Take Crossrail to Stansted

SUBMISSION TO THE DAVIES COMMISSION

Brian Waters, BWCP with Bryan Avery, Avery Associates Architects in association with Michael Schabas, First Class Partnerships (FCP)
1.0 The authors

This submission is proffered by BWCP with Avery Associates Architects and is in support and coordination with a separate submission by Michael Schabas and FCP. Between us we are town planners, architects, railway experts and thinkers.

Brian Waters is principal of BWCP, an architect and town planner. He was a member of Conservative Transport Policy Group with Michael Heseltine and Peter Walker and London Regional Policy Group under John Boyd-Carpenter. He has chaired the London Planning & Development Forum since 1990 and is current chairman of the National Planning Forum.

Bryan Avery is author of the AJ Metric Handbook airport terminal design guide. He designed the masterplan for Dubai airport and was architect for the BFI London IMAX Waterloo, London Transport Museum Covent Garden, and the Royal Academy of Dramatic Art amongst many others.

Michael Schabas was vice president transportation for Canary Wharf Ltd and led negotiations for delivery of the Jubilee Line extension. He also consulted on and gave evidence on the evolving scheme for Crossrail which included the option of an extension to Stansted. The feasibility and costings indicated by Michael Schabas and FCP are realistic. Please refer to their submission for more than is contained in our references and summaries.

We have no interests to declare and do not represent any landowners or other commercial parties who may have an interest though we have met major landowners implicated in this proposal and have discussed it with them.

CVs are included in Appendix A.

2.0 Background

Under Sir Leslie Martin at the Cambridge school of architecture a post graduate project by Max Boisot and Brian Waters (founder partners of BWCP) proposed the ‘London Airport System’. It was published in Official Architecture and Planning and later in a pamphlet by the Conservative Political Centre titled London’s Flight East [see Appendix B]. The London Airport System was conceived around the time of the Roskill Commission which led to the Maplin Sands decision. It proposes a fast rail dedicated to air passengers running across London to link Heathrow to a new hub airport in the East – in that case in the estuary.

Since 2009 Michael Schabas and Brian Waters have been discussing with potential investors and interested parties the idea of running an airport service to Stansted using spare capacity in the Crossrail tunnel. This would run non-stop to Heathrow
west from Paddington and similarly NE from Canary Wharf or Stratford to Stansted. We anticipate four trains each way per hour and premium ticket pricing for the airport extension legs. Journey times from Bond Street to Heathrow and Stansted will be similar, Stansted being closer to Canary Wharf than Heathrow. This is the basis of this submission.

Once the Commission was announced Brian Waters invited Bryan Avery to help develop the thinking in relation to the potential development of the Stansted terminals and in the wider context of a supporting new town. This brings together Brian’s knowledge as team leader for the Hampstead Garden Suburb conservation plan at Shankland/Cox and Bryan’s concept for ‘Wilderness City’ which is a modern interpretation of Ebenezer Howard and the Garden City movement.

3.0 The proposal

3.1 Appendix C (also at http://alturl.com/dbdcy) reproduces the article and cover story from the October 2012 issue of Planning in London which neatly summarises the proposition and the arguments. I will not repeat them here but refer you to the arguments spelled out for the need for hub airports and the case for and precedents of major cities (New York and Moscow, amongst others) which have more than one.

3.2 To compete and provide an efficient facility to serve the UK and the South East it is essential that Stansted has a dedicated and efficient rail connection to London as well as good access from the East Midlands. Using the spare capacity of Crossrail can provide this in a way that the overloaded commuter lines presently trying to serve the airport never can. A big advantage of removing the present Stansted Express service will be to release commuter capacity on those tracks.

3.3 Stansted has the advantage of not overlapping with the flight paths of Heathrow and Gatwick. It also meets the London Mayor’s demand for expansion of the city and its infrastructure to the East. The development and economic potential of the ‘London-Cambridge Corridor’ has recently been formally recognised and Stansted will be a key element in the strategic thinking which this implies.

3.4 We envisage Crossrail running fast, probably non-stop, from Canary Wharf or Stratford into the existing station under the airport. The present terminal will be upgraded and expanded to meet the needs of long-haul international passengers and their airlines while new simple terminal pavilions will be built for the low-cost airlines, dedicated to the larger of these. Their point-to-point passengers will be able to feed the other carriers, though this is not seen as a primary objective.
3.5 An enlarged car park and bus station will be served by a monorail loop.

3.6 The refreshment and expansion of the airport provides an opportunity to provide a more ‘green’ and pleasant passenger experience as suggested by our illustrations.

3.7 Strategic land holdings, especially to the east of the airport (for example Land Securities and Countryside Properties, see Appendix D) demonstrate the potential for substantial housing development which will be supported by airport employment. Well planned this could be conceived as a new ‘garden city’ along the lines of our published thinking (see Appendix E). An aerotropolis concept sharing employment, car park and local transport, even some hotel, catering, retailing and entertainment between the airport and the new town could be an especially attractive and sustainable form of development.

3.8 There would be the need for an approved masterplan and private long-term (patient) investment as considered by members of the Eco-towns Delivery Consortium brought together by Brian Waters in response to the last government’s Ecotowns Prospectus (see Appendix F).
4.0 Delivery and cost

4.1 Informal conversations with Crossrail confirm that if decided speedily and given that the legislation is in place to extend Crossrail, the Stansted service could be running when Crossrail is fully complete in 2019. The cost with Crossrail in tunnel to Fairlop Waters then surface rail, much alongside the M11, is put at £3bn (see Appendix G)

4.2 In the same time frame the second runway could be permitted and, if demand justifies, also built. Otherwise this can follow as with further runways as the airport traffic grows.
4.3 As shown in the Michael Schabas submission, the value of the airport itself is doubled as a result of the Crossrail connection, so underwriting the investment very profitably.

4.4 Its value is presently held down by regulation but with new ownership and competition between London’s airports this will be hard to justify in future. Expansion depends on the willingness of airlines to pay higher charges. The sale price of City Airport suggests that a capital value of £300 per annual passenger is possible, implying that with 50mppa Stansted could support a £15bn valuation. The enhanced land value for the airport city adds to the value released.

4.5 Phasing: a major advantage of this proposal is the flexibility in its phasing. As Stansted expands it can relieve Heathrow of its present overload. It can accommodate expanding demand from non-alliance airlines (Gulf and Chinese for example) and can meet the requirements of airlines or alliances wishing to develop a European hub here. This all depends on regulation, competition and demand so the timing will not be certain and a plan which does not rely on uncertain assumptions has an advantage. At the extreme, a policy requiring the run-down of Heathrow in favour of a major 4-runway replacement at Stansted could also be achieved.
CONCLUSION
The advantages of taking Crossrail to Stansted

We support the case for the UK needing substantial additional capacity and a hub airport (or two) in the South East of England. We leave others to make the argument for this.
We think the time has passed for the ‘grande project’ of the estuary airport hub. Maplin would have started operations in the early 1990’s as Sir Peter Walker pointed out in Parliament at the time. The need for the coherent expansion of airport capacity in the the South East is in any case too urgent.

We agree with the Mayor’s thinking that new capacity should be to the East of the metropolis and that it should have the capacity and potential for airline hub operations. Heathrow is now building a second hub at Heathrow for Star Alliance and major world cities (New York, Moscow) have more than one hub airport. Linking Heathrow effectively with Stansted through central London will allow a speedy balancing of loads in non-conflicting airspace, once airlines see it working. We don’t anticipate significant interlining between the airports. The railway should be useful for staff interlinking. The equal accessibility will also reduce resistance of passengers to using the newly enlarged Stansted.

Daniel Moylan, to whom we presented this proposition as chairman of TfL, has recently gone on the record as saying that an expansion of Stansted gives the Mayor 95 per cent of what London needs.

Extending Crossrail and Stansted itself both have the great advantages of building upon existing assets. If the USA had not donated us a long runway at Stansted then it is not likely to ever have become a significant location but with a credible means of access it can become a viable hub airport.

It is not only an almost obviously easy option but has the added advantage of finding itself on the London to Cambridge corridor (itself the subject of a relevant new study); it has relatively unconstrained airspace (when compared to LGW for example); it can embrace the Midlands in its catchment and, importantly, can stimulate and underwrite the economies of one or more new towns in its vicinity.

We trust that this submission makes a constructive and helpful contribution to the work of the Commission.

Yours faithfully,

Brian Waters, BWCP
with Bryan Avery, Avery Associates Architects
in association with Michael Schabas, First Class Partnerships
Appendix A: CVs of authors

BRIAN WATERS  MA DipArch(Cantab) DipTP RIBA MRTPi PPACA FRSA BRIAN is principal of architects and planning consultants The Boisot Waters Cohen Partnership, founded in 1972. See bwcp.co.uk.
A chartered architect, he studied at Cambridge University; a chartered town planner, he studied at the Polytechnic of Central London. He went to the City of London School, is a Freeman of the City of London and a founder member of the Worshipful Company of Chartered Architects, where he was elected Master in 2002. As a graduate he worked for the City of London Corporation, as a housing architect at the GLC and with Shankland/Cox where he was team leader for the Hampstead Garden Suburb Conservation Plan. He served on policy groups on transport and London regional policy under Peter Walker and John Boyd-Carpenter.
He is chairman of the National Planning Forum and of London Planning & Development Forum and joint publishing editor of Planning in London, its journal, a director of Land Research Unit Ltd which publishes the journal. Planning in London won Magazine of the Year (non weekly) 2007 at the International Building Press Awards and has been a finalist every year since 2006. He has written for most of the professional journals and has received four commendations as Architectural Journalist of the Year for his articles in Building, AJ and RIBAJ. He contributed a chapter in the book on Lord Foster’s Tokyo Tower and is planning correspondent for the Architects Journal.
He has tutored at PCL and Cambridge and lectured at the AA, PNL and Welsh Schools of Architecture, presented a paper to the 1997 ACA annual conference and has contributed to the 1998 and 2000 induction courses for civil servants on planning at the DETR/ODPM. He is a past president of the Cities of London & Westminster Society of Architects and was elected to the RIBA Council in 1987.
He was elected RIBA Vice-President, Marketing and chairman of the Marketing Committee 1988-90 and again for 1991-2. He chaired the National Architecture Conference held in London in 1991. He was appointed chairman of the London Planning & Development Forum in July 1990; the Forum includes representatives of central and local Government and the private sector including DCLG, English Heritage, GLA, BPF, RIBA, RICS, RTPI, London borough chief planning officers, the CBI, UCL and the TCPA.
He was the only private sector member of the CLG steering group contributing to the Killian-Pretty review of planning in 2009. He was appointed vice-chairman (professions) of the National Planning Forum effective 1st January 2010 and chairman from September 2011 and from September 2012. He is immediate past President of the Association of Consultant Architects. He was elected a member of the council in 1997.
He is a Past-Master of the Worshipful Company of Chartered Architects. He is a member of the RAC and Hurlingham Clubs. He was elected president of the Old Citizens’ Association, alumni of the City of London School for 2005-06.
His recreations include dressage, tennis, Siberian huskies, painting, throwing (pots) and growing fruit, lavender and vines in Catalunya. In 1997 he was elected a member of the Society of Architect Artists and exhibited with them in December 1997 and in March 1998 at the RIBA. His first solo exhibition NFS* took place at Leighton House, Kensington in December 2002 (*NotForSale).
Brian was highly commended in the 2007 London Planning Awards for ‘best personal contribution’; these awards are made by the Mayor, London First and the RTPI. The University of Westminster conferred an honorary Fellowship in November 2012.

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BRYAN AVERY
See http://www.avery-architects.co.uk/foreword.html
MICHAEL SCHABAS

MICHAEL SCHABAS has over 30 years experience in development, finance and management of rail passenger, freight and urban transport systems.

He played leading roles in shaping Vancouver Skytrain, London Docklands Light Railway (DLR) and Jubilee Line Extension, West Coast Main Line modernisation and on Britain’s first High Speed Railway (the Channel Tunnel Rail Link).

During privatisation of British Rail, Michael founded GB Railways plc which operated Anglia Railways, launched GB Railfreight and backed the formation of Hull Trains, Britain’s first “open access” train company. GB Railways won numerous awards for passenger service excellence and innovation.

He has also led Great Southern Railways’ acquisition of Australia’s trans-continenal passenger train services and created the business plan which brought it to profitability. Michael has particular expertise in multi-disciplinary business strategy, preparing and reviewing traffic forecasts, business plans and feasibility studies as well as building core teams for complex projects.

He brings a detailed understanding of project finance structure for Private-Public-Partnerships (PPP), concessions and franchises which must operate within technical, economic and political opportunities and constraints. He has been actively involved on international transport projects for public and private sector clients including the UK Department of Transport, Transport Canada, City & County of Honolulu, World Bank, Asian Development Bank, European Development Bank, British Telecom, Transport Innovations Edinburgh, Queensland Rail, Railtrack, East London Line Group, Halliburton, Angel Trains and Amec plc.

He is founder investor of Hamburg Köln Express, a new intercity passenger train company in Germany, which launched in Spring 2012.

Michael is leading the technical and commercial team advising Eko Rail on new metro line development in Lagos, Nigeria under a 25 year PPP concession. He has published extensively on modern transit modes and project planning. For publication links: www.schabas.net.
Appendix B: *London’s Flight East* published Conservative Political Centre 1974
Appendix C:
‘Take Crossrail to Stansted’
– published Planning in London issue 83 October 2012

Under pressure, the Government has backtracked on its manifesto commitment to block new runways in the South East. Michael Schabas and Brian Waters believe that an extension of Crossrail to Stansted is the best answer. Michael outlines the reasoning. The proposal is outlined on the following pages.

Michael Schabas was Vice President Transport for Canary Wharf Developments. He was a founder and director of CB Railways which operated train services from East Anglia into Liverpool Street. He consults on railways with First Class Partnerships.

Brian Waters is an architect and planner. He chairs the National and London Planning Forums and edits Planning in London.

The debate about whether, if, how or where London is to have additional airport capacity has filled the news through the summer.

The question for London is whether to continue expanding Heathrow, or support the creation of a second hub. It’s analogous with the situation in 1988, when Big Bang (financial deregulation) increased demand for office space. The City was unwilling to allow a lot of new development, although some was built (Broadgate for example). So a new financial district was developed at Canary Wharf. That was not good news for landowners in the city, including the Corporation of London. But it survived, and finally raised its game. Meanwhile, Canary Wharf has transformed east London, creating perhaps half a million jobs in the area and stimulation billions in new investment.

BA, the owner of Heathrow, insists that a third runway is the only realistic way to add capacity and maintain London’s position as a global transport hub. Of course they would say that.

Business groups seem to agree. But few politicians want to come out in favour of a scheme that would increase air traffic noise affecting west London, where there are several marginal seats.

Since he was first elected, Mayor Boris Johnson has been enamoured with building a large, four-runway airport on an island in the Thames Estuary. This would take the noise problem away. But while BAA can finance a third runway with ease from landing charges, there seems no way a new estuary airport could make any commercial sense. Airlines want to land their planes close to their passengers.

Norman Foster and Halcrow have suggested a slightly different scheme, combined with ambitious new passenger and freight rail lines, together with closure of Heathrow. This might be good business for consultants but seems unlikely to be good for London. It is easy to draw lines on maps, but Halcrow has not presented even a conceptual business case for the massive investment. Even with a fast rail link to St Pancras, most passengers would prefer Heathrow, or even connecting through Schiphol or Frankfurt. It would be a £40 billion black hole for taxpayer’s money.

Even fakir proposals have been made, to develop “split hubs”, with short haul flights switched to Northolt or Gatwick, linked to Heathrow by a fast, side train. Any passenger flying from say Toronto to Dar es Salaam who found themselves routed this way would be in the market for a better travel agent for their next trip.

Heathrow is the world’s most popular international air hub, and the most profitable for the airlines, because it is at the heart of southern England, at the hub of the motorway network, yet also a short ride to central London. It’s about as close to Harrods as you can land a 747.

There is as much noise as light in this debate. Everyone flies on planes, so everyone thinks they understand the industry. But few understand the regulation or economics of air travel, which are not always transparent. And groups like BAA, BA, Ryanair, and even Norman Foster have particular interests or “axes to grind.”

If a second hub is to be created, where should it be? It needs to have a fast rail link to London, but also good road and rail connections to a much wider catchment area, ideally with direct trains or only one change.

Gatwick is isolated on the south side of London – anyone going there needs to cross London, or go around it, driving past Heathrow on the way. Stansted is convenient to East London and Essex, and within range of the Midlands. Its catchment area overlaps with Heathrow but for large parts of Britain it would be very competitive.

OVERPAGE: The proposal followed by The facts, How hub airports happen and What they say about the Government’s Capacity Review.

TAKE CROSSRAIL TO STANSTED
Michael Schabas and Brian Waters propose an immediate solution page 33; A date with density, Lee Mallett interviews Philip Turner page 44; New Towns: everything to be gained! Patrick Clarke and Katy Lock page 54; Sir Terry Farrell page 66

COALITION SETS UP AIRPORTS CAPACITY REVIEW
The Government has asked Sir Howard Davies to chair an independent commission which will identify and recommend options for maintaining the UK’s status as an international hub for aviation.

The Commission will:
• examine the scale and timing of any requirement for additional capacity to maintain the UK’s position as Europe’s most important aviation hub;
• identify and evaluate how much additional capacity should be met in the short-, medium- and long-term;
• prepare an interim report for ministers no later than the end of 2013 setting out its assessment of the evidence on the nature, scale and timing of the steps needed to maintain the UK’s global hub status. This preliminary report will recommend immediate actions to improve the use of existing runway capacity in the next five years—consistent with credible long-term options.

The Commission will then publish by the summer of 2015 a final report, for consideration by both the Government and the Opposition. This will provide an assessment of the options for meeting the UK’s international connectivity needs, including their economic, social and environmental impact as well as its recommendations(s) for the optimum approach to meeting any need. The final report will also provide the context and material to help the Government prepare a National Policy Statement on aviation for planning purposes. The government has stressed that any decision on new capacity at any existing airport or the development of new facilities will be taken by the next administration after 2015.
Crossrail to Stansted: how it works

Michael Schabas and Brian Waters have worked up a proposal which can be achieved in the near-term and which makes good use of existing infrastructure investment to bring a second hub to the east side of London. They are in discussion with landowners and potential investors.

Why extend Crossrail To Stansted?
- Links Heathrow to City and Canary Wharf
- Carry traffic off and boost local electrification
- Crossrail can be extended to Stansted for about £3 billion, offering...
Hub airports don’t just “happen.”

The airport operator needs to do many things to make an airport suitable for hub operations, and to attract the airlines that will use it. Obviously there needs to be enough runway capacity to serve the mix of long and short haul flights, at the times that work for passengers and for airline operators. It’s hard to make a hub work with only one runway, even if it is not busy at all times through the day. Successful hub airports fill big planes to fly around the world. At Heathrow, airlines can fill 747s, or the even larger A380, mostly with passengers who arrive by car or public transport. But even Virgin and BA need feeder flights. This is why Virgin is now operating 3 flights a day from Manchester to Heathrow. In the past, they could partner with BMI, but now this has been bought by BA. You can’t rely on your competitor to give you good prices on seats on feeder planes.

At Frankfurt and Schiphol, often more than half the passengers on a long haul flight have a connection on a feeder flight. KLM actually set up its own subsidiary, KLM Cityhopper, to feed long haul flights with passengers from across northern Europe (including Britain).

The dominance of Ryanair at Stansted actually makes it hard for a hub to develop, because competition from Ryanair would make it hard for a long haul airline to sustain a feeder network.

The airport also needs to be a nice place, especially if you might need to spend three or four hours waiting for a connection. When United moved from JFK to Newark to create its new hub, it completely rebuilt terminal C. Besides this has been bought by BA. You can’t rely on your competitor to give you good prices on seats on feeder places.

At Heathrow expansion won’t happen

Vince Cable says there is “formidable” cross-party opposition to a third runway. An expansion of Heathrow Airport is “not going to happen”.

His comments came after the government launched a commission on how to increase the UK’s aviation capacity, amid a flurry of business activity.

Mr Cable told BBC One’s Andrew Marr Show the value of this exercise was to “look at the alternatives”.

Several senior Tories say Heathrow must expand, but others, including London Mayor Boris Johnson, oppose the idea.

The CBI Chief Policy Director, said: “We are seeing set up an independent commission to look at how we can increase our aviation capacity is good news, and should lead to a robust and lasting solution.

“The capacity crunch is already biting for businesses, and a lack of direct links to destinations in growing markets hampers our ability to trade overseas, so this commission should look at all the options.

Howard Davies is a good choice for the job. The commission will understandably want to take a long, hard look at this, but we cannot afford further delays on such a growth-critical issue.”

Peter Eversden, London Forum of Amenity Societies says: “The consultation on the Government’s Draft Aviation Policy Framework was published on 12th July. This first consultation deals with noise, night flights, carbon emissions, air quality and regional airports, as well as ‘how the diverse interests in the aviation debate can work together and the how aviation and the planning regime interact.’ It ends on 31st October.

The aviation industry and the media bemoaned the delay in the more controversial part of the consultation, in which they are more interested - south east airport capacity, and perhaps a third runway. This capacity issue has been so contentious, and caused such internal difficulties for the Coalition government, that it is postponed till an unknown autumn date - probably around mid September.

The delay to the second part of the consultation is not a huge problem, but the current consultation is absolutely key, because it is the basic document which will set overall policy; if and where expansion is needed (the second paper) will fall within that framework.”

Other options 2: integrated estuarial airports

Foster & Partners & Halcyon (LEFT) have given a high profile (See Foster’s How Thomas article in Planning in London 79) to a variation on the ‘Boris Island’ idea which, in turn, is based on the Bluebute project by Mark Willenhall and published in PI 60 (January 2007) and the 4/1 in 2003 (BELOW).

Willingdale and published in PI 60 (January 2007) and the AJ in 2003 (BELOW).

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Appendix D: Land assembly
Appendix E: Stansted Cellular City
Appendix F: Eco-towns Delivery Consortium

In 2008 Brian Waters brought together the Eco-towns Delivery Consortium which includes Savills, Sir Terry Farrell, Grosvenor and others and they developed thinking about how ‘patient investment’ might be used again in the tradition of the ‘Great Estates’ to bring a long-term investment foundation to new towns but not dependent on public finance (Appendix J).

as reported in the Estates Gazette [excerpt]:

as reported in the Estates Gazette [excerpt]:
Appendix G: Cost of extending Crossrail to Stansted

- 10km tunnel Stratford to Fairlop Waters £1.5bn.
- 25 km surface railway Hog Hill to Sawbridgeworth £750m.
- Upgrades to existing railway Sawbridgeworth-Stansted/Cambridge £200m.
- Central London station improvements £300m.
- Total cost about £3bn.
- Alignment feasibility confirmed by Mott Macdonald study in 2002.
- Minimal property impacts; mostly follows M11.
- For comparison, High Speed 1 (95km line plus three stations) cost about £6bn.
Appendix H: The value proposition

- London is the largest and richest airport market in the world with 6 airports and 135mppa.
- Owing to BAA monopoly and regulation, only Heathrow has been developed as a hub airport.
- Emerging consensus that a second hub is required to maintain UK pre-eminence.
- BAA forced to sell Stansted and Gatwick.
- Price to purchase Stansted approx. £1.5bn.
- 2000 acres adjacent farmland already assembled.
- Can expand STN to 50 mppa with 4 runways.
- A fast rail link will cost £3bn.
- Potential value uplift is £5bn - £10bn, net of costs.
- Possible “one stop shop” approval process.
- Seeking to form a consortium to work to develop the Stansted Hub and Aerotropolis.

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Brian Waters  MA DipArch DipTP RIBA MRTPI ppACA FRSA
The Boisot Waters Cohen Partnership
Studio Lexham, 17 Lexham Mews W8 6JW

+44 (0) 2079382557
Brian MOBILE: 07957 871477
brian@bwcp.co.uk
brianwaters1@mac.com
www.bwcp.co.uk