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Scenario planning as a tool to understand uncertainty in tourism: the example of transport and tourism in Scotland in 2025

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This paper discusses the use of scenario planning as a methodology to help understand the future of tourism. It reports on the results of a scenario planning exercise undertaken in 2007 in Scotland by VisitScotland, the National Tourism Organisation for Scotland, which seeks to understand how transport might shape tourism in 2025. The study followed an established methodology used by the UK's Office for Science and Technology [OfST. (2006). *Transport – intelligent futures project*. London: Author.] and how it set out to understand what transport provision might look like in 2055. The methodology used by the OfST study was modified and expanded by this study with a series of in-depth interviews with industry stakeholders to understand what the key drivers of change in the transport sector were in 2007 and would be in 2025. This was followed by the construction of two scenarios designed to look at two extreme cases of how transport and tourism would be interconnected to shape the destination and ability to access different types of tourism product and experience. These scenarios were then introduced to a workshop setting with key industry stakeholders to assess the reliability and validity of the scenarios. The paper also draws out wider implications for academic research of using scenario analysis in tourism, so that the value of this methodology can be understood and used more widely in appropriate settings. The study has to be viewed against the current tourism strategy for Scotland – the *Tourism Framework for Change*.

Keywords: scenario planning; Scotland; VisitScotland; Scottish Executive; 2025; methodology

Introduction

Within the literature on transport and tourism (Page, 2005[1]), there is a growing concern within a policy context that the future spatial configuration of tourism, as shaped by transport in terms of accessibility, ability to travel and potential restrictions on personal mobility may change in the next 15–20 years (Becken, 2002, 2007, 2008; Becken & Hay, 2007; Becken, Simmons, & Frampton, 2003). This interest in tourism futures is not just relevant to transport as one form of tourism supply, but also to the wider interactions between tourism supply and demand, given that the main challenge for policy-makers, planners and the tourism industry is to achieve a balance between the demand and supply of tourism in terms of sustainable destination development. Many studies of tourism point to the

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growing consumer-centric focus in tourism demand and yet there are few explicit research studies published that look at the longer time horizons for tourism, perhaps with the exception of the UN-WTO's 2020 Vision study. But if tourism is to plan and develop the infrastructure and supply requirements for the future, finding meaningful ways to develop our understanding of how tourism might evolve in the next 15–20 years must be a key strategic requirement for the public sector (and to a lesser degree private sector with their shorter-term time horizons). This is because the public sector are usually charged with facilitating, developing, managing and funding or co-funding future infrastructure requirements that impact upon the ability to meet future tourism demand. Furthermore where appropriate methodologies exist, there is a clear rationale for developing their wider application to different tourism settings so that futures research in tourism is based upon scientifically validated and peer-reviewed research that can help destinations to understand the conceptual basis of futures research, how to apply it and how to identify the implications of such research.

The value of such research does not necessarily lie in the results *per se*, but more in the application of a planning process to stimulate thinking around the key issues affecting tourism associated with uncertainty. In this sense, and given the current uncertainties induced by sudden shock events such as the global credit crisis, understanding uncertainty and change in tourism is a key challenge. In this respect, this scenario planning exercise and its application in one country provides an illustration of how other destinations can try to understand and think about the effects of uncertainty and change using a research process to meet their own individual needs. In this respect, the paper highlights one example of how scenario planning has been applied in an industry context by practitioners.

In this example, the scenario planning process is used to illustrate that there are other 'futures' research methods, aside from forecasting using quantitative methods (see the excellent review of this area by Song and Li (2008)) to seek to understand uncertainty and change in tourism. Indeed, one criticism of tourism demand forecasting as an approach is that it is not sophisticated enough to accommodate the impact of tourist behaviour change and the impact of events as Song and Li (2008, p. 217) acknowledge:

> Considering the enormous consequences of various crises and disasters, events' impact evaluation has attracted much interest in tourism demand forecasting research. It is crucial for researchers to develop some forecasting methods that can accommodate unexpected events in predicting the potential impacts of these one-off events through scenario analysis.

This points to the importance of scenario analysis as a valid technique to further enrich our understanding of tourism futures. Other studies such as Prideaux, Laws and Faulkner (2003) reaffirmed the necessity of considering scenario analysis, given the problems of forecasting in foretelling the impact of events and the significance of developing the domain often identified as tourism futures research. In short, scenario planning is the process of predicting multiple, plausible and uncertain futures (van der Heijden, Bradfield, Burt, Cairns, & Wright, 2002), and so is well suited to address some of the potential shortcomings of futures research that is almost entirely based upon forecasting in Tourism Studies. As the discussion will show later, forecasting pre-supposes a degree of certainty in futures research, whereas scenario planning seeks to incorporate the principle that nothing is certain in the future and is well suited to strategic planning (Bunn, 1993). This paper argues that the development of scenario analysis in tourism, illustrated through the example of transport and tourism in Scotland, can enrich our understanding of new methodologies and their integration into scenario analysis, which have not been widely adopted within tourism research to date (the exceptions being the works of Yong,

Keng and Leng (1989); Tress and Tress (2003) and Eden and Ackerman's (1998) as well as examples published by VisitScotland such as the study by Page, Yeoman, Munro, Connell and Walker (2006)).

The paper, its rationale and approach

This paper departs with established thinking based on the notion that tourism demand forecasting is the main technique used to forecast the future of tourism, it presupposes that tourism futures are about growth and expansion in global and domestic tourism. Instead, it adopts a scenario planning philosophy that argues that nothing in the future is certain or predictable with regards to transport and tourism, given the current concerns and uncertainty over global issues such as climate change (Gössling, 2003) and the future of oil as a fuel (Yeoman et al., 2007). These two drivers of change alone imply significant future uncertainty over growth and development without beginning to try and understand changes in consumer behaviour. This approach is given greater credence in view of a growing recognition that global tourism is operating in turbulent times (Wilks, Pendergast, & Leggat, 2006), given safety and security concerns emanating from terrorism and personal security. Furthermore, with growing unease among governments over how to address these issues, a wide range of 'futures' research methods is vital to consider how possible policy shifts may be needed to facilitate the ongoing development of a nation's tourism sector. These global issues will have a national and local impact upon transport and its ability to facilitate tourism growth in the future. In other words, the present thinking that dominates our ability to understand how tourism and transport interact and facilitates tourism growth will inevitably change in the next 15–20 years. Therefore, tourism will be affected by a range of new challenges and different potential scenarios such as the future role of transport and CO_2 emissions by 2030 in the UK (Hickman & Banister, 2007) and the role of policy measures in this debate, which will directly impact upon the different modes of tourist transport and the propensity to travel.

There are critics of the need for scenario analysis and the need to apply it to understand future tourism growth because the conventional thinking of many politicians is that the problems of future mobility and global warming will be addressed by technology, a largely optimistic anthropocentric interpretation. This philosophical position argues that there is no need to plan for major changes in the future of travel and tourism resulting from potential constraints. This thinking is shaped by the pursuit of competition and growth in tourism, where virtually every country in the world is now a beneficiary of tourism growth and development, and so the view that tourism may be different in form, shape and volume in the future (i.e. smaller in scale and volume) is not necessarily a stance adopted by political decision-makers, given the short-term political time horizons in which they think.

Scenario planning as an area of study: its evolution, theoretical concepts and methods of analysis

Scenario planning is increasingly being used by organisations to consider the uncertain elements in the business environment to try and improve our foresight, to challenge our existing assumptions about how the world works (Schnaars, 1987). The UK Cabinet Office Performance and Innovation Unit (2001) sets out a range of general principles that underpin futures work, which is more than simply forecasting or predicting the future. It embraces a wide variety of techniques to help create choices by looking at alternative possibilities framed around three key questions: what may happen (possible futures),

what is the most likely to happen (probable futures) and what would we prefer to happen (preferable futures). In their review of different definitions of scenario planning, Duinker and Greig (2007, p. 209) concluded that the commonality was the 'idea that scenario building does not focus on making predictions or forecasts, but rather on describing images of the future that challenge current assumptions and broaden perspectives'.

A substantial literature emanating from management science and the development of scenario planning in the 1960s and 1970s from the work of the Rand Corporation and Stanford Research Institute (Chermack, Lynham, & Ruona, 2001) exists, epitomised by studies such as van der Heijden (2005) and other studies such as Lindgren and Bandhold (2003), where the emphasis is on using scenario analysis to effect a change in corporate strategy. More all-embracing overviews such as Wilson and Ralston (2006) and Ringland (2006) seek to emphasise how learning about the future and uncertainty can use a variety of tools, which are discussed below in more detail. Ringland (2006) provides a detailed background to the development of scenario planning as a subject, including the work of large organisations such as Shell and the way in which scenario planning can be developed to craft several diverging stories about the future using uncertain events and driving forces to better understand the future within organisations. Duinker and Greig (2007, p. 210) argue that scenario planning performs two important functions: 'risk management, where scenarios enable strategies and decisions to be tested against possible futures, while the other is creativity and sparking new ideas', which is reviewed in detail by Lang (1998). One notable example Ringland (2006) illustrates is how one transport organisation – British Airways – has used this process in its futures research. More specialist overviews by Ringland (2002) focus on the public sector, whereas other authors have embraced the term scenario learning (Fahey & Randall, 1997) as a conceptual approach in scenario analysis.

The journal *Futures* and *Long Range Planning* also carries a range of academic and practitioner articles on this highly applied and problem-solving area of management research while there have been a wider applications across the natural sciences (e.g. Duinker & Greig, 2007; and its role in improving environmental impact analysis) and other areas of social science, and each application is characterised by different conceptual approaches to developing scenarios. Cornish (2004) provides an overview of the wide range of futures techniques that can be harnessed, which include environmental scanning, trend analysis, trend monitoring, trend projection, scenarios, polling, brainstorming, modelling, gaming, historical analysis and visioning (i.e. looking more than 10 years ahead), and this aspect of scenario planning according to Schoemaker (1995) is a highly disciplined method for imaging possible futures and asking questions such as 'what if'. This broad range of techniques is outlined in Figure 1, which illustrates how scenario planning fits into the wide continuum of futures research methodologies. Calantone, di Benesetto and Bojanic (1987) distinguished between four forms of forecasting and the merits of each approach, including exploratory forecasting based on extrapolating past trends using regression and similar techniques; normative, integrative and speculative forecasting (each of which are reviewed in detail by Song and Li (2008)). What Prideaux et al. (2003) emphasise is that forecasting has a limited role to play beyond the short-term horizon of around 5–10 years, given the implicit use of equilibrium and stability in such models as opposed to more uncertainty and complexity to acknowledge the certainty of uncertainty, given the maxim of history that change rather than equilibrium dominates human society, where events and the unexpected cause change. This perspective of the longer-term horizon means that risks to tourism growth are more certain than continued growth based on past experiences, particularly given the significance of global warming.

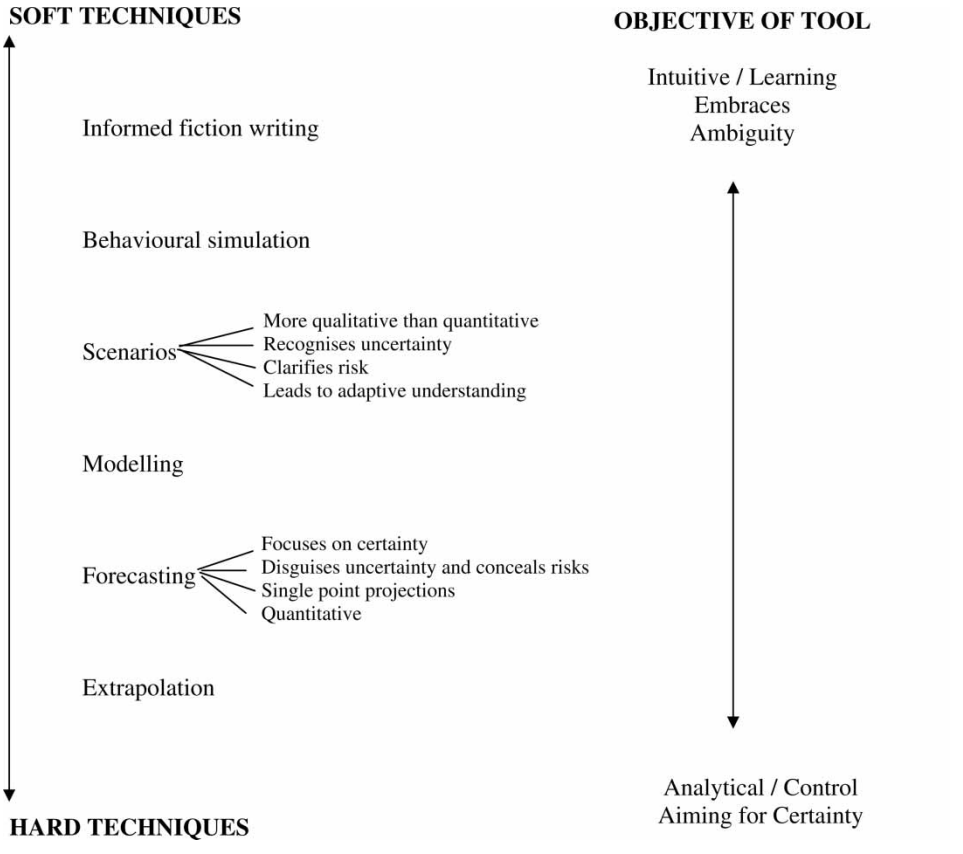

Figure 1. The practices used in future studies.
Source: Developed from Ling, T. (1998). Exploring the environment for healthcare. *The Madingley scenarios*. http://www.cambridgeforesight.com Queensland. (2000). Seeable futures. *Transport portfolio scenario-based planning for the Queensland Department of Transport and the Queensland Department of Main Roads 2000–2025*. http://www.mainroads.qld.gov.au.

Within scenario planning, a range of scientific standpoints exist (see Bradfield, Wright, Burt, Cairns, & van der Heijden, 2005, for more detail)[2] along with a range of practices, each with their own tools and techniques. As Figure 1 shows, there is a range of hard to soft techniques, each having a range of objectives from intuitive and learning outcomes for the organisation to more analytical methods that offer more certainty rather than ambiguity. The challenge is in harnessing the most appropriate tool for the task in hand and in integrating a range of tools to understand different dimensions of the research problem being investigated.

Within scenario planning, the different approaches to building the scenarios can range from informal imaginative exercises by an individual or a group and as Duinker and Greig (2007, p. 210) show:

> There are various approaches for developing scenarios (Cornish, 2004; de Jouvenel, 2000; Godet, 2000; Masini & Vasquez, 2000; Schwartz, 1996; Wilson, 2000). On one dimension, they can range from an informal imaginative exercise by a single individual to a systematic group process (e.g. Roubelat, 2000; Hulse, Branscomb, & Payne, 2004). Common contrasts in scenario-building work include backcasting (starting from some assumed future state and then filling in the sequence of developments that could lead there (Robinson, 1988)) versus

> forecasting, descriptive versus normative, quantitative versus qualitative, and trend versus peripheral (unlikely and extreme events) (Greeuw et al., 2000). Both inductive and deductive methods can used to determine the basic premises of scenarios. The former is typically less structured and relies heavily on the patience of a group of individuals to continue their discussions until consensus is reached.

In the deductive approach, there are a series of steps that use an intuitive logic as outlined in Table 1 by Shell. This process is also described in relation to UK transport scenario research by Chatterjee and Gordon (2006, p. 255) thus:

> In scenario planning the aim is to develop distinctive depictions of the future. Alternative scenarios are developed from the present situation for a desired time horizon. In a scenario planning exercise a number of driving forces will be identified. By making different assumptions about these driving forces or key influences, different 'stories' are formulated about how these interact. The scenarios are effectively those issues.

Consequently, there are many wide ranging contexts in which scenario planning may be applied as Bradfield et al. (2005) have highlighted the scope and application of scenario planning (Table 2) and some of the objectives of purposeful scenario work (Table 3). Within this study the purpose of using this process is to 'make sense' of the complexity and likely uncertainty and the need for the organisation to learn about the transport–tourism interface in Scotland based on the principles in Tables 2 and 3.

One of the most poorly understood interfaces in this process of understanding future drivers is the relationship between transport and tourism and the underlying forces that will shape future human mobility. Therefore, understanding how transport will evolve and shape tourism activity over the next 20 years assumes a growing significance, given its pivotal role in tourism, particularly policy debates on how air travel, the cost and availability of energy and global warming may lead to changes in travel behaviour (Becken, 2007, 2008). However, prior to examining the issue of drivers in more detail, it is important to recognise how scenario planning has been developed at VisitScotland. This helps to illustrate the theoretical and conceptual approaches used in scenario planning within the organisation and how they fit with the existing literature on approaches to and the application of scenario planning to understand tourism futures.

Scenario planning at VisitScotland

VisitScotland's history in scenario planning and futures thinking is rooted in the 'Futures' department of the organisation prior to 2002. This department undertook futures thinking and scenario planning, but lacked a full time/professional futurologist or scenario

Table 1. A deductive approach to scenario analysis.

1.	Define the topic/problem and the focus of the scenario analysis
2.	Identify and review the key factors/environmental influences on the topic (i.e. the drivers of change)
3.	Identify the critical uncertainties
4.	Define scenario logics (often using scenario matrices)
5.	Create/flesh out the scenarios
6.	Assess implications for business, government and the community
7.	Propose actions and policy directions

Source: Duinker and Greig (2007, p. 210).

Table 2. The scope and application of scenario planning.

Users	Purpose
Crisis Management/ Emergency Studies	Simulate future crisis/emergency situations to assist in the testing of systems to assess preparedness (e.g. testing the UK's Pandemic Influenza Plan)
Scientific Community	A means of communication to show the complexity of scientific models and theories to test scenarios (e.g. climate change models and econometric models to assess the future of economic development)
Public policy-makers	To engage multiple stakeholders and other agencies in policy decisions to assist in integrated thinking to aid policy implementation (e.g. VisitScotland)
Professional Futurist Institutes	Independent research institutes who assess future trends and the drivers shaping the trends (e.g. the Future Foundation)
Educational Institutes	Encouraging the development of the subject and knowledge development and to aid learning about the future (e.g. the Hawaii Research Centre for Future Studies, University of Hawaii)
Businesses	Use of the tool as a long-range planning tool (e.g. Shell)

Source: Developed from Bradfield et al. (2005).

Table 3. Purposeful scenario work.

	Once only problem-solving	Ongoing surviving/thriving
Opening-up exploration	Making sense	Anticipation
Closure decisions	Developing strategy	Adaptive organisational learning

Source: Bradfield et al. (2005, p. 805).

planner to carry this out until 2002. Since 2002, it has developed a scenario planning process based upon three clusters of inter-related related work: a Scenario Planning Group; environmental scanning and the development of the Moffat model. These three inter-related activities are shown as the core of a wider range of activities that VisitScotland's scenario planning researchers have pursued which are outlined in detail in Figure 2 and discussed in more detail in Appendix 1.

Scenario planning research methodology and its application to transport and tourism in Scotland

The area of future transport provision and its impact on tourism in specific destinations still remains one of the most poorly researched and understood in the international research arena and at an operational level, transport is normally understood from a narrow modal or operator level; with little interconnection between modes, the impact on tourists and the significance of integrated journey capability to make tourist travel an enjoyable, easy and rewarding experience. This was embodied by one telling comment from a stakeholder interviewed at the initial stage of the project that '*there is a failure to pick up the transport–tourism relationship in Scotland. The tourism sector realises this but the transport sector does not*', also exemplified by a transport operator that viewed tourism as a small market segment in their overall business model owing to seasonality issues that produced peaks and troughs. In the public policy context, tourism does not explicitly feature in national

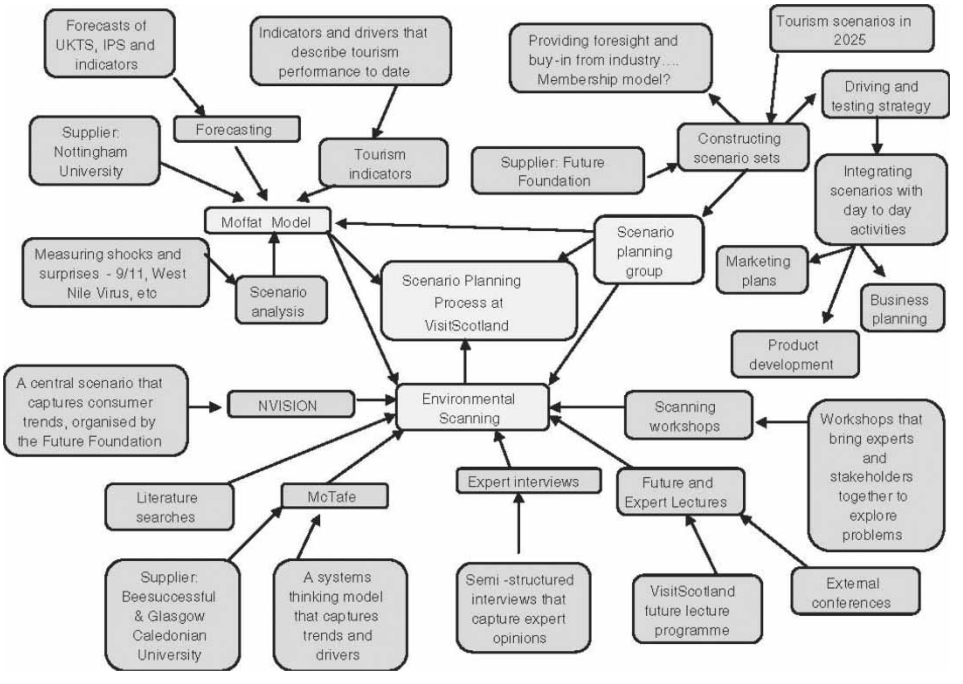

Figure 2. Scenario planning at VisitScotland.

transport planning models (Chatterjee & Gordon, 2006; Page, 2005) such as the proposed National Transport Model for Scotland, though these transport models are sometimes seen as limited as 'it is possible that future travel patterns will not be well explained by the specification and parameters currently used' (Chatterjee & Gordon, 2006, p. 261). The main challenge in transport modelling and scenario planning is in seeking to develop a method of analysis to understand the future spatial configuration of human living and activity (e.g. tourism) in relation to land use (OfST, 2006), as this will determine much of the mobility associated with tourism.

With these issues in mind, this study embarked on a scenario planning process to try and incorporate these features and it can be explained as a series of steps:

- *Step 1*: The OfST (2006) Intelligent Futures report was examined in detail and one of the report's contributors was interviewed to review the assumptions used to create the different scenarios they used. It was seen as a very forward looking project[2] that could, with some modification for Scotland's tourism context, offer a basis for developing the scenario work in Scotland without having to reinvent the wheel. In other words, an existing methodology in a peer-reviewed study was identified as providing a useful starting point for the study. This study, along with other relevant academic studies on scenario planning and transport (Chatterjee & Gordon, 2006) were reviewed along with the limited current research knowledge on transport and tourism in Scotland. This can be construed as the environmental scanning part of the VisitScotland process, but academic research was undertaken to help depict some of the key transport–tourism relationships within Scotland to also inform the scenario writing stage.
  While the OfST (2006) and Chatterjee and Gordon (2006) studies utilised similar scenario planning methodologies to those employed at VisitScotland (i.e. Scenario

Planning Group, scenario writing and workshops to test the scenarios), this study also sought to commence the process with primary research using a selection of 'remarkable people' in transport and tourism to help identify and refine the drivers of change in relation to transport, based on the existing drivers identified in other scenario planning work at VisitScotland (Table 4).

- *Step 2*: A free-flow brain storming session was undertaken among the research team to identify the critical issues from the interviews, following their analysis using a proprietary scenario planning software product to build the relationships that need to be incorporated into the scenarios from a tourism perspective. Two scenarios were then sketched out with critical assumptions that could then be scripted into two storylines.
- *Step 3*: The use of the Moffat model to consider a range of assumptions identified in Steps 1 and 2 were built into the model for Scenarios 1 and 2. The result was a range of key assumptions about how tourism and the wider economy might change under each scenario.
- *Step 4*: The key industry stakeholders from the list of interviewees with interests in Scottish transport and tourism were invited to a workshop in February 2007 to begin examining the scenarios.
- *Step 5*: A workshop with representatives from key organisations was held with a range of objectives and expected outcomes, as outlined in Figure 3.
- *Step 6*: The results and outcomes of the workshop were used to test the validity, reality and potential value of the two scenarios and Moffat model to feed into the next step.
- *Step 7*: The results were analysed and interpreted to produce a series of responses and actions with policy implications for VisitScotland and the Scottish Executive.

The scenarios

Two scenarios were constructed, namely two extreme cases to challenge established thinking:

- One based on urban growth and the decline of rural and island tourism owing to changes in transport.
- One based on continued development of tourism within more limited constraints imposed by transport infrastructure.

Table 4. The key drivers that will shape transport and tourist travel in Scotland to 2025.

Supply side drivers
1. Uncertainty in Future Environmental Policy and its application to Tourism
2. Infrastructure provision
3. Pricing models
4. The future of energy and oil
5. Air transport
6. Urban gateways and tourism concentration in Glasgow–Edinburgh and rural areas
7. Monopoly provision in public transport
Demand side drivers
8. Wealth and costs
9. Consumer spending priorities
10. Declining cost of transport
11. Changing consumer aspirations and expectations for travel

Source: VisitScotland (2005).

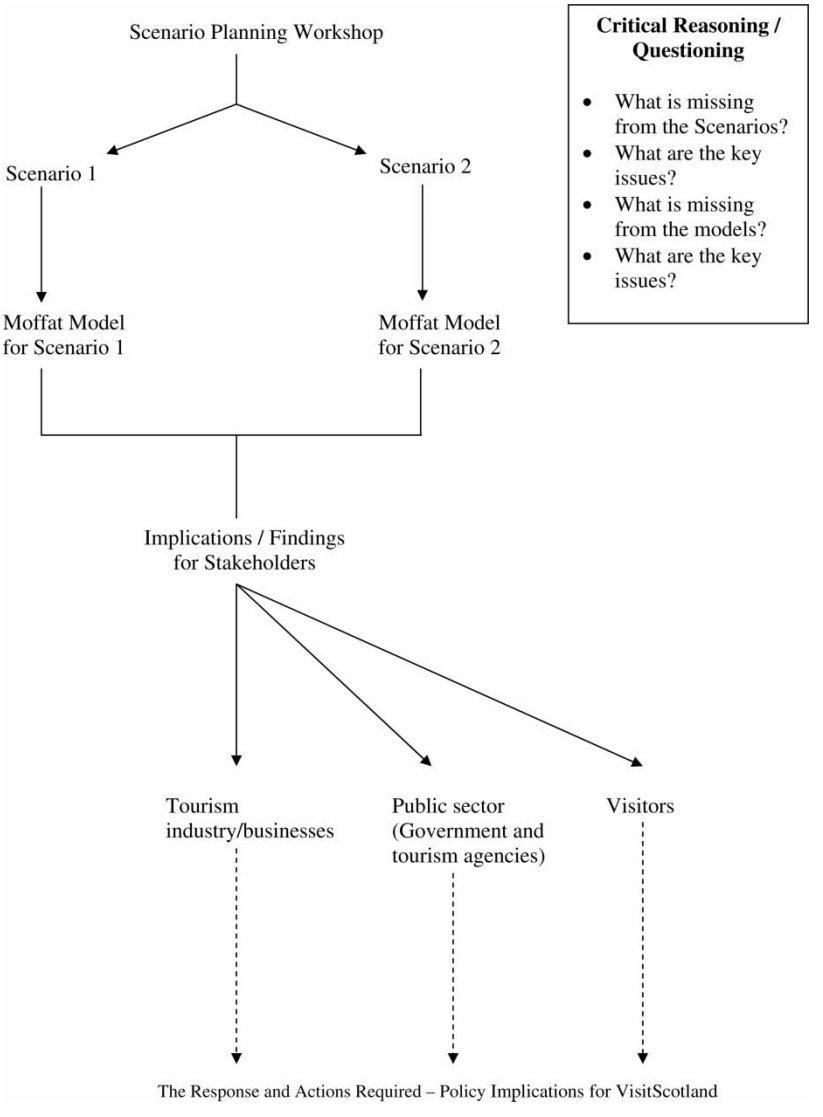

Figure 3. Framework for operation of workshop.

The Moffat model is useful in this context because it uses a wide range of variables to measure the economic consequences of changes to tourism (e.g. the effect of a percentage change in UK holidays, short breaks, business tourism and overseas tourism). This requires the scenario planner to make certain assumptions about the changes that would arise in a crisis, being cognisant of the levels of disruption that might occur and how this would affect the other sectors of the non-tourism economy, in modelling the outcome. In developing the two scenarios and their economic impacts, the initial starting point was to take the 2002 value of tourism as the Moffat model, and then to increase tourism growth at 4% per annum, in line with the Tourism Framework for Change (TFFC). Two scenarios were then developed by the VisitScotland team and their economic implications modelled using certain assumptions related to each scenario. Each scenario was developed as storylines

(see Appendix 2 for Scenarios 1 and 2) after consultation with the Intelligent Futures project and some of the assumptions within that report have been developed and included in this study to provide two contrasting worlds for transport and tourism in Scotland in 2025. The assumptions and implications of each scenario in terms of key drivers of change and the different economic assumptions used in the Moffat model, together with their implications, are also shown in Appendix 3.

Implications of the workshop and policy issues for VisitScotland

In February 2007, a workshop was held to test the validity of the scenarios and the implications for Scottish tourism. The workshop participants were split into two groups, and each group focused on one scenario throughout the workshop. The results for each scenario are examined in relation to the key issues and significance for Scottish tourism. The initial stage of the workshop asked participants to look at the assumptions used in Scenarios 1 and 2 and to consider whether these were realistic and if anything was missing. The overriding consideration was the likelihood of this scenario eventuating owing to the absence of infrastructure decisions now to accommodate the assumptions of an urban metropolis mode of living and travel. The wider issues and implications of this scenario were then brainstormed and mapped using the Idon Free Thinking software,[3] as shown in Figures 4 and 5. The main implications from the free flow thinking can be summarised as shown in Appendix 4 in terms of the tourism features that participants examined.

Implications for Scottish tourism to 2025

The workshop and research process associated with this study have undeniably re-emphasised the critical role that transport plays in facilitating tourist travel in Scotland. The research process did not pre-judge any of these issues, allowing key industry players and decision-makers to highlight the key relationships and issues from a series of interviews and then at a scenario planning workshop and again through a consultation exercise with key stakeholders to gather feedback and a review of the process to ensure a robust outcome. A range of key management implications for the tourism sector emerge.

The transport–tourism nexus

For tourism to continue to prosper in Scotland and to achieve the ambitions for growth in the TFFC, transport needs to be recognised as central driver of change in the growth ambitions. One key policy change needed is for VisitScotland and the Scottish Executive's Tourism and Transport Ministerial Portfolios, to allow joined up working on this crucial theme (e.g. more than just a series of statements in a Transport Strategy). This is the number one issue for Scottish tourism, since in many countries with thriving tourism economies, much of the development process has been transport led or facilitated by major investment in transport by the public sector. *In Scotland, transport is the one key factor that could make or break the ambitions to achieve long-term growth* in relation to infrastructure and accessibility. In the case of Scotland, this critical relationship can be configured around two simple propositions.

First, for tourists to arrive in the destination, transport facilitating access is critical, reflected in the airport investment strategies by British Airports Authority and other operators. Equally, road access or alternative modes of transport that are sustainable need to be assessed for the next 25 years. Making the simple assumption that road provision is for residents

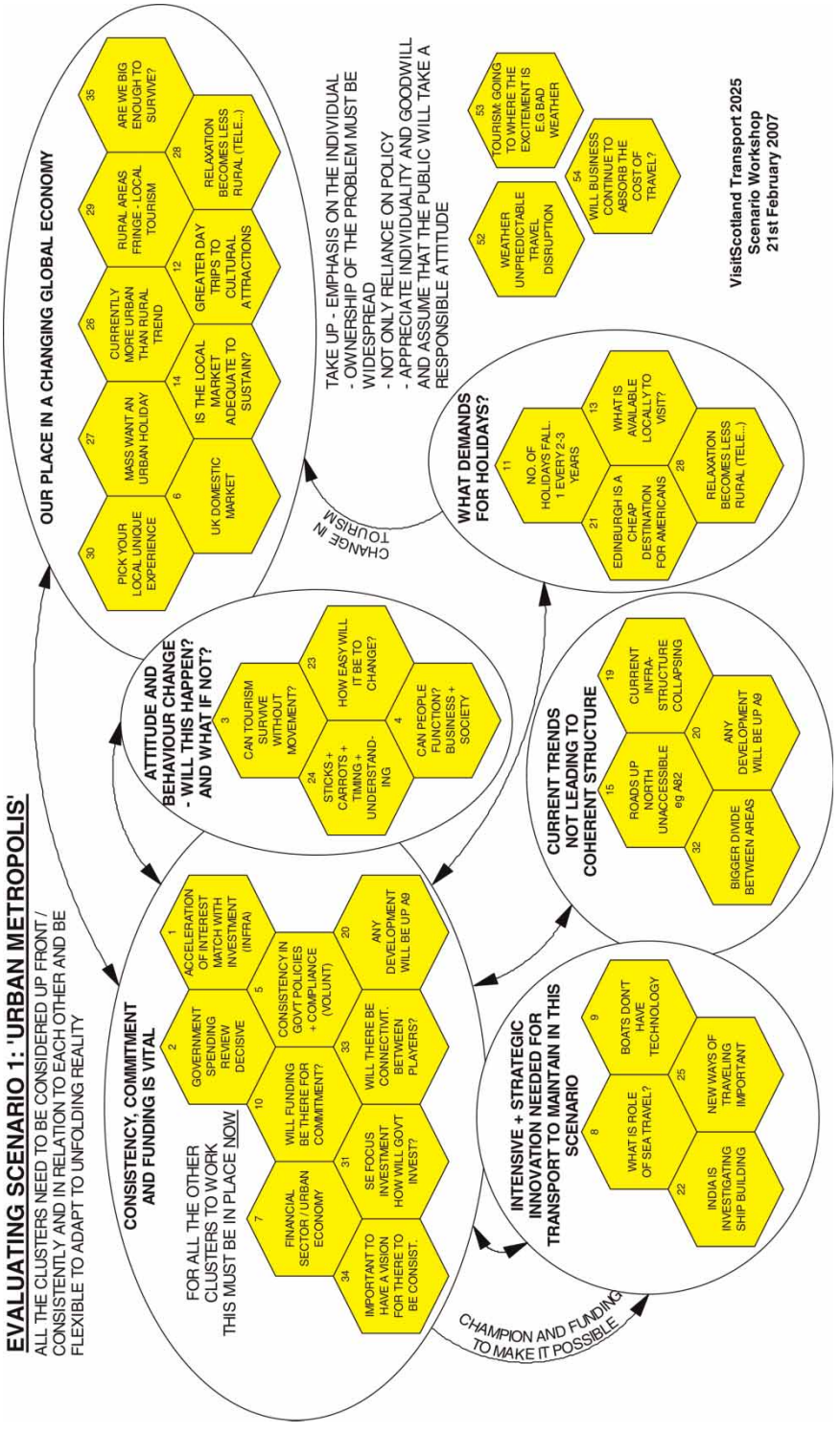

Figure 4. Scenario 1: Urban metropolis and results of free flow thinking.

of Scotland and tourists can be easily added on to the existing provision illustrates the conventional thinking in transport planning that tourism is a marginal activity: it is not – it is a central driver of Scotland's economy. This requires a rethink at policy level, particularly in the cost–benefit analyses, which are used to leverage road investment in tourist destinations.

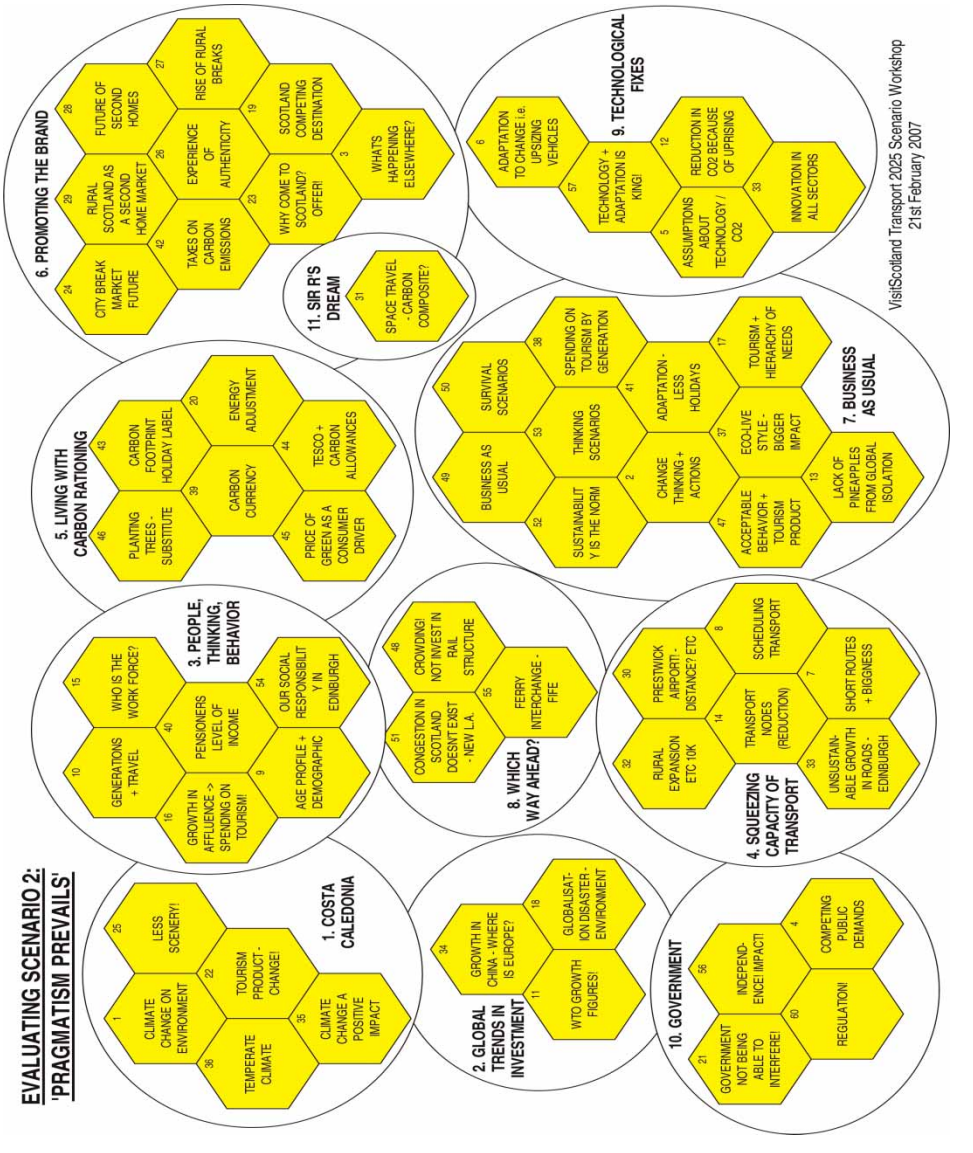

Figure 5. Scenario 2: Pragmatism prevails and results of free flow thinking.

Without continued investment in such road infrastructure, at least to keep the infrastructure maintained, the current ferry routes will not be adequately served by tourist traffic.

Second, travel within the destination to address issues of dispersion from urban gateways (e.g. travel out of Glasgow and Edinburgh) and to reduce perceived peripherality

in non-gateway regions is crucial to broaden the beneficiaries of tourism growth. Likewise, facilitating high-quality inter-city travel (aside from car use) remains a key challenge for the transport and tourism industry. For example, the existence of surplus rail capacity at off-peak times when tourist travel by rail may be more appropriate would help utilise existing provision. This in turn could certainly stimulate greater innovation between the transport and tourism sector to create off-peak products and experiences to drive forward greater public transport use.

Strategic planning for transport and tourism in Scotland

Whatever be the scenarios one prepares for transport and tourism in 2025, there is consensus among participants in this process that there will be global changes affecting transport in terms of climate change, taxation, potential challenges to meet demand and infrastructure constraints. At a policy level, there was consensus that there is inadequate time to put major infrastructure decisions on hold and to delay investment for political reasons: these delays will certainly constrain the ambitions that the Scottish Executive has in growing Scottish tourism to 2025. For example, full implementation of the Edinburgh tram system is a case in point to provide greater dispersion and connectivity in an urban destination. It is unlikely that these constraints will occur at the point of arrival, as airport investment is driven by the private sector owing to the business case for maintaining and growing their business: only planning restrictions may inhibit this growth agenda. However, other areas of strategic weakness identified in the interviews with stakeholders and reiterated in the workshop discussion relate to several other dimensions of transport.

The current policy weaknesses in the management and development of Scottish ferry services

These are managed in a complex and outdated manner, where there is subsidy for Island travel but then additional subsidies for Island air travel weakens the ferry market. A truly competitive model with a level playing field would assist in developing more customer-facing service provision and allow the expansion of tourism markets to the Islands to fill surplus capacity as opposed to the current supply led model of planning. At present, ferry provision as managed by the Scottish Executive is NOT predisposed to a market orientation to allow an operator to offer a service package that would dovetail public transport and convenience for car users, to directly meet the needs of the tourism sector. The focus is predominantly a public transport one, which, being supply led, does allow for innovation and market development.

Innovation and value adding in transport and tourism

The present research on transport and tourism and the critical linkages where value can be added through innovation and investment is, in common with most tourist destinations, sadly neglected. Although some notable examples of innovation and high-value added experiences exist (see Hall and Williams (2008) for more detail on tourism and innovation and the Scottish Enterprise sponsored Tourism Innovation Group for some success stories of innovation – http://www.tourisminnovation.com), much of the focus has been on competition, low-cost travel options and the role of transport as a simple facilitating mechanism as the Route Development Fund indicates. Yet good examples exist in other countries where simple innovations (e.g. providing passengers on scenic rail journeys with a commentary)

can add value with minimal investment beyond staff training. The coach tour sector is probably the exception to the rule, where new markets and products have been developed along with new vehicles to move with consumer trends.

The present understanding of how tourists use and can be encouraged to make greater use of public transport in their travel itineraries is still not understood. Previous desk research by the Scottish Executive (2006) simply compiled statistical knowledge from the most obvious sources but baseline data on tourist transport and travel is largely undocumented. As a result, examples of seeking to engage tourists to use public transport initiatives (e.g. the Trossachs Trundler – see Caffyn, 2000, for more detail) fail because there is no fundamental understanding of what drives the tourist use of public transport and how to derive value from this captive time when travelling. This is then compounded by a failure to communicate the transport offering to potential users. This remains a largely untapped area for operators, with some taking the initiative (e.g. Virgin Trains and its onboard self-guided tour of a specific train route to provide interpretation and a memorable trip). There is scope for a group such as the Tourism Innovation Group to focus on this specific objective as was mooted with the Scottish Tourism Forum 5 years ago when a tentative Teaching Company Scheme project (now Knowledge Transfer Partnerships with the Department for Trade and Industry) was proposed to develop this very area, though Tourism was not eligible for funding in Scotland.

Transport and the Scottish tourism economy

The use of the Moffat model illustrates well how the tourism economy can be hindered, stifled or sent into decline by constraints in the transport system irrespective of whether one adopts a positive or more pessimistic stance on assumptions of growth. In each case, the growth ambitions of Scottish tourism were not met, compounded by changes in energy costs that are inevitable under the present energy environment for transport. For example, in the *Urban Metropolis* scenario, tourism is completely reconfigured to an urban hub and gateway focus with minimal rural interaction via the hinterland. The shift to a short-break product as a result of major changes in transport provision cause a shift to a new Scottish tourism product and the end of international business tourism. In contrast, in the *Pragmatism Prevails* scenario, the transport infrastructure is very much a hygiene factor – an expectation, but the failure to invest in infrastructure (e.g. light rail) means Glasgow, for example is unable to host major business events and is at a competitive disadvantage. Transport is therefore the starting point for the vicious circle of decline by failing to invest and reinvest to remain competitive.

There is a danger that each scenario exhibits evidence of public policy that could arise from the present debates on tourism and pleasure travel as conspicuous consumption. Consequently, tourism could begin to bare the brunt of public opposition to the growing green lobby, causing sustainability to become weighted more towards restriction than facilitating tourist travel. It is evident that once such lobbies gather momentum, as the campaign to ban smoking in public places did, and tourism could quickly become a focal point for restrictive legislation in an extreme case (these implications also raise a range of policy issues for VisitScotland – see Table 5). So what do these issues mean for Scotland's growth agenda for tourism to 2015?

Scotland's tourism growth agenda and the Tourism Framework for Change

Transport is a vital element underpinning the TFFC growth agenda. To lever growth of a 20% increase in visitors by 2015, transport infrastructure will need to be able to

Table 5. Policy issues for VisitScotland arising from the scenarios.

The wide range of policy implications identified through the scenario planning exercise can be summarised as follows.

1. *Tourists are not and never will be the general travelling public*: they are a specific market segment with defined needs (although they remain weakly understood in policy terms by tourism and transport organisations). Visitors may use infrastructure designed for the resident population; they also have specific destination and travel requirements
2. *Transport needs to be integrated into tourism thinking, development and planning across the entire public and private sector to realise that it is not a passive element that is taken for granted as someone else's responsibility* for tourism development. For VisitScotland, a *Transport Task Force* would certainly drive forward the growth agenda benefits of specific transport infrastructure investment for tourism, in the absence of this debate at a policy level. This may not be an attractive topic for many policy-makers but it is fundamental to making tourism work in a more seamless manner. In simple terms, how does Scotland become like Switzerland in terms of transport for tourism (i.e. the World Economic Council top destination for ease of travel?)
3. *Tourism development at a local authority level needs to be incorporated into road planning, service development and capacity building for the transport network*. This is evident in areas such as the Loch Lomond and Trossachs National Park where the population base in relatively small but the road network is large and serves a highly mobile visitor population who do engage in transit and itinerary based travel
4. *The urban redevelopment of Scottish cities combined with new sustainable transport solutions (e.g. trams) offers a new tourism product opportunity for Scotland*. As an integrated mode of transport, it also has a clear tourism role that needs to be constantly emphasised to encourage new innovative products and travel solutions to connect visitors with the attraction and accommodation base. This also has the potential to offer a fresh and new face for the city as a tourist destination
5. *Scotland has the potential to lead many other destinations in trialling new transport technology to establish itself as an example of best practice to break the vicious circle of environmentally damaging forms of tourist travel, which in turn can offer an attraction for visitors*. Integrative thinking across public sector partners offers new product opportunities and marketing opportunities for Scotland. For example, the present feasibility for a hydrogen bus for the Cairngorm National Park is a case in point
6. *Gateway destination/multi-destination linkages and new itineraries based on using tourism routes and the development of alternative niche products can form a valuable basis for further innovation at a local transport network level*. This can help to create new interest from old experiences. Again transport has potential, through innovative thinking, to lead the tourism product development process as a key partner. The key example here is ease of purchase, ease of travel and ease of use. A simple contrast between Edinburgh and Paris shows that signage is in French and English in Paris. The tourist map available at key locations in Paris shows all the modes of transport and interconnectivity. In Edinburgh it is modal focused
7. *Greater VisitScotland–transport provider engagement is certainly needed to grow new products, which can help lobby for greater investment in the transport infrastructure where the tourist use may justify assistance to peripheral communities*. Spreading visitors to the rural destinations with add on and easy to access and use products with attractive discounts are important incentives, with marginal pricing. For example, the Seine River Bus in Paris is €12 for 1 day's use and €14 for 2 days use to encourage greater usage. With this extended to an urban–rural setting, the opportunity to broaden the market base of products exists if the transport component is not prohibitively expensive
8. *The potential for water-based tourist experiences (aside from existing ferry services) remain largely neglected in Scotland (e.g. the potential of the Forth and Clyde) to open up new visitor destinations and experiences*. Any cursory look at urban regeneration schemes in other UK and international cities show that the waterfront areas offer huge tourism potential once the supply of new transport infrastructure opens up their potential access for tourism. Cardiff Bay is a case in point alongside the regeneration of London Docklands after they sorted out the initial planning failures in not linking transport provision to tourism development. This is able to provide innovation and new products with an urban tourism setting and grow new areas with a transport driver of growth.

Feasibility Studies of these types of initiative illustrate that the initial transport investment is not prohibitively expensive but modest for Return on Investment

9. *The research study reaffirms the need for VisitScotland to have a sustainability agenda to protect its natural capital in the long term* rather than becoming embroiled in a highly contested environmental debate on tourism and its role in climate change: with transport perceived as a major contributor to present debates on climate change, emphasising the wider sustainability agenda would be a more appropriate vehicle for the organisation
10. *The scenarios illustrate how Scotland may have the potential to innovate in sustainable transport* with pilot studies of initiatives such as a hydrogen bus or electric cars on some of the smaller Islands to develop a green agenda for tourist travel. The scenarios also indicated that a combination of sustainability and innovation in transport can help to shape future growth of tourism to generate economic benefits

accommodate growth. There is certainly evidence from the transport infrastructure in the major cities (i.e. Glasgow and Edinburgh) that the capacity is reaching its optimum peak capacity (though tourist use out of peak times is a positive feature). There is also evidence that urban growth elsewhere has put additional resident pressure on transport infrastructure, squeezing the tourist capacity further. Transport is the one immediate area where incremental improvements in product offering can yield additional spending and value adding through greater integration of supply with demand. Arguably, without a greater focus on transport the entire agenda will be constrained by inadequate capacity to:

(1) Increase access to Scotland from UK and overseas markets via air and road.
(2) Assist in geographically dispersing visitors from the Glasgow–Edinburgh–Central Belt triangle to explore further afield.
(3) Allow greater access and travel within the destination to spread the local economic benefits of tourism to new areas and assist in local regeneration (e.g. waterfront and waterway areas).

Combined with economic development, transport is the principal driver of tourism development where it is either supply led to open up access such as the Route Development Fund or at a destination level, by linking visitor and destination as exemplified by the present difficulties in the ferry services exploiting the Highlands and Islands real tourism potential.

No growth agenda, even where it is about adding value rather than sheer numbers, can ignore the evidence that transport is a global as well as national and local activity that is changing rapidly. This is illustrated by the debates on global warming, emissions trading and the growing awareness of the sustainability debates. The main concern for the TFFC is that transport is taken for granted as a publicly provided form of infrastructure and will continue to receive adequate investment. This is far from assured in the current policy environment. Although other forms of supply (e.g. accommodation) are vital to fulfilling demand, transport must be viewed as the first priority and not delegated to transport planners who have a history of ignoring or misunderstanding tourism and its needs. The competition is investing in transport infrastructure as a matter of course and so it is a key priority to achieve further growth in tourism.

Transport being vital to regional and national economic growth, infrastructure investment should be easier to leverage where the tourist utility can be demonstrated in public spending reviews, even though this is not necessarily commonplace. The Return on Investment in transport is well established in the private sector and it needs to be used more fully

in public sector lobbying for fundamental and complementary transport investment (e.g. for roads and destination access).

To achieve the TFFC ambitions for a vibrant tourism economy, transport needs to be more fully understood in terms of its facilitating, constraining and generative effects on tourism activity in Scotland and deserves to take its rightful place in policy debates. The nature of current policy debates, based on the current SNP Election Manifesto on Transport in Scotland, have the following key implications for tourism and transport, which may be summarised as including:

(1) Improved capacity use of the transport infrastructure (with some proposed expansion for rail commuters).
(2) Use of alternative road fuels to introduce new technologies which are cleaner.
(3) Reducing travel times from Central Scotland to the other regions.
(4) Possible cancellation of the Edinburgh Trams project with a £4 million investment in modern buses instead of the tram investment.
(5) Improving key trunk roads to make areas more accessible.
(6) A pilot project on a Road Equivalent Tariff to assist freight and tourist journeys to the Western Isles.
(7) A feasibility study for inter-city high-peed rail connections in Scotland.
(8) Improved ferry connections to assist in tourism development.

But this research study also has much wider implications for futures research in tourism to which attention is now paid to.

The contribution of the study to futures research in tourism

From the discussion so far, it is evident that scenario planning does have the potential to identify a range of issues which will help in the formulation of policy issues and actions to contribute to the operational management and strategic development of transport and tourism in Scotland to 2025. But there remain clear tensions in tourism research between the value of individual case studies such as this which use applied research tools to address an industry-specific research problem with a policy orientation. To many academics, this poses real tensions with more purist academic concerns over the importance of commissioned research and industry–academic collaboration. This real issue was certainly raised and debated by Coppock (1974) at the *Institute of British Geographers* annual conference and in several subsequent books and publications (Coppock & Sewell, 1976) which is summarised in Johnston (1991). In essence there is a real danger of such studies making limited contributions to knowledge where they are not scientifically executed, and are not designed with the wider public interest in mind. Concerns may also arise over the impartial role of the academic in policy research that may taint the outcome when institutional politics seek to determine the actions they want to justify from the research. As Coppock (1974) argued, if geographers (and other social scientists) are to engage with policy-oriented research, using methodologies such as scenario planning, they need to develop competencies in modelling and forecasting techniques which can be extended to futures research. This also extends the academic's expertise into an applied and industry domain where more holistic approaches to the subject of tourism are possible than a narrow disciplinary focus. Furthermore, such collaborations also bring to the wider tourism academic community research results and findings which would remain largely unknown and not subject to peer review and critique.

For the subject area to develop, many debates in tourism research have called for greater industry–academic collaboration, extending the notion of the Triple Helix model (comprising public sector, private sector and academia) of knowledge sharing which has been widely debated as a method of knowledge transfer between academia and industry. This suggests that with industry-public sector and academic collaboration, such knowledge transfer and research studies can be undertaken whilst also making a useful contribution and debate on the evolution of tourism research. Indeed scenario planning which is realistic and complex can be of major value in strategic planning and crisis management. For example, the study reported by Page et al. (2006) on avian flu was immediately followed by an outbreak of avian flu in Scotland and so the organisation was prepared for the eventual scenario which occurred. *But how does this type of study benefit the development of tourism knowledge?*

One potential role for such studies and their contribution lie in the growing domain of destination research, epitomised by Ritchie and Crouch's (2003) seminal study. For the area of destination studies to develop further and for the concept of the dynamic destination to emerge, strategic planning which embodies scenarios and futures research is a critical function which needs to be led by those agencies (e.g. the National or Regional Tourism Organisation or Destination Management Organisation) using rigorous academic tools and techniques like scenario analysis if destinations are going to address what needs to be done to remain and enhance their competitiveness. Recent global ranking exercises on destination competitiveness (e.g. the World Economic Forum study, 2007) and the focus on specific infrastructure elements which create rankings begins to illustrate how destinations are performing. Whilst there is a great deal of scepticism over the way such rankings are operationalised, benchmarking begins to illustrate how infrastructure is the key driver of tourism supply for destinations for them to be competitive, illustrated by the identification in 2007 of Switzerland as the most competitive tourism destination globally with its excellent transport and access to global markets.

Scenario planning also makes a conceptual contribution to help try and make sense of key challenges facing most tourism destinations such as sustainability which remains a major focus of global tourism research (Connell & Page, 2008). One of the key tenets of destination development and the long-term sustainability of the resource base is the degree to which transport will continue to facilitate access and a growth in visitor arrivals which challenges attempts to manage the carrying capacity of destinations. In other words, scenario planning can, when combined with other futures research techniques such as forecasting and economic modelling, allow us to look ahead to the consequences for sustainability of specific scenarios of growth or decline, such as the impact of climate change on destinations which are dependent upon peak season water resources to service a growth in a visitor population. There is a wider role for linking scenario planning to current global debates on how tourism contributes to climate change and potential measures which the tourism sector may be forced to take and the effects on destinations. For example, in 2005, the European Commission's report, *Reducing Climate Change Impact of Aviation* created the impetus for action on the future of environmental taxation of air travel. The EU consultation was in favour of the inclusion of aviation in an Emissions Trading Scheme. The European Commission (2005) reviewed the potential policies which could be developed to address aviation emissions. An Emissions Trading Scheme works by placing obligations on those involved in the scheme to reduce emissions at the least cost. Whilst this is a market-oriented solution to a perceived problem, the issue has also gained further momentum as the recent UK Think Tank – The Institute for Public Policy Research has called for measures to fight the public's 'addiction' to carbon-emitting polluting activities such as flying and

driving, including the inclusion of 'health warnings' such as *Flying Causes Climate Change*. The consequences for destinations may be profound. In Scotland, with a high dependence upon air travel for inbound overseas and domestic markets, this is a key threat.

At a more theoretical level, Prideaux et al. (2003) have begun to draw attention to the shortcomings of forecasting studies alone as a basis for understanding future change in tourism. Scenario planning has a key contribution alongside a suite of research techniques to demonstrate in a pure academic or in an applied manner, that forecasting change in tourism is a complex process where specific drivers of change coalesce to alter patterns of travel, of which transport is a key component. But key unknowns such as the sustainability debate Macleod and Todnem (2007) may pose a serious constraint on future growth if holidays are construed in the same way that smoking has been demonised and banned in certain settings. Creating long-term scenarios begins to get tourism researchers to think more long-term alongside the developments in futures research from management science and other areas. Forecasting change in transport is a complex process due to the long-term horizon for infrastructure investment, which is often over 10 years and can be 15–20 years, and so scenario planning is well suited to begin to try and understand the consequences of infrastructure change and the needs of specific destinations and countries. With tourism a highly competitive economic activity, the growth in destination research provides a natural home for the development of scenario research in tourism alongside the forecasting research techniques which are now well ensconced in the armoury of the tourism forecaster (Song & Li, 2008).

There are also wider applications for the scenario analysis example discussed here for academic research and applications elsewhere in the field of transport research. The research process discussed in this paper highlights that transport and tourism are interconnected and that while policy issues at a national government level may be uncertain for the future, this assumes even greater levels of uncertainty when trying to consider the issue at a global scale. The transport system for tourism is interconnected globally and changes in consumer behaviour, the impact of global warming and attitudes to travel have so far only be directly impacted by established parameters we understand such as extreme events (e.g. terrorism and natural disasters) as well as economic factors such as inflation and exchange rates. However, shifts in thinking on the desirability of flying as a consumptive activity, the impact our carbon footprint and the pressure which new markets may pose for travel demand (e.g. China and India) are all future challenges. This mean that forecasting based on past experience is not going to be a surrogate for the future. Destinations will face increased environmental changes alongside changes in consumer behaviour. Therefore, scenario planning involving scenario analysis and a rich mixture of techniques as embodied in the VisitScotland approach will enable decision-makers and those researchers who engage in this process to adopt a more strategic role in visioning destination development in the next 15–20 years. This is fundamental to improving tourism organisations understanding of the future. For example, Witt (1992) highlighted the poor performance of forecasts as generated by some tourism organisations in trying to anticipate tourism futures and so scenario analysis techniques may help to strengthen these attempts to understand these issues more fully.

Conclusions

This paper has shown that scenario planning has a key role to play in the understanding of key challenges at a strategic level for a destination with a dispersed tourism product, and is heavily dependent upon transport and accessibility, given that over 80% of Scotland's

market is from the UK domestic market, which is dependent upon car access. The overseas markets are dependent upon ferry and air access as well as road infrastructure to visit. As a highly dispersed tourism product (outside of Edinburgh and Glasgow, which are the main gateways), the development and growth of tourism in Scotland in the next 10–20 years will be increasingly determined by transport access and the issues that will shape it (i.e. the key drivers). What this study has highlighted is that infrastructure investment decisions to grow and develop the capacity and capability of the destination will also be shaped by a wide range of emerging global issues that may change the nature of tourist travel in the future. In many destinations in 2007, it is almost inconceivable for policy-makers to consider that tourism could be constrained or will decline because of the pressures posed by transport in the future. These constraints could occur through globally derived policy issues (e.g. taxation on travel due to the problems associated with global warming and the rethinking of travel as a basic human right) or through the massive infrastructure requirements that governments are being forced to delay in their budgets because of competing pressures for other human needs in their public sector obligations. This is a key issue affecting Scotland in late 2007, as the new Scottish Parliament is deliberating on scrapping the long-awaited Edinburgh tram project, which would have long-term benefits for tourism. This is a good illustration of the very problem alluded to in this study that a failure to invest in infrastructure that aids both the domestic population and tourist needs is essential to continue to facilitate accessibility within and between destinations. The recent rating of destinations and their transport/accessibility by the World Economic Forum illustrates just how important these issues are – not only for the perception of a destination but also for its competitiveness – if Scotland is to continue to retain its appeal and its access to key markets.

In policy circles, interest in transport issues is often neglected if there is not a high profile major project attached or event such as the Olympics, where access will not occur without new infrastructure and transport provision. Yet the fundamental investment in transport and its sustainable provision has been offset in many developed countries by passing the investment needs to the private sector (e.g. in the case of airports) or to transport operators such as low-cost airlines, who give the impression of opening up access by new route development. Yet as the CAA (2006) acknowledge in the UK context, this has been at the expense of serviced carriers and these airlines have not provided socially inclusive forms of tourism by reducing the price of travel: the main beneficiaries have been the more affluent traveller who now chooses to travel more frequently. In other words, the public sector investment in transport infrastructure projects remains vital for destinations to stay viable and attractive, and may best be described as a basic hygiene factor (i.e. it is a necessity). Scotland and the UK have a very different philosophy towards transport investment to facilitate tourism growth and development than many of its mainland European neighbours: investment is seen as a key lever and foundation of growth that the state has to invest in without seeing an immediate or short-term payback. The private sector philosophy that has characterised UK transport policy since the 1980s, such as the deregulation of public transport, has been a short-term solution to absolve government of the major public sector investment decisions required by passing the costs to the private sector and user (with a major public subsidy). This study points to the potentially spatial and destination impacts of failure to invest in a key necessity for human mobility for leisure and tourism purposes (alongside other purposes such as commuting). Tourism is often a silent element of transport investment decisions where the tourism benefits cannot easily be quantified owing to the absence of appropriate data or evidence of the effects. What is clear is that transport remains the key facilitator of tourism: without it transport

supply, especially the point of interchange and terminal facilities (ports, airports, bus stations and railway termini), need to ideally seek to provide seamless interchanges, minimum interruption and a pleasurable experience. Delays, congestion, service interruptions and multiple agents in the supply chain poses major logistical and management challenges in ensuring a high-quality visitor experience for outbound, inbound and destination travel experiences. These issues remain key policy concerns alongside infrastructure investment.

Understanding the scope and scale of tourist travel and activity needs to incorporate the different modes of transport used by tourists (e.g. air travel by scheduled or charter service, sea travel using ferries or cruise ships and land-based transport including the car, train, coach, motorcaravan, motorbike and bicycle) and how these shape the experience of tourism along with investment decisions. Although data exists in many countries to understand one component of the travel experience (i.e. at the airport, on the train or onboard a ferry), few countries (if any) have pioneered research to integrate the tourist travel system into a holistic measurement tool to show how value can be added to the destination experience by developing the travel experience as a vital component as opposed to emphasising other elements of consumption (i.e. accommodation, food, beverages and attractions/activities). In scenario planning terms, this thinking on value adding is still some way off from the reality of tourist transport provision in many countries.

Scenario planning may not be an exact science, but it helps to explain in very simple terms what might happen if the current challenges facing transport for tourism in a destination are not addressed. As one respondent to this study indicated, transport issues associated with current concerns on climate change and global warming are far too complex and beyond the realms of present politicians' real understanding and domain of knowledge: they cannot easily grapple with the science and consequences alongside the other large issues they are facing, and so it is easier to delay decision-making on fundamental issues associated with travel and transport. When they are not even able to exercise political leadership, then the sector runs the risk of being misunderstood and abrogated to a low-level concern that can be deferred by commissioning yet another report or review of what needs to be done. Consequently, scenario planning provides a crystal ball, under controlled circumstances and is based on current understanding of how transport and tourism interact and are connected, to show what the consequences will be for the destination by not addressing fundamental investment decisions and policy needs.

There is no doubt that travel and tourism will change by 2025 in most countries, but for Scotland, we are able to demonstrate how the spatial hierarchy of destinations could shift and how the nature of the destination is shaped by external issues (global constraints on travel) as well as by domestic policies that may limit access to the current dispersed tourism product, which is the basis of the Scottish tourism brand. In other words, transport and its ability to facilitate and potentially constrain tourism must assume a high priority in the short to medium term, given the very long timeframes involved in implementing policy decisions and seeking the investment to make them a reality. Without an ongoing understanding of how tourism is being shaped by external forces and the likely effects of changing markets and the ability of the destination to meet these needs, then the long-term future sustainability of the present tourism sector as a key economic activity could easily be compromised by neglecting its political importance. This is a fundamental mistake that many governments make: tourism may be a key revenue generator for income and taxation, but it also has reinvestment requirements to keep it competitive, accessible to consumers to make it attractive and easy to use once you arrive in the destination.

Notes

1. In view of the comprehensive nature of the literature reviewed in this book, this paper focuses on scenario planning rather than reviewing all the previous studies to date on transport and tourism, which are well documented in this text and several special issues of journals such as the *Journal of Transport Geography*. More detail on the importance of scenario planning to Scottish tourism can be gleaned from Scottish Tourism in the Future: Opportunities for Growth by Tourism Intelligence Scotland on http://www.tourism-intelligence.co.uk.
2. The potential uncertainties and changes that may occur in energy provision, transport provision, tourist travel and environmental determinants of tourism (e.g. climate change) among many other drivers of tourism led to the choice of long time horizon of 2025, since it seen as challenging and thought provoking to encourage the transport and tourism sector to think beyond the typical strategic timeline of 5 and 10 years or operating conditions (e.g. the length of a tender or franchise) within a Scottish context. This is not without its difficulties but with the long-term prosperity of Scottish tourism dependent upon the identification of key strategic and policy issues that need to be addressed for tourism to succeed. This study was undertaken in view of the dearth of available studies on transport and tourism in Scotland, the UK and wider afield.
3. This is a computer programme that captures and allows researchers to structure free-flow conversations and dialogue from a group setting into a series of hexagons that can then be grouped and simplified into a series of themes in much the same way that the Statistical Package SPSS and its use of Factor Analysis helps to reduce the complexity of data into a series of specific factors to summarise the data. The free thinking software is widely used in scenario planning exercises.
4. nVision is a subscription online service comprising of an online resource, telephone consultancy, seminars and workshops. It provides a comprehensive understanding of social, cultural and economic trends as well as focused analysis and raw data. The service is available at www.nvisiononline.co.uk and is provided by the Future Foundation.

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Appendix 1: Scenario planning at VisitScotland

The Scenario Planning Group (SPG)

Scenario planning is a process that provides the organisation with the capability to think about the future and provides it with the skills needed to manoeuvre the organisation and, over time, to create change. De Geus (1988) called this 'Adaptive Organisational Learning', where the organisation creates a capability to understand, create and manage change that leads to competitive advantage. On the basis of this ethos, the Scenario Planning Group (SPG) was set up in order to embrace the organisation and industry, and to get both to think about the future of Scottish tourism. The group is not about a one-off project, but rather a process of learning and development in which an organisation can focus in a constructive way on the

future beyond short-term decision-making and constant political and organisational review, where policy-makers become focused on structures, roles and responsibilities rather than the long-term strategic position and proposition. As VisitScotland is the lead advisory body for tourism in Scotland, it has a responsibility to create a strategic conversation about tourism with industry and policy-makers from a wide range of public sector organisations. VisitScotland is a public sector agency whose prime responsibility is the marketing of Scotland as a destination; therefore it can bring players and stakeholders (Eden & Ackerman, 1998) together to focus their minds on increasing the value and importance of tourism. The aim of the group is to find answers to several questions, including: '*What actions does VisitScotland and its stakeholders need to take to ensure tourism is the first and everlasting industry of Scotland to 2025?*' illustrating the wider context in which the transport study was conceived and developed in relation to tourism supply issues in 2025. The SPG involved a qualitative process (not just one technique) of capturing shocks, surprises, trends and drivers that will influence and shape tourism in a systematic and sensible manner. The choice of the year 2025 ensures that the scenarios show real change and are not just an extension of the present.

Environmental scanning

The world is full of information and knowledge: in fact, there is too much information, which leads to information overload. Environmental scanning is an intelligence service that produces a systematic process for deciding which information to observe and follow, and that understands the trends and drivers that shape the development of its businesses (Hines, 2003; Temtime, 2003). Indeed, Prideaux et al. (2003) advocate a culture of ongoing environmental scanning in tourism organisations to create a dialogue and for mutual learning to assist in strategic planning as opposed to relying upon forecasting methods. The environment creates problems and opportunities for organisations, therefore, it is important for organisations to detect, capture and link information to strategic and tactical directions. Information and knowledge is held in multiple forms, both explicit and implicit. Therefore, any environmental scanning process cannot rely on just one technique or methodology to elicit this knowledge. Environmental scanning must use a variety of mixing and matching methods in order to attain its goal. More formally, environmental scanning involves a triangulation, or crystallisation, of methods which, at VisitScotland, include the development of a remarkable people network; training; using the nVision scanning tools;[4] running several systems thinking workshops for staff; as well as a series of seminars and futures lectures for staff and people invited from industry. Remarkable people are defined as intensely curious but sharp observers, who understand the way the world works and who have their finger on the pulse (van der Heijden et al., 2002) of change. The concept comes from Shell International, founded on the principle that a search for innovative thinking needs to take place outside the organisation. This means identifying individuals who are not normally part of the strategic conversation within an organisation or even, in this case, the tourism industry, but who are conversant with the industry structure, language, driving forces and key uncertainties, and whose structured knowledge overlaps areas where VisitScotland's knowledge is fragmented, unstructured or lacking. Remarkable people can think outside the box, triggering leads that will have implications for tourism. Basically, these people are experts in a particular field or have a profound foresight of issues that will have an impact on tomorrow's possible actions. At VisitScotland, remarkable people are used to bring their expertise on a particular subject, to act as market intelligence or are used to test the rigour of the present scenario thinking.

Systems thinking workshops are also used to bring together stakeholders and experts in order to explore and share thinking on a specific topic that will have an impact on tourism. The workshops follow a format of presentations, discussion of issues, visual modelling of issues, policy implications and action points. Two interactive visual modelling techniques are used: cognitive mapping or hexagons. Cognitive mapping enables a modeller to represent a participant's individual thoughts on a problem situation. The map itself shows a series of linked ideas, with arrows indicating how one idea might lead to another, i.e. it is a sign-directed map expressing chains of cause and effect among the issues comprising and relating to the problem area. Eden and Ackerman (1998) describe the approach, supported by a computer package called 'Decision Explorer' (Jones, 1993). Hexagons, or their commercial name of IDONS (Hodgson, 1992), according to Dodds and Hocking (1994), assist in the process of introducing and structuring ideas. Hodgson (1992, p. 227) states that:

> Concept mapping with IDONS is the process of rendering tacit models sharable by use of representation mapping. This mapping is done by means of a variety of techniques which are like moving diagrams. The fundamentals of the process involve, in a group session individuals

noting down ideas on magnetic, coloured hexagons, which are placed on white-board. These hexagons are then clustered to show related concepts and connections to ideas. The flexibility of the method means that it can be used in various contexts and provides a means to stimulate creative thinking and eliciting a collective view of ideas.

Through a series of workshops this allows the exploration of issues and the surfacing and challenging of assumptions, through using visual models, which act as holding devices or cryptic labels of knowledge where participants explore their own, and others' mental models of the problem situation. The workshops bring structure to messy problems in which these mental models can be negotiated, leading to a range of clear and agreed actionable outcomes (Yeoman, 2004).

The Moffat model

The Moffat model (Blake et al., 2004) allows VisitScotland to quantify the future, by explaining the present state of tourism through economic indicators. Forecasting the future using econometrics and measuring the impact of shocks or changes in policy, it was computable general equilibrium (CGE) modelling, which is an integrated economics tool. An integrated approach is necessary as traditional forecasting techniques are of limited use in predicting shocks or changes in variables (Blake et al., 2004; Prideaux et al., 2003). Econometric forecasting, which is what the Moffat model does, can predict the future based on the changes in economic variables that are drivers of tourism. The econometric model uses predictable elements from a time series of international and domestic tourism statistics and accounts for seasonal changes or the intervention of one-off events. The model finds a correlation between the tourism time series with exchange rates, gross domestic product (GDP) and inflation, then makes a forecast of the future based on those economic variables that are published biannually by OECD. The model predicts domestic demand and the main international markets for Scotland, and estimates trips and spending for those markets. The forecasts can be used to generate scenarios, based upon changes in exchange rates, GDP and inflation, and provide a useful tool based on changes in economic conditions. The scenario analysis element of the model uses the principles of CGE modelling of the Scottish economy. CGE models are a well-established methodology for measuring changes or shocks in the economy and the effect they have on tourism (Blake & Sinclair, 2003). For example, the model allows for events such as severe acute respiratory syndrome (SARS), changes in value added (sales) tax or air passenger duty/tax, as well as a range of optimistic and pessimistic scenarios relating to the future of the Scottish economy. The model provides macroeconomic effects of alternative scenarios on income, employment, welfare, the balance of trade and government revenue, as well as 82 economic sectors, including tourism-related sectors of large hotels, small hotels, bed and breakfast establishments and retail distribution. It can take account of different types of tourism expenditure: by domestic tourists, tourists from the rest of the UK, international tourists and day-trippers. The model does not give a final answer about the future, just a means to explain and interpret it. It must be remembered that interpretation is an art not a science, where subjectivity reigns, not objectivity.

Therefore, what the discussion shows is that much of the focus in scenario planning at VisitScotland is based on an intuitive logic philosophy, which seeks to use the scenario planning process *per se* as a learning opportunity, since managerial focus in many organisations is on events and the short term. Such an event-led approach leads managers to filter out issues and longer term trends that have relevance to strategic planning and management. In other words, the scenarios constructed and the end product is less important than the process, where a descriptive and discursive narrative is used to provide a contrived situation. This has even more significance, given that one characteristic of UK transport policy (which has shaped Scotland's transport legacy) has been inconsistency, a lack of long-term strategic thinking such as the management of the car and its use in urban environments. For this reason, scenario planning combined with an understanding of some elements of transport forecasts are a key tool to assess the linkages between transport and tourism, given the tendency in transport studies and government research to use economic models to show a level of certainty in demand, albeit with a high degree of uncertainty in the future provision of supply. Furthermore, this scenario planning process may help to make sense of the issues associated with transport and tourism to 2025 along with the importance of developing appropriate strategies to overcome strategic threats to the future prosperity of tourism in Scotland.

Appendix 2

Scenario 1: urban metropolis

In this world there is a realisation that the exponential growth of tourism as predicted by the UN World Tourism Organisation in 2005 was unsustainable. No longer could it be justified both on moral grounds and resources for consumers to over-indulge themselves with holidays. Although tourism is the world's largest industry and China is the world's leading destination, things have changed, as climate-change policies are embedded in international trade agreements. It all started in 2010 when the government realised that emission reduction targets could not be met and the Middle East countries decided to stop selling oil to the West. So it was necessary to encourage people to travel less and this in turn required a public policy intervention to help households and individuals change their lifestyle. By 2025, we will see a major attitudinal change towards travel and tourism.

In fact transport is only allowed if it is green, clean and generates a low-carbon footprint. For example, new cleaner technologies have made road-based car transport viable for a relatively short distance of up to 150 miles. Car distances beyond that point are heavily taxed. Public transport – electric and low energy is efficient and widely used. This efficiency is typified by the Metropolitan Glasgow–Edinburgh transport network. Two cities joined together by a Japanese style bullet train. The rail network links to the UK's high-speed network. However, the system does not extend further than Glasgow or Edinburgh. This metropolitan hub has joined the two cities together blurring the boundaries of the old divide. Glasgow and Edinburgh are suburbs of each other. Visiting this metropolitan hub means hotels are sustainable, which includes self-contained power generation from solar panel cells. The hub has an excellent IT infrastructure needed for a striving financial services industry. Corporate meetings are now confined to virtual worlds ever since the introduction of telepresencing in 2014. Telepresencing combines video conferencing and virtual reality to create three dimensional, high speed, fluid interaction across different geographical locations. Business people even have their own hologram to give that physical presence. The metropolitan hub has invested heavily in conference and exhibition space, combined with an efficient land-based transport system making this metropolitan hub an ideal association meetings destination. In 2025 association meetings are still important for face-to-face situations. Not everything can be done by telepresencing.

Technology in this scenario lets the world deal with change and overcome many of the environmental and economic challenges of climate change and energy policy. In this scenario it is about transporting people from A to B in mass numbers, therefore reducing the need for individual journeys. Urban hubs have organised themselves to minimise travel and carbon footprints. For example, Edinburgh is now a UNESCO tourism colony with award winning features such as the skyscraper Botanical Gardens. The city's green credentials stretch from the connectivity of its ULRS (Urban Light Rail System), connecting the airport with the city's business and leisure districts, making the city centre a car free zone, to the novel use of *Segways* for the elderly and infirm tourists. Globally, competition is increasingly between cities and not countries, and the winners in the competitive environment are those able to link high-value knowledge assets with a desirable workforce, good quality of life and appropriate public assets such as cultural and educational resources. That's one of the reasons why cities are changing and Scotland's metropolitan hub is at the forefront.

However, Scotland's cities have grown up at the expense of rural communities. The rail network is practically non-existent outside cities. Many rural communities have become isolated and unsustainable owing to the lack of tourists combined with immigration towards urban hubs. Many of the rural areas that surround the cities have become gardens for the urban populations, providing them with food for farmers' markets and adventure playgrounds for day trippers. The story for Scotland's islands has been mixed. Arran, once 'Scotland in miniature' is now a five-star resort with golf courses and second homes for celebrities and the mega rich. Rhum, Muck and Eigg were all abandoned in 2018 owing to the high cost of transport to the islands. Air travel is relatively expensive as it still dependent upon carbon fuels, meaning it is heavily taxed at 40% value added tax (VAT) and vulnerable to oil shocks. Government plans to expand both Edinburgh and Glasgow airport have been curtailed, with investment being switched to rail networks and urban hubs. Scottish tourism is predominantly a city-based product with rural destinations offering an exclusive experience for those who can afford to travel to the islands. In this scenario resource use is now a fundamental part of the tax system and people are more careful in their use of resources. So is this what it could look like?

Scenario 2: pragmatism prevails

In this world the exponential growth of tourism as predicted by the UN World Tourism Organisation in 2005 has happened. International arrivals have grown from 800 million in 2005 to 1.75 billion by 2025. However China's exponential growth is not what it used to be; this is typified by Beijing's smog and dust storms. In 2025 snow no longer falls on the top of Kilimanjaro, the Caribbean coral reef is no more, Polar bears no longer wander the Arctic, the Maldives does not exist as a country, lack of water on the African plains has meant the end of the Wildebeest migration and the Cairngorms plateau, once a sun arctic tundra for ptarmigans and snow buntings are no more. Global warning has changed the areas' ecology. The great, green rolling carpet of hardy moss that once covered the plateau is obliterated. But still, people still want to travel as on average, disposal income has doubled in real terms per person in the UK over the last 20 years. People are aware of climate change and the issues of sustainability but it is recognised that climates change and everyone has to get on with their own daily life. In this scenario the key drivers are market economics, mitigation and adaptation strategies.

There is no such thing as a perfect world. Individuals, business and governments have had to comprise as politics is dominated by coalition governments. Edinburgh Airport has expanded rapidly with a dedicated rail terminal direct to the city. Glasgow Airport has rapidly expanded because of the budget carriers. Campbeltown and Lossiemouth are Scotland's exclusive space ports. The new Forth Road Bridge crossing was opened in 2012. No new roads have been built and expansionist plans for a railway infrastructure were blown away by the Eddington report. It was once suggested that expanding the railway network would act as substitute for air travel, but capacity constraints meant that this was a non-starter. Green and clean buses dominate public transport systems in Scotland's cities, with a few exceptions. Edinburgh has a skeleton tram system that has not been able to expand owing to public expenditure constraints – which is shaped by demographics. Glasgow's clockwork orange underground system closed in 2014 for health and safety reasons, meaning the city is the only major European city without a light railway system. Successive governments in Scotland and the UK have not been able to tackle the growing threat imposed by climate change fearing the electorate still wants the right to travel, where, when and how they want.

However, certain measures have been introduced. Everyone in Scotland has their own voluntary carbon account. The purpose of the account sets out to improve sustainability and make consumers think before they travel. Even the introduction of a 17.5% VAT rate on air travel has had little impact on the desire to travel to far-away places. The consumer in 2025 knows about climate change, thinks of themselves as an eco tourist but stills takes at least four short breaks and one long-distant holiday per annum. However, aircraft manufacturers have been able to offset carbon emissions by 60% owing to technological improvements in aircraft design. Similar improvements by car manufacturers, with the introduction of intelligent cars, which adhere to speed limits using the latest hybrid/hydrogen technologies, combined with the government's tough national sustainable surveillance system ensures that everyone knows the cost of travel as road pricing is now the norm. The car is still the number one and most important form of travel to and around Scotland. Hybrid and/or hydrogen cars are the preferred choice of most households. Arran was the first community in Scotland to ban the petrol car in 2016 as the island's electric car scheme allows tourists to get around the island because of relatively short distances.

Businesses are energy efficient. They cannot afford not to be, as the penalties for using old technologies are huge. For example, all hotels of over 25 bedrooms have to provide a sustainable hot water system that does not draw upon the national grid. Solar panel cells are the norm on the skyline today and many communities have their own windmill. In today's society, consumerism still drives our desire to for travel, even with climate change. But government incentives and legislation has led to innovation in business. For Scotland, climate change has been positive. Consumers to a certain extent have been put off by China's smog and population. Although the Far East may be relatively cheap at least Scotland is clean and green. Pragmatism wins in this case.

Appendix 3: Economic assumptions used in the moffat model and implications for tourism to 2025

Key points	Drivers	Macroeconomic assumptions in the Moffat model	Main economic changes induced by the Moffat model
Scenario 1			
Exponential growth in world tourism unsustainable owing to carbon footprint	Population change/ immigration	On the basis of the 2002 Tourism Satellite Account figures and for forecast 2025 tourism levels, the following demand changes have been applied to construct the Scenario 1:	The value of tourism in Scotland declines by 31.17% on the present value with employment dropping by a similar proportion
Consumer attitudes have changed towards the environment	Urban hubs/rural in-migration	Domestic tourism demand by car and air declines owing to inhibitive taxation on these areas	Under these assumptions, travel for tourism contracts considerably from all markets in Scotland and the economic consequences with a urban metropolis model with only urban-based tourism and a limited amount of travel to other destinations highlights the constraints imposed upon tourism as an activity based on the freedom to move and travel without any restraints being applied
Climate change policies embedded in international agreements and legislation	Taxation policy drives transport policy as change agent	Domestic train, coach and bus travel increases with growth of public transport and concentration of travel within central belt of Scotland	A major drop in most forms of tourist travel with a significant impact on inbound tourism
Geo politics of oil supply	Travel is now expensive	Rest of UK transport for tourism sees significant drop in car and air travel to come to Scotland, again for inhibitive green taxation	Overall, overnight tourism declines as a major contraction in tourism spending filters through the tourism economy
Transport is green and clean	Attitudinal shift	Train, coach and bus travel are principle hub to hub transport options to reach Scotland	
Road-based pricing	Legislation intervention	Boat travel from rest of UK to Scotland grows with resurgence of nautical touring and cruising as an environmentally friendly tourist option	
Metropolitan Glasgow–Edinburgh	Technological improvements	International travel sees air travel decline with European Visitors increasing use of	

		most cost effective tunnel and ferry routes to reach the UK and Scotland
High-speed rail link and transient system	Big brother society	Domestic Tourism Demand falls in total by −24%, rest of UK tourism demand increases by 0.9% and international Tourism Demand drops by 77%
Sustainable cities – IT infrastructure, telepresencing, exhibition spaces, segways	Safety	Productivity increases by 5% across the Tourism industry reflecting improvements in efficiency
Technology addresses climate change and sustainability issues	Geopolitical environment	Public transport increases capital stock by 10% showing growth in the number of busses, coaches and trams in line with increased incentive towards public transport use
Highland clearances		Air travel shows a decline in the overall number of aircraft by −25% compared to 2025 figures with the price of air travel increasing 300% over the same period. A 40% tax increase on air travel has also been applied
Exclusive rural resorts		A 25% increase in transport services has also occurred as entrepreneurs provide guided tour services because personal transport is costly
Air travel is a luxury		Other Industry Sectors show a 5% increase in productivity reflecting improvement in efficiency
End of fair trade and eco tourism as we know it!		Coal production shows a −15% drop in coal reserves and subsequent increase in world price of 50%
Scottish tourism is an urban product		World Price of oil has increased by 150% through demand limitation and political sales to preferred countries by suppliers
		Cars and other land transport (trains, trams

(*Continued*)

Appendix 3: Continued.

Key points	Drivers	Macroeconomic assumptions in the Moffat model	Main economic changes induced by the Moffat model
		and buses) see efficiency increases of 10% a technology response to increasing hydrocarbon prices while the number of cars on the roads declines by −15% as an increase of 7% tax is applied to new car purchases Electricity generation improves efficiency by 10% as alternate sources are harnessed for its production while global gas supplies decline by −25% Both gas and electricity see 25% increases in world prices directed to consumers	
Scenario 2			
World tourism has grown from 803 million international arrivals in 2005 to 1.75 billion by 2025	Government legislation and incentives	Domestic Tourism transport demand increases by 10–25% for all land- and water-based vehicles, reflecting increased use of car, inter-island ferry and public transport within and between cities	A more optimistic economic scenario exists for tourism, which contrasts with scenario one where growth is up by 11%
No polar bears in the Arctic or grouse in Perthshire	Technological innovation – science provides solutions	Domestic air travel increases by 5%, although inhibitive in price, public preference for journeys to outer isles is still by plane	There are marginal changes in employment as staff productivity increases and technology is assisting with these efficiency gains
Disposal income has doubled in real terms	Road pricing for cars	Rest of UK tourism transport demand for travel to Scotland sees increases in car use for personal transport	Increases in the price of air travel contracts international tourism as long haul becomes costly but as the most popular form of public transport short-haul flights lead to a growth in domestic visitors from the rest of the UK
Travel is a right – when, where and how	Consumerism dominates	Public transport for the rest of the UK for travel to Scotland shows air travel increase by 10% and represents the most popular form of public transport. Train travel declines as the rail infrastructure decays, with budget public	Underinvestment in transport infrastructure dampens overall growth from its real potential

		transport fulfilled by increases in demand from bus and coach travel
Climates change rather than climate change	Adaptation and mitigation	International travel to Scotland is dominated by a demand increase in air and sea travel (ferry travel)
Mitigation and adaptation	What can you do in a 20-year period?	Overall, Scottish tourism experiences Domestic Tourism demand increases by 11%, rest of UK tourism demand increases by 9% and International Tourism demand increases by 19%
Edinburgh Airport – dedicated rail terminal to city but limited tram system	Politics of compromise	Owing to improvements in efficiency driven partly by policy and tax incentives, productivity in tourism sectors increases by 10%
BAA monopoly ended. Glasgow Airport a budget carrier	Fiscal constraint	Transport Sectors show a mix in productivity with a declining railway infrastructure showing a −10% demand, hybrid engines powers cars and busses seeing a 30% increase and aircraft improving productivity by 15%
Glasgow only major European system without a light railway system	Big brother technology	Owing to the underinvestment in railways and decline in the service the volume of trains declines by 10%, cars, busses and trams increase in number by 25%; however car taxation (in terms of road pricing) increases by 2.5%
Campbeltown and Lossiemouth are Spaceports	The eco tourist	World price of air travel increases by 40% and for UK passengers VAT has been applied at 17.5%
New Forth Road Bridge but little change in road capacity	Short- and long-haul travel continue	Productivity (efficiency) in other industry sectors has shown gains of 10% over 2002 levels
No expansion of rail network owing to Eddington report	Energy efficiency	The voluntary carbon taxation has seen the forestry industry see productivity gains of

(*Continued*)

Appendix 3: Continued.

Key points	Drivers	Macroeconomic assumptions in the Moffat model	Main economic changes induced by the Moffat model
(HM Treasury, 2006) and capacity issues	(assumes energy is plentiful)	15%, and resultant increase in woodland of 150%. The carbon taxation system has also incorporated a tax break for the forestry industry of 10% as an incentive	
17.5% VAT on air travel – a tax rather than a deterrent		Oil industry experiences world price increases of 300%	
Voluntary carbon allowances		There is a 10% increase in the number of cars although an increase in purchase tax of 5% is incurred	
Technology improvement, for example 60% reduction CO_2 emissions in aircraft		Gas and Electricity world prices have increased by 25%	
Car is king but hybrid/ hydrogen cars the norm			
Road pricing – national sustainable surveillance system			
Business are energy efficient			
Scotland is green and clean			

Appendix 4: Implications of scenario 1 and 2 for VisitScotland's brand and tourism markets to 2025

Workshop findings	Impact on the VisitScotland brand	Impact on tourism markets	Learning points from the scenario
Scenario 1			
The key change to tourism is the end of rural tourism in the absence of infrastructure to access rural areas, with the exception of exclusive resorts. This in itself would lead to a greater social exclusion of visitors without the means to pay for these exclusive experiences. The result is the change to the brand that is built around rural tourism imagery and experiences. For example, National Parks as icons of Scottish tourism remain but are largely inaccessible	The brand would change dramatically from its current form, with a city-based focus rather than the human and enduring qualities of the current brand	Air travel would be a luxury product and the impact on the UK tourism market was certainly viewed as a likely decline although long-haul travel was expected to be reasonably stable. Other markets such as road-based, rural-based and sea-based travel would most likely decline. The implications are that the main gateways would host most of the tourism activities, including business and leisure travel, with only limited visitation to the rural enclaves that are accessible	The relationship between transport and tourism now is complex, and government needs to make key decisions to set the framework for future investment and direction for Scottish tourism – they need to invest not just plan. From a policy perspective, talking down air travel could lead to this scenario becoming a long-term reality given the debates occurring on tourism and sustainability, if environmentalism dominates the agenda
The converse effect is the strengthening of urban tourism and a dependence upon domestic markets and a decline in inbound markets from overseas	A focus on health and well-being was suggested, with a greater focus on urban hubs and destination development based on event development. This was accompanied by a more cosmopolitan urban environment and a likely requirement for more visitor management at key urban sites with a mass consumption of tourism within urban areas	Islands would turn into gated communities	The decision to focus on an urban gateway style of tourism experience in terms of continuing the existing allocation of investment and development would lead to the urban concentration scenario for Scottish tourism as the remaining products are not viable due to access and transport problems
In strategic terms, Scottish tourism ceases to be a sustainable proposition after 2010 after oil sales to the west are limited, resulting in focusing	An urban focus would certainly mean a faster product lifecycle for many of the product offerings in Scottish		Much of the focus in the Eddington report would simply lead Scotland down this route since it is about air and road and

(*Continued*)

Appendix 4: Continued.

Workshop findings	Impact on the VisitScotland brand	Impact on tourism markets	Learning points from the scenario
upon a narrow urban experience shaped by transport and infrastructure provision. Public policy interventions have shifted the balance on environmental sustainability to limit tourism options for Scotland, by requiring a lifestyle and attitude change with the focus on clean and green travel	tourism: it would mean the end of the rural tourism product		not rail as well as England rather than Scotland
Global tourism would disappear across the world			Opportunities exist for new transport–tourism experiences in this scenario, with the development of space tourism, offering Scotland a new luxury transport product that could be developed within the next 5 years to position Scotland as a key destination
The geopolitical environment and availability of oil would lead to a sea change in the current dependence upon car-based travel for tourism. It is the end of the car for journeys over 150 miles			Lack of investment in transport infrastructure and inadequate maintenance and re-investment in the public sector could lead to long-term health and safety issues and EU Directives that could make non-urban trips more restrictive if the infrastructure is no longer fit for purpose. Conversely too much investment and making Scotland too accessible could lead to a rise in outbound travel or the rise of mass tourism with a Lake District style experience transposed to the Highlands of Scotland
Air travel is heavily taxed to create a change in behaviour through the imposition of a 40% on VAT to shift			

travel to rail, thereby limiting tourism options
Public transport becomes the most viable option, given the urban focus and interaction and infrastructure in the Glasgow–Edinburgh conurbation, with an associated reliance upon UK tourism, which is declining
The shift in focus and city-based meetings has implications for business and conference tourism and its potential location in the major cities
Technology has allowed behaviour change to occur
The geographical focus of Scottish tourism has come down in scale from a national to a city perspective: competition is between cities and places rather than countries and so the brand has to change to reflect the more micro place-based marketing requirements. Similarly, economic development for tourism is focused on urban hubs and gateways with the local hinterland the focus of short breaks while the Scottish Highlands and Islands remain isolated and inaccessible
The overall effect on the economic significance of tourism is massive owing to the loss of tourism in rural and island economies, highlighting

(*Continued*)

Appendix 4: Continued.

Workshop findings	Impact on the VisitScotland brand	Impact on tourism markets	Learning points from the scenario
whether Scotland can really afford to allow such a scenario to occur			
In political terms, this scenario has a high degree of state regulation, limiting personal freedom to travel to destinations			
The greatest impact of this scenario is on the high yield markets, notably international tourism, especially business tourism as Scotland is not a global player in its leading services such as the financial service sector and biomedical research			
Scenario 2			
Pragmatism prevails is an extension of the present thinking and policy	The country rather than the city becomes the focus for the brand as sustainable tourism becomes a greater focus with changing landscapes and more environmentally aware travellers less accustomed to two peak seasonality	In terms of air travel and its impact upon tourism markets, UK tourism is the main beneficiary, whose domestic tourism sees a 48% growth. The effects on long-haul travel in this scenario are positive but island and rural tourism do not grow as a result of changes in air travel	This scenario was seen as realistic mainly because it was an evolution of what was expected as opposed to a radical revolution in the nature of travel and tourism in the timeframe
The competition is ahead of Scotland in terms of infrastructure. For example, business tourism in Glasgow is threatened by a lack of light transit system across the system. The present clock work orange underground system is inadequate	Scotland becomes a more attractive destination to visit for the English market but the cost of travel and carbon allowances makes tourism a stronger brand with new products to replace those lost through climate change, with a sense of space and green products as key selling points	From the perspective of road travel, if a growth in road investment occurs, much greener forms of travel will see a rise in domestic and UK travel in Scotland. Positive growth may also occur in VFR and rural/island tourism depending upon the trends in road investment and vehicle technology	The Scotland tourism brand was unlikely to change radically
		In terms of rail travel, it may grow	Technology alone is unlikely to solve the

Fiscal policy constraints may hamper future developments	as UK markets may grow, especially city breaks and urban trips depending upon infrastructure investment. The rise in long-haul and short-haul markets using rail from England would be dependent upon infrastructure provision (i.e. a high-speed link)	problems of the transport sector and by default, the nature of tourist travel
A sustainable transport policy is more than environmentalism	In the sea market, potential growth from other UK markets and Ireland was seen as positive along with access to the Highlands and Islands, as well as from mainland European travellers deterred by congestion at hub airports. Some growth in cruise ship markets were seen as possible but much of this will be dependent upon industry innovation and new product development	
Adaptation and mitigation are policies of the future	Overall, the scenario was seen as a positive scene for tourism growth in Scotland but the unknowns were how carbon rationing and trading may work along with what types of investment will come forward to facilitate tourist travel in this scenario	
Travel in the future must be affordable, accessible and sustainable		
Be wary of carbon taxes – as they will not mitigate volume, unless prices rise by 300%		
The future is green and clean		