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# **Shetland Inter-Island Transport Study**

Whalsay Fixed Link Summary Paper

On behalf of ZetTrans



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## 1 Introduction

#### 1.1 Overview

- 1.1.1 Shetland Islands Council (SIC) / ZetTrans funds lifeline transport connections to nine islands across the archipelago. These connections are delivered through a combination of air and ferry services.
- 1.1.2 The inter-island transport network has been supported in both capital and revenue terms by the Council over many years. Whilst this remains the case, capital investment requirements, increasing costs and a reduction in the funding available at the local authority level has led to a need to consider the future of the inter-island transport network at the strategic level. To this end, the Council, in partnership with ZetTrans, Highlands & Islands Enterprise and Transport Scotland, commissioned the Shetland Inter-Island Transport Study (SIITS), with a view to developing and appraising options for the future of the inter-island transport services.
- 1.1.3 The Strategic Business Case (SBC) was completed in autumn 2016, and set out a range of capital and revenue options for nine of the inhabited islands across the archipelago, together with a timeline for progressing specific elements of the SBC to Outline Business Case (OBC) stage. One of the priorities emerging from the SBC was consideration of Whalsay's transport connections. To this end, ZetTrans commissioned Peter Brett Associates (PBA), now part of Stantec, Mott MacDonald (MML) and ProVersa to develop the *Whalsay Outline Business Case*.

#### 1.2 Scope of the OBC

- 1.2.1 The OBC work is solely focussed on developing the preferred option for the future Whalsay ferry service in terms of the number & size of vessels, the harbours to be served and any required harbour works, and the crewing / operational solutions for the service. The options under consideration in the OBC progressed from the appraisal process in the SBC and are subject to further refinement and development.
- 1.2.2 Whalsay Community Council was contacted on 13<sup>th</sup> December 2018 with a request to provide their views on a range of issues surrounding the provision of ferry services. The Community Council responded on 17<sup>th</sup> December 2018, requesting clarifications on the outputs of the SBC, most notably on the rationale for excluding a fixed link within the context of SIITS (although note the conclusion in the SBC that this option should be reframed within a national context and not excluded altogether).
- 1.2.3 The SIITS SBC work was very wide ranging, tackling a range of air, ferry and fixed link infrastructure and revenue options across nine islands. The material relating to fixed links was therefore included in several different documents. With this in mind, it is considered beneficial to draw together the relevant material in this paper and also explain how the OBC work can be used to support the wider and longer term case for a fixed link.
- 1.2.4 This paper consists of three further sections:
  - Chapter 2 sets out the requirements of appraisal and an outline 60-year comparison of the ferry service against a fixed link.
  - Chapter 3 sets out the SIC / ZetTrans deliverability considerations surrounding a fixed link.
  - Chapter 4 explains how the case for a fixed link can be taken forward and how the Whalsay OBC can support this.



## 2 Appraisal of Options

#### 2.1 Overview

- 2.1.1 In their e-mail of 17<sup>th</sup> December 2018, Whalsay Community Council provided a comparison of the 60-year costs of a ferry service and fixed link. They requested clarification of how the SBC conclusion that 'the cost of a fixed link to Whalsay significantly exceeds the costs associated with ongoing ferry services, even when considered over two ferry replacement cycles' was reached.
- 2.1.2 This chapter sets out how this conclusion was reached by first setting out the key requirements of the treatment of costs in appraisal, and thereafter providing a comparative analysis of costs over 60-years for different ferry and fixed link options.

#### 2.2 Appraisal Conventions

#### Discounting

- 2.2.1 The comparison of ferries and a fixed link provided by the Community Council was an *arithmetic* one, in that it added up all of the costs of operating a ferry service (capital and revenue) and all of the costs of a fixed link over 60 years and compared the two.
- 2.2.2 However, appraisal makes use of the concept of **discounting**. This is defined in the H.M. Treasury Business Case Guidance as:

Discounting in the public sector – the Social Discount Rate and Time Preference. There is a universal human tendency to discount the future by giving more weight to current values and events than to the future, which also applies to preference for current over future welfare. The social discount rate is an annual percentage reduction specified by the Treasury Green Book that is applied to values in each year going forward that progressively reduces the current value of future values. By recognising this human tendency to discount future values it is possible to compare alternative options for programmes, projects and policies with different lengths of life and different profiles over time by, in effect, putting them onto a common basis of present values, thus allowing their whole life costs and benefits to be added and compared. This is known as their present value. Over time the discount rate is reduced to allow for increasing uncertainty in its estimation.

Source: Guide To Developing The Project Business Case, HM Treasury

2.2.3 The Scottish Transport Appraisal Guidance (STAG) Technical Database further defines discounting as:

Discounting is a technique used to compare costs and benefits that occur in different time periods. It is a separate concept from inflation, and is based on the principle that, generally, society prefers to receive goods and services now rather than later, and to defer costs to future generations. This is known as 'social time preference'. The 'social time preference rate' is the rate at which society values the present compared to the future.

Source: STAG Technical Database

- 2.2.4 In short, the concept of discounting reflects the fact that 'society' prefers to consume in the present than in the future and, conversely, prefers cost to accrue in the future rather than at present.
- 2.2.5 At present the Treasury Green Book requires that at all costs are produced in a Present Value on the basis of 2010:



- So for example a purchase price of £10 in 2020 equates to:
  - $\pounds 10 * 100/118.45^{1} = \pounds 8.44$  in 2010 prices (to account for inflation); and
  - $\pounds 8.44 * 0.709^2 = \pounds 5.99$  (to convert discount to 2010 values).
- 2.2.6 In the context of the ferries / fixed link comparison, the costs for the first cycle of ferry replacement and a fixed link would be largely up-front. However, the second wave of ferry replacement would be circa 30 years into the future. In appraisal terms therefore, a vessel which would cost £10m in say 2020 (equating to £6.0m in 2010 values) would only 'cost'; £2.2m in 2050, in terms of Present Value.
- 2.2.7 The use of discounting for the ferry / tunnel comparison will be demonstrated in Section 2.3

#### **Optimism Bias**

- 2.2.8 The second appraisal convention applied in the SIITS SBC work was that of optimism bias (OB).
- 2.2.9 OB reflects the demonstrated, systematic tendency for project appraisers to be overly optimistic a worldwide phenomenon that affects all types of projects, including transport, in both the private and public sectors. The available evidence suggests that many project parameters are affected by optimism appraisers tend to overstate benefits, and understate timings and costs, both capital and operational, particularly in the early stages of development. To redress this tendency, practitioners should make explicit adjustments for this bias when appraising projects. These will take the form of increasing estimates of the costs and decreasing and delaying the receipt of estimated benefits.
- 2.2.10 However, in current transport appraisal guidance, it is only provided for cost risk adjustment. As detailed in Section 13.1 of the STAG Technical Database, risks associated with patronage or benefits should be accounted for by applying sensitivity or scenario testing around the central case. Sensitivity testing should be used to consider uncertainties around the adjustment for Optimism Bias. Adjusting for optimism bias should provide a better estimate of key project parameters early in the appraisal process. The application of these adjustments is designed to complement and encourage, rather than replace, existing good practice, in terms of calculating project specific risk adjustments.
- 2.2.11 The STAG Technical Database recommends the application of 66% OB at Stage 1 for Fixed Links (bridges and tunnels). Whilst not specifically listed in the guidance, convention in STAG appraisals has typically been to:
  - Apply no optimism bias to new ferries (unless unusual or unconventional designs are being adopted) as costs are generally well known and risk can be transferred to a shipyard through the contract.
  - Apply 44% optimism bias to marine infrastructure projects.
- 2.2.12 Therefore, the cost of any fixed link at this stage has to be uplifted by 66% and any harbour works by 44%. Optimism bias is not applied to new vessels.

#### References

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/749086/Project\_Business\_Case\_2018.pdf, page 50

<sup>&</sup>lt;sup>1</sup> GDP deflators, see https://www.gov.uk/government/publications/tag-data-book

<sup>&</sup>lt;sup>2</sup> 1/(1+0.035)^(2020-2010), with 1.035 representing a discount rate of 3.5%



https://www.transport.gov.scot/publication/stag-technical-database/section-9/#s943

https://www.transport.gov.scot/publication/stag-technical-database/section-13/#s1333

#### 2.3 Appraisal of Options – Present Value of Cost

2.3.1 This section sets out a high-level appraisal of options for Whalsay based on the above principles and using the material developed as part of the SIITS Report.

#### **Scenarios**

- 2.3.2 In the interests of completeness, seven scenarios are tested covering the five tunnel costs currently available and the two ferry options which emerged from the SBC:
  - Scenario T1: Geoconsult AS proposal £76 million (see comments in Section 3.2 regarding this price)
    - Unclear whether OB and contingency have been applied.
  - Scenario T2: Unlined tunnel priced by UK contractor £153.2 million
    - o 66% OB and 20% contingency applied.
    - Pro-rated from cost of Bressay Tunnel secured by Donaldson Associates in 2016.
  - Scenario T3: Unlined tunnel priced by Norwegian contractor £125.1 million
    - o 66% OB and 20% contingency applied.
    - Pro-rated from cost of Bressay Tunnel secured by Donaldson Associates in 2016.
  - Scenario T4: 1/3 Lined tunnel priced by UK contractor £162.2 million
    - o 66% OB and 20% contingency applied.
    - Pro-rated from cost of Bressay Tunnel secured by Donaldson Associates in 2016.
  - Scenario T5: 1/3 Lined tunnel priced by Norwegian contractor £131.2 million
    - o 66% OB and 20% contingency applied.
    - Pro-rated from cost of Bressay Tunnel secured by Donaldson Associates in 2016.
  - Scenario F1: The MV *Hendra* and MV *Linga* would be replaced by two 45m TYPE 2 vessels, which would cost in the region of £7 million each.
    - Replacement has been scheduled in 2019 and 2049 for illustrative purposes.
    - Harbour works costed at £13.3m inclusive of 44% optimism bias
  - Scenario F2: MV Hendra and MV Linga would be replaced with 3 \* 35m TYPE 1 vessels. The new vessels would cost in the region of £5.5m each.
    - o Replacement has been scheduled in 2019 and 2049 for illustrative purposes.
    - Harbour works include proposed North Voe option and costed at £33.4m inclusive of 44% optimism bias

#### Assumptions

- 2.3.3 The following assumptions underpin this analysis:
  - All figures are reported in nominal terms for ease of comparison (i.e. inflation is not accounted for).
  - Tunnel



- It is assumed that a tunnel would take at least ten years to develop through design, consents and to build and thus the capital costs are evenly distributed across this period.
- For simplicity, Year 1 is assumed to be 2019.
- Annual tunnel maintenance costs would be 0.36% of the build cost this figure was drawn from the 'Sketch TEE' analysis undertaken by Reference Economic Consultants.
- Ferry
  - The replacement of ferries is likely to be staggered but, for simplicity, the first wave of replacement is assumed to be 2019 and the second 2049, with the costs spread over three years.
  - The ferry replacement costs are estimates provided by a shipyard.
  - The harbour costs are at this stage high-level and subject to further development in the Outline Business Case full optimism bias of 44% is applied.
  - The ferry service operating costs used were drawn from Figure 11.1 of the SBC Report and are net of revenue.

#### **Present Value of Costs**

2.3.4 The table below summarises the outcomes of the appraisal in terms of the cash terms value of each scenario and more importantly the 60-year present value of costs.

Scenario	Description	Total – Cash Terms (£m)³	Total – PVC (£m)
T1	Geo-Consult	£114.0	£66.7
T2	UK Unlined	£264.8	£153.2
Т3	Norwegian Unlined	£215.8	£125.1
T4	UK Lined	£280.5	£162.2
T5	Norwegian Lined	£226.5	£131.2
F1	Replace Linga + Hendra with 2 * TYPE2 Vessels	£183.0	£67.9
F2	Replace Linga + Hendra with 3 * TYPE1 Vessels	£301.9	£114.4

Table 2.1: Whalsay Options – 60-Year Cash Terms Cost & Present Value of Costs

- 2.3.5 The key points from the above table are as follows:
  - The lowest cost option in both cash and PVC terms is Option T1. However, there are significant reservations over the robustness of this quotation and it is also unclear whether suitable contingency and optimism bias have been applied to the figures.
  - Outwith Option T1, the ferry-related options have a significantly lower PVC than all of the Fixed Link options, particularly in a scenario where a tunnel is one third lined. Indeed, Option F1 would have a PVC of around half of the lowest cost fixed link quotations secured by Donaldson Associates (and bearing in mind the significant uncertainties attached to those figures).
    - The primary reason for this is that, outwith an initial wave of ferry replacement, the costs of the ferry service are deferred and accrued more gradually over a long-period, and are thus subject to more significant discounting.

<sup>&</sup>lt;sup>3</sup> Costs T2-T5 exclude anything that is not in the tunnel such as portals / connecting road links / land acquisition / further ground investigation / design fees etc.



2.3.6 If we take an average of the four figures provided to Donaldson's Associates from the two contractors with a track record in this field, on this basis, the tunnel would cost circa £143m. The average of the two ferries options is £91m. On pure cost terms therefore, using the approach required by HM Treasury, as a core estimate the tunnel option would be £52m or 57% more expensive.



## 3 Deliverability

#### 3.1 Overview

- 3.1.1 The commentary provided in Chapter 2 reflects how the comparison between ferries and a fixed link is treated in an appraisal context. However, an appraisal is only a means of comparing on an equal basis the costs and benefits of different options. There is often a perception that the option with the largest benefit-cost ratio (BCR) or where benefits are difficult to quantify, the lowest PVC should progress to delivery. However, deliverability is a key issue and there are many schemes around the UK with a potentially positive BCR which have not progressed. A positive Benefit Cost ratio is therefore in itself not a guarantee of a project being taken forward in an environment where there is only a finite amount of funding.
- 3.1.2 The proposal for a Whalsay fixed link delivered by the local authority faces several deliverability challenges, which is why we have attempted to place it within a national context in the SBC. This chapter explores these challenges in more detail before reflecting on where a Fixed Link could feature in a national discussion.

### 3.2 Cost Certainty

- 3.2.1 There is at present a significant lack of cost certainty surrounding any proposed Whalsay fixed link. It is noted in the response from the Community Council that Norwegian contractor Tunnel Geoconsult AS has quoted £76m for a tunnel. However, our understanding is that this is a preliminary offer and there is limited detail on how such a structure would be delivered for this cost, and it is unclear whether this figure includes contingency and optimism bias or whether it is compliant with UK standards.
- 3.2.2 Moreover, as part of the SIITS SBC work, SIC commissioned Donaldson Associates to carry out a supplementary piece of market engagement work with a view to obtaining a fresh set of costs for fixed links to Bressay, Unst, Whalsay and Yell. A number of UK and Norwegian tunnelling contractors were asked whether they would provide independent 2016 cost estimates for each fixed link.
- 3.2.3 After some protracted negotiation, one UK and one Norwegian contractor agreed to provide 'bottom-up' cost estimates for the Bressay fixed link based on a design produced by Donaldson Associates Limited in 2008, compliant with current UK standards and including a cycle way. However, both contractors declined to offer any cost estimate for the other fixed links (including Whalsay), due to the lack of geological and technical engineering information. Whilst a set of costs were pro-rated from the Bressay figures, there remains significant uncertainty around the Whalsay tunnel costs (even with 66% optimism bias applied).<sup>4</sup>
- 3.2.4 Greater certainty around the costs for a Whalsay fixed link could only be obtained through conducting ground investigations and surveys. This would however, require a significant financial commitment from SIC / ZetTrans.

### 3.3 Affordability

- 3.3.1 As previously noted, a key challenge for the local authority in providing a tunnel to Whalsay is affordability.
- 3.3.2 SIC's capital budget (across all areas of expenditure) for 2018/19 is £28.2m, with the five-year total to 2023 being £135m.<sup>5</sup> Committee papers submitted in relation to the *Five-Year Investment*

<sup>&</sup>lt;sup>4</sup> <u>https://www.shetland.gov.uk/transport/documents/FixedLinksBottomUpCostingPaper.pdf</u> - pp.5-6.

<sup>&</sup>lt;sup>5</sup> <u>https://www.shetland.gov.uk/about\_finances/documents/FiveYearAssetInvestmentPlan2018-2023.pdf</u>



*Plan 2018-23* also note that the Scottish Government has not specified the level of core capital grant that it will provide to the Council over the next five years, but the indications are that there will be a reduction in the level of the grant over the period, after an initial increase in 2019/20 which relates to a lump sum of delayed funding from previous years.<sup>6</sup> The current level of the capital budget and the anticipated reduction in government funding suggests that there is no realistic possibility that a fixed link of the cost set out above could be delivered using these annual capital budgets. Any funding would have to be drawn from reserves or borrowing.

3.3.3 The SIC *Medium-Term Financial Plan 2018/19 – 2023/24* noted that the value of the 'Usable Reserves' was around the £250 million mark.<sup>7</sup> Even at the lowest 'with OB' cost, a fixed link would either require a substantial draw on reserves if funded up-front, or a commitment to significant prudential borrowing which would impact on revenue budgets in the years ahead.

#### 3.4 Competing Tunnel Schemes

3.4.1 The aspirations within the Whalsay community for a fixed link are shared with some in Bressay, Unst and Yell. The table below recaps on the fixed link costs provided by the UK and Norwegian contractor as part of the SBC work:

	Unlined		1/3 Le Lin	ength ed	Unlined, with contingency & OB applied		1/3 lined with contingency & OB applied	
	UK 2016 Bottom- Up (£m)	NOR 2016 Bottom- Up (£m)	UK 2016 Bottom- Up (£m)	NOR 2016 Bottom- Up (£m)	UK 2016 Bottom- Up (£m)	NOR 2016 Bottom- Up (£m)	UK 2016 Bottom- Up (£m)	NOR 2016 Bottom- Up (£m)
Bressay	£21.1	£16.8	£22.5	£17.8	£25.9	£20.6	£27.5	£21.8
Bluemull Sound	£71.2	£56.8	£75.9	£60.0	£132.5	£105.7	£141.0	£111.6
Yell Sound	£95.6	£76.3	£101.8	£80.5	£177.9	£141.9	£189.4	£149.8
Whalsay	£108.1	£86.3	£115.1	£91.0	£201.0	£160.4	£214.1	£169.3

#### Table 3.1: Fixed Link Costs – UK & Norwegian Contractor (SIITS SBC 2016)8

3.4.2 Even taking the lowest cost fixed link for each island (i.e. unlined but with contingency and OB applied), the combined cost would be between £428m-£537m. The combined value of these fixed links would be around double the Council's usable reserves. Therefore, if a fixed link was to be progressed for Whalsay, there would need to be a clear and evidence-based justification as to why that island was being progressed ahead of the other islands.

<sup>&</sup>lt;sup>6</sup> <u>https://www.shetland.gov.uk/about\_finances/documents/FiveYearAssetInvestmentPlan2018-2023.pdf</u> - Section 4.5.

<sup>&</sup>lt;sup>7</sup> SIC Medium-Term Financial Plan 2018/19 - 2023/24 (Shetland Islands Council, 2018), p. 39.

<sup>&</sup>lt;sup>8</sup> Note that these costs exclude anything that is not in the tunnel such as portals / connecting road links / land acquisition / further ground investigation / design fees etc.



#### 3.5 **Opportunity Cost**

- 3.5.1 A further key issue which would need to be considered in making the case for a Whalsay fixed link is that of 'opportunity cost' i.e. the next best opportunity forgone (or what else could the money be spent on). As with all local authorities around Scotland, Shetland Islands Council has been under sustained pressure to reduce expenditure, which has led to reductions in both the capital and revenue budgets across most if not all service areas.
- 3.5.2 As noted previously, a commitment to a large up-front sum to pay for a fixed link (either as direct capital or through prudential borrowing) will necessarily lead to:
  - other expenditure being deferred or cancelled or an offsetting reduction in other Council service areas; and / or
  - if funded through reserves, future interest / investment income foregone.
- 3.5.3 This is not necessarily a showstopper, but would require democratic agreement through the Council budgeting process that this is the most appropriate and equitable allocation of Council funding.

#### **Distribution of Benefits**

- 3.5.4 STAG defines a number of criteria, one of which is 'Accessibility & Social Inclusion'. One aspect of this is Comparative Accessibility. This considers the distribution of impacts by people group (particularly focussed on the needs of socially excluded groups) and geographic location where it states that '*The appraisal should describe where impacts are occurring and compare the impacts within these locations with other areas*'.
- 3.5.5 A fixed link to Whalsay would undoubtedly generate benefits for those travelling between Whalsay and the mainland in the form of shorter and potentially more reliable journey times, and the removal of the requirement to pay a fare (subject to there being no tolls on the tunnel). It is important to note however that, these benefits will accrue, in the main repeatedly to a relatively small group of people (Whalsay residents and frequent visitors). This would be in contrast to other schemes which could be progressed across Shetland (transport and non-transport) for which the benefits would be much more evenly spread across more of the population and economy. In addition, Whalsay ranks amongst Scotland's less deprived areas according to the Scottish Index of Multiple Deprivation.
- 3.5.6 Any investment in Whalsay should be seen in this context: i.e. the concentration of benefits and the local socio-economic profile.

#### 3.6 Scale of Delivery

- 3.6.1 Whilst making the case for Scottish Government funding, the purpose of the SIITS study was and indeed is in part to identify a long-term programme of capital expenditure which can be delivered by SIC (irrespective of who provides the funding). SIC has a lengthy track record in procuring ferries and marine infrastructure projects. These projects have generally been of a scale typically delivered by a local authority.
- 3.6.2 A Whalsay fixed link, even at the lowest quoted cost (plus OB) would be of an entirely different scale of procurement and delivery. By way of context, it is understood that the one of if not the single largest transport scheme delivered by a local authority in the United Kingdom to date is the Bay Gateway (the Heysham to M6 Link Road), a 4.8km long dual carriageway. The project was contracted by Lancashire County Council and had an outturn cost of £123.9 million. Even this figure is significantly less than that quoted by the Donaldson Associates work of late 2016.



3.6.3 It is therefore highly unlikely that SIC has or could secure the procurement and contract management skills required to deliver a project of the scale of the proposed Whalsay link. The Council has no track record in the delivery of schemes of this scale or tunnels in particular (indeed there is little experience in this field in the UK generally). Any proposal to construct a fixed link for Whalsay could therefore only be considered at a national scale, led by Transport Scotland.

#### 3.7 Timescales

- 3.7.1 In the event that a fixed link was to emerge as the preferred long-term solution for Whalsay from the Strategic Transport Projects Review (STPR2) see Chapter 4 –it would still remain a medium to long-term proposition given its likely level of prioritisation; time for detailed design & consenting; securing of funding; and mobilisation and construction.
- 3.7.2 Given the age of the MV *Hendra* and the evidenced capacity constraints on the route, an interim ferry solution would be required in any case. The ferry solution which emerges from this OBC will, as far as possible, ensure that the assets associated with the preferred option can be cascaded elsewhere in Shetland, minimising the extent of any sunk costs in the event of a future fixed link.

#### 3.8 Socio-Economic Impacts

- 3.8.1 A fixed link would fundamentally transform the economy of Whalsay. Overall, the benefits of a fixed link are likely to be highly positive these include but are not limited to:
  - reduced cost of living for island residents, in terms of:
    - there being no ferry fares to pay (unless a fixed link was tolled to a similar level);
    - the removal of any cost premium charged by suppliers to the island due to the costs associated with using the ferry and the associated asset & human resource downtime associated with this.
  - unconstrained access to / from Shetland mainland, which would:
    - o allow Whalsay residents to take-up employment on the mainland
    - o provide access to the mainland at all times for leisure, personal business etc.
  - the ability to undertake a meaningful day return trip to the Scottish mainland, as the first flights would now become accessible.
- 3.8.2 It does however have to be acknowledged that major transport schemes of this nature do have distributional impacts, and there would be 'losers' from any fixed link. These would include, but are not limited to:
  - The ferry crew would be made redundant unless alternative posts could be found for them. There are around 30-40 crew serving the combined Whalsay and Skerries routes. Given that the crew of MV Hendra and MV Linga are predominantly island-based, this would represent a significant loss of secure, relatively well-paid and island-based employment.
  - Island businesses and tradespeople would be subject to increased competition (although this could provide a corresponding benefit for Whalsay residents, who could benefit from lower costs).
  - Whalsay would effectively become part of the mainland which, and given budget pressures in the public sector, there is a risk that this would make it more vulnerable to the rationalisation of key services, e.g. health, social care and education.



3.8.3 Whilst acknowledging that a fixed link would likely be positive overall for the community, it does have to be noted that improved transport connectivity is a two-way street and there would likely be 'losers' from any such scheme.

#### 3.9 Conclusion

- 3.9.1 The analysis contained within this chapter, building on the high-level appraisal set out in conclusion, reaffirms the conclusion that a Whalsay fixed link should not be considered further in the context of the SIITS Whalsay OBC for the following reasons:
  - It is not feasible that SIC / ZetTrans could fund a project of this scale in the foreseeable future, nor do they have the technical and procurement expertise to 'buy' and deliver the project.
  - The cost of a fixed link would significantly exceed the costs associated with ongoing ferry services, even when considered over two ferry replacement cycles (outwith the £76 million GeoConsult preliminary offer, which is significantly out-of-step with ballpark prices provided by other contractors with a proven track record in tunnelling).
  - There would also be competition with other fixed links proposals within Shetland and across Scotland for any available funding.
  - Prior to construction, there would be a costly and extended period of technical development and preparation, which is not included in the above costs.
- 3.9.2 As noted in the SBC, the construction of a fixed link to Whalsay would involve a level of investment which would be classed as a nationally significant project. Following the completion of the SBC in 2016, SIC engaged with the Scottish Government and the then Minister for Transport & Islands about considering the case for fixed links in Shetland at the national level. It is to this issue that we now turn in Chapter 4.



## 4 Fixed Links in the National Context

#### 4.1 Overview

- 4.1.1 Since 2010 Shetland Islands Council's policy has been to support the development of Fixed Links where they are a viable alternative to ferries.
- 4.1.2 Recognising that the challenge of delivering fixed links in Shetland exceeds both the financial and technical resources of Shetland Islands Council, it was decided to raise the principle of fixed links with Scottish Government with aim of establishing a national policy on developing inter island fixed links.
- 4.1.3 To this end a paper was presented to the Islands Transport forum in September 2016<sup>9</sup>.
- 4.1.4 The Minister for Transport and Islands supported the paper and agreed that the issue should be included in the National Transport Strategy Review<sup>10</sup>.
- 4.1.5 Work now continues with Transport Scotland on ensuring fixed links are addressed in the National Transport Strategy Review and the Strategic Transport Projects Review 2.

#### 4.2 National Transport Strategy Review

- 4.2.1 *Scotland's Economic Strategy* reaffirms the Scottish Government's commitment to creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable inclusive economic growth. A safe, efficient, effective and sustainable transport system, for both passengers and freight, remains one of the key enablers of such sustainable economic growth.
- 4.2.2 In 2006, the National Transport Strategy (NTS) set out a 20-year vision to 2026, encapsulating priorities for transport in Scotland and providing a strategic framework against which questions of transport investment, priorities and policies could be judged.
- 4.2.3 A refreshed NTS was published in January 2016, keeping the overall NTS framework whilst updating the strategic context and clarifying roles and responsibilities across transport modes, locations and organisational hierarchy. It recommended a 'fuller, collaborative review of the NTS to the next Scottish Government' which was subsequently announced by Humza Yousaf MSP, then Minister for Transport and the Islands, in August 2016.
- 4.2.4 The NTS Review will build upon the 2006 Strategy, and its subsequent refresh in 2016, to produce a successor Strategy (the NTS2) setting out an updated vision for Scotland's transport system over the next twenty years. In doing so, the review process will identify opportunities and explore ways to address the strategic challenges facing the transport system over this time horizon and will seek to identify consistent or different needs between rural, coastal, islands, city, and urban areas.
- 4.2.5 The review is being aligned with the emerging policy and legislative landscape in Scotland including; outcomes from the independent review of the planning system; the Climate Change Plan; the local governance review; Enterprise and Skills review; City and Region Growth Deals; and the Transport Bill.
- 4.2.6 A key function of the review will be to establish a clearly defined set of strategic transport objectives. This will enable a subsequent and full update to the Strategic Transport Projects

<sup>&</sup>lt;sup>9</sup> https://www.transport.gov.scot/media/4031/itf-29-sep-2016-fixed-links-paper.pdf

<sup>&</sup>lt;sup>10</sup> https://www.transport.gov.scot/media/4033/itf-29-sep-2016-note-of-meeting.pdf



Review (STPR) to take place - following publication of the NTS2 - to set out Scottish Ministers' transport infrastructure priorities in alignment with the development of the National Planning Framework.

- 4.2.7 The NTS Review builds on the 2016 Refresh exercise with an approach that focuses on building a robust evidence base; working collaboratively with a wide range of partners and stakeholders; and engaging with transport users across Scotland.
- 4.2.8 The NTS Review will work towards a formal public consultation on a draft strategy with a view to publishing the successor strategy in 2019.

#### 4.3 Strategic Transport Projects Review 2 (STPR2)

- 4.3.1 The first STPR, published in December 2008, appraised a wide range of transport schemes from across Scotland and established a shortlist to be taken forward for further analysis and implementation. As noted above, the STPR will be updated following the publication of NTS2.
- 4.3.2 Transport Scotland has appointed consultants AECOM and Jacobs to deliver the STPR. The project will run for around two years and will gather evidence of transport problems & opportunities across Scotland and will identify a set of prioritised schemes to be taken forward.
- 4.3.3 At the time of writing this paper in January 2019, Transport Scotland have advised Shetland Islands Council and ZetTrans that the consultants are preparing to engage Councils and Regional Transport Partnerships and this should start during February 2019.
- 4.3.4 As part of the Council's inputs to the STPR2 process, they can make the case for the four Shetland fixed links, including Whalsay.

#### 4.4 How will this OBC Assist?

- 4.4.1 As with any Transport Scotland led project, STPR2 will be based on the principles of the STAG. In developing and appraising options, the appointed consultants will be seeking evidence of how each option address evidenced **problems and opportunities**. From the perspective of a Whalsay fixed link, the community and SIC will have to demonstrate that:
  - the current ferry service is not meeting the needs of the islands; and
  - that, in the long-term, a fixed link is the most appropriate means of remedying the problems / realising the opportunities.
- 4.4.2 The SIITS process of the Whalsay OBC in particular will go some way towards providing such an evidence-based in that:
  - The SBC work which was completed in late 2016
    - o provided an initial profile of the transport problems facing the Whalsay community; and
    - o developed outline costs for fixed links in Shetland.
  - The OBC work will:
    - o evidence at a sailing-by-sailing level the extent of current ferry capacity constraints;
    - through the resident survey and community engagement, highlight the personal and economic impacts that both capacity constraints and fares are having on the Whalsay community.
- 4.4.3 The above will assist the community in making the 'case for change' and provide the STPR2 consultants with a firm evidence base against which a range of options can be judged.