

# William Barter

[www.williambarter.co.uk](http://www.williambarter.co.uk)

---



## Profile

William Barter has 36 years' experience in the rail industry including 16 years with British Rail in operations management and planning, and now specialises in projects involving rail operations feasibility planning, investment and business planning, rail capacity and performance modelling, and operations costing. He has made a particular study of the issues surrounding rail system capacity in practice, and is also a capable technical author, having written a variety of published papers and articles, as well as editing franchise bid plans and preparing educational materials. He has been involved in some of the most prestigious public and private sector railway studies of recent years, and his clients include the Department for Transport for whose 2007 Rail Technical Strategy he edited and contributed specialist input on rail capacity.

William is qualified to the level of Master of Business Administration, for which as well as studying financial and operational management, economics and investment planning, he undertook as a project a post-completion audit of NSE's investment in Networker rolling stock, one of the earliest comprehensive investment "back checks" to be conducted by British Rail. He has worked extensively with specialists in areas including infrastructure and rolling stock engineering, demand forecasting and economics. Through his activities in education for rail operators, he maintains a wide general knowledge of the rail industry and appreciation of all contributing disciplines.

William's recent work with the Olympic Delivery Authority has brought him back into contact with Train Operating Companies including key contributors to London 2012 such as Southeastern, Southern and Greater Anglia. This allowed him to build effective working relationships at all levels from Director to operational staff, and reinforce his understanding of train operations commercial, operational and resourcing issues.

## Contact details

The Wilds, Potcote, Towcester, Northants., NN12 8EK, United Kingdom

+44 1327 353877

+44 7771 994151

[wbarter@waitrose.com](mailto:wbarter@waitrose.com)

## Recent achievements

- Supported the Olympic Delivery Authority in respect of Train Operating Company service specifications and delivery for Games-time;
- Panellist for Railway Gazette "Webinar" – "Growth and the Capacity Challenge";
- Article published in Modern Railways, April 2011: "How HS2 can benefit Milton Keynes";
- Edited the Accreditation Questionnaire for a bidder for the InterCity West Coast franchise, successfully achieving pre-qualification;
- Devised innovative schemes for segregated suburban networks as a basis for assessment of the Capacity and Cost implications of the concept of segregation mooted in the Rail Technical Strategy;
- Awarded the grade of Fellow of the Institution of Railway Operators for services to its education programme including tutoring degree students in Operational Planning, Economics and Operations Management;

## EDUCATION

University of Bristol, 1976, BSc (Hons)

Kingston University, 1993, MBA

## QUALIFICATIONS

Fellow: Institution of Railway Operators

Associate: Institution of Railway Signal Engineers

## EXPERIENCE

### January 2004 to date

Consultant, conducting projects and developing business in the specific area of rail operations planning.

### September 1994 – January 2004

Vossloh IT York Ltd.: Product Manager for rail simulation systems, and for management consultancy.

### April 1993 – September 1994

The MVA Consultancy: Project Manager for transport planning studies including assessments of operations feasibility and costs of electrification, new station schemes.

### British Railways Board: 1976-1993

Operations Development Manager, NSE South Eastern Division: Responsible for major projects affecting line capacity, punctuality, resources, and operating costs.

Suburban Services Manager, Watford: Safety and service performance.

Customer Services Manager, Newport, Gwent: Customer-facing activities at major rail terminal, service specification for local train services.

Yard Manager, Severn Tunnel Junction, Gwent.

Station Manager, Ely, Cambridgeshire.

Area Freight Assistant, Whitemoor, Cambridgeshire.

Traffic Management Trainee, and initial appointment.

## Representative Experience

### Operational planning and capacity

**Olympic Delivery Authority, 2011-12:** As Rail Operations Support Manager, undertook liaison with Train Operating Companies, London Underground and Docklands Light Railway to define appropriate service levels to meet forecast demand during the Olympic and Paralympic “Games-time”. Negotiated and managed for the ODA a contract for reserve “contingency trains” to be activated in the event of unexpected demand. During Games-time, acted as point-of-contact to receive reports from TOCs as to current operations and feed these into the daily officers’ conference.

**Railway Safety and Standards Board, 2010:** On behalf of the UK rail industry Technical Strategy Advisory Group, RSSB commissioned a study of megacity suburban networks to test the capacity and cost benefits that could be achieved through segregation of sections of the network. William screened UK networks to identify those most likely to present significant benefits at minimum cost, prepared operationally-feasible schemes as a basis for assessment of operating and capital costs and revenue forecasting.

**UK Department for Transport, 2007** - technical author for the government’s Rail Technical Strategy, dealing with new technologies for railways. Made specific contribution in respect of rail system capacity.

**Transport for London, London Rail, 2005-6** - timetabling feasibility studies for a capacity and timetabling study to support the access bid for the East London Line Project.

**Institution of Railway Operators, 2003** - wrote the educational text on Operational Planning, dealing with system and line capacity creation and management.

**Strategic Rail Authority, 2000-2** - acted as the Vossloh IT Project Director in a team led by The MVA Consultancy, which carried out a variety of tasks for the SRA including a review of Railtrack’s plans for the ECML Upgrade. In this role he undertook analysis of line capacity, service reliability, train planning potential and operations costs.

**British Rail, 1994** - European Passenger Services capacity and reliability study: examined the capacity provided on the domestic rail network for operation of international passenger and freight trains before the opening of the Channel Tunnel Rail Link, and assessing the implications for likely reliability of these services. The work formed the basis for British Rail’s success in arbitration with Eurotunnel.

### Major projects and business case development

**Cross London Rail Links, 2008** - advised TfL’s Crossrail project team on track layout options for Paddington after Crossrail implementation.

**Network Rail, Thameslink project, 2007** - identified service performance risks and proposed methodologies to quantify them as the project progresses.

**Transport for London, London Rail, 2005-7** - for TfL London Rail’s programme of Rail Corridor Plans, provided input on the feasibility and costs of plans to develop the South Western, Great Western, Silverlink Metro and Thameslink North/Great Northern routes. The work involved preparation of draft train plans to assess operability of service specifications and identifying infrastructure and operational constraints.

**Transport for London, London Rail, 2004** - undertook operations costing and option definition in connection with the East London Line Project for TfL as inputs to the business case.

**Strategic Rail Authority, 2000** - led the Vossloh IT contribution to the SRA South London Metro and London East-West Rail studies, preparing train service plans for enhanced suburban services, assessing operating costs and infrastructure requirements, and feeding these into the business case.

**British Rail, 1992-3** – development and analysis of the initial proposals for what was then the Thameslink 2000 project.

**British Rail, 1990-3** - developed deployment plans to ensure utilisation of the new rolling stock throughout the stages of infrastructure enabling works.

**British Rail, 1989** - devised a new track layout for London's Cannon Street station to improve capacity and performance and provide gauge clearance for new rolling stock.

## Franchise bidding

**Abellio (Netherlands Railways), 2011** - edited the Accreditation Questionnaire for the InterCityWest Coast franchise, leading to successful pre-qualification.

**Tyne and Wear Metro, 2009** - undertook preparation of the Operations Plan for the In-House bid for the operating concession for Tyne and Wear Metro, and contributed innovative train service proposals based on observed and forecast demand.

**National Express Group, 2008/9** - led operations planning and timetabling tasks for a bidder for the Southern franchise.

**MTR Corporation, 2008** - undertook editing of operations and fleet delivery plans on a franchise bid for the Stockholm Metro.

**Arriva Trains, 2007** - work on demand management for the successful bid for the New Cross Country franchise.

**MVA Consultancy, 2006** – undertook planning for deployment of rolling stock for the South Western franchise bid.

**Danish State Railways, 2006** – undertook plan editing for the franchise bid for the Great Northern/Thameslink routes.

## Performance modelling and simulation

**Network Rail/ORR, 2010** – undertook review of modelling tools and methodologies employed on the WCML Upgrade so as to improve future forecasting of train service performance.

**Network Rail, 2006** – analysis of benefits of infrastructure enhancements in terms of train service performance improvements.

**Strategic Rail Authority, 2005** – studies for the West Coast Main Line team on identifying performance benefits of infrastructure proposals.

**EDF Energy / Seeboard Powerlink, 2004/5** -specialist advice on network performance simulation to in connection with their contract to supply electricity for traction to London's Underground network.

**Mott MacDonald, 2003** - undertook a review and assessment of operations and infrastructure modelling software packages for the East London Line Extension Project.

**Parsons Brinckerhoff, New York, 1998** - undertook staff training on rail simulation software.

**MTR Corporation and Kowloon - Canton Railway, Hong Kong, 1997/8** – undertook staff training on rail simulation software.

**Indian Railways, 1996/7** - oversaw simulation tasks in connection with the Mumbai Urban Transportation Project.

**Northern Ireland Railways, 1994** – modelling to forecast running times achievable given new rolling stock and a series of line upgrades, as a contribution to demand forecasting and business case development.

## System reviews and due diligence

**Transport for London, 2009** - Assisted AECOM with operations analysis in connection with definition of TfL's aspirations for HLOS2 (the next government 5-year spending plan).

**Undisclosed client, 2007** – due diligence for a potential purchaser of an Eastern European State Railway

**MVA Consultancy, 2007** - supported a client bidding to purchase a UK train operating company, reviewing operating costs, service proposals and asset values.

**Merseytravel, 2006** - development of operations proposals for Full Local Decision Making on the Merseyrail infrastructure.

**Greek State Railways (OSE), 1994** - undertook the role of Operations Expert in a development study led by Systra.

## Freight and logistics

**Olympic Delivery Authority, 2011-12:** As Rail Operations Support Manager, negotiated and managed for the ODA a contract with DB Schenker for reserve “contingency trains” to be activated in the event of unexpected demand. Negotiated and managed a contract with Direct Rail Services for diversion of freight trains to release network capacity for spectator travel during the Olympic/Paralympic period.

**Knauf Drywall (consumer of bulk gypsum from power stations), 2006** – prepared spreadsheet cost model, and forecast “price per tonne” for bulk rail freight hauls to support strategic decisions on sourcing of raw material.

**Transport for London, London Rail, 2005-7** - contributed freight expertise and experience to Rail Corridor Plans, assessing future demand and impact on the rail network.

**WSP Ltd., 2005-6** - assessed operational feasibility of providing rail connections to proposed freight terminals at Ince and Bury St Edmunds.

**Greek State Railways (OSE), 1994** - undertook the role of Operations Expert in a development study led by Systra, responsible for forecasting demand for parcels and sundries traffic.

## Training and Development

**Railway Safety and Standards Board, 2006/7** - devised and managed a programme of workshops to improve joint working between Network Rail and train operators' Traffic Management staff.

**Institution of Railway Operators, 2005/6** – devised and delivered educational courses in train planning.

**Royal Docks Heritage Railway, 2006** – devised syllabus for training programme in railway skills for local disadvantaged teenagers (pro bono).

## Educational activities

William works extensively on the Institution of Railway Operators degree and diploma educational programme. He wrote the SCQF Level 9 (degree) texts on Operational Planning, Economics, and Managing Operations and the SCQF Level 8 (diploma) text on Railway Business Organisation. He tutors degree-level students on Operational Planning, and Economics. For the IRO, William has also planned and delivered one-day and weekend courses on Operational Planning and Economics.

## Writing and Speaking

William has lectured at the Technical University of Delft in the Netherlands, and contributed lectures on railway operations planning to Undergraduate and Postgraduate courses on Railway Infrastructure at Nottingham Trent University. He has given a number of conference papers on cost-effective approaches to performance simulation and system capacity, and was technical author for the UK government's Rail Technical Strategy, published in 2007 dealing with capacity and new technologies for railways.

In 2012, on behalf of the Institution of Railway Operators, William took the lead in compiling and submitting written evidence to the All-Party Parliamentary Group for High Speed Rail, in connection with their Inquiry into rail capacity in the UK.

His published Articles and Conference papers include:

- Rail Professional, July 2012: "The Public Transport Games"
- November 2011: Panellist for Railway Gazette "Webinar" – "Growth and the Capacity Challenge"
- Modern Railways, April 2011: "How HS2 can benefit Milton Keynes"
- Northampton County Council Public Meeting, 17 March 2011 – addressed council in support of HS2, citing potential improvements to local rail services
- Birmingham University, January 2011 – presentation to MSc students: "Mega-City Suburban Services"
- Comprail Conference, September 2008: "Effect of ERTMS on capacity compared with best practice conventional signalling"
- Modern Railways, September 2008: "Will ERTMS give us more capacity?"
- Comprail Conference, May 2004: "Forecasting robustness of timetables"
- Railtex Conference, November 2002: "Comparative simulation of transmission-based and other signalling systems"
- International Railway Journal, October 2001: "Simulation software aids Light Rail planning"
- Railtex Conference, November 2000: "Computer Simulation in Capacity Planning"
- Comprail Conference, September 2000: "Multi-train Simulation – Verification and Accuracy"
- Comprail Conference, September 1998: "Application of computer simulation to rail capacity planning"

## IT Capabilities

Competent user of Word and Excel.

Extensive experience using CorelDraw.

Has undertaken formal training course on RailSys.