

# Tram Inquiry

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**Name:** Duncan Murray Fraser  
**Position:** Technical Manager  
**Academic qualifications:** BSc (Hons.) Civil Engineering, MSC Transportation  
**Professional qualifications:** MICE, MCIHT  
**Awards:** James Forrest Medal ICE

**Career profile: -**

**LAND ENGINEERING**

Technical Manager: design & construction (part time) April 2013-present

**Expertise**

**1. Natural stone pavements**

- Led the Forensic Team, as Special Project Engineer for the City of Edinburgh Council to determine why the 1990's built setts on the Royal Mile failed, using traditional methods;
- Set up the partnership, as Client with Heriot Watt University (Derek Fordyce) and Land Engineering (Stuart Dillett) to design and build (D&B) the new Royal Mile, using the innovative performance based approach, which has been maintenance over its current 10 year life;
- Expert advice on the design and construction of natural stone roadways and footways
- Specialist design and specification capability with Public Realm projects, and projects requiring to operate beyond current national guidelines
- Advisor to Local Authorities on public realm design

**2. Sustainable low energy construction**

- Established a WRAP project to recycle road in Edinburgh

**Professional Experience:**

- Mediator of disputes for Core and the Edinburgh Sheriff Courts
- Chair of the Charter Institution of Highways and Transportation CIHT) in Scotland
- Director of CIHT
- CIHT Chair of Road Maintenance/Road Safety and Transport Policy Committees
- Chaired the R&D committee for SCOTS specializing in road pavement design

**Selected publications:**

- WRAP on recycling secondary road aggregate
- CIHT Traffic Modeling in Edinburgh and Setted Road Construction

**Presentations**

- To Senior Chief Officer Transportation Society (SCOTS) Road Recycling: 2008
- To ICE London Setted Roads Design and Construction: 2005
- External Lecturer to Heriot Watt on Pavement Engineering: 2004-2008
- Lectures to Councils and Consultants on Setted Roads Design and Build

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- European Union in Brussels on Transportation Planning Modeling

## Experience

### CITY DEVELOPMENT DEPARTMENT

**Edinburgh Tram Project** 2008-2011

Promotion of Traffic Regulation and advisor on design submissions to TIE  
Approval of design submission for roads adoption1

**Depute Head of Special Projects** 1998-2008

Developed a new dedicated team to facilitate projects that sustain the economic  
Viability and enhance the environmental quality within the World Heritage Site.

**City Centre Manager** 1996-1998

Initiated and developed City Centre Management for Edinburgh following a study tour  
in US in partnership with LEEL, EDI and the Chamber of Commerce and Enterprise.

### TRANSPORTATION DEPARTMENT, LRC.

**Assistant Director** 1994-1996

Established an access strategy for Edinburgh City centre through consultation with  
Businesses and residents

**Senior Project Engineer** 1991-1994

Gained Government approval to dual the A1 on the basis of a economic and  
Environmental strategy

### DUMFRIES AND GALLOWAY & FIFE REGIONAL COUNCILS

**Highways and Transportation Engineer and Manager** 1987– 1991

PRIVATE SECTOR 1974 -1987

Progressive career in the private sector rising from a graduate  
Engineer to a Project Manager of major roads and bridges projects.

## Education and Development: -

BSc Honours Civil Engineering. Edinburgh University 1974

Member of the Institution of Civil Engineers 1979

Associate of the Institute of Arbitrators 1985

Management. Course Institution of Engineers 1990

MSc Transportation. Napier University 1993

ICE National Award “ Managing Change in Edinburgh City Centre” 1998

Chairman of IHT Central Scotland 2005

Qualified as Mediator 2005

Director of IHT 2006-2009