Shetland Transport Strategy
Approved Version

Approved by Scottish Government Minister for Transport, Infrastructure and Climate Change, 28 July 2008.

ZetTrans: Zetland Transport Partnership
April 2008

Executive Summary

Introduction

Over the last three decades, with the support of oil-generated revenue, Shetland Islands Council (SIC) has been able to develop and deliver an extensive network of transport services and supporting infrastructure to a relatively high standard for the people of Shetland. These services and infrastructure have enabled Shetland to lead the field in many areas of transport provision and have shown what can be achieved when circumstances and foresight allow.

Having established a strong track record, the new challenge is to address the pressures on capital and revenue resources at both the local and national levels whilst maintaining current service provision but also seeking to improve standards wherever possible.

Looking forward, this Strategy adopts two principal perspectives. Firstly, adopting the Shetland perspective, the transport priorities for Shetland over the next 5 to 15 years have been determined through consultation with Shetland's Community Planning Partners as well as a wide range of other stakeholders. Given this approach was adopted in the development of the Strategy there is naturally a strong set of connections between the Strategy and SIC's Single Outcome Agreement (SOA). In transport terms this means an emphasis on external links that meet the needs of their users, investment to secure the ongoing integrity of key inter-island links, ensuring that communities have levels of accessibility to maintain their viability and vitality, and that individuals do not suffer unacceptable loss of opportunities or social exclusion due to transport issues.

Secondly, there is the National perspective. By adopting the National Transport Strategy (NTS) Strategic Outcomes, the Government's Single Purpose, Key Objectives and the relevant National Outcomes are also embedded in the Strategy to support Shetland's contributions to the Government's direction for Scotland. The three NTS Strategic Outcomes are:

- Improved Journey Times and Connections
- Reduced Emissions
- Improved Quality, Affordability and Accessibility

Looking more specifically at the Shetland context, the three additional key messages arising from this Transport Strategy Document are as follows:

a)   It is essential that the actions arising from the Strategy focus on the essential rather than the desirable.

b)   It is also necessary that schemes and policies are developed which are fit for purpose for Shetland.

c)   Finally, it will be important to prioritise interventions on basis of need, benefit and effectiveness.

Zetland Transport Partnership

Zetland Transport Partnership (ZetTrans) was established following the introduction of the Transport (Scotland) Act 2005, following a successful campaign to be recognised as a Regional Transport Partnership in its own right. It has a statutory responsibility to prepare a Regional Transport Strategy, in accordance with the requirements of the legislation.

This Shetland Transport Strategy is a statutory document, and was submitted to the Scottish Government for formal approval in April 2008. It is supported by an accompanying Delivery Plan document, which outlines the specific interventions (actions and policies) that ZetTrans will implement to meet the objectives of this Strategy.

It should be noted that a previous version of the Transport Strategy (encompassing the high-level Strategy document and the Delivery Plan together) was submitted to Scottish Ministers in March 2007. While the format of the Strategy has been slightly changed, the vast majority of the previous Strategy, including the vision, aims and objectives, as well as the analysis and consultation outcomes remains valid and has underpinned the development of the revised Strategy and Delivery Plan.

Consultation

This Transport Strategy has benefited from extensive consultation with a wide range of stakeholders. This has been a key element in driving its content and development. Consultation was initially undertaken between October 2005 and February 2006. The aim was to develop a comprehensive understanding of the challenges, problems and opportunities that local residents, community councils, businesses and other organisations from a range of community, commercial and health sectors believed should be addressed through the Transport Strategy. Once the Draft Transport Strategy had been published, consultation was again undertaken, with communities, the health board, neighbouring transport authorities and community planning partners complementing responses from other stakeholders. The results from this phase were used to finalise the Transport Strategy.

At the time of revising the Transport Strategy, some two years have passed since the original consultation was completed. ZetTrans was keen to ensure that the data, views and information gathered during the consultation has not gone out of date in the period between the submission of the original version of the Strategy and this most recent version and that any new or developing issues are captured and addressed in this latest revision.

To achieve this, ZetTrans has carefully reviewed the information gathered through the consultation processes embedded in various STAG appraisals

carried out in 2007/08 as well as through the External Transport Forum and Local Area Transport Forums which engage with the public and wider stakeholders on a regular basis. Review of the consultation carried out during 2007/08 suggests that the key issues identified during the original consultation remain highly relevant and nothing fundamental has changed since the original Transport Strategy consultation took place.

Key Issues

The results from the initial consultation, supplemented by additional analysis, revealed a number of key issues which together mean that a "business as usual" approach cannot necessarily be sustained. These issues include:

a)   Changing economic situation for Shetland;
b)   Issues related to reliance on lifeline links;
c)   Changing patterns of mobility within Shetland;
d)   Rising Fuel Prices;
e)   Responding to Climate Change;
f)   Responding to opportunities to improve the health of Shetland;
g)   Opportunities arising from New Delivery Structures;
h)   Constraints on Shetland Islands Council (SIC) and External Funding: and
i)   The new relationship between National and Local Government.

Vision and Objectives

The Transport Strategy's vision and objectives have been developed from the extensive community and stakeholder consultation, analysis of constraints and drivers, and also assessment of the key problems and opportunities presented to ZetTrans.

The vision of ZetTrans is as follows:

> To develop an **effective, efficient, safe** and **reliable** transport system for Shetland. The transport system will comprise an **integrated** network of **accessible,** and **affordable** internal, inter-island and external links, which will contribute to the development of a **safe, healthy, vibrant** and **inclusive** society; a **diverse, successful** and **self-sufficient** economy, and enhanced **environmental quality**.

Appraisal

The continued attention given to achieving revenue savings in particular highlights the challenges faced in implementing beneficial schemes associated with additional revenue burdens. In this context, the focus of this strategy points towards making best use of what is currently available, and continued management of current revenue expenditure levels.

Appraisal results showed that in the long-term, significant savings in revenue expenditure could principally be achieved by a programme of replacing ferries with fixed links. This is a high capital expenditure approach, and there are currently significant differences in views which together combine to cause large variations in cost estimates. There appears to be most opportunity for justifying capital investment when it can be demonstrated that this could achieve wider efficiency savings.

External Links

External links to and from Shetland are essential for both the local population and businesses, and to afford access for visitors and trade. The main challenge is to maintain the existing levels of connectivity to mainland Scotland and beyond and identify ways in which services and linkages can be improved where needed, bearing in mind that the majority of links are not directly controlled by either ZetTrans or SIC. ZetTrans' strategy for External Air Services, External Ferry Services, and Ports & Harbours is proposed within **section 5** of the document.

Inter-Island Links

In developing the Inter-Island strategy there have been some key challenges to consider, such as the limited amount of available capital and the pressures to reduce current levels of spending. There is also the over-riding requirement to secure the availability of existing links, in the face of ageing vessels which are potentially becoming non-compliant, and the number of ferry terminals that are being subjected to use beyond what they were designed for and are now requiring significant structural upgrading or replacement.

This element of the Strategy has also had to consider the potential of developing fixed links, and the ongoing delivery of the inter-island air service. **Section 6** of the document outlines ZetTrans' proposals regarding fixed links, inter-island ferry services, and inter-island air services.

Internal Links

Internal links include the provision of public transport services and road links, as well as facilities and initiatives to promote and support walking and cycling. Important complementary themes include the promotion of road safety, promoting travel behaviour change, and supporting community / demand responsive transport provision. ZetTrans' proposals to improve Shetland's internal transport system are presented within **section 7** of the document.

Delivery

Within **section 8**, information is provided on how this Strategy will be delivered with reference to potential funding streams, and the accompanying Delivery Plan which underpins this higher-level Strategy document. The Delivery Plan comprises a specific set of proposed interventions (actions and policies) which have been derived from this Strategy and developed to deliver the Strategy's vision and objectives.

Monitoring

Section 9 concludes with reference to the monitoring approach that will be adopted to measure the success of the Transport Strategy in delivering its objectives. The Delivery Plan will be used as the basis to monitor the success of ZetTrans in delivering the Transport Strategy, including performance against the objectives, targets and performance indicators adopted in the Strategy. Annual Reports outlining the progress made by ZetTrans in delivering the Transport Strategy will also be published. The indicators adopted in the Transport Strategy are also adopted in the relevant sections of the SIC SOA.

Going Forward

The Strategy has been formally approved by ZetTrans, and has been submitted to the Scottish Government Ministers for formal approval. The Delivery Plan has also been approved by ZetTrans and SIC and submitted to the Scottish Government Ministers.

Over the life of the Shetland Transport Strategy ZetTrans will work, in collaboration with partners, to contribute to the Government's single purpose and the outcomes given in the SIC's SOA. This will be achieved through the continued development and implementation of the policies given in the Strategy and the development and implementation of the interventions in the Delivery Plan.

1.   A Transport Strategy for Shetland

Introduction

1.1.   Over the last three decades, with the support of oil-generated funding, Shetland Islands Council (SIC) has been able to develop and deliver an extensive network of transport services and supporting infrastructure to a relatively high standard for the people of Shetland. These services and infrastructure have enabled Shetland to lead the field in many areas of transport provision and has shown what can be achieved when circumstances and foresight allow.

1.2.   Having established a strong track record, the new challenge is to address the pressures on capital and revenue resources at both the local and national levels whilst maintaining current service provision but also seeking to improve standards wherever possible.

1.3.   Looking forward then, there are two principal perspectives to the Shetland Transport Strategy. Firstly there is the local (or regional) Shetland perspective and the role the Strategy has to play in delivering the outcomes and priorities set by SIC and its Community Planning partners. Secondly there is the national perspective and the role the Strategy has to play in Shetland's contribution to the achievement of the Government's Single Purpose.

1.4.   Adopting the Shetland perspective, the transport priorities for Shetland over the next 5 to 15 years have been determined through consultation with Shetland's Community Planning Partners as well as a wide range of other stakeholders. Given this approach was adopted in the development of the Strategy there is naturally a strong set of connections between the Strategy and SIC's Single Outcome Agreement (SOA). For the Transport Strategy this means:

a)   an emphasis on external links that meet Shetland's economic and social needs;

b)   securing investment to ensure the ongoing integrity of key inter-island links, making sure that communities have levels of accessibility to maintain their viability and vitality; and

c)   that individuals do not suffer social exclusion or unacceptable loss of opportunity due to transport issues (including infrastructure).

1.5.   From national perspective, by adopting the National Transport Strategy (NTS) Strategic Outcomes, the Governments Single Purpose is also embedded in the Strategy to support Shetland's contributions to the Government's direction for Scotland. For ease of reference the three NTS Strategic Outcomes are:

•   Improved Journey Times and Connections

•   Reduced Emissions

- Improved Quality, Affordability and Accessibility

1.6.   It is against this backdrop that this Transport Strategy and supporting Delivery Plan has been developed, with this Transport Strategy itself being submitted for formal approval by Scottish Ministers.

1.7.   The Transport Strategy is intended to be a long-term working document that outlines ZetTrans objectives for the short, medium and long term. It will also provide a framework for the wider transport related activities of Shetland Islands Council, and other stakeholders. It has a principal timeframe of 10-15 years, although it responds to immediate ongoing actions, as well as longer term goals. It covers all links related to Shetland's Transport System; external links, inter-island links, and internal links.

1.8.   The Strategy will be used to:
a)   accurately represent the vision for Shetland's Transport System;
b)   provide an assessment of the existing situation;
c)   guide and co-ordinate transport-related activities in Shetland;
d)   set out, in an accompanying Delivery Plan document, a programme of activities, projects and interventions, making the case for investment in services and infrastructure; and
e)   make the case for specific projects that meet funding criteria from the Scottish Government through specific revenue and capital grants.

1.9.   The Transport Strategy was originally developed to fulfil the requirements of the Transport (Scotland) Act 2005[1]. It also responds to guidance provided by the Scottish Executive in March 2006 for the Preparation of Regional Transport Strategies[2], and earlier guidance issued in February 2005 for the Preparation of Local Transport Strategies[3].

Context: Regional Transport Strategy Guidance and STAG

In March 2006, the Scottish Executive produced "Guidance on Regional Transport Strategies" to assist Regional Transport Partnerships in the development of their Transport Strategies. This guidance was based very much on the principles of STAG – the Scottish Transport Appraisal Guidance document[4].

The benefits of STAG are that it is an objective, auditable, inclusive, open-minded and pragmatic process. This has been particularly important when it has come to option appraisal, as it has been able to demonstrate why particular choices have been made and enables the performance of individual schemes to be compared against one another, which has assisted the task of prioritising schemes. An emphasis on effective consultation and stakeholder inclusion also runs through this guidance.

It is the requirement of the Scottish Government that all transport projects for which it provides support or approval are appraised in accordance with STAG.

1.10. Furthermore, following submission of the original Transport Strategy in March 2007, the Strategy has been updated in light of comments from the new Scottish Government, which was elected in May 2007. The comments from the Scottish Government reflected their preference for the specific interventions contained within each of the Regional Transport Strategies to be addressed in a separate Delivery Plan. These have been taken on board in the finalisation of the RTS.

National Policy and Legislative Context

1.11.   The publication in 2004 of the Scottish Transport White Paper, "Scotland's Transport Future"[5], heralded significant changes to how transport policy, and transport schemes in Scotland, are developed and delivered. The Scottish Executive published its National Transport Strategy[6] in December 2006. At the national level, many (but not all) of the main national transport functions have been transferred to Transport Scotland, an agency of the Scottish Government. Transport Scotland is currently undertaking a Strategic Transport Projects Review to determine major infrastructure investment priorities from 2012 to 2022.

1.12.   Zetland Transport Partnership (ZetTrans) was established following the introduction of the Transport (Scotland) Act 2005, following a successful campaign to be recognised as a Regional Transport Partnership in its own right[7]. It has a statutory responsibility to prepare a Regional Transport Strategy, in accordance with the requirements of the legislation. Furthermore, ZetTrans will also have direct responsibility to deliver the Strategy.

1.13.   ZetTrans is one of seven such partnerships in Scotland, typically covering large city / region areas, and a number of individual local authorities. The other Regional Transport Partnerships in Scotland are:
a)   Highlands and Islands Transport Partnership (Hitrans);
b)   North East of Scotland Transport Partnership (Nestrans);
c)   Tayside and Central Transport Partnership (Tactran);
d)   South East of Scotland Transport Partnership (SEStran);
e)   Strathclyde Partnership for Transport (SPT); and
f)   South West of Scotland Transport Partnership (SWESTRANS).

1.14.   While the majority of other local authorities in Scotland have developed their own Local Transport Strategy and contributed to the development of the relevant Regional Transport Strategy, the Shetland Transport Strategy covers both aspects. The fact that ZetTrans is a single authority partnership has also influenced the levels of responsibility that the Partnership has adopted from the local authority, SIC.

1.15.   ZetTrans is now going through a process of assuming responsibility from SIC for the delivery of transport services in Shetland. ZetTrans has

already assumed responsibility for delivery of bus services. Responsibility for inter-island air services and inter-island ferry services may also transfer. Roads services remain a function of SIC.

> **You told us…** you were unsure about the relationship between SIC and ZetTrans.
>
> ZetTrans consists of a Board comprising of four elected Members of Shetland Islands Council. It is supplemented by a member from the Health Board and one from the Local Enterprise Company. In addition, individual representatives from Lerwick Port Authority, SIC Ports and Harbours Department, the Sumburgh Airport Consultative Committee and VisitShetland are advisers to the Board.
>
> ZetTrans currently has the responsibility for the development and delivery of the Regional Transport Strategy. In November 2006, responsibility for bus services was transferred to ZetTrans and inter-island air services and ferry services may follow.
>
> At officer level, the service delivery functions of ZetTrans are currently undertaken by SIC's Transport Service.
>
> Operational funding for the Partnership is secured from SIC and the Scottish Government. The majority of projects and actions arising from this Transport Strategy are likely to be funded either through SIC's capital and revenue funds with funding support being sought from the Scottish Government, Europe and the private sector where appropriate.

Process

1.16. In accordance with the Guidance, the development of the Transport Strategy has been progressed in a staged approach, which has included:
a)   background research;
b)   detailed community and stakeholder consultation;
c)   analysis of problems and opportunities;
d)   development of vision and objectives;
e)   option generation and sifting;
f)   scheme appraisal;
g)   development of Draft Strategy and consultation;
h)   development and prioritisation of Implementation Plans; and
i)   development of a Final Transport Strategy and Delivery Plan.

1.17. A series of background reports support this Transport Strategy, and are available on ZetTrans' website (http://www.ZetTrans.org.uk/).
a)   Results of the initial consultation process are outlined in the *Transport Strategy Initial Consultation Outcomes*.

b) Outcomes of background analysis, objective setting, and option development are presented in the *Transport Strategy Scoping Report*.

c) Outcomes of scheme appraisal are presented in the *Transport Strategy Appraisal Report*.

d) The work is accompanied by a Strategic Environmental Appraisal (SEA) process. The *SEA Scoping Report* was issued in July 2006, and the *SEA Environmental Report* accompanies this report.

e) Information on how the comments made on the Draft Transport Strategy have been taken into account in finalising the Transport Strategy is included in the *Outcomes of Second Consultation Exercise*.

f) A *Transport Strategy Equality Impact Assessment*, has also been developed alongside this Transport Strategy, and highlights the anticipated impacts of the Strategy on vulnerable groups in Shetland's society.

g) The *Delivery Plan*, which outlines the specific interventions (actions and policies) that ZetTrans will implement to meet the objectives of the Transport Strategy.

Context: The Scottish Government and RTPs

In line with the guidance produced by the previous Scottish Executive administration, ZetTrans produced a Final Transport Strategy for submission to Scottish Ministers in March 2007. Since this time, however, the approval of the Transport Strategies of each of the RTPs was put on hold as the newly elected Scottish Government considered how the various Transport Strategies fitted within their vision for Scotland's future.

While the Scottish Government has reaffirmed its support for the RTPs and their valuable role in improving Scotland's transport infrastructure and services, in January 2008, the Scottish Government wrote to each of the RTPs outlining that it considered that the interventions contained within the RTSs would be best addressed in separate Delivery Plans.

The individual Delivery Plans would then become the mechanism by which RTPs would work with local authorities to deliver local priorities (as confirmed in SOAs) as well as integrating the regional policies and objectives in the respective Strategies to give cohesive and coherent regional transport planning and delivery capabilities. This guidance has been taken on board with the development of this Strategy and supporting Delivery Plan.

While the format of the Strategy has been slightly altered, it is to be emphasised the vast majority of the previous Strategy, including the vision, aims and objectives, as well as the analysis and consultation outcomes remain valid and have underpinned the development of the revised Strategy and Delivery Plan. The Strategy has also been updated to reflect what has been learned in the development of various studies which have been undertaken following their original inclusion in the Transport Strategy

1.18.   ZetTrans views the Transport Strategy as an ongoing process, rather than simply a document. This Transport Strategy has been kept relatively simple in order to put across the main strategic themes and individual projects that ZetTrans will look to deliver. Fuller detail is provided in the Delivery Plan and the aforementioned background reports which complement this Strategy and provide provenance for its key elements; from the thinking behind the development of the vision and objectives to the appraisal of the individual schemes to be taken forward.

Consultation

1.19.   This Transport Strategy has benefited from extensive consultation with a wide range of stakeholders. Consultation was initially undertaken between October 2005 and February 2006 in order to develop a comprehensive understanding of the challenges, problems and opportunities which should be addressed through the Transport Strategy. This consultation included key stakeholders (including health and community planning partners), local residents, Community Councils, businesses and other organisations.

1.20.   A second round of consultation was conducted on the Draft Transport Strategy between November 2006 and January 2007. This focussed primarily on inviting responses to the Draft Transport Strategy. A number of public and stakeholder consultation meetings were also held, building on the initial consultation programme. These included Shetland Islands Council, the local Health Board, Community Planning Partnership and the Transport and Environment Forum. Copies of the Draft Strategy document were made widely available for public viewing at various locations throughout Shetland. In addition, copies of the Draft Strategy were posted to a range of other key stakeholders, including all previous consultees. During the consultation period, articles were released in the local press to inform interested stakeholders of its publication and to provide information on where copies of the Strategy could be viewed. Adverts were also posted within the local press to raise awareness of public meetings on the Draft Strategy.

Case Study – Initial Consultation Informing the Strategy

Extensive and inclusive consultation has been a core element in the development of the Shetland Transport Strategy. The initial phase of consultation was initiated in October 2005 and continued until February 2006. During this time, meetings were held with a wide range of stakeholder groups, including Community Councils, small island communities, businesses, organisations, voluntary and community groups, and the general public. Worthy of note is the fact that consultation with small island communities involved spending some time on the islands and talking to as many residents as possible. This approach allowed researchers to build a greater appreciation of the unique transport issues that affect the lives of residents on these

remote islands, while also allowing researchers to sample the travel links to the islands themselves.

Specific sectors of society were also targeted during consultation. For instance, Strategy researchers were in attendance at the Flu Fair in Lerwick in order to capture the views of Shetland's elderly residents, while holding focus groups at the Brae Youth Event was a useful mechanism to gather the views of young people on transport in Shetland. Efforts were also made to investigate the transport related views of those involved with people with health problems and disabilities through consultation with NHS Shetland, local health centres, SIC Social Work department, WRVS lunch clubs and Disability Shetland. Consultation was also held with a class of foreign students undertaking English Plus classes run through Shetland College.

Furthermore, questionnaires were available and distributed via the mobile library van to ensure that those people in the most remote areas of Shetland were given the opportunity to air their views and inform the development of the Transport Strategy. The results from the consultation have been used to identify the key transport challenges that should be addressed by ZetTrans, which in turn has informed the development of the Strategy vision and objectives. Consultee suggestions on specific initiatives that should be taken forward by the Transport Strategy have also been taken on board.

1.21.   At the time of revising the Transport Strategy, some two years have passed since the original consultation was completed. ZetTrans was keen to ensure that the data, views and information gathered during the consultation has not gone out of date in the period between the submission of the original version of the Strategy and this most recent version and that any new or developing issues are captured and addressed in this latest revision.

1.22.   To achieve this, ZetTrans has carefully reviewed the information gathered through the consultation processes embedded in various STAG appraisals carried out in 2007/08 as well as through the External Transport Forum and Local Area Transport Forums which engage with the public and wider stakeholders on a regular basis. Review of the consultation carried out during 2007/08 suggests that the key issues identified during the original consultation remain highly relevant and nothing fundamental has changed since the original Transport Strategy consultation took place.

Case Study – ZetTrans' Transport Forums

The ZetTrans' External Transport Forum was set up as a way of involving stakeholders in the development and implementation of transport initiatives in Shetland. Its membership is drawn from a range of public bodies, transport operators and stakeholders with an interest in external transport, with four meetings held each year to discuss strategic external transport issues, alternating between air and ferry services.

ZetTrans has also established a number of Area Transport Forums across Shetland. These are used to discuss local transport issues, problems, and opportunities, and provide local transport users (as well as current non users) and operators with the opportunity to help ZetTrans and SIC shape the way future transport is provided in their local community. Areas covered by the Transport Forums include: South, Central, West, Lerwick and Bressay, North Mainland, North Isles & Whalsay and Skerries.

Area Transport Forum meetings are held every six months, with a different topic discussed at each of the meetings. Topics covered include walking and cycling, local bus service provision, the inter-island ferry network, and the inter-island air services.

Structure of Strategy

1.23.   The Strategy includes the following sections after this introduction.
a)   Section 2 details the key issues shaping the Strategy;
b)   Section 3 outlines the proposed vision and objectives;
c)   Section 4 summarises key findings from the appraisal process;
d)   Sections 5, 6, and 7 provide details of the actions proposed for external links, inter-island links and internal links;
e)   Sections 8 and 9 provide details of how the Transport Strategy will be delivered and its progress monitored.

1.24.   A number of appendices support the Strategy.
a)   Appendix A details the outcomes of the initial consultation process.
b)   Appendix B provides a summary of the main drivers and constraints affecting the Strategy.
c)   Appendix C goes on to provide an overview of the key problems and opportunities.
d)   Appendix D outlines to the relationship between transport and Land Use Planning.
e)   Appendix E presents a matrix illustrating the compatibility of the Transport Strategy objectives with the Scottish Government's Strategic outcomes and NTS objectives;
f)   Appendix F summarises the outcomes from the SEA, including the key environmental policies and mitigation measures.
g)   Appendix G sets out road traffic levels on Shetland's roads with reference to the Road Traffic Reduction Act.
h)   Appendix H presents a map of Shetland, for reference purposes.
i)   Appendix I presents a glossary of terms used in this Strategy.
j)   Appendix J lists the references cited in this Strategy.

2. Key Issues Shaping the Strategy

Introduction

2.1.   The preparation of the Transport Strategy has revealed a number of key issues, which together mean that a "business as usual" approach cannot necessarily be sustained.

Changing Economic Situation

2.2.   The economy of Shetland is changing. Forecasts predict continued reduction in the value of oil related activities to the economy, along with a reducing impact of traditional industries. Emerging prospects include sustaining growth in Shetland's tourism, renewable energy, high value aquaculture, added value food and drink processing and oil rig decommissioning.

2.3.   In a global market, Shetland's transport system, as well as its links to and from UK Mainland, Continental Europe and Scandinavia, requires to be as efficient and affordable as possible. The aim is to ensure that Shetland's value is not diminished by virtue of its transport links.

Case Study – Tourism

The important role that transport can play in supporting the development of tourism opportunities in Shetland was frequently highlighted during the development of this Strategy. Equally, the Shetland Tourism Strategy[8] contains a number of transport related actions geared towards increasing Shetland's tourism market and products. The following actions are proposed to support tourism development in Shetland:

- Work with Highlands and Islands Airports Limited (HIAL) and other external transport providers to consider options for future route development and service improvements.
- Work with HIAL and Lerwick Port Authority to support the development of Shetland's tourist "Gateways"
- Promote Shetland's transport networks to visitors and residents, including the bus network, inter-islands ferry and air networks.
- Support new tourism opportunities opened up by the availability of the second inter-island aircraft, possibly including promotion of chartered flights to Unst and Fetlar.
- Continue to improve the integration of public transport. (The development of a dedicated bus link between Sumburgh Airport and Lerwick is a good example).
- Promote ticketing initiatives, including tourist "hop-scotch" promotions and a "Shetland Pass" primarily aimed at visitors, and improved marketing of services and destinations.

- Support and promote the "New Walking Guide to Shetland" and the associated website. ZetTrans will continue to work with its partners to promote walking initiatives.
- Investigate improvements to serve the cycling market, including the development of a Shetland Cycle Guide.
- Work with appropriate motorcycle groups to develop a Motorcycle Guide highlighting appropriate touring routes.

A Special Environment

2.4.   Shetland's unspoilt and unique environment must be its greatest asset. The archipelago that makes up the Shetland Islands encompasses over 100 islands, 15 of which are inhabited. The distance from Hermaness in the north to Fair Isle in the south is almost the same as that from Edinburgh to Aberdeen; however the population is just 22,000.

2.5.   Shetland also has 900 miles of dramatic coastline, which is home to many important and rare species of plant and animal. There are also many well-preserved historic sites including Viking settlements, brochs and ancient crofts; all of which are important contributors to Shetland's strong and unique cultural identity.

2.6.   Significant environmental issues of direct relevance to transport in Shetland are likely to be those which affect communities, landscape, cultural heritage and biodiversity. Whilst 'traditional' transport-related problems have been addressed by the Strategic Environmental Appraisal, local air quality is of lesser significance. However, in light of the universal imperative to tackle global warming, it is essential that the Strategy addresses the reduction of carbon dioxide emissions and other greenhouse gases.

Issues of Lifeline Links

2.7.   A recurring theme for the supply of Shetland's external links, inter-island links, and internal transport provision is the relatively high cost of providing the necessary lifeline transport services. Issues are highlighted below.
a)   High capital investment required for constructing and maintaining vessels, ferry terminals and airports.
b)   High operating costs due to the dispersed and relatively small population, large distances and severe sea and weather conditions.
c)   High recurring capital costs, particularly in terms of ferries and their terminals.
d)   Relatively small market size for the transport services.

2.8.   Recognising the social and economic importance of the external, inter-island and internal transport links, the majority of transport services are supported by either ZetTrans/SIC or the Scottish Government. Particular

emphasis has been placed on ensuring that the wide range of services are affordable to their users and, as far as practical, meet the needs of the communities that are being served.

2.9.   Particular issues are faced by users of lifeline links, such as external and inter-island ferries, external and inter-island air services and even communities linked by a single track road with no alternative route. Work undertaken for Highlands and Islands Enterprise[9] identified the following key issues for users.

a)   Total travel time – often longer and slower.

b)   Direct travel costs (for example fares, petrol) – often higher.

c)   Out of pocket costs – there can be the necessity for over-night stays.

d)   Schedule delay – the inconvenience associated with low frequency of services / inconvenient timetabling.

e)   Journey time variability – such as on single track roads compared to two lane roads and impact of weather delays.

f)   The impact of being dependent on "non-secure" links – ferry or air services, which can be susceptible to disruption or delay, or force significant changes in travel arrangements.

g)   The longer term uncertainty of being dependent on a "non-secure" link, which may experience changes in service levels over time.

h)   Restrictions on choice of onward mode.

i)   Affordability for users – a greater proportion of disposable income typically spent on travel, compared to those not reliant on lifeline links.

Changing Patterns of Mobility

2.10. There are a number of important issues which will shape the provision of internal transport within Shetland.

a)   Changing lifestyle patterns in Shetland are leading to higher levels of mobility than in previous generations.

b)   Whilst there is a dispersed population pattern across Shetland, population growth is concentrated in "accessible rural areas" typically 30 minutes drive from Lerwick, and is in significant decline in the most remote areas.

c)   It is very difficult to provide a viable rural public transport service that matches the population's mobility expectations with the costs and practicalities of such a level of provision, despite a rural public transport service that is arguably the most comprehensive in rural Scotland.

d)   Outwith Lerwick, a vehicle is considered a necessity. People without access to a vehicle in these locations are likely to suffer reduced access to opportunities and from social exclusion.[10]

e)   Changing patterns of lifestyle, more affordable motoring, an increasing population in the more accessible rural areas, and changing patterns of employment and service provision, have led to relatively high increases in car use.

f) The increases in car use recorded locally however, do not appear to be creating significant congestion or local environmental problems. However, there is a requirement to tackle the wider issue of reducing carbon dioxide emissions related to transport wherever possible.

Case Study – Research into Deprivation and Social Exclusion in Shetland

The relationship between transport and social exclusion in the Shetland context is better understood following local work conducted into "Deprivation and Social Exclusion in Shetland" (2006).

A key finding of the research was the relationship between deprivation, social exclusion and access, as the following extract from the report illustrates.

"The greatest issue in terms of access in Shetland is people's inability to afford to run a car (or two cars if a partner has the car each day). Although the public transport system is appreciated, it delivers for full-time commuters and is not able to alleviate access issues for those without a car sufficiently for people to feel they are able to access opportunities. This restricts people's ability to learn; find employment or better employment; purchase healthier food at a reasonable cost; take part in community events and access social opportunities, for example. Reliance on others for transport is common, hindering people's feeling of independence and increasing humiliation.

This form of exclusion is predominantly felt by women with family responsibilities (particularly those living in remote areas of Shetland), young people, and those with a disability. For the former, lack of childcare and transport to access childcare in other areas augments isolation. For the latter the situation can be particularly acute as they are physically unable to access any public transport".

Rising Fuel Prices

2.11. A further issue currently affecting all forms of transport in Shetland is the recent significant increase in fuel costs. This affects private car use as well as the provision of ferry services and air services. The knock on impacts are higher freight costs and higher costs of personal travel, which impacts on the overall cost of living in Shetland (virtually all consumables being imported), reduces disposable incomes and reduces the competitiveness and viability of businesses. Despite recent short term fluctuations in oil prices, in the long term a number of factors together combine to indicate trends of still higher fuel prices in the next decade.[11]

2.12. It is noted that Shetland can demonstrate particular opportunities in terms of renewable energy potential (wind and sea) and also is home to an innovative fuel cell research centre (PURE in Unst). This opportunity,

combined with the "closed network" inherent on island communities, provides opportunities for pilot projects.

> **You told us…** that you would support the development of transport schemes being linked into renewable energy proposals. Some consultees noted that if fixed links are to be taken forward in the future, integration of renewable power schemes should be considered. Incorporation of wind or wave power generation schemes into the fixed link infrastructure was highlighted as a means to improve the overall cost/benefit of fixed links.

Case Study – PURE, Unst

The PURE (Promoting Unst Renewable Energy) project in Unst demonstrates Shetland's ability to lead the way in the development of renewable energy. PURE was initially a Renewable Hydrogen Project, primarily focused on the development of hydrogen fuel cell technology to create renewable, pollutant free, energy. PURE were responsible for the creation of the UK's first road licensed hydrogen car.

The Pure Energy Centre has subsequently evolved into a global Energy and Storage business by maximising the opportunities offered by renewables and storage techniques. For example, PURE now provide training courses to communities, businesses, public agency representatives and private individuals across the world, along with consultancy, complete energy systems and business support services. Hydrogen as a power source will be increasingly important in the future and ZetTrans are committed to ensuring that Shetland is at the heart of this development. This commitment has already been demonstrated by providing a grant in 2007/08 to PURE to carry out research into Hydrogen Combustion Engine Development.

In addition to this, PURE play a wider role in the socio-economic vitality of Unst, a community which has suffered numerous setbacks in recent years due to the closure of RAF Saxa Vord. Diverse and unique initiatives which make use of local resources and offer wider community benefits, such as through the attraction of tourism for example, are seen as vital to the future socio-economic development of Shetland, particularly in remoter areas. Consequently, and also due to the limitations of Shetland's electrical grid system, projects such as PURE and other renewable energy initiatives will continue to be supported and encouraged by ZetTrans.

Responding to Climate Change

2.13.   Allied to concerns relating to fuel supply and costs are pressures to stabilise and reduce global carbon dioxide emissions. A long term goal is to reduce UK emissions by 60% by 2050. In 2006, the Scottish Executive produced national carbon dioxide reduction targets.[12] Building on this, the Scottish Government has recently published its proposed Scottish Climate Change Bill[13] outlining its framework for the current and successive

administrations in Scotland to ensure that the nation's emissions are reduced by 80% by 2050.

2.14.   Recent work undertaken for the UK government shows that this can be achieved by significant investment in new technology, plus strong travel behaviour change policies and demand management. Relying on new technology alone, for the UK as a whole, will not achieve the desired target.[14]

2.15.   In a national context, whilst the total amount of carbon dioxide produced by transport in Shetland is relatively low it is recognised that the level of emissions per head of population, is probably higher than the national average. Therefore, it is important that Shetland makes an equitable contribution to national targets and prepares for changes to transport taxation and pricing regimes. Measures designed to encourage sustainable travel and reduce emissions to deliver the targets outlined above have thus been included in this Strategy.

Context: Climate Change and Transport Policy

In recent years, awareness of the need to face up to the tough and uncomfortable realities of global warming has increased.[15] One of the biggest challenges is the transport sector's ever-increasing contribution to carbon dioxide emissions, which is fuelling global climate change.

2006 saw the publication of two influential reports – the Stern[16] and Eddington[17] Reports – which emphasise the scale of the problems and the need for immediate action to face up to the tough realities and tough choices related to global climate change.

The Stern Report reported on the economics of climate change, highlighting that *"the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more. In contrast, the cost of action – reducing greenhouse gas emissions to avoid the worst impacts of climate change – can be limited to around 1% of global GDP each year."*

The Eddington Report emphasised the increasing need to take on board a more sustainable approach to transport. It notes that *"Transport policy has no choice but to respond to the challenge of climate change, for both environmental and economic reasons."*

Local opportunities will be taken to reduce carbon dioxide emissions. National initiatives are also anticipated, including road user charging, and taxation more directly linked to carbon emissions.

Case Study – Carbon Management Programme

ZetTrans supports the wider proposal by SIC to investigate joining the Carbon Trust's Local Authority Carbon Management Programme (LACM)[18]. The LACM provides councils with technical and change management support and guidance to help realise carbon emissions savings across a range of sectors including buildings, waste, street lighting and transport (including for example, consideration of fuel conversion for Council vehicle fleets).

The LACM process guides authorities through a systematic analysis of their carbon footprint, the value at stake and the opportunities available to help them manage carbon emissions in a strategic manner.

A range of measures to help reduce carbon emissions related to transport is outlined throughout this Strategy ranging from the development of a Travel Plan and sustainable travel awareness raising campaigns, such as the promotion of eco-driving and car-sharing schemes, to investigations into the potential for hydrogen buses. However, from a transport perspective, ZetTrans appreciates that there are wider constraints, such as an absence of congestion and long travel distances, which make the challenge of reducing carbon emissions related to transport a particularly difficult one.

While we acknowledge the importance of "thinking global, acting local" to reduce emissions from transport, ZetTrans believes that in Shetland a wider concerted effort should be taken to ensure that the whole of Shetland, including all Council departments, organisations and residents, play their full part in working towards the most effective and efficient carbon dioxide savings for Shetland. From a ZetTrans perspective, joining the LACM provides a great opportunity to lead the way on this issue that we can not afford to ignore.

Land Use Planning Issues

2.16.   The Transport Strategy has been developed to take full account of the existing Local and Structure plans, as well as the wider context provided by the National Planning Framework.

2.17.   Opportunities to control the pattern of land use (especially housing) in Shetland have historically been limited due to the tradition of individual house building on family crofts. This distinct and historic development pattern can be difficult to link into public transport routes and as such can reduce opportunities to improve accessibility and encourages reliance on the private car.

2.18.   However, ZetTrans recognises that transport can no longer be viewed as an afterthought in the development planning process. In preparing this Transport Strategy, cognisance has been given to established National and Local development planning policies. This is further considered in Appendix D.

> **Context: Local Planning Documents**
>
> The Structure Plan[19] sets out a vision for the future of Shetland, and sets out the principles for the way land is to be used, balancing the need for development and infrastructure against protection for the built and natural environment. It does not, however, identify specific sites for development. The plan makes an important contribution to sustainable development. It sets out key strategic policies as a framework for the Shetland wide Local Plan and decisions on individual planning applications.
>
> The Local Plan[20] is used to identify land for development, conserve and where possible enhance the environment and manage traffic. It applies the guidance of the Structure Plan to set out preferred locations for future development and conservation.

Health and Transport

2.19.   It is recognised that transport can have significant impacts on health. In the Shetland context road safety is one specific impact. However, road traffic volumes, or speeds, or the lack of facilities can suppress walking and cycling, reducing opportunities for physical exercise. Conversely, opportunities can be taken to modify the road network to help facilitate these activities.

2.20.   Road Accident Statistics[21] reveal that for each year on average between 2002 and 2006 there were 54 casualties (all categories) on Shetland's roads. While this is a marked reduction from the 1994 to 1998 average of 82 casualties, it highlights the continued importance of ongoing action in this field. Through the development of education initiatives, such as a "Safe Drive, Stay Alive" campaign, engineering improvements, as well as ongoing work with Community Planning Partners, including the police, to increase enforcement, ZetTrans will strive to continue to improve road safety in Shetland.

2.21.   Physical inactivity is accepted to be a major risk factor for a range of health outcomes, including coronary heart disease, colon cancer, diabetes, and obesity. 60% of men and 70% of women are failing to reach the minimum recommendation of 30 minutes moderate exercise at least five times a week[22]. It is currently estimated that around 60% of the adult population and 33% of children in Scotland are either over weight or obese. An increase in physical exercise is one factor to tackle obesity and walking and cycling are recommended activities, particularly if they can be built into daily routines.

2.22.   Consultation undertaken during the development of this Transport Strategy also highlighted the need to strengthen the links between transport and health. This has been taken onboard and ZetTrans proposes to take forward some specific initiatives that should help to both raise awareness of the health benefits of active travel and deliver real, on the ground,

improvements to facilitate active forms of travel. The proposals include measures to encourage an increase in active travel through the promotion of walking and cycling.

2.23.   ZetTrans also has an important role in providing enhanced levels of access to health services, including local health centres, hospitals in Shetland, as well as access to health care facilities on the Scottish Mainland.

Scottish Government and Transport Scotland

2.24.   It is now being seen that the Scottish Government and their new agency Transport Scotland are also responding to specific transport issues at a local and policy level. Two recent examples include the introduction of the Islander Air Discount Scheme and also the recent announcement of a national concessionary fare scheme for 16 to 18 year olds in Scotland. Both these initiatives came out strongly during the initial consultation exercise. Effective lobbying by ZetTrans and its partners can continue to influence national policy directly affecting Shetland.

2.25.   ZetTrans can also be a key local agent in the delivery of national schemes, helping to achieve national goals. For example, Shetland was the first authority in Scotland to introduce smart-card electronic ticketing equipment.

Context: Scotland's National Transport Strategy

In December 2006, the Scottish Executive published Scotland's National Transport Strategy (NTS) outlining the long term vision for transport, together with its objectives, priorities and plans. The NTS focuses on three strategic outcomes which will set the context for transport policy making for the next twenty years:

- improve journey times and connections between our cities and towns and our global markets to tackle congestion and provide access to key markets;
- reduce emissions to tackle climate change; and
- improve quality, accessibility and affordability of transport, to give people the choice of public transport and real alternatives to the car.

Shetland Transport Strategy responds to these strategic outcomes, which are all relevant to delivering the vision for transport. Particular initiatives included in the National Transport Strategy relevant to Shetland are:

- a commitment to a national concessionary travel scheme for young people, and continuation of schemes for older and disabled people;
- support for lifeline airports and air services;
- a review of ferry services, with a view to developing a long-term strategy for lifeline services to 2025;
- review of the affordability of public transport in relation to ferry services;

- support for the Air Discount Scheme;
- expanded funding for Demand Responsive Transport services; and
- encouragement for more sustainable travel patterns.

New Delivery Structures

2.26.   The creation of ZetTrans provides a clear opportunity for Shetland to demonstrate its capability to effectively work collaboratively across agencies and together develop and implement appropriate solutions to transport related problems.

2.27.   It also provides an opportunity to work in new ways; tackling transport issues in a multi-modal context, prioritising and progressing schemes in a way that meets the needs of communities and the ongoing operation of the transport network, as well as providing a focus on being fit for purpose, efficient and effective.

2.28.   An effective and credible ZetTrans provides a clear opportunity to ensure that Shetland's concerns and particular circumstances are heard and understood on the Scottish Mainland.

Pressures on Shetland Islands Council Funds

2.29.   Despite the creation of ZetTrans, significant amounts of funding for the operation and development of Shetland's internal and inter-island transport network will continue to be secured from SIC. Funding of the Partnership by SIC is a point that has been given closer attention following the recent introduction of SOA Settlements. In the past, funds provided to the Council from the Government have tended to be ring-fenced for specific transport projects, though the introduction of SOAs, from April 2008, has led largely to the removal ring-fencing of money. In effect, this should provide the Council with greater responsibility and flexibility to invest in those transport schemes that will deliver the objectives of this RTS and the relevant outcomes set out in the Council's SOA.

2.30.   Particular emphasis has recently been placed on reducing expenditure to sustainable levels to ensure that the Council's funding reserves are maintained. Recent levels of expenditure have led to predictions that the Council's reserves could be exhausted by 2016 or sooner, unless there is continued improvement in corporate stewardship.[23]

2.31.   The Council has established a policy of maintaining reserve funds at a level of £250m, with this level having the capacity to generate interest of an annual £20m for capital investment. Achieving this means that the annual revenue fund deficit requires to be reduced from a current level of £6.8m (2006/07 target) to zero by 2012. It also means that a major overhaul of the Capital Plan is necessary. A review of the Council's Capital Plan has been undertaken and is making significant progress into meeting corporate targets.

Competition for External Funding

2.32. Budgetary constraints and competition for funding are not limited to ZetTrans or SIC. The Scottish Government's current transport investment programme is fully committed up to around 2012, dominated by new road and rail infrastructure. A Strategic Projects Review is currently underway, the outcomes of which will be used to allocate and prioritise national capital allocations in the ten-year period between 2012 and 2022. It is anticipated that a significant proportion of investment will be allocated to addressing a Replacement Forth Crossing. Remaining capital allocations will be fiercely contested.

2.33. It is also highlighted that the availability of capital investment from the European Union is also reducing, due to the introduction of new members from Central and Eastern Europe.

Summary

2.34. Three key messages arise from the review of key issues.
   a) It is essential that the actions arising from the Strategy focus on the essential rather than desirable.
   b) It is also necessary that schemes and policies are developed which are fit for purpose for Shetland.
   c) Finally, it will be important to prioritise schemes on basis of need, benefit and effectiveness.

3.   Vision and Objectives

Introduction

3.1.   The Transport Strategy's vision and objectives have been developed following an extensive period of community and stakeholder consultation, analysis of constraints and drivers, and also assessment of the key problems and opportunities presented to ZetTrans. These are summarised in Appendices A to C.

> **You told us…** the vision of the Transport Strategy reflected the key issues that the Transport Partnership should address and deliver in implementing the Strategy. Many consultees acknowledged that the vision fits firmly within the tenets of sustainable development.

Vision and Principles

3.2.   The vision of ZetTrans is as follows.

> **VISION**
> To develop an **effective, efficient, safe** and **reliable** transport system for Shetland. The transport system will comprise an **integrated** network of **accessible,** and **affordable** internal, inter-island and external links, which will contribute to the development of a **safe, healthy, vibrant** and **inclusive** society, a **diverse, successful** and **self-sufficient** economy, and enhanced **environmental quality**.

3.3.   The following principles have been adopted for ZetTrans. These explain the way that ZetTrans will work and the values that will be considered in the decision making process for transport related investments.

> **PRINCIPLES**
> **Principle 1: Sustainability** – ZetTrans will work to ensure that its actions are sustainable and meet the needs of the current generation of Shetland's people without compromising the ability of future generations to meet their own needs.
> **Principle 2: Accessibility and Inclusion** – ZetTrans will work to ensure that any actions improve Shetland citizens' ability to access services and opportunities, both within and external to Shetland, and will take account of all factors that create a barrier to this. Equal opportunities will be encouraged.
> **Principle 3: Accountability** – ZetTrans will be answerable to the communities and people of Shetland and keep them informed of, and seek their views on, what is being done in a transparent and inclusive way.
> **Principle 4: Partnership** – ZetTrans will work together with partners and Shetland's people to achieve the vision and will encourage communities to realise their important role in the development of the transport system.

Principle 5: Evidence-Based – ZetTrans will ensure that actions are based on clear evidence and information and are derived from what the community wants, with investment decisions based on an objective appraisal and prioritisation process.

Principle 6: Efficiency – ZetTrans will aim to be as efficient as possible with resources and use them to provide as effective services as possible, maximising opportunities for external support.

Principle 7: Compliance – It is necessary to ensure that all ZetTrans actions comply with legislative and regulative provision and competence.

Principle 8: Environmental Responsibility – ZetTrans will ensure that its actions demonstrate its commitment to contributing to the local and global environmental challenges both now and in the future.

You told us… we cannot consider what we do in isolation of how we do it. It is imperative that the Transport Strategy is considered alongside the Council's established ways of working. There was overall support for the principles outlined in the draft Transport Strategy and in particular the principle of partnership working. A holistic outlook must be taken when planning the future delivery of transport schemes to ensure that wider corporate priorities are considered, ensuring effective and best value delivery.

Context: Partnership Working

Results from consultation outlined the importance of partnership working in delivering the Strategy. The formation of statutory Regional Transport Partnerships will help facilitate partnership working. A key element, for example, is the inclusion of representatives from NHS Shetland and Shetland Enterprise into ZetTrans. Other key stakeholders with regards to transport in Shetland also sit on the Board on an "adviser" basis. ZetTrans is also developing links with Shetland's Community Planning Partnership.

The Guidance on the Preparation of Regional Transport Strategies outlines that constituent Councils "…will have to aim to perform, so far as possible, any of their functions that relate to transport, affect transport or are affected by transport in a way which is consistent with the Regional Transport Strategy (RTS). That means that areas of council responsibility other than transport but which, for example, rely on or generate transport should also take close account of the RTS and feed into its development. These include, for example, education (school transport but also decisions on the location of schools and other educational facilities) and land-use planning".

The Guidance also highlights that in a similar way to Councils, "health boards and other public bodies can provide, generate, demand or otherwise impact on transport in the region and whose action will help or hinder the achievement of the RTS." It also points out that the Transport (Scotland) Act 2005 "enables Ministers to place an obligation on named health boards and public bodies to adhere to the RTS in the same way as councils are required to".

Objectives

3.4.   The national transport objectives, as referenced in Scotland's Transport Future (2004)[24], are the overarching objectives for the Transport Strategy. The five national objective areas are:

    a) Economy;
    b) Social Inclusion and Accessibility;
    c) Safety;
    d) Environmental Protection; and
    e) Integration.

3.5.   Specific objectives have been developed to nest within each of the five national objectives, applied in the Shetland context. These are set out below from section 3.10 to 3.19.

3.6.   While the national transport objectives remain as published in the 2004 White Paper and the 2006 National Transport Strategy, the redrafting of this Strategy has provided the opportunity to assess the compatibility of the Strategy's objectives against the Scottish Government's five new Strategic Objectives and fifteen National Outcomes. To illustrate the compatibility of the RTS objectives against each of these, a matrix diagram has been produced and is set out in Appendix E.

3.7.   As part of the SOA Settlement, the Scottish Government has called on all Local Authorities to develop a list of Local Outcomes and Indicators to demonstrate how each Council will contribute to delivery of the Government's strategic objectives and national outcomes.

Context: Links between the Transport Strategy and SIC's SOA

In April 2008, SIC approved its SOA, setting out its Local Outcomes and containing the list of Local Outcome Indicators which the Council will monitor to measure its progress in delivering the Government's strategic objectives and national outcomes.

As stated in the introduction, the development of the Shetland Transport Strategy relied heavily on consultation with SIC and its Community Planning partners. Furthermore, ZetTrans has worked closely with SIC in the development of the Council's SOA and this ensures that the Shetland Transport Strategy and Shetland's Single Outcome Agreement are closely aligned. Those Local Outcome Indicators which will directly apply to ZetTrans are as follows:

- **LI 26:** Reduce the number of people killed or seriously injured on our roads

- **LI1:** Increase the availability, accessibility and usage of internal public transport

- **NI 36:** Increase the proportion of journeys to work made by public or active transport

- **LI2:** Increase the reliability, affordability and appropriateness of external air
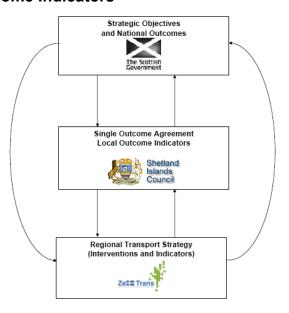
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and sea links

In addition to these specific transport related indicators, there are a number of indicators within Shetland's SOA which will be supported by improvements delivered by ZetTrans and this Transport Strategy. These include the indicators to 'Reduce Shetland's overall ecological footprint' (NI32) and 'Increase the proportion of adults making one or more visits to the outdoors per week' (NI 37).

It will be upon these local indicators that ZetTrans contribution to the delivery of the Government's strategic objectives and national outcomes will be most significantly demonstrated. Accordingly, these outcome indicators will be built into ZetTrans monitoring system.

3.8.   Figure 3.1 below shows the interrelated nature of local and national outcomes, particularly how the development of the Shetland Transport Strategy will support the delivery of the local outcome indicators developed by SIC, and in turn the strategic objectives and national outcome indicators developed by the Scottish Government.

Figure 3.1 – Relationship between the RTS, Local Outcome Indicators, and National Outcome Indicators

3.9.   It should also be noted that the accompanying Delivery Plan will be used to provide, in more detail, information on those national and local outcome indicators that the specific interventions (actions and policies) proposed through this Transport Strategy will help to deliver.

You told us… that the Strategy objectives were generally supported. It was felt that applying the national objectives in a Shetland context has developed local objectives that are realistic for Shetland, but should also help to support the delivery of the national transport vision. Some comments suggested that

Economy

3.10. *National Objective -* To promote economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency.

3.11. *Shetland Context -* In a Shetland context, efficiency implies a particular responsibility to ensure the ongoing reliability, affordability and effectiveness of services and networks which are uniquely vulnerable to weather and natural forces and often costly to provide. However, this Strategy does not simply focus on the delivery of efficient transport services, but also improved transport systems and infrastructure that will help to grow Shetland's economy.

Economy Objectives	
ECON 1	Work to ensure ongoing reliability of Shetland's transport networks.
ECON 2	Work to ensure that external and inter-island ferry and air links are affordable to all (passengers, livestock and freight).
ECON 3	Work to improve the robustness of the transport system (public and private) against significant potential increases in fuel prices.
ECON 4	Support measures that efficiently address current and anticipated capacity constraints on the islands' transport links.
ECON 5	Deliver a transport system that is economically efficient, maximising the overall benefits across each of the five main objectives for a given sum of investment.
ECON 6	Work to optimise the wider economic benefits of the external links for Shetland.
ECON 7	Work to achieve beneficial service development and market growth on Shetland's public transport networks.

Social Inclusion and Accessibility

3.12. *National Objective* - To promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network.

3.13. *Shetland Context* - Social inclusion has a very direct relevance for Shetland in that the provision of reasonably convenient and economical services to small and scattered communities is particularly difficult and costly. The maintenance of transport services is essential to all Shetlanders but is unavoidably more expensive to provide because of remoteness and dispersion and the frequent need for air and ferry crossings. To achieve this shared objective, ZetTrans will seek imaginative solutions to the problems associated with serving small populations in remote communities and will consider how the need to travel can be reduced, for example by new forms of service delivery or measures involving decentralisation.

Social Inclusion and Accessibility Objectives	
SIA 1	Support the retention of measures to ensure continued operation and availability of external, inter-island and internal lifeline freight, livestock and passenger services and infrastructure to specified service levels.
SIA 2	Support measures to ensure access for all on the transport network.
SIA 3	Seek to ensure that the timings and frequency of internal and external passenger services take account of specific requirements of those accessing essential health and welfare services in Shetland and on the Scottish Mainland.
SIA 4	Maximise accessibility (frequency, operating day, service delivery options) to and from each community within constraints of funding, demand, technical and operational feasibility, and taking account of convenient access to essential services, and the social and economic well-being of the community.
SIA 5	Work to improve accessibility for vulnerable groups to essential services.

Environmental Protection

3.14. *National Objective* - To protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimise emissions and consumption of resources and energy.

3.15. *Shetland Context* - In a Shetland context, environmental quality is a particular concern. Any responsible transport strategy must also address the contribution that local action can make in addressing the global impact of transport. ZetTrans will give particular attention to safeguarding the environmental qualities of Shetland in its transport strategies, minimising the potential impacts of projects and services on the landscape, wildlife and archaeology of the islands. In order to address global concerns, ZetTrans will seek to promote transport technologies and modes that minimise emissions. This will include encouraging the use of alternative fuels, car-sharing, walking and cycling. Such an approach will complement efforts to improve health and to offer 'greener' tourism opportunities.

Environmental Protection Objectives	
ENV 1	Reduce carbon dioxide and greenhouse gas emissions, and the consumption of non-renewable resources arising from transport, travel and infrastructure in control of ZetTrans, SIC and its partners.
ENV 2	Encourage and facilitate reductions in carbon dioxide and greenhouse gas emissions, and the consumption of non-renewable resources arising from transport and travel in control of private users and other operators.
ENV 3	Encourage and facilitate walking and cycling for short trips.
ENV 4	Minimise impacts of transport and associated infrastructure on the terrestrial and water environments.
ENV 5	Reduce impacts of transport services and new transport infrastructure on landscape, the historic environment and biodiversity.
ENV 6	Support species native to Shetland through the roadside Biodiversity Action Plan and appropriate management and maintenance of road network.
ENV 7	Encourage design of transport infrastructure that is appropriate to Shetland.
ENV 8	Seek to minimise the adverse affects on natural drainage systems from roads run-off.
ENV 9	Seek to reduce the vulnerability of transport / infrastructure to climate change.

Safety

3.16. *National Objective -* To improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff.

3.17. *Shetland Context -* This general Ministerial objective will run through all strategy and operational decisions which the Partnership will make.

Safety Objectives	
SAFE 1	Ensure compliance with internal and external safety and security requirements.
SAFE 2	Implement measures that seek to achieve National Road Safety Targets.
SAFE 3	Encourage the elimination of driving under the influence of alcohol or drugs.
SAFE 4	Encourage improvement in seat belt compliance and new legislation with regard to the use of mobile 'phones.
SAFE 5	Implement measures to reduce fatalities, addressing particular concerns relating to single vehicle accidents.
SAFE 6	Discourage excessive and inappropriate vehicle speeds.

Integration

3.18. *National Objective -* To improve integration by making journey planning and ticketing easier and working to ensure smooth connection between different forms of transport.

3.19. *Shetland Context -* Transport integration by the alignment of timetables, ready provision of passenger information and through-ticketing is again of particular importance to Shetland where transitions between road transport, air and ferry services and longer travel distances are, by the nature of the islands, much more frequent than is typically the case throughout Scotland.

Integration Objectives	
INT 1	Deliver effective and integrated public transport links to and from Shetland's principal passenger transport interchanges at Sumburgh Airport and Holmsgarth Ferry Terminal, with the inter-island ferry service terminals, and the inter-island air service.
INT 2	Deliver effective transport integration opportunities and facilities at Shetland's principal passenger transport interchanges at Sumburgh Airport and Holmsgarth Ferry Terminal, and at Shetland's principal public transport hubs within Lerwick.
INT 3	In partnership with other Regional Transport Partnerships, encourage effective transport integration opportunities at Shetland's principal UK Mainland ferry terminals and airports.
INT 4	Maintain integrated freight facilities at each relevant ferry terminal.
INT 5	Deliver integrated and multi-modal ticketing across Shetland's public transport network.
INT 6	Provide effective journey planning information for visitors and residents for trips within, to and from Shetland.

External Objectives

3.20. Along with the core transport objectives, the Transport Strategy takes account of a series of key policies and strategies which influence to a significant extent the Transport Strategy. These principally include:
a) Shetland Island Council's Corporate Plan;
b) Shetland Community Planning Framework;
c) Shetland Islands Council's Single Outcome Agreement
d) Shetland Economic Forum's Economic Development Strategy;
e) Shetland Islands Council's Structure and Local Plans;
f)   NHS Shetland's 2020 Vision; and
g) Shetland Enterprise Business Plan.
Details are included within the Transport Strategy's Scoping Report.

3.21. The Transport Strategy also needs to recognise and work with the established plans of partner organisations that also have roles in delivering Shetland's transport network. These include:
a) Lerwick Port Authority[25];
b) SIC's Ports and Harbours Service[26];
c) SIC's Roads Service[27];
d) Highlands and Islands Airport Ltd[28];

e) The Scottish Government and NorthLink Ferries[29];
f) Loganair; and
g) Other external and internal passenger and freight transport operators.

Summary

3.22.   This chapter has outlined ZetTrans' vision and objectives for this Transport Strategy. In developing the Strategy's objectives, consideration has been given to the application of the national transport objectives in the Shetland context. Principles, which outline the way in which ZetTrans will work, have also been outlined within this chapter.

4. Appraisal of Options

The Strategic Options

4.1.   Initial appraisal work was undertaken to inform the overall direction of the Strategy, taking into account performance against the vision and objectives outlined in the previous chapter, as well as constraints such as potential funding availability.

4.2.   Table 4.1 is a summary of the strategic options. Each option has different budget constraints, but also implies different levels of accessibility.

Table 4.1 – Strategic Options Overview

Do Minimum	A continuation of current spending patterns and approach.
Cut Backs	Options designed to reduce expenditure, assuming there were reduced revenue and/or capital finances available.
Spend to Save	Development of infrastructure and services in the short term in order to save finances in the longer term. This infers the availability of external capital, but reduced revenue. Could also include measures to generate income.
Comfort	An improvement of current levels of service and hence improved levels of rural accessibility based on increasing levels of revenue expenditure. Built on the premise that ZetTrans could secure more revenue, but no extra capital.
Aspirational	A scenario including potential strategies and options that ZetTrans would wish to implement if there were no financial constraints i.e. reliant on ZetTrans securing more revenue and more external capital.

4.3.   Appraisal summary tables for the strategic alternatives are presented within the Appraisal Report. A summary of the **performance** of the five strategic options is indicated in Figure 4.1. It can be seen that there is no "out and out" winner; each strategic option has its own relative strengths and weaknesses. However, it is clear that the "Do Minimum", "Spend to Save" and "Comfort" scenarios generally out-perform the "Cut Backs" and "Aspirational" options.

4.4.   A second exercise was undertaken considering the **deliverability** of the strategic options, taking into account affordability, feasibility and public/political support. The outcomes are indicated in Figure 4.2. This clearly demonstrates that the "Cut Backs", "Do Minimum" and "Spend to Save" out perform "Aspirational" and "Comfort".

4.5.   In each of these diagrams, each element has been scored on a seven point scale between -3 and +3 (-3 representing a significant negative impact, and +3 representing a significant positive impact).

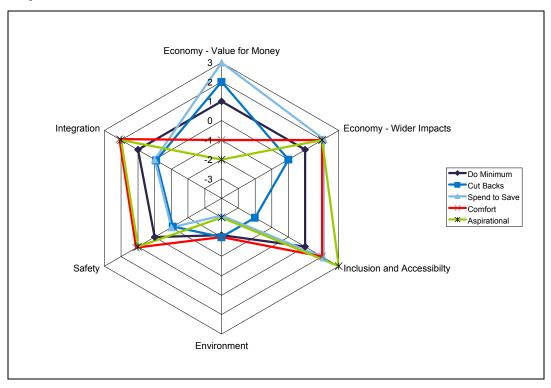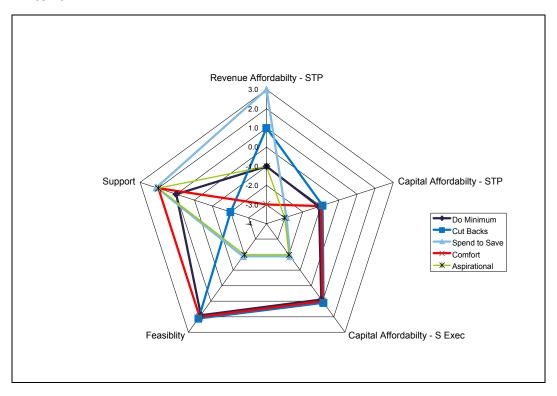**Figure 4.1 – Performance of Strategic Options against Planning Objectives**

Figure 4.2 – Performance of Strategic Options against Deliverability Criteria

4.6.   Recent attention given to achieving reductions in revenue expenditure particularly highlights the challenges in implementing beneficial schemes associated with additional revenue burdens. In this context, the focus of this Strategy points towards making best use of what is currently available, and continued management of current revenue expenditure levels.

4.7.   It was found that in the long-term, significant savings in revenue expenditure could principally only be achieved by a programme of replacement of ferries with fixed links. However, this is a high capital expenditure, and currently higher risk option. There appears to be most scope for capital investment when it can be demonstrated that this could achieve wider efficiency savings.

4.8.   Focus of more detailed appraisal for the next 10 to 15 years has therefore been placed on:
a) Limited cost (to ZetTrans/SIC) options for improving the performance of external links,
b) Cut-backs / Spend to Save approach to inter-island links, and
c) Cut-backs / Spend to Save approach to internal links.

> **You told us…** that the Transport Strategy should not undersell Shetland's requirements. You also highlighted the Spend to Save Strategy as the preferred option.

Appraisal of Individual Options

4.9.   A long list of potential schemes was developed, considering in detail the impacts associated with each individual scheme / policy / option. This work identified the most suitable option where there were a number of particular options, highlighted where more project specific work was required, and has been considered during the project prioritisation process. The appraisal of individual options has been presented in the Appraisal Report (see Paragraph 1.14).

Appraisal of the Preferred Packages

4.10.   The preferred package of measures is presented within the following three chapters. The policies, projects and interventions included in these chapters form the basis of the Implementation Plan.

4.11.   A final appraisal has been undertaken of these measures. In the short to medium term, the preferred strategy is principally based on the ethos of the existing approach, although with increased emphasis on securing the future of key inter-island links, promoting sustainable travel patterns, and measures to address equal opportunities, social inclusion and reducing emissions.

4.12.   In the medium to long term, dependent upon outcomes of studies to determine costs, the policy direction is either based around the development of a series of fixed links, or continuation of inter-island ferry services. This is supplemented by ongoing development of Shetland's external transport links, and ensuring that the internal transport network contributes to Shetland's economic, social and environmental objectives.

4.13.   Outcomes of this appraisal are included within the Appraisal Report. Charts summarising the main findings are presented on the next page. Figure 4.3 highlights that the packages typically perform well against the majority of the objectives. Taking a precautionary approach, negative impacts are scored in both packages, primarily due to the potential for significant negative environmental impacts from new fixed links and to a lesser extent, from ferry terminal re-construction. As schemes are developed and designed, adverse environmental impacts will be avoided or reduced by implementing the mitigation measures set out in Appendix F of this Strategy. In spite of these mitigation measures, there is the potential for environmental impacts to remain. All schemes with the potential for significant negative effects will be subject to full Environmental Impact Assessments.

4.14.   Figure 4.4 highlights the impacts of the packages against deliverability criteria. This again demonstrates that work is required to confirm the feasibility of the fixed link proposals, as well as work to demonstrate the case for funding these schemes.

Summary

4.15.   This chapter has presented the key outcomes from the appraisal process that has been undertaken to develop the Strategy. This has included an appraisal of strategic alternatives, appraisal of individual options, and a final assessment of the preferred packages. Overall, the preferred packages positively contribute to achieving the Transport Strategy's objectives, and are considered to be deliverable; pending the outcome of further feasibility work, and environmental assessments.

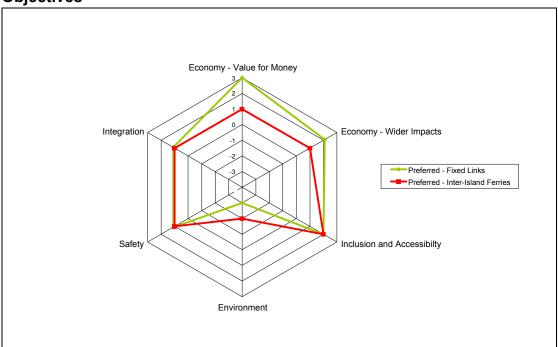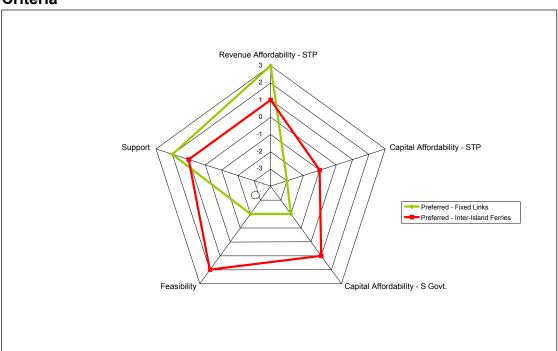**Figure 4.3 – Performance of Preferred Packages against Planning Objectives**

Figure 4.4 – Performance of Preferred Packages against Deliverability Criteria

5.   External Links

Introduction

5.1.   External links to and from Shetland are essential for both the local population and businesses to afford access for visitors and trade. The links are lifeline services, bringing in the great majority of Shetland's food, consumables and materials, and exporting Shetland's produce to external markets. The links facilitate access to health services based on the Scottish Mainland, retail, leisure and sporting opportunities, as well as the means of visiting friends and relations. The main challenge is to maintain (and develop further where possible) the existing levels of connectivity and identify ways in which services and linkages can be improved in terms of efficiency and affordability; bearing in mind that the majority of links are not directly controlled by either ZetTrans or SIC.

5.2.   Another key improvement area in enhancing external links is the connectivity between airports/ports and key destinations or onward travel hubs; delivering an integrated and efficient transport system on the entire journey not only for passengers, but also for freight and livestock.

Air Services

5.3.   Shetland is currently served by frequent flights between Sumburgh Airport and the Scottish Mainland, with the main hub being Aberdeen. Additional destinations include Edinburgh, Inverness and Glasgow. These Scottish Mainland services are operated by Loganair (franchised to British Airways until September 2008 and then to Flybe), using twin engine turboprop SAAB 340 aircraft. 2006 saw the introduction of a seasonal service linking Shetland to London Stansted and Faroe, operated by Atlantic Airways. Loganair will introduce a twice weekly flight to Bergen, in 2008, during the peak weeks in the summer. There are also two scheduled mail and newspaper services operating daily from Sumburgh Airport.

5.4.   The oil industry also operates services for oil service personnel using Scatsta Airport.

5.5.   It is also important to recognise the importance of the Air Ambulance services for Shetland. This service is directly procured by the Scottish Ambulance Service, and delivered in Shetland through use of a pressurised King Air aircraft, operated by Gama Aviation. The service is supplemented by the oil sector helicopters based at Sumburgh Airport.

Case Study – Airports in Shetland

Scheduled air services to UK Mainland and Scandinavia are provided from Sumburgh Airport, operated by the state-owned Highlands and Islands Airports Ltd (HIAL), in the south of Shetland Mainland. Sumburgh is Shetland's principal airport and handled record passenger numbers in excess of 136,000 in 2005/06 – an increase of 18% from the previous year. Work was recently finalised on an extension to one of the runways at Sumburgh, which improves the operational reliability of the airport by allowing planes to take off and land with full loads in a wider range of weather conditions than before. As part of the runway extension works, Sumburgh Airport has also introduced a new instrument landing system (ILS).

There is also an airport at Scatsta, which is operated by the oil industry. Current development work will allow it limited capability to handle diversions of scheduled services from Sumburgh, although there are certain logistical difficulties in achieving this. Going forward, ZetTrans aims to facilitate formal protocols for the use of Scatsta Airport as a diversionary airport for scheduled services to and from Shetland during periods of adverse weather conditions affecting operational reliability.

Tingwall Airport, located in the central mainland around 6 miles from Lerwick, is the base for Shetland's inter-island flights.

5.6.   ZetTrans is committed to partnership working with existing air operators throughout the life of this Strategy in order to seek improvements to existing services to UK Mainland (frequencies, routes and timetables), delivery of affordable fares and improved customer care. To assist in this, we will take a proactive approach to the monitoring of external air services, focussing on service levels, reliability and fare levels.

5.7.   During 2006, recognising the essential role of Shetland's air links to the Scottish Mainland, the Scottish Executive introduced an Air Discount Scheme. This has led to Shetland residents being offered significant reductions on air fares. The discount is exclusive of tax, and does not apply to incoming passengers. Going forward, ZetTrans support the continuation and development of the Air Discount Scheme, and will use future evaluations of the scheme to present the case for discounts to be extended to visitors to Shetland.

You told us… With regards to air travel, the Air Discount Scheme and Air Route Development Fund were recognised as key catalysts for the improvement of services to and from Sumburgh. Links to London were strongly supported and some consultees urged that the Transport Strategy be used to explore potential additional links to Scandinavia and other parts of Europe. On the other hand, some groups highlighted that air transport is the most environmentally damaging mode of transport.

In summer 2008, Loganair will introduce an air link between Sumburgh and Bergen, Norway's second largest city. It is considered that this link will deliver significant economic benefits to the local economy by providing quick, easy, reliable transport for residents, tourists and businesses that want to travel between Shetland and Norway and at the same time will strengthen Shetland's cultural links to our Scandinavian neighbours.

5.8.   Historically, SIC has pursued the introduction of Public Service Obligations (PSOs) for the lifeline air service between Shetland and UK Mainland, which involves putting the operation of these routes out to competitive tender, with the public sector specifying service and fare levels. ZetTrans will investigate the introduction of Public Service Obligations for lifeline flights to and from Shetland.

5.9.   We will also support HIAL in their continued development and improvement of Sumburgh Airport and will support in principle further enhancements that improve operations and reliability at the Airport. We will seek to ensure that Shetland's air services and airports are operated in full accordance with relevant legislation, including safety and security regulations, and Disability Discrimination Act policy, recognising their importance in the transfer of those requiring health-treatment. With a concern for both reducing the impacts of climate change, and reducing the impact of fuel price increases, we will also support external air operators' attempts to secure improvements in fuel efficiency.

Context: Aviation and the Eddington Report

The HM Treasury / Department of Transport's recent study into Transport considered future policies for aviation, and is likely to inform future policy development within the UK and Scotland. The recommendations point towards users increasingly being required to pay the full environmental costs of their journeys. It was found that "*any growth in aviation needs to be sustainable, and must take full account of its environmental costs. One of the most effective mechanisms for achieving this is by ensuring that air travellers pay the full environmental costs of their journey. The principle of ensuring that users pay their full external costs was supported by the Government in the Air Transport White Paper and was strongly supported by the Stern Review of the economics of climate change*".

Given the importance of Shetland's lifeline air routes, it will be essential that ZetTrans, Hitrans, and the Scottish Government work closely in forming rational and coherent policies in respect of the Highlands and Islands air network.

5.10.   With regards to the future development of external air services, we will continue to work in partnership with the Scottish Government, Enterprise

Agencies, Tourism Agencies and HIAL to seek growth of routes to and from Shetland. Going forward, and in seeking to maximise the opportunities presented by the Air Route Development Fund, particular emphasis will be given to the introduction of new and improved services between Shetland, continental Europe and Scandinavia. To inform and identify air service improvements and new route opportunities, we will undertake comprehensive external links origin / destination surveys.

5.11.   Further to encouraging improvements to air services operating to and from Sumburgh Airport, ZetTrans recognises the importance of reliable and attractive surface access connections to and from the airport. Further information on our proposals to improve the surface accessibility of the airport, specifically by public transport, are presented in Chapter 7. In a similar manner, we will also work with neighbouring RTPs and other stakeholders for improved public transport services and facilities at Shetland's UK gateway airports (Aberdeen, Inverness, Edinburgh and Glasgow).

Air Freight Services

5.12.   Due to the high cost of air freight and the limited available bulk capacity, air freight is most suited to urgent parcels and high value goods, whilst sea transport is the most economic freight solution for heavy goods.

5.13. Through the life of this Strategy, ZetTrans will support the continued provision of air freight services to and from Shetland on a commercial basis.

External Ferry Services

5.14.   There are two scheduled ferry services currently operating to and from Shetland. The main service is a lifeline ferry service and is subsidised by the Scottish Government. The subsidy is periodically tendered and the current operator is NorthLink Ferries Ltd who are contracted to operate the service until June 2012. Four vessels are operated on the route carrying passengers, cars, freight and livestock. Services operate seven days a week and are based on an overnight passage to Aberdeen with some calls at Kirkwall in Orkney thereby also providing a Shetland to Orkney ferry service. In the past a specialist livestock ship has been chartered to provide additional capacity for peak autumn demand.

5.15.   Shetland Line also operates a freight lift-on lift-off container shipping service between Aberdeen and Lerwick. ZetTrans is aware that the Scottish Government is tendering the provision of this service.

You told us… that you generally believe that Shetland's external links have vastly improved in recent years. The lifeline ferry service provided by NorthLink was praised by many, although the lack of cabins was frequently

noted.

Since consultation was undertaken on the preparation of this Transport Strategy, NorthLink have increased the number of passenger cabins available on the *MV Hjaltland* and *MV Hrossey,* from 95 to 117 (an increase from 280 to 356 berths). While this has led to some improvements, it is still believed that there could be a requirement for additional cabin capacity. Traveller Needs Studies are being undertaken to gain a deeper understanding of views on various aspects of Shetland's external transport services, including those on the NorthLink ferry service. The findings from this work will be used by ZetTrans to lobby for additional improvements where this is supported by user demand.

Ferry UK

5.16.   Through the life of the RTS, ZetTrans will continue to lobby for improvements to the existing Northern Isles Ferry Service. Focus areas in this regard will be lobbying for sufficient cabin availability, ensuring that timetabling proposals suit the needs of Shetlands population, and pressing for appropriate and affordable freight and livestock arrangements. In terms of operational improvements, we will also seek to ensure that the North Isles Ferry Service is delivered in full accordance with relevant safety and security regulations and Disability Discrimination Act policy. Improvements in the fuel efficiency of the vessels will also be supported during the life of this Strategy.

5.17.   We will also lobby for continued operation of freight subsidy arrangements for the NorthLink service and support the development of subsidy for Lo-Lo freight in recognition that the majority of freight travelling to and from Shetland has no option but to travel by sea.

5.18.   ZetTrans recognise that a proactive approach to the monitoring of external ferry services, with regards to service reliability, cabin and vehicle deck availability, freight and livestock issues, fare levels, and customer care is required in order to provide the evidence base central to making the case for improvements. It is recognised that the NorthLink contract already requires considerable reporting of service information and we will discuss with Northlink a mechanism for accessing this data.

5.19.   ZetTrans supports the existing arrangements for procurement and tendering of the Northern Isles Ferry Service and will seek to ensure that future improvements are built into the specification of future tenders. We will also consider options for the future development of the Northern Isles Ferry Service, including alternative vessel options and route configurations, in order to inform future reviews of the service. The review of options will build on work undertaken through the Northern Maritime Corridor Study, taking into account the needs of passengers, freight and livestock and the different elements of

Shetland's economy. To inform the development of future options for the NorthLink service, ZetTrans will undertake an extensive Origin/Destination and Traveller Needs Study involving surveys and analysis of inbound and outbound passenger, freight and livestock movements, by both ferry and air services and current non-travellers.

Context: Future Vessel Options for Northern Isles Ferry Services

Through the Northern Maritime Corridor (NMC) project, a report[30] was published in 2006 examining future vessel options for the Northern Isles Ferry Services. This report discussed the possibility of introducing larger combined passenger and freight vessels onto the Northern Isles Ferry Service, replacing the four existing passenger and freight vessels (the *MV Hjaltland* and *MV Hrossey, as well as the freight-only vessels MV Hascosay* and *MV Clare*).

The NMC report found that there could be substantial environmental and economic benefits delivered through the operation of two larger combined passenger and freight vessels (ropax), over the existing four vessels operated on the route at present. Comparing the performance of new ropax vessels worldwide of between 120m to 200m in length (similar in facility provision to the 125m NorthLink vessels, *MV Hjaltland* and *MV Hrossey*) the report made the following conclusions:

"Compared with other ropax ferries of over 120m in length, Hjaltland/Hrossey appear to be two of the most inefficient and environmentally unfriendly ships built in recent years by virtue of their single freight deck, extremely high installed power, and hence very high fuel consumption relative to payload. The 24-knot ropax Hjaltland (and her sistership) is up to five times worse off in terms of fuel efficiency compared with other ropax ferries of between 120-200m length overall. Reflecting these inefficiencies, capital and operating costs for Hjaltland/Hrossey are more or less the same as would be the case deploying two much larger ropax ships each offering 4.5 times greater freight/car capacity, the latter also benefiting from reduced installed power of 11%, and offering similar service speed of 23-24 knots. Deployment of two such 'standardised' and more efficient large ropax ships would avoid the need to employ two separate RoRo freight vessels, as is current practice, thereby generating significant cost savings."

ZetTrans recognises that *MV Hjaltland* and *MV Hrossey* were specifically built to be accommodated on the existing shore facilities in Aberdeen Harbour and that their operational parameters were accepted as a consequence of this decision. It is also aware that the larger ropax vessels suggested within the report for the route cannot be accommodated in Aberdeen Harbour as it is presently configured.

The debate necessary to inform future service specification is whether the benefits of larger (and fewer) vessels outweigh the possible disadvantages

and costs of modifying Aberdeen Harbour or relocating to another Scottish Mainland port. Another issue to be considered would be the changes in operational flexibility and resilience by dispensing with the current freight vessels.

ZetTrans recognise the importance of this debate, but believe that there is a need for more robust and quantified information on passenger and freight trip origin and destinations, delays and disruptions, as well as an appraisal of possible future service options including vessel/fleet sizes and configurations prior to being able to provide a view on this issue. To this end, ZetTrans will commission origin/destination surveys, including traveller needs analysis, the results of which will be used to influence the future development of the Northern Isles Ferry Service.

5.20. Over the course of the RTS, ZetTrans will continue to meet with the operator of the Northern Isles Ferry Service on a regular basis to discuss operational issues, while improvements to the services will also be informed through discussions of the ZetTrans External Transport Forum.

Case Study – Origin/Destination and Traveller Needs Survey

ZetTrans is undertaking an Origin/Destination and Traveller Needs Survey of passengers and freight to collect information on travel patterns and reactions to possible changes in external transport provision. Data collection methods involved in this extensive study include:
- telephone survey interviews with a random selection of households across Shetland;
- face-to-face interviews with visitors travelling on the external air and ferry services prior to departure at Sumburgh Airport and Holmsgarth ferry terminal respectively; and
- surveys with local businesses to generate information on freight traffic and, in particular, origins and destinations of goods.

A further element of the study involves surveys with 'current non-travellers' to understand if transport provision, rather than other factors, acts a barrier to visitors coming to Shetland, through surveys of those who have requested Shetland tourist information in the past.

The work will seek to identify the priority areas for external transport improvements, allowing ZetTrans and SIC to better direct their influence over improvements to external transport services, and potentially to inform funding bids to the Scottish Government and Shetland Islands Council. Information generated will also be used to increase ZetTrans' knowledge and understanding of current passenger and freight travel patterns to and from Shetland and to inform the development of policies and potential improvement options, such as future options for the development of the NorthLink ferry

5.21.   In recognition of the important socio-economic role played by the NorthLink service to communities within the Hitrans and Nestrans boundaries, ZetTrans will also meet regularly with our fellow RTPs to discuss specification and policy issues regarding the service. With specific regards to Nestrans, for example, ZetTrans will work with Nestrans and other stakeholders to deliver improved transport integration opportunities and facilities at Aberdeen Harbour, considering passengers, freight and livestock.

5.22.   We will also work with Lerwick Port Authority and NorthLink in seeking to ensure that Public Transport links, parking and interchange facilities at Holmsgarth Ferry Terminal are adequate. Further information on our proposals to improve access to Shetlands key transport interchanges are presented in Chapter 7.

European/Scandinavian Ferry Link

5.23.   In previous years, Smyril Line operated a passenger/freight service linking Shetland to Scandinavia, Faroe and Iceland. While this service ceased operation to Shetland in 2007, ZetTrans will continue to support the investigation of the potential for Scandinavian/Continental Europe ferry links.

You told us… there is support for existing and future Scandinavian ferry services but only if this does not take funding away from vital internal transport services.

Ports and Harbours

5.24.   Shetland has three principal ports; Lerwick is operated by Lerwick Port Authority, whilst the Port of Sullom Voe and Scalloway Harbour are operated by Shetland Islands Council. Shetland Islands Council also operates a number of smaller harbours across Shetland – principally at Walls, Mid Yell (Yell), Symbister (Whalsay), and Cullivoe (Yell).

5.25.   ZetTrans supports in principle the ongoing strategic development of Shetland's Ports and associated facilities, including consideration of the most appropriate model of provision of the services and facilities, particularly in the light of Shetland's changing economic opportunities. This includes full consideration of established plans for Lerwick Port Authority, Sullom Voe and Scalloway Harbour. A key consideration of ZetTrans throughout the life of this Strategy will be to ensure that access to Shetland's principal ports continues to be adequate, particularly for HGVs carrying freight.

5.26.   On the Scottish Mainland, ZetTrans will continue to support Aberdeen Harbour Board's ongoing work to improve the operational reliability of the harbour.

Bulk Freight Transport

5.27.   In addition to oil tanker movements related to Sullom Voe terminal, Shetland's industry relies on a number of bulk freight transhipments, typically utilising chartered coasters or reefers. These are important for the import of salmon feed, building materials, and export of scrap metal and processed fish products.

5.28.   Recent changes have been made in relation to the subsidy support that was previously available for these types of bulk transport; and most support has now been withdrawn for many types of bulk freight going to and from Shetland. This appears incongruous with the availability of subsidy for other types of sea freight in Shetland and national policies to encourage short-sea shipping. ZetTrans will therefore lobby the Scottish Government for appropriate subsidy arrangements to support bulk freight movements to and from Shetland.

6.   Inter-Island Links

Introduction

6.1.   In developing the Inter-Island strategy there have been some key challenges to consider, such as the limited amount of available capital and the pressures to reduce current levels of spending. There is also the over-riding requirement to secure the availability of existing links in the face of ageing vessels which are potentially becoming non-compliant, and the number of ferry terminals now requiring significant structural upgrading or replacement. This element of the Strategy has considered the potential of developing fixed links, and the ongoing delivery of the inter-islands air service.

Fixed Links

6.2.   Work on appraising strategic alternatives has confirmed the desirability of developing a fixed links strategy for Shetland – principally for the benefits accruing from reduced revenue burdens, but also facilitating improved accessibility and wider opportunities for service delivery efficiencies. The principal links to be considered are between Lerwick and Bressay, Mainland Shetland and Yell, Yell and Unst, and also Mainland Shetland and Whalsay.

> **You told us…** Consultation with, among others, Shetland's emergency service providers (the police, fire and ambulance services) highlighted strong support for the development of fixed links. Fixed links would provide direct and quicker access to islands, whilst potentially allowing services to pool resources.

6.3.   In considering previous work, ZetTrans has reviewed the outcome of a number of independent inter-island sub-sea tunnel feasibility studies. This has confirmed that there is the potential requirement for significant levels of capital funding for such projects, indicating the necessity for external funding support.

6.4.   The work also confirmed that there is still a large variance between "appraisal costs" (i.e. accounting for the high levels of uncertainty and risk which would currently be associated with any projects in Shetland) and reported "out-turn costs" from sub-sea tunnelling experience in Faroe / Norway. If costs using the former are assumed, continued ferry operation is the lesser cost, and hence more cost efficient option, over 60 years. However, if the lower costs are assumed, directly based on Faroe/Norwegian experience, there is a much stronger case for constructing tunnels.

6.5.   Given the long term potential benefit arising from fixed links, further detailed work is being undertaken to gather evidence to address current levels of risk and uncertainty; such as the standards and specifications that would be applied in the UK and the construction costs. If the outcomes from this work

are found to be favourable, this could be used to support business cases for fixed link investment, over and above that already planned. ZetTrans is keen to realise the benefits that could accrue from the development of fixed links and will feed the findings from the fixed links standards and costs research into the STAG appraisals for Bressay, Yell, Unst and Whalsay links.

Case Study – Tunnelling Standards and Specifications Study

Shetland has close links to Scandinavia and the Faroe Islands where sub-sea tunnels between some of their islands have been developed at much lower costs than those that have previously been established for possible tunnels between Shetland's isles.

As highlighted in the text above, if costs using the prescriptive application of UK standards to prices previously quoted are assumed, continued operation of ferry services may be the more efficient operation going forward. However, if lower costs are assumed, based on Faroe/Norwegian experience, there is potentially a much stronger case for constructing tunnels.

In developing this Strategy and specifically proposals for sustainable inter-islands links, ZetTrans appreciate the need to gain a better understanding of whether or not Shetland can achieve derogation from UK standards to build more cost-effective tunnels consistent with the Faroese/Norwegian experience.

To assist with this, ZetTrans has have commissioned a review of tunnel costs and outline risk assessments to confirm the robustness of business cases for fixed links between some of Shetland's inter-isles and in turn to provide the strategic information necessary to inform ZetTrans and the Council's decision-making process on this major issue.

Going forward, the results from this study will be fed into the various STAG appraisals being undertaken to identify preferred options for improving inter-islands links across Shetland.

6.6. ZetTrans also recognise that in addition to the assessment of economic and social benefits associated with any potential fixed links infrastructure, potential environmental impacts, such as effects on biodiversity (including all designated sites and protected species), cultural heritage, the landscape, the water environment and other relevant issues, will be a central issue considered as part of the decision making process.

You told us... Fixed Links
Results from consultation suggested that there was much support for the development of fixed links, particularly between Unst and Yell. Some of the arguments in support of fixed links development included increased access to employment opportunities, sustaining populations, maximising efficient use of

resources, reducing the ongoing capital and operational costs related to the ferry services and improved access to health and leisure services.

In contrast, other consultees highlighted some of the potentially adverse impacts of fixed links, stressing the importance of considering their wider social, cultural, scenic value, environmental and economic impacts in a wider Shetland context. It was also suggested that the provision of fixed links could lead to increased commuting and a subsequent adverse impact on the sense of place of islands and a loss of community spirit. These are factors which should not to be undervalued.

Going forward, ZetTrans will feed the findings from the Tunnelling Standards and Specifications Study into the respective STAG studies to examine the robustness of business cases for fixed links as part of the appraisal process against other options considered to sustain and improve inter-island links. ZetTrans recognise that only through robust appraisal of all relevant issues, along with effective and inclusive consultation, can these issues be taken forward and addressed.

Inter-Island Ferry Links

6.7.   Consideration is being given to functionally transferring the inter-island ferry service from SIC to ZetTrans. Until transfer, the responsibility for service delivery will remain with SIC.

6.8.   SIC currently operates a fleet of ferries to provide services to 8 islands with a total population of approximately 3,400 people. The services operate from a total of 15 terminals. Seven Ro-Ro vessels operate the services to the islands of Yell (2), Unst and Fetlar (2), Whalsay (2) and Bressay (1). Two Ro-Ro ferries are kept as relief vessels deployed to cover overhauls and breakdowns. Two Ro-Ro/Freight ferries operate the services to Out Skerries and Papa Stour, whilst one freight vessel carries loose cargo and up to 12 passengers to Fair Isle.

6.9.   In addition, SIC has recently procured the services of Atlantic Ferries Ltd. to operate the specified ferry service between Foula and Walls / Scalloway. This utilises a SIC owned vessel (MV New Advance) under a bare-boat charter to carry loose cargo and up to 12 passengers.

6.10.   There are a number of specific issues relating to the inter-island ferry service.
a)   The requirement to replace a significant number of the existing fleet, due to life expiry (i.e. age greater than 20 to 25 years), and compliance with stricter maritime legislation (MARPOL and SOLAS).
b)   New legislation has meant that replacement vessels require to be larger, in order to deliver the same level of capacity, due amongst other things to a requirement for passenger accommodation to be above the

main deck. This can require substantial investment in replacement terminals.

c)   Many of the existing terminals were designed for the first generation of ferries, introduced during the 1970s. Many are currently beyond the sustainable limits of their operation due to the increased size and weight of vessels now using them, and consequential increased berthing pressures. Recent surveys have confirmed the need for significant remedial and upgrading work at a number of the terminals.

d)   Any terminal and vessel replacement programme needs to be undertaken in a co-ordinated manner to ensure continuation of service and wider network benefits.

e)   It is known that there is a relatively urgent requirement to address peak period vehicle deck capacity issues on Whalsay and Bluemull Sound, and also address difficulties related to the timetabling of the services to Unst and Fetlar on Bluemull Sound.

f)   There are additional issues including demands to address ferry service reliability concerns on the Fetlar and Skerries routes, the possible replacement of the Bressay Ferry with a fixed link, service development options for Papa Stour, as well as continued delivery of the service to Fair Isle.

g)   There are also uncertainties due to the future imposition and interpretation of regulations and legislation.

h)   There is currently significant pressure on delivering operational cost savings. A range of options is currently being reviewed in order to secure these cost cuts, including reviews of fares, changes to service delivery, seeking to better match demand to supply, as well as opportunities to increase utilisation.

6.11. All of the above issues are in addition to the fundamental role played by the inter-islands ferry services in contributing to sustaining social and economic opportunities on each island. Each route is unique, but issues of commuting demands, facilitating access to health, social care, education and other essential services, providing reliable freight services, and promoting tourism all need to be considered.

6.12. ZetTrans recognises the valuable role played by ferries, particularly in the socio-economic sustainability of islands. In general terms, ZetTrans supports the principle of basing ferries on the islands that they serve, where practical, feasible, sustainable and appropriate.

Case Study – Analysis of Ferry Log Book Data

To assist with the development of this Transport Strategy, and future proposals for the inter-islands ferry service, analysis of log book data has been undertaken of all ferry routes. Over the last four years, this has captured on a route by route, and sailing by sailing basis, passenger and vehicle carryings, and the number of vehicles short-shipped as well as sailing and

6.13. The following sections provide some more specific discussion on the strategies proposed to help sustain and deliver improvements to each of the inter-island ferry routes.

Unst and Fetlar

You told us… there was strong support for a fixed link from Unst to Yell. With regards to Fetlar, there was a strongly held belief that both Unst and Fetlar would benefit from dedicated ferry services. This would enable rationalisation of current timetabling constraints and resources shared by both islands. It is felt that the constraints are leading to significant compromises that are detrimental to both islands.

The development of the breakwater at Hamars Ness was seen as vital in facilitating improvements to the ferry service that the Fetlar community wish to see and could deliver a number of other improvements to the island. It was also stated that a dedicated ferry/crew and breakwater facility in Fetlar, tied in with other development opportunities, would have a significant impact on both Unst and Fetlar's futures by allowing each island to have more influence in addressing their own particular needs.

6.14. In developing this Strategy, aspirations to consider the Unst and Fetlar links separately and to base a ferry on Fetlar have been taken into account. ZetTrans are currently progressing two distinct but interrelated studies to help inform the development of the Bluemull Sound link. Firstly, ZetTrans is undertaking a Bluemull Sound STAG appraisal examining the full range of options for this link, including fixed links, ferry terminal replacement, replacement ferries, berthing arrangements and alternative crewing and timetable arrangements. The findings from the Tunnelling Standards and Specifications Study will be fed into this Study.

6.15. A second work stream recently completed has specifically explored the requirements for and practical implications of basing a ferry on Fetlar and the development of facilities to accommodate that. This study recommended the provision of funding towards the construction of a breakwater and small boat berthing facility in Fetlar, in recognition of the benefits to Fetlar and the North Isles in terms of improved service delivery, and as a catalyst to Fetlar's

social and economic development. Going forward, ZetTrans will continue to make the case for funding and delivery of this important infrastructure.

Case Study – Bluemull Sound STAG Study

ZetTrans has begun a study to examine options for transport links across Bluemull Sound, connecting the island communities of Unst, Fetlar and Yell. The remit of the study is *'To identify means of providing sustainable efficient transport links across Bluemull Sound for the long-term and identify the most appropriate actions to carry forward to implementation for the benefit of Shetland as a whole.'*

The study is being taken forward in accordance with the STAG methodology, involving objective development, extensive community and stakeholder consultation, option generation and sifting, and appraisal of options against the local study objectives as well as national objectives on the economy, safety, environment, accessibility and integration.

As highlighted above, central to the successful development of this Study has been extensive consultation, including press releases and articles, questionnaires distributed to all residents in Unst and Fetlar, public meetings, face-to-face and telephone interviews with local service providers and businesses, and workshops with youth groups. Initial findings from this consultation confirmed high levels of support for the development of fixed link infrastructure between Unst and Yell, and the provision of a dedicated Fetlar service.

A working group comprising local councillors, community representatives and ferry crewmen has also been formed to provide input to the study and act as a sounding board at key stages in the STAG process.

The study is expected to report on the results of the appraisal in summer 2008.

6.16.   Working with a scenario that a Yell-Unst fixed link is not found to be viable in the short to medium term, ZetTrans proposes the following actions:
a)   Recognising that the effectiveness of zero fares will be reviewed and that fares may be re-introduced to the route in 2008.
b)   Replacing existing terminals at Gutcher and Belmont.
c)   Within the terminal redevelopment, considering alternative overnight berthing facilities and locations.
d)   Replacing of the existing vessels MV Fivla and MV Geira.
e)   Exploring the feasibility of an additional crew/passenger only vessel.
f)   Continuing to work with the Fetlar community to make the case for the development of infrastructure improvements on the island to address concerns regarding the reliability of the service to Fetlar, the case for all weather berthing protection at Hamar's Ness, and also the case for

basing a ferry on Fetlar possibly providing a dedicated service to the island. ZetTrans is committed to an urgent and early resolution of these outstanding issues, recognising that this will only be achieved through the collation and presentation of robust evidence, partnership working, and effective consultation with the Fetlar community. It also recognises that the link to Fetlar cannot be considered entirely in isolation of the Unst - Yell link.

6.17. A short term aspiration of the communities was for the introduction of an additional crew to allow the second Bluemull Sound vessel to be manned for seven days a week. ZetTrans recognises that this would enable the existing Bluemull timetable to be regularised, and provide a consistent level of service between Monday and Saturday. This could be undertaken on either a full time or seasonal basis, addressing the seasonal peaking which occurs on the route. However, spending constraints do not currently facilitate this opportunity.

6.18. A temporary arrangement was introduced for the summer of 2007 including a reduction in the crew number on duty on this route and changes to the rostering system which allowed the second vessel to operate scheduled sailings on Saturdays without increasing costs. In addition, the second vessel berthed overnight at Fetlar in clement conditions during the week giving an additional commuter sailing from Fetlar in the mornings and to Fetlar in the evenings. Community consultation on Fetlar revealed overwhelming support for these arrangements, which enabled the timetable to be improved such that people on the island considered there to be more opportunity to access facilities off the island, such as accessing regular work opportunities on Yell, and that there were more opportunities for visitors to come to the island. In addition to this, the Unst community also recognised the service improvements that this change brought to its services. ZetTrans supports the continued operation of a more flexible Fetlar ferry service during the summer timetable and will consider measures to improve this situation further.

Bressay

6.19. ZetTrans proposes continued operation of the existing ferry service until a preferred option has been identified for a future link between Bressay and Shetland Mainland. ZetTrans is currently progressing a 'Bressay Links' STAG assessment examining future options for a link to Bressay, whether this is the continued operation of a ferry service, or the development of fixed links in the form of a bridge or a tunnel.

Case Study – Bressay STAG Study

An overwhelming view expressed during consultation in relation to links to Bressay was that there was a need to draw a line under the previous debate over the proposed 'Bressay Bridge' and to revisit this issue with a fresh pair of eyes. ZetTrans acknowledges this and has initiated a 'Bressay Link' study

examining all possible future options to provide an efficient link between Bressay and Lerwick, whether this is in the form of an improved, reconfigured ferry service, a bridge or a tunnel.

This study is being undertaken in accordance with Scottish Transport Appraisal Guidance (STAG) and is being taken forward by the Bressay Link Group, which is led by ZetTrans in co-operation with SIC, LPA, and local community and ferry representatives.

The remit of the STAG Study, as agreed by the Bressay Link Group, is 'To identify means of providing sustainable efficient transport links between Bressay and Mainland Shetland for the long-term and identify the most appropriate measures to carry forward to implementation for the benefit of Shetland as a whole.'

Key features of the STAG process have included the development of objectives, extensive community consultation, option generation and sifting, and option appraisal against the study objectives and various economic, social and environmental criteria. If a fixed link is found to be the preferred option, this will require to be prioritised against any future North Isles fixed link proposals.

Whalsay

6.20. ZetTrans is committed to the improvement of the Whalsay ferry service and is currently progressing a STAG Part 2 Study examining future options for the service including consideration of new vessels and terminals. The study builds on a STAG Part 1 Study which was completed in 2005 but put on hold due to the development of the Transport Strategy.

You told us… Consultation with Whalsay stakeholders highlighted concerns over the lack of progression of the Whalsay Links Study, which appeared to have come to a standstill. It was stressed that urgent work on the Whalsay linkspans is required; otherwise the service is in danger of failing altogether. The opinion was also expressed that some people in Whalsay would prefer to see investment in fixed links to the Mainland, rather than continued expenditure on ferries. ZetTrans remains committed to the progression of the recommendations from the Whalsay STAG report.

Case Study – Whalsay STAG Study

In June 2005, a STAG (Part 1) assessment was undertaken considering future options to provide an improved, sustainable transport link between Whalsay and Shetland Mainland. The STAG Study was commissioned in recognition of the various issues facing this link, the central focus of which concerned the ageing infrastructure and the potential inoperability of the transport link in the medium- and long-term.

On the back of the findings from the STAG Part 1 Report for Whalsay, ZetTrans recommended the following options:
a)   Finalisation of option appraisal work for the Whalsay terminal, with a specific focus on the feasibility and costs of a new terminal at North Voe, relative to an extension of Symbister Harbour.
b)   Replacement of the existing terminal at Laxo. In addition, further appraisal and possible construction at Vidlin as a diversionary port.
c)   Replacement of existing terminal on Whalsay – either Symbister Harbour extension or a new terminal at North Voe.
d)   Procurement of a replacement vessel, similar to MV Daggri and MV Dagalien. MV Linga be retained for service on the route.

Finalisation of the Whalsay terminal and vessels appraisal was put on hold due to the development of the Transport Strategy and the need to consider transport proposals for Shetland as a whole. However, since the completion of the initial Transport Strategy in March 2007, ZetTrans has commissioned a STAG Part 2 Study for Whalsay which is nearing its conclusion.

Going forward, ZetTrans is committed to the delivery of a sustainable, economically efficient transport link between Whalsay and Shetland Mainland, and will seek to implement the recommendations from the Whalsay STAG Part 2 Study.

Yell

6.21.   Following recent investment, ZetTrans proposes continued operation of the current Yell Sound ferry service.

6.22.   The existing vessels MV Daggri and MV Dagalien will require to be replaced early in the next twenty year implementation period, assuming that a fixed link has not been developed. A review of the terminal facilities will be carried out if a fixed link is ruled out.

Case Study – New Yell Sound Ferries
In 2006, an evaluation[31] was undertaken examining the economic and social impacts delivered following the introduction of the New Yell Sound Ferries MV Daggri and MV Dagalien, which were introduced in summer 2004. The evaluation included telephone surveys with residents of the North Isles (Yell, Unst and Fetlar) as well as interviews with businesses.

Overall, results from this post-evaluation study have been very positive, with the new ferries successfully addressing the constraints imposed by the lack of capacity offered by the former ships. The vessels have removed or reduced the need to book in advance, provided a greater ability to travel at the times required, and enabled travel arrangements to be changed at short notice.

Improved comfort of journey through better on-board facilities and a more comfortable crossing also contributed to the very high levels of satisfaction with the service.

Specific results from the household surveys revealed:
- An estimated 6% increase in North Isles residents' trips on the Yell Sound service;
- 75% stating that it is now "a lot" easier to travel on their preferred sailing;
- The new service seen as having the potential to contribute to increased tourism and allow easier movements of freight; and
- Almost all (95%) of the households now either "very satisfied" (57%) or "satisfied" (38%) with the present Yell Sound service.

For businesses, notable impacts included:
- The number of companies booking the ferry in advance has fallen by 50%;
- 83% of companies have enjoyed operational benefits as a result of the new vessels; and
- 87% are now either "very satisfied" (62%) or "satisfied" (25%) with the present Yell Sound service.

Despite these benefits, it is acknowledged that improved access can be a double edged sword with some consultees stating that North Isles residents now shopped more frequently in Lerwick and that local hauliers now faced increased competition from mainland Shetland companies.

Finally, the report outlined that the new ferries only offer the **potential** for economic growth. While to date there have been only limited economic impacts in terms of increased sales to North Isles businesses, the creation of a more effective ferry service means that transport should not act as a constraint on potential future developments. Maximising the opportunities from the much improved service will require the continued and concerted efforts of the North Isles communities, businesses and the public sector.

Fair Isle

6.23. While the inter-islands air service is the main form of transport used by passengers travelling between Fair Isle and Shetland Mainland, ZetTrans recognises the important role that the ferry plays in terms of the movement of freight and passengers to and from the island and, therefore, in the continued socio-economic development of Fair Isle. To this effect, ZetTrans proposes continued operation of the current ferry service, and in the medium to long term supports the replacement of MV Good Shepherd.

6.24. Due to changing patterns in visitor trips, the community expressed the desire for an additional weekly sailing during the autumn shoulder period. It is

considered that this could be secured at minimal additional cost and therefore SIC / ZetTrans will support the community's efforts to enhance the frequency of sailings during the course of this Strategy.

Foula

6.25.   The Foula community believe that a secure Foula based ferry is essential to the future sustainability of the island. ZetTrans recognises the wishes of the islanders to retain the ferry based on and crewed from Foula and the benefits that this brings to the socio-economic well-being of the community. It is as a result of this wish, and the current SIC policy, that SIC has recently contracted the Foula to Mainland Shetland ferry service to an independent operator. This contract is designed to last until June 2010. During the period of the contract, SIC / ZetTrans will monitor the operation and performance of the service.

Papa Stour

6.26.   The Papa Stour ferry service has recently been upgraded with the introduction of new terminals, refurbished linkspans, and the re-deployment of one of Shetland's existing Ro-Ro/cargo ferries (MV Snolda).

6.27.   Two issues were raised during the development of the Strategy. The first issue related to passenger capacity constraints, as MV Snolda is certified to carry only 12 passengers. To overcome this, the short-term deployment of MV Thora during the summer timetable is being considered. In the longer term, the replacement of MV Snolda provides an opportunity to overcome this passenger capacity constraint. ZetTrans will undertake close monitoring of passenger utilisation in the short term.

6.28.   A second issue is believed to be the current timetable, which restricts opportunities for islanders to spend productive time on Shetland Mainland. ZetTrans recognises the desirability of facilitating improved access for Papa Stour residents. An additional return sailing on the route, or the option of a later Wednesday afternoon sailing, is being considered to facilitate this.

6.29.   The cost of an additional sailing could be partially off-set by withdrawing the scheduled inter-island air service to Papa Stour, whilst retaining the air strip for charters and emergency evacuations for health reasons.

Skerries

You told us… the single most important issue related to the Skerries ferry service was resolution of the issue of allowing the ferry restricted access via the South Mouth entrance to the harbour at Skerries. It was stated that there had been lot of promises but no progress on this issue. ZetTrans is committed to a full and robust appraisal of this issue. Consultation highlighted the second highest priority for the Skerries community after South Mouth is

continuing Lerwick sailings. This was seen as important to those that do not drive. Concern was also raised about the perceived extra cost of getting freight to Vidlin if the Lerwick link was removed.

6.30. ZetTrans proposes the following implementation plan for Skerries.

a) A review of delivery of ferry service to Skerries, considering, amongst others:
   i. A Vidlin based service.
   ii. A new freight delivery structure.
   iii. Improved public transport connections between Lerwick and Vidlin.

b) ZetTrans recognises the community's aspirations for the dredging of the South Mouth entrance in order to provide an alternative, restricted ferry route, with the aim of providing reliability benefits. Analysis of log book data provides a baseline for further assessment. ZetTrans is committed to an urgent resolution of this outstanding issue, recognising that this will only be achieved through the collation and presentation of robust evidence.

Operational Issues

6.31. Underpinning the development of the inter-islands ferry service strategy and individual island proposals has been consideration of a number of operational issues affecting the inter-islands ferry services.

6.32. ZetTrans is aware that some interpretations of European Legislation potentially raise the prospect of Shetland's Inter-Island Ferry Service being subject to competitive tendering. ZetTrans will continue to monitor this situation and review its delivery of ferry services to ensure that it is fully prepared for this potential requirement. ZetTrans will continue to ensure that ferry services are operated in compliance with applicable national safety and security regulations and in accordance with Disabled Discrimination Act policy.

6.33. The issue of fares was frequently raised during consultation with island communities and island service providers. As a general principle, ZetTrans supports the delivery of fare structures on lifeline services that are affordable to users. However, we also recognise the necessity to balance this requirement with wider budgetary constraints, and external factors including increases in fuel prices.

a) Fares are currently suspended on Bluemull Sound services to allow economic regeneration after the RAF Saxa Vord Closure. The effectiveness of this policy will be reviewed, and fares may be re-introduced to the route in 2008.

b) Recent operational reviews have resulted in above inflation fare increases on all other inter-island ferry services.

c) ZetTrans will commit to considering options for generating additional revenue on the inter-island ferry services. This may include multimodal

tickets, tourist "hop-scotch" promotions, improved marketing of services and destinations, as well as options for encouraging higher off-peak utilisation.

Case Study – Fares Review

ZetTrans has commissioned a study to investigate ways of increasing utilisation and revenues on inter-island ferry services. The study includes an assessment of current ferry utilisation patterns and expected changes to this as a result of changes in the fare structure and pricing levels.

A number of issues will be considered in undertaking the review as follows:
- Operational – how will fare changes impact on volumes of customers travelling and on the ability for passengers/vehicles to be accommodated on the sailing of choice? How will the existing vessels/infrastructure/timetables cope with changes in demand patterns?
- Revenue budgets – what effect will changes have on fares income and service operating costs?
- Capital programme – will changes in patterns of demand have an impact on the Council's/ZetTrans island links programme?
- Technology – will changes have an impact on the technology requirements?

The review will also analyse sales of the different ticket types which currently exist, with specific consideration given to the impacts of:
- Free fares for the most remote islands;
- Free fares for all foot passengers;
- Introducing separate driver fares and splitting existing vehicle fares in to driver/vehicle elements;
- Removing the bands for charging commercial vehicles;
- Reviewing charges for tankers;
- Reviewing charges for commuters;
- Examine the opportunities for travel cards and season tickets;
- Off-Peak fares;
- Concession schemes; and
- Promotional fares with other operators/attractions.

The findings of this study will be used to inform the development of an improved, more flexible and efficient inter-island ferry service.

6.34.   National concessionary fares schemes currently apply to local bus routes, external air services, and external ferry services. However, they do not currently apply to inter-island ferries, with cost of concessions currently being met totally within SIC budgets. Using this Strategy, SIC and ZetTrans will lobby the Scottish Government to have this anomaly resolved.

6.35.   Against the backdrop of Council pressures to reduce operational costs across budget streams, this Strategy has also been used to consider potential

options and initiatives to maximise service efficiency from the inter-islands ferries network. Options that ZetTrans will consider at an operational level to achieve savings including:

a)   Altering frequencies to better match supply with demand;
b)   Considering alternatives to the practice of 24 hour manning and operation on the Yell Sound Service; and
c)   Re-configuring the Skerries service.

6.36.   Options to achieve added value from the inter-islands ferry service, through promoting the use of the ferries for chartered sailings and to offer wider services, for example as conference venues, will also continue to be explored throughout the course of this Strategy.

6.37.   ZetTrans also recognises the importance of a fuel efficient ferry network and will place a greater emphasis on fuel efficiency in the purchase of future vessels, and operation of existing ferry fleet. In addition to the environmental benefits associated with this, the delivery of a more fuel-efficient network will support wider efforts to achieve revenue savings across Council budgets.

6.38.   Consultation also revealed numerous comments related to ferry booking arrangements, particularly on the smaller isles. Going forward, ZetTrans will monitor the operational performance of the inter-island ferry service through the development and implementation of an e-log system. On the back of this, and through ongoing consultation with relevant community councils and Area Transport Forums, ZetTrans will seek to implement improvements to the current booking and ticketing arrangements. We will also continue to support the current community ferry hires system, and seek to further develop and improve the flexibility of the system through initiatives such as integrated ticketing for example.

6.39.   Another issue frequently mentioned during consultation surrounded the Variable Messaging Signs displayed at inter-island ferry terminals, with concerns raised that the value of the signs is being eroded due to a failure to keep the information displayed on these up-to-date. ZetTrans recognises the importance of these signs and will support measures to improve their information reliability. Other measures to improve service information, such as the introduction of SMS real-time information will also be considered during the life of this Strategy.

6.40.   Throughout the course of this Strategy, ZetTrans will also support the ongoing operation and availability of freight facilities for Fair Isle, Foula, Papa Stour and Skerries.

6.41.   Strategies to improve access to inter-island ferry terminals by public transport are set out in section 7.

Inter-Island Air Services

6.42.   Consideration is being given to the transfer of inter-island air service from functions from SIC to ZetTrans.

6.43.   The inter-islands air services are currently operated by Directflight Ltd, from a base in Tingwall, with scheduled flights operating to Foula, Fair Isle, Skerries and Papa Stour. The service is provided by two eight-seater "Islander" aircraft. Service delivery improvements are currently being progressed by Directflight Ltd, including plans for the improvement of the current booking system for inter-island flights.

Case Study - Inter-Islands Air Service
In January 2007 a new Britten-Norman BN2B-20 "Islander" aircraft was purchased by Shetland Leasing and Property Developments Ltd and leased to Shetland Islands Council / ZetTrans.

The plane, which will be based at Tingwall Airport is the first new plane servicing the islands since the introduction of inter-island flights in 1970 and should help to ensure that high quality, reliable transport links are maintained and operated to Shetland's most peripheral areas. It will supplement the existing "Islander" aircraft currently operating the route.

With the addition of a second aircraft based at Tingwall Airport, not only can the Transport Partnership provide reliable services to the outer isles but it introduces new opportunities to enhance services, essential to sustain and regenerate the remote island communities. A review on the future deployment of the second "Islander" aircraft has been undertaken through community consultation and will be used to identify opportunities to enhance service levels.

6.44.   Through the life of this Strategy, ZetTrans will continue to support the ongoing operation of Tingwall Airport as the Mainland Hub for the service, and facilities for passengers and small parcels. ZetTrans will also continue to support the ongoing operation of individual airstrips on each of the islands, most of which are owned and operated by local Airstrip Trusts with grant funding from the Council. The licensed airstrip at Fair Isle is owned and operated by the National Trust for Scotland. In addition, there are airstrips on Whalsay, Fetlar and Unst. The Whalsay airstrip is used by chartered aircraft but the Unst airstrip has been closed and is unlicensed following the downturn in usage, but continues to be maintained.

You told us… there are often capacity constraints on the inter-island flights, particularly Fair Isle, and to a lesser extent Foula and Skerries. You welcomed the purchase of a second "Islander" aircraft and outlined potential options for

the future deployment of this aircraft. Support was also offered for the chartering of flights to Unst and Fetlar.

6.45. Patronage levels on the inter-islands air services are greatest on services to Fair Isle, with consultation revealing problems of capacity constraint on this route. ZetTrans will continue to support the ongoing development of air services to Fair Isle and will consider opportunities to increase service levels to the island. Increased promotion of chartered services for visitors to the island will also be considered to address capacity constraint issues.

6.46. In Foula, the community expressed an aspiration for the existing winter service to include a second day return trip opportunity to Shetland Mainland. ZetTrans will examine opportunities for to deliver this.

6.47. ZetTrans supports ongoing development of the Skerries air service. Opportunities for enhancement will also be considered.

6.48. In combination with a review of ferry service patterns, it is recommended that continuation of the scheduled air service to Papa Stour is reviewed. ZetTrans supports the continued maintenance and licensing of the Papa Stour airstrip for charters and to facilitate emergency health access.

6.49. ZetTrans is aware of interest in re-opening Unst Airport in order to provide direct chartered air services to support the re-development of RAF Saxa Vord and will support this initiative. ZetTrans will also encourage the operation of chartered flights to Fetlar.

6.50. In terms of operational issues related to the inter-islands air service ZetTrans/SIC currently operates a differential air fares policy, with Island residents receiving significant reductions on standard fares. This is a policy that will be continued during the life of this Strategy.

6.51. Going forward, ZetTrans proposes continued monitoring of the operational performance and utilisation of the present inter-islands air service. Key to this will be ongoing consultation with relevant community councils and island communities in order to ensure that the inter-island air services continue to meet the needs of its users.

6.53   ZetTrans is also committed to working with its neighbours in Orkney to explore if there are any opportunities for collaboration in the procurement and delivery of inter island air services.

7. Internal Links

Introduction

7.1.   Internal links include walking, cycling, and road links and the provision of public transport services. Important complementary themes include the promotion of road safety, promoting sustainable travel patterns, reducing emissions, and supporting community / demand responsive transport provision.

You told us… the health improving potential of the Transport Strategy needed to be strengthened. While recognising that walking and cycling are not always feasible across Shetland, active travel should be promoted. Partnership working with NHS Shetland was also stressed during the consultation process and will be built upon in implementing this Strategy.

During the initial consultation process, a desire for improved walking opportunities within and between settlements was one of the most frequently raised comments.

Walking

7.2.   Walking is often over looked as a mode of transport, but is an essential element of many trips. As an activity, it is healthy, emission free, and can increase opportunities for social interaction within a community.

7.3.   As part of our efforts to increase the attractiveness of walking, both as a means of travel and for recreation, ZetTrans will support and promote the development of the Council's first Core Paths Plan.

Case Study – Shetland's Core Paths Plan

The term 'Core Paths' was introduced in the Land Reform (Scotland) Act 2003. This Act set out that all Local Authorities and National Parks have a statutory duty to draw up a Core Paths Plan that will *"provide the basic framework of routes sufficient for the purposes of giving the public reasonable access throughout their area. This basic framework of routes will link into, and support, wider networks of other paths".*

The concept of developing a path network in Shetland has been ongoing since 2003 when the Shetland Islands Council Access Improvement Scheme was set up. Through this scheme, over 90 routes have been identified and improved to date.

Core Paths in Shetland will cater for all types of users including walkers, cyclists, horse-riders, people with disabilities and families and are intended to:
- Support health lifestyles and health improvement initiatives;
- Promote walking and cycling as sustainable transport modes for everyday

7.4.   In addition to the proposals for the development of Shetland's Core Paths Plan, it is proposed that an audit of footway schemes is undertaken, focusing both on improvements to existing paths, for example through the provision of dropped kerbs and tactile paving, and the identification of potential locations for new links within communities, or between communities and key facilities (schools, health centres, halls, shops, and leisure facilities). Key to identifying potential improvements will be ongoing community consultation, such as with the Area Transport Forums.

7.5.   Furthermore, the provision of new footway schemes will be supported during the life of this Strategy, in the aim to provide safe and attractive local pedestrian networks within and between settlement areas. Where appropriate, ZetTrans and SIC will also investigate opportunities to utilise redundant stretches of the road network for walking/cycling purposes, and as part of the core paths network.

7.6.   Other measures designed to improve the accessibility of pedestrians and the attractiveness of walking are highlighted throughout this chapter, ranging from traffic calming initiatives designed to improve road safety, to travel planning measures which promote and raise awareness of the social and economic benefits of healthy, active forms of travel.

Context: Health and Transport

This Transport Strategy must address a number of health related issues, including how to respond to the growing need for people to take regular exercise to combat increased weight, raise fitness levels and reduce ill heath and the consequent demands for improved access to health facilities. Consultation undertaken during the development of this Transport Strategy also highlighted the need to strengthen the links between transport and health.

This has been taken onboard and ZetTrans proposes to take forward some specific initiatives that should help to both raise awareness of the health benefits of active travel and deliver on real, on the ground, improvements to facilitate active forms of travel.

In terms of active travel, working with partners NHS Shetland, ZetTrans propose to:
- Continue to develop and monitor the ZetTrans/SIC Travel Plan and support other organisations, such as NHS Shetland, with the development of their own Travel Plans.
- Continue to promote the development of School Travel Plans.

- Encourage walking through continuing to develop footway schemes;
- Promote cycling with the introduction of a cycle guide, and provision of appropriate facilities.
- Develop travel awareness campaigns promoting the use of sustainable and healthy travel modes.

In addition to the above, ZetTrans also has an important role in providing enhanced levels of access to health services, including local health centres and the hospital. The further development of DRT services provides a suitable response here. The health improvement role of public transport should also not be underestimated, as it is recognised that shopper and other bus services are key to the social interaction of elderly residents in society. It is hoped that the delivery of these initiatives will demonstrate the health improving potential of this Transport Strategy.

Cycling

7.7.   Like walking, cycling is a cheap, healthy and non-polluting form of transport. It is also an excellent way of exploring Shetland, as testified by the significant number of leisure cyclists during the summer attracted to the National Cycle Network which runs the length of the islands. Despite this, initial consultation revealed that cycling levels in Shetland are currently perceived to be low, with the topography, weather, and relatively long distances between destinations suppressing this activity.

7.8.   To overcome these barriers, ZetTrans is committed to increasing levels of cycling throughout Shetland and, working with SIC, will seek to implement cycle facilities and infrastructure that will help create the conditions key to achieving this. Working with the Council, ZetTrans will undertake an audit of potential cycle opportunities within Shetland, considering links within and between settlements and other key facilities.

7.9.   We will also continue to promote cycling through the provision of secure cycle stands at key locations within main settlements, and promoting the inclusion of cycling facilities within workplace travel plans. Cycle training in all schools will also be continued in order to encourage our youth population to participate in this healthy, active form of transport in a safe, responsible way.

7.10.   However, given existing constraints, the promotion of cycling for tourism and leisure purposes appears to offer the greatest potential to achieve increased levels of cycling. The most appropriate opportunities appear to be for the continued promotion and maintenance of the national cycle network, and support for a cycle route guide that could detail cycle hire and repair facilities, appropriate on and off road routes, and ferry connections.

Powered Two Wheelers

7.11.   Powered Two Wheelers (PTWs) include motorcycles, scooters and mopeds. These modes are typically low-cost forms of transport, and can be particularly convenient where public transport is not frequent, and walking or cycling is not feasible. They are also more fuel efficient than cars, although safety for motorcyclists is an important issue.

7.12.   Through the life of this Strategy, ZetTrans will consider initiatives for improving motorcycle safety, working with the police and motorcycle action groups to promote awareness campaigns and rider training initiatives aimed at motorcyclists and driver safety and awareness. We will also take account of the Institute of Highway Incorporated Engineers (IHIE) Road Maintenance Guidelines for Motorcycling, as well as the "Motorcycling in Scotland" Guidance Report[32] which has been endorsed by the Scottish Government. The introduction of specific signage on popular recreational routes used by motorcyclists will also be considered in order to increase driver awareness of motorcyclists and in turn to reduce accidents levels.

7.13.   We will also support the provision of secure parking facilities for motorcyclists in town centres and other locations where appropriate. ZetTrans will also continue to encourage consideration of appropriate facilities for PTWs within workplace travel plans.

7.14.   Similar to cycling, it is recognised that many tourists travel to Shetland to explore the islands on motorbike and we will therefore continue to support the promotion of motorcycling for tourism and leisure purposes. The most appropriate opportunities appear to be in working with partners to support the development of a motorcycle route guide that could detail appropriate routes.

Encouraging Sustainable Travel Patterns

7.15.   Access to a private car is an essential element for the majority of Shetland's population. Opportunities to change mode are limited. However, this does not mean that existing travel behaviour cannot be made more sustainable. Walking and cycling is appropriate for short trips. Lift sharing can be promoted. Sometimes public transport can be a viable alternative, and publicity can make potential users aware of the opportunities. Initiatives can be promoted which reduce the need to travel in the first place. Such initiatives can often have wider benefits; for health, social inclusion, local economies and communities, as well as the environment. Fuel efficient vehicle use can also be promoted, saving drivers' money, as well as reducing carbon emissions.

7.16.   ZetTrans realises that such schemes have to be applied thoughtfully in the Shetland context, to ensure that they are correctly targeted and applied. In the following section, attention is provided to the various travel planning

initiatives that ZetTrans will seek to take forward to encourage a travel behaviour change and the adoption of more sustainable travel patterns.

> **You told us…** that while the wider constraints in Shetland (e.g. the weather, absence of congestion, longer travel distances, low population densities, and the physical landscape) make it difficult to encourage travel behaviour change towards more sustainable modes, it was still important for Shetland to "think global and act local". Some consultees highlighted that despite these constraints, Shetland should look to make an equitable contribution to reducing carbon dioxide levels.

School Travel Plans

7.17.   A School Travel Plan is produced by school communities to identify issues relevant to journeys to and from the school, including concerns about health and safety. Increased levels of physical activity, raised awareness of environmental issues, and improved travel safety are key deliverables of the School Travel Planning process. Through surveys and debates, pupils, parents and staff identify areas where work is needed; for instance cycle storage, new walking paths, car parking restrictions and crossing points. Shetland's own School Travel Planning Co-ordinator also works with NHS Shetland, Eco-Schools and the Active Schools Co-ordinators on various projects when necessary.

7.18.   Through this Strategy, ZetTrans will actively promote the development of school travel plans recognising the benefits these can play in the promotion of safe journeys to school; the promotion of active lifestyles; and the promotion of increased environmental awareness.

> **Case Study – School Travel Plans**
>
> *Shetland's Progress*
> In 2007, 20 School Travel Plans had been completed with a further 7 ongoing. Following the development of School Travel Plans, many schools have successfully gained cycle racks and shelters through funding from Sustrans. High visibility items and cycle training packs were also awarded to all children who complete the cycle training programmes offered by Shetland's Road Safety Officer. The introduction of 20mph speed limits outside schools, improved footpath links, and the introduction of walking buses are further achievements of the School Travel Planning Process to date.
>
> *Junior Roads Safety Officers*
> The Junior Road Safety Officer (JRSO) project is a scheme developed by Road Safety Scotland to help schools to highlight local road safety issues. Many schools in Shetland have appointed their own JRSOs from Primary 6 or 7 who for a one-year period are responsible for putting up and maintaining a prominent notice board, running school competitions, giving class or assembly presentations and using the 'JRSO' website to promote road safety.

Workplace Travel Plans

7.19.   A Travel Plan is a general term for a package of measures tailored to the needs of individual sites, such as workplaces, and aimed at promoting more sustainable travel choices and reducing reliance on the car. Travel Plans help reduce the impact of travel on the environment and can contribute to improved health. In addition, they can make good business sense by reducing congestion around a site, easing parking problems and saving money on business travel[33].

7.20.   In 2008, ZetTrans developed a workplace travel plan for SIC/ZetTrans. Key components of the Travel Plan include the promotion of flexible working practices, the promotion of car-sharing, promotion of walking and cycling for local trips between offices, and travel reduction by means of video and tele-conferencing. Further details on the Travel Plan are presented in the case study below.

7.21.   In addition to raising awareness of the ZetTrans/SIC Travel Plan amongst staff and implementing the various initiatives proposed within this document, ZetTrans and SIC will actively support the development of workplace travel plans for other major employers in Shetland – both public and private sector. In terms of public sector involvement, ZetTrans are particularly keen to support NHS Shetland in the development of their own Travel Plan in recognition of the impacts of transport on health. The key to the success of such initiatives is the development of measures that are both appropriate to Shetland, and beneficial to the organisations. They will be pursued through the development control process (in line with national planning policy established in Scottish Planning Policy 17 - Planning for Transport[34] and the local and structure plans), and through discussions with major employers.

Case Study – Developing the ZetTrans/SIC Travel Plan

In recognition of the importance of corporate leadership in the travel planning field, ZetTrans, in association with SIC, published its very first Workplace Travel Plan in 2008. The Travel Plan was developed following extensive consultation with Council employees using a questionnaire survey designed to better understand employees current travel patterns, future travel aspirations, and to gather views on the type of measures that could be introduced to encourage less use of the private car and increased use of sustainable transport modes. More than 500 Council employees completed the survey.

Survey results revealed that 61% of Council employees travelled to work by car (as the sole occupant), with 14% car-sharing, 9% walking, 2% cycling, and 2% travelling by bus. However, analysis of results in response to the question "How would you like to travel to your workplace in the future?" confirmed the clear potential to increase the adoption of sustainable transport modes with 38% stating they would prefer to travel by car (as the sole occupant), 27% replying that they would like to car-share, 19% would walk, 15% would cycle and 13% would travel by bus.

Through the Travel Plan, a number of initiatives are proposed in order to encourage the adoption of sustainable travel patterns, including:

- The promotion of walking for local trips;
- Cycling initiatives, such as grant funding for bike repairs and bike maintenance classes;
- The development of a car-sharing database;
- The provision of public transport timetables and walking routes between Lerwick based Council offices to all new SIC employees;
- The promotion of flexible and remote working;
- Encouraging increased use of video-conferencing to reduce business mileage and the need to travel for meetings; and
- Continuing to promote travel behaviour change through raising awareness of the wider social, economic and environmental benefits of sustainable travel choices.

The performance of the Travel Plan in delivering its objectives for increased sustainable transport use will be closely monitored during the life of this Strategy, with the Travel Plan itself subject to regular reviews. It will also be used as an example of good practice and promoted to other major employers in Shetland to assist them to develop their own Travel Plans.

Community Travel Plans

7.22.   Community Travel Plans build on the development of School and Workplace Travel Plans and cover a range of initiatives that could be used to support the goal of 'sustainable accessibility'. As well as promoting more sustainable travel patterns, initiatives can help address the problems of social exclusion, and support the development of rural communities.

7.23.   Potential schemes that will be explored include the development of community IT hubs, the increased provision of mobile services, promoting the awareness of existing public and community transport services, and facilitation of lift sharing / car pooling. These schemes can be assisted by tools such as accessibility planning, land use planning policies that support sustainable development, and decentralisation policies. Key to the success of such schemes is work with community groups, and effective partnerships with other service providers.

Case Study – IT Hot Stops

Community IT Hubs or IT Hot Stops involve the provision of information and communications technology (ICT) including PCs for hot-desk working, Wi-Fi access and video- and web-conferencing equipment established in a rural location with the aim to reduce business mileage and the need to travel for meetings. Opportunities to establish pilot sites will be examined during the life of this Strategy.

Besides delivering time and cost savings to the business user, wider community groups and members of the public would be encouraged to use the facilities. For example, opportunities could be sought to link up the facilities with training programmes and college/university courses from across Shetland and Scotland Mainland (i.e. distance lectures via video-conference). It is believed that such an initiative could help to strengthen local economic development by countering the commuter travel to Lerwick, would increase the accessibility of rural residents to IT, and at the same time deliver positive environmental impacts through reducing the need to travel, supporting the wider work that Shetland currently does to reduce emissions levels. Remote and flexible working will increasingly be encouraged as ZetTrans moves forward with the implementation of the ZetTrans/SIC Travel Plan.

7.24. ZetTrans will undertake a feasibility study considering the development of initiatives that can help promote more sustainable travel behaviour, along with wider community benefits, within Shetland's rural communities. Informed by this work, specific initiatives shall then be selected for implementation.

Reducing Emissions

7.25. ZetTrans recognises that there are a number of additional initiatives which can be pursued to reduce transport related greenhouse gas emissions arising from private vehicles. Increased fuel efficiency benefits the driver with cost savings, as well as the environment. The National Transport Strategy identifies the potential for emissions savings arising from compliance to existing speed limits, promotion of fuel efficient driving techniques (Eco-Driving), supporting the take up of alternative fuels, providing comparative emissions information for different modes, and providing information to drivers and households about how they can reduce their total annual amount of car travel.

7.26. In partnership with SIC, ZetTrans will undertake a feasibility study to identify the most effective means of reducing emissions arising from transport in Shetland. Informed by this work, specific initiatives shall then be selected for implementation.

Context: Strategic Environmental Assessment

The development of the Transport Strategy has been complemented by a parallel Strategic Environmental Appraisal (SEA) process. SEA is a systematic method for considering the likely environmental effects of plans, programmes and strategies and aims to:

- integrate environmental factors into strategy preparation and decision-making;
- improve the Transport Strategy and enhance environmental protection;
- increase public participation in decision making; and
- facilitate openness and transparency of decision-making.

Key outcomes from the SEA of the Transport Strategy are presented in Appendix F, including the list of environmental policies that ZetTrans will work by in implementing this Strategy. This appendix also outlines the list of mitigation measures developed by ZetTrans to prevent, reduce or offset environmental impacts of the schemes proposed on the back of the Transport Strategy.

Local Road Network

7.27. The Local Road Network is managed by SIC, and there are currently no proposals for the transfer of functions to ZetTrans.

7.28. SIC currently manages, maintains and develops 1,045 kilometres of public road in Shetland, with the majority unclassified road. There are no trunk roads in Shetland. In the rural areas, the main physical constraints to the ongoing development of the road system are land ownership issues, managing environmental impacts, suitability of the underlying ground, and topographical constraints.

7.29. It is noted that there is a considerable length of un-adopted private road, providing vehicular access to numerous crofts and houses. Local Community Councils manage the provision of annual grants for the maintenance of these roads and tracks.

Context: Road Traffic Reduction

The Road Traffic Reduction Act 1997[35] requires local authorities to set out existing traffic levels within their area, provide forecasts for future growth in those traffic levels, and then set targets for the reduction of traffic within its local authority area, or to provide justification for not setting targets. SIC's Road Traffic Reduction Report is contained in Appendix G. Whilst Scotland's National Transport Strategy retains a target to stabilise road traffic volumes at 2001 levels by 2021, it does acknowledge that this is an "Aspirational" target.

Research into road traffic targets found that successful targets require a clear rationale for their adoption, a clear action plan for their achievement, sufficient information in order to set realistic target values, effective monitoring

proposals to measure progress, and also strong support for their achievement.

In the absence of local air quality problems and congestion, the main reasons that ZetTrans would set road traffic targets would be to reduce carbon dioxide emissions. The Transport Strategy commits to supporting alternative modes, and seeking to reduce the need to travel which could in part contribute to a reduction in carbon dioxide emissions (e.g. improving walking and cycling facilities, workplace travel plans).

Other means to reduce carbon dioxide emissions are also being pursued. They include improvements in fuel efficiency on the inter-island and external ferry and air networks. It is considered that this is where the most significant and beneficial improvements could be achieved.

At present, the impact of road traffic reduction measures are likely to be slight, very difficult to predict / measure, and likely to be overwhelmed by more significant issues such as the rising price of fuel, and national initiatives such as road pricing, motoring tax policy, and the wider economic fortunes of Shetland.

Therefore, ZetTrans have not established a road traffic reduction target within this Strategy. ZetTrans will continue to use road traffic levels as a Key Performance Indicator and will also use estimates of fuel consumption in Shetland by different modes as a Key Performance Indicator for carbon dioxide emissions. ZetTrans will contribute to Shetland-wide carbon reduction initiatives.

Road Schemes

7.30. SIC will continue to appraise and prioritise potential road improvement schemes using an established two-stage, multi-criteria, objective appraisal approach, taking due consideration of the objectives established for the Transport Strategy. Schemes will be prioritised both on the basis of strategic priority, but also on the basis of improving roads to reduce ongoing maintenance burden. Schemes will continue to be progressed through community consultation, and an SIC Member-Officer Working Group.

7.31. A number of specific road improvement schemes, identified within the Capital Plan, are included within the Delivery Plan that supports this Transport Strategy. Further road improvements will be considered throughout the life of this Strategy, though only where improvements fit within the context of the wider objectives of this Transport Strategy and the criteria presented below. SIC will typically promote road improvements for the following purposes:

a) Relatively minor extensions of the existing two-lane road network to provide links to existing settlements. One example is the link between the A968 and Mid Yell.

b) Road scheme development in conjunction with large scale housing development proposals. One example is the input to a master-planning exercise proposed for Gulberwick, to the south-west of Lerwick.

c) Footway improvement works within existing settlements, such as that proposed for Germatwatt, Walls.

d) On-line structural improvement of specific stretches of minor roads in order to reduce long term maintenance burdens. This may involve edge widening and strengthening to reduce damage caused by HGVs or increased traffic levels.

e) Specific junction improvements to respond to increased, or changing traffic flows.

7.32. ZetTrans and SIC recognise that Shetland's unspoilt natural environment and landscape is one of its greatest assets. Accordingly, road improvement schemes will take full account of ZetTrans' established environmental objectives. ZetTrans, working in partnership with SIC, will develop a best practice design guide for rural roads in recognition that roads need to be fitted into the landscape, and development should be complementary to the environment. In addition, SIC will continue to implement Roadside Bio-Diversity Action Plans during routine maintenance work and road development schemes.

Road Maintenance and Management

7.33. SIC will continue to undertake structural maintenance, routine maintenance and regular inspections of its local road network in order to maintain the value of the asset and also to ensure that the roads continue to be "fit for purpose".

Case Study – Road Maintenance in Shetland

According to Scottish Transport Statistics[36], of the 32 local authorities in Scotland, Shetland's roads are the second best maintained. Overall, only 8% of roads in Shetland are classified as "red" (i.e. the road has deteriorated to the point at which it is likely repairs to prolong its future life should be undertaken). 39% of roads are classified as "amber" (i.e. the road requires further investigation to establish if treatment is required). These figures are better than road maintenance conditions at the national level. Going forward, Shetland Islands Council is committed to the ongoing maintenance of Shetland's roads to sustain these high standards.

7.34. In addition to roads, SIC is responsible for the maintenance of structures throughout Shetland, and will continue to inspect, assess and maintain all structures in accordance with national Codes of Practice for Bridge Management.

7.35.   SIC will also maintain existing street lighting in accordance with relevant national standards and will seek to reduce light pollution and energy consumption by the use of modern street lighting apparatus. Going forward, SIC will continue to assess existing lighting arrangements with a view to removing or modifying unnecessary or inappropriate lighting.

Road Safety

7.36.   Throughout the life of this Strategy, ZetTrans will support SIC in taking forward a combination of Four E measures (Engineering, Encouragement, Education and Enforcement) to contribute towards the achievement of the targets within Shetland's Road Safety Plan.

7.37. In terms of engineering initiatives, SIC will continue to implement a programme of traffic calming, discrete road safety schemes and route action plans, designed to achieve casualty reductions on Shetland's roads. SIC will also continue to monitor road traffic accidents by location and crash type to inform the development of potential remedial schemes.

7.38.   To encourage improved road safety, ZetTrans and SIC will initiate specific road safety education and awareness raising campaigns in relation to speeding, seat belt enforcement, mobile 'phone legislation enforcement and driving under the influence of drink/drugs.

7.39.   ZetTrans and SIC will also lobby for regular targeted traffic law enforcement campaigns within Shetland, in order to effectively complement programmes of education and road improvements.

Case Study – Safe Drive, Stay Alive

'Safe Drive, Stay Alive' is a road safety campaign, which targets young people who are approaching driving age and aims to leave them with a strong and lasting message about their vulnerability and the severe impact that road accidents can have.

The message is presented via a series of live stage shows incorporating filmed footage of an all too typical crash involving a group of young people. People affected (emergency services personnel, victims and the bereaved) speak frankly and openly about their feelings, experiences and life afterwards.

In recent years, the programme has been run in Fife, and also in the Aberdeen City, Aberdeenshire and Moray regions. Working with the Community Safety Partnership, including SIC, Northern Constabulary, the Scottish Ambulance Service and NHS Shetland, ZetTrans are keen to initiate a similar campaign in Shetland.

Risk Assessment and Contingency Planning

7.40.   Risk assessment refers to the identification of risks that could affect the safe flow of traffic on the local road network, while contingency planning refers to the process required to manage traffic during periods of both routine and emergency road maintenance.

7.41.   In Shetland, risks primarily relate to flooding of the local road network and landslips. SIC will continue to develop risk assessment processes to guard against the impacts of these events on local traffic movements. Indeed ZetTrans recognise the increased risk of flooding as a result of climate change and, over the course of this Strategy, will seek to implement a range of hard and soft engineering measures when dealing with flood risk management and mitigation.

7.42.   ZetTrans and SIC will also continue to promote contingency planning for the short-term unavailability of key sections of the local road network, primarily through ensuring that signed diversions and alternative routes are in place, and that this information if conveyed to the public and transport users in an efficient and timely manner.

Winter Maintenance

7.43.   SIC will continue to develop and implement the winter maintenance programme and procedures, prioritising action on the most heavily used routes, footways within settlements that link key facilities, and the provision of grit bins.

7.44.   Winter maintenance policies will be updated on a periodic basis by SIC, and consulted upon prior to their adoption.

You told us… there were generally high levels of satisfaction with the winter maintenance service.

Parking

7.45.   On the whole, there are few constraints and problems around the availability of parking in Shetland, though consultation did highlight some issues over the ability to get parked in the centre of Lerwick, Parking here is currently controlled using a disk parking system and SIC will continue to support this system in order to ensure availability of on and off street parking for short and long-term demands. The provision of on and off street parking in Lerwick, such as at Holmsgarth ferry terminal, and other settlement areas will also be closely monitored by SIC. Where appropriate, solutions will be developed to address identified problems.

7.46.   SIC is responsible for the administration of parking permits for disabled people and will continue to provide dedicated parking for disabled users,

appropriately sited and marked for their use, within local car parks and Lerwick.

7.47. In order to encourage the adoption of more sustainable travel, and in the process reduce potential car parking pressures within main settlements, ZetTrans and SIC support the maintenance and development of park and ride / transport interchange facilities at appropriate sites along the main road network, to facilitate car-sharing, and access to the mainline public transport network.

7.48. Finally, as part of the development management process, ZetTrans and SIC will continue to support the adoption of the Parking guidance contained within Shetland's Local Plan, details of which are presented below.

Context: Parking Policy

SPP17 sets a number of guidelines that are relevant to Regional Transport Partnerships, including the requirement on each council to adopt maximum parking standards for on-site parking at new developments. These may be set at the regional level in the RTS; otherwise the RTS should support the achievement of the targets by each constituent council; parking standards can be more restrictive where an area is well served by sustainable modes.

While it is recognised that there are a number of parking issues which require to be addressed in Shetland, including parking provision for new developments, town centre short-stay parking, long-stay parking and residents parking, Shetland does not have parking problems of the kind experienced in urban centres. The use of parking controls and the adoption of maximum car parking standards as a demand management tool to influence road traffic is subsequently not considered appropriate in the Shetland context where public transport is often limited and there is a heavy reliance on the private car. It is also believed that applying formal standards in rural areas is likely to have a detrimental impact on the environment.

In general, the Council aims to ensure that developments include parking and servicing facilities that are appropriate to both their function and location. The Council will normally require the developer to provide full and adequate parking, including visitor parking, within the boundary of the development, although relaxations or exemptions are available in particular circumstances, for example within Conservation Areas and in conjunction with developer led workplace travel plans.

Policies for car parking are in place within the Shetland Local Plan. Off-street parking is provided where practicable and is usually a requirement when new developments are proposed. In Lerwick, rationing of scarce central spaces has been successfully achieved using a disc system. The provision of rural car parks at road junctions has been developed partly for safety reasons and

partly to provide park and ride facilities for commuters.

For the purposes of this Transport Strategy, ZetTrans will continue to support the adoption of the general car parking standards set out in the Shetland Local Plan. ZetTrans will continue to consider ways of reducing the need for car parking through improved public transport and encouraging the development of Travel Plans. However, it is recognised that car use will remain a necessity for the majority of Shetland residents. ZetTrans therefore supports the adopted car parking standards that seek to attain a balance between road safety, car parking needs, the capacity of the road system and environmental quality.

Monitoring

7.49.   The sections above have highlighted the strategies that will be adopted to improve various aspects of Shetland's local network management and maintenance. Key to delivering improvements will be improved monitoring of conditions on the road network. To support this, SIC will undertake regular and systematic surveys of road traffic at a series of key locations on Shetland's Spine Road network.

7.50.   Regular consultation will also be undertaken with each Community Council to identify local road network issues and inform improvements.

Public Transport

7.51.   ZetTrans has recently assumed the functional responsibility for providing scheduled public bus services in Shetland.

7.52.   ZetTrans provides, through contracts with local operators and SIC, all scheduled bus services in Shetland. There are no commercially operated services. Services generally provide for commuters, shoppers, the elderly and those with a disability to travel to and from the main town (Lerwick). School transport remains the responsibility of SIC.

7.53.   Community transport services are also provided as required in each area, and this extends to the provision of a number of community minibuses. A number of voluntary organisations and community groups also provide or organise specific transport opportunities for certain client groups, for example the Red Cross, WRVS, and Disability Shetland. SIC, through the Child Care Partnership, also provide access to nursery care in specific circumstances.

7.54.   A significant, and successful development in recent years has been the introduction of an integrated bus/ferry service providing the opportunity for residents in the North Isles to travel to Lerwick and return on the same vehicle. Overall, and compared to other rural areas of Scotland, Shetland benefits from a high level of service with every community benefiting from:

a)   Transport to and from Lerwick for the working population; and
b)   Weekday shopper services to local shops and/or Lerwick.

7.55.   Public transport connections are also provided to and from each Mainland Inter-Island ferry service terminal, Sumburgh Airport, and Tingwall Airport.

7.56.   One of the key constraints facing the public transport sector in Shetland is that it is difficult to provide financially sustainable services due to the overall low numbers of service users. Many of the socially excluded groups who would most benefit from these services are also those who live in the most remote parts of Shetland.

7.57.   ZetTrans has now introduced smart-card integrated ticketing in Shetland; this system is the first to be introduced in Scotland.

You told us… that given the rural context in which services operate, Shetland generally has a good public transport service. The desire to introduce more demand responsive transport services was highlighted by many, recognising that these types of services can attempt to better match supply with demand, and in the process increase accessibility and efficiency.

Case Study – Bus Vision and Priorities/Bus Action Plan

In line with the National Transport Strategy and its 'Bus Action Plan' document, Regional Transport Partnerships are expected to develop a strong bus component within their Strategies.

In the Shetland context, there are many difficulties related to providing an efficient, accessible public transport service in a financially unrewarding environment typically characterised by long travel distances and low overall potential user numbers. It must also be noted that many of the proposals within the Bus Action Plan[37] are more suited to urban services and hence are not always feasible in Shetland. Despite this, ZetTrans is committed to public transport service development and market growth.

ZetTrans provides an extensive and integrated transport system to the general public comprising bus services, inter-island air and ferry services. Timetables are formulated to ensure that the best possible integration between these and external transport providers is in place. Bus services provide daily commuter services from all mainland areas into the main town, Lerwick, with a network of "shopper type" services operated either as part of a route network, or in the case of more rural areas, on a demand responsive basis (e.g. dial a ride). DRT services are currently expanding in conjunction with an improved centralised booking and dispatching service.

Passenger usage on local bus services in Shetland has seen sustained

growth since 1998 when the Council implemented DDA compliant vehicles on all mainline routes. This has improved accessibility and the introduction of enhanced concessionary fare schemes have contributed to the continuing passenger growth.

ZetTrans' vision for the future development of bus services across Shetland is to build on these achievements, to further develop opportunities which can deliver a high quality, effective, efficient, safe and reliable integrated public passenger transport system enabling wherever possible enhanced bus services to more rural areas through innovative and community led projects.

Going forward, some specific bus initiatives proposed through the Transport Strategy include:
- Developing a Public Transport Policy Statement, to clarify ZetTrans' bus policies;
- Establishing Area Bus Forums, in which bus operators, community groups and bus users can discuss service improvement issues;
- Undertaking a "stock take" to examine opportunities to improve efficiency with a view to introducing more DRT and community bus services;
- Improving bus/air integration opportunities at the Airport through developing a direct link between Sumburgh and Lerwick;
- Promoting Rural Community Transport and DRT Initiatives to local groups, providing assistance and advice as appropriate;
- Improving information provision and marketing of services and the development of new ticketing initiatives;
- Supporting the Scottish Government/Transport Scotland through trialling of the first Smartcard ticketing system to be introduced in Scotland;
- Evaluating the use of electric powered vehicles within the Council's own fleet; and
- Exploring the potential use of hydrogen powered buses in Shetland.

Public Transport Services
7.58. Throughout the life of this Strategy, ZetTrans will continue to support the provision of existing mainline bus and associated feeder services, aimed at ensuring that each Shetland Mainland Community has access to services, employment and education opportunities within Lerwick, as well as access to social and leisure opportunities. With regard to the islands, ZetTrans will continue to support the provision of ferry and air services aimed at providing adequate access to services and opportunities needed to sustain island communities. The Council's policies and priorities for public transport will be affirmed with the development of a Public Transport Policy Statement.

7.59. In consultation with community councils and Area Transport Forums, and where there is evidence of demand, ZetTrans will continue to trial new or amended service patterns, including evening and late night services.

7.60.   We will also continue to support the provision of integrated public transport opportunities for residents of Shetland's islands, including public transport services which are integrated with inter-island ferry and air services. For residents and visitors, improved public transport integration opportunities will also be sought during the life of this Strategy. In particular, efforts will be concentrated on ensuring that existing bus services provide an integrated service for users of the Holmsgarth Ferry Terminal, and there is greater integration between the arrival and departure of flights and public transport arriving at Sumburgh Airport. On this issue, it should be noted that ZetTrans has recently introduced a dedicated and integrated bus link between Sumburgh Airport and Lerwick, as part of a review of bus services to South Mainland.

You told us… that there was scope to improve public transport integration opportunities in Shetland. A gap in the network was highlighted at Sumburgh Airport, where buses do not always tie in with arriving and departing flights, especially during flight disruptions, at the Airport. As a solution, a direct bus link between Sumburgh and Lerwick has recently been introduced in an effort to improve integration. Appropriate promotion of this service should also help to reduce the number of one driver vehicles which make the trip to/from Sumburgh Airport.

7.61.   Patronage levels on all services will be closely monitored in order to ensure that levels of provision effectively match demand. Where opportunities exist, efficiency will be improved through the introduction of demand responsive transport services.

7.62.   Leading on from this, ZetTrans will continue to investigate and trial innovate forms of public transport service delivery in an attempt to improve service levels, reliability, and efficiency whilst reducing costs. In the future, this may include further development of community transport initiatives, and other forms of rural demand responsive provision. A "stock take" of such provision is proposed.

Context: Demand Responsive Transport

In recent years, there has been growing awareness of the benefits that Demand Responsive Transport (DRT) can play in addressing social exclusion, particularly in rural areas where drivers tend to spend a higher proportion of their income on motoring costs. As Scotland's National Transport Strategy states, "The inherent characteristics of rural areas, namely a low population density and dispersed settlement pattern results in demand which is not necessarily conducive to public transport with more flexible solutions such as Demand Responsive Transport being more appropriate".

By definition, DRT is "any form of transport where day to day service provision is influenced by the demands of users" and can involve a range of services

including taxis, non-emergency patient transport, social services transport, education services transport, dial-a-ride, community buses, flexible public transport buses and many other related services.

The increased emphasis on DRT is illustrated by the NTS, which highlights the opportunities that DRT presents to improve access to health and education, recognising that "…DRT may provide some positive opportunities to create flexible services to meet this demand. This flexibility is particularly beneficial for those who find conventional public transport difficult to use and for services which have a low or fluctuating demand, such as in rural areas".

Within the NTS, Regional Transport Partnerships are challenged to maximise "the contribution of the investment made in transport services across a region, including social work transport, local authority subsidised bus services, non-emergency patient transport and community transport". This alludes to the development of transport brokerage schemes which involves the operation of many of the services noted above coordinated through a common database at a Travel Dispatch Centre to match users with the most appropriate services. ZetTrans proposes to undertake a Transport "stock take" examining opportunities to improve efficiency, the results of which could lead to the introduction of new DRT and community bus services.

Despite increasing emphasis in this field, it is to be recognised that Shetland was one of the first areas in Scotland to introduce DRT services. The Tingwall dial-a-ride service, which provides a demand responsive taxi service to Tingwall Airport, primarily for the benefit of Shetland's inter-island air service users, was particularly highly praised during consultation on this Transport Strategy. Looking forward, ZetTrans will look for opportunities to further develop DRT and Community Transport initiatives.

7.63.   Finally, in taking forward new services, ZetTrans is keen to ensure that these are delivered in accordance with Disability Discrimination Act policy (including the provision of accessible and understandable (i.e. large print) public transport information), relevant national safety guidance and legislation, and are fuel efficient.

Fares and Ticketing

7.64.   With regards to fares on public transport services, ZetTrans will continue to set maximum fare levels as a condition of tender to service providers. The level of fares will be reviewed on an annual basis to take account of both changes in costs of providing the service, but also to ensure that levels of accessibility are maintained.

7.65.   In accordance with the national transport concessionary scheme offered by Transport Scotland, ZetTrans will continue to provide free public transport travel for the elderly and disabled groups. Recognising that many

elderly residents in Shetland are dependent on community transport provision, we will lobby the Scottish Government to extend the national concessionary fares schemes to community transport services.

7.66.   We will also continue to provide discount public transport travel for 16-18 year olds in accordance with the national concessionary travel scheme for youth groups.

7.67.   In addition to these national concessionary schemes, ZetTrans will consider the introduction of a 'Shetland Pass', primarily aimed at visitors to Shetland. As highlighted previously, the promotion of a tourist "hop-scotch" pass that allows visitors to travel easily across Shetland's full array of internal and inter-island transport services, matched by improved marketing of services and destinations, is considered an important initiative to supporting tourism development throughout Shetland.

Case Study – Smartcards

In November 2006, Scotland's new high-tech smartcard ticketing system was launched, with Shetland selected as the pilot site. New smartcard ticketing machines were introduced on mainline buses, enabling concessionary cardholders to place their smartcards on a machine reader instead of the previous 'show and go' process. Smartcards have the potential to improve efficiency (including cost and boarding time) and tackle potential fraud.

Following the trial in Shetland, it is proposed that the technology will be rolled out across Scotland with the aim of paving the way for a system of having just one smartcard usable on all forms of transport.

ZetTrans supports the development of an integrated public transport system, not just in Shetland but nationally and are proud to have been involved in the pilot of this initiative. Shetland's self-contained area makes it ideal to pilot new technology such as this, and ZetTrans will promote Shetland as a future site for other initiatives that could improve the overall transport product delivered not just to Shetland's residents but to the rest of Scotland.

Information, Infrastructure and Facilities
7.68.   Complementary to the development of public transport services across Shetland, ZetTrans understand that market growth and service delivery will be dependent on the provision of safe, clean, attractive, comfortable waiting facilities, as well as readily accessible, and easy to understand transport information.

7.69.   ZetTrans will continue to provide and maintain bus shelters and timetable cases where the need is identified. Viking Bus Station is the main bus station in Shetland. ZetTrans will continue to operate and maintain this station, offering information, left luggage and small parcels services. We will

also continue to offer real-time information for services at Viking Bus Station and will investigate other potential sites that could benefit from real-time information systems in the future.

7.70.   Throughout the life of this Strategy, ZetTrans will also investigate measures to increase the amenity of public transport waiting facilities and to increase feelings of safety on board public transport, and will work in partnership with community groups to achieve this.

7.71.   With regards to transport information, we will continue to market public transport network through the publication and circulation of timetables and user guides. We will also seek to ensure that at the main entry points to Shetland (Sumburgh Airport and Holmsgarth Ferry Terminal) and other key transport interchanges there are appropriate timetable information, and waiting facilities.

Taxis and Private Hire Cars
7.72.   There are currently 70 licensed taxis, and 30 licensed private hire cars operating within Shetland. There are two recognised taxi stances, one at Victoria Pier, Lerwick, and the other at Sumburgh Airport. Licensing of taxis and private hire vehicles is currently a function of SIC, and it is planned that this continues.

7.73.   Taxis and Private Hire Cars form an important element of the transport provision especially in rural areas, providing a transport option for those without cars, and those unable to drive. They also form (on a contracted basis) an important component of school and social work related transport provision, particularly for those with special needs.

Education, Social Services and Community Transport
7.74.   SIC provides school transport services and services for special needs pupils, in line with national guidelines and local policies. In addition to facilitating access to education, ZetTrans believes that school transport can play an important role in fostering the development of future generations of sustainable transport users. Positive childhood experiences of taking the bus, along with incentives in later years, such as the national concessionary travel scheme for 16 to 18 year olds, can help to reduce the premature shift to private transport amongst Shetland's young people.

7.75.   SIC also provides transport services for the social work and community development sectors. ZetTrans recognise the valuable role played by the community and voluntary transport sectors in terms of improving levels of accessibility and social inclusion amongst the most vulnerable groups in our society. ZetTrans believe that, going forward, there is a greater role for the voluntary sector to play in the provision of transport across Shetland and will

look to engage in closer partnership working with colleagues in this sector to deliver improvements.

7.76.   Discussions with colleagues from the voluntary transport sector also highlighted that while there are many good transport services for vulnerable groups in Shetland, this could become even better if they were tied together. ZetTrans will continue to identify areas for efficiency and delivery improvements, potentially through the development of additional demand responsive transport tied in with community transport Schemes. Future developments in this field will stem from the Transport "stock take" proposed within this Strategy.

8.   Delivery

Introduction

8.1.   This chapter presents information on how the Transport Strategy and its accompanying Delivery Plan will be implemented.

Funding

8.2.   Under previous arrangements, Regional Transport Partnerships received ring-fenced capital grant funding from the Scottish Government to deliver transport projects. However, following the introduction of the Single Outcome Agreement Settlement by the new Scottish Government from April 2008, all funding provided from the national level is being channelled through the local authority level meaning that ZetTrans ability to deliver this Transport Strategy will largely depend on the priorities that Shetland Islands Council set for its funding, as well as other external sources.

8.3.   Further to this, there has been a reduction in ring-fencing of funding (such as for transport) provided to the Council, which is a move designed to provide the Council with greater responsibility and flexibility to invest in those schemes that will deliver the Council's key outcomes and indicators presented within its Single Outcome Agreement.

8.4.   ZetTrans has worked closely with SIC to ensure that there is alignment between the Single Outcome Agreement and the Shetland Transport Strategy in terms of transport related outcomes and their relationship with the Strategy's vision for Transport.

8.5.   Delivery of significant transport schemes is ultimately dependent on securing funding. In light of the Single Outcome Agreement Settlement, all schemes that ZetTrans propose to implement and contained within the Delivery Plan will require to be funded from SIC's General Fund through the Capital Plan. The Capital Plan is reviewed on a regular basis and the outcomes from future works proposed by this Transport Strategy will be reflected in future Capital Plans.

8.6.   Under current arrangements, there is no guarantee of a fixed level of capital funding from SIC to implement this Transport Strategy. Transport spending from the Capital Plan is considered against the projects of other SIC departments including Executive Services (e.g. housing), Education and Social Services (e.g. schools, community care), Community Economic Development, and Ports and Harbours. Furthermore, it is recognised that any capital investment leading to increased revenue expenditure will also require to be planned.

8.7.   It must be recognised from the outset that Shetland Islands Council's resources are unable to accommodate all the capital investment required in infrastructure and assets needed even to maintain infrastructure and services at their current levels. If internal and inter-island links are to be continued into the future then it is essential that external funding sources are identified and accessed. A significant source of any additional funding is likely to be from the Scottish Government (although Europe and the private sector are by no means dismissed), however, any funding approaches will require to be supported by a robust and evidence based justification, and a fully worked up and compliant scheme appraisal. Again, there is no guarantee that particular levels of funding will be secured from external sources.

8.8.   Without additional external support from the Scottish Government or other external funding sources, ZetTrans can only do so much to deliver this Transport Strategy. In the case of the inter-island ferry links on Bluemull Sound and to Whalsay, two of the Strategy's major capital investment proposals, ZetTrans would only be able to provide the do-minimum proposals (e.g. ongoing maintenance of the ferry services). This would fail to address current needs, lead to a deterioration in services and would be likely to increase problems in the future.

8.9.   Additional funding from the Scottish Government would, however, allow ZetTrans to retain and improve services in line with the some of the potential interventions set out in this Transport Strategy. The potential future development of fixed links would almost certainly also require external funding support, although where fixed links are concerned, it is important to remember that their development could incur considerable revenue savings in the long term.

8.10.   Further information on the projects that are likely to require external funding support is presented within the Delivery Plan document itself.

Context: The Case for Funding

RTS guidance notes that "it is likely, perhaps probable, that the full implementation of the RTS will require additional funding or other action to be taken by the Scottish Ministers. RTPs should use the RTS to make the case to the Scottish Ministers for the inclusion of such proposals in forward investment plans."

Critical to the success of the ZetTrans' Transport Strategy is securing the ongoing reliability and integrity of lifeline inter-island links. Shared problems include ageing vessels which may shortly face compliance issues, ferry terminals that were designed for significantly smaller vessels and are now requiring significant remedial maintenance and replacement and, on some routes, vehicle deck capacity issues.

Appraisal work, in accordance with the Government's STAG process, has been undertaken to consider future options to deliver sustainable, efficient links to Shetland's islands. Further appraisal work is planned on the back of this Transport Strategy. However, initial findings confirm that continuation of services, even under Do-Minimum scenarios, have significant costs that will require additional Government support.

ZetTrans recognises the high capital costs of such investment, but also realises that maintenance of secure, reliable and compliant links is an essential element for the Transport Strategy. ZetTrans will therefore be seeking to work closely with the Scottish Government during the development and finalisation of these appraisals, seeking guidance and to gain commitment to securing funding support for this investment in lifeline links.

Prioritisation

8.11. Appraisals have been undertaken of the most significant schemes promoted within this Strategy, and also to aid the selection of the most appropriate project or policy option. The results from appraisals ultimately informed the direction of this Strategy and the list of policies and interventions set out within the supporting Delivery Plan. The final list of policies and interventions within the Delivery Plan has also been subject to a process of prioritisation.

8.12. Prioritisation and programming are statutory components of the Transport Strategy. The prioritisation process adopted for the purpose of this Transport Strategy comprised three main elements:
   a) The first element was to consider the *Rationale for Intervention.* For each element of the transport network, this considered extent of influence, the function, and the current performance of the element.
   b) The second element was to consider any *Critical Path* issues. These include specific dependencies or deadlines for intervention, or opportunities for funding.
   c) The final element was to consider the *Performance* of the planned intervention with respect to the established transport objectives, and external objectives.

Delivering the Strategy – The Delivery Plan

8.13. The preparation of the Strategy is the first part of ZetTrans' statutory responsibility. The second is to ensure the delivery of the Strategy, and it is this aspect that will be ultimately used to consider the success of the Partnership. The development of the accompanying Delivery Plan that sits alongside this Strategy will obviously be key in this regard.

8.14.   The interventions presented in Chapters 5 to 7 of this Strategy have been collated into more formal actions and policies, which form the basis of the Delivery Plan. Within the Delivery Plan itself, the various actions and policies have been subject to a process of prioritisation.

8.15.   The emphasis has accordingly been placed at the current stage on mapping out the implementation paths for each initiative, including lead, partners, funding and statutory impacts. ZetTrans believes that central to the successful delivery of this Strategy will be making strong links between this Strategy and accompanying Delivery Plan, the individual Service Plans of different partner organisations in Shetland, and also the funding and budget setting process. The ability to make these links will ultimately determine the effectiveness of the Transport Strategy, particularly for initiatives newly introduced through the Strategy.

Context: Transport Headquarters

At present, officers carrying out the functions of ZetTrans and the planning and delivery of transport services are based across various locations in Shetland. However, it is the longer term aim to consolidate all appropriate staff within one Office Headquarters.

More than just a base for staff, it is proposed that the HQ will become the 'one stop shop' for transport information, bookings and payments, etc. on the range of services offered across Shetland. It is envisaged that it will include a public area offering transport timetables, real time passenger information facilities, and PC facilities offering access to the latest transport information on the web.

Website

ZetTrans recognises that in today's digital age, the internet is a useful tool providing an accessible resource for travel and transport information and advice. ZetTrans has set up a website, www.ZetTrans.org.uk to provide a broad range of information designed to support Shetland's residents and visitors in making informed travel choices. Overtime, it is hoped that the website will become the main place to find timetable information for all transport services operating in Shetland including bus services, the inter-islands air and ferry services, as well as the external air and ferry services. Links to transport operating partners are also included on the website, while. ZetTrans will continue to encourage our partners to provide links to and promote the website. In the future, the website will contain links to online journey planning tools offered by Traveline Scotland.

The website also provides all the latest information and news on transport developments in Shetland and, to boost awareness of issues and emerging campaigns, interested stakeholders are able to sign up to regular bulletin emails from ZetTrans. The website also hosts the full range of reports

developed in the preparation of this Transport Strategy and, in the future, will host the Annual Progress Reports which will chart progress made in relation to the delivery of this Strategy.

9.   Monitoring and Reviews

Monitoring

9.1.   The Delivery Plan will be used as the basis to monitor the success of ZetTrans in delivering the Transport Strategy, including performance against the objectives, targets and performance indicators adopted in the Strategy.

9.2.   In order to assist in the process, a range of Key Performance Indicators (KPIs) and, where appropriate, targets have been developed. In total, eight high level KPIs have been developed as set out in Table 9.1 below.

Table 9.1 – Transport Strategy Key Performance Indicators

Key Performance Indicators
KPI 1   Reliability of Shetland's Transport Network.
KPI 2   Standard of Road Maintenance.
KPI 3   Fuel Consumption Levels
KPI 4   Market Growth on Shetland's Transport
KPI 5   Public Transport Accessibility
KPI 6   Sustainable Transport Use
KPI 7   Road Safety Levels
KPI 8   Transport Integration Opportunities.

9.3.   Further information on the performance indicators and targets used to monitor the delivery of the Transport Strategy is contained within the accompanying Delivery Plan document. This includes information on how the indicators will be monitored (i.e. by qualitative or quantitative means), and where appropriate baseline information, and future targets.

9.4.   It should be noted however that overall there is an absence of specific targets related to this Transport Strategy at present due to the lack of previous monitoring undertaken and, linked to this, the limited availability of baseline data. Efforts will be made by ZetTrans to build upon data collection and monitoring programmes during the lifespan of the Transport Strategy.

9.5.   In addition to the high level objectives, this Transport Strategy has also identified the need to introduce a number of other monitoring regimes which

will allow for ZetTrans' progress against its objectives to be measured. Approaches range from the introduction of bi-annual user surveys in order to monitor levels of satisfaction on Shetland's transport network to ongoing monitoring of fares and timetables to ensure that the services that are operated are affordable and integrated. Again, further information is included in the Delivery Plan document.

9.6. ZetTrans recognises the importance of outcome evaluation and aims to use its monitoring programme, including the KPIs set out above, to assess progress in delivering the outcomes and objectives of this Strategy.

9.7. As the primary organisation accountable for transport decisions in Shetland, ZetTrans is also committed to undertaking post-evaluation project reviews, such as the Socio-Economic Review on the Impact of the New Yell Sound Ferries, in order to assess the performance of its actions.

Annual Progress Reports

9.8. The development of Annual Progress Reports is a significant element introduced through the Transport Strategy Guidance. Annual Progress Reports will be used to chart ZetTrans' progress towards the delivery of the Transport Strategy vision and objectives and will include an update on performance against targets, and a review of projects delivered over the course of the year.

9.9. In the past, a criticism often levelled at strategic documents is that they are only applicable to transport professionals. However, it is envisaged that an Annual Progress Report, written with a wide audience of "non-experts" in mind, will help to increase the visibility, accountability, practicality, understanding and relevance of the Transport Strategy as a working document.

9.10. In terms of the overall monitoring and reviewing of the Strategy document, in line with national guidance, this Transport Strategy and its supporting Delivery Plan will be kept under review and rolled forward every four years with appropriate modifications. In renewing the Strategy, similar stages as have gone into the development of this Strategy will be undertaken, including consultation with stakeholders.

Appendix A – Outcomes from Initial Consultation

A.1　An initial consultation exercise was undertaken between October 2005 and February 2006. The findings provide a "snapshot" during the period of consultation, and focussed on community and stakeholder views and perceptions.

A.2　Consultation meetings were held with all 19 Community Councils in Shetland during the initial consultation process, the majority of which were open to the public. In addition separate community meetings were held on Fair Isle and Foula to enable the residents of these islands, remote from the main part of their Community Council areas, to express their opinions. On Papa Stour, questionnaires were issued to residents in addition to individual meetings held on the island. Meetings were also held with other key stakeholder groups. These groups included SIC officers, transport providers and hauliers, businesses (including stakeholders from the seafood, livestock, retail, oil, construction and tourism industries), the public sector (e.g. Police, Ambulance, and Fire Services), the health sector, the voluntary sector, schools, young people and the elderly. Hard to reach groups (e.g. Mothers with toddlers, non-English speaking residents) were also targeted.

A.3　In addition to the face-to-face meetings, of which there were just under 100 in total, some further consultation outcomes were considered, including reviews of previous research such as the Your Voice questionnaire results, the 2000 NOP Transport Needs Survey, a recent Health Service questionnaire, and outcomes from Initiative at the Edge Workshops. Questionnaires were also issued to users of the Council's library van service, whilst a questionnaire was posted onto the Council's web page for online completion. A transport related thread was also posted on the "Have Your Say" on-line discussion forum. Letters were sent to Parliamentary Members inviting their comments on transport issues related to Shetland.

A.4.　The key findings of the initial consultation exercise are presented below in terms of external links, inter-island links, internal links and wider transport issues.

External Links

A.5　For external links, key findings were as follows.
   a) High cost of services – both for the user, and the provider (or those paying subsidies).
   b) Specific capacity issues – most notably cabin space on the NorthLink service, and some reported peak period private vehicle constraint.
   c) Accessibility issues to port and airport – public transport access/integration and car parking.
   d) Further consideration of contingencies is required.

e) Keenness to see air and sea route development – to grow the travelling market, but also to provide improved accessibility / supply chain efficiencies.

Inter Island Links

A.6   For inter-island links, key findings were as follows.
   a) Desire to maintain and develop responsive, reliable, and "island-centred" services – most acutely expressed on the smaller islands.
   b) Desire for specific infrastructure investment at Skerries (dredging), and Fetlar (breakwater).
   c) Willingness to pursue Unst-Yell fixed link.
   d) Concern over future replacement plans for vessels, and costs, leading to a broad desire for fixed links.
   e) High level of service, and low cost to users widely recognised.
   f) Positive impact of new Yell Sound vessels and terminals appreciated.
   g) Some vehicle deck capacity issues raised, particularly Whalsay and Bluemull Sound.
   h) Recognition of essential role played by both inter-island air and ferry services for fragile island communities.
   i) Contribution of inter-islands air service particularly highlighted.

Internal Links

A.7   For internal transport, key findings were as follows.
   a) Communities have a desire for "safe walking routes" to key local facilities, often despite low traffic volumes – the benefits of safe refuges on verges were commonly discussed.
   b) High level of public transport provision recognised, and low fares welcomed.
   c) Some sectors of the community looking for a public transport model which goes beyond current provision – e.g. convenient links to health centres etc.
   d) Road safety concerns, especially speeding, dangerous driving, and drink driving.
   e) Support for road improvements on West Side.

Wider Issues

A.8   In addition, some wider issues related to transport were raised during consultation.
   a) Future cost and supply of fuel.
   b) Importance of links to economic, planning, community and social agendas.

Appendix B – Analysis of Drivers and Constraints

B.1   This appendix outlines the key drivers, constraints and uncertainties that have been identified through the Transport Strategy development process, including consultation findings and review of background reports, as well as analysis of transport and socio-economic data for Shetland.

B.2   Key **drivers** influencing the shape of the Transport Strategy are as follows.
   a) Economic development growth could be centred on tourism, fish processing, potential oil platform decommissioning, Information Communications Technology, renewable energy, added value in food and drink, and manufacture and crafts. A potential reduction in public sector employment, and at Sullom Voe Terminal.
   b) Current economic trends are tending to focus economic development in and around central Shetland, with the exception of initiatives fixed in location – quarries, aquaculture and tourism.
   c) Specific future developments could include oil platform decommissioning, quarries, and fish processing facilities.
   d) There has been a general trend of population growth around the centre of Shetland (accessible rural areas), slight decline within Lerwick town centre, decline in remote rural areas, and decline on the most fragile islands.
   e) There has been growth in tourism from Scandinavia, potential new markets from new air route from England. Potential growth in some niche markets – eco-tourism, luxury breaks etc.
   f) Lower air fares for Shetlanders are likely to generate additional demand at Sumburgh Airport.
   g) National concessionary fares scheme has sustained demand on the public transport service. The provision of two free ferry trips per annum for pensioners and young people also contributes to increased passenger numbers on the Northern Isles Ferry Service.
   h) Future rises in fuel prices may begin to reduce growth in car use in the future.
   i) Increased use of Information Communication Technologies may increase home and flexible working opportunities.
   j) Few constraints at present on physical capacity of the road network.

B.3   There are a number of **constraints** that impact upon the development of the Transport Strategy. The most important are as follows.
   a) The physical environment of Shetland – topography, exposure to weather conditions which can adversely affect the transport system, and spatial distribution of population.
   b) High costs of providing and maintaining the existing transport system.

c) Limited market size for both passengers and for freight.
d) Limited revenue availability, and limited external capital funding availability.
e) Falling levels of income from oil related activities in Shetland, affecting future opportunities to generate funding for investment in infrastructure.
f) Cultural high expectations for improvement – the main challenge may be maintaining the existing system more than improvements.
g) Reliance on lifeline links constrains choice, imposes timetable constraints, introduces vulnerability to transport connection and accessibility, and can deter investment. This affects both external links and inter-island links.
h) External links experience high degree of seasonality in demand.
i) An ageing and declining population in many areas.
j) Historically, the zoning of housing in many parts of Shetland has allowed the growth of low density and dispersed communities. This can reduce opportunities to improve accessibility (walking, cycling and public transport), and increases the reliance on the private car.
k) ZetTrans is constrained in their ability to directly influence provision of external links.

B.4   Some **uncertainties** also impact on the Strategy.
a) Future cost and supply of fossil fuels.
b) Future social and economic trends within and affecting Shetland – age structure, job opportunities, income, lifestyle choices and aspirations.
c) Changing legislative and regulatory environment.

Appendix C – Problems and Opportunities

C.1   Problems and opportunities have been identified through background research into relevant transport and socio-economic data, and further informed through the findings from consultation. In the following section, the problems and opportunities identified through the above process are offered, and are specifically listed under each of the five national transport objectives – Economy, Environment, Integration, Accessibility and Safety, as well as a series of External Elements.

C.2   Economic Barriers
  a) There is high dependence on lifeline external and inter-island lifeline links and this requires that these are provided in as reliable a manner as practically possible.
  b) There is a high cost of freight and passenger travel to and from Shetland. This prevents opportunities to explore means to reduce the overall costs, and constrains levels of accessibility. Recent initiatives to provide subsidies for passengers (islanders only), and freight may go some way to address this issue.
  c) There is capacity constraint for passenger cabin accommodation on NorthLink ferries – although this may now be resolved by recent modifications to the ferries.
  d) There is some peak period vehicle deck capacity constraint on Whalsay and Bluemull Sound ferry routes.
  e) The high cost of developing, operating, maintaining (and for inter-island ferry network replacing vessels and terminals) the internal and inter-island transport network means that value for money must be a key criteria for future development.
  f) There are opportunities for market and route development of external links – for both freight and passenger sea links and scope to develop new air passenger routes.

C.3   Environmental Considerations
  a) Future impacts of climate change must be a consideration. For example, more severe storms, and rising sea levels may affect ferry sailings.
  b) Continued protection and enhancement of Shetland's unique environmental qualities which are a key future asset.
  c) Global, European and national pressure to tackle rising greenhouse gas emissions from transport.
  d) Scheme design and construction, and roadside maintenance can have significant local impacts on local environment and biodiversity.
  e) Opportunities for education in relation to the Eco-Schools initiative.

C.4   Integration
a) There is potential scope for innovative schemes to improve resource utilisation between different transport sectors – conventional Public Transport, Demand Responsive Transport, and various community, health and social provision.
b) There is a widespread perception that bus services do not integrate with flight arrivals/departures at Sumburgh Airport. There is an issue that scheduled buses cannot wait on delayed flights.
c) Opportunities arising from recently introduced integrated ticketing initiative.
d) A necessity to ensure continuation of public transport integration opportunities (services plus facilities) at ferry terminals and Tingwall.

C.5   Accessibility and Social Inclusion
a) Those without a car in rural areas are particularly vulnerable to social exclusion. The number of people without cars may fall due to increasing car ownership trends, but those without cars may become smaller in number, and more vulnerable. Other influencing factors include changing expectations of the level of accessibility to be provided in rural areas, an ageing population, and also trends towards care in the community for aged persons.
b) Timetable constraint and capacity constraint on internal and external links restricts accessibility.
c) The lack of "safe" pedestrian links within settlements rarely causes severance, but can contribute to reduced pedestrian amenity in some instances. Issue again may arise from changing expectations, although will also be influenced by rising traffic volumes and speeds.
d) Weather related reliability issues. A reliance on transport links that can be adversely affected by weather can lead to journey making decisions being curtailed, restricted or otherwise affected.
e) There is an over-riding requirement to provide adequate accessibility to key services and opportunities (jobs, health, education, shopping) for island and remote rural communities. This implies necessary contingencies to deal with planned and unplanned maintenance, contingencies if any tendered services are disrupted by operator default, and also longer term planning to deal with vessel replacement / fixed links.

C.6.   Safety
a) The challenge of improving road safety. This includes a trend of single vehicle incidents with "Killed or Seriously Injured" casualties.
b) Effective enforcement of good driving behaviour can be challenging in Shetland due to long lengths of high quality roads in sparsely populated areas.

c) There are not perceived to be any security problems for Shetland transport users.

d) There are opportunities for education, and provision for facilities outside schools, through the Safer Routes to School initiative.

e) Community safety could be improved by fixed links, in terms of evacuation to hospital.

C.7   Economic Development Issues

a) The right transport links can help get tourists to Shetland – one part of the mix for this sector.

b) Specific transport related investment can assist in enabling or encouraging specific economic development opportunities and this may go beyond what is required of an "economically efficient transport system". There needs to be early consideration of the transport issues arising from any particular development opportunities.

c) Ferry jobs can be a significant factor in sustaining remote island communities.

d) Improvements in transport links tend to have the impact of "centralising" economic activity, but can disperse residential location.

e) There are opportunities presented by Eco-Tourism, which imply opportunities to promote and enhance Shetland's environment, and promote local access to opportunities to enjoy the environment.

f) In the longer term, there are some opportunities presented by local renewable energy initiatives to provide a diversified energy mix for Shetland.

C.8   Planning Issues

a) Development plans are supportive of national transport objectives.

b) Development control can assist in preventing, and overcoming transport related problems such as maximising local accessibility to services for those without access to a car, footpath development, and ensuring the location of future economic development opportunities corresponds with the infrastructure required to enable it. It can also provide a framework for attracting developer contributions. It is understood that the current development control practices adopted by the Council are not fully enabling such opportunities to be realised. It is recognised that this is constrained by the historic pattern of single plot land release.

C.9   Health and Social Issues

a) There are problems of access for those without a car, in relation to health facilities, and child care opportunities.

b) This relates to the specific location of health and social facilities, and the range of access opportunities to these facilities; and

c) There is a requirement to encourage more physical exercise through walking and cycling. The current transport network may work against this opportunity.

C.10 Service Delivery

a) Decentralisation policies do not necessarily appear to have been implemented, and must be considered very carefully to ensure that they achieve the aims of improving efficiency and bringing services closer to their client. The policy has the risk of worsening accessibility overall to services and jobs if not carefully pursued. Opportunities arise from the consideration of "back room" services, and improved ICT facilities.

b) Fixed links can provide opportunities to pursue service rationalisation.

c) Possible future tendering of inter-island ferry links could lead to a range of different impacts, particularly in terms of service delivery, crewing strategy, and the influence of SIC/ZetTrans over the delivery of wider economic / social objectives through the ferry service.

Appendix D – Land Use Planning

D.1   There are a number of documents which guide national and local land use development and provide guidance on how transport can support the development of a sustainable land use planning system. Documents include:
a)   the National Planning Framework (Scottish Executive 2004);
b)   Scottish Planning Policy 17 (Scottish Executive 2005);
c)   The Shetland Structure Plan 2001 – 2016; and
d)   The Shetland Local Plan (SIC 2004).

D.2   This following section considers these relevant national and local policies and outlines how the Transport Strategy will support the delivery of these.

D.3   Opportunities to control the pattern of land use (especially housing) in Shetland are limited due to the culture of house building on family crofts. Many Shetlanders choose to build their own homes, and commonly build these on private farming land which is only linked to the main road network by private accesses. This distinct and historic development pattern can be difficult to link into public transport routes and as such can reduce opportunities to improve accessibility and reinforces reliance on the private car. However, ZetTrans recognises that transport can no longer be viewed as an afterthought in the development planning process. In preparing this Transport Strategy, cognisance has been given to national and local development planning policies.

D.4   At the national level, there is an increasing emphasis on closer integration between the land use planning and transport planning sectors in order to ensure that new developments are located in locations that reduce the need to travel, and which encourage the uptake of alternative forms of travel to the car. The Government's two White Papers on Integrated Transport in 1998 – "A New Deal for Transport"[38] and "Travel Choices for Scotland"[39] in particular heralded this change in transport policy towards more sustainable modes.

D.5   These themes have been echoed in the National Planning Framework[40], which outlines the Government's Strategy for Scotland's long-term spatial development to 2025. Transport elements particularly relevant to this Strategy include strengthening external links, promoting economic diversification and environmental stewardship, and promoting more sustainable patterns of transport and land use. These are issues that ZetTrans feel are covered by this Strategy.

D.6   ZetTrans recognise that the development of a sustainable transport system goes hand-in-hand with the development of a sustainable land use planning system and will continue to work in partnership with planning colleagues at Shetland Islands Council to support this.

D.7   ZetTrans supports Scottish Planning Policy 17 (SPP 17), Planning for Transport, and the supporting Planning Advice Note 75 (PAN 75)[41], which promote an integrated approach to land use, economic development, transport and the environment. Furthermore, ZetTrans supports the transport hierarchy set out in SPP17, which priorities walking, cycling and public transport above other vehicular modes.

D.8   The ethos of transport sustainability and closer integration between land-use and transport planning has also been recognised in Shetland's Structure Plan (SIC 2001) and Local Plan (SIC 2004).

D.9   'Sustainable Development' is at the heart of Shetland's Structure Plan 2001-2016. Accordingly, it is believed that this sits complementary to the Transport Strategy. The Structure Plan outlines a number of issues relevant to transport that have been supported in this Transport Strategy. Of particular relevance is the Structure Plan's vision for Shetland in 2016. Amongst these 'visions' include that the aspiration that by 2016, Shetland will have "embraced new technology to combat the negative impacts of peripherality and population sparsity on further economic development", while "transport links to the UK Mainland will have been strengthened and made more affordable for business and the local community". The interventions within this Strategy have been developed mindful of these aims. The Plan also outlines the aspiration that Shetland's reliance on the private car will be substantially reduced through the introduction of an integrated public transport system. In addition, the Plan states that, by 2016, improvements to the existing road network will have enhanced access to the rural areas, while road safety will remain the Council's highest transport priority. Enabling more people to work locally, or from home using video and computer networking is another aspiration set out in the Structure Plan. Interventions to support these aspirations are included in this Strategy.

D.10   The links between the Transport Strategy and the Local Plan are also recognised in a number of ways. For example, the Local Plan acknowledges the potential development of fixed links and while it is confirmed that the inter-island ferry service will continue to be the main lifeline link to the isles, the Plan guards against development that could prohibit the future development of fixed links. The provision of adequate car parking standards that meet Shetland's needs are also included in the Local Plan. In line with ZetTrans policies to ensure DDA compliance across a number of transport services, the Local Plan contains the policy of improving access to public places for the less mobile through ensuring that developments are fully accessible by the disabled and other vulnerable groups. Improving public access or the provision of new routes for public access is also encouraged within the Local Plan. The Local Plan outlines that where practical, access for cyclists, walkers, horse riders and those with special needs will be catered for. This is in parallel with ZetTrans' proposals to continue to promote and develop walking and cycling facilities. Finally, the development

of Action Plans for Roads Infrastructure, in consultation with local communities, is another measure noted in the Local Plan that will be supported by ZetTrans. This Action Plan will contain measures for the construction, improvement, maintenance and use of roads infrastructure.

Appendix E – Objectives Comparison Matrix

E.1   The matrix presented over the page illustrates the comparability between the objectives developed for this RTS and the Scottish Government's Strategic Objectives, National Outcome Indicators, and NTS Objectives.

Table E.1: Relationship between the RTS Objectives and the Scottish Government's Strategic Objectives, National Outcome Indicators, and NTS Objectives.

Objectives Category	Objectives / Outcomes	ECON 1	ECON 2	ECON 3	ECON 4	ECON 5	ECON 6	ECON 7	SIA 1	SIA 2	SIA 3	SIA 4	SIA 5	ENV 1	ENV 2	ENV 3	ENV 4	ENV 5	ENV 6	ENV 7	ENV 8	ENV 9	SAFE 1	SAFE 2	SAFE 3	SAFE 4	SAFE 5	SAFE 6	INT 1	INT 2	INT 3	INT 4	INT 5	INT 6
Scottish Government Strategic Objectives	Wealthier & Fairer		x	x		x			x	x		x	x																					
	Smarter									x	x	x	x																				x	x
	Healthier								x	x	x	x	x	x	x	x									x									
	Safer & Stronger																			x			x	x	x	x	x	x						
	Greener													x	x	x	x	x	x	x	x	x												x
Scottish Government National Outcomes	We live in a Scotland that is the most attractive place for doing business in Europe	x	x			x																												x
	We realise our full economic potential with more and better employment opportunities for our people								x			x																						
	We are better educated, more skilled and more successful, renowned for our research and innovation																																	
	Our young people are successful learners, confident individuals, effective contributors and responsible citizens													x	x										x	x		x						
	Our children have the best start in life and are ready to succeed									x	x	x																						
	We live longer, healthier lives									x	x			x	x	x					x				x	x	x							
	We have tackled the significant inequalities in Scottish society		x							x	x	x	x																					
	We have improved the life chances for children, young people and families at risk									x	x	x	x																					
	We live our lives safe from crime, disorder and danger																						x	x	x	x	x	x						
	We live in well-designed, sustainable places where we are able to access the amenities and services we need															x			x		x								x	x	x	x	x	x
	We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others																								x	x		x						
	We value and enjoy our built and natural environment and protect it and enhance it for future generations													x	x	x	x	x	x		x	x												
	We take pride in a strong, fair and inclusive national identity																																	
	We reduce the local and global environmental impact of our consumption and production													x	x	x	x	x	x		x	x												
	Our public services are high quality, continually improving, efficient and responsive to local people's needs	x	x																										x	x	x	x	x	
NTS Strategic Outcomes	Improve journey times and connections	x			x																								x	x				
	Reduce emissions													x	x	x	x				x													
	Improve quality, accessibility and affordability of transport	x	x	x	x					x	x	x	x																x	x			x	x
NTS Objectives	Economic Growth				x	x	x																											
	Social Inclusion		x		x					x	x	x	x																					
	Environmental Protection				x									x	x	x	x	x	x	x	x	x												
	Improve Safety				x																		x	x	x	x	x	x						
	Improve Integration			x	x																								x	x	x	x	x	x

Appendix F - Strategic Environmental Assessment (SEA) of the Shetland Transport Strategy

Introduction

F.1   The purpose of SEA is to integrate environmental considerations within the Transport Strategy and this is done in two key ways. Firstly, the SEA allows the potential environmental impacts of the Transport Strategy to be predicted and, where appropriate, these predictions can be used to inform the development of the policies in the Strategy.

F.2   Secondly, in setting out the predicted environmental impacts in the publicly available Environmental Report, the public and other stakeholders are able to comment on the Strategy and its potential impacts.

F.3   The SEA Scoping Report was submitted to the statutory Consultation Authorities (SEPA, SNH and Historic Scotland) via the Scottish Executive's SEA Gateway in July 2006. Comments were received in August and were taken into account in the assessment which followed. The Environmental Report, which presents the findings of the assessment, will be published alongside the Final Transport Strategy.

Key impacts

F.4   The SEA assesses the potential environmental impacts of the Transport Strategy's policies. The majority of policies are not predicted to have significant environmental effects. However a number of policies which support or promote new or upgraded infrastructure (e.g. road improvements and ferry terminal replacements) have been identified as having potentially significant negative environmental effects.

F.5   Effects which have the potential to be of greatest significance relate to natural heritage, the historic environment and landscape character or visual amenity. There is the potential for species which are protected under European legislation (cetaceans, otters, seals) to be disturbed by the construction of coastal developments such as ferry terminals. There is also the potential for negative effects on protected sites and the Environmental Report will recommend more detailed studies to investigate this further.

F.6   There is the potential for negative effects on the setting of historic buildings and monuments by new or upgraded infrastructure. There is also the possibility of disturbance to archaeology.

F.7   The significance of effects on landscape character and visual amenity is dependent on the scale and design of infrastructure projects and detailed information is not yet available. There is however the potential for significant

negative impacts of schemes which are in the vicinity of receptors e.g. residential dwellings.

Environmental Policies

F.8   A number of policies have been developed for the Transport Strategy to avoid, reduce or offset impacts that have been identified. These policies are listed below in sections F.9 to F.15.

Natura 2000 Sites

F.9   Potential adverse impacts on the integrity of Natura 2000 sites (or proposed Natura 2000 sites) will, in the first instance, be prevented by locating transport activities likely to cause negative impacts away from such sites. Where activities could directly, indirectly or in combination with other proposals affect the conservation interests of a Natura site, an Appropriate Assessment will be carried out, the findings of which will be used to inform planning decisions.

Protected Species

F.10   ZetTrans and SIC will seek to avoid disturbance of protected species, destruction of their habitat and damage or destruction of their breeding sites or resting places by locating transport activities likely to have such impacts away from sites associated with those species. Where disturbance of a European Protected Species or damage to its breeding site or resting place cannot be avoided a licence will be sought from the relevant authority to ensure compliance with protected species legislation. To reduce the number of otters (European Protected Species) killed on existing roads, signposting and crossing facilities will be provided in recognised problem areas.

Scheme Design

F.11   New transport infrastructure will minimise impacts on key environmental, ecological, heritage, landscape and topographical features. The scale and design of all schemes will be fitting to the local landscape character and aligned or located in a manner which uses the existing landform to good effect and which minimises the scale of required earthworks. In addition:
a)   Design profiles will reflect existing natural slopes and be designed to avoid risks of landslips;
b)   the scale of road improvement schemes will be in keeping with the local environs; and
c)   effective environmental mitigation, as set out in sections F.17 to F.20, will be part of all transport infrastructure designs.

Waste

F.12   SIC will ensure that waste materials associated with transport infrastructure are reduced, reused, recycled or recovered.

Water

F.13   Appropriate Sustainable Urban Drainage Systems (SUDS) will be used in development of transport infrastructure.

Alternative Fuels

F.14   ZetTrans and SIC will undertake a study into the use of alternative fuels (including biofuels) and energy conservation measures for the Council's fleet of vehicles and vessels.

F.15   ZetTrans and SIC will support and encourage the development of renewable energy projects.

Mitigation

F.16   In addition to these policies, a number of measures have also been included within the Transport Strategy to mitigate impacts of schemes. For the projects that are promoted by the policies of the Transport Strategy, ZetTrans and SIC are committed to implementing the following mitigation measures and have incorporated them within the Strategy. These measures are listed under the aspects of the environment that have the potential to be affected.

F.17   **Biodiversity**
a)   Sensitive sites (protected sites, second tier sites, semi natural habitat) will be avoided where possible.
b)   Where appropriate, measures to enhance biodiversity will be implemented. Such measures may include seeding locally native species on roadside verges and other schemes.
c)   Any scheme with the potential to affect Natura sites (Special Area of Conservation and Special Protection Areas) will be subject to an Appropriate Assessment by ZetTrans and SIC, as required by the Habitat & Conservation (Natural Habitats) Regulations 1994.
d)   Specialist surveys will be required for any schemes with the potential to adversely affect species protected under the Habitat & Conservation (Natural Habitats) Regulations 1994, the Wildlife and Countryside Act or priority Biodiversity Action Plan (BAP) species / habitats. Potential licensing requirements will be discussed and taken forward with SNH or SEERAD.
e)   Any developments likely to affect European Protected Species (EPS) will require specialist surveys to be carried out and for mitigation to be identified prior to consent being issued.
f)   Schemes with the potential to affect nationally or internationally designated sites (including Ramsar sites) will be subject to formal screening to determine whether Environmental Impact Assessment (EIA) is required.

F.18   **Landscape and Visual Amenity**
a)   Any schemes that will potentially have an effect on National Scenic Areas, areas designated in the Inventory of Gardens and Designed

Landscapes or Local Protection Areas will be subject to formal screening to determine whether an EIA is required.

b)   Landscape and visual appraisals will be carried out for all major schemes to determine the likely effects of the scheme on landscape character and visual amenity and robust mitigation identified and implemented.

c)   High quality design and construction principles will be applied to all new developments, modifications and improvements to existing schemes.

d)   All schemes will be appropriately and sensitively designed for their location.

e)   All schemes will be maintained to ensure they remain in good condition.

f)   All schemes will retain existing important and distinctive landscape features where possible.

g)   Where important and distinctive landscape features must be removed/modified or landscape character will be temporarily altered, Landscape Management Plans will be produced highlighting how the affected areas will be restored, reinstated and enhanced.

h)   All landscape schemes will incorporate biodiversity enhancements where appropriate e.g. use of native species.

i)   The Transport Strategy will ensure that the quality and appropriateness of street furniture (e.g. lighting and signage) is appropriate to their setting, creates a cohesive treatment and enhances streetscape quality.

F.19 **Cultural Heritage**

a)   New transport related schemes in Conservation Areas will be of a high quality and will be designed to ensure they are appropriate to the character of the Conservation Area and its setting.

b)   Any scheme with the potential to affect Gardens and Designed Landscapes, Listed Buildings, Scheduled Ancient Monuments or their settings will consider taking into account guidance included in Memorandum of Guidance on Listed Buildings and Conservation Areas 1998 and will be subject to formal screening to determine whether an EIA is required.

c)   Surveys will be undertaken prior to the implementation of any scheme to determine whether it will affect any site of archaeological importance or the setting of any archaeological features.

d)   Landscape character assessments will incorporate Historic Land-Use Assessments (HLA) to inform all related assessments in terms of the historic elements of landscapes.

e)   Shetland Amenity Trust will be consulted on any proposal with potential to affect unknown archaeology and an appraisal and mitigation strategy defined and implemented prior to any works being undertaken on site.

f)   As part of the planning process, the Council will consider whether or not a scheme requires consultation under the General Development Procedure Order (GDPO).

g)   Historic Scotland will be consulted at an early stage on any scheme likely to affect a protected wreck.

F.20 **Water Quality**

a) The Council will require that, where appropriate, new transport-related developments implement Sustainable Urban Drainage Systems (SUDS).

b) All new transport schemes and improvement works will be carried out in accordance with relevant legislation for the protection of surface and groundwater (including the Water Framework Directive). These will also take into account Scottish Environment Protection Agency's (SEPA's) Pollution Prevention Guidelines (PPG):
  i. PPG1: General Guide to the Prevention of Pollution;
  ii. PPG2: Above Ground Oil Storage tanks;
  iii. PPG5: Works In, Near or Liable to Affect Watercourses;
  iv. PPG6: Working at Demolition and Construction Sites; and
  v. PPG21: Pollution Incident Response Planning

c) All engineering, building or other works in inland surface waters will require authorisation under the Water Environment (Controlled Activities) (Scotland) Regulations 2005 and may require licensing by SEPA.

d) Transport schemes and improvement works will implement appropriate means to minimise pollution from surface run-off during construction works e.g. SUDS attenuation lagoons, rather than oil separators and silt traps.

e) In accordance with the Risk Framework in Scottish Planning Policy 7 (SPP:7), all new schemes and transport infrastructure improvements will be screened against the Indicative River and Coastal Flood Map (Scotland) and other available sources of flood risk information. Any new scheme in a medium to high risk area will be subject to a site specific Flood Risk Assessment and will only be developed if essential for operational reasons.

Monitoring

F.21 The Environmental Report also sets out a framework to monitor the predicted environmental effects of the Strategy.

Appendix G – Road Traffic Reduction

Introduction

G.1   The Road Traffic Reduction Act 1997 requires local authorities to set out existing traffic levels within their area, provide forecasts for future growth in those traffic levels, and then set targets for the reduction of traffic within its local authority area, or to provide justification for not setting targets. Whilst Scotland's National Transport Strategy retains a target to stabilise road traffic volumes at 2001 levels by 2021, it does acknowledge that this is an "Aspirational" target.

Historic Traffic Levels

G.2   Scottish Transport Statistics provide an analysis of road traffic levels for Shetland, over the last 10 years. These are presented in **Table G.1.**

Table G.1 – Historic Road Traffic Growth, Shetland (m veh kms)

Year	Shetland Traffic Levels (m veh kms)	Shetland Growth Index (1996=100)	NRTF Central Growth Index (1996=100)
1995	165	-	-
1996	169	100.0	100.0
1997	172	101.8	101.7
1998	174	103.0	103.5
1999	178	105.3	105.3
2000	178	105.3	107.1
2001	181	107.1	109.0
2002	190	112.4	110.8
2003	194	114.8	112.7
2004	195	115.4	114.6
2005	198	117.2	116.6

G.3   Over the last **5** years, this represents an equivalent annual increase of 2.15%, and over the last **10** years, an equivalent annual increase of 1.84%. These levels are in line with Central Growth predictions provided in DETR's National Road Traffic Forecasts (Great Britain) 1997[42].

Forecast of Future Traffic Levels

G.4   Over the next five years, it is anticipated that traffic levels will continue to rise broadly in line with the NRTF Central Growth Forecast. This is equivalent to a 1.53% annual increase per annum between 2006 and 2011. Forecasts are presented in **Table G.2.**

Table G.2 - Forecast Road Traffic Growth, Shetland (m veh kms)

Year	Forecast Annual Growth Rate (NRTF Central)	Forecast Shetland Traffic Levels (m veh kms)
2005	1.69%	198
2006	1.53%	201
2007	1.53%	204
2008	1.53%	207
2009	1.53%	210
2010	1.53%	213
2011	1.53%	216

Road Traffic Reduction Targets

G.5   Recent research[43] into road traffic targets found that successful targets require a clear rationale for their adoption, a clear action plan for their achievement, sufficient information in order to set realistic target values, effective monitoring proposals to measure progress, and also strong support for their achievement. The research also pointed towards setting more meaningful output targets, related to tackling problems that reductions in road traffic would be seeking to address.

G.6   In the absence of local air quality problems and congestion, the main reasons that ZetTrans would set road traffic reduction targets would be to reduce carbon dioxide emissions and accidents/injuries.

G.7   A range of policies are being adopted within the Shetland Transport Strategy to contribute to reducing carbon dioxide emissions. Principally, they include fuel efficiency and alternative fuel initiatives. Significant gains could be achieved through improved Northern Isles ferries, and also replacement of inter-island ferry links with fixed links. The promotion of walking and cycling and policies to reduce the need to travel are also included. These will help reduce traffic growth, and also carbon dioxide, but also have wider impacts, including benefits to health, and local community vitality and viability.

G.8   Whilst such actions are likely to be beneficial, in terms of measurable reductions in traffic levels, the impacts are likely to be slight, difficult to predict / measure, and likely to be overwhelmed by more significant issues such as the rising price of fuel, national initiatives such as road pricing, motoring tax policy, and the wider economic fortunes and demographic trends affecting Shetland.

G.9   Therefore, ZetTrans have at the present time decided against setting road traffic reduction targets within this Strategy. ZetTrans will continue to use road traffic levels as a Key Performance Indicator and will also use estimates of fuel consumption in Shetland by different modes as a Key Performance Indicator for carbon dioxide emissions. ZetTrans will continue to contribute to Shetland-wide carbon reduction initiatives.

Appendix H – Map of Shetland

Appendix I – Glossary of Terms

Acronyms

BAP	Biodiversity Action Plan
EIA	Environmental Impact Assessment
EPS	European Protected Species
GIS	Geographical Information System
HLA	Historic Land-Use Assessment
ICT	Information and Communications Technology
KPI	Key Performance Indicator
MV	Motor Vessel
PPG	Pollution Prevention Guidelines
Ro-Ro	Roll-on Roll-off (Ferry)
RTP	Regional Transport Partnership
RTS	Regional Transport Strategy
SEA	Strategic Environmental Assessment
SEERAD	Scottish Executive Environment and Rural Affairs Department
SEPA	Scottish Environment Protection Agency
SIC	Shetland Islands Council
SMS	Short Message Service
SNH	Scottish Natural Heritage
SOA	Single Outcome Agreement
SOLAS	Safety of Life at Sea (Maritime Legislation)
SPP	Scottish Planning Policy
SUDS	Sustainable Urban Drainage Systems
WRVS	Women's Royal Voluntary Service

Other Terms

E- Log	Electronic log system
MARPOL	Legislation related to prevention of marine pollution
RAMSAR	Designated Wetland Sites
Natura 2000 Site	Environmentally sensitive sites protected under legislation, including Special Areas of Conservation and Special Protection Areas.
Hitrans	Highlands & Islands Transport Partnership
Nestrans	North East Scotland Regional Transport Partnership
ZetTrans	Zetland Transport Partnership

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