# Scottish transport review

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STR provides an overview of some key research and innovative transport applications in the last 12 months. These projects show how smarter transport delivery, better public transport, place making, rural transport and partnerships are all set to benefit from new approaches. On 1 May the annual research conference in Glasgow will debate the findings of these projects.

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Some of the public debate about Scottish transport in recent months from the newspapers

### INTEGRATING CAR TRAVEL WITH TRIP SHARING AND PARK AND RIDE

Julie Ann Goodlet-Rowley of the Scottish Government has found that car sharing is falling but that there are growing opportunities to integrate car travel through park and ride.

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### WILL SCOTLAND'S AIR TRAVELLERS BENEFIT FROM BAA SELLING AN AIRPORT?

Mike Dooley suggests there is no clear evidence that a better deal for passengers will be achieved by the decision that BAA must sell Glasqow or Edinburgh Airports.

# The Scottish Transport Studies Group (STSG)

STR is the newsletter of the Scottish Transport Studies Group (STSG) and is largely funded from STSG membership subscriptions. STSG was formed in 1984 and now has corporate and individual members from transport operators, industry, national government, local government, universities, and consultants.

The aims of STSG are "to stimulate interest in, and awareness of, the transport function and its importance for the Scottish economy and society: to encourage contacts between operators, public bodies, users, academia and other organisations and individuals with interests in transport in a Scottish context; to issue publications and organise conferences and seminars related to transport policy and research". STSG is a charity registered in Scotland number SCO14720.

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# Who decides what goes in STR?

Firstly the members of STSG - We rely on STSG members and others telling us about interesting studies they have completed or knowledge they have. To keep subscriptions low we need members to invest time to share their knowledge. STSG has some funds to commission some analysis and reporting but the editorial work is undertaken voluntarily.

Secondly the Editor Derek Halden, assisted by the STSG Committee tries to fit the contributions into 16 pages and create a readable document.

If you can contribute to STR please e-mail editor@stsg.org

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### Better Buses as the Solution to City Centre Parking Problems

### **Barry Hutton**

#### The parking problem

Getting to city centres by car is blighted by congestion and parking difficulties. The time, the frustration, the dearth of parking space and the parking charges and possible fines are a toxic bundle that many car-users strive to avoid. City centres are crowded, busy places and there is not enough kerb and road space for everybody who would like to use their car.

The options are very limited. Most cities have some off-street parking and theoretically more could be built but land and construction costs are extremely high and parking charges have to be correspondingly high. Off-street parks have the added problem that, if they are big enough to make financial sense, they suffer from internal congestion as well as saturating the surrounding streets with traffic. Many cities, especially in the United States, have tried to build their way out of the problem but, if land is used for off-street parking, shops and offices are pushed out into the suburbs and the centre itself becomes an amorphous, unattractive mess.

To some extent the problem has been solving itself. Many car-users avoid the hassle of city centre congestion and parking by going elsewhere. Over the last thirty years or so developers have created retail parks and malls around the city, with less congestion around

them and with enough parking space to cope. The result has been a change in city structure and a radical change in the nature of city centres.

This trend could be left to run its course. Shops and offices could continue to move out from the central area, reducing property and rental values and attracting an increasing number of short-lived, poor quality shops. That will continue to erode, and will eventually destroy, the economic viability of the centre. In the absence of positive, vigorous policies to sustain city centres, that will be the inevitable consequence.

The wallets arriving by bus may well be thinner than those arriving by car but there will be many, many more of them

### Buses and other public transport as the solution

City centres can only function economically if people earn and spend money there: centres have to be accessible. Since there can never be enough parking and circulation space, the necessary accessibility by car cannot be achieved.

The sums are relentless: if offices need 10 square metres per worker and shops must have a customer for every 5 – 8 square metres and yet a parked car occupies 12 square metres, there can never be enough parking. Most people have to get to the centre on foot or by public transport.

This already happens in large measure. In London over 90% of people get to the centre by public transport even though the great majority of them own cars. In Edinburgh one of the car park spaces in George Street will bring in three or four wallets per day, maybe even five or six, but just one bus arriving at just one of the Princes Street bus stops will bring in more than that. The wallets arriving by bus may well be thinner than those arriving by car but there will be many, many more of them. Cut the number of parking spaces and the turnover of city centre businesses will fall: cut the bus services and the turnover will collapse.

The policy is clear: access by public transport to the city centre is crucial if the economic vitality of is to be sustained.

### The solution is good quality public transport

Ghosting in the background is the constant spectre that, if the city centre is not attractive enough and if the means of getting there is a repulsive hassle, people will use the flexibility and ease of their cars to go elsewhere, to retail parks, malls, even other, smaller towns. Firms will migrate to locations where congestion and parking are less of a problem, taking their employees, customers and economic activity with them.

The policy must not be just to provide public transport but excellent public transport, otherwise the existing situation will just stumble on: car-use will continue to be undesirable and inefficient and public transport will continue to be perceived as uncomfortable, unreliable, undesirable and inefficient. The diversion away from the city centre to the suburbs, the city edge and beyond will accelerate.

The question then becomes how to create a public transport system of an adequate quality to sustain the economic health of the city centre. It is not a difficult task: we need to create a public transport system that is attractive, reliable, reasonably frequent and cheap. One attribute is absolutely vital – the others follow in its wake.



### Insulating buses from the effects of congestion

Congestion produces:

- poor reliability vehicles become trapped for indeterminate times, resulting in delayed, irregular running which then produces the unpredictable waiting times that enrage would-be passengers.
- passenger ride times are lengthened but by an unpredictable time.
- worse, if public transport is subject to the same delays as general traffic, a considerable potential advantage over car use has been frittered away.
- that destroys much of the potential image
  of public transport. Raising public transport
  above congestion is not just an operational
  advantage it is a powerful political
  statement about the importance and value
  of public transport, of its users and of the
  destinations in the city centre to which they
  are going.
- high costs public transport costs are measured per hour but revenue is per kilometre and so profitability is squeezed down to the minimum or beyond if vehicles are trapped in traffic. Even a fully-loaded bus will be loss-making if it is trapped in congestion.
- high costs are pushed even higher when speeds are suppressed to levels at which more buses are needed to provide a constant timetable: a regular interval service will need more vehicles to provide it whenever speeds are reduced by congestion.
- and costs are higher still if the turnround time at route ends is lengthened to enable vehicles to regain their schedule
- costs driven up by congestion afflict the entire financial base of public transport reducing feasible investment in more comfortable and numerous vehicles

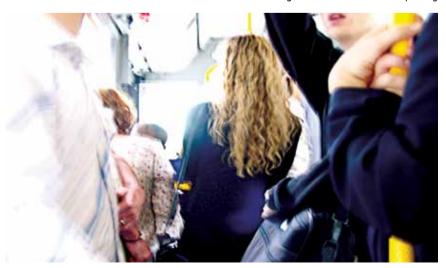
 far worse, congestion repels would-be passengers and with it undermines the economy of city-centre business.

#### The required policies

Public Transport Priority Areas should be established wherever there is insufficient parking space to sustain the local economic base. Within such areas priority use of kerb and road space should be given to public transport with goods loading and unloading given second priority. All public transport stops should provide untrammelled access for the disabled and burdened. Junction priority should be given to public transport. Public transport should be defined widely including taxis and private hire vehicles – the touchstone must be whether a vehicle delivers people to the central area without needing a parking space.

Roads leading to Public Transport Priority
Areas should be provided with provided with
unhampered public transport lanes or tracks.
At present bus lanes are usually along the nearside kerb where their integrity is constantly
threatened by other vehicles stopped at the
kerbside. This is despite tram tracks being
built in the road centre, a position used in the
past and in new tram schemes as well as being
universal in other countries. The logic of central
tracks applies just as much to buses as to trams –
wherever there is a conflict between public and
private transport, the priority should be given to
those using public transport.

To reduce the accident potential of passengers having to cross a lane of general traffic to get to and from public transport vehicles, stops should be provided with either peninsulas reaching out to the public transport or pedestrian signals triggered by the buses or trams. This will calm the flow of general traffic as well as improving





pedestrian safety.

At signalled road junctions public transport should always be advantaged. This, together with the implicit traffic calming, will change the relative advantages of using private and public transport for radial journeys to presently congested areas.

Stop spacing should ensure that walk times from people's front doors are minimised – the walk to and from public transport stops is an important part of the journey. It is acknowledged that this will reduce overall public transport speeds but it will improve the average personal journey speed, including the necessary walks. Although public transport priority tracks and lanes do improve speed, it is the priority over other traffic that is the crucial attraction.

#### All other urban roads and areas

Public transport is not a panacea applicable over the entire city. In areas where parking and congestion are not a problem, not only is car use attractive, but providing efficient public transport is very expensive. It is practical common sense to let the existing regime of a mix of public and private transport to remain. Providing public transport is unaffected by congestion, it is able to provide the reliable, although comparatively infrequent, service that is warranted within areas of low, dispersed demand.

### Park and ride

Having different policies for different parts of an urban area emphasises an existing disparity. City centres demonstrate an existing bias in favour of the use of public transport – the lack of parking and the congestion reduces car-use and encourages the use of public transport. It is a bias that Public Transport Priority Areas are designed to reinforce. In contrast, in low-density suburban areas public transport cannot match the flexibility of car use and it would be expensive and inefficient to try. The disparity occurs in journeys from such low-density areas

to the city centre, journeys in which car-use is sensible at one end of the journey but not at the other.

In part this problem may be solved by comparatively infrequent but very reliable public transport along routes which tour low-density residential areas mixed with other, but uncongested, traffic but which are protected from the congestion on the approaches to and in the centre by stringent priority. This will reduce their costs and improve their reliability.

But even this will not always be feasible and the journey will have to be split into two parts, using a car in the area suitable for cars and then public transport along the radial into town. Park and ride is an acknowledged policy although it is difficult to implement – finding land in the right place suited to large car parks is not easy. Wherever formal schemes are possible the radial ride should be prioritised along the whole length, a demonstration that public transport riders are more important to the health of the city centre than those who will demand a parking space.

Many people use informal park and ride, parking at the kerbside in the inner suburbs. This effectively uses out-of-town parking spaces to support in-town business and should be encouraged. Such areas should be equipped with parking meters that dispense tickets valid on public transport.

#### Recommendations

- Create differential transport policies, favouring public transport where it is necessary and feasible but recognising that car use for diffuse travel in lower density areas is sensible and practical.
- Use the dearth of parking space as the test of whether the use of public transport for the majority of journeys is desirable.
- Establish Public Transport Priority Areas within which public transport has clear, constant and effective priority.
- Extend that priority along the radial approaches to congested areas.
- Provide both formal and informal park and ride facilities
- Do not attempt the impossible and impracticable task of encouraging all journeys to use public transport. Recognise that car use for diffuse journeys wholly within the suburbs is immutable.

# Winning New Customers – Where You Want to Be

### Elaine Rosscraig, Stagecoach UK Bus

Where you want to be is an integrated targeted marketing acquisition campaign which successfully targets latent demand for public transport and challenges people's entrenched views of bus transport.

#### The approach comprises:

- · Primary Research
- Market Analysis
- Risk Assessment
- Pilot
- Targeting of Market and Careful Planning
- Getting the Delivery Team and Product Right
- Offering a Tailored Message through an Appropriate Channel

#### Marketing media used include:

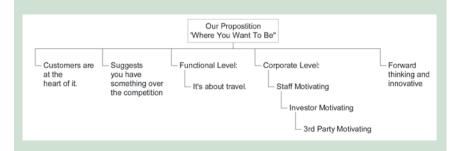
- Local Bus Ads
- Online Ads
- E-mail
- Inbound/Outbound Telemarketing
- Posters
- Media Relations & Public Affairs

#### Critical success factors are:

- Tried & tested framework
- Teamwork
- Accurate Targeting/effective segmentation strategy
- Relevant Communication
- Effective Database Development
- Ongoing Management Control

'Where You Want To Be' adds value through, enhanced ticket sales. The acquisition rates achieved greatly exceed average levels for the marketing industry. The increased profit and revenue is therefore delivered at low cost helping with increased market share and competitive advantage for Stagecoach. Post campaign research has demonstrated that 30% of those converted have switched from the car – the main competitor.

The next steps are to achieve more refined and strategic targeting, based on results to date, to increase acquisition rate and develop the environmental segmentation. By introducing partnership deals the aim is to enhance acquisition and aid retention. The in-house direct marketing database now has 800,000 records from which to define specific impacts of the varied activities within each project associated with the strategy.





### SMARTER TRANSPORT DELIVERY

### Developing Integrated Smartcard Ticketing

#### Michael M Milne, Strathclyde Partnership for Transport, Consort House

This project explores the opportunities and challenges presented in embracing smartcard technology for ticketing in the SPT area. It is expected that by 2009 Scotland will become the first country to have all of its buses equipped with smart-enabled ticket machines, handling 1.2m concessionary smart-cardholders. Building on this, SPT, as the operator of the Subway and ZoneCard administrator is ideally placed to take forward the next stage of delivering smartcard in the commercial ticketing environment. SPT is introducing smartcards in a de-regulated public transport environment and Integrated Ticketing Smartcard Organisation (ITSO) was established to address this. This research explores how SPT is facing this challenge.

### The effects of Real Time Passenger Information on Travel Behaviour and Attitudes

Michael Carreno, Stephen Stradling and Tom Rye Transport Research Institute, Napier University

As part of a wider evaluation of a pilot Real Time Passenger Information (RTPI) system implemented along a Quality Bus Corridor (QBC) in Edinburgh, a survey of residents living alongside the route showed that although only a small change in actual bus use was reported, many users reported changes in their attitudes in terms of amount and utility of waiting time, perceived security, reduced anxiety, satisfaction with the bus journey experience and facilitation of journey planning. The results suggest that an impact of RTPI is to facilitate mode shift by increasing customer satisfaction with bus service delivery.

### Behavioural Change Strategies for Travel Demand Management

Will Symons and Paul Finch, Faber Maunsell

Research clearly demonstrates that positive attitudes towards sustainability do not necessarily lead to behavioural change. Simply providing information is not sufficient, as there is usually a whole range of other barriers that need to be overcome. An effective behaviour change process comprises of five steps: identifying the specific behaviour to change; identifying the specific root cause barriers to that change; identifying the audience's

perceived specific benefits of that change; implementing a series of interventions; evaluate effectiveness.

The research provides a series of practical tools to build effective behavioural change interventions, applying techniques such as barrier mapping and value-effort prioritisation, to both understand the root cause of the barriers to behavioural change and to effectively prioritise interventions given constraints on

Schemes to promote physical activity have achieved reductions in absenteeism of up to a third

time and resources.

### CO2y - maximising shared travel opportunity

Neil Urquhart, Thanasis Vogogias and Tom McEwan, Napier University, and Richard Holden, Plymouth University

In view of the recent leaps in environmental awareness it would appear timely and sensible if people pooled vehicle resources to help minimise the damaging impact of carbon emissions. For software engineers a major challenge is to help facilitate *social* decision-making such that individual preferences can be met. The CO2y™ concept and architecture is designed to satisfy a number of individual preference criteria and thereby find *appropriate* matches within a population of vehicle-share users.

### Promotion of Physical Activity through Workplace Travel Plans

Ko Sakamoto, TRL

The importance of physical activity in improving the physical health of the working population has attracted much attention in recent years, not least because of growing concerns for levels of obesity across the nation. The project centred around a review of the international evidence on the relationship between employer-based schemes to promote physical activity and employee absenteeism. Despite the lack of specific evidence on workplace travel plans, the review found examples of schemes to promote physical activity that had achieved reductions in absenteeism of up to a third, from increases in physical activity of at least one hour per week over timescales of one to two years. This level of physical activity would easily be achievable through walking and cycling to work.

#### Using Intelligent Transport to Manage Transport During Extreme Weather Events

#### Andrew MacIver, Transport Research Institute, Napier University

In recent years Scotland has experienced unprecedented weather events which have caused major problems for transport services. During this time a number of extreme storms and floods have resulted in significant disruptions to road traffic and ferry services. The impact of extreme wind, rain and snow events have considerable impacts on the Scottish economy with thousands of hours lost each year. The Scottish Government has recognised this in the recent 'Scottish Road Network Climate Change Study'.

Intelligent Transport Systems (ITS) can be used to manage weather events, reduce risk and provide appropriate travel information. The research draws from experiences in Canada and North America and shows that while we cannot change the weather, we can reduce the disruption it can cause to travellers. The research covers:

- The type of extreme weather events that are encountered
- International experiences and strategies for dealing with incidents
- Traffic management and ITS for dealing with extreme weather
- ITS technologies used to monitor, manage and provide accurate and timely travel information

### BETTER PUBLIC TRANSPORT

### Implementing the Streamline Bus Quality Partnership in Glasgow

### Andrew Brown, Glasgow City Council

As a result of the quality partnership agreement between Glasgow City Council and bus operator First and close partnership working with West Dunbartonshire Council and SPT, a wide range of measures has been implemented to benefit bus users and provide frequent, reliable services of improved quality across a network of streamline routes around Glasgow.

An independent initial evaluation of the project outcomes against the stated objectives has now been undertaken of the first 8 streamline routes. The vast majority of bus users on streamline routes feel their service has improved since the introduction of streamline measures and they are more positive about their service than those using non-streamline routes. Initial patronage trends are positive and significant road safety benefits have been achieved.

### The case for Personal Rapid Transport

#### Malcolm Buchanan and Simon Bowers, Colin Buchanan and Partners

This research explains the three main reasons why personal rapid transit, PRT, is now a form of public transport whose time has come. In the first instance the car has created widespread, dispersed, land-use patterns which are very difficult to serve by conventional public transport and are becoming increasingly congested with car traffic. Secondly global warming requires a major reduction in transport emissions and thirdly we are living at the height of the second industrial revolution, but have yet to see it bring significant improvements to public transport.

Passengers are much more concerned with punctuality and overcrowding

### Low- Zero Emission Bus Technologies in Urban Centres in Scotland

#### Kirsty Davison and Judith Thomson, Steer Davies Gleave

Interest in low-to-zero emission bus systems is growing worldwide. This project considered hybrid/ low emission bus operations within the varied conurbation areas of Scotland. It evaluates various vehicle technologies, provides an informative research platform for those considering low emission technologies, and assists practitioners in taking forward more detailed evaluations, specific to particular areas.

### High Speed Rail – Better Services for All?

#### Phil Bates, Jacobs

Many urge support for a new high speed line on the mainland network. At first glance, such a scheme does appear to have many advantages but is speed really so important and is high speed the best answer to rail capacity problems? Research shows passengers are much more concerned with punctuality and overcrowding, and train travel can potentially provide an opportunity to work, relax, eat and drink. These are not taken into account by conventional economic appraisals.

### PLACING MAKING & THE LOCAL ENVIRONMENT

### Developing a low carbon residential development

#### Christopher Bell, David Miscandlon WSP

Transport globally accounts for 14% of all greenhouse gas emissions and if this level of carbon production is left unchecked it could lead to a rise in global temperatures resulting in major global effects. The traditional way of assessing the transport impact relating to new developments is to undertake a transport assessment which estimates the traffic generation levels and distribution and to develop a travel plan to manage the demand.

This project reviews if there is there a better way to reduce carbon in the context of the wider climate change agenda. Drawing on experience learned from the creation of a near zero carbon emissions zone in the Middle East, this project proposes a new approach to assess the carbon implications of developments in Scotland.

### **Creating Shared Space in Renfrew Town Centre**

### Scott Allan, Renfrewshire Council and Duncan Birrell. Colin Buchanan

A significant challenge in Renfrew is balancing conflicting objectives of increasing space for pedestrians, accommodating public transport, enhancing the environment and designing for high volumes of traffic.

A minimalist or "naked Street" approach to design was adopted and features such as low kerbs and shared surfaces. The project reviews lessons from the project including:

- The initial design concept involving shared surfaces in busy streets;
- How designs were modified following public consultation;
- The traffic modelling process which supported the design;
- The challenges of accommodating large volumes of traffic;
- Pedestrian friendly, clutter free street design;
- Failing public support during implementation
- The completed project, how it works and how it looks.

### What's Smart about Smarter Choices, Smarter Places?

#### lan Maxwell and Michael Young, Scottish Government

Infrastructure improvements and a range of 'smart' measures such as individual travel marketing and promotion of active travel

and bus use will be undertaken in seven Scottish communities between 2009 and 2012. A national monitoring and evaluation programme is underway to assess the impacts of the interventions, both in each individual community and across the group of communities. This covers a range of impacts on communities associated with the uptake of sustainable transport modes including impacts on wider health and environmental outcomes.

### Designing Streets – the missing link in transport policy?

### Keith Gowanlock, WSP and Sam Anwar, Scottish Government

The Scottish Government has published Designing Streets in spring 2009. This addresses a wide range of policy agendas, including those relating to urban design, health and the environment. The guidance explores how the new approaches are being promoted and can assist in the delivery of a range of objectives set out in wider national, regional and local transport policy. The ability of new approaches in street design to contribute to tackling transportation related issues such as climate change and social inclusion are reviewed.

### **Demand Responses and New Development**

#### Keith Mcgillivray, SIAS Limited

This review examines the performance of a new Dunbar bus route funded by a retail development, and reviews whether the implementation of a bespoke demand responsive transport service in its place would have any potential to deliver a higher value service, potentially proving better access at a lower implementation cost. The work identifies the challenges of securing ongoing investment in public transport from new development, and seeks to establish whether there is potential to apply a new framework for investment in better value improvements during the planning stages of future developments.

### Understanding how Pedestrians interface with Trams

#### Shaneen Khambata, TRL

The project undertook observational studies of pedestrian interaction with trams with on-street surveys of the physical pedestrian environment, identifying how a well designed street environment can reduce conflict and enhance pedestrian mobility. The research made recommendations about designing tram systems that are pedestrian friendly and in line with best practice from around the UK and Europe.

### RURAL AND REMOTE AREAS

### Assessing Wider Economic Impacts in Remote Areas

James Laird, Institute for Transport Studies Given the presence of high transport costs in remote areas it would be expected that a high degree of market failure in remote labour and product markets will occur. However, current appraisal guidance focuses on the benefits of increasing productivity through urbanisation, and provides no medium by which the WEIs associated with increased employment in a remote rural area can feed into an appraisal. This research begins to address this policy gap by reviewing evidence on the scale of different market failures in remote rural areas and their expected impact on the calculation of total economic impact.

### A Sparsity Index for the Highlands and Islands to Ensure Equity of Provision

Jon Crockett and Neill Birch, MVA Consultancy and Ranald Robertson, HITRANS

The Highlands and Islands of Scotland is one of the most sparsely populated regions in Europe. Journey times, particularly by public transport, to key services and opportunities are often extended, making accessibility a prime concern for local authorities. The HITRANS Index of Sparsity combines measures of accessibility (by journey purpose/destination), population density and car ownership, as the key indicator of transport need, to produce an integrated tool for identifying areas of a similar 'type'. The Index helps to ensure that throughout the region no one resident is more disadvantaged by transport provision than those in comparable zones.

### Applying Scottish Transport Appraisal Approaches to Island Communities

#### Paul McCartney and Scott Leitham, MVA Consultancy and Guy Platten, CMAL

There has been a long-running debate regarding the nature of the ferry services required to serve the island of Lismore in Loch Linnhe. At present, neither of the two existing services is considered adequate to meet the needs of the island community. A comprehensive, unambiguous and objective-led analysis of the options for serving the island was needed including the needs of islanders, the finances of providing the service, the economic benefits, the social benefits and the environmental impacts. The benefits associated with the various options were much more social than economic, and this was captured in the analysis and reflected in the findings.

#### Argyll Air Services - Connecting the Argyll Isles to the Scottish Mainland

#### Stewart Turner, Argyll & Bute Council

The peripheral location of Argyll and Bute within the United Kingdom with its low scattered population has disadvantaged communications and thereby restricted economic development. The remote island communities of Coll and Colonsay, who were dependent on the CalMac ferry services for transportation links, were particularly disadvantaged in these terms and maintaining social cohesion, inclusion and viability of these communities was a major concern.

It was established that dedicated air services to these islands could be successful, and be capable of providing the potential for economic and social benefits to these islands. The first flights commenced on 16 June 2008 by the operator Highland Airways. The new services have been successful, and with further development works proposed this success should continue.



### Islands, Lifeline Links and Sustainability

#### Paul Finch, Faber Maunsell

The Scottish Government is currently undertaking a National Ferries Review. This will influence the forthcoming spending review, patterns of future ferry and infrastructure procurement, network development, and options for the tendering of CalMac and Northern Isles networks. Central to this work is the understanding of the relationship between the provision of lifeline links and the success of an island and its community.

The research argues that the future strategies need to recognise the uniqueness of each island. Island centred transport and investment plans need to be matched with housing centred housing plans, and island centred service delivery plans. The work concludes that Scottish Islands are a key part of Scotland's identity, but there are real and significant issues for both users and suppliers of lifeline links. Key challenges are the large and increasing amounts of capital and revenue expenditure that are now required to sustain island overcoming increasing between expectations and constraints; and the delivery of island communities that are sustainable.

### POLICY, PARTNERSHIPS AND MANAGEMENT

### New approaches to Road Casualty Reduction

Duncan Price, Department for Transport, London

This research covers road safety demonstration projects implemented through the mixed priority routes, rural safety, partnership grant and inner city programmes. DfT has invested £30m in these programmes and they are yielding an exciting variety of lessons about how to reduce road casualties. The projects are developed in partnership with local authorities, which implement them. There are also important lessons about the desirability of champions, multi-disciplinary teams and tie ups with non-transport aims.

### Stalled on the starting line? The Regional Transport Partnerships

Kate Pangbourne, University of Aberdeen

This paper describes the outcome of a Scottish Government-funded research to observe and analyze the dynamics of change from local to regional structures in Scottish transport governance. It shows that power relationships are key drivers of organisational effectiveness, and a switch of emphasis for resource allocation in 2007 has effectively sidelined the Regional Transport Partnerships. They are now vulnerable to a cull on the grounds of ineffectiveness, before they have had a real opportunity to demonstrate the benefits of governing transport across a broader scale than that permitted by Scotland's 32 local authorities.

#### A CO, Management Tool

### Emma Gilmour, SIAS Limited and Philip McKay, Aberdeenshire Council

The management mechanism built on established public investment approaches: gather evidence; set objectives; generate options; deliver; monitor. The research describes how the tool is used to monitor progress towards the Council's objectives, and the role it can play in the appraisal of options for delivering these objectives.

### 'Quality of Life' Transport Indicators under a Single Outcome Agreement

Stuart Knowles, Fife Council

This project developed 'Quality of Life' Indicators for Transport under the Government's Strategic Objectives: Wealthier and Fairer; Smarter; Healthier; Safer & Stronger; Greener. This allows the appraisal of multi-modal transport schemes in-line with the requirements of the Single Outcome Agreements (SOA). By including transport indicators across all the Government's SOA objectives, a balanced decision can be taken on the best form of investment in-line with the Government's aims for sustainable economic growth. This cross-cutting approach, will also allow transport schemes to be judged more favourably against competing investment proposals from other sectors.

### Best Practice in Freight Transport

### Katherine Sloane and Jonathon James, Faber Maunsell

Freight Best Practice Scotland was launched in November 2008. Funded by the Scottish Government, it provides information to the Scottish Freight sector across all modes: to improve their fuel efficiency thereby reducing carbon emissions. The launch of Freight Best Practice Scotland is the first part of the UK where the entire freight sector, rather than just road freight, is included from programme inception. Five case studies show improvements through: electric Vehicles in urban environment, short haul rail freight, technology benefits in timber sector, and container distribution



### **STAR CONFERENCE**

1 May 2009 • Glasgow Royal Concert Hall

The fifth annual STAR conference offers an opportunity for transport practitioners from all backgrounds to come together to share their knowledge and learn from the experiences of others through realising transport innovation and better practice.

For bookings contact: Helen Marshall, Conference Manager, PTRC, 1 Vernon Mews, Vernon Street, London W14 0RL

Phone: 020 7348 1970, Fax: 020 7348 1989, Email: helenm@ptrc-training.co.uk, Website: www.ptrc-training.co.uk

### Scotland's Ferries – opportunities for smarter investment

#### Guy Platten, Caledonian Maritime Assets Limited

At the moment many public organisations tend to work in silos when it comes to ordering new vessels however this is potentially an expensive and time consuming way of working. Shipyards hate 'one off' vessel designs and

Collaboration between authorities, both within and outwith Scotland can potentially realise significant financial and operational benefits

so will price in the risk of what are essentially prototypes. By collaborating and developing generic, innovative vessel designs to suit the various operating envelopes around the islands and then approaching shipyards with multiple orders there are opportunities for economies of scale, standardisation of equipment, training and the provision of spares. Expertise can be developed in ship procurement, build supervision and commissioning that can

be used on a continuous basis and not just on individual projects.

This project shows how collaboration between authorities, both within and outwith Scotland, on design and procurement can potentially realise significant financial and operational benefits. There are opportunities for the next generation of ships to be fuel efficient, and a joint approach to vessel procurement can also realise opportunities in researching alternative fuel types including LNG and Hydrogen Fuel Cell technology.

# Why investing in sustainable transport makes economic sense Jolin Warren, Research Officer, Transform

Scotland

The economic case for transport investment is usually based mainly on enhanced productivity through 'time savings.' Other direct economic factors, such as increased productivity from improved health, are rarely given the same prominence despite their very real impacts. This research has supported Transform Scotland's campaign for more sustainable transport. Findings suggest: savings of up to £2 billion annually if Scotland were to achieve a cycle mode-share of 13 percent; up to £2 billion annual savings by switching 20 percent of carbased commutes to walking or cycling; and the loss to Scotland's economy of £1.3 billion every year due to air-based tourism.

### **Review of Scottish Transport in the Media**

### **AVIATION**

The Competition Commission has made a ruling that BAA should sell Edinburgh or Glasgow Airports. It is also requiring BAA to sell Stansted and Gatwick and to reduce charges and increase investment at Aberdeen to eliminate monopoly profits. Prestwick Airport and flyglobespan have welcomed greater competition.

In a controversial decision, the UK government has approved a third runway for Heathrow.

Gordon Dewar, MD at BAA Edinburgh, has argued for the economic advantages of continued expansion of Scottish overseas air links. Work has started on a £40m expansion of the airport over the next two years, though the need to phase investment has led BAA to seek a delay in plans to acquire and relocate the Ingliston showground adjacent to the airport.

Ryanair is to add seven more overseas routes from Edinburgh at the end of March.

David Quarmby, former head of the British Tourist Authority, and Lord Turner, Chair of the UK Climate Change Committee, have both argued that the economy would gain from a substantial slowing of aviation growth.

Government has ditched plans for a per-plane aviation tax due to adverse impacts on freight movement but will increase the level of tax on passenger travel by air.

### **PORTS & SHIPPING**

Prof Neil Kay is seeking a delay in the SNP Government's ferries review pending EU clarification of the legal position on ferry franchising.

Norfolkline is taking booking for a restored Rosyth-Zeebrugge service from 18 May but the new service will have lower passenger capacity than the former Superfast service and has a fare structure favouring freight, group travel and those travelling with cars.

Stena is seeking permission for a new terminal (replacing Stranraer) to the north of Cairnryan with opening planned for autumn 2010. CMAL is undertaking a £6m rebuild of Largs pier.

MVA has completed a study of waterbuses for SPT and Firth of Clyde Councils. This examines potential fast waterbus services on the lower Clyde interlinking at Bowling with fast and local services to central Glasgow. Some 13 vessels would be required along with annual operating support. Further appraisals are to be undertaken.

Cruise Scotland has been launched in an effort to increase cruise visits to Scotland. In 2007, Scotland had 45% of British cruise visits and much scope is seen for further growth and benefit to local economies. Lerwick already has 45 cruise ship calls scheduled for May to September.

#### **RAIL**

As part of approval for a third Heathrow runway, DfT has announced further studies of high-speed rail in Britain also serving Heathrow and supported by extended rail electrification.

DfT has ordered 172 new 125mph trains from Hitachi to expand capacity and replace the 1970s generation of high-speed trains. The trains will contain a mix of electric, diesel and hybrid operation and will be 17% lighter than existing trains. They will replace present trains on the East Coast Main line to Scotland by 2013, cutting London-Edinburgh times by 12 minutes.

Virgin introduced extra trains between Glasgow and London in December with most trains now taking 4 hours 30 minutes rather than 5 hours. One train with a 4 hours 10 minute London-Glasgow trip time was added in February.

The Glasgow Airport Rail Link (GARL) is now two years behind schedule but completion is still likely in good time for the 2014 Commonwealth Games. Costs at 2008 prices have risen to £395m.

The Scottish Government has authorised detailed design work on electrification of the Edinburgh-Falkirk-Glasgow line and associated routes, including a major interchange at Gogar and a direct link from Gogar to the Falkirk line – to be completed in stages to 2016.

SPT is seeking early clarification of STPR options to ensure early completion of the initial phase of essential Glasgow Crossrail links and further work following on from the results of the Conurbation Public Transport Study due in spring 2009.

The West Highland Line has been voted the world's most scenic railway. This has sparked complaints that scenic views are being spoilt by excessive tree and foliage growth.

Rail fare rises across Britain in January have provoked strong complaints at this happening when petrol prices had fallen considerably and when many rail fares were 50% higher than in continental Europe.

EWS has introduced a new container service from Teesport to Mossend and Grangemouth. Stobart Rail in partnership with Tesco has introduced a rail freight service from Grangemouth to Inverness. This is estimated to save 13,000 lorry trips per year on the A9 and 827,000 litres of fuel. The service had obtained a £3m Scottish Government grant.

### **BUS, TRAM & TAXI**

In a U-turn, Edinburgh City Council has agreed to a complete closure of Princes St for tramworks during most of 2009. This was aimed to allow completion of the initial tram route by July 2011 but tram plans are in disarray following a major dispute between tie and the main contractor, Bilfinger Berger. Construction work was suspended on 23 February with completion unlikely before 2012. Prospects that the option to include a Haymarket-Granton tram extension will be taken up are now slim.

Work is to start on new bus lanes for SE Edinburgh as interim improvements on the proposed tram corridor to the south-east. A new Princes St Hotel is contributing £500,000 to tram costs with further contributions likely from the developers of the St James Centre and the derelict Morrison St site. Ryden expect the property downturn to delay contributions.

SPT has given further support to a bus rapid transit route from the city centre to Renfrew via Southern General Hospital with an option for extension into Glasgow's east end.

Lothian Buses has put the minibus Edinburgh Shuttle service from the airport up for sale 'as it does not fit with core business aims'. West Lothian Council has offered subsidy to retain the threatened Fauldhouse-Edinburgh X33 express bus.

CPT has called for better parking and pick-up/ set down facilities for coach parties visiting Edinburgh. Lack of staffing and poor week-end frequencies from fringe of Edinburgh park and ride bus sites have been criticised.

First and Lothian Buses again raised fares in and around Edinburgh in January, provoking strong complaints. First has raised fares by 25% within a month of removal of the Competition Commission cap on fares around Glasgow and Edinburgh. SEStran has urged more firms to take advantage of Salary Sacrifice, a government tax exemption giving employees savings up to 40% on the cost of an annual bus pass provided that their primary journey is to work. The scheme offers employers national insurance savings up to 12.8%.

The Scottish Government has increased bus operator support by £4m a year to offset the 2p a litre rise in fuel duty and ensure that costs are not passed on to passengers in increased fares. Bus operators point out that rises in Bus Operator Grant in Scotland have been lower than in England.

12 Scottish charities have called for a reform of free bus travel to extend concessions to Demand Responsive Community Transport and taxis.

#### **ROADS & PARKING**

FTA has renewed attacks on the Chancellor for permanent increases in fuel duty, partly to finance a temporary cut in VAT. It is seeking a new deal on road taxation and spending, including reconsideration of shelved plans for lorry charging or wider nationwide electronic charging giving a level playing field for home and foreign hauliers.

DfT investigation of a modest 2 metre rise in trailer lengths has been welcomed but there are wider concerns about EU studies which may lead to longer (25 metre) and heavier lorries up to 60 tonnes.

The Manchester conurbation voted by 79% to 21% against congestion charging plans in the early December referendum

The £174m M6 extension from Carlisle to Gretna opened on 5 December 2008, the 50<sup>th</sup>

anniversary of the opening of Britain's first motorway, the Preston Bypass.

2009 marks the centenary of the Development and Roads Improvement Act which paved the way for the 20th century motorisation of Britain.

In a PFI deal, the Scottish Government has awarded the M80 completion project to Bilfinger Berger, John Graham and Northstone. Completion is expected by 2011

SCOTS, the body representing council roads executives, claims that £2.5bn is needed to bring road maintenance up to standard. More utility companies are facing fines for roadworks delays.

A survey for esure has found that drivers would find motorway hard shoulder running confusing.

Holyrood's Audit Committee has called for tighter control of major project costs.

Following the interim £3 per day cap on hospital parking imposed in January 2008, free parking for patients and visitors commenced on 31 December except at three PFI hospitals. £14.5m is being sought if parking fees go at the Edinburgh Royal PFI hospital. Other hospitals are using barrier controls to stop abuse of free visitor parking, forcing staff to park further away.

The AA has called for a large expansion of park and ride and has welcomed inclusion of this as one of the 29 projects in STPR. 80% of members say they favour park and ride.

Edinburgh City Council is to introduce higher charges for residents' parking permits for gasquzzling vehicles.

The First Minister has called for the drink-driving limit to be cut in line with most of Europe.

### **WALKING & CYCLING**

Scotland's first 'urban trail' for mountain bikes has opened in Cumbernauld. The trail was established by the Scottish Wildlife Trust and is directed at schoolchildren. Mountain biking has been introduced in the PE curriculum

Highland Council is holding talks with charities on the use of Ben Nevis walks for fundraising.

A record 200,000 are estimated to have climbed the mountain in 2008, causing increasing habitat damage and giving little benefit to the local economy.

Visitors have criticised Edinburgh for being cycle un-friendly with excessive traffic and poor facilities for bike-parking. Research for Sainsbury home insurance has found that 12% of the UK workforce is cycling to work or using car clubs at least part of the time. This can bring financial savings of £136 a month as well as other benefits.

A notorious pedestrian underpass on Calders Road in Edinburgh is to be supplemented by a light-controlled pedestrian crossing leading to Napier University's Sighthill campus.

### **TOURISM, ENERGY & PLANNING**

The Economy, Energy & Tourism Committee is seeking more emphasis on fast-track rail schemes, energy efficiency and a commitment to Anglo-Scottish high-speed rail.

Renfrewshire Council has approved outline consent for 2500 houses at Bishopton on the former munitions site close to the rail route to Greenock. An additional junction on the M8 was also approved.

The lead developer of the 5000 home Shawfair new town south-east of Edinburgh has pulled out. Plans have been submitted for the Tornagrain new town for 10,000 people between Inverness and Nairn with a phasing over 35 years.

The Scottish Government is consulting on new 'Designing Streets' guidance replacing PAN 76.

GB rail passenger growth in 2008 is expected to be 3%, down on the 7% growth of 2007. ScotRail passengers may be up 4%, helped by above-forecast use of the reopened Alloa line

With exchange rates aiding in-tourism and more UK residents taking holidays in Scotland, prospects for the Scottish tourism industry in 2009 are encouraging. A further boost will come from the Year of Homecoming

Electronic screening of passengers in and out of Britain is to be extended to Scotland in 2009 in a £1.2bn e-borders scheme linking government agencies and the travel industry. The system will be used within the confines of human rights legislation with use focused on specific targets rather than all passengers.

### **Making Car Travel More Efficient**

### Julie-Ann Goodlet-Rowley, Scottish Government

#### Introduction

In 2007 new transport questions were added to the Scottish Household Survey (SHS) to examine car sharing and park and ride use across Scotland. This note summarise the initial findings.

#### **Car sharing and Travel Plans**

Car occupancy rates have decreased since the SHS began in 1999. The SHS has shown that since 1999 there has been a significant modal shift towards driving to work in Scotland. The majority of this shift is at the expense of the proportion travelling to work as a car passenger (Figure 1). Consequently, there has also been a significant decrease in the average number of occupants in a car across Scotland, dropping from 1.68 in 1999 to 1.58 in 2006. In fact, 85 per cent of all commuting journeys in the 2005/2006 Travel Diary had only one occupant in the car.

### Around one in ten respondents are involved in a car sharing scheme, most of which are informal.

In 2007 the SHS asked a sample of respondents about car sharing when travelling to work or education. The majority of respondents (87 per cent) were not involved in any car share agreement with people outside of their household. There appears to be little difference in the propensity of those living in urban areas and rural areas to car share, and women were just as likely to car share as men (Figure 2). Of those who did car share, almost 9 out of 10 stated that this was an informal agreement between themselves.

Almost two-thirds of non-car sharing respondents stated that nothing would encourage them to begin car sharing.

Respondents who *did not* car share were then asked a series of follow up questions asking the reasons why and what would encourage them to car share<sup>1</sup>.

The main reasons cited for not car sharing relate to the practical difficulties of doing so - 'no-one lived near them' and 'they worked irregular hours or shifts' (55 per cent and 26 per cent, respectively). Perhaps surprisingly, 'unreliability of other people' was not seen as an important reason for not

car sharing (1 per cent). There was very little difference in the reasons given by those in urban and non-urban areas, and between the genders.

One in five of those not currently car sharing stated that sharing with someone they knew would encourage them to car share, but almost two-thirds of all respondents stated that nothing would encourage them to begin car sharing. Interestingly increasing petrol prices was not seen as much of an encouragement to car share (Table 1), although the major price volatility occurred in 2008.

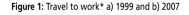
Table 1: What would encourage respondents to car share, 2007?

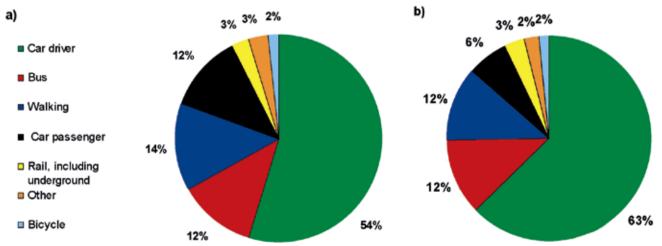
	Male	Female	All
Nothing	67%	62 %	64 %
Sharing with someone they knew	18%	23 %	20 %
Employer to set up scheme	4 %	4 %	4 %
Work mates live nearby	2 %	3 %	3 %
Petrol prices increase	2 %	2 %	2 %

One of the methods currently being employed by work places and educational establishments to reduce the number of driver-only commuter journeys is the implementation of Travel Plans. Common and effective measures implemented by Travel Plans are the promotion of active travel, especially cycling, public transport and car sharing schemes. Results from the SHS show that 10 per cent of respondents know that their place of work/education has a Travel Plan. However, it is not clear how many companies in Scotland have Travel Plan schemes in place.

#### Park and Ride

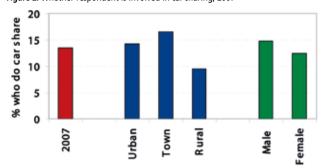
Around one in five respondents had used the car for only part of their journey and had completed their journey using a different mode of transport Another option to tackle the dominance of the private car is the implementation of Park and Ride, and Park and Choose sites across Scotland. Park and Choose sites allow users to choose either to continue their journey by train or by bus.





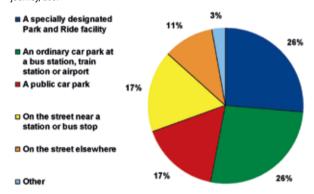
<sup>\*</sup> based on a sample size of around 5,200.

Figure 2: Whether respondent is involved in car sharing, 2007\*



\*sample size is 3,659 in 2007, town is the smallest sub-group at 543 respondents

Figure 3: Respondents who had drove and then used another mode to complete their journey, 2007\*



\* based on a sample size of 1,059. Data source: Scottish Household Survey, 2007.

Nine per cent of respondents in 2007 had made a journey where they could have used a designated Park and Ride facility but had chosen not to

In 2007, 21 per cent of respondents chose to drive part of their journey, park and then use another mode of travel to complete their journey. Of those respondents over a quarter had used a designated Park and Ride facility (Figure 3).

However, it may be worth noting that no information is collected on the final destination of respondents. Respondents who park on the street elsewhere may be parking in a housing estate and then walking to work. In these cases a designated Park and Ride/Choose facility may not change their mode choice.

Interestingly, nine per cent of respondents in 2007 had made a journey where they could have used a designated Park and Ride facility<sup>2</sup> but had chosen not to. The main reason given for not using Park and Ride sites was the perception that the 'journey would take longer'.

# The European Transport Conference in Glasgow

Tom van Vuren, Chairman of the Board of Directors of the Association for European Transport

The European Transport Conference is the largest transport planning conference in Europe, with nearly 500 attending in 2007 and 2008. Glasgow will host the conference between 2010 and 2012. The conference will be held in the Crowne Plaza Hotel in October 2010, enabling a large venue in an interesting area of the city, with fast transport links to the centre. Transport Scotland will be the main sponsors for the event.

The event will be a showcase opportunity for Scottish transport planning and operations. Participants attend from not only Europe, but from most Continents. ETC is <u>the</u> international networking event for transport professionals and there are many opportunities to meet with new and old colleagues, and to create new contacts.

Why not attend the 2009 Conference in the Netherlands, in preparation for possibly contributing to the 2010 event in Glasgow, or further involvement in the Association for European Transport, the professional body organising the conference? Between 5 and 7 October 2009, the European Transport Conference will be held at the Leeuwenhorst Conference Centre near Leiden. Themes for this year's conference are:

- Creating a liveable environment
- · Climate change and sustainable travel
- Managing the demand for road space
- Financing local transport initiatives
- Achieving quality public transport
- Producing safer transport infrastructure
- Case studies of delivering improved access and mobility in towns and cities

An exciting programme has been put together around these themes. There will be a separate workshop on Pricing, chaired by Phil Goodwin. Discounts for attendance are available for those working in local and regional government, and for young professionals.



<sup>1</sup> These are multi code questions so respondents can give multiple responses. Based on a sample of 3,182 respondents in 2007.

<sup>2</sup> Based on a sample of 4,932.

# Is the Outcome of the Strategic Transport Projects Review Affordable and Sustainable?

### The views of the Chartered Institute of Logistics and Transport in Scotland

The Chartered Institute of Logistics and Transport (Scottish Region) welcomes the publication of the Strategic Transport Policy Review. It is difficult to take exception to the proposed developments. However, there is little indication of relative priority of schemes. The projects included reflect modelling conclusions, but there is little evidence of transport planning and stakeholder consultation and conclusions have been made before completion of the National Freight Model.

In the present financial climate, the affordability of the projects needs to be considered together with the timescale over which they can be achieved. If economic growth is likely to be lower than forecast it may be sensible to re-evaluate the net present value of the projects using lower growth traffic forecasts. This could result in adjustments to priorities or even some projects dropping out of the frame.

There is concern about the level of expenditure available for transport infrastructure. Maintaining appropriate budgets for local authorities and continuing to give them access to adequate capital is very important. Necessary local transport investment should not suffer because of STPR commitments.

Insufficient attention is paid to sustainability in the face of potential threats from climate change, terrorism and security of energy supplies. In the case of climate change, it is noted that the Scottish Government has recognised a number of road locations where there is a significant land-slip risk. There will, of course be other elements of infrastructure, road, rail and ports at risk from rivers flooding or coastal erosion as well as land-slips. There is a need to ensure that sufficient funds, both revenue and capital,

# Environmental Assessment and the STPR

### Colin Howden, Transform Scotland

Transport-related emissions have to be reduced in line with the targets in the Scottish Climate Change Bill. However, environmental assessment has patently failed to influence the content of the STPR. The STPR schemes do not represent a programme of investment which would make significant cuts in greenhouse gas emissions (and make almost no contribution to meeting the ambitious targets set out in the Scottish Government's own Scottish Climate Change Bill).

Encouragement of walking and cycling is a key element of Human Health assessment but STPR does nothing specifically to encourage walking and cycling, and makes no contribution to meeting Scottish Government objectives to improve public health and reduce obesity.

Strategic environmental assessment is a legal requirement, but there is a danger that it could be seen as no more that a 'box-ticking' exercise, rather than a genuine environmental assessment of government transport proposals.



are available, possibly at short notice, to ensure that the existing critical communication links, including life-line ferry services, are robust in the face of such threats. Similar robustness is required of key items which may be at risk from terrorist threats.

Electrification of parts of the rail network is contemplated. This is welcome since it extends the range of fuels available to move freight and passengers, in particular, increasing the potential for renewable sources to be utilised. In assessing the case for rail electrification, it is hoped that account is taken of the potential for regeneration and transmission losses and the costs associated with new long distance transmission lines which may be required, particularly if the private utilities are unwilling to invest in these.

There is no provision for a high speed rail link to the south, which is seen as an omission. To avoid delay in completion, at least to the Central Belt, sufficient funds must be available during the period of the Review from the Scottish Government Budget to pay for the section within Scotland.



### The STPR, the Forth Crossing and Scottish Transport Finance

Tom Hart, University of Glasgow and John Howison, Project Director, Forth Crossing, Transport Scotland

#### The Strategic Transport Projects Review (STPR)

The review was published in December 2008 and has been generally welcomed for its shift of emphasis from single major projects to a phased range of corridor improvements and transport network management. Rail and other public transport schemes gain the majority of funding between 2012 and 2022.

The welcome for STPR has been partly qualified by pleas for full dualling of the A96 as well as the A9 Perth-Inverness road, a 3 lane M8 between Glasgow and Edinburgh, a high capacity additional crossing at Queensferry (with 3 rather than 2 lanes) and a direct commitment to Anglo-Scottish high-speed rail. However, the main criticism of STPR has been of uncertain finance and the poor fit with the UK and Scottish Government aims for steepened cuts in greenhouse gas emissions by 2020 including related changes in the level and structure of investment and regulation to deliver efficient energy use, energy conservation and shifts to alternative fuels.

The indication of immediate priorities emphasises completion by 2016 of an additional Forth Crossing, substantial progress on Edinburgh-Glasgow rail improvement, and rail trip time reductions on the routes linking Aberdeen and Inverness with the Central Belt. STPR also makes it clear that completion of A9 dualling between Perth and Inverness and completion of all five phases of rail electrification will extend beyond 2022.

Nevertheless, serious issues have arisen regarding the total funds likely to be available to the Scottish Government. Unless more funding can be secured in a very difficult financial climate, the STPR projects are likely to be completed over 20 to 30 years rather in 10 to 15 years.

#### The Forth Crossing and Transport Finance

The most acute immediate issue is whether an additional Forth crossing financed from existing and projected allocations should have priority for completion by 2016. This would require diversion of between £330m and £465m from the Scottish Government's total capital budget in each year between 2013 and 2016. The result would be displacement of an unspecified number of other deserving capital projects, unless some means can be found of spreading Forth Crossing costs.

UK borrowing and the asset values of transport infrastructure in direct or indirect public ownership are, or soon will be, reflected in notional allowances for the cost of capital included in the Transport Scotland Annual Report. Notional costs for capital already amount to almost 25% of the

£2bn annual budget. Under new accounting rules, PPPs will lead to further rises in the notional cost of capital, in addition to the annual payments being made to contractors over the 25 to 30 years of PPP contracts. This will reduce the cash funds available to the Scottish Government and other public bodies from UK sources.

Both the First Minister and John Swinney are seeking powers of longerterm borrowing to help spread the cost of major projects. If no agreement is reached on these issues, there is a high risk that many transport projects will be abandoned or delayed until after 2016. Local authorities could also experience further cuts in their spending.

There could be a strong case for the use of long-term borrowing and contingency funds to finance a new crossing by 2016. At worst, the bridge may require to be closed to HGVs (5% of existing usage) between 2017 and 2021 if dehumidification cannot reduce or halt deterioration of the cables. Conclusive information will not be available until 2011 but the existing bridge, if not used by HGVs, will have a life closer to the original estimate of 120 years with no early need for recabling. If HGVs were to continue to use the bridge, there would be a requirement for redecking, involving much higher direct costs and disruption.

The engineering and economic argument for an additional crossing is that it will reduce the risk of having no HGV crossing at Queensferry, minimise disruption, by allowing repairs to the existing bridge to be delayed until the new one is available, and supply a bridge with lower maintenance costs and a potential to handle the longer and heavier HGVs now being considered by the EU. A in February 2008 report by W A Fairhurst concluded that the disruption or partial closure of the existing bridge for repairs could involve economic losses as high as £1bn.

Perhaps the more important evaluation, will be to compare the economic costs and benefits of provision of an additional crossing by 2016 with the economic costs and benefits (or opportunity costs) of using the £2.3bn of public funds in other ways over the period to 2016.

Some organisations such as Edinburgh City Council suggest that Scottish programmes for the economy, energy and transport would benefit if a Forth Crossing decision was delayed until 2012. This would allow the funds to be redirected to less capital-intensive schemes giving larger and earlier gains. Informed decisions will require clear assessments of the full costs and benefits including wider impacts on public spending.

### Will Scotland's Air Travellers Benefit from BAA Selling an Airport?

Mike Dooley, Former Managing Director of Prestwick Airport, and Former International Marketing Manager for BAA Scottish Airports

The long expected announcement has been made by the Competition Commission (CC) to force the BAA Ferrovial Group to sell off three of its airports, including Glasgow or Edinburgh. Whilst this announcement may not see the end to this saga, it should act as a wake up call to Scotland's business community and air travellers in general about ownership of its major airports.

The CC Inquiry, which commenced in March 2007, was initiated by a reference

from the Office of Fair Trading (OFT), that there were reasonable grounds for suspecting that a failure, or combination of features of the market in which the airport services that are supplied by BAA, prevents, restricts or distorts competition in connection with the supply of airport services in the UK.

The Competition Comission has found, that where airports are under the common ownership of BAA there is no competition, but it has not presented substantive evidence to back this up. However this is difficult to reconcile

with the opinions and experiences of airport management, airlines, businesses and passengers. The extensive airport development programme, undertaken by BAA in Scotland, since the mid 1970s, the programme of international marketing since 1983, and the participation in financial support programmes for new airline services have all seen intense competition between the airports for business from airlines.

Examination and the value of competition is the 'raison d'etre for the very existence of the OFT and the CC, yet, the Inquiry Group report admits that 'it is difficult to anticipate precisely how competition will benefit customers'. Certainly the Aviation Industry in the UK, finds it difficult to understand the relevance of the Inquiry, as it goes about its daily business of flying people from A to B. The purely theoretical belief of the CC, is that if and when

Edinburgh or Glasgow Airports are sold to a private buyer, then competition will ensue. According to their criteria incoming operators should have an expertise in airport operations, and a record in the acquisition of airports in recent years. However experience and practice show over the last two to three decades, airport charges are only a minor factor affecting competition in the aviation industry. It is the airlines who decide where to operate from, and from where they can expect a reasonable level of profit, generated from high load factors and passenger yield.

Having forced through the sale of Edinburgh or Glasgow Airports, using their proposed divestiture trustee methodology, the very powerful Commission can depart the scene, in the belief that its esoteric competition benefits will bring about major savings for both airlines and passengers. Passenger business comes from airlines, travel agents and the individual making his/her own travel arrangements. Scotland's airports have seen in the last six to nine months, and previously over many years, the demise or departure of numerous

airlines. Would the sale of an airport change this?

In reality this is unlikely to be the case. Will the new owner of Edinburgh or Glasgow Airports actually be able to reduce charges, when they faced with servicing a large capital debt, along with the airport's inherited debt? Even if the new owners are in a position to reduce charges to airline operators and other service providers, will these same groups pass on these savings to passengers and other users? The case for airport competition as a driver of aviation market growth it is not clear.

At no time has the OFT or the CC provided substantive evidence, that increased competition between airports is in the public interest. It cannot he denied that there are issues within the corporate organisation of BAA, that require urgent attention and remedial action, but these can be addressed without the dissolution of the Group.

Lessons appear not to have been learnt from the break-up of British Rail. Rail may not be an exact parallel example of what is being proposed for the airports by the CC, but it highlights the need to be wary of an approach driven by dogma rather than operational efficiency.