

Alan J Peakall

Independent Economic and Transport Planning Advice

Personal Details

Nationality	British
Profession	Economist and Transport Planner
Specialisations	Economic and financial analysis, public transport planning / operation
Years in profession	27

Education

BSc (Econ), London School of Economics
MA Transport Economics, Institute for Transport Studies, University of Leeds

Key Experience

Economic / financial appraisal of rail, road, port, airport, energy, water supply and tourism projects in the UK, Europe, Middle East, South / East Asia, Central and South America

Advisor on rail and metro infrastructure and operational feasibility

Development and application of spreadsheet-based models for: financial / economic analysis of transport infrastructure projects; estimation of road vehicle, rail and mass-transit operating costs; and public transport demand and revenue forecasting

Use of EMME/2 software to model public transport networks

Language ability

English	mother tongue
French	basic
German	basic
Spanish	basic

Recent and key project experience:

2010 to present	Post-‘retirement’, as Independent Consultant
2013	UK: Airport Rail Accessibility, Private Client Identifying potential for improved rail access at a major south-east airport, from optimized use of existing infrastructure to dedicated high-speed line. (In connection with submission to the Airports Commission.)
2012	UK: Airport Access Mode Choice, Transport for London Developed demand and revenue forecasts for Heathrow trips on Crossrail 1 under a range of service level, fare and airport development scenarios.
2010	UK: New Town Rail Access, Halcrow Group Advised on options for rail services to a proposed ‘eco-town’ development for a range of interface locations and infrastructure upgrade scenarios.
2010	UK: HS1 Privatisation, Private Client Advised on potential additional traffic on the Channel Tunnel Rail Link, notably express freight, additional passenger operators and extending trains beyond Paris / Brussels.
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2001 to 2010	Halcrow Group Limited
2010	UK: West Coast Main Line, Moderation of Competition, Private Client Developed options for extra / faster services on the West Coast Main Line following the easing of regulatory protection for the West Coast franchise.
2010	Indonesia: Strategic Rail Corridor Review, Private Client Reviewed potential investments in rail infrastructure to unlock macro-economic and social development in Java and Sumatra: inter-city passenger upgrade (Java); capacity and route deficiency of mine-to-port links (south Sumatra); relative costs of rail or road transport to a palm oil export facility (mid-Sumatra); and the aspirational ‘trans-Sumatra’ rail link.
2010	UK: Essex Thameside Franchise, Private Client Assisted the drafting of a potential bidder’s pre-qualification submission to DfT. Advised on: crowding issues; demand spreading; and future commuter demand patterns.
2009 -2010	UK: HS2 Review, West Midlands Regional Development Agency Reviewed: High Speed 2 Ltd’s proposals for HS2; earlier and supporting documents; and alternative proposals. Reported to WMRDA, acting on behalf of all RDAs. Commented on key areas of interest to the RDAs - route, viability and optimal phasing of construction.
2008 – 2010	UK: Severn Estuary Tidal Power – Financial Viability, Private Clients Reviewed potential to enhance viability of the Cardiff-Weston barrage by capturing wider transport and property / economic development benefits. For a smaller (lagoon) option adapted Halcrow’s Cardiff-Weston financial model to forecast financial viability under a range of electricity price and carbon credit scenarios.
2006 – 2010	UK: SERAS – Demand input to Railplan, TfL Generated demand forecasts for airport access by public transport for assigning to TfL’s Railplan model, disaggregated by: access mode; time of day; and journey purpose. Extended the South East Regional Air Services (SERAS) access model suite to cover Luton and London City to the same level of disaggregation and accuracy as Heathrow, Gatwick and Stansted.

2009	<p>UK: New Town Development, Private Client Estimated ability of the local rail system to absorb additional demand from a proposed new town / business park with and without an on-site station.</p>
2009	<p>Panama: Panama City Metro, Private Client Advised potential constructor on appropriate technology and horizontal / vertical alignments for a proposed metro. Assessed scale and scope of project given indicative demand forecasts, including extending the network to address future urban and socio-economic developments.</p>
2008-2009	<p>UK: South Central Franchise Bid, Private Client Developed models of on-train and platform crowding for South London, Surrey and Sussex rail commuter services. Projected future trainloads with proposed rail service changes. Advised on: rolling stock design to reduce impact of crowding; and rail demand at Gatwick Airport.</p>
2008 – 2009	<p>UK: Urban Development, Public Transport Demand:Capacity Issues, Private Client Derived diurnal forecasts of demand by mode for a major brownfield site development in inner London using the TRAVL database. Assessed: current and projected spare capacity on rail services near the site; likely change in rail access / egress with the development; and cost-effective options to address capacity shortfalls.</p>
2008	<p>UK: Severn Estuary Tidal Power – Financial Viability, Halcrow Consolidated, updated earlier estimates of: construction cost; operating cost; potential output; revenue; and benefit streams associated with a Cardiff-Weston barrage. Derived whole-project whole-life benefits, costs and wholesale electricity price needed for financial break-even, together with implicit values for carbon saving and security-of-supply. Findings presented to IEE, impacting on perception of role of tidal energy in the UK.</p>
2008	<p>UK: Air Passenger Demand Forecasts, Private Client Used DfT's SPASM/SERAS suite of models to derive rail access demand and revenue forecasts for a London airport under a range of service level, fare and marketing strategies. Proposed revisions to the fare structure.</p>
2008	<p>UK: Forecasts of Station Demand, CLRL Used LUL's SDM methodology to generate forecasts of morning peak entry, exit and interchange at key stations on the planned Crossrail 1 line, combining observed (RODS, LATS) data with Railplan model output.</p>
2006-2008	<p>UK: SERAS – LASAM Review, DfT Aviation Monitored the development and documentation of BAA's updated suite of airport access mode choice forecasting models as an input to Departmental sign-off of the models for use in support of Planning Applications at Stansted, Heathrow etc.</p>
2006-2008	<p>UK: Estimation of Benefits of Crossrail Access at Heathrow, CLRL Deconstructed SERAS surface access model modal utility data to generate estimates of changes in passenger hours for use in TfL's Business Case Development Methodology.</p>
2006-2008	<p>UK: New Rail Station Demand:capacity analysis, Private Clients Modified TfL Railplan scenarios to derive forecasts of do-minimum demand at planned new stations. Identified station and on-train crowding issues with development-related demand forecasts added.</p>
2007	<p>Hungary: Rail Freight Privatisation, Private Client Advice to bidder for MAV-Cargo. Derived rail freight forecasts for key domestic, international and transit flows based on: historic data, historic and forecast macro-economic data and planned infrastructure developments. Projected need for locomotive and wagon investment.</p>

2003-2007	<p>UK: South East and East of England Air Services Study (SERAS) Surface Access, DfT Aviation</p> <p>Ongoing advice to DfT (following publication of the 2003 Air Transport White Paper) on airport access issues. Forecast demand for new PT services using the SERAS suite of mode choice models. Considered restrictions on car/taxi use to achieve modal shift and the resulting impact on mode choice and PT demand / revenue.</p>
2006-2007	<p>UK: West Midlands Franchise Bid, Private Client</p> <p>Modeled future crowding levels on Euston and Birmingham rail commuter services. Estimated (revenue) cost of crowding. Identified priority train-lengthening need. Advised on internal design of new trains.</p>
2006-2007	<p>UK: Air Passenger Demand Forecasts, DfT Rail</p> <p>Used DfT's SPASM/SERAS suite of models to forecast demand and revenue for a range of alternative rail service levels at a London airport.</p>
2005-2006	<p>UK: Review of the Representation of Crossrail in TfL's Railplan Model, CLRL</p> <p>Advice on model inputs describing: the crush capacity of Crossrail trains in the Railplan crowding algorithm; walk links within Crossrail stations; and walk links Crossrail and the London Buses network. Also considered: the internal layout of proposed trains; and the impact of track layout at Hayes station / Airport Junction the cost and operability of the Heathrow spur.</p>
2005	<p>UK: Airtrack, SRA</p> <p>Used DfT's SERAS suite of models to forecast air passenger demand for the proposed Staines-Heathrow rail link under a range of timetable, fare and intra-airport accessibility assumptions.</p>
2004-2005	<p>UK: Commuter Rail Demand and Crowding Analysis, TfL</p> <p>Reviewed specification of future year rail services in TfL's Railplan model. Analysed output to derive measures of: AM peak capacity, demand and load factor at cordon crossing points, disaggregated by route of approach and service group. Assessed impact of revised service patterns and TfL's interchange upgrade aspirations.</p>
2004-2005	<p>UK: Rail Franchise Bid, Modelling Advice, Private Client</p> <p>Updated Halcrow's EMME/2-based East Thames Appraisal Framework multi-modal model to assess the impact of alternative service patterns on: AM peak demand; diversion to new routes; and crowding on commuter rail services. Audited 3rd-party demand and revenue forecasts, modifying exogenous growth and revenue yield assumptions.</p>
2003	<p>UK: Review of Impact of RPP and RPF Schemes, SRA</p> <p>Reviewed out-turn demand, revenue and operational impacts of small investments undertaken by the SRA in the RPP and RPF programmes. Considered the extent to which projects had delivered expected benefits and whether there was any systematic variation by type of scheme. Proposed refinements to the bid preparation and evaluation process.</p>
2002-2003	<p>UK: Impact of Thameslink 2000, TfL</p> <p>Analysed service levels, peak crowding and operational constraints on the South London rail network. Estimated the contribution of T2000 and East London Line extensions to meeting TfL targets. Considered alternative service patterns targeted at improved accessibility and reduced crowding.</p>
2001-2002	<p>UK: South Coast Multi-Modal Study, GOSE</p> <p>Technical Co-ordinator, rail and freight. Drew together available data and stakeholder views to identify transport related issues and opportunities. Developed and evaluated plans and strategies to improve transport in the corridor, taking the preferred strategies through to public consultation.</p>

2001	<p>UK: Thameslink 2000 and the Borough Market - Independent Review, TfL</p> <p>Undertook literature review of evidence to the Thameslink 2000 Public Inquiry to establish the strength of the economic and operational case for routing via Borough Market rather than Herne Hill. Synthesised an evaluation of the alternative options from partial analyses in existing Inquiry evidence. Presented findings to the Inquiry.</p>
2000-2003	<p>UK: South East and East of England Air Services Study (SERAS), DETR</p> <p>Technical Co-ordinator Surface Access (Public Transport) on major study underpinning the 2003 White Paper "The Future of Air Transport". Identified existing and potential public transport service level / capacity issues in airport access a range of airport development and new site assumptions. Evaluated new rail infrastructure and rail/bus services, developing an EMME2 trip assignment model and a hierarchical multinomial logit mode choice model (the SERAS model suite) to forecast demand, revenue, need for capital / operating support for PT or restrictions on car/taxi use to achieve target airport access mode shares.</p>
1987-2001	Halcrow Fox and Associates
2000-2002	<p>UK: London to South West and South Wales Multi-Modal Study, GOSW</p> <p>Technical Co-ordinator, freight. Drew together available data and stakeholder views to identify transport related issues and opportunities. Developed and evaluated plans and strategies to address problems, taking the preferred strategy through to public consultation.</p>
1999	<p>Philippines: Transport Infrastructure and Capacity Development, NEDA / ADB</p> <p>Derived local economic values for operating cost and travel time for evaluation of road and rail projects. For Metro-Manila commuter rail developed a demand-sensitive staged implementation plan covering infrastructure, rolling stock and staffing. Advised on institutional issues affecting rail and on conditions for economic and financial viability of rail.</p>
1999	<p>Philippines: Cavite-Laguna Development Study, NEDA/ World Bank</p> <p>Economist/financial analyst on transport component. Estimated future public-sector budget for transport infrastructure, including innovative funding sources. Evaluated new highways and corridor improvements. Economic and financial appraisal of busway/pre-metro proposal.</p>
1997-1998	<p>Philippines: Metro Manila Urban Transport Integration Study (MMUTIS), DOTC / MMDA / JICA</p> <p>Financial analyst. Developed public sector budget envelope for Metro Manila transportation to 2020. Reviewed financial performance of existing public transport operations. Developed financial and economic operating and maintenance cost models for road vehicles and mass transit railways.</p>
1997-1999	<p>Europe: PRORATA, European Commission DG VI</p> <p>Project co-ordinator, technical editor for 2-year, 7-partner EC study to review the competitive position of European passenger railways and improve their commercial focus / profitability. Developed a hierarchy of management powers, demonstrating link between management accountability and operating cost. Recommended structured progression of management empowerment and commercialisation of services.</p>
1996	<p>Peru: Abancay, Quosco and Sicuani Water Supply, PRONAP / IDB</p> <p>Adapted established potable water demand forecasting methodologies to the socio-economic circumstances of towns in the high Andes. Prepared</p>

inputs to the Bank's economic evaluation package SIMOP, derived estimates of economic viability for proposed improvements.

- 1996 **Hungary: Railway Investment Prioritisation, MAV / EBRD**
Reviewed MAV's business plan. Assessed economic / financial viability of proposed investments. Identified optimal program within budget envelope.
- 1995-1996 **Sri Lanka: Colombo Urban Transport Study, Ministry of Transport and Highways**
Developed transport system policies, investment plans and schemes to increase efficiency and cope with urban growth. Key projects included: port traffic (landside); development of a metro from the existing urban rail network; and derivation of local values for vehicle operating cost, travel time and other economic inputs for the highway assignment model
- 1995 **Thailand: Conceptual Implementation of Mass Rapid Transit Master Plan for Bangkok, OCMRT**
Derived economic inputs to demand, mode choice and assignment models. Developed metro cost model sensitive to network layout, peak demand and management philosophy. Estimated economic and financial viability of extensions and proposed changes to the "ultimate" network.
- 1995 **Pakistan: Private Sector Participation in Highways, DOH/ ADB**
Generated vehicle operating cost estimates disaggregated by speed and road condition for the economic evaluation of tolled expressways and river crossings. Reviewed estimates of value of travel time by journey purpose.
- 1994 **Pakistan: National Transport Plan Study, MoC / JICA**
Strategic review of proposed investment in transport infrastructure / vehicles against the study team's demand forecasts up to 2006. Advised on: viability of infrastructure projects; division of traffic between road and rail; improving rail's operational and financial performance; and the potential for inland waterway and multi-modal transport.
- 1994 **Jordan: Road Transport Policy and Institutional Issues Study, Ministry of Planning/European Commission**
Projected future government highway sector revenue and expenditure under a range of development scenarios; reviewed highway regulatory regime (particularly vehicle overloading). Recommended changes to: organisation of and relationships between the government agencies involved; road user charging system; regulation of trucking industry.
- 1991-1993 **Hong Kong: Freight Transport Study; Transport Department, Government of Hong Kong**
Assessed demand for, and impact of, road freight transport in Hong Kong. Developed freight transport demand forecasting and goods vehicle operating cost models. Advised on regulatory and fiscal policies to improve road haulage efficiency. Appraised potential for rail links to the container port.
- 1990 **Thailand: 7th Plan Urban and Regional Transport Component, NESDB / World Bank**
Reviewed candidate projects proposed by government agencies for the urban transport component of the 7th 5-year plan, identifying overlaps / gaps. Evaluated and prioritised projects into a fundable implementation strategy.
- 1988-1990 **UK: Financial Evaluation Model, Halcrow Fox**
Developed a spreadsheet application to estimate the financial viability of projects at the pre-feasibility or feasibility study stage.

- 1988 **Indonesia: Review of Road User Charges, DLT/World Bank**
Analysis of road user charges. Reviewed present and planned size of both the road network and levels of capital and current expenditure. Proposed taxation and spending policies to balance highway sector income with expenditure.
- 1988 **UK: Crossrail Study, Network SouthEast / LRT**
- 1987-1990 **UK: West London Assessment Study, Dept. of Transport**
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- 1986-1987 **UK: M.A. in Transport Economics, Institute for Transport Studies, University of Leeds**
- 1987 **Dissertation – Analysis and Evaluation of New Rail Station Patronage, BR / Nottingham County Council**
Conducted an on-station interview survey of users at a re-opened station. Analysed responses, extrapolating to a forecast of annual revenue. Tested the spatial transferability of models developed to forecast patronage at railway stations in West Yorkshire.