

	Airports Commission NWRI cost estimate - Source: Appendix C, Cost and Commercial Viability Cost and Revenue Identification Update Heathrow Airport North West Runway, Jacobs June 2015				DRL comment	HAs estimate of cost for NWR scheme			
All figures rounded									
Elemental breakdown as Jacobs cost estimates	Quantity	Unit	Unit Rate (£)	Total (£)		Quantity	Unit	Unit Rate (£)	Total (£)
Site clearance	547ha		156,000	84,708,000	The AC's assumed site clearance/demolitions only within the NWR site boundary (initially 500ha, para. 9.136 AC Final Report July 2015). Additional costs will be incurred as a result of the additional land required for relocation of displaced property and infrastructure - estimate additional 25%.	680 ha		156,000	106,080,000
Decants/demolitions	0.7m	m	17,000,000	153,900,000	The AC's assumed earthworks only within the NWR site boundary. Additional costs will be incurred as a result of the additional land required for relocation of displaced property and infrastructure - estimate additional 25%.	1.1 m	m	17,000,000	188,100,000
Fairways	3,933,500-m ²		8	31,468,000	The AC's estimate appear to assume earthworks to be primarily excavation, rather than fill, across the NWR site, assuming the new runway and taxiway at grade. This is based on Jacobs allowing a rate of £/m ² for NWR earthworks compared to £35/m ² for ENR, that higher rate relating to cut/fill grading of imported fill (Appendix C, Cost and Commercial Viability; Cost and Revenue Identification Update, Heathrow Airport Extended Northern Runway, Jacobs for Airports Commission, June 2015) - despite ENR requiring a much smaller site (338ha) than the NWR (500ha) site (para. 9.136, Airports Commission Final Report, July 2015).	5,000,000-m ²		8	40,000,000
						10,000,000-m ²		35	350,000,000
					Within the NWR site boundary there is c.7 million m ³ of contaminated material which requires either on-site remediation or excavation and removal (Figure 2, Heathrow NWRI Landfill Report, Appendix D, response to Airports Commission Consultation, RSM for Gatwick Airport Ltd, January 2015 - see Appendix A). For comparison, prior to 2012 the Olympic Park (to landfill required treatment of 0.7m3 contaminated soil by soil washing, £2,000/m ³ complete sorting, 50,000m ³ ex situ stabilisation and 30,000m ³ decontamination (Sustainable site clean-up from megaprojects: lessons from London 2012, Engineering Sustainability, Volume 168, Issue E52, Institute of Civil Engineers 15th January 2015). While it is not possible to make direct comparisons, the final cost of the Olympic Park enabling works was £364m, within a total site preparation and infrastructure cost of £1.8bn (London 2012 Olympic and Paralympic Games, Final Quarterly Report, CMC/ October 2012). HAA's NWR scheme will require substantial remediation over a much larger area in view of not only surface works but also the necessary underground infrastructure to include drainage, fuel pipelines, utilities and passenger transit and baggage systems. Assume higher rates/ha, and 50% additional area as a result of the additional land required for relocation of displaced property and infrastructure.	340 ha		1,000,000	340,000,000
Site levelling, remediation	270ha		453,000	122,810,000					
Runway, taxiways, stands & tarmac				655,000,000					655,000,000
Airside facilities				329,000,000					329,000,000
Terminal & satellite buildings				3,330,000,000					3,330,000,000
Airside infrastructure (inc. passenger transit, baggage systems)				1,536,000,000					1,536,000,000
Landside infrastructure (car parks)				500,000,000	HAA June 2019 consultation confirms new 52,500 space car park ("Northern and Southern Parkways", para. 7.3-4, Preferred Masterplan June 2019). Assume 25% of construction cost of T2 MSCP (£1,340 spaces, £40M at 2011 prices, HAA Project Definition Sheet B). HAA masterplan now includes pedestrian crossings to connect Northern & Southern car parks via CATVTS (see Appendix B). Assume same rates as airside transit system.	52,500 spaces		25,000	1,312,500,000
					Tunnel (chcyl/Rt-out)	5,000m	m	80,000	400,000,000
					Stations (surf-turf)	8 no.			60,000,000
					Depot/maintenance base	2 no.			50,000,000
					Transit vehicles				5,400,000,000
Other landside infrastructure e.g. utilities, river diversions				467,000,000					467,000,000
Equipment				730,000,000					730,000,000
Operational consideration				124,000,000					124,000,000
Commercial property CPO				1,552,000,000	The AC's estimate appears to have assumed extinguishing, not relocation. However, replacement of commercial and public property and infrastructure is essential, and includes the Lakeside EW plant, BA HQ, Hammondsworth/Cobrook Immigration Removal Centres, BT Data Centre, Heathrow Police Station, Cobrook freight train and associated facilities including the airport's aviation fuel terminal as well as the industrial/warehousing/logistics facilities and hotels (providing c. 5,000 jobs). HAA has previously estimated a total of c.200,000m ² of "commercial and industrial airport-related displaced users" in addition to "2,335 to 2,980" hotel rooms (Table 12.1, Our emerging plans, HAA, January 2018).	Lakeside EW plant/High Temp Incinerator/Material Recovery Facility, Inc. road infrastructure, utility diversions etc.			
					BA Waterside W4, 466,002 sq ft, external works, car park	m ²		4,000	194,000,000
					Immigration Removal Centres, 1100 places	place		250,000	275,000,000
					Cobrook freight branch inc. aggregated/collection fuel terminals & new pipeline connections				100,000,000
					BT Data Centre				50,000,000
					Commercial/Industrial property including Airport Gate, Polar Park, Heathrow police station, c. 100,000-m ²	m ²		2000	200,000,000
					Hotels, 3,000 rooms	room		150,000	450,000,000
					Car rental locations, parking and maintenance facilities, assume 5,000 spaces	space		20000	100,000,000
					Compensation for business disruption/relocation costs				50,000,000
Land purchase				406,000,000	The AC had no allowance for additional land to relocate displaced users, and instead assumed "the inclusion within the NWR/masterplan of large areas set aside for development which would no longer be suitable for residential land due to the proximity of the runways" (Para. 8.15, Heathrow Airport North West Runway Business case and sustainability assessment, Airports Commission, Airports Commission, November 2014). See Appendix C for comparison of landtake assessed by AC and now proposed by HA. We assume additional land purchase is therefore now required. Acera Group own much of the land required, the value of which likely to have increased from the AC's assumptions in view of Acera's promoting their expertise for terminal development and airport expansion.				500,000,000
Residential property CPO				268,000,000	NWR requires the demolition of at least 783 homes (para. 3.51 AHP) and the NPS confirms payments of 125% of market value plus taxes and moving costs (para. 5.246). The average value of properties in the CPO zone, which reflects generations of blight, is c.£393,000 (Mousepiece accessed 22nd March 2019). The AC's estimate values each home at £342,000. Note our (HEC) assessment of total commercial and residential property CPO and land purchase costs (lines 14-16 above + £270n, while the CA's latest consultation (CAP1819, July 2019) confirms £2.4bn for "Category C spending" (para. 2.8), i.e. not all Category C spending.	783 property		500,000	393,500,000
Environmental compensation & mitigation				476,000,000	HAA's submissions to the Transport Committee's Inquiry into the draft NPQ2079, published 15 February 2018). The designated NPS confirms "Over a 25 year period, a community compensation fund could therefore distribute £750 million to local communities" (Para. 5.242, NPS June 2018); while it is impossible from published information to assess the likely costs of compensation and mitigation, we assume £2.6bn is an appropriate overall estimate. However this assumes HAA's book excluded residential property CPO costs.				2,600,000,000
Community impacts including Noise insulation and compensation				347,000,000	(NPQ2079, published 15 February 2018). The designated NPS confirms "Over a 25 year period, a community compensation fund could therefore distribute £750 million to local communities" (Para. 5.242, NPS June 2018); while it is impossible from published information to assess the likely costs of compensation and mitigation, we assume £2.6bn is an appropriate overall estimate. However this assumes HAA's book excluded residential property CPO costs.				15,971,988,000
Sub-total				11,115,918,000					15,971,988,000
Project/Design team fees	15%			1,667,387,700	The CA's latest consultation (CAP1819, July 2019) reports HAA's estimate of £330m for planning costs to DCJ across the project. This has increased from £265m (para. 1.9) suggesting the CA's overall project/Design fee budget of 15% was an under-estimate even without taking into account the higher scheme cost.	20%			1,194,316,000
Risk	20%			2,556,664,140		20%			3,833,083,200
Option B01	15%			9,580,995,030		15%			6,289,034,815
Sub-total (2014 prices)				17,466,961,866					26,466,274,080
Surface access enhancements				5,000,000,000	The Government expects, as set out in the Aviation Policy Framework 2013, the cost of any surface access works required solely to enable airport expansion to be met by the promoter. In the case of Heathrow expansion, this would mean that Heathrow Airport Limited, will meet the cost of the surface access improvements necessary to allow expansion of the airport, including re-alignment of the A25, the A4 and A304, as well as airport and terminal access roads. Where proposed projects have wider beneficiaries, such as Western Rail Access and Southern Rail Access, the Government will expect Heathrow to fund an appropriate proportion of the costs based on the direct benefits for the airport" (Written question HS5875 answered 16th March 2017)				5,000,000,000
Sub-total (2014 prices)				22,660,961,866	Add for inflation from 2014 to 2026 (estimate)	20%			31,446,274,080
Sub-total					The CA's latest consultation (CAP1819 July 2019) states "HAA's current estimates for total expansion capital costs are around £32.5 billion (in 2014 prices) in the period to 2050 (to provide the capacity to accommodate 142 million passengers per annum)" (para. 7). This assumes HAA's estimate of £140n capital cost to deliver expansion in 2026, and therefore allows an additional £18.5bn beyond 2026. We assume this is an additional NWR scheme cost to runway the scheme assessed by the AC and not what the AC termed "Asset replacement costs" - relate to the Asset investment required to maintain or replace the capital assets of the airport as well as to update infrastructure to maintain the assets as a modern airport" (p. 69, Cost and Commercial Viability: Financial Modelling Input Costs Update, PwC for Airports Commission, July 2015). We assume 30% inflation since this additional cost relates to works to 2050	20%			37,797,928,896
Total									61,797,928,896