



Paul Roberts
Director



- Transport Strategy & Plan Development
- Multi-modal Assessment
- Programme Optimisation
- Peer Review
- Expert Witness
- Transport Network Development
- Expert Modeller
- Network-wide Safety
- Economic Assessment
- Land use Forecasting

Professional Experience

- 2009 – Present Director, QTP Ltd, NZ
- 1994 – 2009 Transport Planner-Network, Christchurch City Council, NZ
- 1991 – 1994 Senior Transportation Engineer, Ove Arup and Partners, Edinburgh UK
- 1988 – 1991 Senior Transportation Engineer, Ove Arup and Partners, Manchester UK
- 1987 – 1988 Traffic Engineer, HETS (City Council Consultancy), Leeds UK
- 1986 – 1987 Graduate Transport Planner, Ove Arup and Partners, London UK
- 1985 – 1986 Graduate Water Engineer, Ove Arup and Partners, London UK

Education and Qualifications

- Member of the Institute of Highways and Transportation (MIHT), UK
- B.Eng. (Hons) Civil Engineering, University of Liverpool UK (1985)
- SIAS Approved Paramics User

Selected Relevant experience

QTP Ltd, Christchurch NZ

Wellington Region Simplified Transport Emissions Model 2023

GWRC commissioned Paul to deliver the STEM tool for their region. This built upon his previous simplified model development and included provision of more flexible intervention inputs as well as additional and more-refined outputs. The tool is currently being applied by GWRC to assist development of their VKT-reduction strategy and inform more-detailed scenario assembly and assessment. The work was presented with the Client at the 2023 Engineering NZ Modelling User Group Conference, receiving the Best Presentation award.

Interventions to Reduce Greenhouse Gas Emissions 2022-23

A major contributor to this Waka Kotahi research project (ART21-13) working as sub-consultant to Principal Economics Ltd, Paul took data from existing regional transport models in Auckland, Wellington and Christchurch and developed Simplified Models for these major urban areas, applying these to identify the VKT and emission impacts of potential interventions (and their assembly and interactions within multiple potential packages). These models built upon earlier 2022 work by Paul for the Greater Christchurch Partnership, focussed on mode-shift opportunities and used to inform strategic transport and spatial planning projects.

Christchurch Major Cycle Route Planning 2021

Assistance to CCC to identify CO₂-e impacts of a proposed Major Cycle Route (using the strategic Cycle and CAST SATURN models developed by QTP).

Christchurch Strategic Model Update 2021

Contributed to QTP's major update to the Strategic transport models applied in Greater Christchurch (CTM and CAST), with inputs including count assembly, processing and cleaning, GIS application to realise land use inputs and scenarios, through to updating network coding.

Christchurch Local Cycle Route Indicative Business Plan 2017

This project was focussed on enhancing connectivity to the planned Major Cycle route network. Included preparation of multi-criteria evaluation using GIS techniques of all potential cycle links, and subsequently Benefit-Cost appraisal of recommended programme.

Christchurch Hospital Long-Term Transport Strategy, 2017

Commissioned by Canterbury District Health Board (CDHB) to “develop a Long-term Hospital Parking Plan”. Advice was for need to incorporate this within a more comprehensive Transport Strategy, with the deliverable providing recommendations on strategic framework (Vision and Goals etc.) as well as more detailed matters.

Christchurch Major Cycle Routes, 2014-2018

Preparation of benefit-cost appraisal (using strategic transport models) and supporting business case inputs \ for programme for UCF/NLTF funding applications to NZTA, on behalf of CCC. Followed his development (2012) of the city-wide cycle model to assist evaluation of cycle infrastructure.

Network Analysis for Transport Business Case, 2016

Acting as a sub-consultant, QTP were responsible for around 90% of the model and GIS analysis required to support preparation Council's Transport Network Business Case.

Auckland East-West Connections – Detailed Business Case, 2015

Peer review of detailed business case for a major (\$1b+) project, focussing on economic assessment and modelling inputs, on behalf of NZ Transport Agency.

Christchurch Strategic Transport Models (CTM/CAST v09 Update) 2015

Responsible for preparation of the critical land use scenario inputs on behalf of model partners (including CCC and NZ Transport Agency), this included significant data assembly, analysis and management components.

Christchurch Transport Strategic Plan, 2011-2012

Lead external advisor to CCC project team: Included development of integrated future transport network hierarchy (system and application) and supporting GIS material since integrated within adopted Strategy and subsequent NOPs and development/application of programme/project prioritisation assessment framework.

Transport Planning Services, 2009-10

Effective secondment to CCC for 4 days per week for a period totalling 18 months. Included transport planning advice to Council for most major development proposals.

Christchurch City Council NZ

CCC Transport Improvement/ Scheme Plan Assessment Teams, 1997-2009

Paul was the key internal transport planning advisor on most of CCC's major infrastructure works over this period. He was a member of the core groups which ensured strategy alignment, oversaw scheme planning, and evaluated, prioritised and programmed all major CCC transport network improvements (for all modes) in Christchurch. He also provided technical liaison with NZTA over many projects of shared interest.

Metropolitan Christchurch Transport Statement (MCTS), 2003-2004

Paul was the principal author (90%+) of this guiding strategy for Christchurch, resulted in councillors approving \$200m of additional transport expenditure; Integration within subsequent LTCCP.

City Plan development hearings and Environment Court References, 1997-2003

Paul prepared and presented evidence on behalf of CCC for most significant development areas within the City, following input to the development of transport objectives, policies and rules within the original Plan (1995).

Christchurch Transport Model, 1995-96

Virtually solely responsible for development of the strategic Christchurch Transport Study (CTS) Model. (acknowledged by Transit NZ's Peer Reviewer as the 'probably the best model development report to date in NZ'). This model was used as the foundation for strategic transport planning in Christchurch for over 10 years, until the update to CTM - which still uses many of Paul's original sub-model concepts.

A Review of Parking Strategy in Christchurch, 1994

Responsible for an independent review of the requirements for off-street car parking facilities in the city centre, followed by a more general assessment of alternative parking policies that could be pursued by the City Council.

A Review of Public Passenger Transport in Christchurch, 1994

Paul was initially engaged by CCC on a contract basis to review public transport use and organisation within the City. He identified measures to improve patronage which could be pursued under the then current or modified legislation. This report led to formation of joint City Council/Regional Council committee to oversee subsequent initiatives, including the first Metro Strategy. Paul was subsequently offered a full-time role with CCC.

Ove Arup and Partners, UK

Edinburgh Western Corridor Busway Study, 1991-94

Responsible for demand modelling, revenue and economic social cost-benefit forecasting, along with operations and alignment engineering for segregated busway to the Airport, including bus priority design on existing streets within the CBD. Included development of a study-specific mode-choice model to assess Park & Ride potential.

Masterplanning and Assessment, 1986-94

Principal roles in multi-modal transport master-planning in Glasgow, Edinburgh and Aviemore, Johnstone & Shrewsbury. Sole responsibility or significant input into transport planning for major regeneration areas in Wath-Manvers (Yorkshire), Trafford Park (Manchester), Lille (France) & Stockley Park (Heathrow), scheme development, assessment and/or evaluation for all or part of 4 Light Rail schemes, in Glasgow, Croydon, Manchester and Lille (using EMME/2), and parking and access advice for a multiple development projects (including term appointments for Tesco UK Ltd.). Responsible for preliminary design of comprehensive cycle network for Leeds (HETS).