

### Recently completed projects

Needs assessment for the Glasgow City Council Community Transport Strategy

Skye Bridge socio-economic impact study

Review of the air discount scheme for Scotland's remotest communities

Economic development and social inclusion impacts of the North Clydeside relief road

Policy options for improving access to essential services for the National Consumer Council

The impact on accessibility of the Department of Health pharmacy grant scheme

Analysis of access to rural post offices for DEFRA

Access to legal services in England and Wales for the legal services commission

Accessibility indicators for the Scottish Index of multiple deprivation

North Skye bus service review for Highland Council

For further details

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 [www.dhc1.co.uk](http://www.dhc1.co.uk)

## 10 Years of Progress

DHC recently celebrated its 10th birthday. A core value in all DHC work is that customer needs come first, and that to deliver better transport we should understand these needs. Better information and dialogue, improved analysis and presentation techniques, and partnerships for business, community and accessibility planning, have all helped DHC staff get to the heart of the problems faced by clients.

The next 10 years are likely to herald even greater change as energy sources for transport evolve, and more automated and intelligent systems provide new delivery options. As DHC continues to grow its markets, not just within the UK but internationally, we look forward to working with an increasingly wide range of organisations to deliver these changes.

### Better Travel Plans

Looking back, it was nearly 10 years ago that DHC started a programme of work for the Scottish Executive to review the potential for school travel plans and to develop plans and guidance for their delivery. Derek Halden was therefore delighted to speak at the 10th annual conference of the Association for Commuter Transport (ACT) in London in February 2007.



Although school and workplace travel plans are now better understood, they are often seen as predominantly an environmental transport measure. This is set to change. Transport authorities and their partners are now delivering more integrated approaches including social and economic aims. The opportunities offered by accessibility planning and city region planning to improve local, regional, national and international connections present many new challenges.

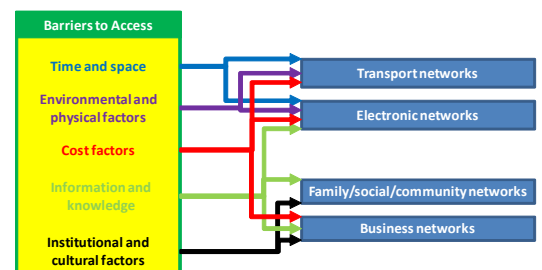
### Improving Future Access

Over the last year, a step change has been made in accessibility modelling capabilities. The new national model "NAMTRAC", developed for DfT and the Scottish Executive allows travel choices to be analysed from any set of origins to any set of destinations by any combination of modes.

These new flexible and powerful analysis capabilities are increasingly helping private companies and public agencies to maintain access, and plan sustainable connections, in the face of rising travel costs and growing congestion.

## Championing Consumer Interests

The National Consumer Council works with government, regulators and businesses, campaigning and researching ways to improve consumer opportunities. Market based exclusion is a growing problem for many disadvantaged consumers, and NCC have helped to negotiate practical solutions on priority issues. Lack of access is an increasingly important barrier, and DHC was commissioned to review what more should be done to improve access to essential services.



# Lessons for Transport Appraisal from Skye Bridge

It is now over 10 years since the bridge opened, and on 21 December 2004 the tolls were removed from the crossing. DHC with support from the Institute for Transport Studies at the University of Leeds undertook research for Highlands and Island Enterprise and HITRANS to review the lessons learned and assess the scale of the impacts which have occurred.

Over the last 15 years the transport changes have been significant, affecting the time, cost, comfort, convenience, reliability, and image of travelling to Skye. The most significant journey time change was when new ferries were introduced in 1992, but once the bridge was opened, cost replaced time as the most important factor affecting the accessibility of Skye. Substantial cost reductions were subsequently made in 2004 when the tolls were removed.

These changes have resulted in a large increase in vehicle traffic. The greatest impacts were a 20% growth in vehicle trips when the bridge opened in 1995, and a 50% increase when the tolls were removed in 2004. Alongside these new car trips there was significant suppression of pedestrian journeys when the bridge was built, with an immediate loss of 275,000 journeys rising to 410,000 by 2004.

In the early 1990s the congestion at Kyle of Lochalsh was acting as a constraint on the development of Skye. The introduction of the 24 hour ferries overcame this problem, and helped the economy of Skye to grow. The toll bridge consolidated the benefits of the ferry improvements, and made them more permanent.

The toll removal has changed perceptions of the Skye Bridge, so that it is now, almost universally, perceived positively by local residents and businesses. This has the dual benefit of helping to underpin business confidence and making the area a better place to live and visit.

The bridge, and the controversy relating to the tolls, has helped to market Skye across the UK and overseas. The Skye Bridge was promoted as a project of strategic interest to the Highlands. These strategic benefits were broadly achieved by the tolled bridge, but were not matched by equivalent local benefits. The toll removal has extended the strategic benefits to ensure that local people can benefit more, also helping the bridge to be perceived more positively by both residents and businesses.

There are some important lessons that future transport appraisal can learn from Skye:

- It is necessary to include all modes affected by investment in user benefit calculations, including



changes for pedestrians. Also, identifying the relationships between modes is vital even if this is only the walk to the car.

- The relationship between travel cost and demand, requires a highly segmented approach to travel behaviour analysis, particularly where money costs are involved. These effects can also be more sensitive in remote areas. Averages are of less interest than changes at the margin, since it is the latter that change behaviour most.

- Transport investment appraisal needs to include issues such as convenience, comfort, reliability and image in addition to cost and time.

- A 'fixed link' factor may exist, related to the uncertainty that communities and businesses experience when reliant on ferry services, but this is relatively small when comparing frequent ferries with a bridge .

- Many of the most important impacts are uncertain, particularly in remote economies where impacts depend on the decisions of a few companies or entrepreneurs. Project development and appraisal should consider how to lock in potential benefits as part of project delivery to manage these uncertainties wherever possible.

- Appraisal needs to consider which social and business networks influence behaviour, and ensure that investment appraisal includes appropriate complementary marketing interventions alongside the infrastructure works. It is necessary to include indirect and consequential effects as well as direct impacts.

- Labour markets are relatively important influences in remote economies.

- Agglomeration benefits appear to be less important in remote regions.

- The distribution of benefits is important not just for equity but for public acceptability.

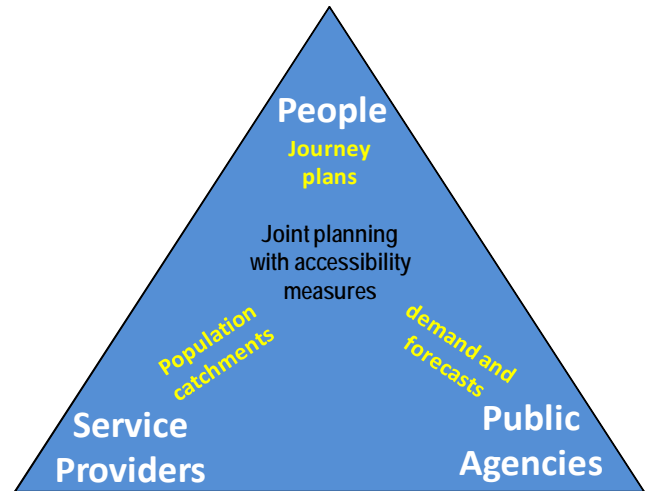
# Step Change in Modelling Capabilities with New National Model

For many years it was assumed that transport infrastructure investment could be prioritised largely by analysing and forecasting changes in travel demand. As understanding has grown of the links between transport, the economy and society, the need to analyse the local, regional, national and international connections available for people and businesses has increased.

The recent Eddington review by the Treasury identifies the importance of connections within city regions, between cities and through international gateways as being of particular importance for the economy. This follows and complements similar approaches for local services and facilities required by social inclusion policy. Making new connections and improving accessibility through accessibility planning is now centre stage in transport planning.

Although accessibility modelling has evolved in conjunction with transport modelling over the last 30 years, accessibility measures have often been perceived as complex and confusing. The recent policy developments define more clearly which aspects of accessibility are valued in national and local investment decisions, and how these benefits will be measured. This covers both complex utility based measures, including agglomeration effects in cost benefit analysis, and simpler travel cost and opportunity indicators, to help develop the dialogue between transport and other sectors towards more integrated decision making.

To support these new requirements, increasingly flexible and sophisticated modelling techniques are needed. In March 2006 DfT appointed a consortium comprising DHC, Dotted Eyes and Automatica to develop a national accessibility model. The model uses the best available data on travel times by time of day on each link in the road and public transport networks and relates this to origin and destination



data. The model allows both transport and land use options to be tested including the impacts of congestion by time of day and day of the week and alternative public transport options.

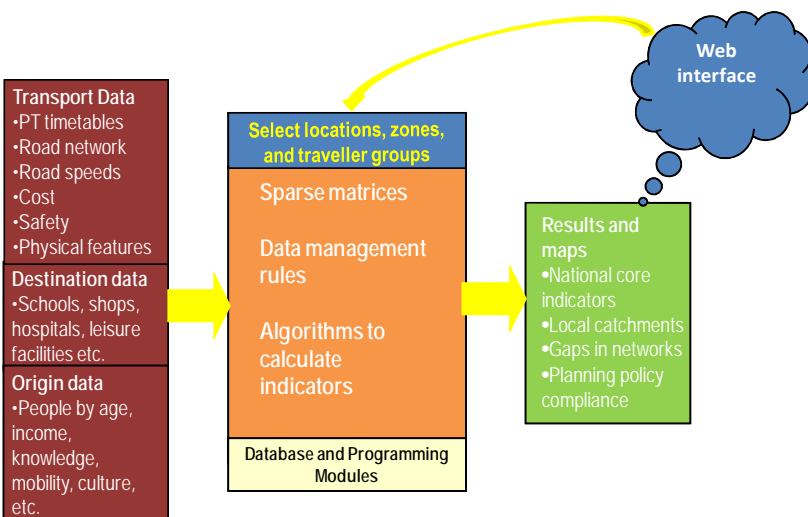
The analysis can be scaled to any chosen zoning system, from address point data for local areas of interest, to larger zones where less detail is needed. In the national model there are more than 220,000 zones, and by using sparser matrices even larger models can be accommodated within the same system. The model offers a step change in the flexibility available for analysis by transport and accessibility planners.

It is hoped to make the model widely available to local authorities and their partners through a web interface during the course of the current 5 year commission.

Many local and national analysis challenges have already been tackled, and the consortium has been able to respond quickly to both transport and non transport policy questions. Local and national policy makers and planners can use the model to:

- Investigate how growing congestion is affecting accessibility, and what investment is needed to maintain and improve connectivity in city regions.
- Identify gaps in transport networks and take action to close them
- Review the accessibility impacts of alternative national and local policies for supporting local facilities such as post offices.
- Analyse and map the changing catchments for major trip attractors such as shopping centres and employment sites.

Further information about the model can be found on the DfT website <http://www.dft.gov.uk/162259/162469/221412/221692/223677/accessibilityreport2005.pdf>



# Planning Efficient and Flexible Retail Transport

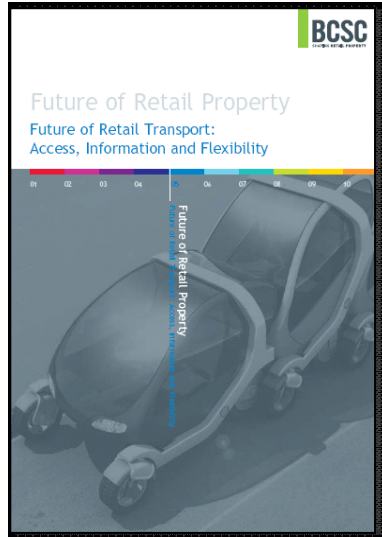
The British Council of Shopping Centres (BCSC) represents the interests of many of the country's leading retailers and property developers, and has recently completed a major review mapping out the forces for change in the retail industry. DHC and the Institute for Retail Studies at the University of Stirling led the transport theme in this programme, reviewing how social, economic, political, and technological forces will affect future retail transport.

The findings of the research give a unique insight into the deliverability of transport change including public acceptability, political desirability and market success. The analysis demonstrates the close linkages between efficient transport and successful retailing. Not only is shopping the fastest growing trip purpose, but retailers are amongst the largest purchasers of transport.

The final report "Access, Information and Flexibility - The Future of Retail Transport" was launched by BCSC at the Scottish Parliament in Edinburgh and suggests that a sustainable future requires partnerships built around: shared aims for improved access, better informed and more sophisticated consumers, stable public policy, and incentives for innovation to capture the benefits of new technology and energy sources.

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 in partnership with the transport industry:

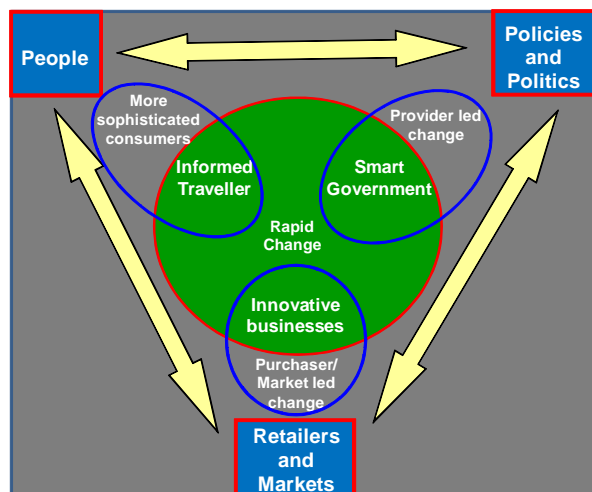
- Informed travellers will benefit from increasingly personalised travel information before and during journeys, provided through mobile phones, satellite navigation, and customer loyalty schemes.
- Markets for road pricing and carbon trading will develop steadily. Voluntary approaches are already both publicly acceptable and technologically feasible, but require a conducive policy and legislative framework to grow market share and improve efficiency in transport markets.
- Smart media will not just pay for transport and parking, but other small purchases like coffees and newspapers. This will increasingly cement growing business relationships between transport and retailing.
- Successful modes will be flexible enough to meet the demands of 24 hour



lifestyles, with increasingly automated vehicles and networks.

- Developers and planners who build better accessibility, information, efficiency and flexibility into future shopping opportunities will be well placed to face the challenges ahead.

For further information see [www.bcsc.org.uk/forp](http://www.bcsc.org.uk/forp)



## About DHC

DHC delivers consultancy, planning and research services to a wide range of public, voluntary and private sector clients.

We specialise in projects which draw from state of the art evidence to engage constructively with policy and market development, delivering politically acceptable approaches.

Our clients regularly tell us that we provide "added value", we "identify solutions which can be acted on", and that our "commitment and enthusiasm" sets us apart from our competitors.

Our particular strengths lie in the ability to bridge gaps in understanding, and build partnerships between sectors and disciplines.

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