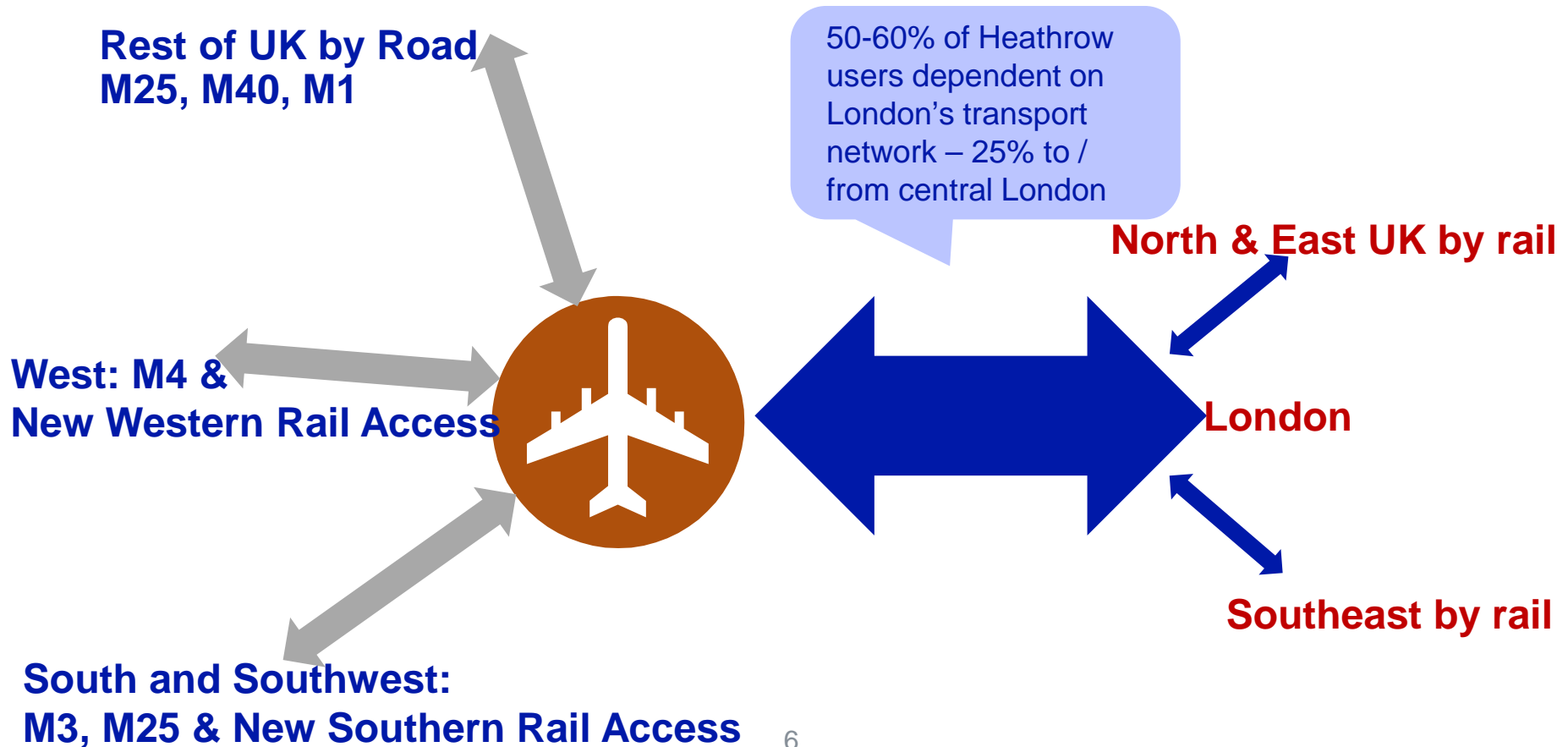
The AC estimates this will lead to over 100,000 more trips on public transport a day compared to today...

Heathrow **daily** demand forecasts using AC's assumptions

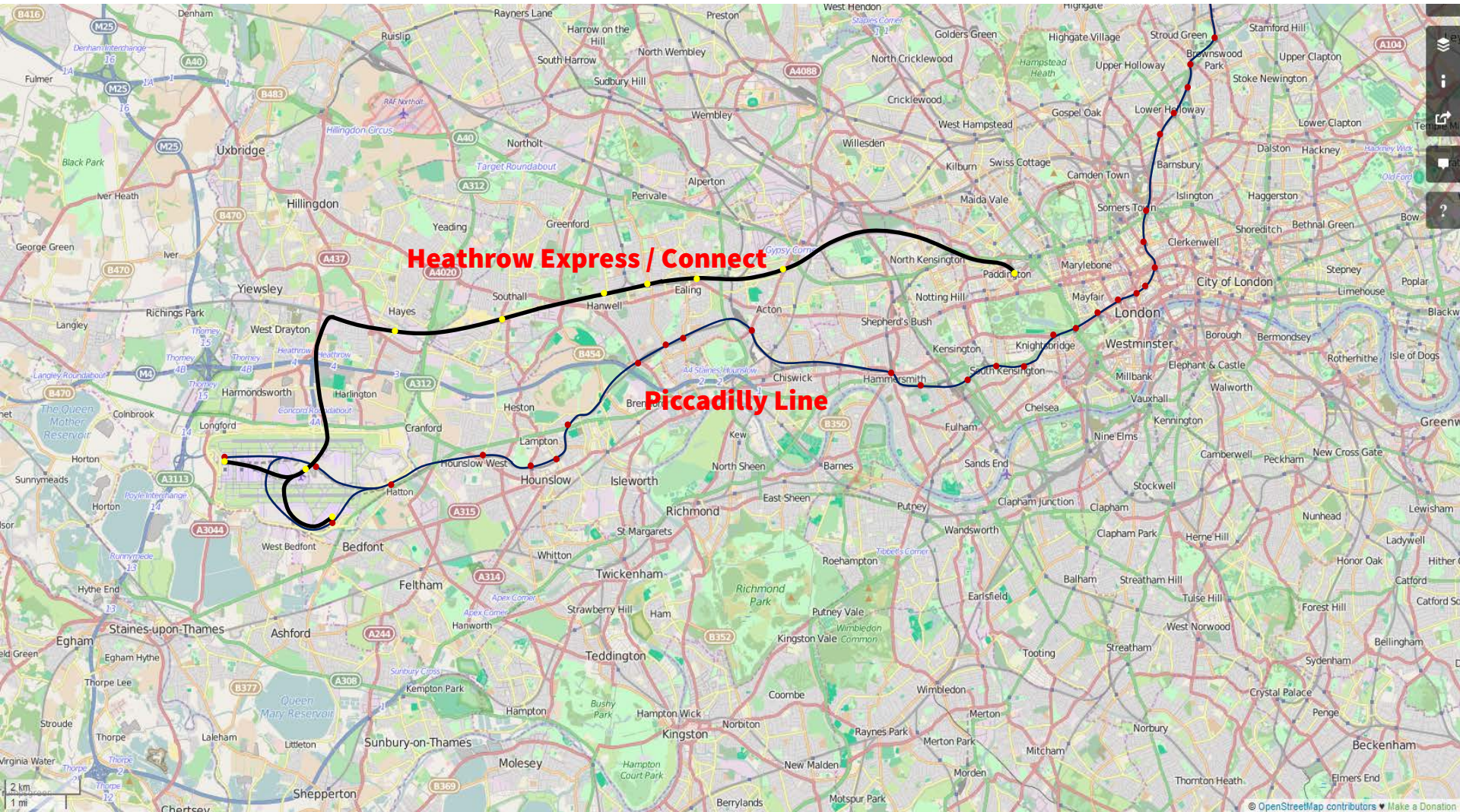


The majority of Heathrow airport's passengers and staff currently use London's transport network

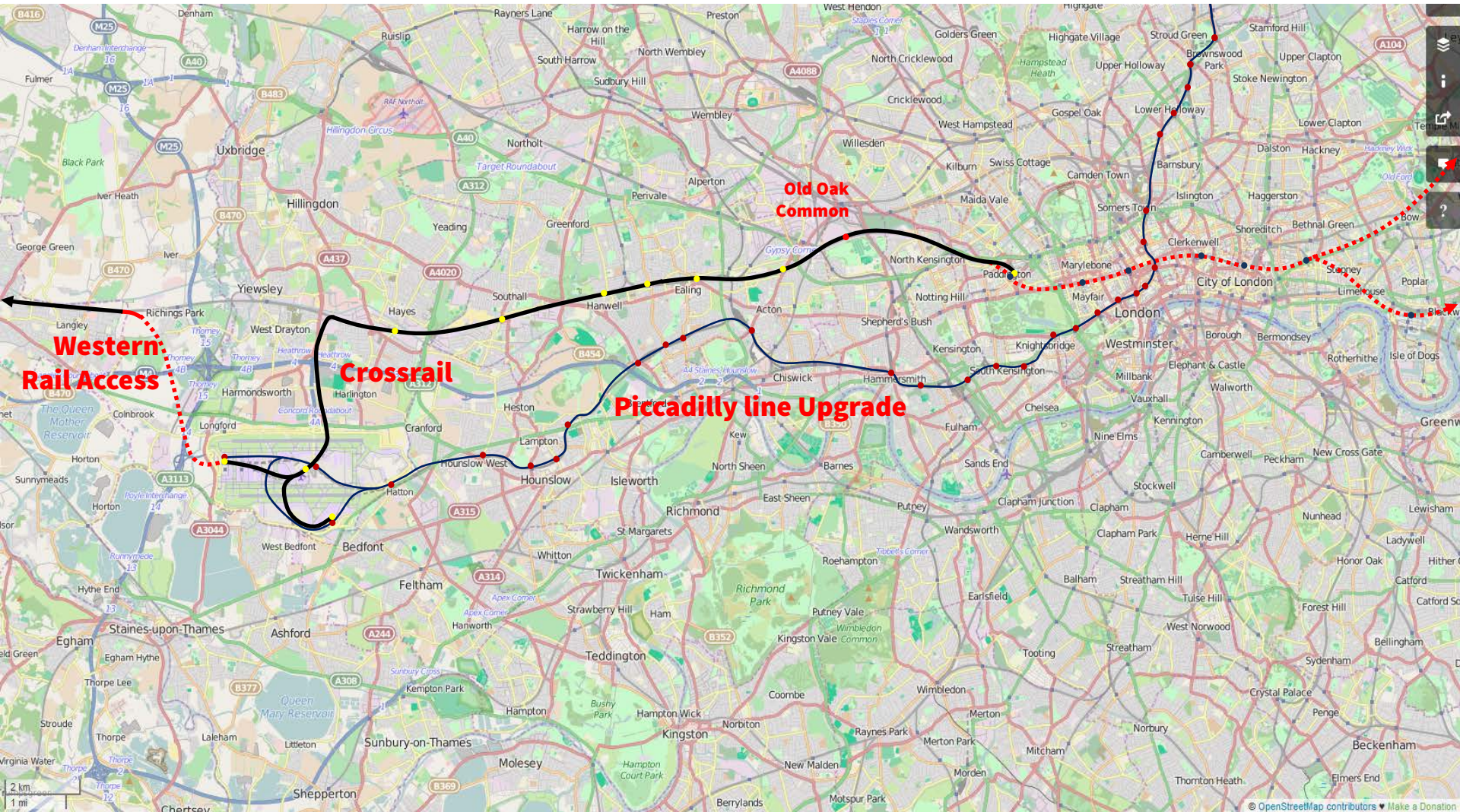
The AC forecasts at least half of future passengers will travel through London with a similar proportion for staff



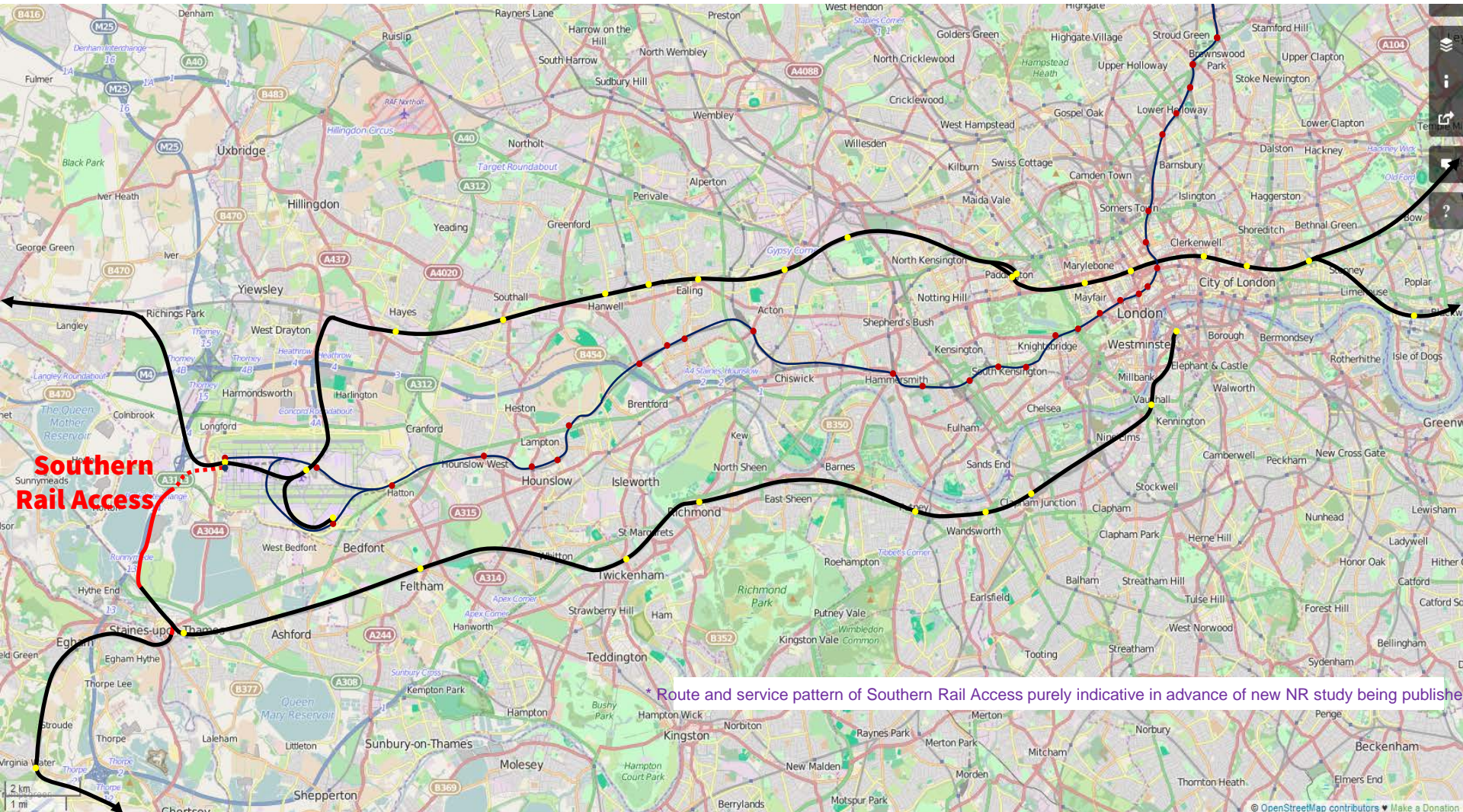
Heathrow is currently served by Heathrow Express, Heathrow Connect and the Piccadilly Line



Without a third runway, it will benefit from Crossrail, the Piccadilly Line upgrade & a new Western Rail Access



With a third runway, the AC indicated that a Southern Rail Link would be required



* Route and service pattern of Southern Rail Access purely indicative in advance of new NR study being published

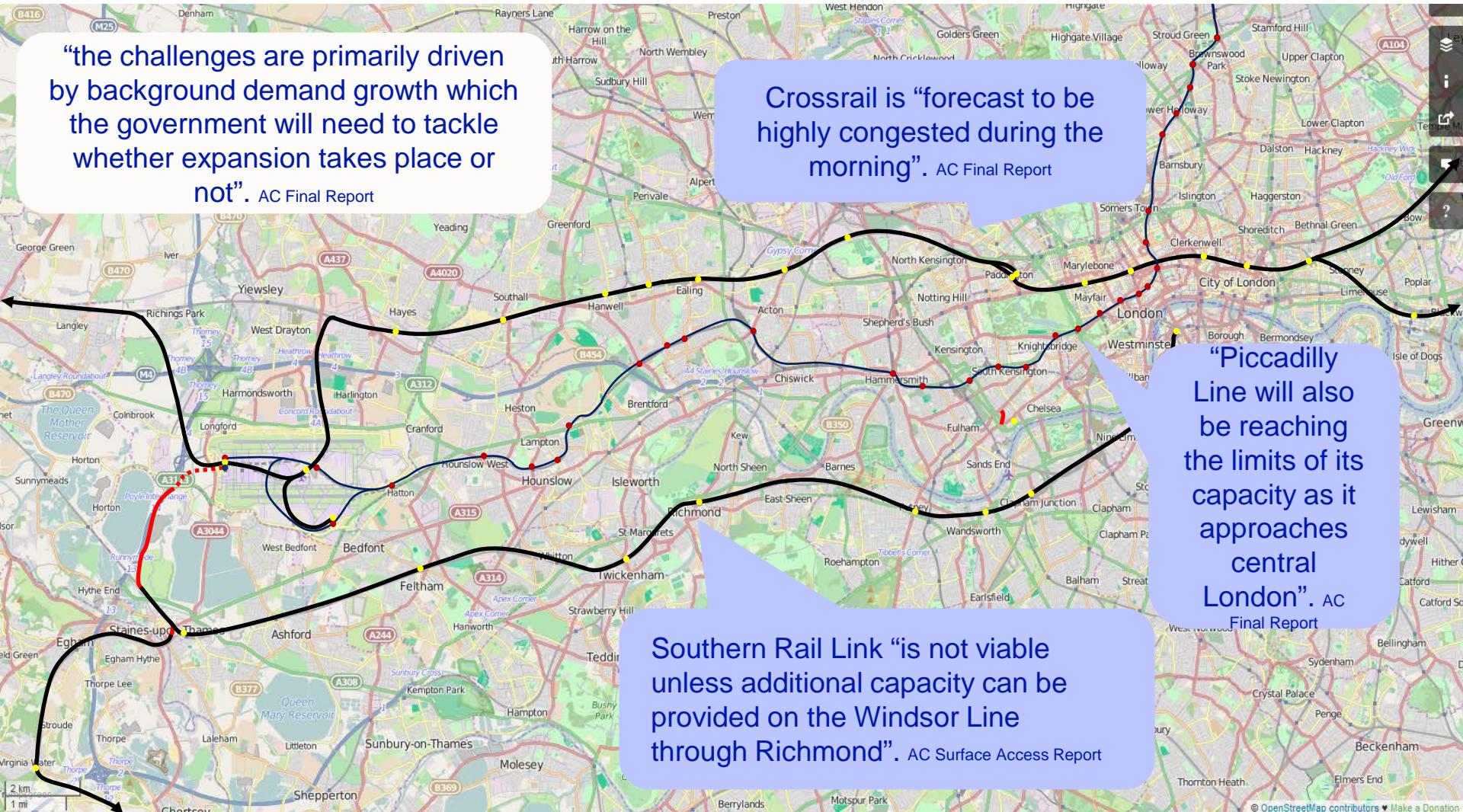
However the AC indicates there will be significant rail capacity challenges in 2031 with an expanded airport

“the challenges are primarily driven by background demand growth which the government will need to tackle whether expansion takes place or not”. AC Final Report

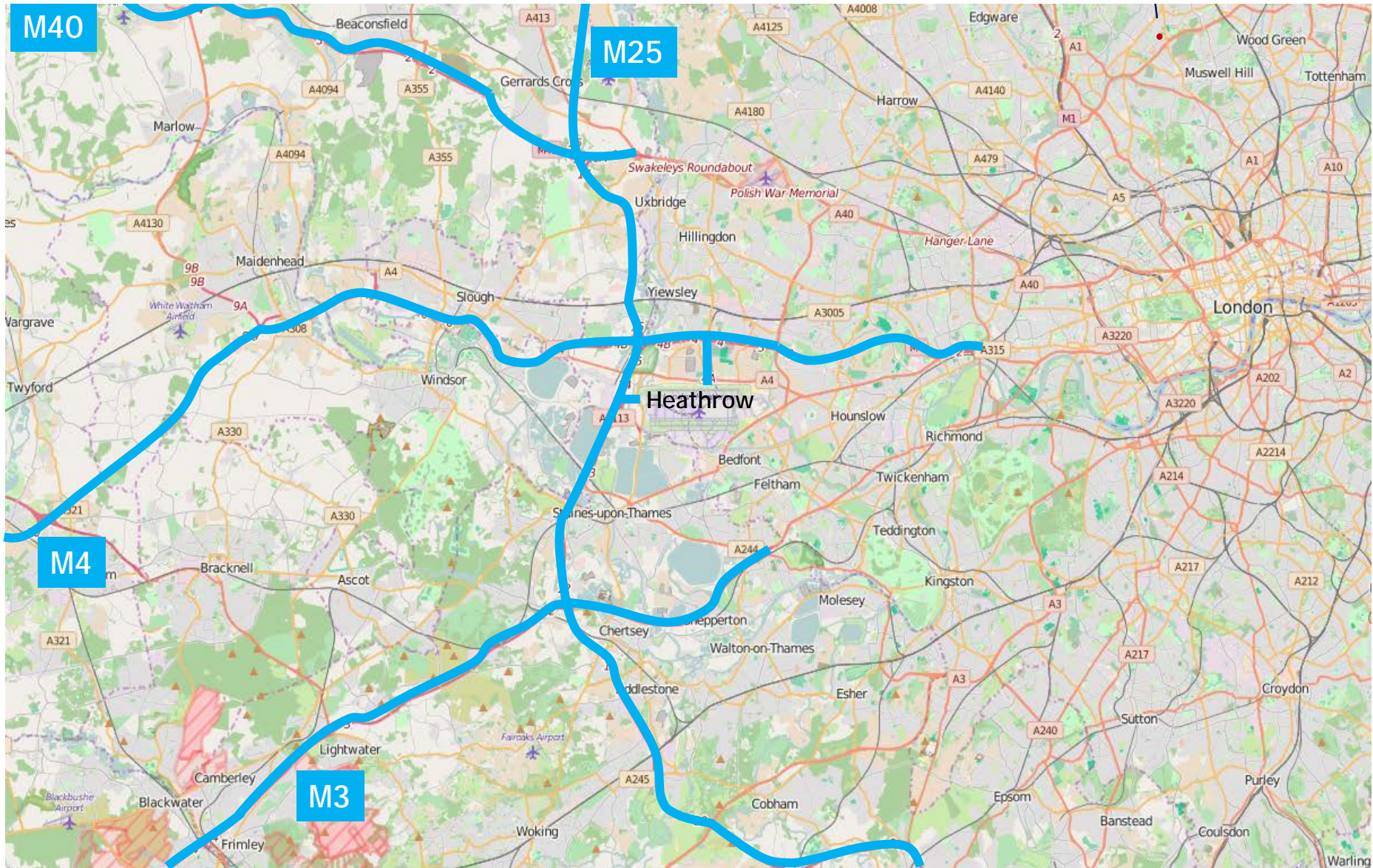
Crossrail is “forecast to be highly congested during the morning”. AC Final Report

“Piccadilly Line will also be reaching the limits of its capacity as it approaches central London”. AC Final Report

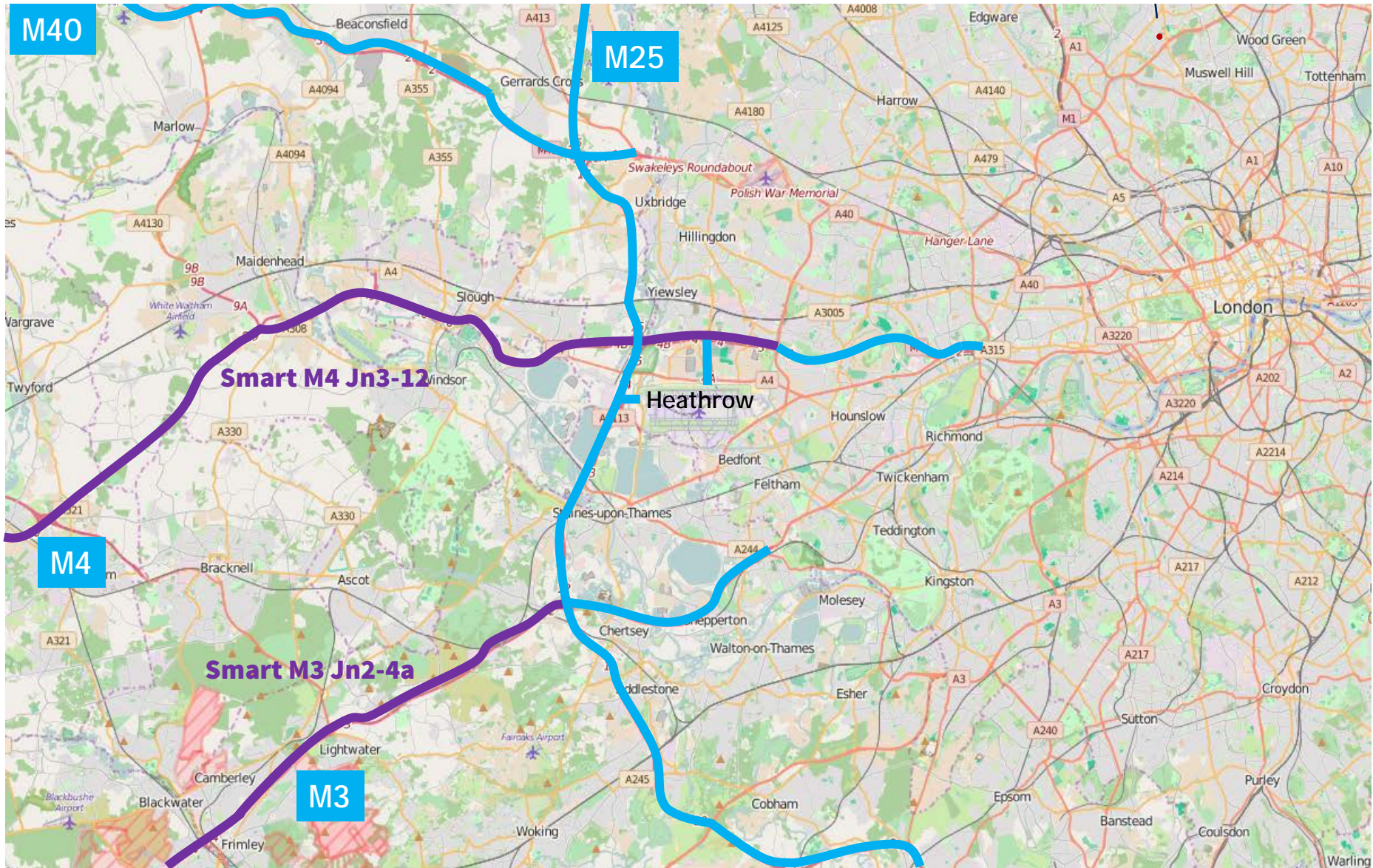
Southern Rail Link “is not viable unless additional capacity can be provided on the Windsor Line through Richmond”. AC Surface Access Report



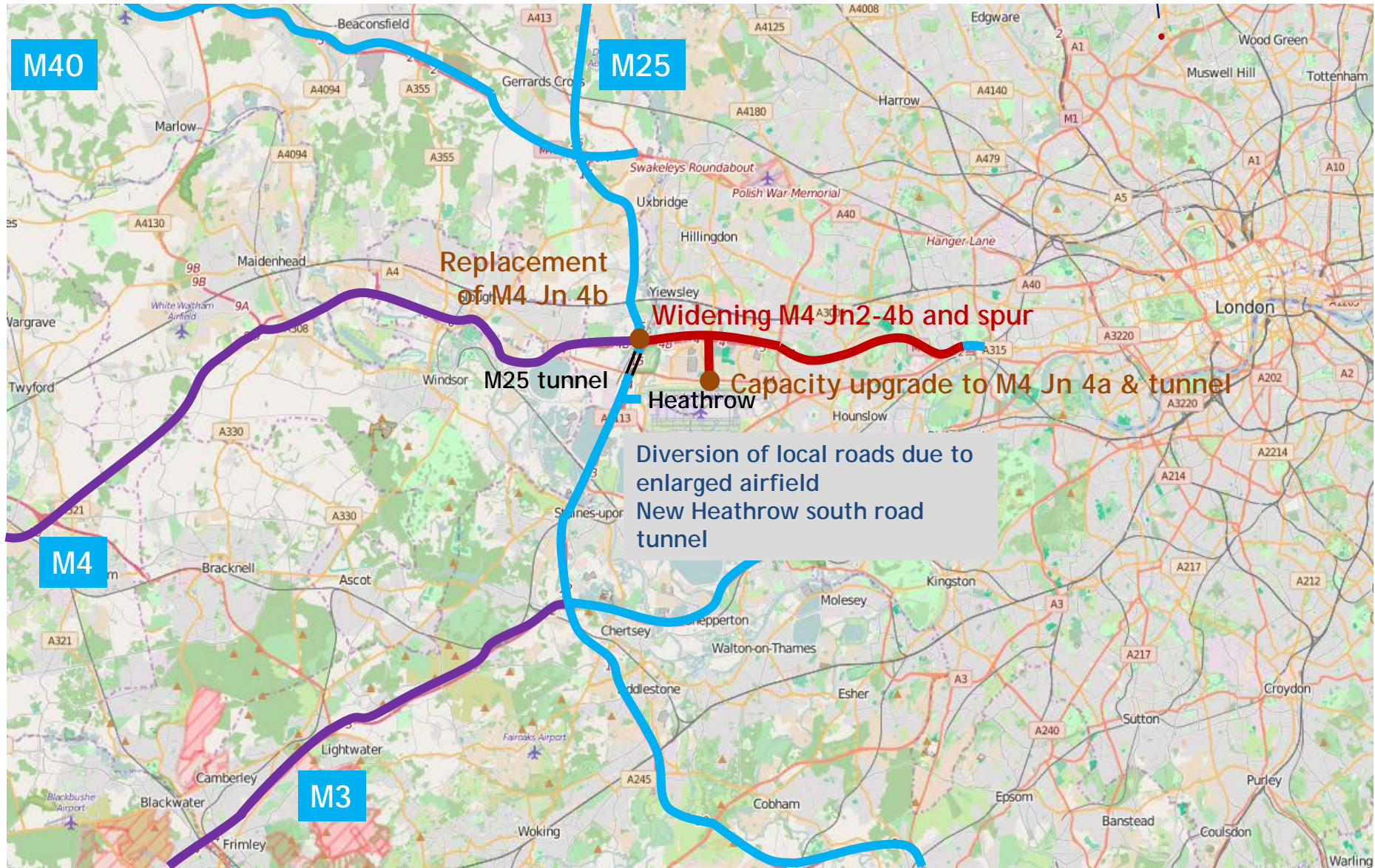
Heathrow is connected to some of the busiest motorways in the UK



Without a third runway, smart running on the motorway network is expected to increase capacity on the M3 & M4



With a third runway, the AC indicated that the M4 would need to be widened along with enabling schemes



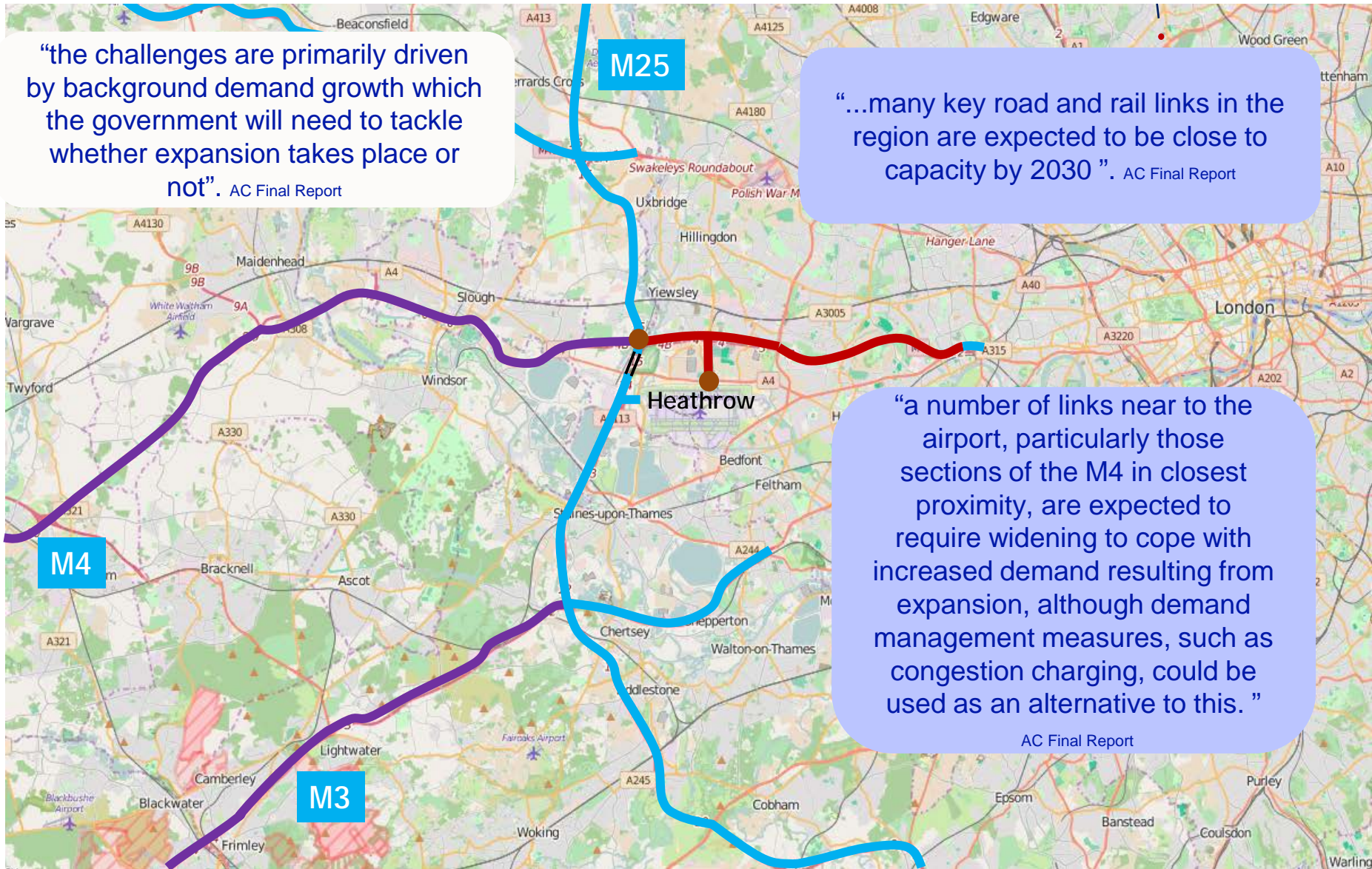
However the AC indicates there will be significant highway capacity challenges in 2031 with an expanded airport

“the challenges are primarily driven by background demand growth which the government will need to tackle whether expansion takes place or not”. AC Final Report

“...many key road and rail links in the region are expected to be close to capacity by 2030”. AC Final Report

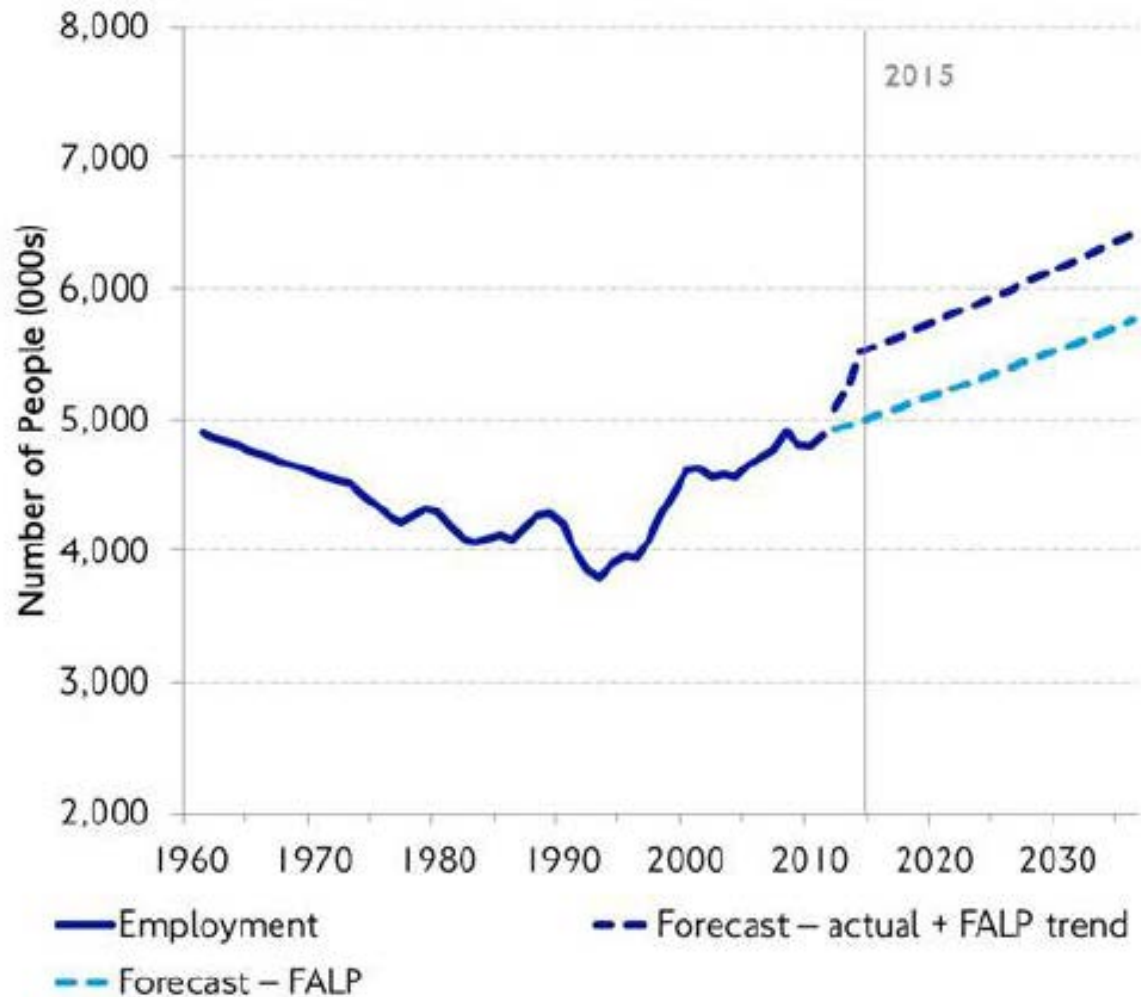
“a number of links near to the airport, particularly those sections of the M4 in closest proximity, are expected to require widening to cope with increased demand resulting from expansion, although demand management measures, such as congestion charging, could be used as an alternative to this.”

AC Final Report



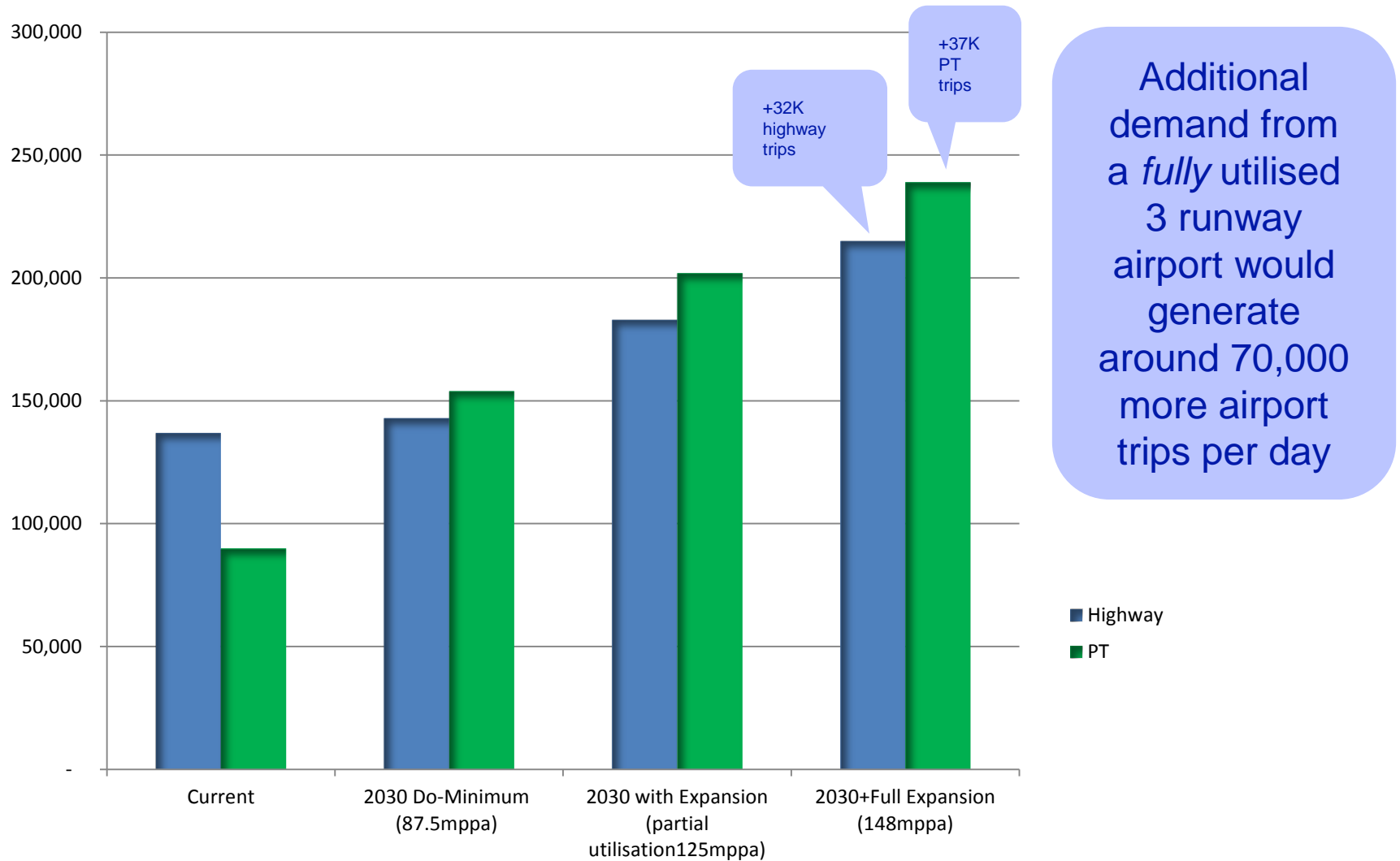
TfL's concerns with the
AC's assessment

Background travel demand will be higher than assumed by the AC with the GLA's new interim employment forecasts



The AC has not assessed the impact of *full* utilisation of the 3 runways

Heathrow daily demand forecasts:

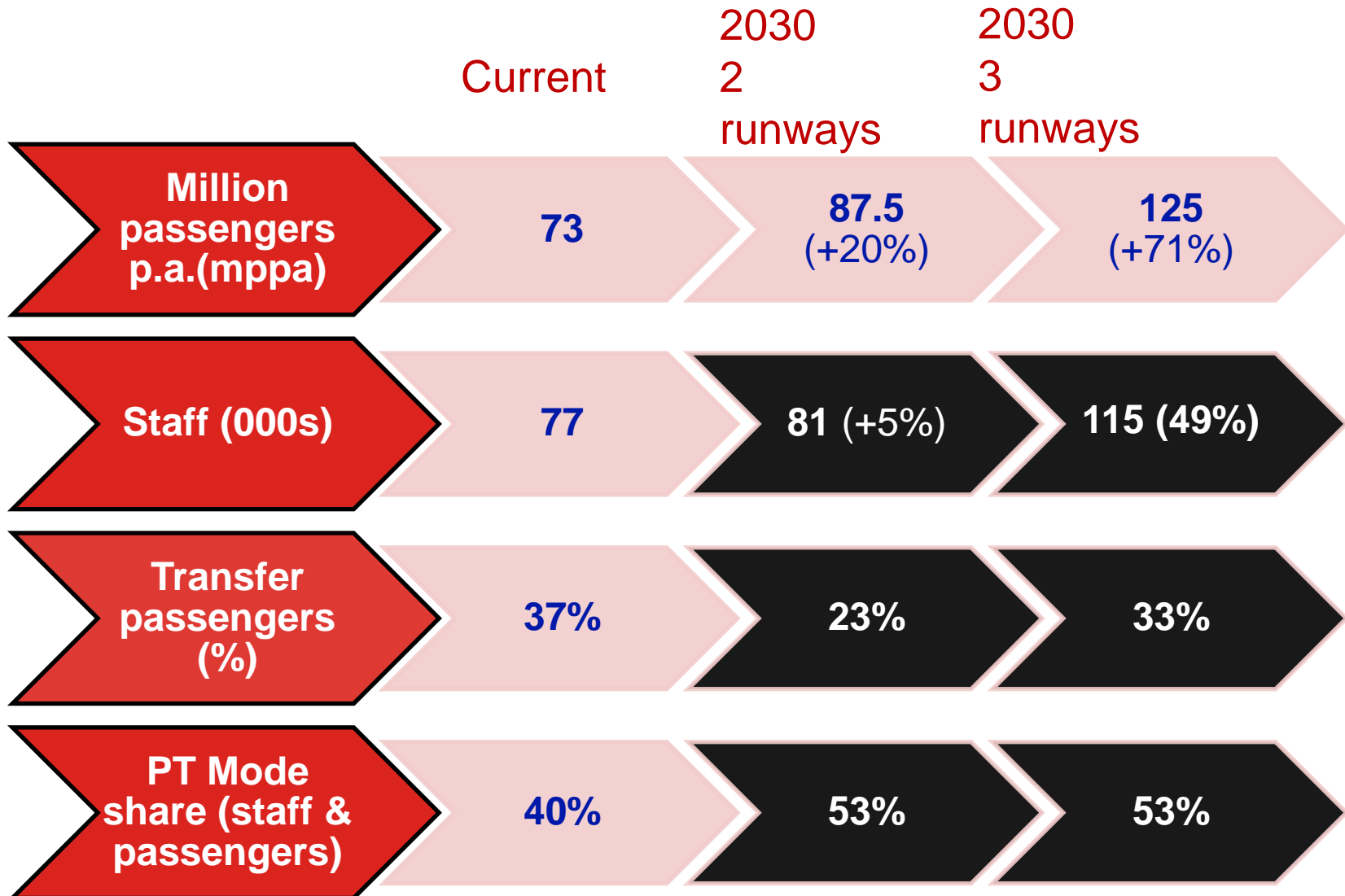


The AC has not included the full impact of additional freight and growth in business activity around the airport



Thousands of additional freight and extra activity generated from business growth around Heathrow have not been fully included in the AC's analysis

Many of the other assumptions could be seen as optimistic & sensitivity testing should have been undertaken

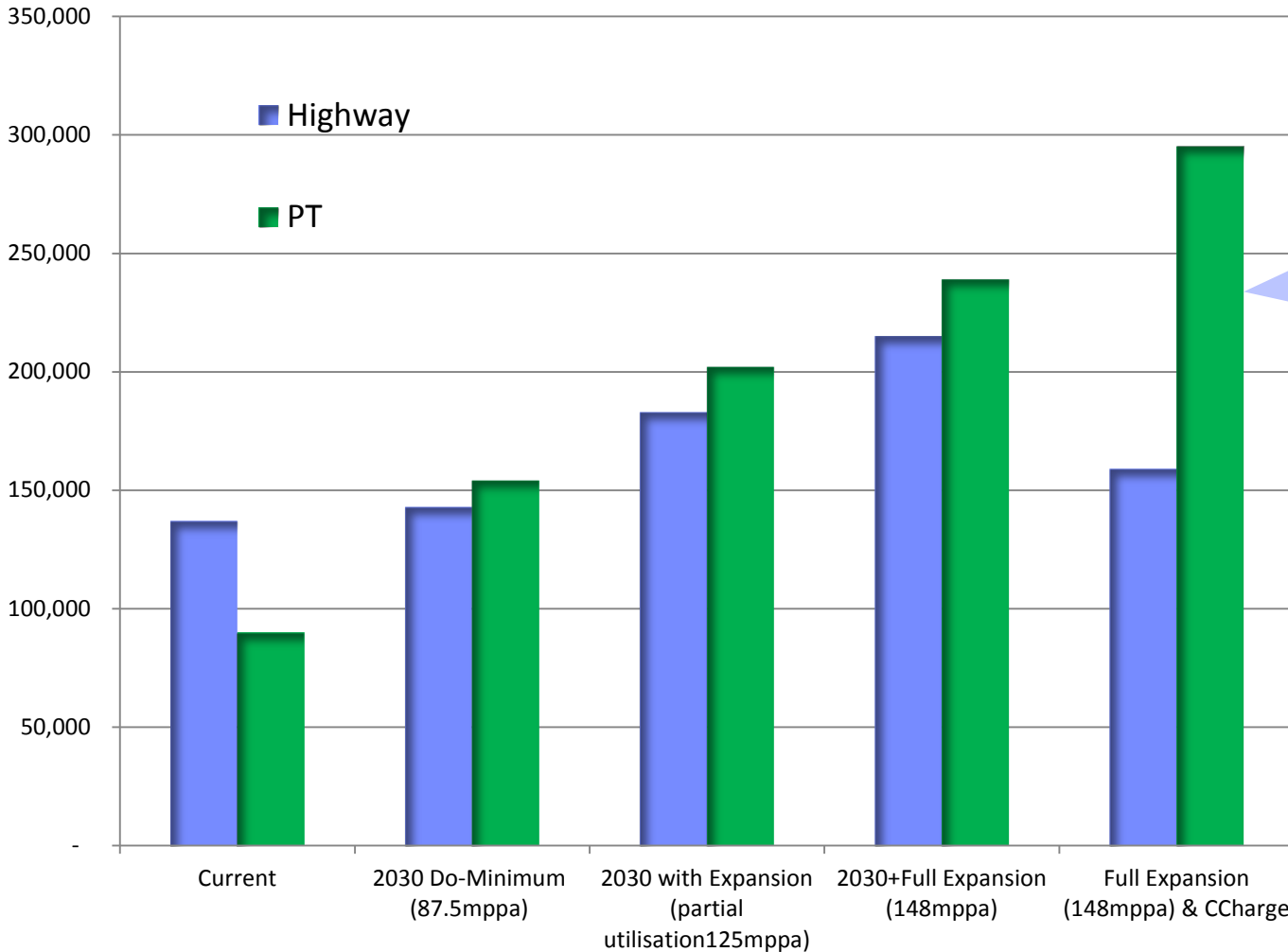


The extra runway results in NO₂ concentrations on Bath Road higher than the current worst link in London

- **Without mitigation** the AC found that the Bath Road would have the highest NO₂ concentrations in London. This would delay compliance with EU limits even with the AC's conservative traffic assumptions.
- **With partial mitigation** the Bath Road would fall just below the worst link in London so, it is claimed, would not delay compliance. However:
 - The AC has **underestimated highway demand** which will add to the air quality challenges in the area.
 - Mitigation measures are poorly developed
 - **Transformational changes in PT** would be required to meet limit values.
 - The **'last link' approach is legally flawed** and open to challenge and does not support the AC objective of improving air quality
- Defra's recently published **Draft Air Quality Action Plan** substantially changes the baseline air quality and brings forward compliance by 10 Years. The impacts of a 3rd Runway at Heathrow must be **completely reassessed** in light of the revised action plan.

A road user charging scheme to address congestion and air quality would add substantial demand to public transport

Heathrow daily demand forecasts: with charging (AC assumptions)



Road user charging adds c90,000 additional PT trips per day to AC's 2030 estimate

"demand management measures including congestion charging would increase demand on sections of the rail network that are already forecast to be congested in 2030." AC Consultants Demand Management Study

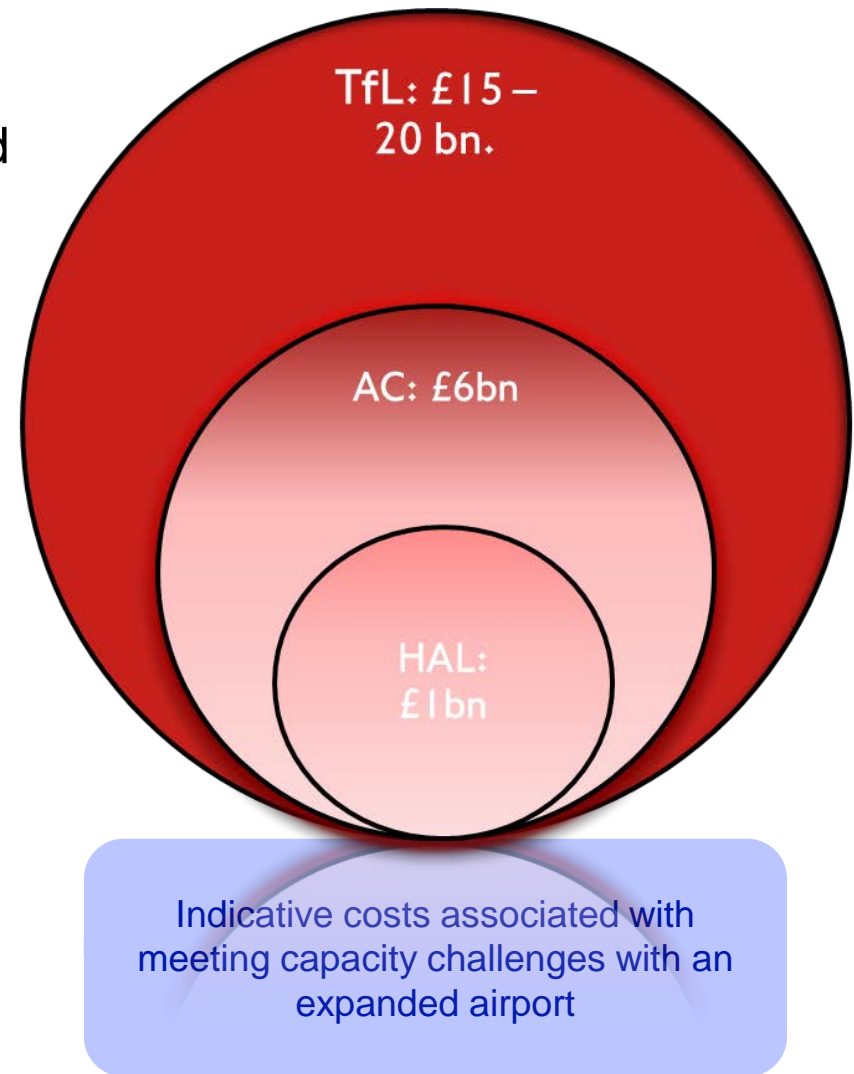
Source: **AC Demand Management: Road User Charging Analysis**,

Para. 4.1.1 "reduction of car mode share among airport passengers from 47.1% to 38.7%; Para 4.2.8 "20% reduction in employee car demand"

Conclusions

A substantially greater level of public transport investment will be required

- **Substantial transport capacity challenges** arising from background demand growth & Heathrow expansion.
- **AC: Expansion is 'not a transformative factor'** that would significantly change the scale of these challenges' i.e. it is not Heathrow's problem.
- **TfL: If non-committed schemes are required for a 3rd runway they need to be identified and their costs included to ensure delivery with a 3rd runway.**
- Without commitment to additional investment there's a real risk of severe impacts on both airport and non-airport travellers, increased crowding and congestion, and an ²³



Questions



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FOR LONDON**
EVERY JOURNEY MATTERS