

MINUTE

“B”

**Zetland Transport Partnership
Council Chamber, Town Hall, Lerwick
Tuesday 22 April 2008 at 2.15pm**

Present:

A S Wishart	I J Hawkins
C H J Miller	F A Robertson
Dr S Taylor	

Also:

R S Henderson

Observer/Adviser:

S Laurenson, Chief Executive, Lerwick Port Authority
J G Simpson, Chairman, Shetland Development Trust

Apologies:

A Steven

In attendance (Officers):

M Craigie, Lead Officer
K Duerden, Transport Development Manager
B Hill, Acting Divisional Manager, Legal
G Spall, Executive Director - Infrastructure
L Geddes, Committee Officer

Chairperson

Mr A S Wishart, Chairperson of ZetTrans, presided.

The Chairperson welcomed Dr S Taylor to her first meeting of ZetTrans.

Circular

The circular calling the meeting was held as read.

Declarations of Interest

None

Minutes

The note of the meeting held on 18 February 2008 was confirmed.

Members' Attendance at External Meetings

There was nothing to report.

Copies of the Standards Commission's "Guidance Note to Devolved Public Bodies in Scotland and their Members" were distributed to those present at the meeting (Appendix A).

17/08 **Lead Officer's Report**

The Partnership considered a report by the Lead Officer (Appendix 1).

The Lead Officer and Transport Development Manager gave a brief update on the items in the report.

Parliamentary Ferries Inquiry

The Partnership noted that the Committee was due to report back on its findings in June, and that there were no significant changes to the itinerary appended to the report. It was pointed out that Bressay Community Council had yet to be formally informed about the meeting to take place on Tuesday 29 April. The Transport Development Manager said that he understood the invitations had recently been issued from Edinburgh, but would check that this was the case following the meeting.

Meeting of RTP Chairs – 17 March 2008

It was noted that the date of the meeting referred to in Appendix B should read "17 March 2008".

Progress on Functional Transfers

The Lead Officer referred the Partnership to the most recent email exchange in Appendix C, and said that it raised the question of whether progressing the air services functional transfer in isolation would be considered as an inefficient use of parliamentary time. He advised that he tended to share this view, and was instead suggesting that work was carried out to explore all functional transfers by the end of the calendar year in order to reach a conclusion on the best way ahead for Shetland.

In response to a query, he said that he felt that the work involved would be within the capabilities of staff within the Council, and therefore would not require the use of parliamentary agents. It was a relatively straightforward process which the Council had gone through before. He further explained that it had been a condition relating to the establishment of ZetTrans that bus services transferred, and that the previous Government had hoped to apply this to all services. However the new Scottish Government did not have any particular views on how this should happen, and had asked the Partnership to explore this further. If the Partnership was agreeable to his proposal to present a report on functional transfers by the end of the year, he would intend firstly to consider the legal requirements and implications, before looking at the strategic options and carrying out wider consultation.

On the motion of Mrs I J Hawkins, seconded by Mr F A Robertson, the Partnership agreed to the Lead Officer's proposal to present a report to the Partnership, in consultation with Shetland Islands Council, by the end of the calendar year on the principles and pros and cons of the function transfer of both ferries and air services from Shetland Islands Council to ZetTrans, as outlined in paragraph 7.2 of the report.

The Scottish Transport Conference 2008

The Lead Officer advised that since the report had been written, he had been approached by Swestrans asking if ZetTrans would consider sharing a stand at the conference. As well as halving the costs to the Partnership, there were also a number of similarities between the areas which would make sharing a stand appropriate, including that both were the only single authority transport partnerships in Scotland, both faced similar transport challenges and both had international transport connections. He felt that it would be beneficial to take up this offer, and that it was important to be represented at the Conference.

The Partnership agreed, and on the motion of Mrs I J Hawkins, seconded by Mr F A Robertson, approved recommendation 7.3 in the report, and that ZetTrans should take up the offer to share an exhibition stand with Swestrans.

18/08

Implementation of Shetland Transport Strategy

The Partnership noted a report by the Transport Development Manager (Appendix 2).

The Lead Officer referred to paragraph 2.6 of the report and pointed out that the bike repair scheme had been very successful, and that the first four sessions of the bike maintenance courses were now fully subscribed.

In response to a query regarding the report prepared for the Capital Programme Review Team (CPRT) in relation to the Skerries South Mouth, as referred to in paragraph 2.3, the Lead Officer confirmed that the project had gone through the prioritisation process but he had not yet been informed of the outcome. However he would contact the CPRT following the meeting to find out.

With regard to paragraph 2.8, Mr J G Simpson advised that the feeling of the last two Whalsay STAG meetings was that it was not an option to consider the Whalsay link without taking account of Vidlin to allow for diversions in bad weather. The Lead Officer confirmed that the Vidlin connection featured in the preferred option, and that the financial implications would be presented to the next meeting.

The Partnership noted that the area transport forums, referred to in paragraph 2.13, had received positive feedback, and that those involved had commented on the value of being able to engage in the process of reviewing services. The forums had also proved valuable for officers in finding out more about the reasons that services had evolved in local areas, and in getting people's views on future provision. It would be a longer term process to pull together this information and consider it in terms of the resources available to deliver services.

The Partnership agreed to Dr S Taylor's suggestion that changes that arose as a result of area transport forums should be reported to the Partnership.

19/08

Revised Final Draft Transport Strategy

The Partnership considered a report by the Lead Officer (Appendix 3).

The Lead Officer explained that there were no fundamental changes to the Strategy. It had been restructured in order that it could be presented in a format

that the Cabinet Secretary expected and that reflected national objectives. The main difference was that the previous version had included the delivery plan as part of the Strategy. However this now had to be a separate plan that would be approved by ZetTrans and the Council, but does not need to be sent to the Scottish Government for approval.

It was pointed out that the Scottish Government had made it clear that the delivery of the Strategy would be the responsibility of the Partnership and the Council, therefore it would be imperative on ZetTrans and the Council to consider what is affordable within the plan. The Lead Officer pointed out that consideration had been given to economic and community sustainability and to social inclusion, and that the Strategy contained a set of requirements to ensure sustainability rather than a list of aspirations.

It was suggested that, in the longer term, it would be important to lobby the Government and to seek EU funding, as it would not be possible for the local authority to fund everything. The Chairperson advised that he had already raised this issue with the Transport Minister, and that he had not been dismissive of future approaches by the Council/ZetTrans for funding. The point had been made to the Minister that national projects were being funded by central government, and the Chairperson agreed that it was important to maintain this level of contact and to continue dialogue with the Government.

Some discussion took place regarding soft verges for roads in rural areas. It was felt that there was a case for hard verges to be installed where possible in order to encourage people to walk and to make it safer for them to do so. It was noted that this had also been raised in relation to the Burra/Scalloway area at a recent Member/Officer Working Group. It had been agreed that, as a starting point, a map should be sent to Community Councils so that they could map the main areas where people walked as it would not be possible to install hard verges everywhere.

The Partnership agreed to the Chairperson's suggestion that the minutes of ZetTrans meetings should be included on the agenda of the Council's Infrastructure Committee for information.

The Partnership otherwise approved the recommendations in the report on the motion of Mrs C H J Miller, seconded by Mr F A Robertson.

On the motion of Mr A S Wishart, seconded by Mrs I J Hawkins, the Partnership resolved, in terms of the relevant legislation, to exclude the public during consideration of the following item of business.

20/08

Approval of ZetTrans Nominations

The Partnership considered a report by the Head of Legal & Administration and approved the recommendations contained therein on the motion of Mrs C H J Miller, seconded by Mrs I J Hawkins.

The meeting ended at 3.00pm.

A S Wishart
CHAIRPERSON

Zetland Transport Partnership

REPORT

To: **Zetland Transport Partnership**

26 May 2008

From: **Lead Officer**

Lead Officer's Report

1. Introduction

- 1.1. The Lead Officer's Report is a routine report to the Zetland Transport Partnership Board that gives an overview of current issues and events relating to the business of the Partnership.
- 1.2. This report covers,
 - Initial figures on Revenue and Capital Out Turn for 2007/08
 - Appointment of SACC Chairman as Adviser to ZetTrans
 - Resubmission of Regional Transport Strategy

2. Revenue and Capital Out Turn for 2007/08

- 2.1. For the financial year 2007/08 ZetTrans had a total revenue budget of £694,000 and a total capital budget of £188,464.
- 2.2. Full details of expenditure will be included in an out turn report to the next meeting of ZetTrans but I can confirm that budgets detailed in at 2.1 above have been fully spent.

3. Appointment of Chairman of SACC as Adviser to ZetTrans

- 3.1. At the last meeting of the Sumburgh Airport Consultative Committee a new Chairman, James L B Smith, was appointed. Mr Smith represents the Federation of Small Businesses in Shetland.
- 3.2. Previously this position was held by Andy Steven, Director of Visit Shetland and he has continued to be an Adviser to ZetTrans.
- 3.3. At the ZetTrans meeting of 18 February (Min Ref 09/08), it was agreed that the new Chairperson of the SACC would be trusted to attend as an Advisor. Mr Smith has accepted this position.

4. Resubmission of RTS

- 4.1. Members will recall that at its last meeting ZetTrans approved a revised draft of the Regional Transport Strategy for submission to Scottish Ministers for approval.
- 4.2. I can confirm that copies of the Strategy were posted to the Scottish Government Transport Directorate and the Minister for Transport, Infrastructure and Climate Change on 5 May 2008.

5. Fuel Prices in Scottish Islands – A Case to Made to The Chancellor of the Exchequer

- 5.1. Appendix A to this report contains a letter from the Chairman of Hitrans to the Chancellor to of the Exchequer regarding fuel prices in Scottish Islands and the disproportionate challenges it places on island economies.
- 5.2. In effect the Chairman is asking the Chancellor to consider the application of a differential taxation regime with regard to fuel in Scottish islands to offset the disadvantages we currently face.
- 5.3. This is clearly an issue that Shetland would wish to see developed and in this connection I ask the Partnership, through a letter from the Chairman to the Chancellor, to support the case being presented by the Chairman of Hitrans.

6. Landing Slots at Heathrow Airport

- 6.1. Appendix B contains a letter from the Chairman of Nestrans to the Secretary of State for Transport raising the importance of protecting landing slots at Heathrow through the application of PSOs on some slots to accommodate flights from Aberdeen, Inverness and Belfast.
- 6.2. The main thrust of the case is that as pressure on slots at Heathrow rises there will be more commercial pressure to allocate slots to transatlantic and long haul travel at the cost of slots for regional travel.
- 6.3. As explained in the letter, Aberdeen aspires to evolve from a world leading Oil and Gas centre to a world leading Energy Centre of Excellence. This has clear synergies with some of Shetland's aspirations also.
- 6.4. In principle it is my view that we should support Nestrans in this matter because Aberdeen Airport's links are very important to Shetland and our aspirations to be at the forefront of the Energy sector. The arguments being made by Nestrans are applicable from the Shetland context also.
- 6.5. In this connection I recommend that officers of ZetTrans engage with Nestrans and Hitrans to determine how best to provide support in this matter.

7. Financial Implications

7.1. There are no financial implications arising from this report.

8. Recommendations

I recommend that: -

- 8.1. The Partnership notes the initial out turn position with regard to the revenue and capital budgets for 2007/08.
- 8.2. As described in section 3 above, the Partnership notes the appointment of Mr James L B Smith, by virtue of his position as Chairman of SACC, as an adviser to ZetTrans.
- 8.3. The Chairman of the Partnership writes to the Chancellor of the Exchequer in similar terms as the letter in Appendix A as mark of support for the case presented to the Chancellor by the Chairman of Hitrans.
- 8.4. Officers of ZetTrans engage with colleagues in Nestrans and Hitrans to resolve the most effective means of protecting landing slots at Heathrow for Scottish regional airports.

Report Number: ZTP-19-08-F

21 April 2008

Rt Hon Alistair Darling MP
HM Treasury
1 Horse Guards Road
London
SW1A 2HQ

Dear Chancellor

Fuel Prices on Scottish Islands

I write to you as Chair of HITRANS, the Highlands and Islands Transport Partnership set up by Government to promote and deliver effective transport services across this peripheral region of the UK.

Transport is a disproportionate element in the everyday budget of people living in the remote parts of the highlands and islands due to the sparsity of the population and the higher than average cost of fuel in these areas. People have to travel longer distances and incur higher costs to access basic services and employment which create significant household budgetary pressures. This cost impinges on the sustainability of our communities and ultimately their ability to add value to the national economy.

HITRANS appreciate the reasoning behind the level of taxation applied to fuel across the country and the need for us all collectively to reduce our carbon footprint and support measures that mitigate climate change. We understand that applying a differential fuel tax raising regime across the country to equalise the impact of fuel tax on sectors of the community would be problematic. It could create incentives for people to travel to obtain cheaper fuel thus partly negating the intention of the measure.

The reason I write to you at this time is to ask you to consider the worsening situation faced by our island communities, who pay the highest prices for fuel in the UK, and raise with you the possibility of considering a dispensation of the fuel tax for these distinct and easily defined areas who suffer disproportionately from the application of the tax and higher fuel prices. Were a reduced level of fuel tax applied on islands without a fixed link to the mainland, there would be no resultant incentive for people from out with these island communities to travel to gain the benefit of the reduced duty. The cost of fuel would, as a result of such a dispensation, only be equivalent to that available on the mainland, and any journey by mainland residents to obtain fuel on an island would result in their incurring a return ferry fare for the privilege, thus negating the benefit.

If a dispensation was allowed, it would improve the sustainability of our island communities, and with just under 100,000 people living on some 95 islands in Scotland, allow these people to enjoy the same basic cost of transport in doing business and living their everyday lives as those in the rest of the country.

I would ask you to consider their case.

Yours Sincerely



Duncan MacIntyre

Chair, HITRANS

7 May 2008

Our Ref RGM/N1/11 & N13/8
Your Ref

Rt. Hon. Ruth Kelly, MP
Secretary of State for Transport
Great Minster House
76 Marsham Street
London
SW1P 4DR

Dear Secretary of State

Protection of Landing Slots at Heathrow Airport for Services from Other UK Airports

I am writing to you on behalf of Nestrans as a follow up to your Department's recent consultation on the third runway proposal at Heathrow Airport. Nestrans is the statutory Regional Transport Partnership for the North East of Scotland covering the geographic areas of Aberdeen City and Aberdeenshire Councils. We are charged with setting a Regional Transport Strategy for our area and supporting our constituent authorities in implementing that strategy.

The economy in our area is one of the few truly global economies in the UK. Our area has been the home to the UK's oil and gas industry for the development of North Sea reserves. As such our region has a vast wealth of knowledge and expertise in the energy sector that has developed and grown over the last 40 years or so. It has an enviable record of innovation and implementation. The successes in our area are transported throughout the world as oil and gas fields are developed else where and our region has become one of the worlds centres of excellence in this field. We have the greatest concentration of sub sea expertise in the world.

Our economy is also a major exporter in the food and drink sector with our region accounting for 1/3 of all Scotland's food and drink exports.

Our local authorities are keen to embed this success into our area and develop from an oil and gas centre of excellence into an all energy global centre of excellence as well as building on our more indigenous food and drink industry export successes.

The energy companies are also interested in maintaining and developing the expertise that exists in our area, building on the record of innovation, success and export that already exists, keeping and expanding the critical mass needed for our region to support and drive the energy industry throughout the world as North Sea developments begin to contract. In doing so we hope to continue to contribute greatly to the Scottish and UK economies and continue to bring in and grow export revenue at a time of reducing North Sea income.

We have the people, the knowledge, the existing business, the global outlook and the linkages with other parts of the world where energy industries exist. This base provides us

with a good chance of success in developing our economy for the benefit of Scotland and the UK. We are, though, far from the centre of the UK and the main world hub for UK travellers at Heathrow Airport.

Because of the distance involved in getting to Aberdeen on arrival into the UK at Heathrow, flying is the only practical option for today's and tomorrow's business passenger. Taking the train is not a practical option at 7½ hours journey time on the train alone never mind the time taken to get from Heathrow to Kings Cross and only 3 trains per day with the last at 1600 hours.

With an existing global economy and a will and desire to increase that economy air travel from Aberdeen to various parts of the world is extremely important to us. Our regional Transport Strategy in support of the developing Structure Plan recognises these important external links. A copy of what our Regional Transport Strategy says in respect of this is included as an appendix.

Whilst we recognise that developing direct flights from Aberdeen would be helpful, particularly for the reduction of carbon emissions, we also recognise that access to many parts of the world will only be viable from a hub airport.

It has therefore been with concern that we have watched Heathrow becoming more and more busy over the years, until this year, when we have been advised it has reached capacity. The Nestrans Board were therefore pleased to take part in your consultation on the third runway where we discussed the strategic context of the proposal rather than the details of the local planning issues.

The recent trading of landing slots at Heathrow for considerable sums also highlights the pressures that now exist at the airport. The Nestrans Board are concerned that with no slots available and with slots trading for such high sums, there will be considerable pressure to maximise profits from these slots resulting in pressure to use bigger aircraft at each slot for long haul services rather than the more local internal UK links.

The Board have taken some advice on the possibility of applying for a Public Service Obligation to ensure that services are maintained between Aberdeen and Heathrow. They are also aware that we are currently reasonably well served with this connection and that Aberdeen is the only UK airport to have seen a significant expansion of services over the last decade or so. There is a concern though that with Heathrow now at capacity in terms of slots, greater pressure will come on these existing services resulting in loss of service as has happened over the last 10 years to many other airports.

The Board are also aware that the Department of Transport seems to operate a policy of not entertaining such PSO requests for the London airports preferring to let the market decide these issues. The Nestrans Board are concerned that this policy disadvantages our area disproportionately due to the distance between Aberdeen and London. We recognise that our peripherality is not unique being shared by other airports such as Inverness and Belfast. We do believe though that the global nature of our economy and our desire to increase that global interaction combined with the peripherality makes it more important to us that our connections with Heathrow are maintained and if needed in the future enhanced.

Given the relatively buoyant nature of the current economy in our region resulting in the reasonable connections that currently exist, the Board decided that it was not the appropriate time to request a PSO. They were though concerned about what might happen in the future when pressure on slots is increased and the economy goes through one of its cycles of quieter times. If services are not maintained during these times there is a great risk that companies who underpin our economic success across all sectors of our global

economy could relocate and such relocation could be to anywhere in the world harming not only our economy but also that of Scotland and the UK.

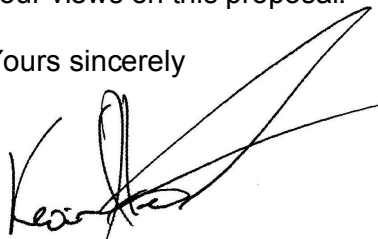
The Board considered with interest the possibility of the Government relaxing the planning conditions on use of the existing runways and the possibility of mixed use resulting in the creation of new landing slots. As these slots do not currently exist, they do not belong to anyone and nobody would lose out if a proportion of the newly created slots were kept back for future use by implementation of a PSO if a case were to be made. The Board have therefore instructed me to investigate with you the possibility, should new slots be created, of your Department allocating a proportion of these slots to the UK Director General for Civil Aviation to be used for regionally important services should an adequate case be made to your Department.

This wouldn't be an immediate interference in the market as the generation of the other proportion of slots would enhance the existing landing capacity at the airport and of course in the longer term a third runway would create even more slots to address market force issues.

It would however give a measure of assurance that as we continue to expand our global connectivity through Heathrow as we anticipate in our structure plan, investing heavily in our region, that the global connectivity can and will be maintained even if in the future Heathrow again comes under pressure for landing slots.

I would therefore request that in your consideration of the relaxation of the runway operations at Heathrow you would also consider incorporating this safeguarding of a proportion of slots you would create for use for future PSO applications that you may agree to establish. I thank you for your consideration of this matter and look forward to hearing your views on this proposal.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Kevin Stewart', with a long, sweeping horizontal line extending to the right.

Councillor Kevin Stewart
Chair, Nestrans

A similar letter has been sent to:

Your Department
The UK Director General for Civil Aviation
BAA
BAA (Aberdeen)
The Scottish Governments Cabinet Secretary for Finance and Sustainable Growth
The Scottish Governments Minister for Transport, Infrastructure and Climate Change
Scottish Regional Transport Partnership Chairs
Scottish Enterprise
Aberdeen City and Shire Economic Forum
Local MP's, MSP's & MEP's
Local Councillors
Aberdeen & Grampian Chamber of Commerce
Aberdeen City and Shire Councils
BA CEO and Chairman
BMI
Chairman of the UK Transport Select Committee

Appendix

Extract from Nestrans Regional Transport Strategy

Connections by Air (EC5)

Aberdeen Airport is one of the busiest regional airports in the UK and one of the fastest growing. It plays a key role in supporting the economy of Aberdeen City and Shire, both through providing connections for business and acting as a gateway for in-bound tourism. It is also the base for many lifeline services to Orkney and Shetland. The Aberdeen Airport Masterplan, published by BAA in December 2006, sets out a strategy for the airport's development to 2030. This focuses on expanding the airport infrastructure, extending the runway and increasing the number of direct flights to international destinations.

Aberdeen's geographical location makes aviation a crucial element of the transport system. Journey times by other modes are generally not competitive with air services and accessing alternative airports involves a surface journey of over two hours. Direct domestic and international services, as well as frequent links to hub airports, are therefore essential in supporting the place competitiveness of the north east. To sustain Aberdeen City and Shire's role as a centre of excellence in the energy sector, services are needed to major cities, continental hubs and other energy centres such as Houston.

Aviation is known to be a growing source of carbon emissions and it is therefore important that airlines are encouraged to adopt more modern, efficient aircraft which emit less CO₂ per passenger than older aircraft. Direct flights to other destinations can help to reduce the need for making multiple flights or travel to other airports, contributing towards reducing environmental impacts.

Aberdeen Airport - Air Routes and Frequency of Services

Nestrans will continue to work through the Airport Business Development Forum to support the important role that Aberdeen Airport plays in the north east. This work will focus on the following:

- establishing new direct routes to European and international business destinations;
- maintaining the frequency of services to international hubs – London Heathrow, Amsterdam Schiphol, and Paris Charles de Gaulle; and
- improving the availability of leisure travel, especially to encourage inward tourism.

Aberdeen Airport - Runway Extension

A key infrastructure improvement that is required to facilitate the development of transatlantic and other long haul routes is the extension of the existing runway at Aberdeen Airport. BAA has been granted permission by Aberdeen City Council to extend the existing runway by 300 metres, which will enable airlines to use larger, more fuel-efficient aircraft, and allow aircraft to operate non-stop direct services from Aberdeen Airport without payload restrictions or costly and inconvenient en-route stops. A further extension, currently proposed for the longer term, would bring destinations in North America and the Middle East within non-stop range of Aberdeen Airport.

Aberdeen Airport – Support for Key Aviation Routes

Nestrans will seek to ensure the continuation of services to major hubs, including Heathrow and Gatwick (London) by protecting slots and interlining opportunities. Nestrans will explore the most appropriate means for ensuring routes which are critical to the economic and social well-being of the north east are retained - if need be through the use of Public Service Obligations.

Zetland Transport Partnership

REPORT

To: Zetland Transport Partnership

26 May 2008

From: Transport Development Manager

IMPLEMENTATION OF SHETLAND TRANSPORT STRATEGY

1. Introduction

- 1.1 This report is to update Members on the progress of the implementation of the interventions contained in the updated draft of the Shetland Transport Strategy, which was approved at the ZetTrans meeting on 14 April 2008 (Min. Ref. 19/08). The updated Strategy has been submitted to the Scottish Government Minister for Transport, Infrastructure and Climate Change.
- 1.2 The report contains a short summary on a number of the interventions relating to the Strategy and includes those being progressed by both ZetTrans and external personnel.

2. Shetland Transport Strategy Interventions

- 2.1 Origin & Destination study – Surveys are ongoing including a joint project with VisitShetland and the Economic Development Unit to capture the views of non-travellers. The study will report by October 2008.
- 2.2 Fetlar breakwater and small craft berthing - currently seeking funding.
- 2.3 Skerries South Mouth - in the prioritisation process of the Council's Capital Programme.
- 2.4 Bressay STAG - The STAG 2 study for the Bressay link is a separate report to this meeting.
- 2.5 Fares Study and Increasing Utilisation of Inter Island services – The Fares study report will be presented to the Inter Island Ferries Board (IIFB) on 4 June 2008.
- 2.6 Travel Plan - the car share website www.ifyoucareshare.com, a partnership between HITRANS and ZetTrans, will be launched across the Highlands and Islands on 28th May. This will enable people across

Shetland, whether car drivers, or not, to find opportunities for sharing car journeys.

- 2.7 Tunnels Study - The technical element of the tunnels studies, giving details of potential alignments and costs, has been completed. The risk appraisal element is still ongoing and is expected to be concluded by the end of May to mid June. Having said that, sufficient has been learned from the work so far to inform the Bressay, Bluemull and Whalsay STAGs. The remainder of the work is to complete third party check and to engage the Fire Service in initial discussions.

Both Transport Scotland and the Scottish Government Transport Directorate have confirmed that tunnel standards are a matter for the local Roads Authority. Therefore, the work that has been done will be used in the progress of any tunnel options that come out of the STAGs, e.g. Bressay should the Council choose to pursue that option.

- 2.8 Whalsay STAG 2 – The STAG 2 study for the Whalsay link is a separate report to this meeting.
- 2.9 Bluemull STAG – Following completion of the initial consultation and pre-appraisal stages of work, attention has focussed upon preparation of the STAG 1 report. To this end, a meeting of the Bluemull STAG group was held on 23 April, which enabled clear guidance to be obtained on the short list of options to be considered in most detail. However, a further outcome of this meeting was that further dialogue was required with the Fetlar community to determine their input on some of the shortlist options. Subject to this discussion, the short-listed options are currently
- Do Minimum (retained as benchmark)
 - Replacement on a broadly like for like basis
 - Replacement on a broadly like for like basis with Fetlar Breakwater
 - Replacement on a broadly like for like basis with additional crew
 - Fixed link (tunnel) between Yell and Unst, with a Fetlar Ferry service with 2 crew
 - Fixed link (tunnel) between Yell and Unst, with a Fetlar Ferry service with 3 crew
- 2.10 Scandinavian Ferry –The outcome of the bid for EU Marco Polo funding is awaited.
- 2.11 External Transport Forum – The next meeting of the Forum is at 2.15 p.m. on Wednesday 21 May 2008 in Room 16, Islesburgh Centre. Representatives of Northlink will attend this meeting. A verbal report of the Forum will be given at the ZetTrans meeting.
- 2.12 Tier 2 Ferry Consultation – The next Tier 2 Ferry Consultation Forum comprising of HITRANS, Nestrans, ZetTrans and Scottish Government will be held in Shetland on 18 June 2008.
- 2.13 Area Transport Forums – Forums are planned for:
- Central, Scalloway Hall, 29th May, 7.10pm

- West-side, Bixter Hall, 3rd June, 6.30pm
 - Lerwick, Bressay and Gulberwick, Market House, 2nd June, 7.30pm
- The topic will continue to be Timetabling of Internal Transport and Integration with Other Transport Services.

A different approach is being trialled in the North Isles and Whalsay and Skerries, where there has been detailed consultation work in relation to transport in recent months. Communities are still being provided with the opportunity to respond, with the findings being collated with relevant information obtained from recent STAG work and other studies. This will then be used as the basis of future work to ensure services are being optimised.

Work has started on using the information obtained from the South and North Mainland Forums.

- 2.14 Road Equivalent Tariff (RET) – There has been no development since the last meeting.
- 2.15 Scottish Parliamentary Ferry Inquiry – The Parliamentary Inquiry took evidence in Shetland on 28 and 29 April 2008. The Inquiry is due to report in late June 2008.
- 2.16 Officers responsible for the above projects will be present at the meeting and will answer any queries.

3. Recommendation

- 3.1 I recommend that the Members of ZetTrans note the content of this report.

Report Number: ZTP-17-08-F

Zetland Transport Partnership

REPORT

To: Zetland Transport Partnership

26 May 2008

From: Transport Development Manager

WHALSAY STAG 2 APPRAISAL – SUMMARY, FINDINGS AND RECOMMENDATIONS

1. Introduction

- 1.1 This report is to present the findings of the STAG 2 Whalsay appraisal to the ZetTrans Members. The appraisal was undertaken by Faber Maunsell on behalf of ZetTrans. The Executive Summary of the appraisal is attached to this report as Appendix 1. The full report has been circulated separately to ZetTrans Members.

2. Background to the Study

- 2.1 The Whalsay STAG 1 was considered by the Infrastructure Committee at its meeting on 16 June 2005, as report IFSD-CPU-02-05-F (Min. Ref. 34/05).
- 2.2 Shetland's Regional Transport Strategy, presented to Scottish Ministers in March 2007, includes the following intervention as paragraph 6.23:

"In line with the findings from the STAG 1 Report, ZetTrans recommends the following option:

- 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) Simultaneous or phased procurement of two replacement vessels, similar to *MV Daggri* and *MV Dagalien*. *MV Linga* could be disposed of or utilised elsewhere in the network."

- 2.3 Faber Maunsell were asked to carry out the STAG 2 appraisal in mid 2007.

3. Scottish Transport Appraisal Guidance (STAG)

- 3.1 STAG is the Government standard for appraisal of transport services and infrastructure projects and provides an evidence-based framework to use in the development and assessment of options against Government and local objectives. Since July 2003 it is a requirement of the Scottish Executive (now Scottish Government) that all projects for which it provides support or approval are appraised in this way.

4. Issues to Address

- 4.1 The main issues requiring address for the ongoing provision of the link to Whalsay are as follows:

4.1.1. Planning for the Replacement of Existing Vessels

4.1.2. Changing Vessel Legislation

4.1.3. Renewal and Replacement of Ferry Terminals

4.1.4. Managing Vehicle Demand

4.1.5. Management of Heavy Goods Vehicles

4.1.6. Sustaining the Socio-Economic Prospects of Whalsay

4.1.7. Harbour Congestion Issues

4.1.8. Affordability

4.1.9. Operational Reliability

- 4.2 In summary, the range of problems and opportunities that have been considered in this study are:

4.2.1. Focus has concentrated primarily on vehicle capacity problems aboard the ferries. There is also an issue with the restricted capacity for HGVs and high vehicles on MV 'Linga'. Due to competition for space on the vehicle deck, there can be lengthy delays for larger vehicles.

4.2.2. Other identified problems relate to ageing vessels, changing legislation with regard to ferry design standards, and marine congestion in Symbister Harbour.

4.2.3. Concerns about the condition of the ferry terminals were identified in terms of the increasing berthing pressures and

increasing rate of wear and tear on the terminal infrastructure, which will lead eventually to failure of the structures.

- 4.2.4. Stakeholders have expressed concern regarding affordability, both in terms of fares as well as the importance of finding an affordable solution for funding bodies. There were also concerns expressed over the operational reliability of the ferries with regard to operation in inclement weather as well as continuation of service during times of repair and routine maintenance.

5. Study Objectives

5.1 Objectives identified in STAG Part 1 are six-fold:

- To deliver a solution that is affordable (for funding bodies);
- To deliver a solution that is operationally sustainable;
- To at least maintain the current level of accessibility to the island;
- To reduce conflict between ferry and other harbour users;
- To better match supply and demand; and
- To ensure that the socio-economic characteristics of the island are not constrained.

6. Summary of STAG 1

6.1 The following is a summary of the outcome from the STAG 1 appraisal:

- 6.1.1. Fixed links – A fixed link could provide an attractive long-term solution. However, a fixed link to Whalsay cannot be considered in isolation and must be prioritised against possible fixed links to Bressay, Unst and Yell. The ferry service must continue until a fixed link could be provided.
- 6.1.2. Mainland terminal(s) – The STAG 1 appraisal assumes that Laxo be provided as the principal mainland terminal with Vidlin as a diversionary port.
- 6.1.3. Island terminal – The STAG 1 appraisal did not identify a clear preference between a new terminal in North Voe and an extension to Symbister Harbour
- 6.1.4. Vessels – The STAG 1 appraisal identified two options for vessels. The first option was to procure two new 31 vehicle vessels. The second was to procure one new 31 vehicle vessel to operate alongside the existing m.v. “Linga”.

7. STAG 2 Options

7.1 The seven options arising out of the STAG Part 1 appraisal, detailed in Chapter 8 of the full report, are:

- 7.1.1. Option 1 – Do-Minimum. Replace existing vessels with similar capacity replacements when life expired. Carry out maintenance required to maintain the three existing terminals;
- 7.1.2. Option 2 – Symbister Harbour with inward extension, plus one new, larger ferry;
- 7.1.3. Option 3 – Symbister Harbour with inward extension, plus two new, larger ferries;
- 7.1.4. Option 4 – New North Voe ferry terminal, plus one new, larger ferry;
- 7.1.5. Option 5 – New North Voe ferry terminal, plus two new, larger ferries;
- 7.1.6. Option 8 – Grunna Voe Mainland terminal, Symbister Harbour with inward extension, plus one larger ferry vessel and retention of *MV 'Linga'* (replaced on a like-for-like basis at end of operational lifespan)
- 7.1.7. Option 9 - Grunna Voe Mainland terminal, North Voe terminal, plus one larger ferry vessel and retention of *MV 'Linga'* (replaced on a like-for-like basis at end of operational lifespan)

7.2 The complete consideration of Costs and Benefits is given in Chapter 16 of the full report but is summarised in the following table:

Monetised Summary of Costs and Benefits (£millions, 2002 values and prices)

	PVB	PVC	NPV	BCR*
Option 1 – Do-Minimum	£7,063,570	(£27,702,908)	(£20,639,338)	0.25
Option 2 – Symbister with extension, plus upgraded Laxo terminal, plus one new 31-vehicle ferry vessel and MV 'Linga'	£8,456,990	(£58,356,772)	(£49,899,782)	0.14
Option 3 – Symbister with extension, plus upgraded Laxo terminal, plus two new 31-vehicle ferry vessels	£8,847,649	(£67,543,816)	(£58,696,167)	0.13
Option 4 – North Voe terminal, with Laxo terminal, plus one new 31-vehicle ferry and MV 'Linga'	£8,456,990	(£55,077,034)	(£46,620,044)	0.15
Option 5 – North Voe terminal, with Laxo terminal, plus two new 31-vehicle ferries	£8,847,649	(£64,264,078)	(£55,416,429)	0.14
Option 8 – Grunna Voe, plus one new 31-vehicle ferry and MV 'Linga', plus Symbister terminal with extension	£7,349,015	(£59,325,973)	(£51,976,959)	0.12
Option 9 – Grunna Voe, plus one new 31-vehicle ferry and MV 'Linga', plus North Voe terminal	£7,349,015	(£56,046,235)	(£48,697,220)	0.13

*ratio not monetary value

The Net Present Value (NPV) is calculated as the Present Value of Benefits (PVB) minus the Present Value of Costs (PVC). It therefore calculates the net benefit to society. In an ideal world, any scheme with a positive NPV would be implemented, as society gains. However, as funds are scarce, another indicator is required. The Benefit to Cost Ratio (BCR) is the Present Value of Benefits divided by the Present Value of Costs multiplied by negative one. This

therefore presents the amount of benefit society gets from each pound spent on the project.

The options all produce negative NPV and BCRs of less than 1. This is reflective of the rural nature of this project and many benefits, which arise out of such a project, cannot be monetised.

8. STAG 2 Conclusions

- 8.1 Considering the ferries alone, it is recommended that the option to retain MV 'Linga' and introduce a larger-sized ferry vessel onto the route provides the best way to address the problems identified through the STAG process.
- 8.2 It is therefore recommended that when considering the mainland terminal that Laxo be upgraded in order to accommodate the larger-sized ferry vessels.
- 8.3 It is recommended that, subject to further analysis and technical modelling, the option of developing a ferry terminal at North Voe on Whalsay be progressed as the preferred option. In the event that a North Voe option is no longer considered preferable or feasible, it is recommended that an upgraded terminal at Symbister with an inward extension is then considered.
- 8.4 It is recommended that Vidlin is retained as a diversionary port and upgraded to accommodate the larger ferry vessels.
- 8.5 The STAG analysis examined the benefits and disadvantages associated with each of the option packages. Through careful appraisal against the study objectives and against the five national transport strategic outcomes, the recommended preferred Option comprises the following elements:
 - Retention and maintenance of *MV 'Linga'*
 - Introduction of one larger-sized ferry vessel (31 vehicle capacity)
 - Upgrading of Laxo ferry terminal to accommodate larger-sized ferries
 - Construction of a new North Voe ferry terminal on Whalsay.
 - Upgrade of Vidlin to remain as diversionary port capable of accommodating the larger ferry and *MV 'Linga'*.

9. Issues to be progressed

- 9.1 The issues identified from the appraisal to be addressed are as follows:
 - 9.1.1 Modelling for North Voe terminal
 - 9.1.2 Detailed design for all terminals
 - 9.1.3 Explore funding mechanisms

9.1.4 Establish lead time for procurement of new vessel

9.1.5 Consider the future role of the Whalsay Ferry and Terminal Working Group.

10 Financial Implications

10.1 There are no immediate financial implications for ZetTrans other than the cost of completing the Whalsay STAG 2 study, which is budgeted for.

11 Recommendations

I recommend that ZetTrans:

11.1 endorses the preferred option from the Whalsay STAG 2 appraisal summarised in paragraph 8.5 above; and

11.2 subject to approval of 11.1, recommends to Shetland Islands Council that the option summarised in paragraph 8.5 be adopted as the means of providing a transport link between Whalsay and Mainland Shetland and that funding be identified within the Council's Capital Programme to progress the issues identified in section 9 above.

Report Number: ZTP-18-08-F

Prepared by:
Joanne Casey
Principal Consultant

Approved by:
Paul Finch
Associate Director

Whalsay Transport Link

Rev No	Comments	Date
1	Final for circulation	13.05.08

225 Bath Street, Glasgow, G2 4GZ

Telephone: 0141 222 6400 Fax: 0141 222 6499 Website: <http://www.fabermaunsell.com>

Job No 55280/601

Reference Executive Sum

Date Created May 2008

This document has been prepared by Faber Maunsell Limited ("Faber Maunsell") for the sole use of our client (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between Faber Maunsell and the Client. Any information provided by third parties and referred to herein has not been checked or verified by Faber Maunsell, unless otherwise expressly stated in the document.

No third party may rely upon this document without the prior and express written agreement of Faber Maunsell.

f:\projects\55280\tab\tetrans regional transport strategy development\ws 601 whalsay stag2\11\stag 2\final report\formal executive summary.doc

Executive Summary

Introduction

ZetTrans commissioned Faber Maunsell to undertake a detailed examination of options with regard to the transport link between Whalsay and the Mainland. The analysis follows Scottish Transport Appraisal Guidance (STAG¹). This note summarises the STAG process undertaken in order to reach a preferred option to be considered for funding.

The 'Do Nothing' option is considered to be unacceptable. Currently the route suffers capacity constraints at peak times which is reported to be hampering the commuter base of the island. Almost one quarter (22% or 160 residents) of the working population on Whalsay commute to the Mainland and depend on a regular and reliable ferry service. Current issues with capacity lead to uncertainty about being able to travel which can cause personal stress to people and potentially make continued commuting to the mainland untenable. Added to this is the uncertainty regarding the state of the infrastructure and the vessels serving the route. The infrastructure is currently operating at its limit in terms of berthing pressures with ever increasing maintenance costs required to keep the service operational. The route is served by two vessels, MV 'Linga' and MV 'Hendra'. MV 'Hendra' was recently refurbished to extend her serviceable life but it is not anticipated that this could be extended further and she will need to come out of regular service use in approximately 2014; waiting time on new ferries is three years and can be potentially up to five years.

These factors all combine to provide a bleak future picture for Whalsay under the 'Do Nothing' scenario with ongoing capacity constraints hampering access to economic activity for residents of the island and increasing likelihood of service disruptions due to the aging infrastructure and vessels. All of this could serve to make living on Whalsay and commuting to the mainland untenable which could in turn generate population decline on the island as people move off in search of employment opportunities.

Whalsay is the most populated of the Shetland Islands and the Whalsay route is the third busiest on the Shetland network. The route has been experiencing sustained and continued growth in passenger and vehicle numbers.

Problems and Opportunities

Analysis of the problems and opportunities has been undertaken and found the key problems to be:

- Aging vessels and changing legislation with regard to ferry design standards which affects the medium term use of MV 'Hendra';
- Aging infrastructure and increasing berthing pressures and increasing rate of wear and tear on the terminal infrastructure;
- Vehicle capacity problems aboard the ferries, particularly during peak commuting times, as well as problems related to the booking system and service gaps - commuting to the mainland is essential for 22% of the working population on Whalsay (approximately 160 people);
- Restricted capacity for HGVs and taller vehicles on MV 'Linga'; due to competition for space the vehicle deck, there can be lengthy delays for larger vehicles;
- Marine congestion in Symbister Harbour;
- Concern regarding affordability, both in terms of affordability of fares as well as the importance of finding an affordable solution for funding bodies; and
- Concerns expressed over the operational reliability of the ferries with regard to operation in inclement weather as well as continuation of service during times of repair and routine maintenance.

¹ STAG is the official appraisal framework developed by the Scottish Government to aid transport planners and decision-makers in the development of transport policies, plans, programmes and projects in Scotland.

Statutory Context and Planning Objectives

National, regional and local policies have been reviewed as part of this study and common theme is the emphasis on the importance of efforts to sustain island communities, and accept that local and central funding will be central to the sustaining of these, often isolated, populations.

Following assessment of the problems, opportunities and statutory context for the study a list of planning objectives was prepared. These objectives are six-fold:

- To deliver a solution that is affordable (for funding bodies);
- To deliver a solution that is operationally sustainable;
- To at least maintain the current level of accessibility to the island;
- To reduce conflict between ferry and other harbour users;
- To better match supply and demand; and
- To ensure that the socio-economic characteristics of the island are not constrained.

Option Generation and Sifting

A long list of options was generated and sifted to produce a list of options for appraisal. The following list shows those that were appraised at STAG Part 1 and Stag Part 2 and the outcome of this appraisal:

- **Option 1 ('Do minimum' option)** – *This option would see Laxo and Vidlin, renewed or replaced on a like-for-like basis and the current location of the Whalsay terminal within Symbister Harbour, renewed or replaced on a like-for-like basis; MV 'Linga' and MV 'Hendra' would be retained until life expiry, then replaced on a broadly like-for-like basis.*

This option provides an essential benchmark against which the other options can be compared. It performs only marginally better than the Do Nothing scenario however as it does not address the capacity constraints and would see the uncertainty involved with commuter travel continue. Congestion issues at Symbister would continue and the socio economic prospects for Whalsay would be compromised. The option has little impact on the environment, safety, integration or accessibility.

- **Option 2** - *Laxo is retained as mainland terminal, with Vidlin retained as diversionary terminal. Both terminals are replaced with new, larger terminals capable of accommodating 31 vehicle capacity vessels. Symbister remains the Whalsay Ferry terminal but is extended to be capable of accommodating 31 vehicle capacity vessels. One new 31 vehicle capacity vessel is introduced to operate alongside MV 'Linga'*

This option sees the capacity constraints addressed in the medium term and allows the route to grow whilst also removing the current uncertainties with commuter travel. The terminal upgrades would improve their reliability. Two options were investigated for extending Symbister; an outward and inward extension. The outward extension allows greater separation of the marine traffic and better addresses the issue of congestion at Symbister but the risks involved with constructing a breakwater in deep water and the risks involved with the construction (whereby the existing northern breakwater would have to be removed thus leaving the harbour exposed) have been deemed too significant to take this option forward. The outward extension was therefore dropped following STAG Part 1 appraisal. The inward extension of Symbister allows the larger ferries to make use of the harbour but does not fully address the congestion issues within the harbour. This option has little impact in terms of the environment, accessibility, integration or safety.

- **Option 3** – *Option 3 is the same as option 2 in infrastructure terms but sees two new 31 vehicle capacity vessels introduced onto the route*

As above with option 2, the outward extension of Symbister is ruled out due to technical risks; the inward extension is retained but does not fully address the congestion issues at the harbour. The introduction of two new 31-vehicle vessels onto the route addresses the capacity constraints but is significantly more expensive in the early years when compared with option 2. The introduction of two new larger vessels is therefore considered unnecessary when one new

larger vessel operating alongside MV 'Linga' addresses the capacity constraints and this option has been dropped after STAG part 2 appraisal.

- **Option 4** - *Laxo is retained as mainland terminal, with Vidlin retained as diversionary terminal. Both terminals are replaced with new, larger terminals capable of accommodating 31 vehicle capacity vessels. The Whalsay Ferry Terminal is relocated to North Voe with a new terminal constructed capable of accommodating 31 vehicle capacity vessels. One new 31 vehicle capacity vessel is introduced to operate alongside MV 'Linga'*

This option sees the capacity constraints addressed in the medium term and allows patronage on the route to continue to grow whilst also removing the current uncertainties with commuter travel. The terminal upgrades would improve their reliability. Developing North Voe addresses the congestion issues at Symbister and provides a more efficient operational arrangement. Due to developing an undeveloped voe, this option, has negative environmental impacts in terms of landscape and visual impacts. It has little impact on safety, integration or accessibility.

- **Option 5** – *Option 5 is the same as option 4 in infrastructure terms but sees two new 31 vehicle capacity vessels introduced onto the route*

As above with option 4, the relocation of the ferry terminal to North Voe has environmental impacts but addresses the issues of congestion at Symbister harbour and, through the introduction of larger vessels addresses the capacity constraint issues. The introduction of two new larger vessels is therefore considered unnecessary when one new larger vessel operating alongside MV 'Linga' addresses the capacity constraints and this option has been dropped after STAG part 2 appraisal.

- **Options 6 and 7** – *These were the fixed link options of a bridge and tunnel respectively*

Fixed links would provide a long term solution to capacity issues and remove uncertainty for commuter traffic. It would address the issues of congestion at Symbister. However, in light of the relative urgency to provide a solution for the Whalsay transport link and the timescales involved in constructing such a fixed link and the competing demand for fixed links from other islands within Shetland it is not considered that a fixed link is a feasible solution in the medium term for Whalsay.

- **Option 8** – *Grunna Voe is developed as the mainland terminal and Vidlin is not upgraded as diversionary terminal since the attraction of Grunna Voe is more sheltered berthing conditions and therefore an anticipated reduction in the number of diversions that would be required. Symbister is retained as the Whalsay Ferry Terminal and is upgraded to be capable of accommodating 31 vehicle capacity vessels. One new 31 vehicle capacity vessel is introduced to operate alongside MV 'Linga'*

This option addresses the capacity constraints in the medium term. However, following detailed assessment of weather records, etc. concern exists about the performance of this option in inclement weather since Vidlin would not be upgraded and would therefore not be capable of accommodating the larger vessel. At these times the service would reduce to being served by only MV 'Linga'. In this sense, the option does not address the uncertainty issues which affect commuter traffic. Additionally, this option sees a largely undeveloped area at Grunna Voe developed to provide a ferry terminal with the associated visual and landscape impacts. The option also introduces additional journey time for vehicles accessing / egressing Grunna Voe compared with Laxo with associated negative TEE and safety impacts. The option has little impact on accessibility and integration. Due to the poor performance of this option in economic terms and the environmental impact and the inability of the option to address the uncertainty issues affecting commuter traffic, this option has been dropped following STAG Part 2 appraisal.

- **Option 9** – *Grunna Voe is developed as the mainland terminal and Vidlin is not upgraded as diversionary terminal since the attraction of Grunna Voe is more sheltered berthing conditions and therefore an anticipated reduction in the number of diversions that would be required. The Whalsay Ferry Terminal is relocated to a new ferry terminal at North Voe capable of accommodating 31 vehicle capacity vessels. One new 31 vehicle capacity vessel is introduced to operate alongside MV 'Linga'*

As above, this option addresses the capacity constraints in the medium term, however it does not address the uncertainty issues which affect commuter traffic. This option has negative impacts on TEE and safety associated with increased length of journey accessing / egressing Grunna Voe and has the negative environmental impacts of developing North Voe. The option has little impact on accessibility and integration. Due to the poor performance of this option in economic terms and the environmental impact and the inability of the option to address the uncertainty issues affecting commuter traffic, this option has been dropped following STAG Part 2 appraisal.

A full appraisal has been undertaken for the options and the key monetary summaries are provided in the table below.

	PVB	PVC	NPV	BCR*
Option 1 – Do-Minimum	£7,063,570	(£27,702,908)	(£20,639,338)	0.25
Option 2 – Symbister with extension, plus upgraded Laxo terminal, plus one new 31-vehicle ferry vessel and MV 'Linga'	£8,456,990	(£58,356,772)	(£49,899,782)	0.14
Option 3 – Symbister with extension, plus upgraded Laxo terminal, plus two new 31-vehicle ferry vessels	£8,847,649	(£67,543,816)	(£58,696,167)	0.13
Option 4 – North Voe terminal, with Laxo terminal, plus one new 31-vehicle ferry and MV 'Linga'	£8,456,990	(£55,077,034)	(£46,620,044)	0.15
Option 5 – North Voe terminal, with Laxo terminal, plus two new 31-vehicle ferries	£8,847,649	(£64,264,078)	(£55,416,429)	0.14
Option 8 – Grunna Voe, plus one new 31-vehicle ferry and MV 'Linga', plus Symbister terminal with extension	£7,349,015	(£59,325,973)	(£51,976,959)	0.12
Option 9 – Grunna Voe, plus one new 31-vehicle ferry and MV 'Linga', plus North Voe terminal	£7,349,015	(£56,046,235)	(£48,697,220)	0.13

* ratio not monetary value

Taking this information along with the assessment of the performance of the options against the planning objectives, the government objectives and technical and deliverability issues, the preferred option has emerged as Option 4.

Summary and Conclusions

The STAG analysis examined the benefits and disadvantages associated with each of the option packages. Through careful appraisal against the study objectives and against the five national transport strategies, the recommended preferred Option comprises the following elements:

- Retention and maintenance of MV 'Linga'
- Introduction of one larger-sized ferry vessel (31 vehicle capacity)
- Upgrading of Laxo ferry terminal to accommodate larger-sized ferries; and
- Development of North Voe as a replacement ferry terminal on Whalsay.
- Upgrade of Vidlin to remain as diversionary port capable of accommodating the larger ferry and MV 'Linga'.

The next steps for this study would be to finalise designs for each of the terminals in order that the works can be procured. For this, North Voe requires a degree of testing to determine the position of the breakwaters and to ensure the facility can be built in the Voe as anticipated.

The STAG study outputs should be revised following such works to ensure the preferred option is still the preferred option and stacks up against the others in terms of delivering against the objectives.



REPORT

To: ZetTrans

26 May 2008

From: Lead Officer – ZetTrans

BRESSAY LINK STAG APPRAISAL – SUMMARY, FINDINGS AND RECOMMENDATIONS

1. Purpose

- 1.1. This report presents the key findings of the Scottish Transport Appraisal Guidance (STAG) appraisal of the Bressay Link, which has been undertaken by ZetTrans, Shetland Islands Council (SIC) and a team of consultants between August 2007 and May 2008. A summary of the study can be found at Appendix A and copies of the full report are available from ZetTrans.
- 1.2. It also provides a discussion of the key issues and implications of these findings to Bressay and the wider Shetland community, before making recommendations and setting out relevant timescales.

2. Strategic Context and Background to the Study

- 2.1. Options for linking Bressay to Mainland Shetland have been considered by SIC since at least the 1970s. The need to secure the option that, on balance, best meets the aspirations of stakeholders has been the subject of much debate on whether or not to build a bridge or tunnel, and the effects of this on other land uses, navigation and reliability of the new link.
- 2.2. The current Local Plan requires protection of a “corridor” for construction of a bridge at Point of Scatland. In 1998, the Council commissioned consultant engineers to carry out a technical feasibility study, following best practice, which concluded that a high level fixed bridge at this location was the preferred option.
- 2.3. In 2001, following a socio-economic study and a STAG-type¹ appraisal, the Council approved the construction of a high level bridge (min ref 06/01) and commissioned consultant engineers and others to develop the proposals in order to be able to promote the bridge through the consents process. The details were developed in consultation with stakeholders and this concluded that a bridge with principal dimensions of 40m air-draft by 160m main span would meet requirements (min ref 09/03).

¹ The STAG process in its current form was only in development in 2001

- 2.4. In the consents process objections were received and not resolved or determined and this has led to SIC re-visiting the way forward within the context of Shetland's Regional Transport Strategy.
- 2.5. This strategy will be a statutory document, once approved by Scottish Ministers². In this, ZetTrans is required to set out the transport priorities for Shetland over a 15 year period. The conclusions of the consultation process identified that resolving the ongoing issues of the transport link between Bressay and Mainland Shetland is a key priority.
- 2.6. To meet this objective, ZetTrans has undertaken an appraisal of the link, in accordance with best practice, set out in the Scottish Transport Appraisal Guidance.
- 2.7. A report to Infrastructure Committee on 19 June 2007 (Min. Ref. 27/07) gave details of the proposed approach to carrying out the STAG appraisal. A joint working group, the Bressay Link Group, was set up to oversee the process. This includes representatives from ZetTrans, SIC, LPA and Bressay Community Council. The Infrastructure Committee has received update reports throughout the study.
- 2.8. The overall aim of the study was defined at an early stage as: *'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'*.
- 2.9. This aim fits well with the Council's recent Corporate Plan which states: *"Shetland's communities are scattered and have a diverse set of needs. To best address those, we must have sustainable road, sea and air transport systems, both internal and external, that ensure everyone is able to access the places, services and opportunities they need"*.

3. Scottish Transport Appraisal Guidance (STAG)

- 3.1. STAG is the Government standard for appraisal of transport services and infrastructure projects and provides an evidence-based framework to use in the development and assessment of options against Government and local objectives. Since July 2003 it is a requirement of the Scottish Executive (now Scottish Government) that all projects for which it provides support or approval are appraised in this way. A summary of the process and the key findings of each stage is included in Appendix A.

4. Main Issues to Address

- 4.1. The purpose of STAG is to identify the transport option which, on balance, best meets the issues relating to the current provision. The five Government Transport Objectives (of Environment, Safety, Economy, Accessibility and Integration) are also taken into account.

² This strategy was produced by ZetTrans, and submitted to the Scottish Executive for approval in March 2007. It has been resubmitted to the Scottish Government, at their request and approval is anticipated imminently.

4.2. The detailed consultations which have underpinned the STAG study, have indicated the following key issues:

- the Bressay community is highly dependent on the ferry service to access employment, education, health, shopping and recreational facilities: some needing to use the service several times a day, and the timetable sometimes constrains access to essential services;
- the overall cost of the current service to travellers is considered to be high, particularly for those who need to use the service regularly. However the service and its centre-to-centre link is valued;
- business expansion and new business development on Bressay is being constrained; a fixed link could provide opportunities to sustain the Bressay community;
- the link should ensure that the LPA can continue to meet its statutory requirements to 'manage, maintain, and regulate the Port and Harbour of Lerwick, including the undertaking to improve and deepen the harbour area';
- a number of issues relating to development: for example, the need, or not, for additional land to develop Lerwick and in turn Shetland; uncertainties about the link affecting land development in Bressay;
- a fixed link could lead to a loss of island identity and associated social benefits;
- it is important to consider how any new infrastructure could affect the environment, including in terms of carbon emissions; and
- current transport integration is poor (for example there is limited public transport or taxi provision on Bressay, and it is not possible to access early flights from Sumburgh without an overnight stay on Mainland Shetland).

4.3 Local objectives for this study were developed to meet these issues nesting in the overall framework of the study aim and the Government transport objectives (see Appendix B).

5. Summary of STAG 1

5.1. The findings of the STAG Part 1 appraisal concluded that the following options, set out below were sufficiently consistent with the local planning objectives for the scheme, to warrant more detailed appraisal (Part 2 STAG):

- Option 1: Drill and Blast Tunnel
- Option 2: High Level Bridge
- Option 3: Reconfigured Ferry Service
- Option 4: Do Minimum (existing ferry service used for comparative purposes)
- Additional: Public Transport Measures, to support Options 1-3.

In all options walking and cycling measures have been taken into account.

- 5.2. During STAG 1, the following options were rejected because they did not meet the local objectives:
- Causeway
 - Transporter Bridge
 - Helicopter Service
 - Chain Ferry
 - Immersed Tube Tunnel
 - Opening Bridge
- 5.3. The parameters of the high level bridge were subsequently redefined (to a 60m air draft and 260m wide channel) in the STAG 2 study following consultation with the LPA on current and future harbour requirements.

6. STAG 2 Key Findings

- 6.1. The options were developed to an appropriate level of technical detail to allow detailed appraisal in the framework of the local planning and Government Transport objectives. In addition, costs to the Government were taken into account³.
- 6.2. Appendix A of this report includes a summary of STAG 2. The key findings are:
- Option 1 (drill and blast tunnel) best meets the objectives (see Appendix B);
 - this option requires significant capital outlay, but much reduced operational and maintenance funding;
 - a fixed link generates traffic and does not provide a centre-to-centre link, and therefore would have negative effects unless a suitable level of enhanced public transport is provided;
 - however, a fixed link provides 24 hour, 'as and when' access to facilities and opportunities located on the Mainland;
 - it is considered, therefore, that on balance the Drill and Blast Tunnel provides best value to the public sector, as well as best addressing identified issues;
 - this option does not comply with current Council policy, which supports a bridge.
- 6.3. A high level bridge, designed to meet present day requirements (Option 2) provides many of the same benefits but the costs are much higher, and there would be a risk of closure in extreme weather conditions. In addition, the scale of the structure is considered to be out of keeping with Shetland's landscape and the bridge would therefore have significant adverse environmental effects.

³ Cost to Government refers to all costs incurred by the public sector as a whole, net of any revenues. The total net costs consist of investment costs, operating and maintenance costs, grants/subsidy payments, revenues and taxation impacts. It does not distinguish between local authority and central government.

- 6.4. Option 3 (the reconfigured ferry service) would provide improvements, but this would be dependent on the fare structure put in place, and the current lack of transport internal to the island would need to be addressed. The important centre-to-centre link would be retained, but timetable restrictions would remain.

7. Economic Appraisal Summary

- 7.1. Table 1, below, provides a summary of the costs for each of the options over a 60 year period, in compliance with Government guidance.
- 7.2. The capital costs in the table include the cost of any infrastructure required over the 60 years, including any road improvements (e.g. construction of fixed link, or 3 replacement ferries and 1 replacement berthing structure and 2 replacement link spans). The operating costs cover the annual cost of operating the option, over 60 years.

Table 1: Summary of Capital and Operational Costs for Each Option Over 60 years, expressed in today's prices (including additional public transport services and infrastructure)

	Tunnel	Bridge	Reconfigured Ferry (existing fare structure)	Current Ferry (Do Minimum)
Capital Costs	£26,339,000	£51,480,000	£27,780,000	£27,750,000
Operating Costs/annum	£195,000	£195,000	£1,095,364	£934,385
Total Operating Costs over 60 years	£11,700,000	£11,700,000	£65,721,840	£56,063,100
TOTAL ACTUAL COSTS	£38.0M	£63.2M	£93.5M	£83.8M

- 7.3. Table 2 summarises the findings of the economic appraisal using a recognised transport model. In the model all costs and benefits for each option are expressed in current day prices to allow for like for like comparison. The figures below are for the reconfigured ferry, using the existing fare structure. The main STAG report includes details for two further scenarios: no fares and a sample new fare structure.
- 7.4. Options 1-3 have been compared throughout the STAG process, with the Do Minimum. This is the current ferry service projected forwards for the next 60 years, taking account of any new infrastructure requirements during that time (see 7.2). In the economic model the Do Minimum is only used for comparative purposes and is not appraised itself. The costs and benefits of the current service are therefore taken as zero and the costs and benefits of the three other options are compared against this.

- 7.5. Net Present Value (NPV) is a measure of the quantifiable benefits minus costs. A positive NPV and Benefit Cost Ratio (BCR) demonstrate better value than the current situation.

Table 2: Summary of Costs and Benefits for Each Option, as generated by Transport Economic Efficiency Model (TEE) (including public transport)

	Tunnel	Bridge	Reconfigured Ferry (existing fare structure)	Current Ferry (Do Minimum)
Present Value of Transport Benefits	£19,447,016	£19,379,131	£0	0
Present Value of Cost to Government	-£2,613,631	-£41,901,088	-£3,630,566	0
Net Present Value (NPV)	£16,833,385	-£22,521,957	-£3,630,566	0
Benefit-Cost to Government Ratio (BCR)	7.44	0.46	0	0

- 7.6. Table 2 clearly demonstrates that Option 1, Drill and Blast Tunnel, is the only option with a positive economic case. Including optimism bias at 66% and contingency of 20%, this option was found to have a BCR of 7.44 which means that for every £1 invested by the public sector a benefit of £7.44 is generated. In addition this option has an NPV of £16.8M.

- 7.7. A number of sensitivity tests were undertaken but none of these were found to impact on the main conclusions from this work. These tests were to:
- assume no additional trips were generated;
 - assume a ferry lifespan of 25 and 30 years; and
 - assume optimism bias on all options (including the ferry) of 66%, 44% and 0%.

8. Discussion Of Key Issues Relevant to Council

- 8.1. There has been much discussion and speculation about this link over many years. The STAG study has revisited the issues and has reached clear recommendations for the future, see Section 9. However, with these come a number of implications, which are worthy of further consideration and are discussed here.

Previous Bressay Bridge Study

- 8.2. The previous studies carried out by the Council between 1999 and 2001 followed a thorough and robust process. Although the STAG process currently adopted did not exist then, the steps taken were

similar in principle to STAG and followed best practice. The studies concluded that a high level bridge of 40m air-draft and 134m span between pier foundations was the most appropriate link, i.e. the best fit within the various constraints at that time.

- 8.3. The current study has indicated that a tunnel is the preferred option. The reason for this change is because LPA has indicated that development in current and future vessel size now requires a greater air-draft and span than previously considered necessary if a bridge is not to impede transit of most vessels through the harbour. Consultation with the LPA concluded that to meet future needs a bridge with a main span of 260m and an air-draft of 60m would be a minimum requirement.
- 8.4. A bridge of these dimensions is considerably more expensive than the bridge option previously taken forward to consents due to the significant increases in height, length and span. To illustrate the difference Appendix D provides a comparison of the elevations of the two bridges. A bridge of this size did not perform as well in the appraisal process as the current tunnel option.
- 8.5. In the course of the STAG appraisal the economic model was run for the 40m x 134m high level bridge. This indicated that the bridge performed slightly better than the tunnel option, in economic terms.
- 8.6. However, when compared against the specific objectives that were agreed for this STAG appraisal, the bridge did not perform as well as the tunnel option in overall terms. This was principally due to the perceived impacts on decommissioning and other harbour activity and the potential constraints on navigation for vessels which have a higher air draft than can be accommodated by a 40m bridge, thus potentially affecting the port's opportunities to attract business.

Port Related Issues

- 8.7. The preferred tunnel option would have some implications for the future of the harbour. However, discussions with the LPA have indicated that these are not considered significant because it would be unlikely that the channel would be dredged to deeper than -10m below Chart Datum because of the implications to other infrastructure in the harbour.
- 8.8. There remain some land issues which require to be resolved. These include:
 - compensation for an LPA owned shed, which would need to be demolished;
 - an issue relating to land ownership, if land was to be reclaimed at the marina;
 - consents for land reclamation (to enable best use to be made of the rock from the tunnel).

- 8.9. There may be some uncertainty attached to gaining consents for a tunnel. It is considered that these would be resolved in the process of taking the tunnel option forward, if agreed.
- 8.10. LPA would prefer that the channel above a tunnel alignment be dredged to -10m, prior to construction. This would be a risk to the Council because a decision has not been made about the future link; funding has not been secured; an alignment for the tunnel has not been finalised; and the necessary consents have not been pursued.
- 8.11. The Bressay Link tunnel expert has advised that it is feasible to dredge to -10m above a tunnel once constructed.

Public Funding

- 8.12. STAG does not distinguish between central and local government funding for any costs associated with the options being appraised, such as capital costs, annual revenue costs and grants to operators.
- 8.13. At the current time the Council receives revenue funding from the Scottish Government to assist with the provision of ferry services in Shetland. This figure is variable, but is currently 64% of total operating costs. A proportion of this is allotted to the Bressay service.
- 8.14. If a fixed link were to be built, it is not known what the effect would be on the calculation of the RSG (Revenue Support Grant). However, it is considered that the drill and blast tunnel option would have a strong case for Scottish Government funding support for a proportion of the capital cost, on the basis that there are significant revenue savings in public expenditure.

Land Use Planning

- 8.15. The Planning Service is currently taking forward work to inform a future Local Plan, following a statutory process. This work will not be completed in time to inform the link study in any detail. However it will be possible for the planning study to take account of the findings of the STAG study.
- 8.16. The study has not found any definite need for land development on Bressay. However, if a tunnel was built, positive economic impacts would be expected to outweigh the negative economic impacts. It can be assumed that in the long-term there would be inevitable development in Bressay if a fixed link was created and it would be important that the Planning Service make provision for this in the new Development Plan.

Current Ferry Service

- 8.17. The current ferry service employs 18 people, most of who live in Bressay. In line with Council Policy, there would be no compulsory redundancies if a tunnel option was taken forward.

9. STAG 2 Recommendations

The key recommendations from this study are that:

- Option 1, the Drill and Blast Tunnel is taken forward.
- Public transport enhancement measures should be detailed and put in place to support the fixed link.
- Walking and cycling measures are promoted as part of the package.
- Funding mechanisms are thoroughly researched and thought through for delivery of all proposals. This process should ensure absolute clarity on any potential impacts on SIC resources.
- Measures, such as enhanced public transport provision and a fares review should be taken forward in the short-term to address community needs.
- A working group is established, to include ZetTrans, SIC and LPA representatives to oversee the progression of the tunnel proposals.
- The legal issues surrounding development in the harbour are openly discussed to ensure the final proposals meet all parties' needs and aspirations.
- The legal framework for taking the proposals forward is defined and agreed.
- Land ownership issues are researched and detailed and the findings taken into account in the planning of the next stages of the project.
- Various further research and development work is progressed including:
 - further research on funding opportunities;
 - more work on utilities;
 - undertaking topographical surveys at portals and intrusive ground investigation on Lerwick approaches to allow confirmation of portal locations;
 - checks on extent of made ground at Gremista;
 - confirmation of tunnel design to approval in principle (AIP) stage;
 - reaching agreement with LPA on the shed to be demolished;
 - an environmental impact assessment (EIA) and identification of appropriate mitigation;
 - further research on appropriate levels of public transport provision;
 - checks on likely flood risks at the Lerwick portal;
 - confirmation of areas identified for reclamation in the harbour and identifying necessary consents;
 - effective consultations progressed with relevant statutory agencies, communities and relevant interests groups to ensure full understanding of constraints and opportunities; and
 - identifying timescales for all relevant work.
- As risks are investigated and better understood for the proposals, the level of optimism bias which has been applied (66% for the tunnel and 44% for the approaches) is re-assessed and used to help identify accurate budget

figures for all parts of the project – a risk informed approach should be adopted in the development of a budget that is robust and auditable.

- SIC departments work together to identify the implications that a fixed link would present and identify potential issues which require to be addressed.
- Detailed discussions are progressed with affected parties (ferry staff, businesses, landowners and managers) following a Council decision to proceed.
- The SIC's Planning Service and others are engaged in effective pre-application discussions as required by forthcoming legislation.
- The role of the Bressay Link Group is considered and re-defined if found necessary.
- The impacts of major construction projects on Shetland are considered and if necessary that a staggered timetable is agreed.
- Regular updates on progress are given by the project team to SIC, the LPA, the community, the press and to all affected parties.

In addition it is recommended that:

- ZetTrans, in collaboration with the SIC's Ferry Service, should ensure data collection on the inter-island network is improved in order to provide data of a quality suitable for studies of this kind.
- The STAG model is developed for use in other project appraisals.

10. Financial Implications

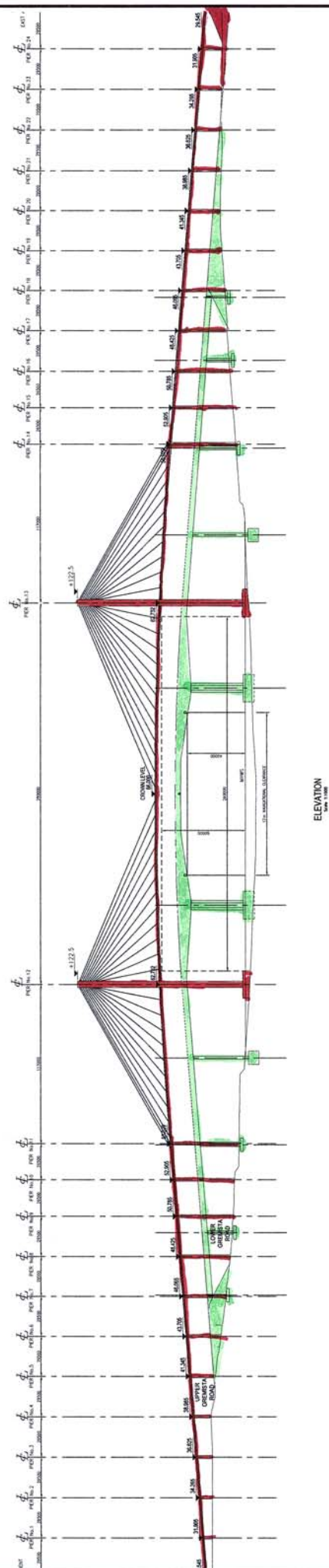
10.1. There are no immediate financial implications for ZetTrans. The roles of ZetTrans and Shetland Islands Council, in the delivery of any option, will be agreed between the two bodies. This may, then, have financial implications for ZetTrans, dependent on its role in the delivery of the project.

11. Recommendation

11.1. I recommend that ZetTrans recommend to Shetland Islands Council that they implement the STAG 2 recommendations, as set out in Section 9 of this report.

Report No. ZTP-21-08-F

Bridge promoted by SIC
in 2003 shown in green



Appendix C: Key Terms

Do Minimum

The “Do Minimum” (Option 4 in the appraisal) is what the Council would have to do to continue the provision of a ferry link to Bressay into the future. In essence it means replacing the ferry when it needs to be replaced and replacing terminal infrastructure and equipment when it needs to be replaced. It also assumes that funding provision would continue at current levels.

Cost to Government

For the purposes of STAG, Cost to Government means the cost to the public sector. Therefore, it does not distinguish between central and local government. For example, capital costs, annual revenue costs, grants to operators, etc.

Costs and Benefits

The assessment of costs and benefits is done both quantitatively (i.e. by measurement e.g. journey times) and qualitatively (by description, e.g. social benefits such as increased accessibility).

However, only certain benefits are “monetised” (i.e. the value in £s is calculated) and used in the economic analysis and comparison of cost and benefits of options.

Examples are: -

- Journey time savings
- Savings in running and operating costs
- Increases/ decreases in fares
- Increases/ decreases in cost to the private sector, etc.

Net Present Value (NPV)

Net Present Value is regarded as the best measure of the absolute ranking of economic welfare, for comparable proposals. NPV is the sum of the present value of all costs and benefits of the proposal. A positive figure represents a net benefit compared to the current situation.

Benefit Cost Ratio (BCR)

The Benefit Cost Ratio provides a measure of the value of the option to the government. In this a comparison is made between total benefits to society of the option with the cost to Government. This is defined as:

$$\frac{\text{Present Value of Benefits}}{\text{Present Value of Cost to Government}}$$

A BCR value of 1 implies that every £1 invested generates a benefit of £1. Therefore if the BCR is greater than 1 it means that society is gaining more than is being invested by the public sector. If the BCR is less than 1 the public sector is investing more than is being gained by society.

Risk Contingency

20% is added to the base cost capital costs to account for risk within any infrastructure project.

Optimism Bias

Government advises¹ that 'optimism bias' is included in the costings for major transport infrastructure projects. Optimism bias is the demonstrated systematic tendency for people to be over-optimistic about the outcome of planned actions. Optimism bias arises in relation to estimates of costs and benefits and duration of tasks. It should be accounted for explicitly in appraisals, if these are to be realistic. The recommended percentage cost to be added to cover optimism bias ranges between:

- Standard Civil Engineering 3% to 44%
- Non Standard Civil Engineering 6% to 66%

At present there is no requirement from Government to include optimism bias on new ferry options despite the unknown risks of what a ferry could cost some 60 years on. The two fixed link options, which have been appraised, would be classed as Non Standard Civil Engineering Projects.

¹ Treasury Green Book on Transport Project Appraisal, 2003 and associated guidance

Appendix B: Bressay STAG, Local Objectives

Economy: Promote economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency

- Ec1: To enhance the transport infrastructure between Bressay and Mainland Shetland to ensure the long-term sustainability of the Bressay community.
- Ec2: To provide a link which does not constrain Lerwick Harbour's current activities or its future expansion
- Ec3: To provide and promote a link which supports a stable and sustainable economy and enhances employment opportunities
- Ec 4: To provide a link which is affordable for users
- Ec 5: To provide a link which is sustainable for funders and is value for money

Accessibility: Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network

- Ac1: To provide and maintain an accessible, efficient, cost effective transport network for Bressay
- Ac2: To provide a link which enables the Bressay community equal opportunities to access employment, services and facilities as other communities in Shetland
- Ac3: To provide a link which does not restrain opportunities for housing in Bressay
- Ac4: To maintain and improve accessibility and response times for emergency services and other service providers, including out-of-hours needs

Environment: 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

- Env1: To develop a link to Bressay that recognises and protects Shetland's unique environment and safeguards the natural, cultural and social heritage of the island
- Env2: To provide a link that seeks to minimise carbon emissions and the use of finite resources
- Env3: To promote a link that can accommodate current and future patterns of development and land use in Bressay

Safety: Improve safety of journeys by reducing accidents and enhancing personal safety of pedestrians, drivers, passengers and staff

- S1. To ensure the link continues to maintain and enhance community safety and health
- S2. To ensure the link does not compromise maritime safety or road safety

Integration: Improve integration by making journey planning and ticketing easier and working to ensure smooth connections between different forms of transport

- Int1: To provide a link which integrates with all Shetland's transport services and infrastructure, including air, ferry, bus, cycling and walking opportunities
- Int2: To promote a transport link that facilitates the delivery of other committed plans and strategies

Appendix A: BRESSAY LINK STAG APPRAISAL – SUMMARY

1 INTRODUCTION

The project aim was to provide an affordable, efficient, flexible and sustainable transport link between Bressay and Mainland Shetland.

This document provides a summary of the STAG (Scottish Transport Appraisal Guidance) process which has been followed to identify the most appropriate option to meet this aim. The study has involved the community and other stakeholders at relevant stages as recommended by the guidance and to ensure that the process was informed by local input.

2 KEY ISSUES

The main issues identified by the stakeholders at the beginning of the study were:

- a belief that Bressay is not currently conducive to business expansion or new development;
- that employment based on Bressay is heavily reliant on the ferry;
- that it is unclear whether there are real constraints on the economic development of Lerwick at the current time, from lack of suitable land for development, as different perceptions were given by different people;
- some people considered that there were difficulties over land ownership in Lerwick and about the affordability of available land;
- that it was unclear whether opening up Bressay to development (by providing a fixed link) would be positive for Lerwick in the future or have a negative impact by, for example, leaving vacant properties on the Mainland;
- that previous debate over a long time period was detrimental to developments in the harbour area and was difficult for local residents;
- the lack of decision about the link (not the nature of the link itself) means that owners of land are not selling land and this is a barrier to development;
- a fixed link could provide opportunities to sustain the Bressay community but the design of this link would have to ensure that LPA would be able to continue to 'manage, maintain, and regulate the Port and Harbour of Lerwick, including the undertaking to improve and deepen the harbour area' in the interest of industries operating in the harbour, so as to ensure their business potential can be achieved;
- the overall cost of the current service to travellers is considered to be high. The ferry has to be used to access most opportunities off the island and can be expensive to visitors staying on Bressay;
- it was recognised that it is important to consider how any new infrastructure could affect the environment including in terms of carbon emissions and in retaining remote biologically diverse areas of the island and of neighbouring Noss;
- some stakeholders considered that a fixed link could lead to a loss of island identity and associated social benefits, such as knowing everyone in the community; feeling and being safe; and using the ferry as a social hub;
- there is heavy reliance on Lerwick and Mainland by Bressay residents for employment, services, leisure and learning as opportunities are relatively limited on the island itself;
- restricted access sometimes denies access to opportunities available on the Mainland (eg social activities; shift working etc);

- there is a lack of accessibility for those residents without access to a vehicle and who are unable to walk to the ferry as public transport and taxi provision is limited on Bressay and is not always convenient;
- there is an ageing population on Bressay and associated with this are difficulties in being able to provide adequate services: residents may not always get the service they need or equality of community care as service as compared with the rest of Shetland as services have to be planned to fit with the ferry timetable;
- there are some ongoing problems with recruiting staff for community posts because living in Bressay carries extra travel costs as compared with living in Lerwick;
- there are difficulties in accessing Bressay out-of-hours, unless the ferry is called out in a blue-light emergency;
- there is a lack of integration between the ferry service and bus services on the Mainland;
- some stakeholders queried whether the current service is sustainable and whether in terms of Shetland's finances the inter-island ferry service is sustainable in the long-term compared to fixed links; and
- the unresolved decision about a fixed link is resulting in other aspects of the community's development not being addressed, for example road improvements and public transport provision.

These issues were confirmed throughout the study and were used to underpin the team's understanding of problems with the current transport provision between Bressay and the Shetland mainland.

3 STAG PART 1 APPRAISAL

Strategic workshops assisted in the development of local planning objectives (Appendix B) and, with the help of the community, a long list of options was identified for further consideration.

These options were then appraised against the identified planning objectives. At an early stage the following options were sifted out:

- **Causeway:**
 - It was considered that this option could cause significant problems to operation of Lerwick Port, and the economic activities that it supports. For example the port would be split in two, not enabling boats to move around easily; requiring two sets of tugs to operate; and constraining activities such as decommissioning;
 - there were also safety issues: for example the lifeboat would be on one side, unable to quickly reach incidents in the other direction, and build up of shipping in one area, rather than another; and
 - there were environmental issues, as it would cause silting of harbour and increased fuel used of boats moving from one side of the harbour to the other, around Bressay.
- **Transporter Bridge:**
 - This option was rejected because of the increased journey time associated with it; potential constraints of use in poor weather; constraints on harbour activities; and potential visual impact.

- **Helicopter Service:**

- This option would be unable to take vehicles; unable to take many passengers or much freight and could have associated safety issues. It was recognised that the option could be used in combination with other options, but was likely to be too expensive to be sustainable.

The remaining options were taken through the Part 1 STAG appraisal, with the following being eliminated as a result of the findings:

- **Chain Ferry**

- This option would require higher levels of capital investment than the existing ferry service (operating the ferry and back up for overhaul/maintenance). Slipways would need to be constructed on either side at a new location and operational costs would not be significantly lower than the existing service (manning levels would be similar to current operation to ensure the ability to safely evacuate a vessel in an emergency situation);
- the Maritime and Coastguard Agency (MCA) code of practice will only consider issue of a certificate allowing a chain ferry to operate in Category A-C waters¹; Bressay Sound is categorised as a Category D water;
- the ferry could cause a level of disruption to Lerwick Harbour operations, depending on the frequency of service, because the Master of the ferry generally has to ascertain that the way is clear, before leaving shore, and vessels less than 50m long have to give way to the ferry when it is crossing. Mariners also have to be warned not to pass directly in front of the chain ferry and the draught behind the ferry can also be restricted by the chain;
- the location would have to be from the Point of Scatland or Greenhead, in order to function effectively. The crossing time would be approximately three minutes, but the overall journey time would be slower, as the link would not be so central, and there would be additional time for embarking and disembarking. The Point of Scatland is being developed and land for a slip is now constrained;
- information from Sandbanks, via Tor Point, has highlighted the need to have an appropriate system of chains such that they would not get destroyed on the sea bottom, or interfere with boats using the Sound. This would require substantially more dredging of the navigation channel than for other options, to create a graded edge in order to prevent abrasion of the chain on the edge of the dredge channel. This would increase the costs of the option significantly;
- the ferry must travel in a straight line, along the chain, limiting manoeuvrability. The service could also be adversely affected by sea conditions, particularly waves; and
- there are some safety issues, because chain ferries have no means of steerage if the chain were to break.

- **Immersed Tube Tunnel:**

- The capital costs involved in building this option would be high compared to a drill and blast tunnel, because of the depth of dredging the trench required (up to 18m) and the cost of transporting tunnel sections to Shetland or of constructing holding ponds locally to construct the sections in Shetland;
- there is a potentially greater environmental impact, particularly during construction, because of the activities required to facilitate construction;

¹ Category A: narrow rivers and canals where the depth of water is generally less than 1.5m; Category B: wider rivers and canals where the depth of water is generally more than 1.5m and where the significant wave height could not be expected to exceed 0.6m at any time; Category C: tidal rivers and estuaries and, large, deep lakes and lochs where the significant wave height could not be expected to exceed 1.2m at any time

- there is a high degree of risk in floating or craning in sections of tunnel in Shetland's climate and sea conditions; and
 - in excess of 250,000m³ of rock would be removed and need to be disposed of with associated high costs (and if no reclamation site were found potentially adverse environment impacts).
- **Opening Bridge:**
 - Operational costs would be higher than for other fixed link options, due to required maintenance and manpower costs;
 - it would place some constraints on the current activities of Lerwick Harbour, for example, it would have to be opened to enable to allow any pelagic fishing boats to pass through;
 - access would be unpredictable: from when the bridge begins to open it would require up to 30 minutes wait (opening and closing time of 5-15 minutes each way and time for the vessel to pass through). The frequency of opening is not known, but the unpredictability to those using the link could present access issues and could prevent integration with other transport services, including external connections. There would be a deterioration in level of provision of access for emergency services at these times; and
 - under certain extreme weather conditions opening would be prevented.

4 STAG PART 2 APPRAISAL

4.1 OPTIONS FOR APPRAISAL

The options appraised at STAG 2 are as follows:

- **Option 1: Drill and Blast Tunnel:** Option covers the construction of a tunnel by drill and blast techniques in the rock beneath the Sound of Bressay on an alignment between Point of Scatland and Hoegan. The tunnel would allow bi-directional traffic movement with provision for a 2m cycle way/footpath and a 1.05m hard shoulder.



- **Option 2: High Level Bridge:** This option covers a high level bridge with an air draft of 60m above MHWS over a 260m wide channel. The bridge would also be provided with wind shielding. It would allow two directional traffic and

would have a 2m combined footway/cycleway on one side and a 0.6m wide verge on the other.



- **Option 3: Reconfigured Ferry Service:** This option is for an enhanced ferry service, which includes a lengthened operational day and some increase in the frequency of sailings at certain times of day to address issues raised in consultation about access and integration. The service would operate:
 - Sunday to Thursday: 0545 (depart Bressay) to 2400 (depart Lerwick) – 18.5 hour service;
 - Friday and Saturday: 0545 (depart Bressay) to 0145 (depart Lerwick) – 20.25 hour service;
 - In addition there would be an improvement in the service on a Sunday morning, returning to that prior to the introduction of Sunday maintenance and drill period.

Fare levels are considered to be a major issue by those using the ferry and thus Option 3 has been considered on the basis of three fare levels:

- Retaining the current fare structure;
 - removal all fares;
 - a more sophisticated structure reflecting issues raised during the first stage of consultation (see Section 7.5.3 for more information).
-
- **Option 4: Do Minimum (Existing Ferry Service, used for comparative purposes):**
 - The first service of each day departs Bressay at 0700 hours, and departs Lerwick at 0715 hours.
 - Monday to Thursday there are twenty-one crossings each way, in the main on an hourly basis, but more frequently at peak times, including lunch time.
 - On a Friday and Saturday there is an additional service at 2330 and 0045 departing Bressay and 2359 and 0100 departing Lerwick.
 - On a Sunday there are fewer crossings during the morning, compared to other days, to enable maintenance and drill period.

- Passenger costs are as follows:
 - Adult – return: £3.30
 - 10 return journey ticket: £15.80
 - Children, up to 16 – return: £0.40
 - 10 return journey children's ticket: £2.80
 - Concessionary SIC Pass Holders – no charge
- Vehicle costs (fares include driver) are as follows:
 - Motorcycles – return: £6.00
 - Vehicles up to and including 5.50m – return: £7.80
 - 10 return journey ticket: £62.00
- Limited post car service.
- **Additional: Public Transport Measures**
- Timetabled along main route, with options to phone on for service from the more minor routes.
- This would be for a midibus, suitable for 30 passengers with Options 1 and 2, and a 7-seater car, suitable for 6 passengers, for Option 3.
- Three sub-options have been considered in terms of frequency of the provided service.

4.2 FINDINGS

The options have been appraised against the Government's five transport objectives for environment, safety, economy, accessibility and integration. A detailed assessment has been made of the fit of each option with the Government and the local planning objectives and the scope and scale of the benefits and impacts associated with each option have been considered.

A summary of the key findings is provided below.

4.2.1 Community

- There are issues relating to the current ferry provision. These are mainly linked to the level of provision and fares.
- The ferry forms an important part of Bressay life.
- The community is dependent on the ferry to access basic facilities on the Mainland (doctor, retail and leisure facilities, childcare provision etc).
- Current public transport provision on the island is very limited.
- Annual spend on ferry fares can be considerable for some members of the community.
- If a fixed link is provided alternative jobs for the ferry crew would be found.
- There is an urgency to make a decision about the link, to relieve uncertainty, in particular for the community of Bressay, and an urgency to address the identified issues relating to the current link.

4.2.2 Environment

- Local planning policy supports a bridge and this would have to be changed if another option is taken forward.
- The ferry options (Options 3 and 4) would impact least on the local environment because no (or only limited) new infrastructure would be required.

- The fixed link options (Options 1 and 2) would generate traffic with associated increases in noise emissions etc.
- The tunnel (Option 1) would have less impact on the environment than a high level bridge because it would have less impact on surrounding land uses and less landscape and visual and related impacts.
- However, the tunnel (Option 1) would require the demolition of one shed belonging to LPA. Businesses using the property and others in the locality would be affected.
- No designated sites would be affected by any option.
- The tunnel option would have a smaller carbon footprint than a high level bridge or a reconfigured ferry service.

4.2.3 Safety

- No option has significant benefits or disbenefits in terms of safety although a fixed link may heighten community fears of crime.
- There is risk of more serious effects from fire in a tunnel (Option 1). The risk of accidents in a tunnel however has been demonstrated to be less than on the connected road network².
- There would be some risks working at height on a high level bridge (Option 2) in an exposed location during construction.

4.2.4 Economy

- The bridge (Option 2) could be perceived by some as a constraint in the harbour which could impact on a fragile economy and one in which competition for port related activities is high.
- Construction of a tunnel under the Sound would place some restriction on very deep dredging in the future but not on the planned -10m below CD dredge. LPA has confirmed that this is acceptable because a dredge to below -10m would require replacement of existing quays which would be very expensive.
- A fixed link option could lead to development on Bressay but no demand has been identified in the short term. LPA has indicated that it may have a requirement for a further deep water quay in the longer term but has no pressing need to do so because plans exist to develop quayside and jetties on the Lerwick side of the harbour.

4.2.5 Accessibility and Integration

- Fixed link options (Options 1 and 2) provide significant benefits in terms of access and integration because of the convenience of 24 hour access and the costs to users as long as improved public transport measures are included to address the needs of non-vehicular users.
- Enhanced public transport measures would be an essential part of any fixed link option to ensure that access was as possible for those without vehicular transport as at present.
- The ferry provides centre to centre access. This would only be possible with a fixed link for some people with good public transport links.
- The tunnel provides access at all times. Option 2 (the high level bridge) could have restricted access in times of bad weather even with effective wind shielding.

² Ongoing work by Faber Maunsell for SIC

- It has been calculated that on the basis of the following assumptions: a drive time of 50kmph³ (tunnel) and 65kmph (bridge), cycling at 30kmph (but some cyclists would have to get off and walk up the incline on each) and walking at 5kmph, the 1200m of fixed link would take the following times to cross:
 - 1.2km @ 50km/hr would take 0.024hrs = 1.44 min = 1 minute and 26.4 seconds
 - 1.2km @ 65km/hr would take 0.018hrs = 1.11min = 1 minute and 6.5 seconds
 - 1.2km @ 30km/hr would take 0.04hrs = 2.4 min = 2 minutes and 24 seconds
 - 1.2km @ 5km/hr would take 0.24hrs = 14.4 minutes = 14 minutes and 24 seconds.

4.3 APPRAISAL

- Option 1, the drill and blast tunnel, is the option, which on balance is most able to address the issues associated with the current Bressay Link and best meets the project objectives. This finding is based on feedback from consultations and also from the detailed studies undertaken for STAG 2. Various sensitivity tests have been undertaken to test these findings in terms of the option's economic value but the findings remain the same.
- Option 1 would provide best value as demonstrated by the cost benefit analysis, and the appraisal of costs to Government over a 60 year appraisal period.
- The construction cost of the tunnel would be £26,339,000; operational costs would be £100,000 each year; the net present value (NPV) would be £16,833,385 and benefit to cost ratio 7.44.
- This finding is different from that made in the original bridge study because the 60m x 260m bridge is considerably more expensive than a bridge with a 40m air draft and 134m span and current standard tunnelling techniques have reduced tunnel costs.

4.4 FUNDING

- It is not clear at this stage how a fixed link could be funded and further work and discussions would be required to clarify this.

³ Kilometres per hour

Table 1: Summary Appraisal of Options

Key:

- ✓✓✓ Good fit with objective
- ✓✓ Moderate fit with objective
- ✓ Fit with objective
- Neutral
- ✗ Minor non compliance with objective
- ✗ ✗ Moderate non compliance with objective
- ✗ ✗ ✗ Major non compliance with objective

Aim, Government and Local Planning Objectives	Option 1 – Drill and Blast Tunnel	Option 2 – High Level Bridge	Option 3 – Reconfigured Ferry	Option 4 – Do Minimum
Aim: To provide an affordable, efficient, flexible and sustainable transport link between Bressay and Mainland Shetland	✓✓✓ Tunnel provides 24hour link and with enhanced public access would be improved for all. Option generates traffic but is flexible and affordable	✓✓ Bridge provides 24hour link, apart from in most extreme weather conditions, and with enhanced public access would be improved for all. Option generates traffic and has high cost. Perceived risk to Port activities	✓ Provides improvements in transport provision. High capital and operating costs	✗ Issues will remain and high capital and operating costs
Economy: Promote economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximise their efficiency	✓✓✓ Tunnel provides 24 hour link. Provides opportunities for economic development in Bressay	✓✓ Bridge provides 24 hour link. Provides opportunities for economic development in Bressay, could create perceived constraint on Port activities	✓ Improvement over Do Minimum, but does not meet all issues raised	- No change
Ec1: To enhance the transport infrastructure between Bressay and Mainland Shetland to ensure the long-term sustainability of the Bressay community	✓✓✓ Tunnel provides 24 hour link. Public Transport measures required to ensure effective link for everyone within the community	✓✓ Bridge provides 24 hour link, apart from in most extreme weather conditions. Public Transport measures required to ensure effective link for everyone within the	✓ Better provision than current service. Public Transport measures required. Option remains susceptible to future changes in ferry fares and prices	✗ No change so no improvement

Aim, Government and Local Planning Objectives	Option 1 – Drill and Blast Tunnel	Option 2 – High Level Bridge	Option 3 – Reconfigured Ferry	Option 4 – Do Minimum
		community		
Ec2: To provide a link which does not constrain Lerwick Harbour's current activities or its future expansion	✓✓ Tunnel could restrict dredging below -10m in the future (current LPA plans are only to dredge to -10)	* 60m aircraft and 260m main span mitigates main constraints. Perceived constraints remain	✓✓✓ Additional vessel movements, could be incorporated in existing harbour management	✓✓✓No change
Ec3: To provide and promote a link which supports a stable and sustainable economy and enhances employment opportunities	✓✓ 24 hour access could affect local business on Bressay. This could be positive or negative. Improved opportunities to access employment	✓✓ 24 hour access could affect local business on Bressay. This could be positive or negative. Improved opportunities to access employment for Bressay	✓ Improved access to employment, but still restricted by timetables	* * No change – constraints to access
Ec4: To provide a link which is affordable for users	✓✓ No direct cost, but increase in vehicle operating costs. Improved public transport	✓✓ No direct cost, but increase in vehicle operating costs. Improved public transport	* *✓✓ Would depend on fare structure implemented. Improved public transport	* *Community consider costs are high relative to distance travelled and need to travel
Ec5: To provide a link which is sustainable for funders and value for money	✓✓✓ Sustainable for funders and value for money (capital outlay required)	✓ Sustainable for funders in long term (high capital outlay required)	* * *High annual operational cost and additional replacement costs	* * *High annual operational cost (less than option 3) and additional replacement costs
Accessibility: Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network	✓✓✓ 24 hour access to and from island. However, could increase social exclusion if adequate public transport measures are not provided	✓✓✓ 24 hour access to and from island. However, could increase social exclusion if adequate public transport measures are not provided	✓ Better provision than current service, dependent on fare structure. Public Transport measures required to address issues	* Inclusive nature of centre to centre link and social hub provided by ferry. However, lack of public transport internal to Isle increases social exclusion
Ac1: To provide and maintain an accessible, efficient, and effective transport network	✓✓✓ Tunnel provides 24 hour link. Public Transport measures required to ensure	✓✓ Bridge provides 24 hour link, apart from in most extreme weather conditions.	✓ Better provision than current service, dependent on fare structure. Public	- No change

Aim, Government and Local Planning Objectives	Option 1 – Drill and Blast Tunnel	Option 2 – High Level Bridge	Option 3 – Reconfigured Ferry	Option 4 – Do Minimum
cost effective transport network for Bressay	effective link for everyone within the community	Public Transport measures required to ensure effective link for everyone within the community	Transport measures required	
Ac2: To provide a link which enables the Bressay community equal opportunities to access employment, services and facilities as other communities in Shetland	✓✓✓ Tunnel provides 24 hour link to employment, services, and recreation. Public Transport measures required to ensure equality of access	✓✓ Bridge provides 24 hour link to employment, services, and recreation, apart from in most extreme weather conditions. Public Transport measures required to ensure equality of access	✓ Better opportunities than current service, but some restrictions by timetable and cost. Public Transport would improve access to the ferry	* Current service does not meet Bressay's requirement to access opportunities on Mainland Shetland, because of cost and timetable constraints
Ac3: To provide a link which does not restrain opportunities for housing in Bressay	✓✓✓ 24 hour access to the island	✓✓✓ 24 hour access to the island	✓ Improvement over Do Minimum	- No change
Ac4: To maintain and improve accessibility and response times for emergency services and other service providers, including out-of-hours needs.	✓✓✓ Tunnel provides 24 hour link, enhancing provision for non-blue light emergencies and others	✓✓ Bridge provides 24 hour link, enhancing provision for non-blue light emergencies and others	- No change. Adequate emergency cover	- No change. Adequate emergency cover
Environment: 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	* * Option would create emissions through traffic generation. Public transport measures are key to delivery of the option. Smallest carbon footprint of three options. Potential decrease in walking and cycling across the link might have negative impact on health	* * Option would create emissions through traffic generation. Public transport measures are key to delivery of the option. Second smallest footprint of options. Potential decrease in walking and cycling across the link might have negative impact on health	* * Increased use of fuel for additional services. Some improvement in public transport. Greatest carbon footprint of the three options	- No change
Env1: To develop a link to Bressay that recognises and	✓✓✓ Minimal environmental intrusion	✓ Landscape intrusion from major structure. Piers could affect sedimentation patterns	✓✓✓ No change	✓✓✓ No change

Aim, Government and Local Planning Objectives	Option 1 – Drill and Blast Tunnel	Option 2 – High Level Bridge	Option 3 – Reconfigured Ferry	Option 4 – Do Minimum
protects Shetland's unique environment and safeguards the natural, cultural and social heritage of the island				
Env2: To provide a link that seeks to minimise carbon emissions and the use of finite resources	✓ ✓ Link would generate traffic but carbon footprint smallest of options	✓ ✓ Link would generate traffic. Carbon footprint second smallest of options	✓ ✓ Less traffic generated than fixed link options. High carbon footprint	- No change
Env3: To promote a link that can accommodate current and future patterns of development and land use in Bressay	? ✓ ✓ 24 hour access provided to and from island. Land use planning required to address patterns of development in Bressay, car park needs etc. Decision would resolve current uncertainties	? ✓ ✓ 24 hour access provided to and from island. Land use planning required to address patterns of development in Bressay, car park needs etc. Decision would resolve current uncertainties	? ✓ ✓ Enhanced access from present service. Decision would resolve current uncertainties	* * No change. Current uncertainties about future link unresolved
Safety: Improve safety of journeys by reducing accidents and enhancing personal safety of pedestrians, drivers, passengers and staff	* Tunnel would generate traffic which could lead to increase in accidents. 2m segregated footway/cycleway provided through tunnel. Further consideration required about measures to ensure safety of non vehicular users	* Bridge would generate traffic which could lead to increase in accidents. 2m segregated footway/cycleway provided over bridge. Further consideration required about measures to ensure safety of non vehicular users	- No change from current provision	- No change
S1: To ensure the link continues to maintain and enhance community safety and health	-/* Unable to determine any potential change in crime. However, community perception of increased fear of crime. Potential decrease in walking and cycling across the link might have negative impact on health	-/* Unable to determine any potential change in crime. However, community perception of increased fear of crime. Potential decrease in walking and cycling across the link might have negative impact on health	✓ ✓ ✓ Ferry provides constraint to open access to Bressay. Ferry enables people to not rely on a private vehicle	✓ ✓ ✓ Ferry provides constraint to open access to Bressay. Ferry enables people to not rely on a private vehicle

Aim, Government and Local Planning Objectives	Option 1 – Drill and Blast Tunnel	Option 2 – High Level Bridge	Option 3 – Reconfigured Ferry	Option 4 – Do Minimum
S2: To ensure the link does not compromise maritime safety or road safety	✓✓ Increase in road traffic could lead to increased numbers of accidents. No effects on maritime safety	✓ Increase in road traffic could lead to increased numbers of accidents. Perceived effects on maritime safety	- No significant effects	- No change
Integration: Improve integration by making journey planning and ticketing easier and working to ensure smooth connections between different forms of transport infrastructure, including air, ferry, bus, cycling and walking opportunities	✓✓✓ Combination of 24hour access and enhanced public transport provision improves integration	✓✓ Combination of 24hour access and enhanced public transport provision improves integration, apart from in most extreme weather conditions	✓ Better opportunities for integration than current service, but some restrictions by timetable and cost. Improved public transport to access ferry, required	* * Does not integrate well with the wider Shetland transport system, but centre to centre link is an advantage
Int1: To provide a link which integrates with all Shetland's transport services	✓✓ Tunnel provides 24hour access, but reliance on private transport and not centre to centre. Public transport provision required to meet the needs of the whole community	✓✓ Bridge provides 24hour access, but reliance on private transport, apart from in most extreme weather conditions, and not centre to centre. Public transport provision required to meet the needs of the whole community	✓ Better opportunities for integration than current service, but some restrictions by timetable and cost. Improved public transport to access ferry, required	* * Does not integrate well with the wider Shetland transport system, but centre to centre link is an advantage
Int2: To promote a transport link that facilitates the delivery of other committed plans and strategies	?/✓✓ Planning issues paper underdevelopment, but option helps deliver commitments in the Regional Transport Strategy	?/✓ Planning issues paper underdevelopment, but option helps deliver commitments in the Regional Transport Strategy. Does not meet all LPA objectives	- No significant effects	- No change

5 RECOMMENDATIONS

The key recommendations from this study are that:

- Option 1, the Drill and Blast Tunnel is taken forward.
- Public transport enhancement measures should be detailed and put in place to support the fixed link.
- Walking and cycling measures are promoted as part of the package.
- Funding mechanisms are thoroughly researched and thought through for delivery of all proposals. This process should ensure absolute clarity on any potential impacts on SIC resources.
- Short-term measures, such as enhanced public transport provision and a fares review should be taken forward in the short-term to address community needs.
- A working group is established, to include ZetTrans, SIC and LPA representatives to oversee the progression of the tunnel proposals.
- The legal issues surrounding development in the harbour are openly discussed to ensure the final proposals meet all parties' needs and aspirations.
- The legal framework for taking the proposals forward is defined and agreed.
- Land ownership issues are researched and detailed and the findings taken into account in the planning of the next stages of the project.
- Various further research and development work is progressed including:
 - further research on funding opportunities;
 - more work on utilities;
 - undertaking topographical surveys at portals and intrusive ground investigation on Lerwick approaches to allow confirmation of portal locations;
 - checks on extent of made ground at Gremista;
 - confirmation of tunnel design to approval in principle (AIP) stage;
 - reaching agreement with LPA on the shed to be demolished;
 - an environmental impact assessment (EIA) and identification of appropriate mitigation;
 - further research on appropriate levels of public transport provision;
 - checks on likely flood risks at the Lerwick portal;
 - confirmation of areas identified for reclamation in the harbour and identifying necessary consents;
 - effective consultations progressed with relevant statutory agencies, communities and relevant interests groups to ensure full understanding of constraints and opportunities; and
 - identifying timescales for all relevant work.
- As risks are investigated and better understood for the proposals, the level of optimism bias which has been applied (66% for the tunnel and 44% for the approaches) is re-assessed and used to help identify accurate budget figures for all parts of the project – a risk informed approach should be adopted in the development of a budget that is robust and auditable.
- SIC departments work together to identify the implications that a fixed link would present and identify potential issues which require to be addressed.
- Detailed discussions are progressed with affected parties (ferry staff, businesses, landowners and managers) following a Council decision to proceed.
- The SIC's Planning Service and others are engaged in effective pre-application discussions as required by forthcoming legislation.

- The role of the Bressay Link Group is considered and re-defined if found necessary.
- The impacts of major construction projects on Shetland are considered and if necessary that a staggered timetable is agreed.
- Regular updates on progress are given by the project team to SIC, the LPA, the community, the press and to all affected parties.

In addition it is recommended that:

- ZetTrans, in collaboration with the SIC's Ferry Service, should ensure data collection on the inter-island network is improved in order to provide data of a quality suitable for studies of this kind.
- The STAG model is developed for use in other project appraisals.

Zetland Transport Partnership

REPORT

To: Zetland Transport Partnership

26 May 2008

From: Lead Officer

PROGRESS OF RECOMMENDATIONS OF WHALSAY AND BRESSAY STAG APPRAISALS

1. Introduction

- 1.1. Earlier on this agenda Members have been advised of the recommendations of the Whalsay and Bressay STAG appraisals.
- 1.2. At its most fundamental level each of the reports are recommending that two major transport infrastructure projects are required to meet the needs of Whalsay and Bressay. However, there is no priority set between the two.
- 1.3. Also, at this stage the Bluemull Sound STAG appraisal is still in progress and therefore the nature of the requirements for the transport links between Yell, Unst and Fetlar is not yet clear.
- 1.4. The remainder of this report advises Members on how these projects should now progress.

2. Discussion

- 2.1. ZetTrans has now completed two major STAG appraisals (Bressay and Whalsay) reported to this meeting and a third (Bluemull) will be completed and reported to ZetTrans in the August cycle of meetings.
- 2.2. With the recommendations of the Whalsay and Bressay STAGs now clear, ZetTrans is faced with the issue of considering how each of these projects can be progressed.
- 2.3. The Shetland Transport Strategy has prioritised the order in which fixed links should be pursued where they prove viable but did not attempt to prioritise each of the transport links in principle because insufficient information was available at the time of the Strategy development.
- 2.4. As can be seen from the reports both Bressay and Whalsay have distinct and different sets of issues in terms of their transport links and

as a consequence have equally important priorities to address in terms of socio-economic sustainability of the islands albeit they are different in nature.

- 2.5. On Bressay the threat to their sustainability lies in the uncertainty over the future link and the growing problems of affordability to the traveller due to increasing need to access Lerwick for all elements of everyday life.
- 2.6. On Whalsay the threats to socio-economic sustainability lie in the growing capacity constraints of the existing service and the urgent need to replace ageing infrastructure, which is already at a high risk of failure.
- 2.7. It is my view that both these projects need to be developed in more detail to resolve the many unknowns and establish individually the technical and financial viability of each before ZetTrans and the Council can determine which, if either, has the greater priority.
- 2.8. Once this is done then an exercise can be undertaken to appraise these two projects and Bluemull as a package of projects and recommend to ZetTrans and the Council which order they should be taken in.
- 2.9. At present the Council's Capital Programme has a budget of £250k allocated against the Bressay Link in the current financial year.
- 2.10. There is no allocation in the Council's Capital Programme for the Whalsay Link.
- 2.11. It is my view that it would take a similar amount of resources to progress the Whalsay Link as it would the Bressay Link.

3. Conclusions

- 3.1. Bressay and Whalsay have different issues to address in terms of their future transport links and it cannot be determined without further work which, if either, is a higher priority for Shetland at this time.
- 3.2. It may be that as each project is progressed technical issues and issues of implementability create a "natural order" to the progress of the projects or it may be that some of the current unknowns turn out to be showstoppers for one or other of the projects. Things like this cannot be predicted at the moment however.
- 3.3. With Bluemull Sound STAG appraisal not yet complete there is a gap in the information needed to understand the full picture.
- 3.4. It is necessary, therefore, to work up each of the projects in more detail and in parallel in order to reach a point where ZetTrans and the Council can make informed and strategic decisions about the implementation of these projects.

- 3.5. This will require an additional funding commitment from the Council of up to £250k in the current financial year to progress the Whalsay project alongside the Bressay project. This is not currently budgeted in the Council's Capital Programme.

4. Financial Implications

- 4.1. There are no direct financial implications for ZetTrans from this report as any work required of officers working on ZetTrans contribution to these projects will be met from approved budgets.
- 4.2. Should the recommendation to the Council be adopted there will be a requirement of up to £250k of capital funding from the Council's Capital Programme to progress the Whalsay project.

5. Recommendations

I recommend that: -

- 5.1. ZetTrans recommends to Shetland Islands Council that the recommendations of the Bressay and Whalsay STAG appraisals be progressed in parallel.
- 5.2. Progress on each of the projects is reported routinely to both ZetTrans and the Council's Infrastructure Committee and that Members are kept advised on all significant project issues and in particular development of cost estimates and project risks.
- 5.3. Once the Bluemull STAG appraisal is complete a further report is brought to ZetTrans and Shetland Islands Council with recommendations on how it will integrate with the work described above.

Report Number: ZTP-20-08-F