



CURRICULUM VITAE

MALCOLM BUCHANAN

<i>Nationality</i>	British
<i>Date of Birth</i>	1939
<i>Education</i>	Cambridge University MA Mechanical Sciences Tripos Birmingham University MSc Transportation and Traffic Planning
<i>Languages</i>	Some knowledge of French and German
<i>Professional Affiliations</i>	Member of the Institution of Civil Engineers Member of the Chartered Institute of Transport Fellow of the Institute of Highways & Transportation
<i>Present Position</i>	Director, Colin Buchanan and Partners
<i>Previous Positions</i>	Department of Planning and Transportation: Principal Planner, Rail Planning Section, 1973-4 Greater London Council Department of Planning and Transportation: Principal Planner, Bus Planning Section, 1972-3 Greater London Council Department of Planning and Transportation: Senior Research Officer, Highway Development Section Greater London Council, 1969-72 Transportation Planner, 1969 Wilbur Smith and Associates, New Haven, Connecticut, USA Research Officer, 1968 Greater London Council, Department of Highways and Transportation Regular Officer, 1960-67 Royal Engineers
<i>Professional Background</i>	A chartered engineer with a masters degree in transportation and traffic planning, he is an experienced manager of multi-disciplinary teams in major studies for land use, highway, bus and rail planning. He has particular interests in the application of economics to transport policy. He acted as advisor to the government over the deregulation of the British bus industry and

the formulation of transport policy in London after the abolition of the GLC. He is a frequent expert witness at public inquiries and has, in the last few years, directed studies as diverse as the Malta Structure Plan, the Oxford Transport Study and the Shanghai Transport Policy Review. Mr Buchanan is a visiting professor at Napier University, Edinburgh where he chairs the Transport Research Institute.

COLIN BUCHANAN AND PARTNERS (recent studies only)

<i>Bus Reliability</i>	Directed the construction of the bus reliability simulation model for First Group Leeds.
<i>Shanghai Transportation Strategy</i>	Directed CBP's review of the transport strategy being followed by the Government of Shanghai.
<i>Bus Reliability Study</i>	Directed a study of the causes of variation in bus running times for the Confederation of Passenger Transport, and have represented many operators at Traffic Commissioners' Public Inquiries.
<i>Effectiveness of Bus Priority</i>	Reviewed the effectiveness of Greenways compared to conventional bus lanes for the Scottish Executive.
<i>Braehead</i>	Directed the review of access and parking at the new Braehead Shopping Development for Capital Shopping Centres.
<i>Bournemouth</i>	Expert witness at the Local Plan Inquiry regarding the Riverside Avenue P&R site.
<i>Chester – Deeside Transit System</i>	Expert witness at the Public Inquiry into Chester's fifth P&R site and the guided busway.
<i>Cambridge Region</i>	Presented evidence to the Cambridge RPG Inquiry and subsequently directed CBP's review of the transport and land use strategy for the region.
<i>Concessionary Fares</i>	Directed the firms development of a national concessionary fares scheme for Scotland.
<i>Limerick Region</i>	Directed the review of land use and transport strategy for the Limerick Region.
<i>Park-and-Ride Networks</i>	Developed the P&R network proposal for central Herts on behalf of Arriva.
<i>Newcastle City Centre</i>	Directed the design of Newcastle's traffic reduction scheme.

<i>Galway Airport Relocation</i>	Directed the study of the possible relocation of Carnmore Airport.
<i>Liverpool Airport</i>	Reviewed the case for ERDF funding of the expansion of Liverpool Airport for the GOM.
<i>Oxford Public Inquiry</i>	Witness for the County and City Councils at the OTS Inquiry.
<i>Galway Transportation and Planning Study</i>	Director responsible for developing a new planning and transport plan for the Galway region.
<i>Southwark Coach Management Study</i>	Directed this study which identified locations for coach pick-up/set down bays, and an off street coach park, potential coach ban areas and a network of pedestrian routes.
<i>Durham Transport Study</i>	Directed this study of the historic city of Durham. Options considered included P&R, pedestrian 'priority' improved cycling and a new bypass.
<i>Dublin LRT</i>	Development of proposals for integrating the Dublin tram with bus services.
<i>Bus Regulation in Europe</i>	Reviewed the regulatory frameworks in EU member states for DGVII.
<i>Henley Transport Study</i>	Directed this study which led to the preparation of a plan for limiting traffic and improving the environment for pedestrians.
<i>Milton Keynes</i>	Directed three successive studies for MKBC of the bus system, the case for a new bus station and the preparation of a sustainable transport plan.
<i>Buses in Manchester City Centre</i>	Advised the bus operators over the needs of buses with the post-bomb replanning of the city centre.
<i>Greenwich Millennium</i>	Directed this study of the means of getting 12m visitors per annum onto the Greenwich Peninsula.
<i>Newcastle Public Transport Study</i>	Directed this study of bus priority and LRT for the City Council.
<i>Strathclyde Tram</i>	Advised Strathclyde Buses regarding the impact of this proposal on their finances. Prepared petition against the proposal and represented SBH at the Inquiry.
<i>Strathclyde Millennium Plan</i>	Conducted studies of Argyle Street proposals in Glasgow and prepared counter proposals aimed at improving public transport.

<i>Oslo Airport Bus</i>	Advised SAS regarding the future of their airport bus service when Fornebu Airport is relocated to Gardemoen.
<i>Trentino Bus Services</i>	Directed the surveys of Atesina's bus services in northern Italy.
<i>Park-and-Ride in Kent 1995</i>	Examined the potential for P&R throughout the County.
<i>Greenwich By-Pass</i>	Compared and evaluated the three by-pass options for Greenwich and recommended the Foreshore Route. Conducted the public consultation exercise.
<i>Review of Major Scottish Trunk Road Projects 1994/5</i>	Director in charge of this project for the National Audit Office, which assessed the trunk and key road network review and the Central Scottish Traffic model.
<i>Manchester Airport 2nd Runway 1994</i>	Prepared the case to support Cheshire County Council's view that the public transport share of trips should be increased from less than 10% to 40%. Developed the multi-modal trip end spreadsheet for the airport. Represented the Council at the Public Inquiry.
<i>Oxford Transport Study 1993/4</i>	Directed this study recommending further restrictions on car use and greater reliance on buses and cycling in order to improve the environment of the City Centre. The study used Stratagem - the multi-modal model.
<i>Red Routes in London</i>	Responsible for the firm's assistance to the Traffic Director for London.
<i>Lower Thames Crossing 1993/4</i>	Responsible for the traffic forecasting, financial and economic appraisal of options in this study of a new crossing of the Thames estuary downstream of the M25.
<i>Medway Towns Park-and-Ride Study</i>	Analysed the demand and options for P&R in the Medway Towns for Kent County Council. Recommended the Rochester Airport site as top priority.
<i>Norwich Inner Ring Road</i>	Developed the City Council's alternative to the County Council's proposal and presented the City Council's case at the Public Inquiry.
<i>South and West London Bus Priority Study 1991</i>	Directed this study for London Transport and 6 London Boroughs.
<i>Channel Tunnel Terminal</i>	Conducted the study of the Newham option for British Rail and presented the case to the Select Committees of both houses of Parliament.
<i>Royal Mile Edinburgh</i>	Directed this study of the means of reducing bus and coach traffic in the Royal Mile.

<i>Stafford Pedestrianisation</i>	Principal witness for the Borough at the Inquiry in which full pedestrianisation was approved.
<i>Cambridge Transport Study</i>	Directed this study of the transport problems of Cambridge covering Park and Ride, Cycling, Pedestrianisation, Parking Control, road improvement, the case for LRT and road pricing. Forecasting and evaluation work involved the use of SATURN and an innovative strategic spreadsheet-based model.
<i>Hereford Transport Study</i>	Directed this study of the transport problems of Hereford. The study for the County and City Councils was used as a test case by the Civic Trust and Department of Transport to examine the potential for increased use of cycles in urban areas.
<i>Luton Central Area and Busway Study</i>	Directed this study examining how the Luton Busway could be integrated with new development in the central area. The study also examined the alternatives for re-routing buses and introducing traffic management.
<i>East London River Crossing</i>	Prepared and presented the London Borough of Greenwich evidence against the latest ELRC proposal. Argued that the bridge was inconsistent with government policy and should be tolled.
<i>Malta Structure Plan 1989/90</i>	Chairman of the Supervisory Board for the preparation of the Structure Plan for the Maltese Islands.
<i>Newcastle Sunderland Busway 1990/91</i>	Directed this study for Go-Ahead Northern of the case for intensive bus priority, express services and park and ride in this corridor as an alternative to a metro extension.
<i>South West London Orbital Public Transport Study 89-90</i>	Directed this study for 6 London Boroughs which led to the "SWOPTIONS" proposal for a new rail link connection SW London to Heathrow.
<i>Leicester Transport Policy 1989/90</i>	Advised the County Council over the development of a new transport strategy.
<i>Coach Operators</i>	Directed the study of congestion in London and its effects on commuter coaches.
<i>Paisley Traffic Study 1989/90</i>	Directed this SATURN based study of traffic and road improvements in Paisley.
<i>Sunderland Coalfields Infrastructure Study 1989/90</i>	Directed this study of the highway network improvement needs.
<i>Channel Tunnel Terminal 1989/90</i>	Responsible for developing the case that the London Channel Tunnel Terminal should be located at Stratford

	rather than Kings Cross on behalf of L.B. Newham. Presented the case before the House of Commons Committee.
<i>Wrexham Inner Ring Road 1989</i>	Expert witness on behalf of Wrexham Maelor Borough Council, presented the case for an alternative alignment of the inner ring road making use of a cut and cover tunnel.
<i>Luton LRT and Busway Study 1989/90</i>	Director responsible for the study of the case for reopening the Luton Dunstable BR line either as a tramway or as a busway with Park and Ride services.
<i>Strathclyde Public Transport Development Study 1988/9</i>	Director responsible for the market research and model development for this major study of the scope for new rail or light rail infrastructure in Glasgow. The study developed and calibrated the public transport network model.
<i>Subsidy, Rail and Road Investment for Greater London 1988</i>	Directed these three studies of the case for public transport subsidy, for new rail and underground lines and for highway investment for LPAC.
<i>Clapham Junction Access 1988</i>	Responsible for this study of access and interchange movements at Clapham Junction paying special attention to the needs of persons with disabilities.
<i>Strategic Transport Planning for London 1988</i>	Directed CBP's input to this exercise conducted jointly with MVA for the London Planning Advisory Committee. The project used the first multi-modal strategic planning model - LAM - originally developed by the TRL.
<i>Westminster City Council 1987</i>	Responsible for the preparation of the City Council's alternative to LRT's plan for a new 'hub' coach station at Paddington.
<i>London Regional Transport 1987</i>	Directed the study of the use of taxis in place of uneconomic bus services in London.
<i>London Borough of Greenwich 1987</i>	Negotiation with the Department of Transport over the designation of Secondary and Local roads in the borough and preparation of evidence for the local plan inquiry.
<i>Department of Transport - Policy Advice 1985-7</i>	Six months prior to the abolition of the Greater London Council and the Metropolitan Counties he was appointed as policy advisor to the Department of Transport by the Secretary of State, Nicholas Ridley. He worked part time alongside the senior civil servants responsible for advising Ministers on the formulation of transport policy for London and the conurbations. He was particularly concerned with rail and bus policy but also advised on the

interactions between public transport, roads and traffic and on many specific policy issues such as bus deregulation, access to Heathrow and the opportunities for new railway construction.

<i>Traffic Congestion in Glasgow 1987</i>	Expert witness at the Traffic Commissioner's Inquiry into the causes of congestion in the central streets of Glasgow following the deregulation of buses in 1986.
<i>Bus Priority in London - London Regional Transport</i>	Director responsible for this reassessment of the value of bus priority measures in London.
<i>Bus Stations and Bus Stops Under Deregulation 1984/5</i>	Director of this study aimed at determining the extent to which the Government's policies for the deregulation of bus services could be hindered by the ownership/control of bus stations or could lead to congestion at city centre bus stops.
<i>Depot Management Information System (Demist) 1984/5</i>	Responsible for the formulation of this system, its implementation in the Scottish Bus Group and its marketing to the rest of the bus industry.
<i>White Paper - Buses 1984</i>	One of the three external advisors on the committee which advised the Secretary of State for Transport on the introduction of competition in the bus industry.
<i>Kuwait Transport Company 1983/4</i>	Retained as policy advisor to the Deputy Chairman and Managing Director.
<i>National Bus Company 1984</i>	Preparation of a plan for increasing the extent of competition in the bus industry by means of franchising and tendering.
<i>Bus Network Study 1984</i>	Director in charge of this study for the DTp of the alternative procedures for justifying public expenditure on urban bus networks.
<i>Economic Evaluation Comparability Study 1983</i>	Director in charge of this study for the DTp of the comparability of public transport and highway investment appraisal procedures.
<i>Kuwait Public Transport Studies 1983</i>	Director in charge of the review of the bus operation and its management.
<i>Grampian/Northern Engineering Study 1982/3</i>	Responsible for the financial appraisal of the case for merging the central workshops and/or depots of the two major bus operators in Aberdeen.
<i>Poor Geometry Roads</i>	Director in charge of this study for the SDD to determine the links between traffic speeds and road geometry.
<i>Park-and-Ride Studies</i>	Director in charge of the design of Park and Ride services in Cambridge and for the Wimbledon Lawn Tennis Championships.

<i>Strathclyde Public Transport Strategy Review 1982/3</i>	Responsible for the consultants input to this review of the public transport strategy being followed by the three main operators in the Greater Glasgow area. He formulated the study approach, was closely involved in all aspects of the work and was a joint author of the proposed new strategy report.
<i>Caledonian Macbrayne Demand and Service Review 1982/4</i>	Director in charge of this review of the Clyde and Western Isles ferry services.
<i>Trinidad Bus Priority Route 1981/2</i>	Director responsible for the bus operation, service planning, economic and traffic engineering aspects of the continuing development of the busway along the disused Port of Spain - Arima railway track.
<i>Trentino Transport Study 1981</i>	Responsible for the public transport aspects of this study in Northern Italy.
<i>Public Transport in Gallarate, Italy 1981</i>	Advisor to Italian consultants on a study of bus operations in the town of Gallarate.
<i>Netherlands Public Transport Service Standards 1980</i>	As part of a major review of service standards and the allocation of subsidies between different areas, he was commissioned by the Netherlands Ministry of Transport to write a paper for an internal seminar of transport economists, planners and public transport operators describing how service levels should be determined in different parts of Holland.
<i>Lewes Area Public Transport Study 1979-81</i>	Director in charge of CBP's contributions to this study of rural public transport for the Department of Transport and East Sussex County Council. The roles and ways of evaluating bus services in rural areas was a central issue, but the study also embraced rail and 'tertiary' modes of transport.
<i>Scottish Bus Group Market Analysis Project 1979 - 82</i>	Following the successful application of Market Analysis techniques by the National Bus Company, the Scottish Bus Group decided to apply similar techniques to its own operation which covers the whole of Scotland. He was the consultant director of this project which was carried out by the six subsidiary Scottish Bus Group companies controlled by a small central team based in Edinburgh. The study involved the reshaping of bus services provided by the SBG's 4000 buses and produced major financial improvements.
<i>Bombay Bus Management Study 1979</i>	Responsible for this study of the Bombay Electric Supply and Transport Undertaking's bus operation which comprises 1,800 vehicles and carries 4 million passengers per day. The study had to examine the effectiveness of

the operator's current traffic operations, corporate planning, vehicle maintenance and financial procedures. He was particularly responsible for the examination of the company's traffic operations methods and the establishment of policies for fleet expansion, fares and cross-subsidies. The traffic operations work included a close examination of existing vehicle and crew scheduling procedures as well as incentive payment schemes and on-street control methods.

National Bus Company Market Analysis Project 1977-81

He acted as consultant to the National Bus Company for this study, whose aim was to apply the techniques successfully developed in the Midland Red Viable Network Project (see below) to all the subsidiary operating companies of NBC. The project included conducting surveys on the buses operated by NBC companies, processing and analysing the data collected and designing and implementing new bus networks.

Transport Planning for Greater London 1977 - 79

He directed this two year study for the Nuffield Foundation. This study was a thorough appraisal of the objectives of transport policy, the ways in which these objectives could be achieved and how their achievement could be assessed. A whole range of policy options in London was compared, including policies for roads, rail, buses, traffic management and restraint, and freight. The study led to the publication of a book 'Transport Planning for Greater London'.

Fraud 1979

He directed this study of the extent of passenger and staff fraud in a bus company in the UK.

Bradford Traffic and Transport Study 1977

He was responsible for this study of the traffic and transport problems in the centre of Bradford. The study was undertaken on behalf of the Bradford Chamber of Commerce and considered the effects of the proposed traffic management scheme, the bus lanes and the public transport interchange.

Rainworth Commuter Coach 1976-77

He was responsible for the preparation of evidence on behalf of Rainworth Travel to support their application for a licence from the Traffic Commissioners to operate a commuter coach service into the centre of Nottingham.

M54 Telford Interchange 1976-77

Responsible for the study of alternative ways of connecting the new M54 motorway into the road network of Telford New Town. This work was conducted for the Midland Road Construction Unit.

Bus Rail Interchange, Bournemouth Central Station 1976

Responsible for this short study of alternative bus routing configurations in the proposed redevelopment of Bournemouth Central Station.

- Ravensberg Spinnerei Bielefeld 1976* He conducted the traffic analysis for this short study of the scope for conserving the Ravensberg Spinnerei by producing alternative road solutions. The work was conducted for the Beigeordneter fuer das Bauwesen of Bielefeld in West Germany.
- Southwell Traffic Management 1976* Responsible for the evaluation of the Southwell traffic management scheme on behalf of the Southwell Parish Council.
- Midland Red Viable Network Project 1976-78* He directed this study for the National Bus Company, the general aim of which was to develop a plan for the whole of the Midland Red's bus network (covering some 26 towns) which would make the whole bus operation financially self-sufficient. The detailed study objectives were:
- ? To identify areas where immediate cost savings could be made;
 - ? To prepare alternative peak and off-peak route networks in the light of observed demand;
 - ? To prepare alternative peak and off-peak fares policies;
 - ? To develop improved methods of bus costing;
 - ? To examine public attitudes to the bus services;
 - ? To compare and evaluate alternatives and produce agreed routes and fares plans and marketing strategies;
 - ? To establish an on-going method for monitoring and controlling cost effectiveness.
- The Midland Red study included an extensive programme of on-bus surveys. A design and testing procedure was developed to derive the optimum bus network from the pattern of potential demand, and then schedule and cost the network and produce estimates of revenues.
- Elasticities of Demand For Bus Services 1976-80* He was Director in charge of this study for the Transport and Road Research Laboratory, which was a 'before and after' assessment of the changes to be made to the Telford bus services following the Short Term Bus Study (see below). The study produced estimates of the elasticities of bus demand with respect to bus fares and generalised travel time for different categories of journey purpose.
- Kuwait Master Plan Review 1975* Responsible for conducting this review of the transport strategy set out in the Kuwait Master Plan. This formed part of a study for the National Housing Authority.
- A55 Trunk Road Inquiry 1975* Prepared and presented evidence to this inquiry in North Wales on behalf of a private client. The evidence

covered the interpretation of traffic forecasts and cost-benefit analysis.

Telford Short Term Bus Study 1975 He led a joint team of consultants, local authority and bus operator staff in a study to determine the best way of reorganising the bus services in Telford in the short term. The study covered bus costs and the revenues likely to result from service reorganisation

Petworth By-Pass 1974-75 He led a team of highway and traffic engineers to re-examine all the alternative ways of providing a by-pass for the town of Petworth. This work was conducted for the National Trust.

Telford Transportation Study 1974-77 Responsible for this study including the design and conduct of the surveys, the development of options and the interpretation of test results. The study produced a revised basic highway and public transport plan for Telford New Town.

Traffic and Transport in Caracas, Venezuela 1974 Advice to the Federal Governor of Caracas on traffic and transport with particular reference to the organisation and operation of the bus system.

GREATER LONDON COUNCIL 1969-74

London Rail Study 1973-74

In 1973, as head of the rail planning section, he became one of GLC's representatives on the London Rail Study - a joint study of railway planning and operation in Greater London conducted under an independent chairman, by the GLC, the Department of the Environment, the British Railways Board and the London Transport Executive. This study which followed the report of the Layfield Panel on the Greater London Development Plan, covered all aspects of railway planning from fares and ticketing arrangements to the development of an investment programme for new railway construction over the next twenty years. His particular responsibilities during the study included:

- ? Estimation of future planning parameters affecting rail travel in London and south east London;
- ? Forecasting of the future demand for rail travel;
- ? Testing of alternative new rail lines and services and the estimation of passenger flows;
- ? Economic evaluation of investment options; (Chairman of the economic evaluation working party);
- ? Study of new interchange possibilities and of bus/rail co-ordination;
- ? Comparison of alternative fares systems;
- ? Examination of the need for organisational changes.

Channel Tunnel Rail Link 1973-74

He was responsible for preparing the rail planning part of the GLC's response to British Rail's Channel Tunnel consultation paper. He subsequently proposed and established a joint study between the GLC, Kent CC, Surrey CC and LB Croydon of the transport issues arising from the Channel Tunnel Rail Link proposal, and in particular of the case for suburban stops on the line.

Transport Policy and Programme 1973-74

He was responsible for drafting the rail part of the GLC's Transport Policy and Programme.

Public Transport Model Development 1973-74

He was responsible for reviewing the branch's needs for public transport models, specifying the model to be developed for the Greater London Transportation Study and for model development work.

General Bus Planning 1972-73

As head of the bus planning section of the Greater London Council, he was responsible for studies of the demand for new types of bus services, the causes of unreliability and bunching in existing bus services, and the effects on buses of traffic management and redevelopment schemes.

Bus Priority 1971-72

He led a team of engineers and economists in a study to examine the most cost effective ways of introducing bus priority measures in Inner London. This study looked at alternative strategies for the introduction of bus lanes and bus- only streets and compared the benefits to bus passengers and pedestrians with the disadvantages that might arise for other road users.

South Bank Polytechnic 1971-73

Gave the transportation planning lectures on this undergraduate course.

*Greater London Development
Plan Inquiry 1970-71*

During the course of the GLDP Inquiry, he prepared a number of papers for submission as evidence to the Layfield Panel. Amongst the topics covered were:

- ? The testing of alternative primary road networks;
- ? The development of road planning in London;
- ? Speed/flow relationships;
- ? Traffic flow composition.

*Expenditure on Secondary Roads
in the Greater London Development
Plan 1970*

He conducted a study of the expenditure that would be necessary on London's secondary road system under alternative assumptions on construction of the primary road system. The results of this study were published as a background to the Development Plan Inquiry.

WILBUR SMITH AND ASSOCIATES, NEWHAVEN, CONNECTICUT 1969

*Johnstown (Pennsylvania)
Transportation Study 1969*

For Wilbur Smith and Associates he worked on Phase II of the Johnstown Study. This involved the projection of the demand for road traffic and analysis of road capacity shortfall.

*Baltimore Beltway Interchange
Study 1969*

He examined the feasibility of a new interchange on the Baltimore Beltway.

GREATER LONDON COUNCIL 1968

*Traffic Forecasting for the Greater
London Development Plan
Road Proposals*

Because of the complexity and scale of the road system in Greater London this study involved the development of special analysis techniques for assigning traffic to road networks. The study was concerned with determining how the GLDP road proposals would work in practice and producing figures to enable design work for intersections and town centre schemes to proceed.

ROYAL ENGINEERS 1960-67

During his service as a regular officer in the Royal Engineers, he attained the rank of Captain. In addition to normal military duties, he was in charge of various construction works including road and building work in Norway and airfield and port construction in the Middle East.

PUBLICATIONS AND PAPERS

London Road Plans 1900-70, GLC Research Report;

Secondary Road Expenditure, GLDP Background Paper;

Peak Hour Characteristics, GLDP Background Paper;

Speed/Flow Relationships, GLDP Background Paper;

Bus Priority in Inner London, GLC Internal Report and Article in Traffic Engineering and Control;

The Inner London Bus Priority Model, GLC Research Memorandum;

A Note on Traffic Speeds in London, Traffic Engineering and Control, June 1976;

Mass Transit and Personal Mobility, Paper to the International Congress of the European Asphalt Pavement Association, Montreaux 1975;

Traffic and The Environment, Paper to the Jornadas Internacionales Sobre Medio Ambiente Urbano, November 1976;

Urban Transport Policy, Article in Built Environment;

Transport Planning for Greater London, Saxon House, with Nick Bursey, Kingsley Lewis and Paul Mullen;

The National Bus Company Market Analysis Project, Traffic Engineering and Control;

Bus Policy Appraisal and Decision Making - The BUSMODEL Approach, Paper to the World Conference on Transport Research 1980, with Kingsley Lewis;

Public Transport Planning - Do We Need Needs? Surveyor 1982, with Kingsley Lewis;

Value for Money in Public Transport, Paper to the London Transport Golden Jubilee Conference 1983;

Traffic in Towns 1963-1983 - How Have the Towns Coped with the Traffic? Paper to Chester Civic Trust.

Future Urban Transport Options in the UK, Paper to the American Institution of Transportation Engineers 1983.

Public Transport: Who travels, who pays? Keynote paper to the Nottingham CICC Conference - Public transport - planning for radical change 1985.

Milan Central Area Supplementary Licensing Scheme, Paper to PTRC Summer 1987.

Urban Transport and Market Forces, Chapter in "New Life for City Centres" 1988

Urban Traffic Congestion: A Consultant's Route Through the Maze, Paper to Nottingham CICC Conference 1989.

Park-and-Ride, Paper with Ian Mitchell to PTRC Summer Conference 1989.

Subsidy of Public Transport: Can London Learn From Paris? Paper to PTRC Summer Conference 1989.

Park-and-Ride, Paper to Newcastle Conference 1992.

The Economics of Bus LRT vs Tram LRT, Paper presented with Kingsley Lewis to conference "The Urban Transport Dilemma" 1992.

Pollution Tax? A response to Sir Alastair Morton's proposals. RSA 1992.

The Oxford Package Bid. Paper presented with Roger Williams to Aston University Conference 1994.

Can Planning for Oxford survive the Academics? Oxford Magazine 1994.

A National Strategy for Urban Transport? Paper to Institution of Civil Engineers Conference on Urban Transport, Birmingham 1995.

Town Centres and Cars. Paper to Maidstone Conference "Town Centres and Beyond" 1995.

Transport Dilemmas for Historic Towns. Paper to Scottish Historic Burghs Association 1995.

Demand Management in Practice. Paper to English Historic Towns Forum 1995.

Improving Rail and Bus Access to Airports 1995

Lessons from the Demise of the Strathclyde Tram 1996

Sustainability: Transport Problem or Lifestyle Problem? PTRC 1997.

18 Years of Tory Transport Policy Edinburgh TRI Conference 1997.

Transport Needs from a Scottish Perspective CIT 1997.

What is Integrated Transport? Paper for DETR Conference 1997.

Integrating Transport and Environmental Policies. Paper to SUPRA Dec. 2000