

## SHORT ( & MEDIUM) TERM MEASURES - EXECUTIVE SUMMARY

MEASURE SET	Surface Infrastructure	
MEASURE TITLE	Improvements to surface access infrastructure for Heathrow	
MEASURE SUMMARY	This measure includes proposals to enhance surface access to Heathrow, by rail, underground and bus, and increase mode share for public transport access.	
MEASURE INVOLVES	<div><div><input type="checkbox"/> Behavioural Change</div><div><input checked="" type="checkbox"/> Infrastructure Change</div><div><input checked="" type="checkbox"/> Operational Change</div><div><input type="checkbox"/> Regulatory Change</div><div><input checked="" type="checkbox"/> Technical Change</div><div><input type="checkbox"/> Policy Change</div></div>	
WHAT DOES THIS ADDRESS?		
<p>LHR is a major hub and destination airport, but suffers from traffic congestion and limits in rail/air connectivity.</p> <p>Heathrow Airport has good motorway and rail access; however there are a number of constraints that reduce the utility of these surface transport links. This measure set considers infrastructure improvements. There is the opportunity to improve surface transport for Heathrow Airport, which would enhance the passenger offer and help Heathrow deliver its Environmental and Economic goals, including the Heathrow Commuter program. Heathrow has a target of 40% public transport access, which additional infrastructure improvements could help it continue to deliver. Surface transport improvement should help Heathrow deliver additional public transport mode share for air passengers and staff.</p> <p>This issue does not address airport capacity directly, but improvements tending to the medium term would support the PAX capacity growth of the airport. Improving to surface access to airports is identified within the Aviation Policy Framework as a priority in paragraphs 1.92 to 1.98.</p>		
WHAT WOULD BE DONE?		
<p>A proposed range of rail and highway upgrades, including Piccadilly line upgrade, central London downtown air terminal, London Waterloo to LHR rail services, HS2 to connect directly to LHR, relocate Heathrow’s bus and coach station, enhance highway capacity, rail connection between London airports, and high-speed rail options.</p>		
WHAT IS THE IMPACT?		
<p>The impacts would be expected to be:</p> <ul style="list-style-type: none"><li>• Time savings for many users</li><li>• Increased access</li><li>• Enhanced connectivity between LHR and proposed connections</li><li>• Depends on individual projects as to whether benefits exceed costs</li><li>• May have positive impacts on emissions if modal shift occurs</li></ul>		

MEASURE SET:	Surface Infrastructure	Short Term	<input type="checkbox"/>
MEASURE TITLE:	Improvements to surface access infrastructure for Heathrow	Medium Term	<input checked="" type="checkbox"/>

## PROPOSAL SUMMARY

Proposed by:	ABTA(005), CBI(012), CILT(013), Enterprise M3 LEP (022), Heathrow Hub(025), Ginsburg (033), IOD(039), LCCI(042), Rothwell(060), Heart of the SWLEP(023), IARO(040), KFAS (041)		
Proposal:	<p>This measure covers enhancing surface access to Heathrow, by rail, underground and bus, and increase mode share for public transport access. It includes:</p> <ul style="list-style-type: none"> <li>• completing the Western rail access to the Heathrow branch</li> <li>• upgrades of the Piccadilly line</li> <li>• introduction of a Waterloo to Heathrow rail service</li> <li>• a central London air terminal</li> <li>• express bus services from transport hubs outside central London</li> <li>• Heathrow peak congestion charge</li> </ul>		
Approach	<p>A range of rail and highway upgrades will enhance the attractiveness of Heathrow, and will reduce traffic congestion and enhance accessibility to Heathrow, including enabling rail/air connectivity between Heathrow and the wider UK.</p> <ul style="list-style-type: none"> <li>• Complete planned Piccadilly line upgrade</li> <li>• Create central London downtown air terminal adjacent to a key railway station</li> <li>• Enable London Waterloo to LHR rail services from Eurostar platforms to T5</li> <li>• HS2 to connect directly to LHR</li> <li>• Relocate Heathrow's bus and coach station to an intermodal interchange on the motorway network</li> <li>• GWML western connection to LHR</li> <li>• Enhanced highway capacity between SW and LHR (e.g. M4, M3, A3)</li> <li>• Improvements to M25 corridor to ensure not a constraint on access</li> <li>• A Piccadilly line service to Park Royal to interchange with Central Line</li> <li>• High speed rail services between LHR and Cardiff (proposed "HS3")</li> <li>• Rail connection between LHR, STN, LGW and LTN.</li> <li>• High speed monorail to Northolt (to support as a reliever airport)</li> <li>• Heathrow Hub proposal of a new HSR station and terminal adjacent to the GWML</li> </ul>	Stated Capital Cost:	Not stated
		Capacity (mppa):	Not stated
		Capacity (atm):	Not stated
Benefits	<p>The main benefits available are time savings for Heathrow users from the west, users of Piccadilly line, access to Heathrow from the vicinity of Waterloo and connecting underground services, and for non-car/taxi users from London. Time savings and improved journey comfort for those using downtown air terminal. Enhanced connectivity between LHR and locations on HS2 and on GWML</p>		
Issues & Risks	<p>The main issues and risks are:</p> <p>Costs of some proposals likely to be very high, and net benefits low - generally not short term</p> <p>Downtown air terminal would be constrained by potential sites and scale of operation (including need for secure transfer of luggage). Limits to rail capacity approaching Waterloo.</p> <p>Scale of a LHR-LGW-STN-LTN rail connection project likely to outweigh likely users</p> <p>Further new infrastructure pre-empts decision on long term option</p>		
Mitigations	<p>None are identified within the proposals, but improved infrastructure should bring environmental benefits, as well as construction impacts which will require mitigation.</p>		
Dependencies	<p>There key dependencies are:</p> <ul style="list-style-type: none"> <li>• Planning approval for new railway and highway infrastructure</li> <li>• Commercial interest in new rail services.</li> </ul>		

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## ASSESSMENT SUMMARY

<b>Strategic Fit</b>	Improving to surface access to airports is identified within the Aviation Policy Framework as a priority in paragraphs 1.92 to 1.98. Strategic fit with RUS / Network Rail Control Period 5 and 6 investment plans must also be considered. Supports long term options that retain or enhance the role of LHR. Infrastructure improvements are dependent on long term future being at least retention of LHR as a major air terminal.
<b>Economy</b>	Unclear as to whether benefits exceed costs - depends on individual projects Minimise surface access as a constraint to the usage of LHR as a hub airport. Enhance connectivity to regions beyond Greater London to LHR, and consequently connectivity to cities served from LHR. Relocating bus and coach station to a motorway location will reduce on airport congestion GWML western link will reduce minicab and car journeys reducing congestion but risk “poor returns” because of a relatively dispersed population in the SW and will hamper the ability of regional airports to attract new long-haul routes and could be seen to undermine the private sector investment in regional airports (source: Bristol Airport)
<b>Surface Transport</b>	Expected to result in increased usage of rail services. Significant implications for existing services. Connecting LHR to HS2 will allow for the airport capacity to be more effectively used for destinations beyond the 3 to 4 hour journey time that is competitive with air travel
<b>Environment</b>	May have positive impacts on emissions if modal shift occurs. Major infrastructure construction will have its own significant negative environmental impacts, which can be mitigated through good environmental project management. Modal shift will result in reduced car journeys, and with electric train replacement in particular, will result in carbon emissions reduction and air quality emissions reductions, dependent on train loadings
<b>People</b>	Public transport accessibility enhancements are supportive of accessibility for work and family reasons. Rail corridor and station improvements will benefit other travellers. Reduction of environmentally damaging emissions can contribute to an enhanced quality of
<b>Cost</b>	Limited costings are presented in proposals at this stage. GWL western link to LHR - £500m (source:Bristol Airport)
<b>Operational Viability</b>	Dependent on project taken forward. Rail link issues may need to address congested underground spaces and current routes ast LHR terminals (Heathrow express, Crossrail, Picadilly line) May be some technical issues in linking air and rail ticketing. Codesharing limited by some air services agreements
<b>Delivery</b>	Most infrastructure projects likely to have lengthy timeframes for delivery. HS2 route now determined does not include LHR