Dr John Parkin

BSc (Eng) ACGI MSc PhD PGCE CEng FICE FIHT FCILT FHEA

SPECIALISM Transport engineering and planning

PRESENT POSITIONS Reader, School of the Built Environment and Engineering, The University of Bolton

Visiting Senior Research Fellow, Institute for Transport Studies, University of Leeds

Retained Consultant, The MVA Consultancy

ACADEMIC QUALIFICATIONS

2004 PhD – The University of Leeds Institute for Transport Studies

2000 PGCE in adult education – Bolton Institute

1994 MSc Transport Engineering and Planning – University of Salford (Stanley Raymond

Prize for best performance in examinations)

1984 BSc (Eng) Civil Engineering – Imperial College of Science and Technology

1984 ACGI Associate of the City and Guilds Institute

PROFESSIONAL QUALIFICATIONS

1991 Chartered Engineer (CEng)

Fellow of the Institution of Civil Engineers (Member, 1991)

(2002 to date on Lancashire Branch Committee, vice-chair 2007-08, prospective chair 2008/09 sometime member of Professional Careers in Construction Group and on panel of judges for 2002 NW

Merit Prize)

Fellow of the Institution of Highways and Transportation (Member, 1991)
Fellow of the Chartered Institute of Logistics and Transport (Member of former

Chartered Institute of Transport, 1997)

(2007 to date host of NW Policy committee, 1998 to 2003 Education and Training Officer, ILT Gt.

Manchester Branch)

2007 Fellow of the Higher Education Academy (Member of the Institute of Learning and

Teaching, 2001)

EMPLOYMENT

2005 to date

Reader, School of the Built Environment and Engineering, The University of Bolton

Principal Lecturer, Department of the Built Environment, The University of Bolton

Civil and Environmental Engineering Group Leader, Bolton Institute

Senior Consultant, WS Atkins (and formerly, Wootton Jeffreys Consultants)

1984 to 1992 Engineer, LG Mouchel and Partners Ltd.

PROFILE

I am a Chartered Civil Engineer specialising in transport engineering and planning and have wide interests that encompass quality design, innovation, sustainability principles, evaluation, safety and community benefit. After an initial career in consultancy, I became an academic at the age of thirty four and now divide my time between teaching, research and consultancy.

I am the principal author of the design manual *Lancashire the cyclists' county* and have delivered training on this manual, the *London Cycle Design Standards* for Transport for London and on national standards for Cycling England. I have reviewed methodology for monitoring the use of the National Cycle Network for Sustrans, and I am engaged in research on the impact of cycle training interventions and in monitoring cycle use levels for the six English Cycling Demonstration Towns. I have undertaken a lecture tour on cycling to New Zealand. I host an annual conference on cycling at the University of Bolton.

More generally, I have experience of all stages of the promotion of transport infrastructure schemes including policy formulation, forecasting and assignment modelling, operational analysis and economic appraisal. I have also managed and undertaken detailed engineering design, safety auditing and implementation of highway and traffic engineering schemes and managed two quality bus corridor and cycle route schemes for Dublin Transportation Office.

I managed the study of the transport impacts of the South Yorkshire Supertram and critiqued proposals for Metrolink extensions in Manchester. I have studied the commercial case for re-introducing passenger rail services to Keswick and appraised ground access at Manchester and Liverpool airports. I have prepared the NW regional park and ride strategy and a pilot Rights of Way Improvement Plan. I have also undertaken a best value review and evaluation of Yellow Bus schemes in West Yorkshire and Greater Manchester.

1998 to date, The University of Bolton

READER in Transport Engineering and Planning (2005 to date, Principal Lecturer from 2001 to 2005 with responsibility for research and consultancy within Built Environment and Engineering.)

SUBJECT GROUP LEADER (1998-2001) for Civil and Environmental Engineering, responsible for under- and post-graduate civil engineering courses, research and consultancy, and management of the former Faculty of Technology.

2004 to date Visiting Senior Research Fellow – The University of Leeds

Teaching on the MSc programme, cycling short course, supervision of MSc student dissertations and other research.

2001 to date Retained Consultant with MVA Consultancy.

Providing specialist support to projects.

2001 to 2005 Visiting Lecturer - The University of Bradford

Teaching of the Transport Studies level three module on the BEng / MEng Civil Engineering programme.

1998 to 2000 retained Conslutant with ITP Consultancy.

Providing specialist support to projects.

Research

Interests

- Longitudinal analysis of transport data sets for monitoring purposes.
- Development of prospective study methodologies for enhanced assessment of transport interventions.
- Perceptions of risk and effort in mode and route choice for modelling and infrastructure design.

Projects and Supervision

2008

SUPERVISOR, PhD The development and use in infrastructure planning and monitoring of cycle user effort profiles relative to hilliness and stops and starts (since 2007)

RESEARCHER on monitoring of cycle use in the six English Cycling Demonstration Towns for Cycling England, with Sustrans and the University of Leeds (since 2006).

2007

RESEARCHER on literature review of child cycle training interventions, contract research for Sustrans.

2006

RESEARCHER on methodological review of monitoring regime for Sustrans.

2005

RESEARCHER on preparation of appraisal guidance for cycling and walking for the Department for Transport for webtag (since 2004).

2002

RESEARCHER on investigation of research based assignments, for Centre for education in the Built Environment, via Oxford Brookes University.

Reviews

Reviewer for: Built Environment; Journal of Sports Science and Medicine; Journal of Transport Policy; Preventive Medicine; Proceedings of the Institution of Civil Engineers: Transport and Municipal Engineer; and EPSRC project report.

Teaching

Validations and reviews and external examinerships

External examiner for Ulster University BSc Civil Engineering degree, 2007 to date.

Chair of panel validating MSc in Logistics and Supply Chain Management at Malawi Institute of Management, Lilongwe, August 2007

Panel member validating Foundation Degrees in Textiles, Clothing & Footwear & institutional appraisal of Leicester College, June 2005.

Chair validation panel for BSc (Hons) International Tourism Management, Bolton Institute, June 2004.

Panel member of internal subject review of History, Bolton Institute, Summer 2001.

Panel member for validation of BEng (Hons) Civil Engineering with Disaster Studies, Coventry University, May 2001.

Panel member for review of Tourism Studies and Tourism Management Pathways, Bolton Institute, May 1999.

Panel member for review and validation of undergraduate civil engineering provision (13 titled courses), Coventry University, January 1999.

Subjects

Research Methods (level 2 undergraduate); Transport Engineering (HNC and level 2 undergraduate); Transport Studies (level 3 undergraduate); Inter-disciplinary Design Project (level 3 undergraduate); Transport Analysis (postgraduate); Environmental Management (postgraduate).

Honorary positions in transport

2005 to date Chair of Greater Manchester Education Strategic Accessibility Partnership

2004 to date Chair of Bolton MBC Transport Partnership (part of Local Strategic Partnership)

2004 to date Reviewer for BookPower, charity providing textbooks to developing world Higher Education Institutions.

2003 to date Chair of Trustees/Directors of charity/limited liability company "Cycling Projects" (£200,000 p.a. turnover)

2007 Chair of one day Greater Manchester Air Quality workshop and seminar

2001 to 2004 Chair of the Bolton Environment Forum Transport Working Group (also chair 1997-1999)

1997 to 2004 Member of the Bolton Environment Forum Steering Committee.

Consultancy

Project Listing

2008

TRAINER for Cycling England 'Making Cycling Mainstream' course for Local Authorities through PTRC (since 2006) TRAINER on three modules to train Transport for London and London Borough engineers, consultants and managers on the London Cycle Design Standards through PTRC. (since 2005)

2007

CONSULTANT Yellow Bus Evaluation Study for Greater Manchester PTE (with MVA, since 2006).

CONSULTANT Bicycle monitoring and forecasting, North Yorkshire County Council.

CONSULTANT cycle access modelling to Olympic Games Park for 2012 London Olympics.

2005

PROJECT MANAGER AND PRINCIPAL AUTHOR for a code of planning, designing and maintaining roads and tracks for cycle traffic for Lancashire County Council (with MVA, since 2002).

2004

CONSULTANT Pilot Mini-Rights of Way Improvement Plan for Cheshire County Council and Countryside Agency (with MVA, since 2003).

2003

CONSULTANT BEST VALUE REVIEW OF EDUCATION TRANSPORT provision for West Yorkshire PTE (with MVA, since 2001).

2002

PROJECT DIRECTOR for Park and Ride study for North West Regional Assembly (with MVA).

2001

CONSULTANT SOUTH AND WEST YORKSHIRE MULTI-MODAL STUDY (SWYMMS). Considerations of environmental impacts and public transport options.

2000

CONSULTANT NORTHAMPTON RAPID TRANSIT SYSTEM PASSENGER FORECASTING. Advice and supervision of market research, forecasting and evaluations (with ITP, since 1998)

CONSULTANT MIDDLESBROUGH DOCKS RE-DEVELOPMENT producing initial spreadsheet based transport model (with ITP).

Prior to employment with the University of Bolton

1997 W S Atkins

PROJECT MANAGER CANON SLADE SCHOOL TRANSPORT STRATEGY. Development of access strategy.

PROJECT MANAGER SOUTH YORKSHIRE SUPERTRAM MONITORING STUDY. Three year monitoring of Supertram including appraisal of original demand forecasts to recommend improvements in forecasting methodology.

PROJECT MANAGER, DUBLIN BLANCHARDSTOWN QUALITY BUS AND CYCLEWAY IMPLEMENTATION Preliminary design, justification and detail design of bus priority and cycle proposals leading to implementation

PROJECT MANAGER, SMITHILLS HALL AND ESTATE TRANSPORT STRATEGY. Development of a transport strategy to provide access to and circulation within a 2000 acre recreational development in the West Pennine Moors.

PROJECT MANAGER, MODEL AND TRAFFIC ENGINEERING AUDIT, EAST MANCHESTER METROLINK. Audit of modelling in the development of traffic engineering proposals for the introduction of street running trams.

PROJECT MANAGER, DRAFTING OF ACTION GUIDE FOR BUS OPERATORS. Writing, for the Confederation of Passenger Transport, a guide to planning, funding and legal processes affecting bus operators in urban areas.

PROJECT MANAGER, SEFTON NORTHERN CORRIDOR STUDY. Conversion of model to SATURN/SATCHMO.

SENIOR CONSULTANT, DUBLIN MALAHIDE ROAD QUALITY BUS AND CYCLEWAY IMPLEMENTATION. Substituted for the project manager and undertook Stage 1 safety audit of bus priority and cycle design.

SENIOR CONSULTANT, DUBLIN TRAFFIC MANAGEMENT STUDY. Review of traffic management and operation of the SCATS UTC system to develop short term solutions to traffic congestion problems.

PROJECT MANAGER, GRIMSBY TRANSPORTATION ADVICE. Review of a five-arm junction and advice on adoption of SATURN/SATCHMO model developed by Humberside County Council.

1996 W S Atkins

PROJECT MANAGER DUBLIN BUS PRIORITY STUDY. Development of the design for a detailed City Centre and radial route bus priority strategy to complement LRT including modelling of the scheme using SATURN/SATCHMO.

PROJECT MANAGER, EAST MANCHESTER METROLINK ALTERNATIVES STUDY. Review of public transport in East Manchester to identify other means of achieving the benefits of Metrolink; options comprised bus based systems incorporating significant priority as well as heavy rail options including new stations and revised service patterns.

PROJECT MANAGER, SOUTHPORT MULTI-MODAL MODEL. Co-ordinating role constructing SATURN/SATCHMO multi-modal transport model for Southport in collaboration with Sefton MBC.

SENIOR CONSULTANT BARRIERS TO BUS PRIORITY IMPLEMENTATION STUDY. Interviewed local authority officers and members, PTEs and bus operators exploring the difficulty of implementing bus priority measures.

SENIOR CONSULTANT, WALSALL BUS PRIORITY PRELIMINARY DESIGN. Substituted for the project manager supervising preliminary design and evaluation of bus priority for Bloxwich and Wolverhampton Road Corridors.

PROJECT MANAGER PENRITH - KESWICK RAIL PRE-FEASIBILITY STUDY. Examination of the demand potential and commercial case for re-opening of rural passenger line including impact on the local economy.

PROJECT MANAGER, CARLISLE PACKAGE BID STUDY. Multi-modal modelling of public transport options including bus priority and park & ride, surveys of public attitude and advice in on the development the package bid.

PROJECT MANAGER, TRAFFIC IMPACT APPRAISALS. Traffic engineering appraisals of development proposals.

1995 W S Atkins

SENIOR CONSULTANT, OBJECTIONS TO METROLINK EXTENSIONS. Advised GM Buses South and landowners on the Airport and Eccles Extensions of Metrolink including critical appraisal of demand and financial forecasts.

PROJECT MANAGER, LEEDS SUPERTRAM AUDIT. Critical appraisal of demand and financial forecasts for bidder.

PROJECT MANAGER FOR LIVERPOOL AIRPORT PUBLIC TRANSPORT STUDY. Demand modelling for public transport options comprising bus, heavy and light rail and people mover schemes for Liverpool Airport.

 $PROJECT\ MANAGER,\ TRAFFIC\ IMPACT\ APPRAISALS.\ Traffic\ engineering\ appraisals\ of\ development\ proposals.$

PART-TIME LECTURER IN TRAFFIC ENGINEERING at Stockport College of Further and Higher Education.

1994 W S Atkins

SENIOR ENGINEER, HAWALLY RE-PLANNING STUDY, KUWAIT. Traffic surveys and public transport data collection for transport engineering and planning aspects of re-planning study of densely populated area of Kuwait City.

PROJECT MANAGER FOR APPRAISAL OF PLANNING APPLICATION FOR LIVERPOOL AIRPORT. Appraisal of traffic impact assessment submitted by the airport company for terminal expansion to 12 mppa.

SENIOR ENGINEER, DATABASE DESIGN. Assisted in development of database for storage and analysis of Metrolink planning information relevant to the financial case for future extensions.

SENIOR ENGINEER, TRAFFIC IMPACT ADVICE, DoT, NWNMD. Advice on traffic impact of developments on the North West motorway and trunk road network including the Manchester Airport second runway planning application.

1993 Wootton Jeffreys Consultants Ltd.

SENIOR ENGINEER, SOUTH SHORE CENTRAL CORRIDOR, BLACKPOOL. Reviewed transportation needs of access corridor into town centre and sea front including review of public transport including peoplemovers.

PROJECT MANAGER, SCHEME IDENTIFICATION STUDY, M62, MANCHESTER. Scheme identification study for innovative solutions to enhance capacity of M62 Junction 12 to Junction 18.

PROJECT MANAGER, ROUNDABOUT DESIGN, PORTWOOD, STOCKPORT. Design for J13 M63 improvement.

1989-1992 ENGINEER L G Mouchel and Partners

SCHEME DESIGN, A6 (M), STOCKPORT. Forecasting, economic evaluation and operational appraisal preparing for the Side Roads Orders Public Inquiry involving supervising Greater Manchester Transportation Unit.

DEVELOPMENT HIGHWAY SCHEME, ASHTON UNDER LYNE. Preparation of preliminary highway layouts and operational appraisal of ten signal controlled junctions associated with 2.2km of dual carriageway link road.

M66, DENTON TO MIDDLETON, MANCHESTER. Advance works Public Exhibition and Inquiry, detail design and contract documents for interchanges and substantial side road works including pedestrian and cyclist provision.

MS2 EVALUATION. Economic evaluation of Matrix Signal Mark 2 on dual 3-lane motorways using QUADRO.

SIGNAL DESIGN, CARLISLE. Detailed design of linked signalisation of four junctions including gyratory.

TRAFFIC AND HIGHWAY ENGINEERING ADVICE. Advice for various development proposals with public inquiries. HARTLEPOOL MARINA. Assessed impact of traffic of 200 acre development, detail design and contract documents for site roads and preliminary design for diversion of 0.8km of existing primary route.

1987-1989 ASSISTANT ENGINEER, L G Mouchel and Partners

ROADS FEASIBILITY, ANGUILLA. Undertook traffic, land and materials surveys, benefit appraisal and prepared detail design and contract documents for 20 km of road improvement.

HIGHWAY ACCESS TO RETAIL STORE, SANDHURST. Responsible for detail design and contract documents for 1km of dual carriageway link road, signal controlled gyratory and two roundabouts.

HEAVY CIVIL ENGINEERING, UK AND TURKEY. Three power station design studies, including transport of plant; planned and supervised ground investigations in the U.K. and pile testing in Turkey.

1986 SITE ENGINEER, Sir Robert McAlpine and Sons Ltd. OXFORD ST, LONDON. Site engineer (secondment). 1984-1985 ASSISTANT ENGINEER, L G Mouchel and Partners

A3 IMPROVEMENTS, HINDHEAD. Forecasting, economic evaluation and operational appraisal of 7km dualling. BRIDGE REPLACEMENT, PONT SEIONT. Evaluated and reported on economics of bridge replacement scheme. TRAFFIC ENGINEERING DESIGN, KUWAIT. Designed Arabic/English signs, signalling and road markings.

PUBLICATIONS

- Parkin, J. and Coward, A. (forthcoming) Comparison of methods of assessing routes for cycle traffic. *Proceedings of the Institution of Civil Engineers, Municipal Engineer.*
- Parkin, J., Wardman, M. and Page, M. (2008) Estimation of the determinants of bicycle mode share for the journey to work using census data. *Transportation*. Vol. 35, No. 1, pp93-109 doi: 10.1007/s11116-007-9137-5
- Parkin, J., Ryley, T. and Jones, T. (2007) Barriers to cycling: an exploration of quantitative analyses. Chapter in *Cycling and Society* Eds. Rosen, P. and Horton, D. and Cox, P., Ashgate, London. ISBN 13: 978 0 7546 4844 4
- Parkin, J. (2007) Pushing towards improved traffic planning for the bicycle. New Zealand National Transport Conference, July.
- Parkin, J. (2007) Effective skills training in bicycle infrastructure design for urban development professionals. Velo-city Conference, Munich, June.
- Parkin, J. (2007) Policy implications of results from an aggregate model of cycle use in the UK. 39th Universities' Transport Study Group Conference, Harrogate, January.
- Parkin, J., Wardman, M. and Page, M. (2007) Models of perceived cycling risk and route acceptability. *Accident Analysis and Prevention* Vol. 39 No. 2 pp364-371. doi:10.1016/j.aap.2006.08.007.
- Cope, A.M., Abbess, C.R. and Parkin, J. (2007) Improving the empirical basis for cycle planning. Paper in Mathematics on Transport, selected proceedings of the 4th Institute of Mathematics and its Applications International Conference on Mathematics in Transport. Elsevier ISBN 978 0 08 045092 6
- Roodhouse, S. (2006) Cultural Quarters: principles and practice. Intellect, Bristol. Contributor.
- Lancashire County Council (2005) Lancashire the cyclists' county. A code for planning, designing and maintaining roads and tracks for cyclists. Principal author: John Parkin. Lancashire County Council Environment Directorate, Preston, http://www.lancashire.gov.uk/environment/cycling/pdf/Lancashire.pdf
- Parkin, J., Christensen, J, Krause, J. and Moores, D. (2005) A systematic approach to Rights of Way improvement planning. *Proceedings of the Institution of Civil Engineers, Municipal Engineer* Vol 158 No. 2, June, pp123-128.
- Parkin, J., Wardman, M. and Page, M. (2005) Target setting using a model of variation in cycle use for England and Wales. Paper at Velo City Conference, Dublin, June
- Parkin, J. (2005) The users' perspective. Presentation to conference on new perspectives in designing for cyclists, University of Nottingham, 14th April 2005.
- Parkin, J. (2004) Aiming for the bullseye: how to set realistic cycling targets. Presentation to the Government Office for the North West and the Cycling Projects seminar on 6th December 2004.
- Parkin, J. (2004) Determination and measurement of factors which influence propensity to cycle to work. Doctoral Thesis. University of Leeds.
- Clarke, D. and Parkin, J. (2004) Environmental management awareness of sub-contractors and the requirements of main contractors. *International built and human environment research week*, 4th *International postgraduate research conference, University of Salford*. April.
- Parkin, J., McCorquodale, F. and Pickersgill, S. (2004) Innovation in education transport: developments in West Yorkshire. *Proceedings of the Institution of Civil Engineers, Municipal Engineer* Vol 157 No.1 March, pp33-38.
- Parkin, J. (2003) Case study on an assignment to develop student ability to constructively challenge design guidance. Integrating teaching with research and practice in the built environment. 8-10 September 2003. Wadham College, Oxford.
- Parkin, J. (2003) Comparisons of cycle use for the journey to work from the '81, '91 and 2001 censuses. *Traffic engineering and control*. September Vol44 No 8, pp299-302.
- Parkin, J., Wardman, M. and Page, M. (2002) Video based technique to develop risk ratings for cycle use. 30th PTRC European Transport Conference, Cambridge, September.
- Parkin, J. (2002) Provision for cyclists along busy roads and the implications of hilliness and stops and starts. Presentation to the Government Office for the North West and the Cycling Project for the North West seminar on 11th June 2002.
- Parkin, J. (2001) Time series analysis of cycle use in Bolton. Paper at Velo City Conference, Glasgow. September.
- Parkin, J. (1999) Educational Requirements for UK local authority engineers. Paper at I Jornadas de Ingeniería civil y adminstración local, Granada, Spain. 29-20 October.
- Murray, S and Parkin, J. (1999) Bolton: Coming full cycle. Paper at Velo City Conference, Graz. April.
- Peace, H., Parkin, J. and Nwagboso, C. (1998) Development of a model, based on observations, to predict roadside emissions from traffic flow data. *Traffic engineering and control*, Vol 39 (11), November, 620-624.
- Parkin, J., Merrall, A.C., Goodwin, P.B., and Parkhurst, G. (1997) Experiences from the Supertram Monitoring Study. 25th PTRC European Transport Forum, Uxbridge, September.
- Parkin, J. (1993) Requirements for modelling networks with variable direction signing. MSc dissertation. University of Salford.
- Parkin, J. (1984) Trends in new car fuel efficiency. Undergraduate final year project. Imperial College of Science and Technology.