

## CURRICULUM VITAE

### Proposed role in the project: Transport Economist

1. **Family name:** Burgess
2. **First names:** Peter James
3. **Date of birth:** 28/05/1953
4. **Nationality:** British
5. **Civil status:** Married
6. **Education:**

Institution [Date from - Date to]	Degree(s) or Diploma(s) obtained:
University of Nottingham - 1974	BA (Hons) Industrial Economics
University College London - 1977	MSc Economics of Public Policy
Association of Certified Accounts - 1987	Certified Diploma in Accounting & Finance

7. **Language skills:** *Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)*

Language	Reading	Speaking	Writing
English (Mother tongue)	1	1	1
French	3	3	5

8. **Membership of professional bodies:**

Member International Consulting Economists Association  
Transport Economists Group

9. **Other skills:** (e.g. Computer literacy, etc.):

Excel

10. **Present position and contact details:**

Independent consultant, Director, Transport Economics Limited.

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11. **Years within the firm:** 1

12. **Key qualifications relevant to assignment:**

Peter Burgess is an independent transport economist with over 35 years' experience in project management, consulting and Government in UK and overseas. He is a general transport and development economist, working mainly in road, maritime, urban public transport and rail sectors, with extensive experience of working with the international financial institutions having worked as an in-house consultant at EBRD from 1994-2000 and lead Arup's input on the EIB (JASPERS) transport framework from 2007-2011. He has provided economics input and managed multi-disciplinary teams engaged on feasibility studies of urban transport projects in Sofia and Burgas (Bulgaria). Also in Bulgaria he has provided the transport economics input to support applications for funding for the Struma motorway and three rail schemes: Sofia-Plovdiv, Plovdiv- Burgas, Plovdiv-Svilengrad. In 2011, Peter has also lead work in Malta which has included appraisal of park and ride and other bus priority measures. During six years at EBRD, Peter worked mainly on highway schemes in the Baltic States, Poland and Slovakia and port projects in the Caspian region. Recent studies have concerned the appraisal of policy packages for Etihad Rail (covering the development of road user taxes, rail subsidies and regulatory changes, with the aim of recovering external costs) and a review of the mode shift revenue support grant paid to rail freight operating companies by the UK Department of Transport.

Previous work includes urban public transport studies on an extension of the Croydon Tramlink (London, UK), four years at the London Docklands Development Corporation (dealing, inter alia, with Docklands Light Railway and other public transport issues) and a spell within the Taipei Municipal Government working on the appraisal of light rail and heavy rail urban transport systems.

13. **Specific Experience:** Eastern Europe

Country	Date from - Date to
Latvia	October 1993 - November 1993. 2008.
Lithuania	August 1993 – October 1993. Intermittent 1994 – 1996
Romania	October 2007- November 2008
Poland	March 2002 – April 2002, 2007, 2008

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Bulgaria	2009-2011
Slovenia	2008
Slovakia	Intermittent 1994 – 1996, 2008
Malta	2008, 2010-2011
MEDA Region (inc Malta, Cyprus)	MEDA Project Workshop, Cairo December 2004 Transport Feasibility Studies, Training Course, Istanbul ,June 2005

### 14. Specific experience in Middle East and Africa:

Country	Date from - Date to
UAE	2013-2014
Oman	2009,2011 and 2013
Bahrain	1983
Kuwait	1983
Tanzania	Ministry of Works : 2 year contract 1978-1980
Zimbabwe	1981
Uganda	2012

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### 15. Professional experience

Date from - Date to	Location	Client	Position	Description
2014	Oman	Ministry of Transport	Transport economist	<b>Oman Rail: Socio Economic Impact Study</b> This study assesses the socio economic impact of the new railway which is currently being under designed in Oman. This divides into (1) supply chain impact and (ii) customer related impact. Port related economic development is a key aspect of Government policy. Supply chain opportunities (related to construction, operation and maintenance) have been estimated with the objective of maximising Omani GVA and employment. Passenger service impacts are also being considered.
2013	UAE	Etiihad Rail	Study Manager	<b>Etiihad Rail: Regulations, Taxes and Subsidies Study.</b> The new Etiihad Railway (ER) will open soon. Governance of road freight is poor. The Study has developed and appraised alternative packages of taxes, subsidies and regulations that will create a more balanced playing field between road haulage and rail. Tax instruments have been estimated using a simple Road Cost Allocation Model following World Bank methodology. Socio Economic impact on trucking employment is also assessed. The scope includes development of an action plan with a strong focus on stakeholder acceptability and ease of implementation taking account of local capacity.
2013	UK	Department of Transport	Study Manager	<b>Review of Mode Split Revenue Support (MSRS) Grant</b> Study Manager and transport economist. MSRS grant is paid to support movements of containers where rail transport is more expensive than road but there would be an environmental benefit associated with movement by rail. This Study updated the cost models used to estimate financial need defined as the difference in transport costs by rail and road. The economic impacts of removal or reduction in grants after 2015 was also estimated.
2013	UK based study covering eight EBRD countries of operation	EBRD	Study Manager	<b>Inter-City Bus Market Study</b> Market assessment study to identify bankable projects. Questionnaire design and supervision of local experts. The scope included: understanding quality of current provision, institutional context and barriers to new entrants. A number of opportunities were identified and there has been a follow up meeting with a potential private investor.
2013	Albania	EBRD	Study Manager/Transport Economist	<b>Port of Durres: Dredging Project</b> Feasibility study to investigate the case for larger vessels to enter the Port. Review, with dredging expert, of previous technical and financial studies. Updated traffic forecasts, for individual dry bulk commodities were developed and input to economic feasibility model.
2012-2013	Uganda	World Bank	Transport Economist	<b>Kampala Bus Rapid Transit (BRT) Project</b> Lead economist responsible for economic and financial appraisal including socio-economic impact on existing taxi (matatu) and bus operators. Prepared note on the value of time in Kampala using local income distribution data, taking account of World Bank guidance.
2012	UK	Centro		<b>Strategy Advice</b> Ongoing work to assist the Centro's strategy team in their work on the updating of the Integrated Public Transport Prospectus. Since the Prospectus was issued in 2010, the HS2 announcement and the rise of local enterprise partnerships have transformed the West Midlands public transport and economic development landscape, with HS2 connectivity becoming a key issue. Work has focussed on the development of appraisal criteria and the application of these to produce a list of investment priorities. A planning data base covering GBSLEP has been developed.
2012	UK	DfT		<b>A14 Challenge</b> Lead Arup multi-disciplinary team response to DfT set challenge to produce an affordable scheme for the A14 in Cambridgeshire. The Arup solution offered a 50% reduction in capital costs. Funding sources capable of raising £300 million were identified.

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2011	Bulgaria	EIB (JASPERS)	Transport economist	<b>Bulgaria: Ministry of Regional Development and Public Works, urban public transport Project Management Unit (PMU): Institutional support.</b> Transport economist within team supporting the PMU. Activities included the development of a cost benefit analysis for the proposed project in the city of Stara Zagora. This included the estimation of benefits arising from the purchase of new trolley buses, catenary, depot rehabilitation and real time information at bus stops.
2011	Bulgaria	EIB (JASPERS)	Transport economist	<b>Bulgaria: Struma Motorway appraisal.</b> Lead economist on review of appraisal of this proposed 130km motorway between Sofia and the Greek border. Review of traffic forecasts and all inputs to the economic and financial appraisals in line with DG Regio Guidance. With technical team, re-work of construction and operation and maintenance costs. Review of data base benchmarking international tunnel construction costs. Inputs to sensitivity and risk analyses using @RISK.
2011	Malta	EIB (JASPERS)	Project Director	<b>Malta – ITMS Appraisal.</b> Appraisal of urban transport urban bus priority schemes in Valetta. These included. Priority at traffic signals, extra bus lanes and park-and-ride sites. The outputs of the appraisal have supported an ERDF/Cohesion Fund application.
2011	Oman	Sohar Industrial Port Company (SIPC)	Project manager	<b>Port of Sohar: traffic forecasts.</b> Sohar is Oman's main industrial port with petrochemical, iron and steel and logistics clusters. . The focus of the forecast was on the prospects for the development of these clusters over the next 30 years. A particular feature of this exercise was the need to take a view on the prospects for attracting internationally footloose traffic in a wide range of market sectors.
	Bulgaria	JASPERS, EIB	Transport economist	<b>National Rail Infrastructure Company: Review and Upgrade of Three Rail Feasibility Studies.</b> Transport economist within team conducting appraisal of rail projects Sofia-Plovdiv, Plovdiv-Burgas and Plovdiv-Svilengrad. The scope of the studies includes economic and financial appraisal and preparation of application forms and supporting documents for ERDF funding
2010-2011	Sofia, Bulgaria	EIB (JASPERS)	Project manager	<b>Urban public Transport Study, Sofia, Bulgaria. Client JASPERS, EIB</b> Project manager of multi disciplinary study to appraise packages of works and equipment to provide urban transport improvements in Sofia. These include, tram network extension and modernisation, procurement of new trolley buses, public transport shelters and passenger information system. Phase 1 included traffic forecasts and technical, economic, financial, environmental and wider social and economic impacts appraisal to identify a preferred option. The output will be a full feasibility study to support an ERDF/Cohesion fund application.
2010-2011	UK, France, Portugal	EIB Evaluation Department	Project manager, transport economist	<b>EIB: Transport projects in Convergence Regions: evaluation</b> Ex post evaluation of eight EIB loans to projects in convergence regions in the UK, France and Portugal. These included road schemes, an urban metro and a tramway.
2009-2010	Burgas, Bulgaria	EIB (JASPERS)	Project Director	<b>Bulgaria – Municipality Integrated Public Transport System – Feasibility Study, Environmental Assessment and Preparation of ERDF Major Project Application</b> This objective of this Multi-disciplinary Urban Public Transport Study in the City of Burgas, Bulgaria is to appraise alternative options and recommend a sustainable, economic and financially viable urban public transport system for European (ERDF) Funding. This project will mark an effective, sustainable improvement to public transport service provision and traffic management in the City.
	Oman	Sultanate of Oman Ministry of National Economy	Lead Economist	<b>National Ports Study</b> Lead Economist in multi-disciplinary team in this important (2009) study, which led to the recommendation for the creation of a National Ports Authority. The study covered all ports and fishing harbours in the Sultanate of Oman. The economics role included traffic forecasting and assessment of socio-economic impact.
2009	Slovakia	Ministry of Transport	Senior Transport Economist	<b>Slovakia: R1 Expressway Economic Appraisal</b> Three PPP Concession Contracts for construction and operation of 150km of highways consisting of both motorways and expressways in Slovakia. Part of the technical assistance Arup have provided is in relation to the management of potential environmental risks, particularly evaluating compliance with the relevant Slovakian and EU environmental legislation, and establishing whether appropriate assessments of potential environmental effects on Natura 2000 sites.

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2008-2009	EU Wide	EIB	Project Manager	<b>EIB Jaspers Cost Forecasting and Programme Management (CFPM) Study</b> The CFPM is a "horizontal" study covering nine of the most recent entrant countries to the EU 27 and three transport sectors: roads and motorways, rail and urban public transport. The objective of the study was to improve the process of project preparation, budgeting and programme delivery. Outturn Unit costs, and cost development over project life were benchmarked across a range of European examples.
2007-2008	Malta	EIB	Senior Transport Economist	<b>EIB Jaspers Transport Framework: Malta Roads</b> Provision of technical assistance to the Maltese Highways authorities, ADT, for the development of 9 highway improvement schemes across the islands of Malta and Gozo and the preparation of the European Commission Cohesion Funding Application.
2008		EIB Evaluation Unit	Project Manager	<b>Evaluation of Transport Projects in New Member States</b> Arup were commissioned by the Operations Evaluation Department of the EIB to conduct ex-post evaluations of five EIB-financed transport projects in the New Member States. The individual projects were evaluated in a broad economic and social context and within the framework of EIB and EC policies and accession criteria taking account of the rules and lending programmes for transport projects.  The projects evaluated a loan to the City of Bucharest for tram network extension. Each evaluation assessed the effectiveness, the efficiency and the sustainability of the project taking account of the Bank's criteria and the original project objectives.
2008	Romania	EIB (JASPERS)	Project manager, transport economist t	<b>Romania: Port of Constantza: review of Feasibility Studies</b> Team leader and transport economist. Review and update of feasibility studies cover rail road/bridge and breakwater projects. Update of economic and financial appraisals in support of ERDF applications.
				<b>Copenhagen Metro: economic impact</b> This short study for a private client reviewed international evidence to assess the economic and development impact of a specific route option.
2007	China			<b>Dongtan Eco-City, Shanghai China</b> <b>Client: Private Developer</b> Transport economics input to this major study to develop and master plan a sustainable city with end state population of 100,000 people. Alternative land-use configurations were tested to establish opportunities to reduce average trip length and the need to travel. Using these as a basis alternative bus technologies based on a fuel cell and conventional diesel were appraised to establish the trade off over time between capital and operating costs and CO2 emissions.
	Vancouver : Canada	ABN Amro		<b>Fraser Surrey Docks due diligence</b> Undertook due diligence on steel traffic as part of a large team advising ABN. This assignment involved interviews with steel importers and analysis of total Canadian steel imports to advise on future market share.
2007	Hong Kong			<b>Hong Kong: Northern Link (NOL): Economic and Social Benefits Report</b> <b>Client: Kowloon-Canton Railway Corporation</b> This study, conducted with the Arup Hong Kong office, assessed the economic and social benefits of the a shuttle train service on a new strategic link between West Rail, East Rail and the boundary crossing at Kwu Tung. The study estimated the economic internal rate of return of the scheme, taking account of capital and operating costs, passenger time savings, bus and private vehicle operating cost savings and accident benefits. Wider economic benefits took account of the expenditure and job creation associated with the additional tourists which, it was estimated would visit Hong Kong as a result of the increased capacity provided by NOL. Development planning and environmental benefits were also taken into account.

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2006	UK	Transport for London		<p><b>Croydon Tramlink Crystal Palace Extension Business Case Review – Economic Impact Report (EIR)</b>Client: Transport for London (TfL)</p> <p>Arup were commissioned by TfL to deliver an appraisal of the economic impacts of the proposed Crystal Palace Extension (CPE). The wider economic impacts of the CPE were assessed in terms of effects on retail activity, effects on house prices, benefits to the socially excluded and impacts on the scale and timing of the Crystal Palace Park (CPP) development. The retail impact was estimated by construction of a retail baseline and assessment of Tramlink user behaviour. This included potential impacts in terms of additional visits, spend, and jobs generated. The impact on house prices was considered using both local housing stock data and evidence on the effects of previous comparable public transport schemes. The impact on the socially excluded was built up from an analysis of the accessibility improvements which the CPE would provide and the socio-economic characteristics of the population in the area of impact. The impact on CPP was assessed using trip forecasts and evidence on the impact of other public transport schemes. The synergies between such developments were also considered.</p>
2008	UK			<p><b>UK Coventry Station RAST.</b> Client: Coventry City Council</p> <p>This innovative piece of work was part of a larger transport case for improved pedestrian access and public transport interchange facilities at Coventry station. This strand of the work focussed on the estimation of wider economic benefits. Recent DfT research was used as a basis for estimating (i) productivity and agglomeration benefits arising from improved access to and from Coventry City centre and (ii) an uplift in rental values associated with a reduction in door-to-door journey time between the Centre and Central London. In Addition, health benefits, arising from the increased use of public transport and associated additional walking activity were estimated. These three items help to improve considerably the scheme's cost-benefit ratio.</p>
	Algeria/Tunisia	EC DG Regio	Project Manager	<p><b>Annaba-Tabarka-Beja: High Speed Railway Pre-Feasibility Study</b> <b>MEDA Transport Infrastructure Network Project</b></p> <p>Project Manager and lead economist on this study of the re-instatement of a railway connection between Algeria and Tunisia to be built to high speed standard. This study involved the development of passenger traffic forecasts and the estimation of time and demand was cross-checked against traffic on the Spanish AVE network. The economist and financial internal rates of return and economic Net Present Values were estimated and the robustness of these assessed through a range of sensitivity tests</p>
2008	Israel/Jordan			<p><b>Israel/Jordan: Haifa to Beit She'an and onward to Baghdad: Railway Pre-Feasibility Study</b> Client: EC DG Regio, MEDA Transport Infrastructure Network Project.</p> <p>Project Manager and lead economist on this study which provided financial, economic and technical appraisal of this major port/rail project. This analysis involved developing freight and passenger demand forecasts, and estimating savings in vehicles operating costs, highway maintenance costs, environmental impacts, accidents and passenger journey time. The economic and financial internal rates of return and economic Net Present Values of three scheme variants were estimated and sensitivity tests were carried out.</p>
2004	UK	Transport for London	Transport Economist	<p><b>London Rail Freight Study</b></p> <p>Manager of this high profile study, commissioned by Transport for London, for the London Sustainable Distribution Partnership. The study investigated opportunities in London for the growth of rail freight to encourage a sustained shift in transport from road to rail.</p> <p>Key areas covered included possibilities for the development of new and existing freight terminal capacity whilst considering the need to integrate facilities with sustainable road-borne or water-borne delivery and collection methods. This involved a review of potential rail freight markets for quarried aggregates, freight through wharves, cement and building materials, municipal waste and cross-Channel flows of consumer goods. Based on the Study recommendations, TfL is considering the safeguarding of strategic rail connected sites for freight terminals.</p>

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				<p><b>Petroleum and Petroleum Products Market Study</b> This ongoing freight market study for SRA developed a macro economic picture of petroleum product consumption, production, imports and exports. Existing trunk haul movements between refineries or import termini to inland wholesale distribution depots were identified. Based on weekly volumes, length of haul and market prospects, forecasts have been developed.</p> <p><b>Forecasts of Movement of Coal by Rail</b> The study for the Strategic Rail Authority UK Strategic Rail Authority was in two stages. The first stage developed scenarios for the supply (from domestic mines and imports) and demand (from power stations) for coal over the next fifteen years. The scenarios took account of Government policies towards deep mine and open cast production, the economic life of reserves, environmental standards, port capacities and security-of-supply factors. Stage 2 translated this macro-economic picture into line flows on the Rail network.</p>
2004	Spain, UK and Portugal	EIB Evaluation Department		<p><b>Evaluation of Urban Transport Projects</b> For the European Investment Bank, this study was an ex-post evaluation of 21 urban transport and development loans in six countries of the European Union. Peter led Arup's contribution which is assessing several projects in Spain, UK and Portugal. Objectives of the study were to determine how project outturn matched ex ante forecasts and whether the Bank was additional.</p>
		DG (AIDCO)		<p><b>Mediterranean Transport Infrastructure Network</b> Arup was a member of a consortium commissioned by DG AIDCO. Specific areas of transport economics work were on appraisal methodology, funding options and a review of air passenger forecasts.</p> <p>The objective of appraisal development was to identify, and take to feasibility study stage, suitable transport projects that would enhance the development of the Mediterranean Transport Infrastructure Network. This required the development of criteria to be applied at initial screening, pre-feasibility and feasibility study stages using a customised Multi Criteria Appraisal Framework (MCAF). Over 170 projects were appraised using the initial screening criteria to produce a long list of projects from which a further screening was applied to identify a short list for pre-feasibility studies.</p> <p>A further area of work reviewed international practice to identify financing options. Issues and funding options for financing were considered and viable funding options identified. Financing options were addressed in the four transport sectors of roads, railways, airport and ports. Analysis considered the scope of investments and in particular focussed on the financing of infrastructure. A priority was made to review project finance structures involving private sector participation (PSP).</p>
	UK	Yorkshire Forward.		<p><b>A160/A180 Dualling: Economic Impact Report</b> Project Manager of this EIR study for Yorkshire Forward to assess the wider economic impacts of dualling the A160 into the VIC's largest port of Inningham. The study focussed on the estimation of journey time reliability benefits.</p>
				<p><b>Trans-Pennine Express Franchise Bid</b> Assessment of Economic benefits. Responsible for estimation of economic benefits which would arise from improved train services, stations and rolling stock. These benefits were estimated for several different options for service development.</p>
		EBRD		<p><b>European Bank for Reconstruction and Development</b> Associate Banker responsible for: Azerbaijan: Road Project: finalisation of project scope; appraisal. Baku Port Project: implementation (post signing, pre effectiveness); tasks include development of a Ferry Service Operating Agreement. Trans Caucasus Railway Projects (Azerbaijan and Georgia): monitoring and supervision.</p>
	Latvia, Slovakia, Lithuania and Poland.	EBRD		<p><b>European Bank for Reconstruction and Development</b> In-house Consultant to Transport team. Road sector projects in Latvia, Slovakia, Lithuania and Poland. This work included evaluation of bypasses, evaluation of repaving programmes and supervision of technical cooperation studies on road user charges, pavement management and road maintenance reorganisation. Port sector project tasks: component identification: monitoring of engineering studies; traffic forecasting; economic appraisal.</p>

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Date from - Date to	Location	Client	Position	Description
	Lithuania	EBRD		<b>Lithuania - Institutional Support Programme</b> Transport economist in multi-disciplinary team working with the Transport and Road Research Institute in Kaunas to develop a Lithuanian Road Investment Manual. The Manual consists of a series of case studies illustrating economic evaluation methods and, in its final section, a set of methodologies for estimating common input data (values of time, accidents, vehicle operating costs, national traffic forecasts etc). Case studies were also developed, with Lithuanian Railways, to illustrate methods for railway investment evaluation including track renewal, resignalling, replacement of a locomotive maintenance depot and purchase of new rolling stock.
	Lithuania	EBRD		<b>Lithuania - Evaluation of five town bypasses on selected sections of the Via Baltica</b> This study was based on a simplified version of UK COBA to evaluate and compare the economics of five town bypasses. This involved traffic origin-destination surveys through number plate matching, development of unit values of time, accidents and vehicle operating costs, traffic forecasts and the input to these to a simplified fixed trip matrix evaluation.
	UK		Consultant Senior Transport Economist	<b>London Docklands Development Corporation</b> Consultant Senior Transport Economist engaged on a variety of studies including: - Docklands Light Railway Traffic and Revenue Forecasts; - Docklands Employment Forecasts: Review and Update; - Woolwich Rail Crossing: Financial Prefeasibility Study and Review of Development Case.
	UK			<b>East Thames Corridor Development Study</b> Involved in inception stage, defining land use and development scenarios for the Thames corridor to the east of London.
	UK		Project manager	<b>East London Rail Study Stage 2</b> Project manager of major study to evaluate 15 options for improving rail access to the Royal Docks in east London. The innovative methodology included estimation of accessibility indices. Options were evaluated on the basis of conventional economic and development benefits.
	UK		Project Manager and transport economist	<b>Channel Tunnel Rail Link (CTRL) Comparative Assessment Study</b> Project Manager and transport economist responsible for social cost-benefit analysis study of CTRL. This study quantified benefits to passengers from savings in transit and waiting time, improved service reliability and overcrowding relief. Also estimated were savings in airline operating costs, arising from service reductions in response to forecast diversion of passengers from air to rail.
	UK		Transport economist	<b>London Docklands Development Corporation</b> Transport economist, initially assigned to the Isle of Dogs Area Team. Worked on a variety of local transport issues including car parking and the assessment of development impacts. Studies included the financial evaluation of a multi-storey car park and the development of a new method for producing Docklands employment forecasts.
1982-1988	UK	Halcrow Fox & Associates	Transport Economist	<b>Taiwan - Taipei Municipal Government</b> Transport economist/financial analyst, Taipei Rapid Transit Systems Project. Responsible for all economic and financial analysis on this major project, including economic evaluation of alternative options for network development, construction phasing options and the financial and economic evaluation of alternative fare policies. On-the-job training of local staff.
	UK			<b>Docklands Light Railway (DLR) Lewisham Extension</b> Conducted this initial economic and financial evaluation.
	Ireland			<b>Belfast Transportation Strategy Review</b> Transport economist responsible for all aspects of economic and financial evaluation of highway schemes, bus service improvements and multi-storey car parks.
	Turkey			<b>Turkey Edirne-Kinali toll road appraisal</b> Developed financial model to conduct an initial financial appraisal of this 145 km proposed toll road.
	Kuwait			<b>Kuwait Industrial Land Parcellation Study</b> Prepared a national industrial development model, incorporating sectoral GDP forecasts, employment intensities and labour productivity forecasts. This model was used to forecast land requirements.
	Bahrain			<b>Bahrain Second Manama-Muharraq Crossing Study</b> Developed values of time and estimates of vehicle operating costs for use in the evaluation of alternative alignments for this crossing between the two main islands in Bahrain.



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1978-1980	Tanzania	Government of Tanzania, Ministry of Works	Economist	<b>UK Overseas Development Institute Fellowship</b> The objective of this two year contract was to establish an effective planning division within the Ministry of Works. The Ministry was responsible for the development and maintenance of trunk roads and airports. Work included the development of a realistic investment programme, estimation of recurrent maintenance costs and of road user charges for transit traffic on the TanZam Highway.
1977-1978	UK	Scott Wilson Kirkpatrick and Partners	Economist	Worked on different aspects of major land use/transportation models for Grimsby-Cleethorpes area and Archway Road in north London.
1974-1976	UK	Advanced Systems Division, Transport and Road Research Laboratory	Scientific Officer	Engaged mainly on the development of a macro-economic model aimed at forecasting the long term UK demand for transport.

16. **Other relevant information** (eg, Publications):

Training: Convenor and Main lecturer: PTRC International Course: Transport project Feasibility Studies.

This course is designed to provide training in the appraisal techniques needed to prepare transport projects for funding by EBRD and other International Financial Institutions. The Course has been given in 1996 (in Riga), 2005 in Istanbul and in 1996, 1999 and 2002 in London.