Scottish transport review

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SPECIAL THEME
Transport and Energy

WHAT'S INSIDE:

Editor's Introduction

Apologies for the five month gap since STR 33. In recent weeks, there has been no shortage of reading material on transport with widespread news coverage of challenges, policies and plans. One of the most compelling topics is that of Transport and Energy. STR 34 looks behind headlines at views from across the industry on what needs to be done. There are many other topics we need to move on to review in the Scottish context so STR 35 should follow very shortly in the new year.

Contents

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 has charitable status.

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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

Action Now will Reap Dividends Later - Transport and Energy Debate

Derek Halden, DHC

In bringing together many leading experts on transport and energy in Scotland at a conference in the Autumn of 2006, STSG wanted to summarise an action agenda. The messages presented by the speakers were powerful, emphasising that transport needs to change. A few of the highlights are described below.

Future energy needs and sources are amongst the most important issues facing Scottish transport at this time, if the opportunities of the new transport economy are to be exploited. To capture these opportunities leadership and focus are needed from across the industry. However current presentation of transport and energy issues is of a sector in retreat in the face of increased costs and environmental damage.

The experts have a much more positive story. First movers in the market will surely be winners. Scotland as a peripheral nation, might need to pay a little more, but being more reliant on transport is a leadership advantage in the energy sector. The spin offs from the new global companies on transport and energy will surely exceed any additional costs. Could Scottish transport even become carbon neutral in advance of statutory emissions trading?

Cars are becoming much more efficient, but oil is becoming more expensive. New technology will help, but the capital replacement costs mean that we will be running on current technologies for some time. The clear message is that even if we can change the technology now we still need to accept some cost increases and reduction in private car use. But there is good news. The long held relationship between transport and economic growth is changing and we can now have successful economies with less travel.

Emerging technologies need to be: at an attractive price, deliver high quality performance, supported by appropriate legislation, able to rely on suitable infrastructure, and marketed successfully. The potential for change is predicated on delivery on all five of these aims. Different sectors have different skills. Barriers to progress need to be overcome and good practice needs incentives.

We need to remember the lessons from introducing unleaded fuel. By supporting both supply and demand sides of the transport industry, rapid change was achieved. Government helped petrol retailers convert to unleaded, and gave tax advantages to drivers. Action only on supply, or only on demand, would not have achieved the change.

So what needs to be done? No one organisation can deliver a transport and energy future for Scotland working alone. Understanding and respecting each other's goals is a starting point from which to agree with partners workable solutions towards achievable goals. Since we know that change is coming it makes economic and environmental sense to lead. Scotland's strong stake in both worldwide energy and transport industries gives it an enviable position. The maturing Scottish Parliament is also an advantage, and the new National Transport Strategy provides clarity on how government sees its stake.

> *"the transport and energy agenda could be more of an opportunity than a threat"*

Government's role is important, but it is only a small part of the transport and energy future. Other key stakeholders also need to help define what could be deliverable, and there are many uncertainties and risks that need to be managed. Will biofuels, fuel cells or some other technology be the preferred future approaches for cars and buses? The highly successful trials of fuel cell buses in London, and the first fuel cell car in the world running exclusively from renewable energy sources in Shetland, shows that fuel cell technology is worth pursuing vigorously.

However, if cars and trains are to run on electricity, government needs to be clear in discussions with industry how national targets for renewable energy can include transport, ensuring that energy supply can meet transport needs.

Change is happening much faster than many people realise. In the last year alone progress has included Grangemouth becoming a UK centre for biofuels, carbon offsetting emerging within corporate responsibility plans, business staff and customer travel plans spreading to more organisations with support from government, and faster growth in energy efficient modes than for many years. These changes might be at the margin today but can be mainstream within a very short time.

Overall, public, private and voluntary organisations all need to act on the transport and energy agenda. With clarity and focus; working together; action on both supply and demand; recognition of how to overcome and manage barriers to change; and a willingness to seize the unique opportunities available to Scotland at this time; the transport and energy agenda could be more of an opportunity than a threat.

Transport and Energy: Research Challenges

Dr Jillian Anable, UK Energy Research Centre Transport and Aviation Topic Leader

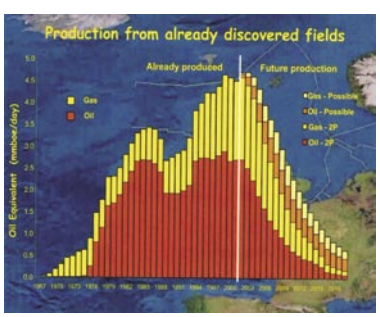
In the UK, the transport sector, including international shipping and aviation, is now responsible for a third of UK emissions of carbon dioxide. Indeed, even without international aviation, transport is the only sector of the UK economy for which emissions have consistently increased year on year and were higher in 2004 than the baseline year of 1990. Moreover, transport is an especially difficult sector in which to reduce emissions due to its dependence on oil: 99% of all transport in the UK currently runs on oil products and transport accounts for 71% of the UK's final consumption of this fuel. Consequently, it has a vital and especially challenging role to play in reducing energy and emissions in the UK and on a global basis.

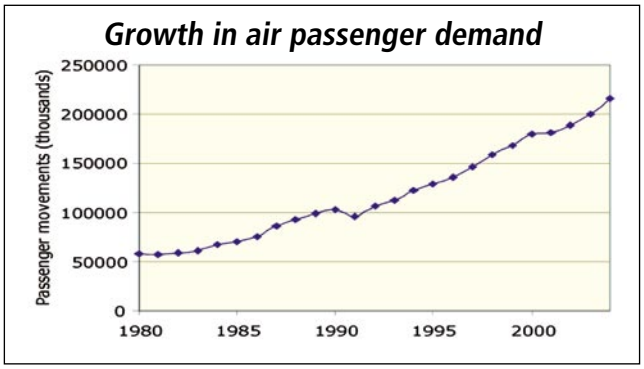
This challenge can be subdivided into at least 10 constituent parts which reflect the global environmental context and the vital interplay between the demand and supply sides of the transport equation. This article takes each of these challenges in turn.

(i) The need to respond rapidly to the need to reduce greenhouse gas emissions in the face of global climate change provides the backdrop to **(ii)** the inherent failure of policy making to respond with both the necessary urgency and with visionary thinking to change infrastructure investment, vehicles and behaviours in a direction appropriate for a carbon constrained society. **(iii)** Even current debates on 'Peak Oil' do not appear to have concentrated thinking to prompt consideration of dramatic changes in the sector. If the UK Government's projections of conventional reserves extending to 2030 are correct, this is still quite a short time given transport's current 99% reliance on oil, the pervasive nature of transport and the very large stocks of infrastructure as well as vehicles.

> *"hydrogen's long term potential cannot be used as an excuse to avoid taking action now".*

(iv) Technological developments in this sector will not appear rapidly enough nor **(v)** cost effectively enough to reduce the demand on fossil fuels in this sector. Alternatives to fossil fuels are being considered and developed in the transport sector but these are starting from a very low base and transitions will take a long time. In particular, there are extreme difficulties to finding alternatives to oil in long distance transport, particularly aviation. Significant cuts in emissions will therefore require **(vi)** widespread individual changes to patterns of consumption and travel. Indeed, behavioural change will be as much if not more important technological solutions. **(vii)** Public attitudes arguably need to shift before meaningful changes in behaviour will materialise, but again the evidence suggests that information and awareness raising will not be sufficient on its own to engender the required shift in social norms and patterns of consumption and mobility. This requires the **(viii)** political will to tackle all the ways in which energy can be reduced from transport: fuel switching; vehicle efficiency; mode switching and encouraging less travel. However, current UK Government policy essentially aims to achieve net reductions by relying on improvements in vehicle efficiency in the hope these will eventually overtake the upward trend in emissions due to **(ix)** a continued rise in traffic. This is despite the fact that in the early 1990s there were signs that transport policy would move away from a 'predict and provide' approach where the objective is to build enough new infrastructure to meet projected demand, to attempts to restrict car use and optimise existing infrastructure. However, neither the most recent Transport White Paper nor the Energy Review contains any explicit statement that there should be a reduction in the number or length of car and freight vehicles and journeys. Indeed, the prolific increase in the demand for transport is set to continue, particularly if the Government's own projections for UK air passenger movements to more than double by 2030 travel are to be believed - a growth which is supported by the UK policy framework of airport expansion.



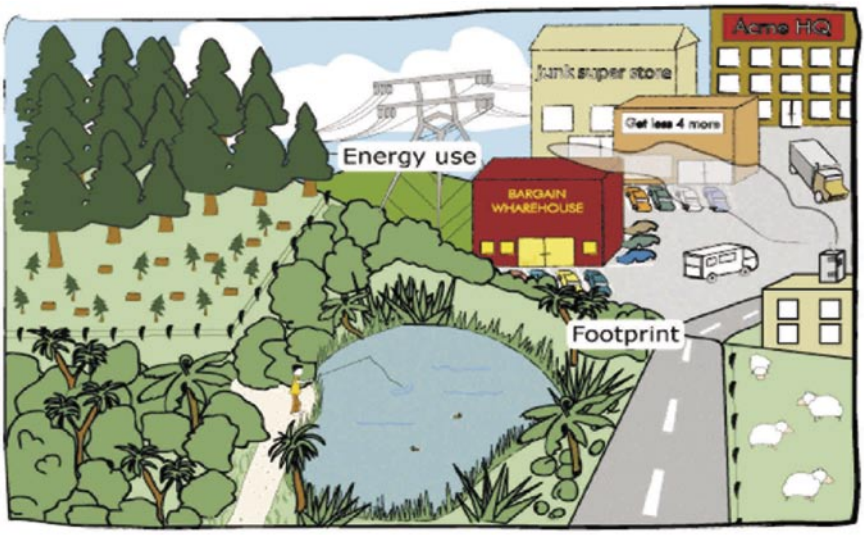


A major challenge is to tackle the root cause of these trends in mobility: **(v)** economic growth. Historically, as the economy has grown, so has transport activity and so has energy use and emissions from the transport sector. Up until about 1990, the growth in vehicle use outstripped the economy. However, since the early 1990s, there has been some relative decoupling of road traffic from economic growth. Achieving economic development without a proportional increase in transport activity means improving access to goods and services without excessive or unnecessary mobility and subsequent emissions. In other words, we need to encourage economic growth but with less transport (at the minimum in terms of resource use and environmental impacts). The question is whether a target to reduce traffic intensity is enough to tackle the rising carbon emissions from the transport sector or whether economic growth needs to be static in order to achieve our carbon reduction targets.

These challenges are not merely research challenges. They represent real current threats to the ability of transport to pull its weight in both an oil and a carbon constrained world. Much emphasis is put on technological fixes such as hydrogen. However, hydrogen's long term potential cannot be used as an excuse to avoid taking action to reduce oil dependence in this sector now. In addition, we cannot rely on behaviour to change quickly enough without the political will to direct these changes. What is more, we cannot rely on other sectors to compensate for the growth in carbon emissions from transport. It may be time for a sectoral target and a re-emergence of the discussion of the need to reduce the demand for travel.

Transport, Energy and Natural Heritage

Bill Band, SNH



Most people are now aware of climate change and its stark consequences for society and the environment if action is not taken to reduce our emissions of carbon dioxide. SNH considers climate change to be the biggest single threat to Scotland's biodiversity in the medium to long term. The key natural heritage objective should be to reduce the greenhouse gases from transport . We strongly support Government in seeking 60% reduction of carbon emissions by 2050, through energy efficiency and demand reduction measures and by substituting fossil fuels by energy from renewable sources.

To bring the implications to home: Scotland's carbon emissions are 15 MtC (million tonnes of carbon) per annum which amounts to 3 tC per person. If you heat your house with electricity and drive 15,000 miles a year then that is likely to use up about 2.5 tC at present carbon levels. A 60% reduction represents a radical change.

The Scottish Executive's Scottish Sustainable Development Strategy seeks a strong, sustainable economy, a high level of well-being, thriving communities, protection of natural resources, and a reduction in global impacts. Transport is an important prerequisite for the economy, for the services which enable well-being and thriving communities, and to enable the most efficient use of global resources. Transport is an integral part of a sustainable development strategy. However, transport accounts for 17% of greenhouse gas emissions in Scotland.

Looking at emissions across different travel modes, it is clear that substituting rail for air travel should be an obvious objective – especially for the much-used services from Edinburgh and Glasgow to London and other English cities. But it is also important to look closely within each travel mode. Rail will only become much greener if the electricity used to power it is derived from renewable sources. For much of the Scottish rail network, electrification may simply be too high an investment cost: trains powered by fuel cell may be a better solution for the less heavily used lines. Bus travel may be relatively carbon-efficient, but not necessarily in rural areas where levels of seat occupancy may be low.

Aviation is a particular problem for the future. Demand for air travel is predicted to increase some 2.5-fold by 2030. UK emissions due to aviation are expected to be of order 16-18 MtC by 2030. However the climate change impact of aircraft emissions is 2-4 times greater than of CO_2 alone, because they are emitted high in the atmosphere. Such an increase is not compatible with an aim of reducing UK greenhouse gas emissions (currently 180 MtC) by 60%.

Caution is needed, too, over the move to transport biofuels. While these result in less greenhouse gas emissions than petrol or diesel, the emissions reduction is typically only 50%-60% - they are far short of being carbon neutral, because of the fertilisers required in growing crops and the processing required to produce the fuel. Also, the agricultural land area which would be required if all our fuel needs were to be met is huge. Transport biofuels should be encouraged but cannot be seen as a panacea.

It will be very hard to secure emission reductions of order 60% in the transport sector. It seems likely that travel in the future may become more constrained than it is now. Businesses can make more use of employees working at home, and videoconferencing. Individual lifestyles may have to adapt, recognising the carbon emissions associated with foreign travel. The concept of a personal carbon emission quota may yet emerge. However the initial steps are obvious and becoming well expressed in public policies – energy efficiency, modal shift, renewable fuels, transport sharing. All of these require change and investment.

Energy Efficiency, Renewables and Transport

Ian Murdoch, Energy Saving Trust

The Energy Saving Trust is one of the UK's leading organisations that works to reduce the damaging effects of climate change. We aim to cut carbon dioxide emissions – one of the main gases that contributes to climate change – by promoting the sustainable and efficient use of energy.

The Energy Saving Trust was established in response to the 1992 Earth Summit in Rio de Janeiro, which addressed worldwide concerns on sustainable development issues. We work through partnerships towards the sustainable and efficient use of energy by households, communities and the road transport sector, and are one of the key delivery agents for the Government's climate change objectives.

With regards to transport, the Energy Saving Trust in Scotland can help with the development of:

- Travel plans
- Fleet consultancy (in the form of green fleet reviews)
- Grants for installing refuelling and recharging stations

Travel plans

Although often incorrectly considered as anti-car plans, travel plans have a number of benefits. A well developed and implemented travel plan can not only help reduce business costs, it also helps to protect the environment by reducing the amount of CO2 emitted from vehicles.

A travel plan is a package of measures designed to promote greener, cleaner travel choices within organisations and encourage the use of travel alternatives such as car sharing, public transport, walking and cycling. A travel plan is tailored to the specific circumstances of a business, and should take into account a wide array of factors. These include; the size and location of the organisation or building, the number of staff, the number of visitors and deliveries received, as well as the number of contractors servicing the building.

If an organisation has either more than 50 employees, or more than 10,000 visitors a year, they may be entitled to free consultancy advice for travel planning. The free travel plan service is funded by the Scottish Executive and carried out by the Energy Saving Trust's expert consultants.

Free travel planning is also available to schools. This is achieved by using the existing network of school travel plan co-ordinators in each local authority. Schools must have either 300 pupils or 30 members of staff to obtain this service free of charge.

Online information, telephone consultancy, case studies, and publications, such as Travel Plan News, are also available free of charge to organisations and companies that are looking to reduce their CO2 emissions and implement efficiency measures.

You can access more information on our travel plan service at www.est.org.uk/fleet/

Green fleet reviews

Our free fleet consultancy, is provided in the form of a green fleet review, and is carried out by one of the Energy Saving Trust's specialists, who have gained experience across a wide spectrum of fleets.

Funded by the Scottish Executive, a green fleet review will help you to identify efficiency measures, and ensure that you're taking the right steps in managing your business transport. Savings can come from buying the right vehicles according to need, identifying and implementing fuel efficiency measures, driver training and reducing mileage wherever possible.

The Energy Saving Trust offers free green fleet reviews to organisations in Scotland running a minimum of 20 vehicles. Vehicles must be 3.5 tonnes or less for organisations to qualify. For smaller fleets, we provide support and advice by telephone on 0845 602 1425.

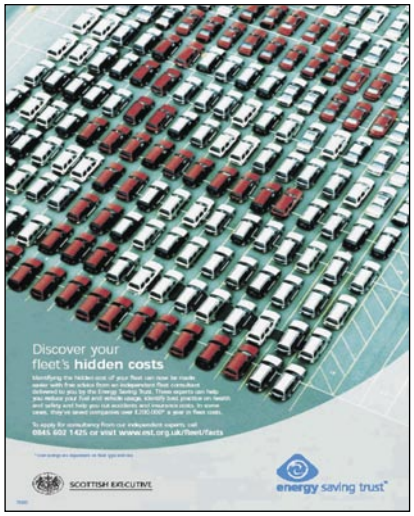
A typical green fleet review would consist of:

- A review of vehicle choice lists
- Alternative fuels
- Fuel economy
- Methods of mileage reimbursement
- Driver education
- The impact of technology on reducing mileage
- Advice and information on health and safety issues and employers duty of care
- Business mileage in private vehicles, known as a grey fleet

You will then receive a comprehensive report outlining a strategy that once implemented will improve your business in many ways, including:

- Reducing your fleet costs
- Cutting your vehicle emissions
- Improving your social and environmental reputation
- Minimising traffic and parking problems where you work

Our consultants understand the legal and commercial pressures facing organisations and aim, after an initial session, to identify both quick wins and longer term strategies to meet your fleet needs.



Refuelling and recharging grants

- Hydrogen
- Electric
- E85 bioethanol
- Natural gas/biogas stations

We believe that by offering these grants we will be able to expand the country's alternative fuel infrastructure, enabling more people to access cleaner fuels and electric recharging points, as easily as they can currently access petrol and diesel. We hope that better access to alternative refuelling and recharging stations will encourage the uptake of clean, alternatively-fuelled road vehicles in the UK.

Further information on the grants we offer can be found at www.est.org.uk/fleet

The way ahead

We believe that individuals and organisations can do a great deal to save energy when it comes to road transport by:

- Buying cleaner vehicles
- Driving efficiently
- Using vehicles less

Low carbon vehicles are already available, new cars are labelled (much like the labels used to identify energy efficient white goods) and tools are in place, such as satellite navigation systems, to help people reduce the miles travelled unnecessarily.

You can access the Energy Saving Trust's free advice services online, apply for a free travel plan, free green fleet review, or find out information on grants for new refuelling and recharging facilities at www.est.org.uk/fleet, or by telephone on 0845 602 1425..

What Drivers Think

Neil Greig, AA

Too often the debate seems to suggest that if only we could ban large 4x4s all our problems would be solved. There is of course a lot more to it than that. Common sense is needed. The AA and the AA motoring trust have a long tradition of promoting green motoring in a variety of forms and organised free unleaded fuel conversions when lead was removed from petrol in the mid 1980s. Tax on unleaded fuel was cut and this was probably the best example of how carrots work better than sticks.

The AA provides advice and in our regular motoring concerns surveys the cost of motoring emerges top again and again. Environment appears to be a low priority as a result of confusion over the facts of global warming, drivers waiting for a technological quick fix or perhaps they see that their modern cars are cleaner than greener than ever before. Environmental measures have to be carefully sold to drivers and go with the grain of their daily lives.

But things have already got better. Today's Euro 4 engines have cut some pollutants by up to 5 times compared to a Euro 1 engine from 1996. Euro 5 engines are now being fitted to new cars and work will continue on euro 5, 6, 7 etc. Car building is a world industry that requires such high level agreement.

Existing internal combustion engines could become between 35 and 50% more efficient by 2020 and hybrids could be up to 66% more efficient. We may also be seeing the first signs of traffic stabilisation due partly to high fuel prices and congestion and better public transport has a part to play as well. Energy use by lorries and particularly by vans is increasing at a faster rate than for private cars.

Progress can bring unintended consequences. To meet crash testing standards new cars tend to be heavier and between 1995 and 2003 the average weight of cars has increased by 12.2%. Other safety inspired ideas that will increase fuel consumption include daylight running lights. The EU wants to make them mandatory by 2010 but keeping your dipped headlights on all day increases fuel consumption by 3%.

Emission control equipment such as a catalyst increases fuel consumption and diesels can increase particulate and smoke problems. Drivers also like new technology such as air conditioning, cd players, sat navs all of which increase fuel consumption.

Despite these conflicting factors, and a 4.8 million increase in the number of cars in the UK, C02 emissions from cars over the last ten years has remained stable. The AA Trust wants to make as practical a contribution to this debate as possible and we have commissioned research from the UK Centre for Economic and Environmental Development with many interesting findings.

There are four main areas where savings can be made in energy consumption by cars. A combination of all four will be required covering:

- Cleaner and more fuel efficient cars
- Drive more efficiently
- Cleaner and lower carbon fuels
- Drive fewer miles

Nobody buys the most fuel efficient cars since you cannot get them in the UK. Progress in encouraging the sales of the lowest carbon cars has been miniscule.

To our knowledge there are no Band A (ie free from VED cars) available in the UK market – the scope for growth is therefore immense. There are a number of already exempt vehicles like the GWhiz but they are not perhaps the most attractive options.

A report to the US Congress in 2004 noted key issues for the marketability of advanced technology vehicles; cost, infrastructure, performance, and government policy. It is interesting that two of the most reliable car makers in the world, Toyota and Honda are leading the way with hybrids. They do not want to jeopardise their reputation by selling cars that do not meet their existing brand values. The company car is a prime target for improving energy efficiency. Governmnet policy is already working and in 2004 the average company car produced 169g/km of C02, 3% lower than the average private car. Much more work could be done to promote the CO2 band information.

The AA is happy to work with partners to help promote and market practical options for drivers.

What Role for Walking and Cycling?

Erl Wilkie, Cycling Scotland

Current integrated provision between walking, cycling and public transport, and the possibilities to maximise intermodality are both very much under-developed to the detriment of these modes, and the wider environment. If the potential advantages of linking public transport (of all types) and walking and cycling were better understood it would help cities to plan a fully integrated transport system, make more efficient use of their public transport networks, provide greater accessibility for citizens, and help to promote greater levels of walking and bicycle use therefore creating a people focused journey to be known as the "seamless journey".

While the concept of a 'seamless journey' is generally supported, not many city officials and politicians know how to plan well for this, and/or how to put this into practise. Good intermodal practise depends on designing space for people, and reducing the interchange 'penalty'. This penalty can take the form of a time loss, an inconvenience and/or a lack of safety.

Good intermodality also includes the integration of information, and the integration between modes and the surrounding area. It requires all providers involved to work together to find solutions to the advantage of the many, not the few.

Current practice shows what works. By concentrating on the situation as it affects cyclists and pedestrians successful solutions can be identified. This is not just a Scottish issue. Interest in this subject is being worked on as part of the EU POLIS work for inclusion in forthcoming EU research and development. It is planned to bring together as partners, a number of city authorities as well as public transport operators and organisations representing them. The research can be foreseen to have a number of outcomes such as; an evolution of best practise and review, embedding walking and cycling from the 1st principles, creating design criteria and mode criteria, and therefore creating a 'seamless Journey'.

Audit Scotland's Overview of the Scottish Executive's Transport Function

This summary highlights some points made by members of the Chartered Institute of Logistics and Transport on the recent Audit Scotland review

The Audit Scotland report is helpful in providing an overview of the Executive's transport responsibilities, its organisation, objectives, progress towards targets and the contribution being made to wider policy areas such as the economy, social inclusion, the environment and health and safety. The appendices are particularly beneficial in providing concise summaries of the Executive's Partnership Agreement, Transport Appraisal Methods and Major Projects costs and timescales.

The expenditure monitoring section provides valuable information and permits easy assessment of the Executive's performance in the different areas of activity. This is assisted by the helpful tables and graphics which also enable the various trends to be readily assimilated and problem areas to be identified.

However presenting a factual summary only partially meets Audit Scotland's remit to hold to account the Scottish Executive and public sector bodies for the proper and efficient and effective use of public funds. Audit Scotland report that further work is needed to be able to comment effectiveness of delivery. The report is therefore largely confined to statements of fact, and progress made and costs incurred, against the Executive's objectives, targets and budget heads.

There are several areas in the Audit Scotland report where it is surprising that the issue has been dealt with at a narrow factual level:

The report states that there is "*higher than expected usage*" of the Executive's concessionary travel scheme. Perhaps the question might be why the Executive expected lower levels of usage when many respondents to their consultation explained that the generation would be higher. Good financial stewardship requires uncertainties to be managed to ensure value for money.

For the last five years lorry miles transferred from road have consistently been little more than half the predicted figures on which *Freight Facilities Grants* grant was based. Bearing in mind '*mileage removed amounts to less than two per cent of total heavy goods vehicle traffic*' it would have been helpful for a view to be provided by Audit Scotland on whether the grants represent good value for money and how this value could be improved.

> *"further work is needed to be able to comment effectiveness of delivery"*

Investment priorities are appraised using Scottish Transport Appraisal Guidance but greater transparency is needed in how programme priorities are managed when schemes escalate in cost. When major cost increases arise, as for Aberdeen Western Peripheral Road it is important to ensure the revised project is fully justified.

The interaction of transport activity with other areas of Executive activity should also be addressed. There is a need for a broader overall policy audit embracing the transport and economy linkage and the interaction with social need, sustainability and the environment. As a derived demand, value in transport cannot solely be assessed in such a narrow context.

A fundamental aim should be to assess the appropriateness of the Executive's objectives against its stated policies in the context of its defined strategies. There should also be consideration of the extent to which movement towards targets is a result of stated policy initiatives or of related actions e.g. increased bus patronage has arisen largely from introduction of more attractive concessionary travel rather than principally from improved bus services.

Transport is attracting increasing public investment and needs support from audits to ensure value for money and better targeting of investment. The recently established Regional Transport Partnerships probably deserve priority attention. For local authorities, attention might be directed to areas of activity where unexpected trends are identified and/or to particular authorities.

Comments on the Report have been invited and should be sent to Phil Grigor, Project Manager, Audit Scotland, 18 George St, EDINBURGH EH2 2QU.

National Transport Strategy for Scotland

The Scottish Executive published their national strategy in early December. It expands in the 2004 White Paper and explains how the policies will be delivered. It has also helped to stimulate a public debate about transport policy.

The strategy highlights three key issues that will make a fundamental difference towards delivering a world class transport system:

- Improved journey times and connections - making it quicker, easier and more reliable for passengers to travel between our towns and cities and across our global markets.
- Reduced emissions - making sure that Scotland takes a lead in the future of sustainable transport.
- Improved quality, accessibility and affordability - ensuring everyone across Scotland has high quality public transport choices.

It identifies the role of the Scottish Executive to help facilitate partnerships to deliver the vision.

The strategy is available on the Scottish Executive website: www.scotland.gov.uk Paper copies are available from: Blackwell's Bookshop, 53 South Bridge, Edinburgh, EH1 1YS, 0131 622 8283

AVIATION UPDATE

New air routes and plans include:

- flyglobespan is planning more long-haul flights direct from Scotland.
- A new service from Glasgow to Orlando has started and Toronto will be served from May 2007.
- American Airlines has ended Chicago-Glasgow flights.
- flyglobespan flights from Edinburgh to Chambery willl start in December.
- easyjet has introduced three new daily services between Gatwick and Glasgow.
- Ryanair plans to introduce in flight mobile phone calls in 2007-08.
- Direct services from Inverness to Benbecula started in September.
- The Route Development Fund has allowed Eastern Airways to start a direct Inverness-Newcastle route.

Transport Minister Tavish Scott is contesting an EU decision to prohibit any new subsidy for long-haul flights from May 2007.

In a new strategic plan, HIAL expect growth at all airports but with Inverness having the largest rise (250% by 2030).

BAA master plan for Edinburgh proposes £300m of investment over next decade. Traffic is expected to triple to 26m passengers a year by 2030 with long-haul up 13 times. A new £19m pier opened in September.

PORTS & SHIPPING UPDATE

Forth Ports is studying a freight-only Rosyth-Europe service but this could affect the existing *SUPERFAST* passenger/freight service. *SUPERFAST* is investigating a more economical vessel. Forth Ports plan to invest £40m in a distribution hub at Grangemouth.

A local ballot has rejected plans for a short vehicle ferry link to Jura but a fast Crinan-Craighouse passenger service is being considered.

Western Ferries has withdrawn from bidding for Clyde and Hebridean services, claiming the process is unfair and lacking transparency.

V.Ships has dropped out of bidding for the Gourock-Dunoon ferry, leaving only CalMac and Western Ferries as bidders for a non-subsidised service carrying both vehicles and passengers.

CalMac has gained a six-year contract to operate Northlink ferries at an initial subsidy of £31m a year.

A £20m renovation of the Caledonian Canal has been completed.

Problems related to beach landing have delayed an experimental Stagecoach hovercraft service from Kirkcaldy to Edinburgh (Seafield).

Progress on the £30m programme to open new Highlands and Islands piers has seen the opening of Canna and at Inverie(Knoydart) replacing transfer boats with direct landings.

RAIL UPDATE

Virgin aim to cut best Glasgow-London times to 4 hours 15 minutes by 2008 with further cuts to 3 hours 45 minutes if 135 mph is allowed. Trains could be lengthened from 9 to 12 coaches. On a test run, Virgin set a record of 3 hours 55 minutes for a Glasgow-London trip on 22 September.

An Eddie Stobart/Tesco partnership has introduced a new supermarket container service between Daventry (near Rugby) and Coatbridge.

Extra rail freight clearances on the route from Coatbridge to Elgin via Aberdeen have been approved.

Network Rail's new freight strategy for Britain aims at 30% growth in rail freight over the next 10 years.

Track-laying on the Stirling-Longannet reopening has started

Transport Scotland has abandoned plans for major reconstruction at Waverley station but additional through platforms are being provided plus 1 extra platform at Haymarket by 2007. Further expansion may be required after 2012.

Rail park and ride continues to grow with extensions being opened at Uphall, Markinch, Kirkcaldy and Newton.

The Strathspey Steam Railway is making progress with plans to extend from Broomhill to Grantown-on-Spey. An interim bus link is planned.

The onset of free bus travel for older people has led Perth & Kinross and Falkirk Councils to discontinue support for rail concessions.

The Waverley Route Rail Bill now has Royal Assent.

Completion of the GARL, EARL and Airdrie-Bathgate Bills is expected early next year though the EARL Bill is the most controversial.

Network Rail has selected Springburn to be a major new signalling and maintenance centre for the west of Scotland, offering 450 jobs.

BUS, TRAM & TAXI UPDATE

Contracts are to be placed for utility relocation required for the Edinburgh tram route but will be subject to cancellation should the business case for the route be unproven. The promoters, tie, hopes to have both the Newhaven-Airport line and the Haymarket-Granton spur open by 2010. This will involve cuts in Leith Walk bus services and a halving of the airport bus service. Auto-ticket machines are being installed at stops on pre-tram Edinburgh bus routes as a pilot for integrated tram/bus ticketing. Such ticketing (with most fare collection on the vehicle avoided) will also speed-up bus loading times and overall route performance. BAA hopes that 25% of Edinburgh airport passengers will use buses for access by 2007 (with many transferring to the tram route on its completion). A 2011 target is to be set later this year.

Glasgow City Council and SPT have expanded plans for segregated bus routes to include both the north and south Clyde Waterfront area, using the new Finnieston Bridge.

NHS Glasgow has developed two schemes to improve hospital access for patients and visitors. A fleet of minibuses is to be introduced for evening visitors and the other pilot scheme will introduce people carriers to take chronic housebound patients in east Glasgow to clinics.

NHS Lothian and West Lothian Council have expanded direct bus services from West Lothian to Edinburgh Royal Infirmary

Edinburgh City Council is proposing free buses to convey people from car parks to city shops

and is working with Lothian Buses on how to make best use of existing services.

First Edinburgh has withdrawn its Clerwood route and used buses saved to expand services between Haymarket and Mayfield.

First has ended night bus services in Glasgow, excepting Thursdays, Fridays and Saturdays.

Among new services started by Stagecoach are a Fife-Queensferry-Edinburgh Airport link, an Ayr-East Kilbride link and a Paisley-Ayr via Irvine express bus.

More rank space for taxis and private hire remains a problem at Edinburgh Airport. New larger 7 seater private hire vehicles have been introduced.

Bus park and ride around Edinburgh continues to grow. Work has started on a further site at Sheriffhall and enlargement of the Ingliston site opened in 2005. Sites adjacent to the City bypass are being progressed for other sites at Lothianburn and Wallyford.

Stirling has extended park and ride from Springkerse to 6-day operation.

SPT is working with police to reduce bus vandalism.

Extra CCTV cameras at rail stations have also been approved.

ROADS, STREETS & PATHS UPDATE

Scottish Executive has announced a general review of speed limits including possible extension of 20 mph zones and limits below present levels on some rural roads. A lowering of 70mph motorway maximum speeds has been suggested to cut road energy use and CO2 emissions while also cutting noise levels and accident risks.

Areas covered by parking charges are being extended in both Edinburgh and Glasgow. Edinburgh Old Town businesses say parking charges have led to less trade on Saturdays than on Sundays.

MSPs Bruce Crawford and Helen Eadie have promoted Bills to abolish tolls on the Forth and Tay Bridges in advance of the outcome of the Executive research on the economic and social impact of tolls.

Decisions on Forth crossings are expected next year following detailed reports on the condition of the present bridge.

Aberdeen City is planning the first high occupancy vehicle lanes in Scotland.

Glasgow's £20m 'squinty bridge' over the Clyde at Finnieston opened on 18 September under the formal name Clyde Arc. The design allows for tram operation and one lane each way is reserved for buses and cyclists.

Tavish Scott has opened a new road access to Inverness Airport. This will aid a shuttle bus link to a future airport station between Inverness and Nairn.

A £150m upgrade of the A80 to motorway between Stepps and Haggs is programmed for completion in 2011.

Comhairle nan Eilean Siar is conducting a feasibility of a causeway between Harris and Berneray which might act as a transport link and generate electricity.

Car insurance prices are rising well above inflation but petrol and derv prices have eased since a peak in August 2006.

Numbers of Scottish petrol stations have fallen from 1,723 in 1990 to 970 in 2006.

Audit Scotland report says that councils need to spend an extra £1.5bn to bring road maintenance up to standard with a further £325m needed for trunk road maintenance.

Overall, road accidents are falling but 3 out of 4 drivers fail eye safety standards while more than 1 in 10 Scots have driven under the influence of drugs.

Greater use of flashing speed limit signs is helping to cut down speed. The 26 mile long A77 speed control in Ayrshire has led to a sharp drop in speeds and fewer accidents.

In an '*Edinburgh without a car day*' test on 22 September, cycling proved to be the fastest access to the city centre from around five miles out.

PLANNING, LEGISLATION AND FUNDING

Health Minister Andy Kerr had noted that centralised hospital facilities, often on remoter sites, have caused access problems which need to be addressed.

Plans for a new £300m hospital west of Larbert have been announced. It will replace existing hospitals in Stirling and Falkirk and will require hospital access to be managed through travel plans.

Audit Scotland has found that community planning, aiming to get different players to work in harmony, has had the opposite effect and has increased acrimony, muddle and confusion. Bodies involved needed to be much clearer on what they expected community planning to deliver and how this would be done. Funding was too fragmented.

The Transport and Works Bill, aimed to speed decisions on non-road transport schemes, is now proceeding through the Scottish Parliament. Experience from England suggests time-saving will be limited though the burden on MSPs will be eased.

Booster seats are now required when children under 12 and below specified heights use cars.

BLUE BADGE HOLDERS – SOME SCOTTISH HOUSEHOLD SURVEY RESULTS

A note by the Scottish Executive Transport Statistics branch

1. Introduction

1.1 This is the twenty-eighth in a series of short notes on transport-related results from the Scottish Household Survey (SHS). It describes characteristics of households which have Blue Badge holders, and characteristics of Blue Badge holders themselves. The Blue Badge scheme, which is the successor to the Orange Badge scheme, provides a national arrangement of parking concessions for people with severe walking difficulties who travel either as drivers or passengers. The scheme also applies to registered blind people, and people with very severe upper limb disabilities who regularly drive a vehicle but cannot turn a steering wheel by hand. At the moment, children under the age of two are not eligible for these badges.

1.2 The question about possession of Blue Badges has been asked of all members of the household since the start of the survey, and so the figures given here are based on 107,082 interviews with households (which had a total of 221,014 members) conducted between 1999 and 2005. In the earlier years, the question was asked in respect of Orange Badges.

1.3 Key findings:

- 8% of households have someone with a Blue Badge;
- 4% of the population have a Blue Badge;
- 5% of adults have a Blue Badge;
- 0.5% of children (aged 2-15) have a Blue Badge.

2. Households with Blue Badge holders

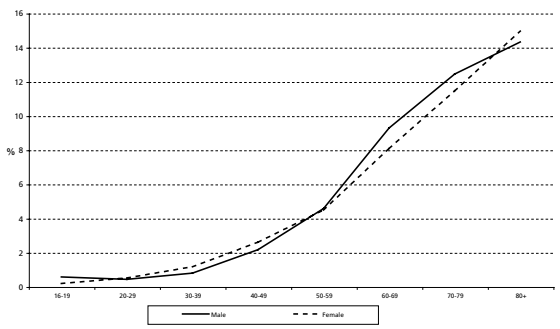
2.1 The interviewer asks "Do you or does anyone in your household have a Blue Badge?". 8% of households contained at least one person who held a Blue Badge. This varied quite considerably with household type, with the percentage being highest for "older smaller" (i.e. a household with two adults where at least one of them is of pension age) and "single pensioner" households (20% and 11% respectively), compared with 2% for "single parent" households and 3% for "small family" households.

2.2 There is also variation with annual net household income. The percentage of households containing someone with a Blue Badge was highest for those with an annual net household income of between £10,000 and £15,000 (12%), compared with 6% of "£20,000 to £25,000" households, and 2% of "over £40,000" households. There did not appear to be a clear association between Blue Badge possession and different types of area; large urban areas had the lowest percentage of households with a Blue Badge at 7%, whereas other urban areas, small "accessible" towns, and "remote rural areas had the highest with 9%.

2.3 The percentage of households containing a Blue Badge holder varies with the number of cars a household has access to. 5% of households with no access to a car, 11% of households with access to one car, but only 5% of households with access to 2 cars had someone with a Blue Badge. The proportion of households containing a Blue Badge holder has increased slightly but steadily since the survey began in 1999, from 7% in 1999 to 9% in 2005.

2.4 A very small proportion of households (0.2%) contained a child aged between 2 and 15 who was a Blue Badge holder.

Chart 1 - Adults (aged 16+) : Blue Badge Possession by sex and age



3. Adult Blue Badge Holders

3.1 A randomly chosen adult member of each household is asked several questions about (e.g.) driving licence possession and general state of health. In this section, the percentage of adults who hold Blue Badges is analysed against these personal attributes. The figures in this section are based on 99,841 random adult interviews completed between 1999 and 2005. Results are weighted to take account of response rates and differences in selection probability.

3.2 5% of adults in Scotland are Blue Badge holders. There is very little variation between the sexes – however, as would be expected, the percentage varies greatly with age. Less than 1% of 16-29 year olds are Blue Badge holders, compared with 1-2% of 30-49 year olds, 5% of 50-59 year olds, 9% of 60-69 year olds, 12% of 70-79 year olds, and 15% of those over 80. Chart 1 shows that the percentage of females who are Blue Badge holders tends to be slightly higher for those aged 20-49, but slightly lower for those aged 50-70. Less than 1% of those who were employed had a Blue Badge, compared with 3% of those who were "looking after the home or family", 11% of those who were permanently retired from work, and 25% of those who were permanently sick or disabled.

3.3 The proportion of adults holding a Blue Badge did not vary much with driving licence possession; 4% of those with a full driving licence held a Blue Badge, compared with 5% of those who did not have a full driving licence. However, there was a difference for frequency of driving: 3% of those who drove every day were Blue Badge holders, compared with 7% of those who had a full driving licence but never drove.

3.4 As may be expected, the state of a respondent's health had a large effect on whether they held a Blue Badge or not. 1% of those who described their state of health as "good" had a Blue Badge, compared with 5% of those who described themselves as being in "fairly good" health, and 17% of those who said their health was "not good". 19%

of those with a long-standing illness or disability had a Blue Badge, compared with 1% of those who did not. Similarly, 34% of those who need regular help or care held a Blue Badge, compared with 3% of those who don't.

3.5 Blue Badge possession increases among adults who have limited mobility. 33% of those who have difficulty walking for at least 10 minutes have a Blue Badge, compared with 1% of those who do not have this difficulty. 37% of those who had difficulty using a taxi or a train had a Blue Badge, compared with 36% for buses, and 31% for cars. This compares to around 1-4% of adults who did not have difficulty using these forms of transport.

4. Child Blue Badge holders

4.1 This section examines the characteristics of children in households with regards to possession of Blue Badges. The responses in this section are based on information provided by householders in respect of 44,636 children between the ages of 2 and 15 who were in households covered by the survey between 1999 and 2005.

4.2 Overall, 0.5% of children between the ages of 2 and 15 held a Blue Badge. There was little variation with age or sex: slightly more boys than girls held a Blue Badge (0.6% and 0.4% respectively). Those aged between 5 and 10 had the highest rates of possession of Blue Badges (0.6%), compared with 0.4% of those aged between 2 and 5, and 0.5% of those aged 10-15.

4.3 20% of children who were reported to need regular help or care were holders of Blue Badges, compared with only 0.1% of children who did not need regular help or care. The percentage of children who held a Blue Badge appears to have risen slowly but steadily over the last five years, from 0.4% in 1999 to 0.6% in 2005.

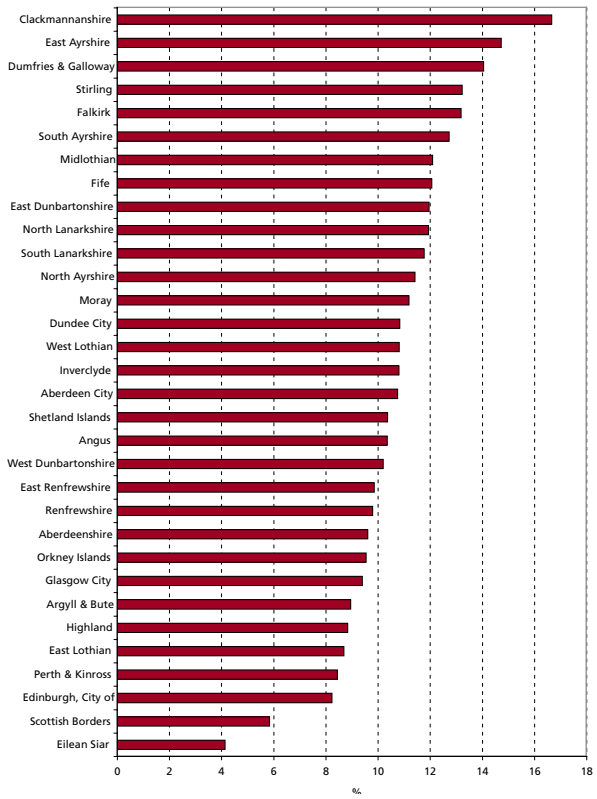
5. Differences across Scotland

5.1 Every two years, the SHS is able to publish results at local authority level. This section looks at the different rates of Blue Badge possessions, both for all people in households covered by the survey, and for those aged over 60 only. These results are based on 221,014 people in the survey between 1999 and 2004, or on 46,648 over 60s. The latest year (2005) is not included in this analysis as the SHS data only become representative at local authority level after a full "2 year sweep".

5.2 For Scotland as a whole, 4% of people hold a Blue Badge. There are variations between local authorities; Clackmannanshire, East Ayrshire and Dumfries and Galloway have 5% of their population as Blue Badge holders, compared with only 2% of people in Eilean Siar. However, it is possible that these differences are due to difference in the proportion of the population that are aged 60 and over (as shown from the analysis above, they are much more likely to be Blue Badge holders).

5.3 For Scotland as a whole, 11% of people over 60 are Blue Badge holders. However, even when examining just this subset of the population, there are still differences between local authority areas. Clackmannanshire has the highest percentage of over 60s who were Blue Badge holders (17%), followed by East Ayrshire (15%), Dumfries and Galloway (14%) and Falkirk, Stirling and South Ayrshire (13%). In contrast, Eilean Siar had the lowest percentage of over 60s with Blue Badges (4%), followed by the Scottish Borders (6%). Chart 2 shows the full comparison of local authority areas for adults aged over 60.

Chart 2 - Adults (aged 60+) : Blue Badge Possession by Local Authority



6. Background and Further Information

An interview was sought with the highest income householder or his/her spouse/partner (who provide information about the household as a whole) and with one randomly-selected adult (someone aged 16+) in each household which was included in the sample, which is spread across Scotland. The results were weighted to take account of differences in selection probabilities and response rates.

Lists of the topics covered by the SHS, and analyses of its transport-related results, appear in a series of Scottish Executive Transport statistics bulletins:

- Household Transport (latest edition: December 2005) - provides the results of most of the Transport questions (but not the Travel Diary) for Scotland as a whole;
- Transport across Scotland (latest edition: January 2006) - provides the results of the main Transport questions (but not the Travel Diary) for each Council area and some figures for Regional Transport Partnership areas;
- SHS Travel Diary results (latest edition: March 2006) - provides the main Travel Diary results for Scotland as a whole and some figures for each Council and Regional Transport Partnership area.

All are available from Blackwells bookshop, or at: www.scotland.gov.uk/transtat/latest. Anonymised copies of the SHS data are available from the UK Data Archive (www.data-archive.ac.uk). Further information about the SHS can be found at www.scotland.gov.uk/shs. Enquiries should be made to the SHS Project Manager: Tel: 0131 244 8420 Fax: 0131 244 7573 Email: shs@scotland.gsi.gov.uk.

Research, Publications and Statistics Update

Given limited space in this issue only selected research contracts, publications and statistics has been included. A fuller update will be provided in STR 35.

In this update we provide a snapshot of statistics and publications and focus on two recent research findings: the consultation on the national transport strategy and a review of future retail transport. The summaries presented in STR are extracts from the Executive summaries of the reports. Further details can be obtained by following the web links.

STATISTICS SNAPSHOT

A wealth of new statistics and information can be found in new issues of Scottish Transport Statistics, Road Accidents Scotland and Household Transport in 2005. Further details are at http://www.scotland.gov.uk/transtat/latest

A snapshot of interesting statistics from these and other recent publications is as follows:

- Rail passenger trips in the west of Scotland have exceeded 50 million for the first time (SPT).
- UK new car registrations in 2006 are below 2005 though the fall has been lower in Scotland (Scottish Transport Statistics).
- Virgin West Coast report a 25% rise in Anglo-Scottish rail trips
- Buses now have a 40% peak share of traffic into Edinburgh on the principal western corridors (Lothian Buses).
- On some core routes in central Edinburgh in peak hours cycle traffic comprises over 15% of passenger movement (SPOKES).
- Scottish road deaths fell by 20 to 286 in 2005, a record low
- Over 1.008 million people flew long haul from Scotland, a rise of 15% on 2005 (BAA).
- Highlands and Islands airports handled a record 1.153m passengers in the year to 31 March 2006, with passengers using Inverness rising to 0.67m. (HIAL)

SELECTED PUBLICATIONS

Planning and management

- Scotland's National Transport Strategy December 2006. Including detailed supplements on Rail, Bus and Freight.
- *Consultation on the Review of Air Quality Strategy*, Scot Executive. April 2006
- *Scottish Executive: an overview of the performance of transport in Scotland*, Audit Scotland, September, 2006
- *Scotland : Route Consultation Strategy – Draft for Consultation*, Network Rail, August 2006
- *Designing Safer Places PAN77*, Scottish Executive, March 2006
- *Inclusive Design PAN78*, Scottish Executive, March 2006
- *East Lothian Local Plan 2005: Supplementary Planning Guidance 1 – Home Zone Design Standards – Draft for Consultation*, January 2006 www.eastlothian.gov.uk
- *Making 'In Town Without My Car! Work: A Good Practice Guide*, DfT – see www.itwmc.gov.uk
- *Scottish Planning Policy 8 Town Centres and Retailing*, Scottish Executive, August 2006
- *Draft Scottish Planning Policy 8: Town Centres and Retailing – Analysis of Consultation Responses*, Scottish Executive, August 2006
- *Scottish Planning Policy 21: Green Belts*, Scottish Executive, April 2006
- *Community Engagement – Planning with People: Consultation Draft* PAN, Scottish Executive, July 2006
- *Draft Scottish Planning Policy 21: Green Belts – Analysis of Consultation Responses*, Scottish Executive, April 2006
- *Public Participation in Environmental Impact Assessment – Summary of Consultation Responses*, Scottish Executive, June 2006

Research and Statistics

- *Long-distance Commuting in Scotland*, Scottish Executive Transport Research Planning Group, July 2006 – compiled by Lucy Barker and David Connolly, MVA
- *Fast Track: High Speed Rail for Scotland*; report on 9 December 2005 Seminar, Railway Forum and SAPT
- *Main Transport Trends*, Scottish Executive Statistical Bulletin – Transport Series, TRn/2006/5 August 2006 £2 (also includes summary leaflet, *Key Transport Statistics*)
- *Step in the Right Direction*, Report by Physical Activity Council, Scotland – advocates more 20 mph limits, more home zones, reduced priority for parking and more efforts to cut anti-social behaviour
- *Key 2005 Road Accident Statistics, Scottish Executive Statistical Bulletin* – Transport Series Trn/2006/4 June 2006. £2

Bedside reading

- *The West Highland Railway – Plans, Politics and People*, John McGregor, John Donald, 2005, £25
- *Battle for the North: The Tay and Forth Bridges and 19th century Railway Wars*, Charles McKean, Granta, 2006, £20 (both these books give accounts of the delays, cost over-runs and abandoned schemes which were associated with lobbying for rail schemes in the 19th century)

EUROPEAN COMMISSION 7TH FRAMEWORK RESEARCH AND DEVELOPMENT PROGRAMME

The forthcoming 7th Framework Programme of the European Commission will commence in the Spring of 2007 with the first call for proposals likely to be out by late December this year.

Sustainability and Integration will figure highly in the criteria for new research and demonstration projects and a Scottish based project on this is being developed is by Erl Wilkie of Cycling Scotland with research into seamless journeys covering:

- Benchmarking of interchange design and audit technique.
- Prioritise new mode concepts (inc. citybike, car club, daila a ride) in additional inter-modality.
- Objective 1 = seamless person-focussed journey.
- Objective 2 = minimise interchange penalty.
- Benchmarking success
- Design Guidance / criteria
- Identification / recognition of existing, and profile (generally smaller size, informal etc.)
- Mode specific issues, especially walk and bicycle
- Positioning of interchange
- Integration / impact on locality
- Urban design – self recognition – awareness – understanding of interchange
- Integration of information sources and technology both related to interchange and locale
- Best practice review of cities
- *Pilot tests of design guidance*
- *Cost Benefit Analysis and future deployment funding, programming etc.*

There will be many other projects being developed so please use the pages of Scottish Transport Review to debate and develop ideas. Send to editor@stsg.org

National Transport Strategy – Analysis of Written Consultation

Linda Nicholson, The Research Shop

A Scottish Executive consultation on "Scotland's National Transport Strategy" took place between 20 April and 13 July 2006. 314 responses were received from a wide range of individuals and organisations. The draft aim, vision and objectives of the National Transport Strategy were generally welcomed. A common theme was that respondents wished to see these linking more explicitly with wider related policies and the strategies of other organisations such as Community Planning Partnerships.

Respondents:

- Remarked on the compatibility of the draft strategy with the health improvement agenda.
- Agreed that the National Transport Strategy should provide direction to the forthcoming Strategic Projects Review, giving it a framework of priority objectives and action programmes, including key transport corridors, against which investment could be mapped.
- Argued in favour of shifting the balance of future funding in favour of the maintenance of existing transport infrastructure rather than investing in new infrastructure.
- Recommended that more funding should go towards transport in rural areas.
- Were split on further development of international air connectivity. Some advocated further advances in order to develop economic opportunities and tourism, and some arguing against air development on environmental grounds.
- Supported improving cross-border connectivity by rail and road, with a large majority (89%) in favour of developing a faster Scotland to London rail service to compete with flying.
- Sought alignment of the developing Freight Strategy and the National Transport Strategy. There was much support for encouraging a shift of freight from road to rail.
- Considered that the National Transport Strategy should have a role in addressing skill gaps in the transport sector.
- Considered that the Strategy was well placed to support tourism.
- Supported the development of Demand Responsive Transport (DRT), whilst noting the barriers curtailing future development.
- Thought that accessibility planning should be considered for local or regional transport strategies.
- Considered that transport could be made more accessible to disabled people.
- Praised the Rural Community Transport Initiative for helping to tackle social exclusion in rural areas.
- Suggested that the consultation document should have set out more explicitly the links between these lifeline ferry and air services and tourism.
- Considered that developers should take more responsibility for transport provision with some arguing for making this a condition of permission to develop.
- Considered that travel plans should be required of all larger employers.
- Recommended that the Scottish Executive should promote the concept of "smart measures".
- Viewed walking and cycling as deserving a much higher profile
- Advocated adopting Quality Partnerships and Quality Contracts with bus transport operators.
- Identified the need to tackle capacity issues on some train services with upgrades in station premises being recommended along with increasing facilities for car parking and cycle storage at stations.
- Urged that new technologies be introduced in conjunction with traditional paper timetables and face-to face presentation of information including the development of Real Time Information systems.
- Supported for the future promotion of the uptake of biofuels. Respondents requested that biofuels be made more widely available at an affordable cost.
- Identified potential gains to be had from the development of new transport technology in Scotland.
- Sought better enforcement of parking policy.
- Expressed concern at the poor image attached to road pricing and made suggestions of how to change this.
- Identified: the need to educate on road safety issues; the need for tighter law enforcement of existing road safety measures; the need to publicise road safety issues; and the need to find ways to reduce the speed of motor traffic in some locations.
- Considered that reducing speed limits and improving street design could contribute to making streets safer and more pleasant places to be.
- Urged that an appropriate evaluation framework be established to enable regular monitoring and assessment of the effectiveness of the strategy. It was recommended that the Strategy by "equality proofed" and "rural proofed".
- Were split between those favouring the adoption of "traffic intensity" as an overall indicator of success and those against this proposal.
- Had mixed views on whether the target of quadrupling cycle use should be retained.
- Supported a move to regional road traffic reductions, although a common view was that these should be in addition to a national target, rather than replace this.
- Supported the proposal to set a level of contribution for reductions in Scotland's CO2 emissions.

See: http://www.scotland.gov.uk/Resource/Doc/153453/0041294.pdf

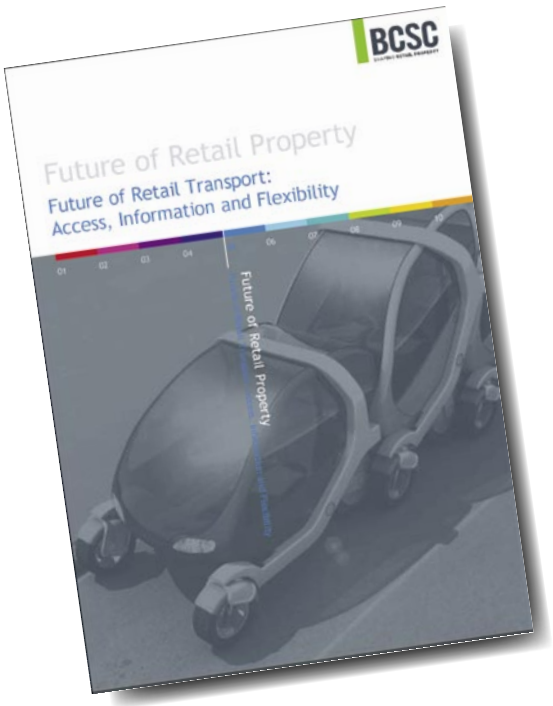
Informed Travellers are the Key to Future Transport

According to new research by the British Council of Shopping Centres a new breed of informed traveller, rapid progression towards road pricing, and more flexible public transport competing with private cars, are the future of transport. The review suggests that the gap between public understanding of transport policy and government policies has stifled change – but retailers are set to help change this as competition grows in the shopping industry.

The development of transport, the economy and society are interdependent. In the 19th century, the developing rail network helped cities to strengthen their position as major retail centres. The 20th century was the age of the motor car widening the range and choice of viable retail locations to suburbs and out of town locations. At the start of the 21st century, the fast developing electronic information, communication and transport networks are set to make equally profound impacts on both retail and transport industries.

This review identifies that the factors leading to transport change are:

- Transport infrastructure and transport cost
- Managing freight and passenger transport
- New modes
- Informed travellers
- Changing, lifestyles and retail markets

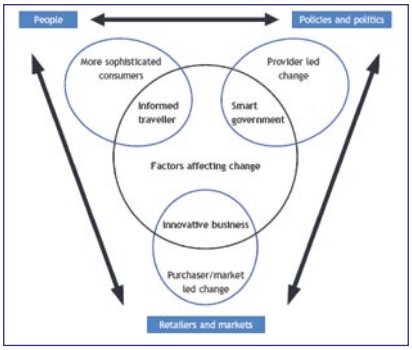


The research shows that the future of transport will be determined by changes in accessibility, efficiency, information and flexibility. This means that investment in future transport is not just about improving existing infrastructure but depends on new approaches:

- Retailers which use personalised travel plans as part of their retail marketing will win market share from those that do not. If government invests in the successful retail travel plans then the very good value transport delivery can be realised.
- Informed travellers will rely on PDAs, satnav, and mobile phones when deciding how and where to travel. Changes in travel behaviour mean that many trend driven approaches to transport planning need to be reviewed.
- Electronic payment mechanisms will not just pay for transport and parking, but other small purchases like coffees and newspapers, increasingly cementing growing business relationships between transport and retailing.
- The successful modes will be those that are flexible enough to meet increasingly demanding 24 hour lifestyles. We might even see greater convergence of bus and taxi markets with swarming networks of taxis and minibuses replacing some of the less successful timetabled fixed route networks in some towns.
- If the UK can lead the development of transport technology with increasingly automated systems then transport can help to underpin the future of the economy. Investment is needed now in the infrastructure to support the new generation of transport adopting energy sources such as fuel cells and biofuels.

"systems set in place now will define the future of transport for many decades to come"

Rretailers will become more directly involved in selling and managing access to transport



services, increasingly finding ways to pay for customer parking and offering free/subsidised public transport for customers and staff in order to maintain a competitive edge. However the rate at which shoppers will benefit from these changes will depend on government backing for the industry schemes.

Road pricing can significantly improve travel efficiency and the BCSC research suggests that Government should back industry schemes to offer road pricing and carbon offsetting as consumer choices. If Government attempts to link road pricing with revenue raising then it runs the risk of destabilising local retail economies and delaying road pricing by many years.

Transport accounts for more than 15% of household spending and this is growing. However, it is clear that the indirect effects of wider economic, demographic and social changes on these spending patterns will have a far greater impact on future transport than the direct effects from changes in the supply of roads, parking, air services, buses, trains, cycle routes and footpaths. In the new information age, lifestyle, attitudes and behaviour change will mean that more sophisticated consumers make new travel choices.

Large transport markets evolve slowly, but the sector is set for major transformation and the systems set in place now will define the future of transport for many decades to come. This will require a much closer partnership between the retail industry and government on transport investment.

http://www.bcsc.org.uk/research/FORP/project07.htm