



ProVersa  
Professional.Versatile

# Shetland Inter-Island Transport Connectivity Programme

Network Strategy Case for Change

On behalf of **Shetland Islands Council**



Project Ref: 332611491 | Date: June 2025

---

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU  
Office Address: 3<sup>rd</sup> Floor, Capital Square, 58 Morrison Street, Edinburgh, EH3 8BP  
T: 0131 335 4200 E: [info.edinburgh@stantec.com](mailto:info.edinburgh@stantec.com)

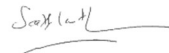
## Document Control Sheet

**Project Name: Shetland Inter-Island Transport Connectivity Programme**

**Project Ref: 332611491**

**Report Title: Network Strategy Case for Change**

**Date: 19<sup>th</sup> June 2025**

|                                                | Name             | Position                     | Signature                                                                           | Date     |
|------------------------------------------------|------------------|------------------------------|-------------------------------------------------------------------------------------|----------|
| <b>Prepared by:</b>                            | Stephen Canning  | Director, Transport Planning |  | 02/06/25 |
| <b>Reviewed by:</b>                            | Dr Scott Leitham | Director, Transport Planning |  | 12/06/25 |
| <b>Approved by:</b>                            | Stephen Canning  | Director, Transport Planning |  | 19/06/25 |
| <b>For and on behalf of Stantec UK Limited</b> |                  |                              |                                                                                     |          |

| Revision | Date     | Description                        | Prepared                                                                            | Reviewed                                                                              | Approved                                                                              |
|----------|----------|------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| vFINAL   | 23/06/26 | Minor updates ahead of publication |  |  |  |
|          |          |                                    |                                                                                     |                                                                                       |                                                                                       |

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

## Contents

|          |                                                                         |           |
|----------|-------------------------------------------------------------------------|-----------|
| <b>1</b> | <b>Introduction.....</b>                                                | <b>2</b>  |
| 1.1      | Overview.....                                                           | 2         |
| 1.2      | Shetland Inter-Island Transport Connectivity Programme .....            | 3         |
| 1.3      | How will the business case be developed?.....                           | 5         |
| 1.4      | Programme SOC .....                                                     | 8         |
| 1.5      | Case for Change Report .....                                            | 8         |
| <b>2</b> | <b>Developing the Case for Change .....</b>                             | <b>9</b>  |
| 2.1      | Overview.....                                                           | 9         |
| 2.2      | How has the Case for Change been developed? .....                       | 9         |
| 2.3      | Transport Scotland Community Needs Assessment Guidance .....            | 14        |
| 2.4      | Transport Problems Framework.....                                       | 16        |
| <b>3</b> | <b>Strategic Context.....</b>                                           | <b>18</b> |
| 3.1      | Overview.....                                                           | 18        |
| 3.2      | How has the macroeconomic context changed? .....                        | 18        |
| 3.3      | What have been the recent trends on the Shetland ferries network? ..... | 21        |
| 3.4      | How do the islands compare economically to mainland Shetland? .....     | 25        |
| 3.5      | What were the headline survey findings for the isles overall? .....     | 28        |
| 3.6      | Next Steps .....                                                        | 29        |
| <b>4</b> | <b>Policy Context.....</b>                                              | <b>30</b> |
| 4.1      | Overview.....                                                           | 30        |
| 4.2      | National Policy - Scotland .....                                        | 30        |
| 4.3      | National Policy – United Kingdom .....                                  | 38        |
| 4.4      | Regional Policy.....                                                    | 39        |
| 4.5      | Local Policy .....                                                      | 41        |
| <b>5</b> | <b>Island Supply-Chains .....</b>                                       | <b>44</b> |
| 5.1      | Overview.....                                                           | 44        |
| 5.2      | How are individual islands served? .....                                | 44        |
| 5.3      | How are individual sectors served?.....                                 | 47        |
| 5.4      | Staffing, recruitment and workforce mobility .....                      | 55        |
| 5.5      | Summary .....                                                           | 57        |
| <b>6</b> | <b>Network Problems .....</b>                                           | <b>58</b> |
| 6.1      | Overview.....                                                           | 58        |
| 6.2      | Fleet Age .....                                                         | 58        |
| 6.3      | Crewing .....                                                           | 60        |
| 6.4      | Fleet Resilience .....                                                  | 62        |
| 6.5      | Vehicle Deck Capacity .....                                             | 63        |
| 6.6      | Cost .....                                                              | 65        |
| <b>7</b> | <b>Bluemull Sound .....</b>                                             | <b>68</b> |
| 7.1      | Overview.....                                                           | 68        |

|           |                                                                                          |            |
|-----------|------------------------------------------------------------------------------------------|------------|
| 7.2       | Community Needs Assessment Step 1: Route Service Level .....                             | 68         |
| 7.3       | Community Needs Assessment Step 2: Connectivity .....                                    | 75         |
| 7.4       | Community Needs Assessment Step 3: Service Performance .....                             | 81         |
| 7.5       | Community Needs Assessment Step 4: Island Narrative .....                                | 90         |
| 7.6       | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 97         |
| <b>8</b>  | <b>Bressay.....</b>                                                                      | <b>101</b> |
| 8.1       | Overview.....                                                                            | 101        |
| 8.2       | Community Needs Assessment Step 1: Route Service Level .....                             | 101        |
| 8.3       | Community Needs Assessment Step 2: Connectivity .....                                    | 104        |
| 8.4       | Community Needs Assessment Step 3: Service Performance .....                             | 107        |
| 8.5       | Community Needs Assessment Step 4: Island Narrative .....                                | 113        |
| 8.6       | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 116        |
| <b>9</b>  | <b>Foula .....</b>                                                                       | <b>118</b> |
| 9.1       | Overview.....                                                                            | 118        |
| 9.2       | Community Needs Assessment Step 1: Route Service Level .....                             | 118        |
| 9.3       | Community Needs Assessment Step 2: Connectivity .....                                    | 122        |
| 9.4       | Community Needs Assessment Step 3: Service Performance .....                             | 122        |
| 9.5       | Community Needs Assessment Step 4: Island Narrative .....                                | 122        |
| 9.6       | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 123        |
| <b>10</b> | <b>Papa Stour.....</b>                                                                   | <b>125</b> |
| 10.1      | Overview.....                                                                            | 125        |
| 10.2      | Community Needs Assessment Step 1: Route Service Level .....                             | 125        |
| 10.3      | Community Needs Assessment Step 2: Connectivity .....                                    | 128        |
| 10.4      | Community Needs Assessment Step 3: Service Performance .....                             | 131        |
| 10.5      | Community Needs Assessment Step 4: Island Narrative .....                                | 135        |
| 10.6      | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 135        |
| <b>11</b> | <b>Skerries .....</b>                                                                    | <b>137</b> |
| 11.1      | Overview.....                                                                            | 137        |
| 11.2      | Community Needs Assessment Step 1: Route Service Level .....                             | 137        |
| 11.3      | Community Needs Assessment Step 2: Connectivity .....                                    | 141        |
| 11.4      | Community Needs Assessment Step 3: Service Performance .....                             | 144        |
| 11.5      | Community Needs Assessment Step 4: Island Narrative .....                                | 148        |
| 11.6      | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 149        |
| <b>12</b> | <b>Whalsay .....</b>                                                                     | <b>151</b> |
| 12.1      | Overview.....                                                                            | 151        |
| 12.2      | How does the IITCP relate to the 2022 Whalsay Outline Business Case? .....               | 151        |
| 12.3      | Community Needs Assessment Step 1: Route Service Level .....                             | 153        |
| 12.4      | Community Needs Assessment Step 2: Connectivity .....                                    | 158        |



|           |                                                                                          |            |
|-----------|------------------------------------------------------------------------------------------|------------|
| 12.5      | Community Needs Assessment Step 3: Service Performance .....                             | 161        |
| 12.6      | Community Needs Assessment Step 4: Island Narrative .....                                | 168        |
| 12.7      | Community Needs Assessment Step 5: What are the transport problems (gap analysis)? ..... | 171        |
| <b>13</b> | <b>Yell .....</b>                                                                        | <b>173</b> |
| 13.1      | Overview.....                                                                            | 173        |
| 13.2      | Community Needs Assessment Step 1: Route Service Level .....                             | 173        |
| 13.3      | Community Needs Assessment Step 2: Connectivity .....                                    | 177        |
| 13.4      | Community Needs Assessment Step 3: Service Performance .....                             | 180        |
| 13.5      | Community Needs Assessment Step 4: Island Narrative .....                                | 186        |
| 13.6      | Community Neds Assessment Step 5: What are the transport problems (gap analysis)? .....  | 189        |
| <b>14</b> | <b>Transport Planning Objectives .....</b>                                               | <b>191</b> |
| 14.1      | Approach .....                                                                           | 191        |
| 14.2      | Theory of Change.....                                                                    | 191        |
| 14.3      | Summary of problems .....                                                                | 192        |
| 14.4      | Consequences of Problems .....                                                           | 196        |
| 14.5      | Transport Planning Objectives .....                                                      | 199        |

## Figures

|                                                                                                                                                                                  |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Figure 1.1: Geographic scope of the Shetland Inter-Island Transport Connectivity Programme .....                                                                                 | 4  |
| Figure 1.2: IITCP business case stages.....                                                                                                                                      | 5  |
| Figure 1.3: Development of the Network Strategy Programme Business Case .....                                                                                                    | 7  |
| Figure 2.1: Resident survey responses.....                                                                                                                                       | 12 |
| Figure 2.2: Community Needs Assessment process .....                                                                                                                             | 15 |
| Figure 2.2: Transport Problems Framework process.....                                                                                                                            | 16 |
| Figure 3.1: Passenger carryings on high-volume Shetland ferry routes 2013-24 (2013=100) (Source: Shetland Islands Council vessel logbook data).....                              | 22 |
| Figure 3.2: Car carryings on high-volume Shetland ferry routes 2013-24 (2013=100) (Source: Shetland Islands Council vessel logbook data) .....                                   | 23 |
| Figure 3.3: Patronage trends on Shetland internal ferry network and other comparable public transport services 2013-2023 (2013=100) (Source: Scottish Transport Statistics)..... | 24 |
| Figure 3.4: Mainland Shetland and island communities population index (1981=100) (Source: Census) .....                                                                          | 26 |
| Figure 3.5: Population by age group, 2022 (Source: 2022 Census).....                                                                                                             | 26 |
| Figure 3.6: Resident survey – headline findings, all islands except Foula.....                                                                                                   | 29 |
| Figure 4.1: NTS2 Priorities and Outcomes (Source: NTS2) .....                                                                                                                    | 31 |
| Figure 4.2: Sustainable Travel Hierarchy (Source: NTS2).....                                                                                                                     | 32 |
| Figure 4.3: Sustainable Investment Hierarchy (Source: NTS2) .....                                                                                                                | 32 |
| Figure 4.4 Route Map to 20% Car KM Reduction - Four Behaviours .....                                                                                                             | 34 |
| Figure 4.5: The five ‘missions’ of the Government.....                                                                                                                           | 38 |
| Figure 5.1: Profile of non-commercial trailer movements (Source: Shetland Islands Council).....                                                                                  | 50 |
| Figure 6.1: Shetland Ferry Service costs 2015/16 to 2024/25 (Source: Shetland Islands Council) .....                                                                             | 66 |
| Figure 7.1: Bluemull Sound ports .....                                                                                                                                           | 71 |
| Figure 7.2: Hamars Ness – Gutcher timetable - winter 2024/25 .....                                                                                                               | 76 |
| Figure 7.3: Belmont – Gutcher timetable - winter 2024/25.....                                                                                                                    | 79 |
| Figure 7.4: Bluemull Sound - total sailings by route leg, 2013-2024 (Source: vessel logbooks) .....                                                                              | 82 |
| Figure 7.5: Bluemull Sound – total vehicle lane metre carryings by route leg, 2013-2024 (Source: vessel logbooks).....                                                           | 83 |

|                                                                                                                                                   |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Figure 7.6: Proportion of Gutter – Belmont route leg sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks) ..... | 84  |
| Figure 7.7: Annual percentage cancellation rate by route leg (Source: vessel logbooks) .....                                                      | 86  |
| Figure 7.8: Bluemull Sound – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks) .....             | 87  |
| Figure 7.9: Population trend for Fetlar and comparator areas (1981=100) (Source: Census) .....                                                    | 90  |
| Figure 7.10: Population age profile for Fetlar and comparator areas (Source: Census 2011 and 2022) .....                                          | 91  |
| Figure 7.11: Employee jobs by industry – Fetlar (Source: 2022 Census) .....                                                                       | 92  |
| Figure 7.12: Population trend for Unst and comparator areas (1981=100) (Source: Census) .....                                                     | 94  |
| Figure 7.13: Population age profile for Unst and comparator areas (Source: Census 2011 and 2022) .....                                            | 95  |
| Figure 7.14: Employee jobs by industry – Unst (Source: 2022 Census) .....                                                                         | 96  |
| Figure 8.1: Lerwick – Bressay ports .....                                                                                                         | 103 |
| Figure 8.2: Bressay timetable - winter 2024/25 .....                                                                                              | 105 |
| Figure 8.3: Bressay - total sailings by vessel, 2013-2024 (Source: vessel logbooks) .....                                                         | 107 |
| Figure 8.4: Bressay – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks) .....                                               | 108 |
| Figure 8.5: Proportion of Bressay - Lerwick sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks) .....          | 109 |
| Figure 8.6: Annual percentage cancellation rate on the Bressay route (Source: vessel logbooks) .....                                              | 110 |
| Figure 8.7: Bressay – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks) .....                    | 111 |
| Figure 8.8: Population trend for Bressay and comparator areas (1981=100) (Source: Census) .....                                                   | 113 |
| Figure 8.9: Population age profile for Bressay and comparator areas (Source: Census 2011 and 2022) .....                                          | 114 |
| Figure 8.10: Employee jobs by industry – Bressay (Source: 2022 Census) .....                                                                      | 115 |
| Figure 9.1: Foula - Walls ports .....                                                                                                             | 120 |
| Figure 10.1: West Burrafirth – Papa Stour ports .....                                                                                             | 127 |
| Figure 10.2: West Burrafirth – Papa Stour 2025 .....                                                                                              | 129 |
| Figure 10.3: Papa Stour - total sailings by vessel, 2013-2024 (Source: vessel logbooks) .....                                                     | 132 |
| Figure 10.4: Papa Stour – total passenger vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks) .....                                 | 133 |
| Figure 11.1: Skerries' route ports .....                                                                                                          | 139 |
| Figure 11.2: Skerries timetable - winter 2024/25 .....                                                                                            | 142 |
| Figure 11.3: Skerries - total sailings by vessel, 2013-2024 (Source: vessel logbooks) .....                                                       | 144 |
| Figure 11.4: Skerries – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks) .....                                             | 145 |
| Figure 11.5: Skerries – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks) .....                  | 147 |
| Figure 12.1: Symbister – Laxo / Vidlin ports .....                                                                                                | 155 |
| Figure 12.2: Whalsay timetable – summer 2025 .....                                                                                                | 159 |
| Figure 12.3: Whalsay - total sailings by vessel, 2013-2024 (Source: vessel logbooks) .....                                                        | 161 |
| Figure 12.4: Whalsay – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks) .....                                              | 162 |
| Figure 12.5: Proportion of Symbister – Laxo / Vidlin sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks) ..... | 163 |
| Figure 12.6: Annual percentage cancellation rate on the Symbister – Laxo / Vidlin route (Source: vessel logbooks) .....                           | 164 |
| Figure 12.7: Whalsay – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks) .....                   | 165 |
| Figure 12.8: Number of days where at least one Symbister – Laxo sailing has been diverted to Vidlin (Source: vessel logbooks) .....               | 166 |
| Figure 12.9: Number of individual sailings diverted to Vidlin (Source: vessel logbooks) .....                                                     | 166 |
| Figure 12.10: Population trend for Whalsay and comparator areas (1981=100) (Source: Census) .....                                                 | 168 |
| Figure 12.11: Population age profile for Whalsay and comparator areas (Source: Census 2011 and 2022) .....                                        | 169 |
| Figure 12.12: Employee jobs by industry – Whalsay (Source: 2022 Census) .....                                                                     | 170 |
| Figure 13.1: Yell Sound ports .....                                                                                                               | 175 |
| Figure 13.2: Yell Sound timetable - winter 2024/25 .....                                                                                          | 178 |
| Figure 13.3: Yell Sound - total sailings by vessel, 2013-2024 (Source: vessel logbooks) .....                                                     | 180 |
| Figure 13.4: Yell Sound – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks) .....                                           | 181 |

|                                                                                                                                     |     |
|-------------------------------------------------------------------------------------------------------------------------------------|-----|
| Figure 13.: Proportion of Yell Sound sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks) .....   | 182 |
| Figure 13.6: Annual percentage cancellation rate on the Yell Sound route (Source: vessel logbooks) ...                              | 184 |
| Figure 13.7: Yell Sound – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks) .....  | 184 |
| Figure 13.8: Population trend for Yell and comparator areas (1981=100) (Source: Census).....                                        | 186 |
| Figure 13.9: Population age profile for Yell and comparator areas (Source: Census 2011 and 2022) ....                               | 187 |
| Figure 13.10: Employee jobs by industry – Yell (Source: 2022 Census).....                                                           | 188 |
| Figure 14.1: Simplified transport intervention logic map .....                                                                      | 191 |
| Figure 14.2: Inter-island transport connectivity through time .....                                                                 | 192 |
| Figure 14.3: Island and mainland resident surveys – Respondents expressing dissatisfaction with elements of the ferry service ..... | 193 |
| Figure 14.4: Island and mainland resident surveys – Barriers to travel – ‘Major Impact’ .....                                       | 195 |
| Figure 14.5: Island and mainland resident surveys – activities and opportunities missed out on .....                                | 196 |
| Figure 14.6: Island and mainland business surveys – impacts on business operation .....                                             | 198 |
| Figure 14.6: Island and mainland business surveys – impacts on business performance .....                                           | 198 |

## Tables

|                                                                                                                                        |     |
|----------------------------------------------------------------------------------------------------------------------------------------|-----|
| Table 2.1: Transport problem ‘themes’ .....                                                                                            | 16  |
| Table 3.1: Additional Section 70 grant funding by financial year .....                                                                 | 19  |
| Table 3.2: Orkney and Shetland internal ferry networks – comparable trip rates (2022) .....                                            | 25  |
| Table 3.3: Population change by age group 2011 to 2022 (Source: 2011 Census and 2022 Census) .....                                     | 27  |
| Table 4.1: Proposed 10-year minimum all tenure land requirements for Shetland .....                                                    | 37  |
| Table 6.1: Shetland Islands Council internal ferry fleet – vessel age as of May 2025.....                                              | 59  |
| Table 6.2: Shetland Islands Council Ferry Service contracted sea staff by age band.....                                                | 61  |
| Table 6.3: Routes to which the current fleet can be deployed .....                                                                     | 63  |
| Table 6.4: Proportion of total sailings where vehicle deck utilisation exceeded 75% .....                                              | 64  |
| Table 7.1: Route Service Level definitions .....                                                                                       | 69  |
| Table 7.2: Allocation of Bluemull Sound routes to levels .....                                                                         | 69  |
| Table 7.3: Key features of MV <i>Bigga</i> and MV <i>Geira</i> .....                                                                   | 70  |
| Table 7.4: MV <i>Bigga</i> , length of operating day - summer .....                                                                    | 73  |
| Table 7.5: MV <i>Geira</i> , length of operating day - summer .....                                                                    | 74  |
| Table 7.6: MV <i>Bigga</i> , length of operating day - winter .....                                                                    | 74  |
| Table 7.7: MV <i>Geira</i> , length of operating day - winter .....                                                                    | 75  |
| Table 7.8: Fetlar’s connectivity .....                                                                                                 | 78  |
| Table 7.9: Unst’s connectivity .....                                                                                                   | 81  |
| Table 7.10: Bluemull Sound - 2024 carryings as a percentage of 2019 carryings.....                                                     | 83  |
| Table 7.11: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks) ..... | 85  |
| Table 7.12: Availability of public services in Fetlar.....                                                                             | 93  |
| Table 7.13: Availability of public services in Unst .....                                                                              | 97  |
| Table 7.14: Fetlar - transport problem ‘themes’ .....                                                                                  | 97  |
| Table 7.15: Fetlar – transport problems and supply-side causes .....                                                                   | 98  |
| Table 7.16: Unst - transport problem ‘themes’ .....                                                                                    | 99  |
| Table 7.17: Unst – transport problems and supply-side causes .....                                                                     | 99  |
| Table 8.1: Allocation of Bressay - Lerwick route to levels.....                                                                        | 101 |
| Table 8.2: Key features of MV <i>Leirna</i> .....                                                                                      | 102 |
| Table 8.3: MV <i>Leirna</i> , length of operating day .....                                                                            | 104 |
| Table 8.4: Bressay’s connectivity .....                                                                                                | 107 |
| Table 8.5: Bressay - 2024 carryings as a percentage of 2019 carryings.....                                                             | 108 |
| Table 8.6: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks) .....  | 109 |
| Table 8.7: Availability of public services in Bressay.....                                                                             | 115 |
| Table 8.8: Bressay - transport problem ‘themes’ .....                                                                                  | 116 |

|                                                                                                                                           |     |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Table 8.9: Bressay– transport problems and supply-side causes.....                                                                        | 117 |
| Table 9.1: Allocation of Foula – Walls route to levels .....                                                                              | 118 |
| Table 9.2: Key features of MV <i>New Advance</i> .....                                                                                    | 119 |
| Table 9.3: MV <i>New Advance</i> , length of operating day .....                                                                          | 122 |
| Table 9.4: Transport problem ‘themes’.....                                                                                                | 123 |
| Table 9.5: Foula ferry service – transport problems and supply-side causes.....                                                           | 124 |
| Table 10.1: Allocation of West Burrafirth – Papa Stour route to levels .....                                                              | 125 |
| Table 10.2: Key features of MV <i>Snolda</i> .....                                                                                        | 126 |
| Table 10.3: MV <i>Snolda</i> , length of operating day – summer timetable 2025 .....                                                      | 128 |
| Table 10.4: Papa Stour’s connectivity .....                                                                                               | 131 |
| Table 10.5: Papa Stour - 2024 carryings as a percentage of 2019 carryings.....                                                            | 133 |
| Table 10.6: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75%<br>(Source: vessel logbooks) ..... | 134 |
| Table 10.7: Transport problem ‘themes’.....                                                                                               | 135 |
| Table 10.8: Papa Stour – transport problems and supply-side causes .....                                                                  | 136 |
| Table 11.1: Allocation of the Skerries route to levels .....                                                                              | 137 |
| Table 11.2: Key features of MV <i>Filla</i> .....                                                                                         | 137 |
| Table 11.3: MV <i>Filla</i> , length of operating day.....                                                                                | 140 |
| Table 11.4: Skerries’ connectivity.....                                                                                                   | 143 |
| Table 11.5: Skerries - 2024 carryings as a percentage of 2019 carryings.....                                                              | 146 |
| Table 11.: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75%<br>(Source: vessel logbooks) .....  | 146 |
| Table 11.7: Transport problem ‘themes’.....                                                                                               | 149 |
| Table 11.8: Skerries – transport problems and supply-side causes .....                                                                    | 150 |
| Table 12.1: Allocation of Whalsay route to levels .....                                                                                   | 153 |
| Table 12.2: Key features of MV <i>Hendra</i> and MV <i>Linga</i> .....                                                                    | 153 |
| Table 12.3: MV <i>Linga</i> length of operating day.....                                                                                  | 156 |
| Table 12.4: MV <i>Hendra</i> length of operating day .....                                                                                | 157 |
| Table 12.5: Whalsay’s connectivity .....                                                                                                  | 161 |
| Table 12.6: Whalsay - 2024 carryings as a percentage of 2019 carryings .....                                                              | 162 |
| Table 12.7: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75%<br>(Source: vessel logbooks) ..... | 163 |
| Table 12.8: Availability of public services in Whalsay .....                                                                              | 171 |
| Table 12.9: Whalsay - transport problem ‘themes’.....                                                                                     | 171 |
| Table 12.10: Whalsay – transport problems and supply-side causes.....                                                                     | 172 |
| Table 13.1: Allocation of Yell Sound route to levels.....                                                                                 | 173 |
| Table 13.2: Key features of MV <i>Dagalien</i> and MV <i>Daggri</i> .....                                                                 | 174 |
| Table 13.3: Shift vessel - length of operating day .....                                                                                  | 176 |
| Table 13.4: Day vessel - length of operating day .....                                                                                    | 177 |
| Table 13.5: Yell’s connectivity .....                                                                                                     | 180 |
| Table 13.6: Yell Sound - 2024 carryings as a percentage of 2019 carryings .....                                                           | 181 |
| Table 13.7: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75%<br>(Source: vessel logbooks) ..... | 183 |
| Table 13.8: Availability of public services in Yell .....                                                                                 | 189 |
| Table 13.9: Yell - transport problem ‘themes’.....                                                                                        | 189 |
| Table 13.10: Yell – transport problems and supply-side causes.....                                                                        | 190 |
| Table 14.1: Survey ferry service factors and prospective TPO themes.....                                                                  | 199 |
| Table 14.2: Survey ferry service factors, barriers to travel and prospective TPO themes.....                                              | 200 |
| Table 14.3: Survey ferry service factors, barriers to travel and prospective TPO themes.....                                              | 201 |

This page is intentionally blank

***Note: The Shetland Inter-Island Transport Connectivity Programme (IITCP) – Network Strategy Case for Change Report was produced as part of the development of the Strategic Outline Case. It is therefore accurate as of 25<sup>th</sup> June 2025. The document has not been updated to reflect any changes in the period to June 2026, although where elements of this report have been brought into the Network Strategy OBC, relevant updates have been made.***

# 1 Introduction

## 1.1 Overview

- 1.1.1 The purpose of the **Shetland Inter-Island Transport Connectivity Programme (IITCP)** is to develop a high-level timed and costed sequence of island connectivity investments which, taken together, will form an agreed **network strategy** to meet the needs of Shetland's island communities.
- 1.1.2 The study is being delivered by **Stantec UK Ltd** in partnership with **Mott MacDonald**, **COWI** and **ProVersa Ltd**.

### What is the background to the study?

- 1.1.3 Shetland Islands Council (the Council) operates or contracts essential transport connections to nine islands across the archipelago – Bressay, Fair Isle, Fetlar, Foula, Papa Stour, Out Skerries, Unst, Whalsay and Yell. These connections are delivered through a combination of air and ferry services, which have been supported over many years in both capital and revenue terms by the Council and, more recently with respect to ferry service revenue funding, the Scottish Government.
- 1.1.4 The majority of ferry services are operated directly by the Council, with the exception of the Foula ferry route which is delivered through a contract with a private operator. Air services are provided under contract by ZetTrans, the Regional Transport Partnership for the Shetland Islands, and the costs are met by the Council, under its duty to meet the net costs of ZetTrans.

### Shetland Inter-Island Transport Study, 2016

- 1.1.5 In 2014, Shetland Islands Council, through the *Our Islands, Our Future*, initiative, began a dialogue with Scottish Government on establishing some principles for 'fair funding' of Shetland's inter-island transport services and infrastructure. The basis of these discussions was that the financial burden placed on the Council in providing inter-island transport was both disproportionate and unsustainable
- 1.1.6 To inform the Council's ask of the Scottish Government, it commissioned the **Shetland Inter-Island Transport Study (SIITS)**. SIITS was a programme-level Strategic Outline Case which established the case for investment in the inter-island transport network and identified a set of timed capital and revenue options which, if delivered, would in-part or in full address the identified transport problems.
- 1.1.7 Elements of the Programme Strategic Outline Case were progressed through a subsequent series of project-level Outline Business Cases (OBC)<sup>1</sup> focused on the priority recommendations from SIITS. The SIITS project delivered several important successes for the Council, including:
- Securing partial and thereafter full Scottish Government **top-up revenue funding to cover the annual operating deficit of the Council's ferry service**
  - Securing circa **£27 million** of UK Government funding for the **Fair Isle Ferry Replacement Project**, now under construction
  - Reorganisation of **air services** to provide improved connectivity for Fair Isle and Foula
  - **Timetable improvements** on several ferry routes including **Papa Stour, Skerries and Whalsay**

<sup>1</sup> These were the Fair Isle, Whalsay, Air Services and Ferry Revenue OBCs.



- Further development of **potential future ferry options for Whalsay**

#### Why is the IITCP required?

1.1.8 Whilst SIITS delivered a number of successes, it will be replaced by the IITCP upon its completion. There are two reasons for this:

- Several island communities, including Bressay, Fetlar, Unst, Whalsay and Yell, have long expressed **a desire to consider a fixed link** rather than a ferry as their means of connectivity. At the time SIITS was undertaken, the prevailing political, economic and financial position meant that fixed links were not considered in detail and were instead placed in the context of Transport Scotland's Strategic Transport Projects Review 2 (STPR2) for consideration. The macroeconomic and policy context has however changed, and the time is now right to consider fixed links in detail
- SIITS was also published almost a decade ago and, as with any strategic planning document, it is appropriate to **periodically review and refresh the outcomes** to reflect the passage of time and the evolving context within which transport investments are made

## 1.2 Shetland Inter-Island Transport Connectivity Programme

1.2.1 The Shetland Inter-Island Transport Connectivity Programme will set-out a **long-term network strategy for eight island communities served by Shetland Islands Council's ferry service** (with Fair Isle being addressed through the ongoing Fair Isle Ferry Replacement Project), as shown in the map below:

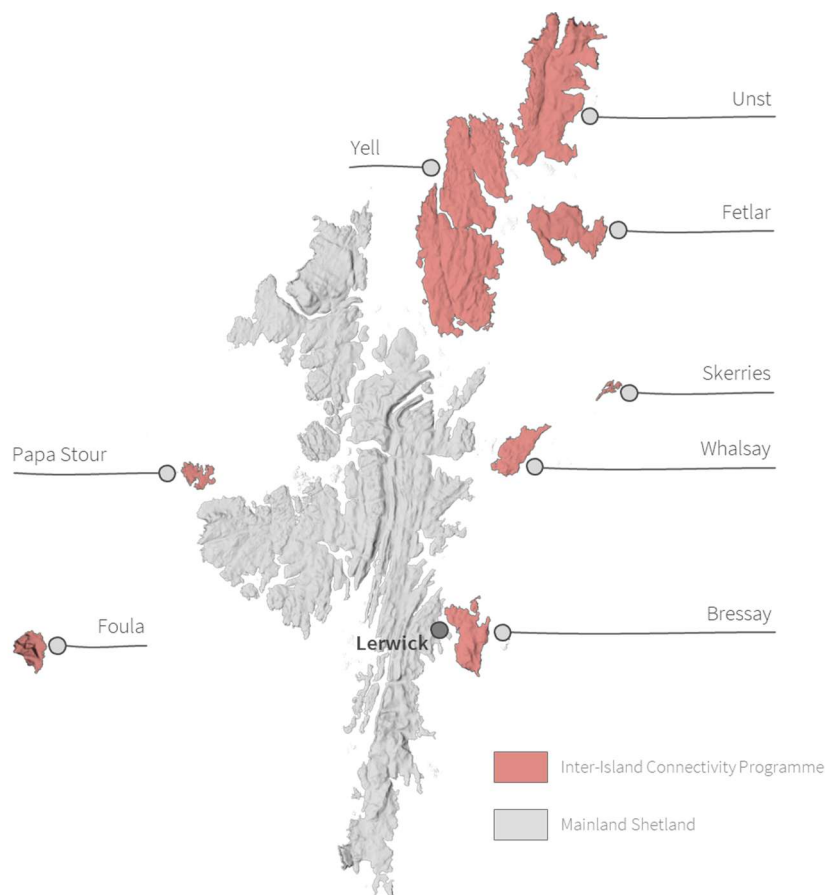




Figure 1.1: Geographic scope of the Shetland Inter-Island Transport Connectivity Programme

## What is the purpose of the IITCP?

1.2.2 As alluded to above, the purpose of this study is to determine, for Shetland overall:

- The 'case' (in its widest sense) for **fixed links**
- The **shape of the ferry service and network in the short, medium and long-term**

1.2.3 These two elements will be combined to create a long-term 'Network Strategy', i.e., a sequential and costed investment plan for the inter-island transport network.

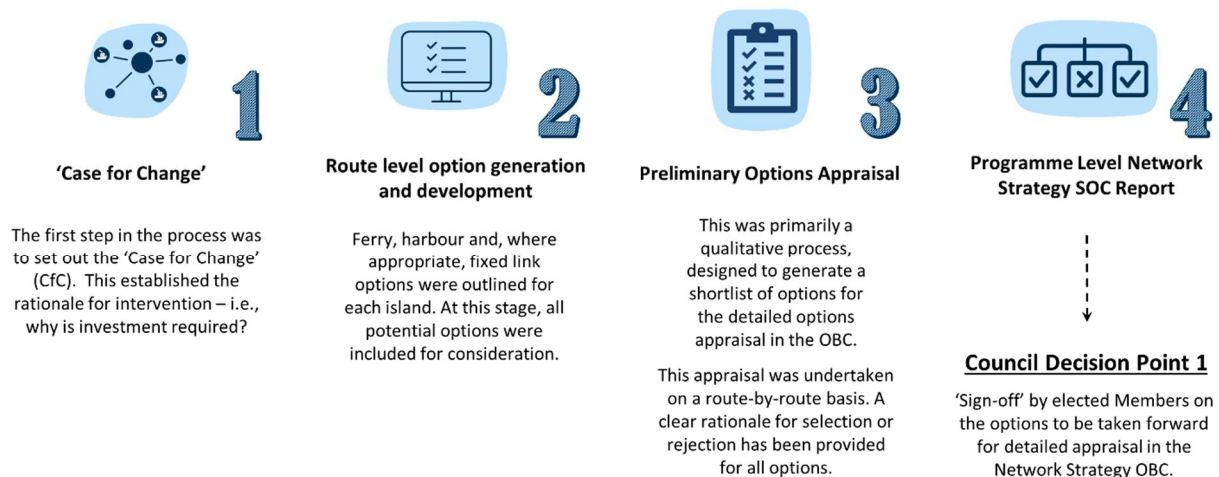
## What are the key steps in the study?

1.2.4 The Network Strategy will be developed in two stages:

- The **Network Strategy - Strategic Outline Case** will establish the case for investment, the spending objectives and the ferry, harbour and, where appropriate, fixed link options at an island level
- The **Network Strategy - Outline Business Case** will determine the preferred option for each of the islands and aggregate these to a preferred network option – i.e., which investments should be made, where and in which order?

1.2.5 The individual steps contained within each of these two stages are shown below:

### Network Strategy – Strategic Outline Case



## Network Strategy – Outline Business Case

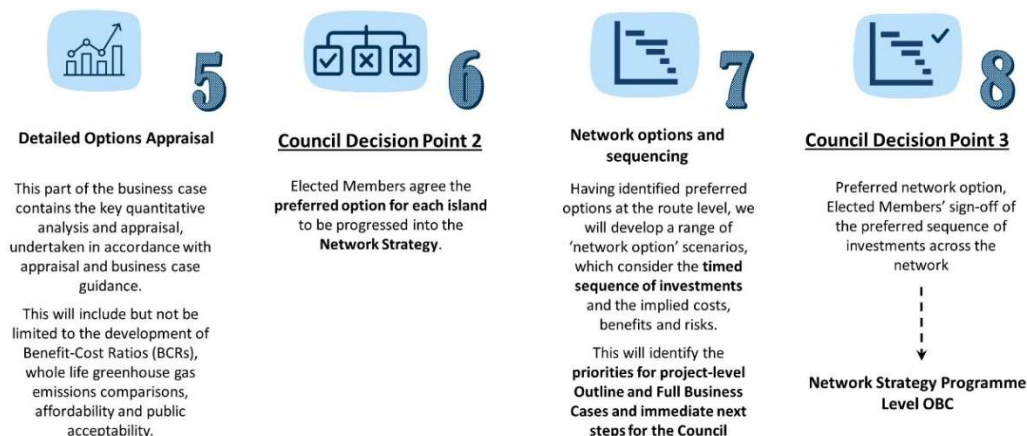


Figure 1.2: IITCP business case stages

## Does this study cover air services?

- 1.2.6 The IITCP **does not consider air services** – it has been commissioned specifically to consider future ferry services, fixed links and the potential interaction between the two.
- 1.2.7 However, the information obtained through the IITCP will be used to support ZetTrans in developing the specification for the next inter-island air services contract in 2028.

## 1.3 How will the business case be developed?

- 1.3.1 Any appraisal work in relation to publicly funded transport projects in Scotland must be undertaken in line with the **Scottish Transport Appraisal Guidance (STAG)**. The IITCP will therefore closely follow the refreshed STAG Managers' Guide published in January 2022 to ensure full compliance with Scottish Government requirements. STAG comprises three stages:
- Initial Appraisal: Case for Change
  - Preliminary Options Appraisal (largely qualitative)
  - Detailed Options Appraisal (more quantitative)
- 1.3.2 The **end product here though is a business case**, which goes beyond a typical STAG-based study into e.g., commercial, delivery and management issues. To this end, Transport Scotland has published *Guidance on the Development of Business Cases*, very broadly reflecting H.M. Treasury *Green Book* approaches, although with some subtle differences. This guidance outlines the following stages:
- Stage 1 – Scoping: Strategic Business Case (SBC)
  - Stage 2 - Planning: Outline Business Case (OBC)
  - Stage 3 – Procurement: Final Business Case (FBC)
- 1.3.3 Given the range of potential funders for any options emerging from the IITCP, it is also important to consider UK business case guidance, which is far more detailed than the Transport Scotland guidance. In UK guidance the equivalent steps are:
- Stage 1 – Strategic Outline Case (SOC) – identifies a 'preferred way forward'
  - Stage 2 – Outline Business Case (OBC) – 'identifies a preferred option'

- Stage 3 – Full Business Case (FBC) – confirms the preferred option and sets out the means by which it will be delivered
- 1.3.4 In both sets of guidance, each business case stage comprises five ‘cases’ or ‘dimensions’. These are:
- Strategic
  - Socio-Economic (Transport Scotland) / Economic (H.M. Treasury)
  - Financial
  - Commercial
  - Management
- 1.3.5 As noted above, the requirement for this commission is a ‘**preferred option**’ Network Strategy (i.e., sequence of investments and actions). In order to reach this preferred option stage (and align with both Scottish and UK Guidance), it will therefore be necessary to complete the SOC and the OBC. In addition, UK business case guidance uses the term ‘programme’, defined as *a series of planned measures, related events and co-ordinated activities in pursuit of an organisation’s long-term goals*. This definition applies well to this work, and we will therefore adopt this terminology. The outputs will hereafter be referred to as the **Network Strategy Programme SOC / OBC**, and these will provide the framework for all subsequent project-level business case work.
- 1.3.6 **The reporting structure across this study will therefore (i) follow the UK business case guidance as referred to by the Scottish guidance and (ii) use the main components of STAG for the qualitative and quantitative appraisal, including for example the STAG criteria.**
- 1.3.7 The primary relationships between STAG and the business case process are therefore:
- **Stage 1 – Strategic Outline Case (SOC):** broadly incorporates the STAG ‘Initial Appraisal – Case for Change’ and ‘Preliminary Options Appraisal’ (qualitative)
  - **Stage 2 – Outline Business Case (OBC):** broadly incorporates the STAG Detailed Options Appraisal, which itself draws heavily on the Department for Transport’s Transport Analysis Guidance
  - **Stage 3 – Full Business Case (FBC):** beyond STAG and the scope of this commission
- 1.3.8 Future stages of work subsequent to this commission will involve a series of ‘**Project OBCs**’, one for each individual component of the Network Strategy. These would draw on the ‘umbrella’ Network Strategy Programme SOC and OBC but update and expand on the analysis, and complete the Financial, Commercial and Management Dimensions for these individual projects in much greater detail.
- 1.3.9 A ‘**Project FBC**’ would follow the Project OBC at the point of procurement - for clarity, this overall structure is shown in the figure below:



Figure 1.3: Development of the Network Strategy Programme Business Case

## 1.4 Programme SOC

1.4.1 To aid readability, the **Programme SOC** is divided into three separate documents:

- **Case for Change Report (this document):** This report details the rationale for investment through the analysis of transport problems and opportunities and defines desired outcomes from any investment, expressed as Transport Planning Objectives (TPOs)
- **Option Generation and Development Report:** This report sets out the framework within which the study options have been developed and the individual option packages for each island
- **Network Strategy - Strategic Outline Case Report (this document):** This report summarises the Case for Change and Option Generation and Development Reports and details the preliminary appraisal and the options to be progressed for further consideration

## 1.5 Case for Change Report

1.5.1 This report details the case for change, or rationale for investment, in the Shetland inter-island transport network. It consists of **thirteen** further chapters, as follows:

- **Chapter 2** details how the case for change has been developed and how the transport problems are defined and categorised
- **Chapter 3** sets out the strategic context for the study, detailing the evolution in the macroeconomic context since the SIITS study was undertaken and the implications for the IITCP as well as headline trends at the Shetland level
- **Chapter 4** sets out the prevailing policy context for the IITCP, again highlighting the evolution in that context since the time of SIITS
- **Chapter 5** details the functioning of the island supply-chains and the role of the inter-island transport network within this
- **Chapter 6** details the transport problems faced by Shetland Islands Council in delivering inter-island ferry services – i.e., the problems on the supply-side
- **Chapters 7 to 13** detail the transport problems and opportunities on an island-by-island basis
  - It should be noted that Fetlar and Unst are presented jointly as the Bluemull Sound given their shared route, but the individual problems associated with each island are detailed separately
- **Chapter 14** establishes the Transport Planning Objectives for the IITCP

## 2 Developing the Case for Change

### 2.1 Overview

- 2.1.1 This chapter details the tasks undertaken in developing the case for change and explains how the outputs have been applied to develop a systematic Transport Problems Framework within which the Transport Planning Objectives have been developed.

### 2.2 How has the Case for Change been developed?

- 2.2.1 The case for change underpinning this business case is complex and nuanced – each of the eight in-scope islands have commonalities but they also have significant differences, reflecting their geography, economies, history and culture. Moreover, for several of the smaller islands, data availability is limited and that which does exist is often aggregated with other islands or mainland Shetland, out-of-date or not reported because it would risk the identity of individuals being revealed.
- 2.2.2 Developing a robust investment case was therefore reliant on undertaking an extensive baselining exercise combining primary research and secondary data analysis. This is summarised below with the information reported where appropriate in the proceeding chapters.

#### Macroeconomic and policy context

- 2.2.3 The macroeconomic and policy contexts which follow in Chapters 3 and 4 respectively were developed using published documents and data and reviewed by the Council's Economic Development Service. These two chapters (and in particular the policy context) provide the overarching strategic rationale for the business case.

#### Island profiles

- 2.2.4 Ultimately, the purpose of the inter-island transport network is to enable the functioning of the society and economy of each island it serves. Developing individual island profiles was therefore a key element of the baselining – this consisted of two tasks:
- Islands socio-economic dashboard
  - Supply-chain mapping and service delivery

#### Islands socio-economic dashboard

- 2.2.5 This dashboard incorporates available secondary data and presents it in an interactive PowerBI<sup>2</sup> format. This tool enables data to be presented at the individual island level (e.g., Bressay), in comparison with other islands (e.g., Bressay compared to Fetlar) and with regional (e.g., Bressay compared to mainland Shetland, Shetland overall etc) and national figures.
- 2.2.6 The dashboard incorporates the following:
- **Population:** absolute level, population change over time, population by age group, population change by age group (2011 to 2022) and the dependency ratio<sup>3</sup>

<sup>2</sup> Microsoft Power BI is an interactive data visualisation software product.

<sup>3</sup> The dependency ratio is the number of people aged under-16 or over 64 divided by the number of people of 'working age'

- **Housing:** house prices for Shetland overall and by island group and housing tenure
- **Travel:** household car availability, mode of travel-to-work and distance travelled to work
- **School rolls:** statement of on-island education provision and the trend in school rolls
- **Economic activity and educational attainment:** highest level of qualification held and economic activity rates
- **Employment:** hours worked per week, gross mean annual earnings (Shetland-level only), employee jobs by industry, employee jobs by sector and community council area, employee jobs by occupation and mean claimant count
- **Deprivation:** overall deprivation rank and quintile and rank by domain
- **Broadband:** percentage access to superfast broadband

2.2.7 It is important to recognise that a key challenge in developing a socio-economic profile of islands, particularly small islands, is the availability of data. There are three issues in this respect:

- **Spatial disaggregation:** The relatively small population of some of the smaller islands mean that they are often grouped with parts of mainland Shetland or other islands. There are good reasons for this spatial definition, but it is problematic for studies of this nature where an island-specific perspective is required
- **Lag:** Large datasets such as the Census are a snapshot of a specific period in time and are published with a significant lag. In larger mainland communities, this is not generally a major issue as there is typically broad stability in e.g., population over at least the short-term. However, small island communities can be much more dynamic in terms of population, industrial structure etc. and the published data does not always reflect the reality on the ground
- **Under-reporting:** Published datasets capture official figures on e.g., economic activity, employment etc but they under-record the high levels of volunteering and unofficial or family-based work in island communities

2.2.8 To mitigate this, we undertook a depth interview with the Council's Economic Development Service and also worked with communities in smaller islands to sense check / update data as required. This also served to assist in identifying and better understand new developments which may emerge over the horizon of this study, for example Spaceport in Unst, new windfarms, new aquaculture sites etc.

### Supply-chain and service delivery mapping

2.2.9 We also undertook an extensive supply-chain and service delivery mapping exercise, the purpose of which was to understand how goods are moved to and from the isles and how essential services such as skilled trades are delivered to them. This analysis was informed by **24** stakeholder interviews with Council services, hauliers, wholesalers and firms involved in aquaculture, windfarm construction and operation, Spaceport and a range of smaller interests. Headline findings are reported in Chapter 5.

### Ferry route profiles

2.2.10 Allied to the island route profiles was a comprehensive description of how the ferry routes are supplied and used. This covered the following

- **Operations:** how each route is operated (i.e., the supply-side) with respect to waters categorisation and vessel class, vessel deployment, overnight base, crewing, timetable structure and relief arrangements



- **Carryings, capacity utilisation and performance:** we developed a PowerBI dashboard incorporating all sailings (at the sailing-by-sailing level) between 2013 and 2024
- **Ferry service 'stock check':** using condition information provided by the Council, we developed a 'stock check' of all vessels and ferry terminals detailing their facilities, current condition and anticipated replacement date, amongst other items
- **Cost and revenue:** using detailed cost data provided by the Council, we reviewed the financial profile of the ferry service and identified any areas where costs were growing above their long-term trend, e.g., vessel maintenance

## Engagement

- 2.2.11 The final component part of the baselining was an extensive engagement programme, which is summarised below.

### Resident and business survey

- 2.2.12 In order to develop evidence on current travel behaviour and any problems associated with this, a highly detailed online resident survey (with telephone and paper-based back-up) was undertaken. Separate surveys covering island residents and mainland Shetland residents were produced and asked questions around:
- Journey frequency
  - Journey purpose(s)
  - Travel to and from the origin and destination ferry terminals
  - The booking process
  - Capacity, including the requirement to book and the behavioural response when a sailing is fully booked
  - Satisfaction with all elements of the ferry service
  - The extent to which residents are able to make all the journeys that they wish to and, where they cannot, the implications of this
  - Mainland Shetland residents were asked, amongst other questions, whether they had ever lived in one of the islands and, if so, whether the ferry service was a contributory factor in their decision to leave
- 2.2.13 The survey ran between 9<sup>th</sup> December 2024 and 17<sup>th</sup> January 2025. There were **997** responses in total with the breakdown by area of residence shown in the figure below:

### Which island do you live in?

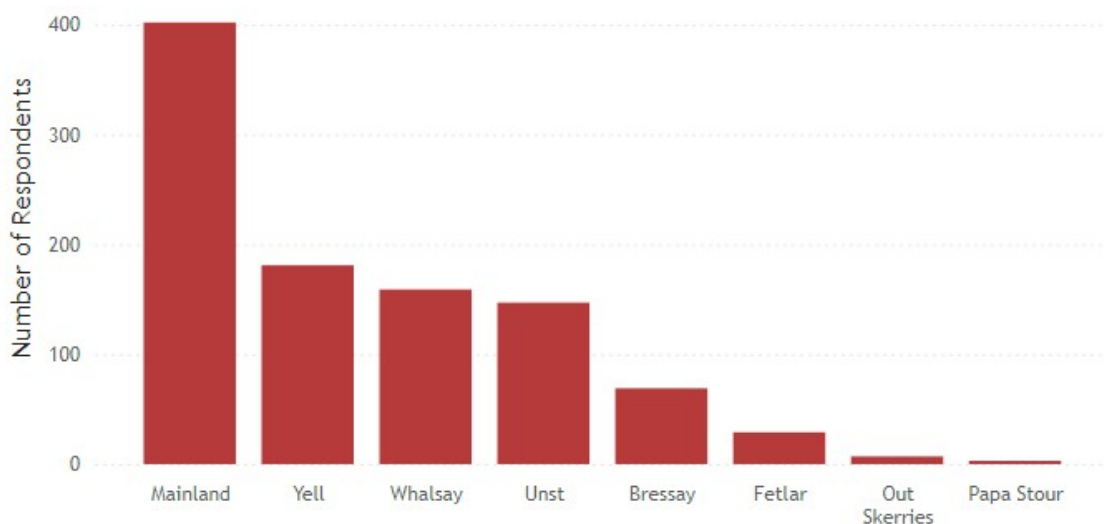


Figure 2.1: Resident survey responses<sup>4</sup>

- 2.2.14 The survey consisted of a mix of closed and free text questions and has provided highly valuable insights into the travel behaviour of island residents, the problems which they encounter when making a journey and how these problems impact their day-to-day lives.

#### Under-16s and business surveys

- 2.2.15 When developing the resident survey, we considered there to be an opportunity to roll-out a slightly modified version to **island and mainland: (i) under-16s; and (ii) businesses**. The survey was never intended to be the primary means of engagement with these groups – for businesses, the main initiative was the supply-chain mapping depth interviews (see above) whilst a tailored engagement programme was developed for young people (see below). Nonetheless, it was considered a worthwhile opportunity to pursue for a relatively modest effort – the following responses were received:

- Island under-16: **8**
- Mainland under-16: **6**
- Island business: **24**
- Mainland business: **10**

- 2.2.16 The sample sizes for these surveys did not lend themselves to detailed analysis as per the main resident survey but the outputs, and in particular the free text elements, were used to support the analysis of problems.

<sup>4</sup> It should be noted that the Foula community was not invited to participate in the survey as it was primarily focused on travel by ferry. Most journeys to and from Foula are made using the air service, with the ferry fulfilling a largely supply-chain role. A separate depth interview was therefore organised with representatives of the Foula community.

## Public drop-in sessions and community engagement

- 2.2.17 The centrepiece of the engagement programme was a series of public drop-in sessions for Bressay, Fetlar, Unst, Whalsay and Yell, supplemented by more focused engagement with representatives of Foula, Papa Stour and Skerries.

### Public drop-in sessions

- 2.2.18 The purpose of the public drop-in sessions was to provide island residents with a flexible time window within which they could stop by the local community hall, browse exhibition boards on the project overall and specific to their island and speak to the Council and consultancy team. The events also provided an opportunity to feed the resident survey responses back to the communities and to validate the information that we put in front of them (and which formed the basis of the case for change).
- 2.2.19 The dates and attendances of the public drop-in sessions were as follows:

- Bressay (3<sup>rd</sup> March 2025): **26**
- Yell (4<sup>th</sup> March 2025): **22**
- Fetlar (5<sup>th</sup> March 2025): **10**
- Unst (5<sup>th</sup> March 2025): **43**
- Whalsay (6<sup>th</sup> March 2025): **30**

- 2.2.20 The drop-in sessions, together with the post-event feedback forms, provided the team with valuable insights which have been fed into this Case for Change Report.

### Community engagement – Foula, Papa Stour and Skerries

- 2.2.21 The public drop-in format was less appropriate for Foula, Papa Stour and Skerries given their comparatively small population. To this end, one-to-one discussions were held with community representatives as follows:

- **Foula:** 3<sup>rd</sup> April 2025
- **Papa Stour:** 26<sup>th</sup> March 2025
- **Skerries:** in-person on 6<sup>th</sup> March as part of the Whalsay public drop-in session

- 2.2.22 A note for discussion was sent to each community prior to the meetings.

## Youth engagement

- 2.2.23 The views of young people are frequently under-recorded in studies of this nature as they can be challenging to engage with. However, as will be shown for each island later in this report, demographics are a challenge, particularly in terms of attracting families / young people to the islands and thereafter retaining them. Youth engagement was therefore an integral part of the overall programme and was led by the Council's Youth Services team, complementing the under-16s surveys previously described.

### Shetland Youth Event – January 2025

- 2.2.24 Shetland Youth Voice identified transport as the biggest issue facing young people in the islands and, to this end, organised a Transport Summit on 14<sup>th</sup> January 2025. The event brought together a representative sample of around 50 school age children from across Shetland to discuss all elements of transport to, from and with the archipelago, including inter-island transport services. The Council and Stantec represented the IITCP stream of work.

- 2.2.25 For the connectivity sessions, the young people worked in groups to annotate on an A0 map the journeys that they regularly make, why they make these journeys and any problems that they have in doing so. The outputs of the workshop were collated and fed into this report.

Public drop-in sessions – exhibition boards

- 2.2.26 Whilst a small number of young people attended the public drop-in sessions, the Council's Youth Services team also took the display material around island schools and sought feedback to be included in this report.

Members of the Scottish Youth Parliament

- 2.2.27 Finally, the Council, supported by the study team engaged and kept in contact with Members of the Scottish Youth Parliament. A meeting was held with the two MSYPs on 14<sup>th</sup> January 2025 where feedback was sought on the connectivity issues facing young people in Shetland.

**Public sector depth interviews**

- 2.2.28 The project team also undertook a series of depth interviews with Council Services (departments) and other public sector stakeholders. These interviews were intended to better develop our understanding of how the inter-island transport network facilitates or otherwise the delivery of public services and the economic development of the isles.

- 2.2.29 The following interviews were undertaken:

- Shetland Islands Council Community Planning and Development
- Shetland Islands Council Economic Development
- Shetland Islands Council Planning
- Shetland Partnership
- Transport Scotland
- ZetTrans and the Council Infrastructure and Development Services were engaged with through the Programme Board meetings

**Estate agent interviews**

- 2.2.30 Finally, the project team attempted to engage with all local estate agents in Shetland to obtain a better understanding of the property market in the islands. Unfortunately, however, no responses were received.

## 2.3 Transport Scotland Community Needs Assessment Guidance

- 2.3.1 Transport Scotland is currently developing the *Islands Connectivity Plan (ICP)*, which is replacing the *Ferries Plan 2013-2022*. Central to the ICP will be a set of 'Community Needs Assessments' (CNA), which will provide a consistent means of identifying the current level of ferry service provision received by an island or peninsular community, any problems associated with this and, where relevant, options for service improvements or reductions. Given the centrality of the CNA process to determining future service provision, it is essential that each assessment is based on a robust methodology.
- 2.3.2 The requirement for each CNA is to set out the current and future 'needs' of ferry dependent island and peninsular<sup>5</sup> communities in terms of their ferry service (Community Needs Assessment) and align this with an appropriate level of service, in the process identifying

---

<sup>5</sup> Note that, for brevity, the term 'island' is used forthwith and all references to islands also apply to peninsular communities, unless otherwise stated.

potential under or over-provision of services compared to the service currently provided on the route.

2.3.3 Scotland's ferry services perform four main roles:

- Meeting the travel needs of **island residents**
- Meeting the travel needs of **visitors to the islands**
- Meeting the **supply-chain** needs of islands in terms of inbound supplies and raw materials and outbound exports
- Supporting **business travel** and **services delivered to islands by mainland suppliers**, particularly in smaller communities

2.3.4 To determine whether island needs are being met or not, a **six-stage process is being adopted**. These steps are summarised in the flowchart below.

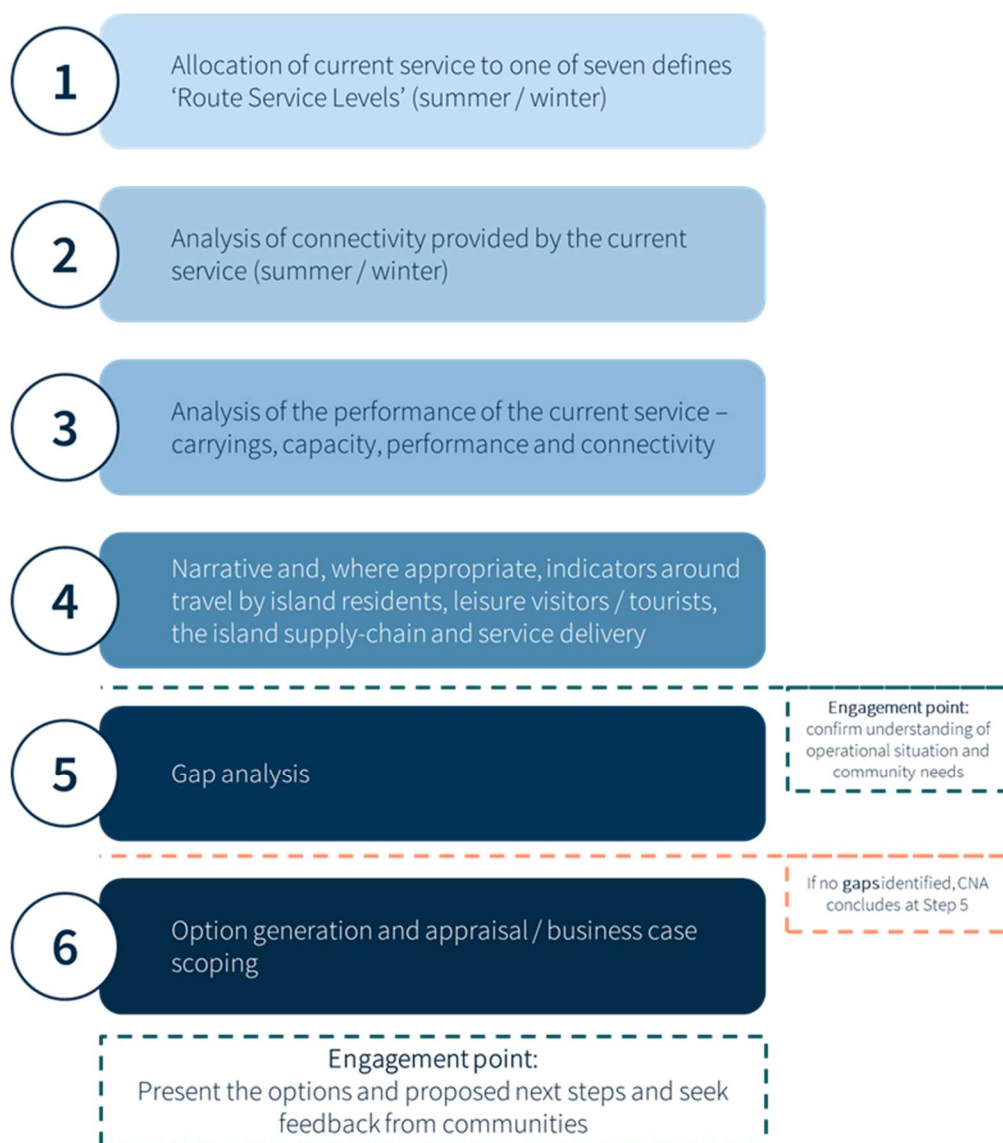


Figure 2.2: Community Needs Assessment process

2.3.5 Whilst the IITCP is a Shetland Islands Council study, it will be presented to the Scottish and UK Governments. To this end, the Community Needs Assessment methodology has been

adopted in this case for change and throughout the IITCP. The CNA guidance is attached to this report as **Appendix A**.

## 2.4 Transport Problems Framework

2.4.1 The figure below sets out the 'Transport Problems Framework' that has been used to guide the development of the case for change, from the perspective of users or potential users of the inter-island ferry services:

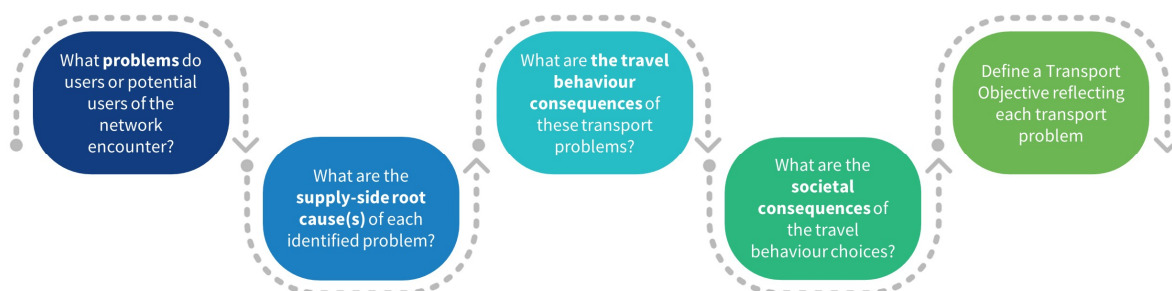


Figure 2.3: Transport Problems Framework process

2.4.2 **What is a transport problem?** Here, we primarily focus on the definition of a transport problem as being **a problem experienced by a user, or potential user of the transport network** in or travelling to / from one of the in-scope island communities. These transport problems can be thought of as one or more of:

- Something that **negatively affects a journey which is still made** (people and freight) by that mode of travel – *in the main this makes a trip less efficient, more expensive, less comfortable or more stressful in terms of safety and / or wellbeing*
- Something that **stops people or goods travelling by (generally) more sustainable and policy friendly modes** – *this primarily leads to more car use and associated negative impacts across a range of policy areas including environment, climate change and safety*
- Something that **stops people making the trips they would like to make, or goods being moved** – *impacting on people's life chances, wellbeing, and business opportunities*

2.4.3 These transport problems are defined as problems faced by users of transport networks and services either now or potentially in the future and are the basic building blocks from which the investment case is developed. The Transport Planning Objectives / Spending Objectives and subsequent options should reflect these transport problems. *For example, if vehicle deck capacity on the ferry is a problem, the Transport Planning Objective should be to address that problem and the options should provide a means of addressing it, e.g., additional sailings, a larger vessel, more vessels etc.*

2.4.4 Transport problems, when defined as described above, are typically associated with a relatively narrow range of parameters which define any trip, defined here as '**problem themes**' - these problem themes are set out in the table below:

Table 2.1: Transport problem 'themes'

| All modes of travel                         | Public transport specific                                                |
|---------------------------------------------|--------------------------------------------------------------------------|
| Concern over environmental impact of travel | Booking and journey planning (e.g., making connections between services) |
| Cost of travel and affordability            | Capacity                                                                 |

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fuel / power issues                                                                                                                                                                                          | Comfort, safety and security                                                                                                                                                                             |
| Integration of travel between modes                                                                                                                                                                          | Connectivity and network coverage (availability of services)                                                                                                                                             |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                                                                                                                                |
| Journey quality                                                                                                                                                                                              | Integration between services (within mode, e.g., bus-to-bus and between modes, e.g., bus-to-ferry, including for people with disabilities or other protected characteristics which affect accessibility) |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                                                                                                                      |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups                                                                                                   |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                                                                                                                          |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                                                                                                                          |
| Personal security (fear of crime)                                                                                                                                                                            |                                                                                                                                                                                                          |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                                                                                                                                                                                                          |

- 2.4.5 The above list has been used as a 'checklist' to develop a set of transport problems for each island in **Chapters 7 to 13**, informed by the tasks described earlier in this chapter.



## 3 Strategic Context

### 3.1 Overview

3.1.1 This chapter details the strategic context within which the IITCP is set. There are two components to it:

- An exploration of how the **macroeconomic context** has changed since the Shetland Inter-Island Transport Study was completed in 2016
- An overview of the **current context** in which the study is set

### 3.2 How has the macroeconomic context changed?

3.2.1 Since the completion of SIITS in autumn 2016, there have been several changes in both the macroeconomic and institutional landscape, some of which are directly material to this study whilst others define the context in which it is being undertaken. This section therefore summarises these changes and sets out their potential implications for the IITCP. To aid readability, the changes are set out in chronological order.

3.2.2 It should be noted that the impact of the **COVID-19 pandemic** is considered separately in **Section 3.3**.

#### Scottish Government Section 70 funding – 2018

3.2.3 In 2014, Shetland Islands Council, through the *Our Islands Our Future* initiative, began a dialogue with the Scottish Government on establishing some principles for the 'fair funding' of Shetland's inter-island transport services and infrastructure. The basis of these discussions was that the financial burden on the Council in providing inter-island transport was disproportionate relative to other areas in Scotland.

#### Grant Aided Expenditure

3.2.4 The financial settlement for local authorities operating ferry services was designed in 1989-90, when previous expenditure-based controls were discontinued in favour of a system of Grant Aided Expenditure (GAE) assessments.

3.2.5 As a mechanism for distributing grant funding, GAE no longer implied that local authorities needed to spend a specific amount on the supported service, rather an allocation is made based on expenditure. The Scottish Government *Green Book*, which sets out the detailed distribution of the Local Government Finance Settlement, includes a Local Authority Service GAE (LASG)<sup>6</sup> which recognises that Shetland Islands Council is responsible for delivery of inter-island ferry services. This GAE is expenditure based, so that if the Council's proportion of expenditure relative to other local authorities reduces so does its share of GAE.

3.2.6 The two main GAE variables are largely outside of the control of councils - namely the overall size of the GAE quantum which is determined by Scottish Ministers, and the Council share of that quantum which varies depending on the actual expenditure of all local authorities.

3.2.7 The key issue with regards to the GAE settlement was that it was historically well below the marginal cost to local authorities of operating ferry services, with the shortfall funded annually from the budgets or reserves of those Councils.

---

<sup>6</sup> The other recipients of this funding are Orkney Islands Council, Highland Council and Argyll & Bute Council.

## Section 70 funding

- 3.2.8 Scottish Government accepted in principle that a ‘fair funding’ position needed to be established. To inform this, Shetland Islands Council and ZetTrans agreed to undertake the development of a network business case to establish and appraise the service and infrastructure requirements for inter-island transport over a 30-year planning horizon – this was the 2016 SIITS study.
- 3.2.9 Whilst the SIITS study focused on the ‘**what**’, a ‘Fair Funding’ grouping comprising of the Scottish Government, Shetland Islands Council, Orkney Islands Council, ZetTrans, HITRANS and Highlands and Islands Enterprise was established to explore ‘**how**’ current and future services could be funded, procured and delivered.
- 3.2.10 The main outcome of this ‘Fair Funding’ Working Group was a commitment in the Scottish Government Budget for Financial Year (FY) 2018/19 to provide additional Section 70<sup>7</sup> funding to partially cover the operating deficit associated with the Council’s ferry services. The table below shows the additional Section 70 funding granted to Shetland Islands Council since it was first introduced in FY 2018/19:

Table 3.1: Additional Section 70 grant funding by financial year

| 2018/19                 | 2019/20                 | 2020/21                  | 2021/22                   | 2022/23                   | 2023/24                   |
|-------------------------|-------------------------|--------------------------|---------------------------|---------------------------|---------------------------|
| £5,000,000 <sup>8</sup> | £5,200,000 <sup>9</sup> | £5,223,000 <sup>10</sup> | £10,784,000 <sup>11</sup> | £17,496,000 <sup>12</sup> | £23,082,000 <sup>13</sup> |

- 3.2.11 The Section 70 funding provided by the Scottish Government initially provided a partial contribution to Council ferry service operating costs. However, by 2023/24, the level of funding was increased to cover the full annual deficit incurred by the Council in operating its inter-island ferry services. This did not, and does not, include any provision for capital.
- 3.2.12 It is evident from the table above that the supplementary Section 70 funding provided by the Scottish Government is significant, particularly given the increases in recent financial years. However, this is not a fixed ongoing commitment, with the funding agreed annually as part of the Scottish Government’s Budget setting process. Whilst there is no suggestion that the funding is under threat, it nonetheless presents a risk to the Council in maintaining a sustainable network in the future.

<sup>7</sup> The Scottish Ministers can make grants to any persons for any purposes relating to transport, known as Section 70 funding

<sup>8</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2018-19 (Transport Scotland, 2019), p. 8

<sup>9</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2019-20 (Transport Scotland, 2020), p. 17

<sup>10</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2020-21 (Transport Scotland, 2021), p. 3

<sup>11</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2021-22 (Transport Scotland, 2022), p. 3

<sup>12</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2022-23 (Transport Scotland, 2022), p. 12

<sup>13</sup> Section 70 Grant Payments in accordance with: Transport (Scotland) Act 2001. Section 70(4), Financial Year 2023-24 (Transport Scotland, 2022), p. 16

**What are the implications for the IITCP?** When the SIITS study was being undertaken, the Council ferry services operated with a significant annual deficit. The award of additional Section 70 funding from the Scottish Government from FY2018-19 onwards addressed this, with funding ramped-up over time to cover the full annual revenue deficit of the Council Ferry Service. However, this funding is only awarded in single-year settlements through the annual Scottish Government Budget, so its potential reduction or withdrawal presents a risk to this study.

### United Kingdom's withdrawal from the European Union – 2020

- 3.2.13 Following the referendum on the United Kingdom's membership of the European Union on 23<sup>rd</sup> June 2016, the UK formally left the European Union on 31<sup>st</sup> January 2020. Understanding the impact of Brexit on Shetland overall is clearly well beyond what can be achieved in this study, particularly at the level of individual islands, where economic activity can be very volatile. The change in access to markets and the free movement of labour has however affected Shetland in both positive and negative ways, all of which influence the underlying demand for travel (amongst many other factors).
- 3.2.14 One material development stemming from Brexit has been a change to the procurement landscape. The granting of public funds for capital investment in assets and the provision of operating subsidies has historically been governed by the Treaty on the Functioning of the European Union (TFEU), particularly in relation to state aid. However, the UK's withdrawal from the EU on 31<sup>st</sup> January 2020 and the completion of the subsequent transition period on 31<sup>st</sup> December 2020 means that the UK is no longer directly bound by these rules.
- 3.2.15 Again, the change to procurement law as a result of Brexit is outwith the scope of this case for change but will be an issue of relevance in the Commercial Dimension of the business case, at least in terms of the procurement options available to the Council.

**What are the implications for the IITCP?** Brexit has had, and will continue to have, a multiplicity of effects on Shetland. Identifying and understanding these impacts is clearly beyond the scope of this case for change but it is nonetheless important to recognise both the change in the wider economic context and in procurement law since the SIITS study was published in 2016.

### Emerging role of the UK Government – 2021 onwards

- 3.2.16 Responsibility for transport in Scotland was devolved to the Scottish Government in 2005, with Transport Scotland formally taking control on 1<sup>st</sup> January 2006 (although responsibility for the Clyde and Hebrides Ferry Services and Northern Isles Ferry Services remained directly under the control of the Scottish Government for several years thereafter). Internal ferry services in Shetland, Orkney and a handful of routes in other parts of Scotland remained under the control of local authorities. However, any 'ask' for additional funding or investment would generally have been a matter for devolved rather than UK Government.
- 3.2.17 However, from 2021 onwards, the UK Government began to take a more active role in transport in Scotland, primarily through a combination of its involvement in City and Region Growth Deals (like the Islands Growth Deal) and the opening of competitive funds which could be bid into, for example the *Levelling-Up Fund*. Indeed, the Council has direct experience of this process, securing a circa £27m funding contribution towards the construction of a new ferry and associated infrastructure for Fair Isle. The UK Government has also established the Islands Forum, which brings together island authorities across the UK to discuss issues of mutual interest.
- 3.2.18 It remains to be seen at the time of writing whether the assumption of power by the new (2024) Labour-led administration will lead to any further change in of the role of UK Government in Scottish island transport issues. However, at present, it remains the case that

there are wider case-making and funding opportunities for investment in inter-island transport than existed at the time of the SIITS study.

**What are the implications for the IITC?** At the time of the initial SIITS study, the focus was almost entirely on making an investment case to the Scottish Government. However, the recent involvement of the UK Government in Scottish local authority transport matters provides a potential second outlet for this business case.

### Ferry Replacement Task Force – 2023

- 3.2.19 In August 2023, the Scottish Government and Shetland Islands Council formed a 'Ferry Replacement Task Force' to work jointly on proposals to support the Council's consideration of options for the long-term renewal of the internal ferry fleet.
- 3.2.20 An early output of this was the award of £10m through the Scottish Government Budget for FY2025/26 to support improvements to the inter-island transport network.

**What are the implications for the IITC?** The Ferry Replacement Task Force provides a forum into which emerging outcomes of the IITC can be input for discussion. It has also delivered a short-term funding commitment of £10m to support improvements to the inter-island transport network.

### Summary

- 3.2.21 Since the completion of the SIITS study in autumn 2016, there has been a fundamental change in the macroeconomic and institutional landscape, which presents both opportunities and threats.
- 3.2.22 The provision of additional Section 70 funding for FY 2018/19 by the Scottish Government was a major intervention by national government in Council operated ferry services. There is also an ongoing dialogue with Scottish Government Officials in relation to the Council's ferry replacement programme, which has yielded an initial £10m investment. The emergence of the UK Government as a potential funder is also an opportunity that did not exist in 2016. However, it also has to be recognised that the current fiscal position facing both governments is challenging with respect to both capital and revenue.

## 3.3 What have been the recent trends on the Shetland ferries network?

- 3.3.1 This section sets out the headline trends on the inter-island ferry services in Shetland, providing context for the individual island chapters which follow later in this report. It should be noted that these trends are based on vessel logbook data provided by the Council, providing consistency with the island specific chapters which follow later in this report.

### What has been the long-term trend in carryings?

#### Passengers

- 3.3.2 The table below summarises the trend in **passenger numbers** on the four high volume ferry routes in Shetland (Bluemull Sound, Bressay, Whalsay and Yell Sound, which account for around **99%** of total passenger and car carryings) between 2014 and 2024:

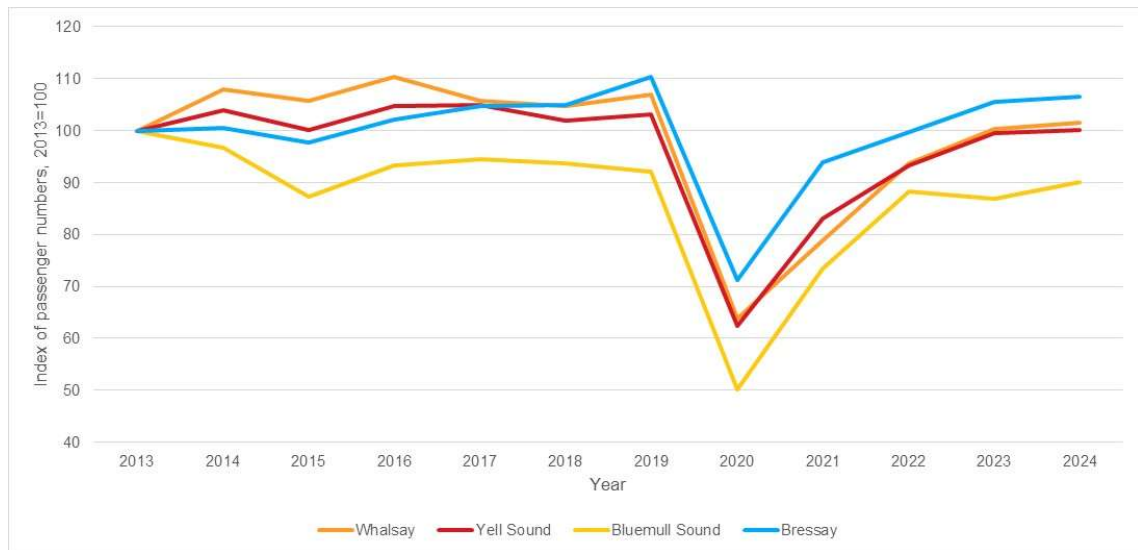


Figure 3.1: Passenger carryings on high-volume Shetland ferry routes 2013-24 (2013=100) (Source: Shetland Islands Council vessel logbook data)

3.3.3 The key points of note from the above figure are as follows:

- Passenger carryings on the Bressay (+9%), Whalsay (+7%) and Yell Sound (+3%) routes demonstrated reasonable growth between 2013 and the pandemic. This was despite the 2013 service reductions, which reduced evening and Saturday services on the Whalsay and Yell Sound routes
- Conversely, passenger carryings on Bluemull Sound reduced by 8% over the same period
- The COVID-19 pandemic has led to a reduction in the number of passengers carried. 2024 carryings as proportion of 2019 carryings (the last full pre-pandemic year) were Bluemull Sound: 98%; Bressay: 96%; Whalsay: 95%; and Yell Sound: 97%. Despite this, only Bluemull Sound remains below its 2013 level

### Cars

3.3.4 The figure below shows the equivalent data for **car carryings** on the same subset of routes:

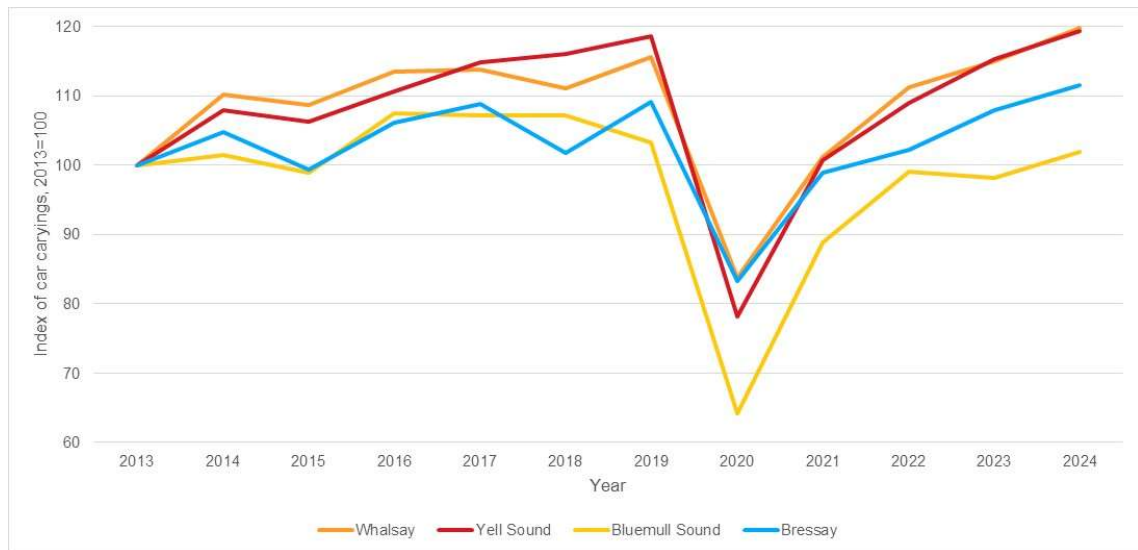


Figure 3.2: Car carryings on high-volume Shetland ferry routes 2013-24 (2013=100) (Source: Shetland Islands Council vessel logbook data)

3.3.5 The key points of note from the above figure are as follows:

- Car carryings grew even more strongly prior to the pandemic, despite the 2013 service reductions. This implies that average vehicle deck capacity utilisation increased post-2013 cuts
- Bluemull Sound carryings increased by **3%** between 2013 and 2019, with even stronger growth over the same period on Bressay (**+9%**), Whalsay (**+16%**) and Yell Sound (**+19%**)
- Moreover, carryings on all four routes have almost or fully recovered to their pre-pandemic level - 2024 carryings as proportion of 2019 carryings (the last full pre-pandemic year) were Bluemull Sound: **99%**; Bressay: **102%**; Whalsay: **104%**; and Yell Sound: **101%**

**Key Point:** Carryings on the high-volume routes on the Shetland network were increasing prior to the pandemic (Bluemull Sound excepted), despite significant service reductions in 2013. Moreover, recovery from the pandemic has been strong, with all routes having largely recovered their pre-pandemic carryings levels.

### Comparison with other modes of transport

3.3.6 To provide some context to the trends on the intra-Shetland network, the figure below compares the trend in **Shetland ferry car carryings** with:

- Passenger journeys by bus in the Highlands, Islands and Shetland (note these are for financial years rather than calendar years)
- Traffic, all roads – million vehicle kilometres, Scotland
- Passenger journeys – ScotRail (note these are for financial years rather than calendar years)
- CalMac Ferries, cars
- NorthLink Ferries, cars
- Orkney Ferries, cars



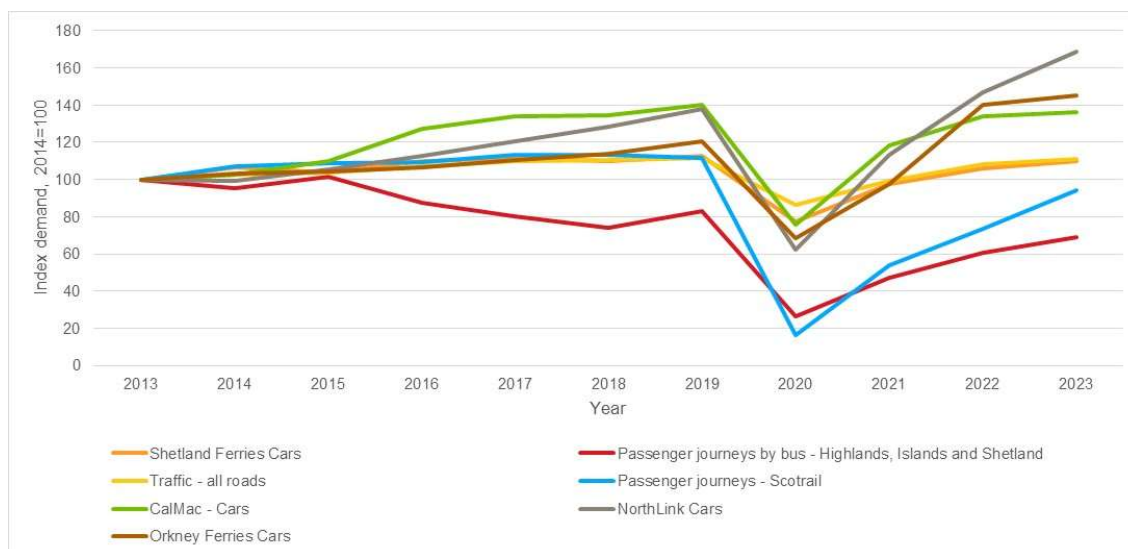


Figure 3.3: Patronage trends on Shetland internal ferry network and other comparable public transport services 2013-2023 (2013=100) (Source: Scottish Transport Statistics)

### 3.3.7 The key points of note from the above figure are as follows:

- The Shetland internal ferry services had a much lower level of underlying growth than both CalMac and NorthLink. This is however to be expected given that both of these operators carry a higher proportion of visitors and business / project-related travel
- General road traffic has recovered from the pandemic at a broadly similar pace to carryings on Shetland's internal ferry services
- The number of bus passengers in the Highlands, Islands and Shetland has been on a long-term downward trend which has been exacerbated by the pandemic. This is an important consideration in terms of ensuring that bus services support any future ferry improvements or fixed links
- The number of passengers using ScotRail was relatively stable pre-COVID-19 but reduced significantly during the pandemic. Passenger numbers remain slightly down on the pre-pandemic era

## Do Shetland residents travel more frequently than residents of other island groups?

3.3.8 The internal Shetland ferry network assumed its current form the 1970s and 1980s. It was designed around the short-sea crossings principle with a high frequency Ro-Ro service operating across a long day with comparatively low fares for most islands. An interesting question here therefore is whether this service model has led to Shetland residents travelling more frequently than island residents elsewhere in Scotland.

3.3.9 In practice, the only broadly comparable Scottish ferry network to that of Shetland is the internal ferry network within Orkney. Whilst the geography is different, particularly in the Outer North Isles where distances and sailing times are much longer, the characteristics of the islands served are not wholly dissimilar. In contrast, islands in the Clyde and Hebrides generate much higher levels of visitor demand, particularly in the summer months and are not therefore comparable.

3.3.10 The table below shows the comparable trip rates on the Orkney and Shetland internal ferry services:



Table 3.2: Orkney and Shetland internal ferry networks – comparable trip rates (2022)

|          | Passenger trips | Council population | Annual Trip rate | Mainland population | Annual Trip rate | Island population | Annual Trip rate |
|----------|-----------------|--------------------|------------------|---------------------|------------------|-------------------|------------------|
| Orkney   | 320,800         | 21,958             | 15               | 17,162              | 19               | 4,796             | 67               |
| Shetland | 656,510         | 22,900             | 29               | 18,765              | 35               | 4,135             | 159              |

3.3.11 The key points of note from the above table are as follows:

- For the islands overall, the average Orcadian only makes around half (**15**) the number of trips of the average Shetland resident (**29**)
- Specifically with regards to those who live in an island, the average Shetland resident makes around two and half times the number of journeys (**159**) that the average Orcadian (**67**) resident makes each year
- It is likely that the figures in the above table slightly underestimate the relative difference in annual trip rates, as there is a higher volume of tourism to Orkney's island communities relative to those in Shetland

**Key Point:** The residents of Shetland's island communities, and indeed mainland Shetland, display a much higher rate of trip making than the average Orcadian (Orkney being the most appropriate comparator). This highlights the extent to which travel demand in Shetland has responded to the much higher levels of connectivity offered.

### 3.4 How do the islands compare economically to mainland Shetland?

3.4.1 This section draws out some key headlines on how the isles compare to mainland Shetland, providing context for the island specific chapters which follow later in this report.

#### How has population changed over time?

3.4.2 The figure below shows the change in population between the 1981 and 2022 censuses for the eight in-scope islands (collectively) and mainland Shetland:

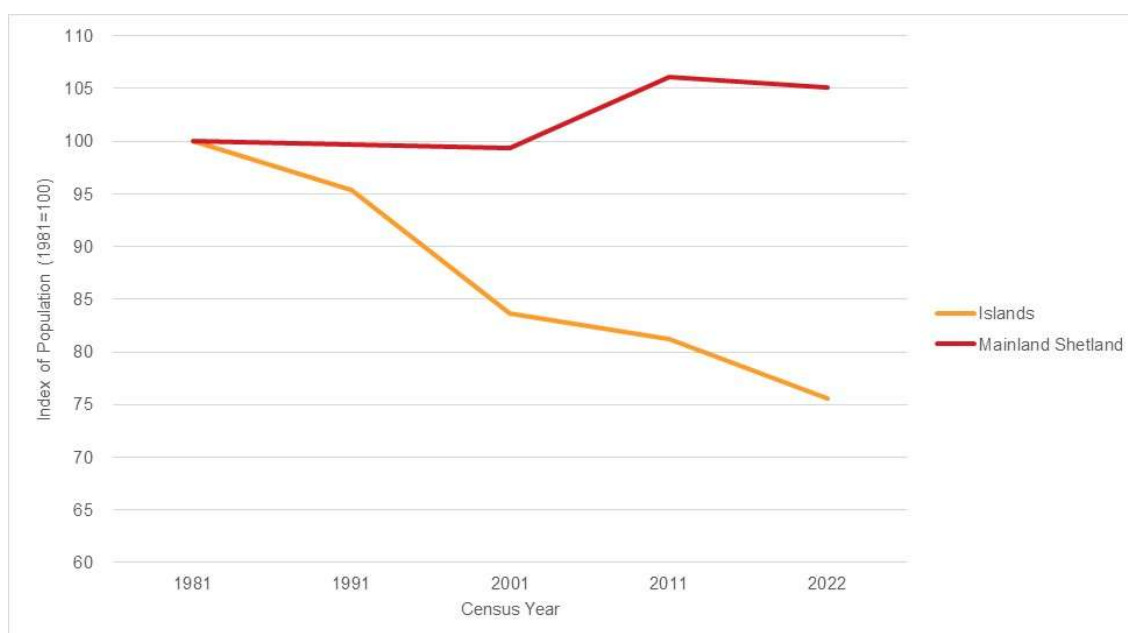


Figure 3.4: Mainland Shetland and island communities population index (1981=100) (Source: Census)

3.4.3 The key points of note from the above figure are as follows:

- Over a 40-year period, the cumulative population of Shetland's island communities has **reduced by almost one quarter** (from **3,959** in the 1981 Census to **2,990** in the 2022 Census)
- Over the same period, the population of mainland Shetland has increased by **5%**, from **18,809** in 1981 to **19,764** in 2022
- Much of the decline in island populations occurred between 1981 and 2001, with a reduction of **16%** over this period. The rate of decline slowed after 2001, but the population of the islands still fell by a further circa **10%** between that year and 2022
- The pattern of population reduction varies by island, and indeed population increased slightly in Bressay between 1981 and 2022. The biggest reductions in absolute terms were in Unst (**-505** people) and Yell (**-294** people)

**Key Point:** The collective population of the eight in-scope island communities has reduced by almost a quarter over the last four decades, which compares to a 5% increase in mainland Shetland. Absolute reductions were particularly significant in Unst and Yell.

### Does the population age profile differ between the isles and mainland?

3.4.4 Whilst absolute population is an important indicator of economic vitality, it is also necessary to consider the population age profile. Areas with a large working age population and proportionally higher number of children tend to perform better economically than areas with an ageing population. The figure below shows the population age profile for Shetland's island communities, mainland Shetland and Scotland. It should be noted that the data geography means that the figures for Foula and Papa Stour include parts of mainland Shetland (which have in turn been excluded from the mainland Shetland figures):

Population by Age Group

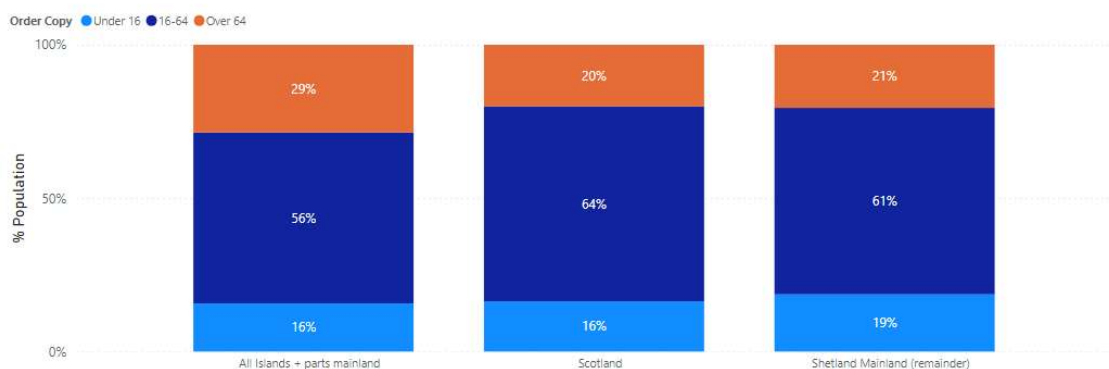


Figure 3.5: Population by age group, 2022 (Source: 2022 Census)

3.4.5 The key points of note from the above figure are as follows:

- The islands have a significantly larger proportion of residents aged over-64 (**29%**) than mainland Shetland (**21%**) and Scotland overall (**20%**)
- Conversely, the working age population in the islands is significantly smaller at **56%** than mainland Shetland (**61%**) and Scotland overall (**64%**)

- The proportion of children in the islands (**16%**) broadly matches the national average (also **16%**) but is proportionally smaller than for mainland Shetland (**19%**)
- As a consequence of the above, the **dependency ratio** – i.e., the number of people aged under-16 or over-64 divided by the number of people of ‘working age’ (16-64) – is higher in the islands (**0.79** relative **0.65** for mainland Shetland), highlighting that their demographics are less favourable
- Again, there is significant variation between islands in this respect, with Fetlar and Skerries having particularly unfavourable demographics

3.4.6 To provide further context, the table below summarises the change in population by age group between the 2011 and 2022 censuses:

Table 3.3: Population change by age group 2011 to 2022 (Source: 2011 Census and 2022 Census)

|                   | Under-16 | 16-64 | Over-64 |
|-------------------|----------|-------|---------|
| Islands           | -16%     | -14%  | +20%    |
| Mainland Shetland | -5%      | -6%   | +36%    |
| Scotland          | -3%      | -1%   | +22%    |

3.4.7 In summary, whilst the population is ageing across Scotland, there has been a stark reduction in the number of children and working age adults in the islands, which has compounded the overall reduction in population.

3.4.8 The population age profile is reflected in economic activity rates<sup>14</sup>, where only **60%** of island residents are economically inactive relative to **66%** in mainland Shetland.

**Key Point:** The islands have an older than average population and a demographic position which has worsened over the last decade or so. This has increased the dependency ratio and placed additional pressures on the remaining working age population. This is reflected in lower economic activity rates.

### How do the island and mainland property markets compare?

3.4.9 A key challenge facing Shetland’s island communities is the availability of suitable (i.e., modern and energy efficient) and affordable housing – this is identified as a problem in published documents and was also highlighted several times by attendees at the public engagement events.

3.4.10 In terms of headline figures:

- The median price for house sales in Shetland’s island communities was much lower (**£135,000**) than for mainland Shetland (**£186,000**)
- There is however significant variation between islands and property types. House prices tend to be higher in Bressay<sup>15</sup> (mean sale price **£178,141** in 2023) but much lower in the communities which are more distant from Lerwick. For example, the mean sale price for a house in Yell in 2023 was **£122,454**, whilst sales in Fetlar and Unst in recent years have generally been **<£100,000**<sup>16</sup>

<sup>14</sup> The economic activity rate is the proportion of the population aged over-16 that was working or looking for work in the week before the Census.

<sup>15</sup> Note that the Bressay datazone includes part of Lerwick, which will be inflating that average to some degree, potentially significantly

<sup>16</sup> Source: Residential property sales in Scottish island regions, Registers of Scotland

3.4.11 Consultation with the Council's Planning Service highlighted the considerable challenges in enabling development in the islands – these included:

- The **cost of building and refurbishing properties in island communities is typically higher, and sometimes much higher, than on mainland Shetland**. As well as the cost of moving goods by ferries, contractors and tradespeople need to account for long journey times, standing times whilst waiting for ferry connections and the risk of stranding in the event of bad weather and mechanical breakdowns. Costs in communities that are more remote and with more limited ferry connections can be particularly high
- The higher costs allied with lower-than-average house prices in island communities presents **commercial challenges** for housebuilding. There is little to no development in the islands undertaken by commercial builders, with most new housing being delivered by the Council or the housing association. Self-build is also common but relies on having funds / being able to get a mortgage for a house that may be worth less than its build cost. This is not just an islands issue – it applies to much of Shetland outside of Lerwick
- Much of the existing housing stock in the islands is **old**, often family croft houses. Such housing generally has low energy efficiency, poor insulation and old equipment and is thereby expensive to run and maintain

**Key Point:** House prices in Shetland's island communities lag those of mainland Shetland, whilst the cost of building is also higher. This makes the provision of modern and affordable housing problematic and thus compounds the challenges associated with population retention and growth. Whilst this is understood to be a Shetland-wide issue outside of Lerwick, it is likely to be particularly prominent in the islands.

### 3.5 What were the headline survey findings for the isles overall?

3.5.1 The graphic overleaf outlines the headline findings from the resident survey for the islands overall (seven in total as Foula was not included in the resident survey because it was predominantly focused on ferry services, with air being the main mode of travel for Foula):

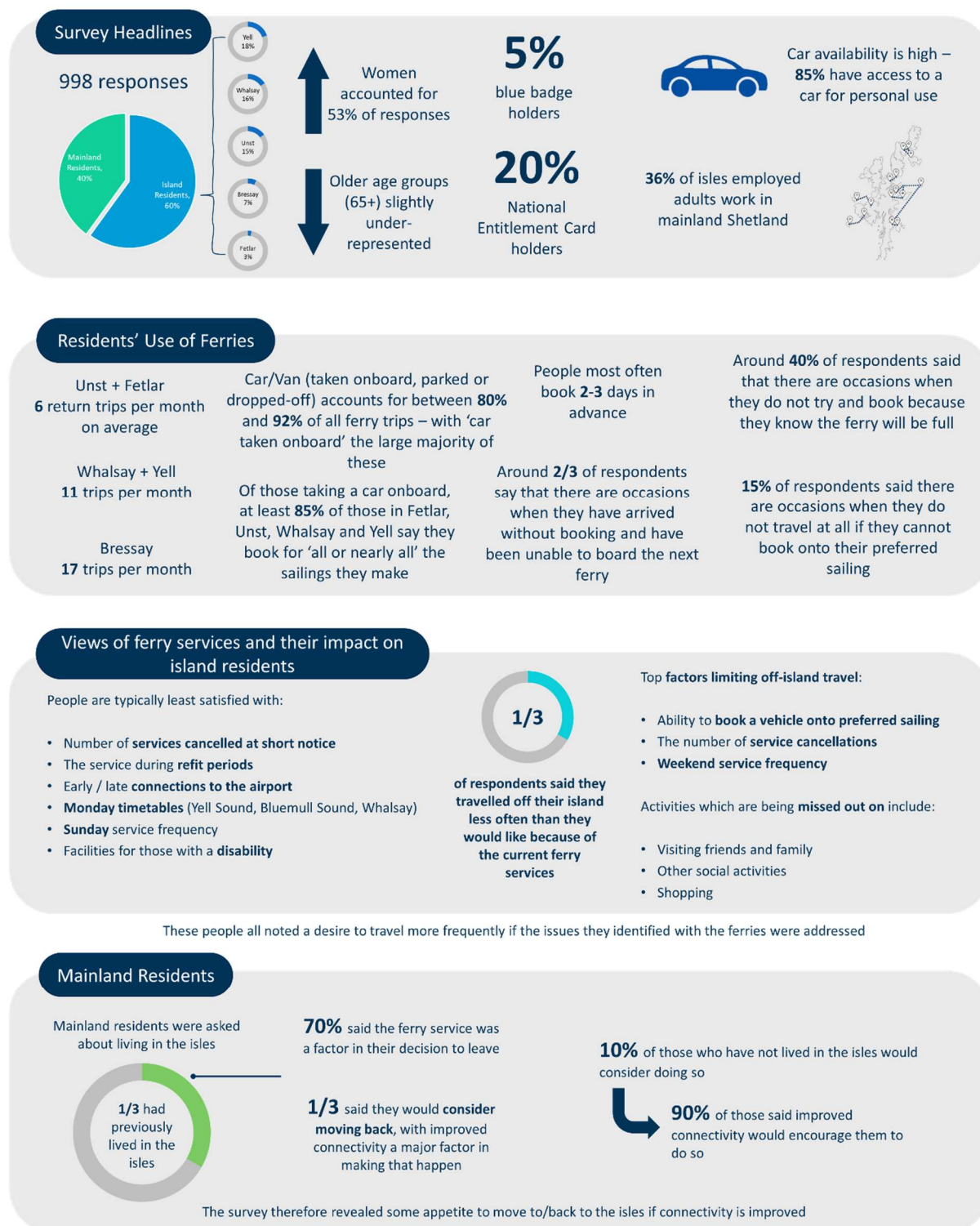


Figure 3.6: Resident survey – headline findings, all islands except Foula

## 3.6 Next Steps

- 3.6.1 This chapter has established the transport, social and economic context for Shetland's island communities overall. It provides the basis for the consideration of individual island communities in **Chapters 7-13**. In advance of this however, the next chapter provides the policy framing for the IITCP.

## 4 Policy Context

### 4.1 Overview

- 4.1.1 When the original SIITS study was undertaken in 2015/16, much of the policy which informed it had been set in the 2000s (e.g., the National Transport Strategy (2006) and ZetTrans Regional Transport Strategy (2008)) or early 2010s (e.g., the *Scottish Ferries Plan 2013-2022*). These and other documents provided a clear but dated strategic direction for the work.
- 4.1.2 It was however recognised when preparing the SIITS reporting that the Scottish Government planned to embark on a wholesale review of policy, commencing with the National Transport Strategy 2 and a refresh of the capital spending programme which accompanied it, the Strategic Transport Projects Review (STPR2). Whilst this introduced uncertainty, it also provided an apparent funding opportunity for strategic projects beyond the immediate resources of Shetland Islands Council, including a renewal of its ferry fleet and the construction of fixed links.
- 4.1.3 Since the completion of the SIITS study, there has been a wholesale change in the policy environment through which a much more coherent position has emerged on several issues of relevance to Shetland's island communities. This chapter outlines the main policy documents of relevance and their implications for the IITCP.

### 4.2 National Policy - Scotland

- 4.2.1 The enacting of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 and its subsequent update in December 2020 combined with the publication of the National Transport Strategy 2 (February 2020) has fundamentally changed the approach to transport infrastructure and service planning in Scotland. These key developments and their relevance to the IITCP are set out below.

#### Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

- 4.2.2 The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 was an Act of the Scottish Parliament committing the Scottish Government to deliver net-zero emissions<sup>17</sup> by **2050** (the UK-wide target date for achieving net zero).<sup>18</sup> The Act was amended by the Climate Change Plan Update published in December 2020, which brought forward the date of achieving net zero to **2045**. It is important to note that **delivering net-zero by 2045 is a legal commitment** rather than just a statement of aspiration and thus carries a higher weight in future infrastructure and service planning. Note however that in April 2024, the Scottish Government abandoned the *interim* and *annual* targets which set out a pathway to this 2045 date, replacing these with five-yearly carbon budgets, whilst retaining the overall 2045 net zero end date. Of particular note was the scrapping of the interim 75% reduction in emissions (relative to 1990) target by 2030.
- 4.2.3 It is important to note that the 2019 Act embeds the principles of a 'Just Transition', which means reducing emissions in a way which reduces inequalities or at least does not widen them. This recognises that, in theory at least, islands have unique characteristics which have to be accommodated within the overall transition to net zero. This is particularly pertinent in Shetland where there is a concentration of employment and other essential services in Lerwick, making routine travel essential for many island residents.

<sup>17</sup> Net zero means that the amount of greenhouse gas emissions released into the atmosphere and the amount that is extracted through offsetting measures will add up to zero - <https://www.netzeronation.scot/the-importance-of-net-zero>

<sup>18</sup> <https://www.legislation.gov.uk/asp/2019/15/contents/enacted>



**What are the implications for the IITCP?** The IITCP will establish a long-term network strategy for the eight in-scope islands, with a planning horizon which extends beyond the Scottish and wider UK net zero commitments. The option generation, development and appraisal will therefore require a strong focus on the absolute and relative embedded and operational carbon of each option.

The legal commitment imposed by the Act is also focusing both public and private sector investment on new technology and infrastructure which will reduce transport 'tailpipe' emissions. The appraisal will therefore have to carefully define assumptions around the transition of the vehicle fleet to electric power and the path to decarbonisation for ferries.

## National Transport Strategy 2

4.2.4 In February 2020, Transport Scotland published its *National Transport Strategy 2* (NTS2) which set out a vision for Scotland's transport system over the next 20-years to 2040, including a statement of transport's contribution to achieving net zero by 2045. Its 'Vision' is:

- *"We will have a sustainable, inclusive, safe and accessible transport system, helping deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors".<sup>19</sup>*

4.2.5 The Vision is underpinned by four 'Priorities' and 12 'Outcomes', as shown in the figure below:



Figure 4.1: NTS2 Priorities and Outcomes (Source: NTS2)

4.2.6 The NTS2 established two 'hierarchies' which define the principles upon which future transport investment decision making and services should be planned. The **Sustainable Travel Hierarchy** defines the priority which will be given to each mode of transport in future investment planning and is illustrated in Figure 4.2 figure below:

<sup>19</sup> National Transport Strategy 2 (Transport Scotland, 2020), p. 5.



## Prioritising Sustainable Transport

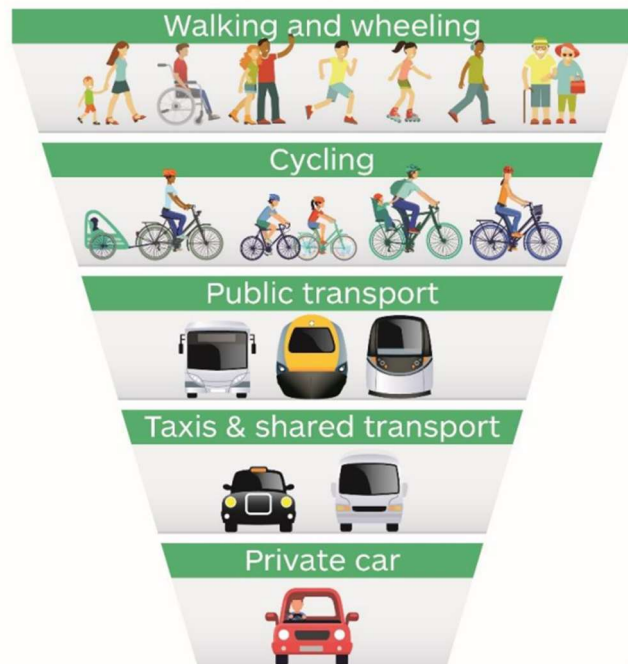


Figure 4.2: Sustainable Travel Hierarchy (Source: NTS2)

- 4.2.7 In summary, the Sustainable Travel Hierarchy prioritises walking and wheeling and cycling, with investment to support the single occupant private car being the lowest priority.
- 4.2.8 The **Sustainable Investment Hierarchy** establishes a structured set of steps to be followed when planning investment in transport infrastructure, as is illustrated in the figure below:

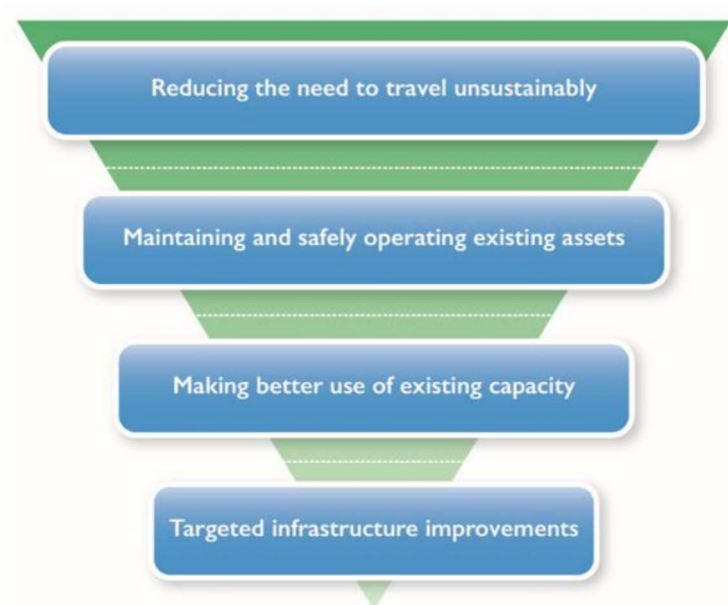


Figure 4.3: Sustainable Investment Hierarchy (Source: NTS2)

**What are the implications for the IITCP?** NTS2 and its embedded hierarchies provide a clear statement of the transport priorities of national government, which will need to be reflected in the business case if funding is sought from this source.

An inherent challenge here is that the Shetland ferry network, and hence the island communities which it serves, has by and large evolved around a car-based model of travel. There is therefore a balance to be struck in terms of reducing unsustainable travel without widening inequalities in island communities, where residents are frequently making essential car-based journeys to employment and / or off-island services.

The Sustainable Investment Hierarchy also very clearly identifies that 'targeted infrastructure improvements' should only be introduced once options under each of the preceding steps has been exhausted. For example, where ferry vehicle deck capacity is a problem, this hierarchy would advocate options to better manage demand prior to building more or larger ferries or a fixed link in the first instance. This point is particularly pertinent in relation to fixed links, where the investment case would need to provide evidence that there is an insurmountable problem or problems that cannot be addressed with existing assets.

### Strategic Transport Projects Review 2 (STPR2) and the Islands Connectivity Plan

- 4.2.9 As alluded to at the outset of this chapter, the expectation at the time the SIITS study was undertaken was that STPR2 and the related Islands Connectivity Plan would encompass both Transport Scotland and local authority funded infrastructure and services. However, this was not the case, with the study focusing almost exclusively on the trunk road and railway networks and Transport Scotland funded ferry services. It is therefore of limited direct relevance to this study in terms of specific proposals (although it is worth recognising as a comparator that the STPR2 report did identify an aspiration to deliver fixed links to Mull and across the Sounds of Barra and Harris).
- 4.2.10 However, STPR2 did depart from conventional approaches by using two forecast scenarios to frame the options appraisal process. These were defined as a **'without policy ambition'** (high) and a **'with policy ambition'** (low) levels of motorised traffic demand. These scenarios represent a very broad range of traffic growth outcomes where the 'with policy' scenario delivers a 20% reduction in car kilometres by 2030 (as per the now abandoned target) whereas the 'without policy' scenario sees strong growth in car kilometres which is accelerated through to 2045 with the widespread adoption of connected and autonomous vehicles (CAV). It is assumed that individual projects were modelled under both scenarios as part of the decision-making process.

### Consultation on the 20% Reduction in Car KMs: Route Map

- 4.2.11 The commitment to reduce car kilometres by 20% by 2030 (from a 2019 base) within the *Securing a Green Recovery on a Path to Net Zero: Climate Change Plan 2018–2032 - Update* policy document is shaping current transport planning priorities. This target was set to allow the transport sector to make its contribution to (at that time prevailing) national emissions targets for 2030 (given vehicle fleet assumptions). Transport Scotland published their 'route map' for achieving this, which was developed in partnership with COSLA.
- 4.2.12 This target was scrapped by the Scottish Government in April 2025 as it was deemed unachievable. However, the principle of reducing car kilometres remains and, at the time of writing, the government is considering setting a new target. For this reason, the primary components of the 'route map' are still summarised below.
- 4.2.13 The framework established recognises that any solution must include a holistic set of interventions to provide non-car-based options for different trip types in different geographic

areas. To encourage the reduction in car use, the framework outlines the need for a behaviour change by users through positive messaging. This has led to the development of four 'desired behaviours' which are shown below.



Figure 4.4 Route Map to 20% Car KM Reduction - Four Behaviours

#### 4.2.14 From the perspective of the in-scope islands in the IITCP:

- Reducing the need to travel:** Improved broadband and mobile coverage in Shetland, together with long-term travel behaviour change and adaptation to new ways of working post-COVID-19 provides potential opportunities to reduce the need to travel overall without negatively affecting communities. For example, it is now possible to hold productive online meetings on MS Teams that would previously have required a full day's travel (e.g., from Unst) or potentially even an overnight stay (e.g., from Foula, Papa Stour and Skerries). The above said, Chapter 3 highlighted that car-based ferry travel on the Shetland internal network has almost fully recovered to pre-pandemic levels
- Living well locally:** The ability to 'live well locally', on-island in this context, varies across the eight in-scope islands, with each having differing levels of provision defined in part by population and respective levels of connectivity. For example, Unst, Whalsay and Yell all have Junior High Schools, whereas lower population islands like Fetlar do not
- Switching modes:** With the possible exception of Bressay, switching from car-based travel to active travel for onward journeys from mainland ferry terminals is largely impractical. Mode switch would therefore be dependent on travel by bus or Community / Demand Responsive Transport, but the bus network is currently very limited in scope
- Combining or sharing car trips:** Informal car sharing is a prominent feature of travel across Shetland, particularly in island communities – some of which will be 'forced' by ferry capacity issues. Alongside reducing the need to travel, this 'desired behaviour' is likely to be the most achievable in the short-term

**What are the implications for the IITCP?** The ambition to reduce car kilometres (by an as yet to be defined target) presents a number of challenges for this study. For several island communities, there is a desire to expand provision for car travel, be that through an increase in the number, size and / or frequency of ferries or fixed links. This would likely generate additional vehicle KMs but would also generate a range of benefits for the islands.

There also has to be a recognition that many of the car-based journeys made to and from island communities are essential in nature, with little in the way of alternative travel options. Moreover, many island residents will undertake multiple activities on the one trip to minimise the cost of repeated journeys and thus require a car – this is especially the case where ferry services are less frequent and more expensive, Skerries for example. Reconciling the potential tension between reducing car kilometres and the scope for increasing inequalities faced by island communities will be an important element of this study.

### Islands (Scotland) Act 2018 and National Plan for Scotland's Islands (2019)

- 4.2.15 The Islands (Scotland) Act 2018 was introduced to support and help meet the unique needs of Scotland's islands, now and in the future. A key provision within the Act was to develop a National Islands Plan (NIP), the purpose of which is *"to set out the main objectives of the strategy of the Scottish Ministers in relation to improving outcomes for island communities that result from, or are contributed to, by the carrying out of functions of a public nature"*.<sup>20</sup>
- 4.2.16 The NIP set 13 Strategic Objectives for Scotland's islands – most of these are relevant to the IITCP but of particular relevance are the following:
- **Strategic Objective 1:** To address population decline and ensure a healthy, balanced population profile
  - **Strategic Objective 2:** To improve and promote sustainable economic development
- 4.2.17 Transport evidently has an important role to play in realising these objectives for islands generally. However, this is particularly the case with Shetland's island communities, due to the high degree of economic concentration in Lerwick and at Sullom Voe. Moreover, Shetland is an exporting economy and this also applies to several of its island communities, particularly Unst and Yell, where there is a strong aquaculture presence. This therefore lends distinct weight to **Strategic Objective 3**, *"to improve transport services"*.<sup>21</sup>

**What are the implications for the IITCP?** The NIP is one of the few documents that adopts an island-specific policy perspective. It recognises the unique features and challenges of Scotland's islands and highlights the importance of promoting sustainable economic development and population retention. It specifically recognises the role of transport connectivity as an enabler of these outcomes.

### Islands Growth Deal

- 4.2.18 The Islands Growth Deal is jointly funded by up to £100 million from the Scottish and UK Governments and the investment package will drive economic growth and create sustainable jobs across Shetland, Orkney and the Outer Hebrides. The Full Deal Agreement was signed in January 2023 and includes five Shetland-specific projects:

<sup>20</sup> <https://www.gov.scot/policies/community-empowerment/empowering-our-island-communities/>

<sup>21</sup> The National Islands Plan (Scottish Government, 2019), p. 3.

- The **Shetland Clean Energy Project** will support the islands' necessary transition away from hydrocarbons towards affordable clean energy
- **Dales Voe Ultra-Deep-Water Quay**, which aims to create an ultra-deep-water quay that will increase the opportunity to secure more of the growing decommissioning sector and the developing offshore renewables sector
- The **Shell-volution Project**, which is focused on designing new and innovative ways to expand the low carbon and sustainable mussel farming sector in Shetland
- The **Shetland Campus Redevelopment**, which will provide new learning opportunities for Shetland residents, as well as other island groups. The earlier proposal at Heads of Terms stage for a Shetland Space Innovation Campus project has been integrated into this project
- The **Knab Redevelopment** project aims to go beyond creating a simple housing project with ancillary services, by delivering a mixed-use site that embeds living and ageing well, creative innovation, wellbeing and a dynamic use of public space, alongside future fit housing that enables a flexible approach to work and life<sup>22</sup>

- 4.2.19 These projects are currently making their way through the Full Business Case process. Several have implications for island communities, most notably the space component of the Shetland Campus Redevelopment Project (Unst) and potentially the Shell-volution Project, depending on where this investment is targeted.

**What are the implications for the IITCP?** The Islands Deal includes five Shetland-specific projects, together with additional joint-island activity, which will deliver a combination of direct and indirect (e.g., employment) opportunities for Shetland's island communities.

### National Planning Framework 4 (NPF4)

- 4.2.20 Travel patterns are closely related to spatial planning as people travel to access employment and services like healthcare, retail, education and leisure facilities. This is particularly true for small island communities.
- 4.2.21 In order to improve health outcomes and tackle inequalities, help reduce vehicle kilometres and deliver a low carbon society, an integrated approach to land use-development and transport planning must be adopted which, at a strategic level, is done through the Scottish Government National Planning Framework. The Scottish Government published National Planning Framework 4 (NPF4) in February 2023. This sets out the priorities and policies for the planning system to 2045. The document identified six spatial principles which will guide the development of future places, namely:
- **Just transition:** ensuring the transition to net zero is fair and inclusive
  - **Conserving and recycling assets:** making productive use of existing buildings, places, infrastructure, and services
  - **Local living:** support local liveability and ensure people can easily access services, greenspace, learning, work, and leisure locally
  - **Compact urban growth:** limiting urban expansion
  - **Rebalanced development:** targeting development in areas of past decline
  - **Rural revitalisation:** encourage sustainable development in rural areas

<sup>22</sup> Islands Growth Deal Full Deal Agreement <https://www.islandsdeal.co.uk/downloads/file/44/full-deal-document>  
Islands Deal website <https://www.islandsdeal.co.uk/>



4.2.22 NPF4 also identifies regional spatial priorities for five broad regions of Scotland, with Shetland included in the 'North and West Coast and Islands' area for which the following priorities are identified:

- Maximise the benefits of **renewable energy** whilst enhancing blue and green infrastructure, decarbonising transport, and building resilient connections
- Support coastal and island communities to become **carbon neutral**, thus contributing to net-zero commitments and reducing fuel poverty
- Seize the opportunities to grow the **blue and green economy**, recognising the world-class environmental assets that require careful management and opportunities to develop skills and diversify employment<sup>23</sup>

4.2.23 The document notes that these regional spatial priorities will inform the preparation of Local Development Plans.

**What are the implications for the IITCP?** The main thrust of NPF4 is on implementing measures to achieve net zero, whilst supporting the socio-economic development of communities. It identifies effective spatial planning as a means of reducing emissions. With respect to travel, it highlights that, where a journey does have to be made, it should be made sustainably.

### Residential Development

4.2.24 The revised NPF4 also sets out the 10-year Minimum All Tenure Housing Land Requirement (MATHLR) for Shetland as shown in the table below.

Table 4.1: Proposed 10-year minimum all tenure land requirements for Shetland<sup>24</sup>

| Proposed MATHLR | Total dwellings in Shetland in 2023 <sup>25</sup> | % of total dwellings |
|-----------------|---------------------------------------------------|----------------------|
| 850             | 11,567                                            | 7%                   |

**What are the implications for the IITCP?** The proposed MATHLR implies a significant increase in the housing stock in Shetland over the next decade, which will be an important contributor to supporting the retention and growth of the population.

### National Policy, Scotland - Summary

- 4.2.25 Since the completion of the Shetland Inter-Island Transport Study in 2016, there has been a significant and pronounced change in national policy direction. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 followed by the NPF4 and NTS2 put decarbonisation at the heart of the policy agenda. There is now a distinct focus on travelling less frequently and, when a journey is required, that it is made by sustainable modes where possible.
- 4.2.26 The last decade or so has also seen a wider consciousness emerge of the issues faced by Scotland's island communities, culminating in the Islands (Scotland) Act 2018 and the signing of the Islands Growth Deal.
- 4.2.27 This evolution in the policy context provides a strong rationale for revisiting and updating the business case for improvements in inter-island connectivity.

<sup>23</sup> National Planning Framework 4 (Scottish Government, 2023), p. 23

<sup>24</sup> National Planning Framework 4 (Scottish Government, 2023), p. 143

<sup>25</sup> Shetland in Statistics 2023 (Shetland Islands Council, 2024), p. 36.

### 4.3 National Policy – United Kingdom

- 4.3.1 Transport in Scotland is a devolved matter, with Shetland effectively having ‘double devolution’ with respect to its ferry services (acknowledging that annual revenue funding requirements are currently underwritten by the Scottish Government). That said, the UK Government has in recent years become more involved in supporting Scottish transport schemes, both through partnership-based Growth Deals and national funding streams such as the *Levelling-Up Fund*. It is worth therefore briefing reflecting on headline UK Government transport policy.
- 4.3.2 The UK Government has founded its policy platform on **five ‘missions’ for a better Britain** – these define the Government’s long-term aims for this Parliament. The figure below sets out these five ‘missions’ together with the Secretary of State for Transport’s (The Rt. Hon. Heidi Alexander MP) priorities and the Department for Transport’s ‘strategic enablers’ which will support the delivery of these priorities and the overall ‘missions’:

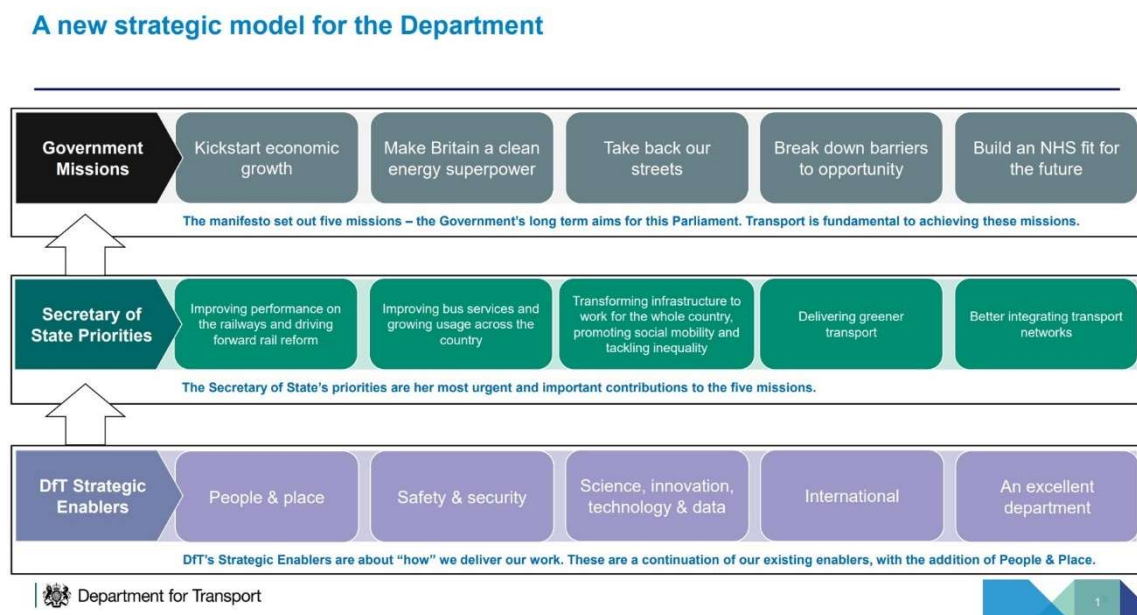


Figure 4.5: The five ‘missions’ of the Government

- 4.3.3 The outcomes of this study will support the following priorities of the Secretary of State:
- **Transforming infrastructure to work for the whole country, promoting social mobility and tackling inequality:** infrastructure measures which reduce the peripherality of Shetland’s island communities will increase social mobility and reduce the inequalities faced by island residents. Such measures would also support several high value and nationally important industries such as aquaculture and renewable energy production
  - **Delivering greener transport:** The Shetland internal ferry network operates entirely on hydrocarbon-based fuels. Regardless of whether new ferries or fixed links are the future solution for Shetland’s island communities, reducing embodied and operational emissions will be a key focus of this study
  - **Better integrating transport networks:** A major cause of car dependency when travelling to and from Shetland’s island communities is limited alternative provision. Whilst buses and active travel are outwith the immediate scope of this study, improved integration will be a theme of the IITCP



4.3.4 By supporting the delivery of these priorities, the outcomes of the IITCP will support the following Government Missions:

- **Kickstart economic growth:** through improving the efficiency and productivity of Shetland's high value economy, most notably the aquaculture industry and the emerging aerospace / space cluster
- **Make Britain a clean energy superpower:** through supporting the commercialisation and delivery of renewable energy projects
- **Break down barriers to opportunity:** through minimising the inherent disadvantage faced by island residents in accessing employment and leisure opportunities and essential services

**What are the implications for the IITCP?** This project is closely aligned with the 'Missions' of the UK Government. Investment in and improvements to inter-island transport connectivity will support nationally significant economic sectors such as aquaculture and aerospace, facilitate the transition to clean energy and reduce the inequalities faced by residents of the eight in-scope islands.

## 4.4 Regional Policy

- 4.4.1 The change in the national transport and land-use planning policy landscape created in turn the requirement to refresh regional policy, which is the responsibility of the ZetTrans Regional Transport Partnership (RTP) in Shetland. The ZetTrans RTP is the statutory RTP for the Shetland Islands and is responsible for the provision and maintenance of public transport services in Shetland, whilst also supporting the case for improvements in air and ferry services to the Scottish mainland.
- 4.4.2 ZetTrans defines its policy positions for transport to, from and within Shetland by means of a Regional Transport Strategy (RTS). The purpose of the RTS is to identify the present and future transport needs of the islands, practical means of addressing these needs, and set out how transport in the region will be provided, developed, improved and operated so as to: promote safety; enhance social and economic well-being; promote sustainability; conserve and enhance the environment; promote social inclusion and equal opportunities; improve access to healthcare; and foster integration between modes and with cross-boundary routes.
- 4.4.3 The first ZetTrans RTS was published in 2008 and was refreshed in 2017-18 to cover the period 2018-28. However, legislation requires that the RTPs keep their RTS under review and modify or create a new one as necessary. Whilst the first RTS was extant to 2028, ZetTrans took the view that the major policy changes at the national level combined with technological opportunities and societal and economic changes in the islands meant that a new RTS was required. This was developed over the period 2021-23 and was adopted in March 2025.

### ZetTrans Regional Transport Strategy 2

- 4.4.4 The second ZetTrans RTS (RTS2) was based around an overarching 'Vision', under which sat six RTS Strategy Objectives and eight RTS Themes, within which individual policies are grouped.
- 4.4.5 The **RTS Vision** is:
- *"Our transport networks in Shetland and our connections to the rest of Scotland support our social and inclusive economic prosperity, provide equitable access to opportunities,*

*enable people to live healthy and active lives, facilitate the development of sustainable and inclusive communities, and contribute to our net zero emission targets*<sup>26</sup>

4.4.6 Whilst all of the RTS Strategy Objectives are relevant to Shetland's island communities, RTS Strategy Objective 2 was specifically set with these communities in mind:

- **RTS Strategy Objective 2:** To address the barriers which constrain access to and / or impose unreasonable costs of travel and freight transport for all groups within Shetland

4.4.7 Through this objective, the RTS recognised that Shetland's island communities experience a specific set of transport problems which limit access and / or increase the costs of travel for passengers and freight alike. This island-specific focus at the strategic level gave rise to an RTS Theme and associated policies specifically related to these island communities, as follows:

- **RTS Theme 4:** Improving internal ferry and air connections and exploring the case for fixed links so as to better connect Shetland's island communities
  - **RTS Policy 25:** Our internal ferry network should be developed in a more coherent, recognisable, and integrated way for regular, occasional and new users of the network, including visitors
  - **RTS Policy 26:** We are committed to contributing to the sustainability of our island communities by reducing or removing the cost, capacity and connectivity barriers to personal and business travel, the delivery of public services and the movement of goods between our islands
  - **RTS Policy 27:** We commit to ensuring the maintenance of the ferry fleet and associated infrastructure and to invest in these assets and crews to a level which ensures a continuing reliable and resilient service
  - **RTS Policy 28:** We commit to maintaining the inter-island air service to at least its current level and to explore opportunities to improve the service where necessary and deliverable. As part of developing and implementing this policy, we will take cognisance of the activities being undertaken by the Sustainable Aviation Test Environment (SATE) located in Orkney
  - **RTS Policy 29:** We will progress the feasibility and case for fixed links and act on the conclusions as part of our future wider inter-island connectivity planning across all modes of travel. Any fixed link should be implemented in conjunction with a high-quality public transport offer, which incorporates provision for cyclists
  - **RTS Policy 30:** We will support island-based vessels and crews where safe, deliverable and practicable
  - **RTS Policy 31:** We will ensure that all future ferry and aircraft replacement programmes will contribute towards the delivery of the Council's Climate Change Strategy
  - **RTS Policy 32:** Inter-island services will move towards being fully accessible taking account of the needs of all users<sup>27</sup>

<sup>26</sup> ZetTrans Regional Transport Strategy (ZetTrans, 2023), p. 7

<sup>27</sup> ZetTrans Regional Transport Strategy (ZetTrans, 2023), p. 10

**What are the implications for the IITC?** The new ZetTrans RTS specifically provides the rationale for this study (RTS Policy 29) and highlights a range of issues that it must cover including fixed links, island-based vessels and reducing the cost and connectivity barriers facing Shetland's island communities.

## 4.5 Local Policy

### Shetland Islands Council Corporate Plan 2021-2026 – Our Ambition

- 4.5.1 The Corporate Plan provides the strategic political direction for the Council across all policy areas. Much of the Plan is relevant to this study, for example its aspirations to achieve an improved demographic balance, equitably grow the economy and support new development. However, it is the transport theme which is most relevant here.
- 4.5.2 The Plan references the challenges facing the inter-island transport network, including ageing assets and affordability. It also provides the specific political context for this study noting that:
- *“We will **continue to secure support from the Scottish Government to ensure financially and environmentally sustainable internal ferry services**, so we can continue to provide links between the islands that are reliable and support economic and social wellbeing, and will **continue to pursue fixed links where they can be proven to be a viable alternative**.”<sup>28</sup>*

**What are the implications for the IITCP?** The Shetland Islands Council Corporate Plan 2021-26 provides the strategic political direction for this study.

### Shetland Local Development Plan

- 4.5.3 The Local Development Plan (LDP) defines planning policy and the spatial approach to development in Shetland. Shetland's current LDP was adopted in 2014. Policy H2 of the LDP identifies eight areas of 'Best Fit' throughout Shetland in order to promote sustainable locations for residential or residentially compatible development. There are three island locations identified – Baltasound, Symbister and Mid Yell.<sup>29</sup>
- 4.5.4 The Council is currently preparing its LDP2 which will reflect the policies and principles set out in NPF4, the national spatial strategy for Scotland (introduced in **Section 4.2**). Shetland's LDP2 is expected to be adopted in 2028. In the intervening period, NPF4 will be the primary planning policy document that applies to Shetland, taking precedence over the extant Shetland LDP.

**What are the implications for the IITCP?** The extant LDP and NPF4 provide the local spatial planning context for the IITCP. These documents recognise the importance of ensuring balanced development, which will include reflecting the needs of Shetland's island communities.

### Shetland Islands Council Climate Change Strategy 2023-27

- 4.5.5 Shetland Islands Council acknowledged a 'Climate Emergency' in January 2020, prompting the creation of the Climate Change Programme, with the purpose of minimising the risks of climate change to the Shetland community as far as possible, and to make the transition to net zero as beneficial as possible. The Council has a statutory duty to reduce greenhouse gas emissions in line with Scotland's national target of 2045, and to demonstrate that it is working towards this. The Shetland Islands Council Climate Change Strategy and associated Action

<sup>28</sup> Shetland Islands Council Corporate Plan 2021-26 (Shetland Islands Council, 2021), pp. 29-30

<sup>29</sup> Shetland Islands Council Local Development Plan (Shetland Islands Council, 2014), p. 39.

Plan were prepared in response to these developments.<sup>30</sup> The Strategy is formed of six themes, of which **transport** is one.

4.5.6 The Strategy sets out six outcomes that the Council is seeking to achieve with respect to transport:

- Fully **decarbonise the Council fleet by 2045**, including heavy-duty vehicles, vessels and aircraft
- Reduce emissions from business and commuter travel by **30%** by 2030 from the 2019 baseline
- **Increase active travel infrastructure and encourage uptake of active travel** for Council employees and the Shetland community
- Work towards **developing a public transport system that is affordable and attractive to residents**, which will increase use and efficiency
- Support the **transition to zero-emissions vehicle use and transport infrastructure**
- Prepare our transport networks and infrastructure for the **effects of climate change**<sup>31</sup>

4.5.7 The Climate Change Strategy directly references the IITCP, highlighting that it will consider the emissions implications of fixed links and consider both the growing zero-emissions fleet of vehicles and the possibility of zero-emissions ferries. It is important to note that 'vessels' (the majority of which will be Council ferries) are by some distance the third biggest source of greenhouse gas emissions in Shetland, behind only 'waste and waste infrastructure' and 'Council homes', demonstrating the importance of the solutions that will emerge from this study.<sup>32</sup>

**What are the implications for the IITCP?** The Climate Change Strategy 2023-27 is the local expression of how the Council will contribute to the delivery of national net zero legislative commitments, inclusive of a specific transport theme. The key consideration for this study is understanding, at the options appraisal stage, the emissions associated with each option, both in terms of embodied and operational carbon. It will also be important to develop realistic assumptions on the timescales for the transition of the vehicle fleet and future options for low or zero emissions ferries.

As with several other policy documents, there is also a presumption towards reduced business and commuter travel, which will have to be factored into the business case work.

### Shetland's Partnership Plan 2018-2028

4.5.8 The Shetland Partnership is the Community Planning Partnership (CPP) for Shetland, which combines a range of agencies and bodies that work together and with local communities to design and deliver better services. The Plan incorporates a shared vision, as follows:

- *"Shetland is a place where everyone is able to thrive; living well in strong, resilient communities; and where people and communities are able to help plan and deliver solutions for future challenges."*<sup>33</sup>

<sup>30</sup> Climate Change Strategy 2023-27 (Shetland Islands Council, 2022), p. 4

<sup>31</sup> Climate Change Strategy 2023-27 (Shetland Islands Council, 2022), p. 52

<sup>32</sup> Climate Change Strategy 2023-27 (Shetland Islands Council, 2022), p. 22

<sup>33</sup> Shetland's Partnership Plan 2018-2028 (Shetland Partnership, 2018), p. 2

- 4.5.9 Under the 'Place' priority, public transport is noted as being of the highest priority for improvement according to Shetland communities.<sup>34</sup> It highlights that distance should not be a barrier to opportunity.<sup>35</sup>
- 4.5.10 The Plan also highlights the opportunity of 'Locality Planning', which is locally based planning that enables communities and wider partners to find innovative solutions to key local challenges. Locality Plans can be based on geography or for a particular community of interest, e.g., young people. The first Locality Plan produced was for Shetland's Islands with Small Populations and is introduced below.

#### **Shetland's Islands with Small Populations: Second Locality Plan**

- 4.5.11 The Shetland Partnership has published its *Second Locality Plan for Shetland's Islands with Small Populations*, which covers Fair Isle, Fetlar, Foula, Papa Stour and Skerries. The purpose of the Plan is to support these five island communities to find innovative solutions to their main local problems. The Second Locality Plan follows on from the original Plan, which was adopted in 2020.<sup>36</sup>
- 4.5.12 The decision to develop and now update a Locality Plan for these five islands is based on addressing the social, economic and demographic challenges faced by these communities.
- 4.5.13 The Plan is based on a 'Vision' which states that:
- *"The people living within Shetland's Islands with Small Populations can thrive and are actively influencing decisions on services and the use of resources"*<sup>37</sup>
- 4.5.14 The delivery of the Vision is predicated on the realisation of five 'Outcomes' for these communities. These are effectively focused on partnership working with island communities to ensure that both operations and investment solutions reflect local needs and requirements, the desire to base a vessel on the island in some cases for example.

**What are the implications for the IITCP?** The key point of note for this study is that the solutions for the four 'small population islands' in-scope are developed in the context of each locality, recognising that bespoke solutions may be required for each island (as per Fair Isle for example).

<sup>34</sup> Shetland's Partnership Plan 2018-2028 (Shetland Partnership, 2018), p. 8

<sup>35</sup> Shetland's Partnership Plan 2018-2028 (Shetland Partnership, 2018), p. 9

<sup>36</sup> Shetland's Islands with Small Populations: Second Locality Plan (Shetland Partnership, 2023), p. 1

<sup>37</sup> Shetland's Islands with Small Populations: Second Locality Plan (Shetland Partnership, 2023), p. 3

## 5 Island Supply-Chains

### 5.1 Overview

- 5.1.1 The inter-island ferry network enables and supports the supply-chains of island communities. The views of businesses and freight stakeholders are often under-represented in studies of this nature, yet their activity underpins both the sustainability of island economies and the ability to deliver essential services to the islands.
- 5.1.2 To this end, freight specialist ProVersa engaged with **24** companies and individuals during January and February 2025 to build a profile of how island supply-chains function at a practical level and to establish the role that inter-island connectivity has in enabling economic activity. Given the long-term perspective of the IITCP, this work did not seek to identify or quantify specific volumes of freight and commercial movements rather it sought to understand the qualitative make-up of movements - **in short, what moves, how it moves, why it moves and to what extent inter-island connectivity today impacts the commercial supply-chains that operate to and from the islands.**
- 5.1.3 Capturing these data across eight islands and multiple industrial sectors is more complex than understanding a single sector, or a single route. However, across the 24 companies and individuals consulted - many for at least an hour of conversation - the key sectors were identified and multiple perspectives gathered.
- 5.1.4 The **key sectors** are:
- Livestock, crofting and agriculture
  - Fisheries and aquaculture sectors
  - General freight, including supply to retail and trade outlets and home delivery
  - Major project delivery, including SaxaVord Spaceport, renewable energy sector and roads infrastructure
  - Specific end businesses
- 5.1.5 Perspectives on inter-island transport connectivity were sought from:
- The communities and community development bodies
  - End users and customers
  - Major companies located in the islands
  - Lerwick-based suppliers to the islands
  - Multi-customer hauliers and transport companies serving the islands
  - Major project delivery companies.
- 5.1.6 This chapter is primarily **structured by sector rather than by island**, as supply-chains are network rather than route-based. That said, Section 5.2 briefly summarises how the needs of the individual islands are served.

### 5.2 How are individual islands served?

- 5.2.1 It was quickly evident from the stakeholder interviews that the eight in-scope islands can be categorised into three groups from a supply-chain perspective
- Islands of small population: Foula, Papa Stour and Skerries
  - Bressay and Whalsay



- North Isles: Fetlar<sup>38</sup>, Unst and Yell

5.2.2 Each of these island groupings is now considered in-turn.

### Islands with small populations

- 5.2.3 Characterised by their modest populations and, in the case of Foula, being served by a lift-on lift-off vessel, these locations neither generate nor consume much freight traffic. The supply of goods has developed around a model of using the Shetland mainland pier (e.g., Walls) as the 'destination' for suppliers. Through an arrangement with the Council, the ferry service acts as the *de facto* haulier – goods are collected from a secure holding point on the quayside, shipped on the vessel and delivered to the island for collection by residents.
- 5.2.4 Goods that cannot be moved in this way tend to either be collected from mainland suppliers by the island residents themselves or, where more significant works are involved, must be planned in advance. The reasons for this forward planning are twofold:
- Plant, equipment or materials may have to be moved onto the island by special vessel charter (e.g., barges) or arranging additional sailings outwith the regular timetable. This is a particular issue for Foula, where its vessel MV *New Advance* has a very limited carrying and deadweight capacity
  - Any labour from outwith the island, whether from mainland Shetland or further afield, must plan to stay and be sustained on the island, where there is limited accommodation and eating options
- 5.2.5 For these reasons, the islands of small population are generally not self-sustaining. Lerwick based suppliers and trades indicated that the cost and complexity of organising and delivering work in these islands generally makes them expensive to deliver to in terms of having to commit staff and equipment for extended periods (with the added risk of being stranded due to weather-related disruption, particularly in Foula and Skerries). For these same reasons, there is a reluctance to commit to taking on work in these islands unless it is of scale and well remunerated, typical more of public sector projects than domestic work.

**Key Point:** The logistical and commercial challenges of serving the islands of small population means that these islands are generally self-sustaining. Goods are dropped off at the mainland Shetland ferry terminal, with the Council ferry service (or contracted ferry service in the context of Foula) acting as the *de facto* haulier.

### Bressay and Whalsay

#### Bressay

- 5.2.6 The background volume of freight to and from Bressay is modest, supplying domestic needs, parcel deliveries, the island shop and other commercial outlets.
- 5.2.7 Bressay's main employer is Pelagia Bressay, which operates a processing factory that receives 'Category 2 and Category 3' byproducts from salmon farms, factories and the whitefish sector across the isles and from Pelagia's own pelagic fish processing plant in Lerwick. The factory takes in these byproducts, in addition to other inputs imported into Shetland, to refine into high grade fishmeal and fish oils for feeds and fertilisers that are sold across the UK and into global markets.
- 5.2.8 All inputs to Pelagia Bressay from mainland Shetland (and from further afield, including Orkney, the Outer Hebrides and mainland Scotland) are moved by HGV road trailer to

<sup>38</sup> Whilst an island of small population, Fetlar's geographic location and shared ferry service with Unst means that it is part of the overall North Isles supply-chain.

Bressay on the ferry. The business was traditionally focused on pelagic fishing only but has evolved in recent years and is growing rapidly to process other inputs as the market has recognised that wastes previously landfilled in Shetland now have market value to process into other in-demand products.

- 5.2.9 Outbound product is moved either on road trailer back across to mainland Shetland for shipment via Aberdeen on NorthLink or by sea from Bressay on vessels chartered by Pelagia. The business is currently investing in increased processing capacity at the factory and is exploring investment in tank facilities in other (non-Shetland) locations to hold increased volume that can be shipped to Bressay for processing. The challenges faced by Pelagia Bressay mostly relate to the ability to move large and heavy machinery to the factory as part of expansion and investment activity, challenges that increase cost and impact investment viability.

**Key Point:** Whilst the background volume of freight to and from Bressay is modest, the Pelagia Bressay facility generates high volumes of inbound and outbound demand for an island of Bressay's size.

### Whalsay

- 5.2.10 Whalsay has very little industry that generates freight traffic, despite a large part of Shetland's pelagic vessel fleet being based there. Consumption and demand are based around the needs of the resident population and meeting the needs of its small number of shops, accommodation and restaurants, as well as the island care home.
- 5.2.11 Such is the volume of general freight, the majority is subcontracted by mainland Shetland hauliers to a local company, Whalsay Haulage, who collect any general freight, parcels and other less than full load freight from the Lerwick depots of the mainland Shetland hauliers. One noted that *"there's no point in us running there with small volumes. Customers get a much better service if we sub-contract, its more efficient for all and it keeps a small business active"*. This attitude of recognising the value in supporting smaller island-based businesses was expressed by many stakeholders.

**Key Point:** With little on-island industry, Whalsay generates very limited freight traffic. Given the low volumes, the carriage of the majority of freight is sub-contracted to Whalsay Haulage by the primary Shetland hauliers.

### North Isles

- 5.2.12 The North Isles, with their larger aggregate population, aquaculture industry and the emerging Spaceport on Unst, are the most significant in volume terms from a freight perspective. As will be discussed in the sectoral breakdown that follows, they also face the most significant challenges with inter-island connectivity.
- 5.2.13 The movement of freight is characterised by:
- The dominance of local haulier, RS Henderson (based in Cullivoe, with a southern depot in Scalloway), which is active across many sectors and is used on a sub-contracted basis by all mainland Shetland hauliers for less than full load (groupage) traffics
  - The presence of Cooke Aquaculture, whose salmon farming and processing business is the largest employer in the North Isles – it operates 17 salmon farms across Yell, Unst and West Mainland, supplying its processing plant in Mid Yell. Its commercial movements likely account for the largest proportion of commercial lane metres on the North Isles ferry services
  - The requirement for Unst businesses to plan around two ferry crossings that do not always connect effectively (this is also true of Fetlar but the business base and freight

volumes are evidently much smaller). This is considered to import significant inefficiencies and costs for businesses located in or serving Unst and Fetlar

- 5.2.14 The consultees explained that the logistical challenges and costs of moving freight to and from the North Isles is an everyday operational complexity and it is worked around. The more material challenge identified was however **staffing** - recruitment and retention of quality staff was highlighted by almost every stakeholder, particularly when set in the context of the ageing population in the North Isles, very low unemployment generally in Shetland and a trend amongst younger people being drawn to employment on mainland Shetland.

**Key Point:** Unlike the other islands, the North Isles (Yell and Unst primarily) generate significant volumes of freight associated with the aquaculture industry. Consultees identified a number of challenges with inter-island transport which will be expanded on in this chapter, but the recurring key issue highlighted was the recruitment and retention of staff.

### 5.3 How are individual sectors served?

- 5.3.1 As noted, supply-chains are in many cases not specific to an individual island, so it is important to analyse them on a sector basis.

#### Aquaculture and fishing – shared waters, distinct supply-chains

- 5.3.2 Shetland's seafood economy is anchored in **two major sectors: salmon aquaculture**, dominated by companies like Cooke Aquaculture, and **whitefish fishing**, centred around landings from local and visiting fleets. While both sectors rely heavily on inter-island ferry services, their supply-chains, logistics and processing models are markedly different.

#### Salmon aquaculture - vertically integrated and time-sensitive

- 5.3.3 Salmon farming in Shetland is highly structured and vertically integrated (i.e., one company controls different stages of the supply-chain). Cooke Aquaculture operates hatcheries in Unst, multiple marine farms in Unst, Yell and surrounding waters, and a central processing facility in Mid Yell. A proportion of young salmon are delivered by road from the Scottish mainland to the Unst hatchery, then transferred seasonally by vessel to sea pens for on-growing.
- 5.3.4 Feeding and tending to the salmon farms at sea is done by vessel and is a continuous, seven-day-a-week operation. When fish are harvested, they are removed from pens, stunned and slaughtered 'in the field' before being transferred ashore, where they are immediately loaded into bulk road tankers. These tankers move the fish to the Mid Yell factory for processing. Typically, one or two farms supply fish each day, so over a two-week cycle, stock is drawn from each location, thus balancing the growing and supply. The Mid Yell processing plant operates a five-day working week.
- 5.3.5 Processing factory capacity is effectively **limited by the capacity of the NorthLink ferry** and its allocation of the guarantee around moving trailer loads of processed salmon as 'time sensitive' goods. NorthLink guarantees carriage of 18 time sensitive road trailers per night on the Ro-Pax service (i.e., MV *Hjaltland* and MV *Hrossey*), which must be split across all customers with products of this characteristic. Cooke Aquaculture typically ships 4-5 road trailers of processed salmon from the factory each day to meet each evening's NorthLink sailing, moved by one of the larger Shetland hauliers. It should be noted that the construction of **two new 'freight-plus' ferries for the NorthLink service**, expected to enter service towards the end of the decade, will **increase the daily available capacity**, allowing the opportunity for a higher level of production to take place. This will in-turn **increase the demands on the Yell Sound and Bluemull Sound ferry services**.

- 5.3.6 Given the wastes associated with processing, this broadly equates to 6-7 tanker movements from farms to the Mid Yell processing plant per day. Movement of wastes is typically at a rate of 1-2 trailer loads per week, which is moved to a Pelagia owned processing facility in Greenock. Pelagia is actively seeking to grow its Bressay operation though, so this could change over time, increasing demand for the Bressay ferry service.
- 5.3.7 When the Mid Yell factory capacity is exceeded - often during seasonal peaks - unprocessed fish are transported by road to Cooke Aquaculture's Orkney processing factory. This happens only on days when the NorthLink sailings call into Kirkwall and can add a further 5-6 road tankers of unprocessed salmon to the demand on the Unst and Yell crossings, depending on the origin farm. Even where this overflow volume is being sourced from Cooke Aquaculture's farms in Walls and Aith (in West Mainland), the movements go via Cullivoe and back to Lerwick as this is where there is an ice plant, used to pack the product for shipment to keep it fresh.
- 5.3.8 The sector's logistical model is highly time-sensitive - fresh salmon must be processed and shipped the same day to preserve quality and shelf life. Although not considered as time sensitive, 'Category 3' wastes degrade and Pelagia notes that the quality of products produced from it also depends on the degree of 'freshness' before it is processed into feeds and other products.

**Key Point:** The aquaculture industry in the North Isles, centred on Yell but also incorporating Unst, is a major driver of demand on Yell Sound and, to a lesser extent, Belmont – Gutcher. Farmed salmon is high value, extremely time sensitive and moved in relatively large volumes (circa 4-5 trailers each day plus waste shipments). The supply-chain extends far beyond Shetland and requires reliable daily connections with NorthLink Ro-Ro services to Aberdeen. Meeting this demand is a critical current and future requirement of the inter-island transport network serving the North Isles.

#### **Whitefish - auction-based, multi-port operations**

- 5.3.9 The whitefish sector operates under a different model, reflecting its roots in the traditional fishing industry. Whitefish - including species like cod, haddock and saithe - is landed by vessels operating across Shetland's waters. Whilst major landings occur in Lerwick and Scalloway, significant volumes - around **10%** of Shetland's whitefish - are also landed at Cullivoe in Yell, a strategic satellite port for northern fishing grounds. Very roughly, this equates to 130 HGV trailer loads per year.
- 5.3.10 Once landed, whitefish is packed and moved by road to either Lerwick or Scalloway fish markets. The seafood auctions, which run five days a week, act as the gateway to UK and European markets. All whitefish passes through these auctions before heading to its final destination. The auction model demands predictability and consistency as buyers and processors rely on timely and stable supplies to plan distribution.
- 5.3.11 Fish landed at night or early morning must reach the auction floor by around 21:00–22:00 to be held on ice and sold the following day. The dependency on inter-island crossings is that delays potentially undermine the freshness and market value. Once sold, the fish is moved by mainland Shetland hauliers via the NorthLink ferry with other Shetland seafood into chilled loads bound for consolidation at distribution hubs in central Scotland, for onward distribution to customers. Whitefish volume also falls into the daily 'time sensitive' capacity guaranteed on NorthLink ferries.
- 5.3.12 Salmon is mostly processed in Shetland, while whitefish largely leaves the islands unprocessed, destined for further handling closer to consumer markets. The exception is small processors in Lerwick and Scalloway serving domestic markets.
- 5.3.13 As with salmon, the scale of the whitefish market in Shetland is dictated largely by the assured capacity on the NorthLink connection. Whilst there is appetite for growth and UK quotas are

favourable to attracting more fishing vessels into Shetland's ports and seafood market, the whitefish sector is not actively seeking more volume because the overall transport system today cannot accommodate it (this could again change when the new NorthLink freight plus vessels are introduced towards the end of this decade).

**Key Point:** An estimated 130 HGV trailer loads of white fish are moved each year from Cullivoe in Yell to auction in Lerwick and Scalloway. This is again a highly time sensitive product and thus there is a dependence on the inter-island ferry service to ensure a reliable connection to market.

### Shellfish, mussels and high-value fresh products

- 5.3.14 Shellfish and mussel farming in Shetland is undertaken on a smaller scale than for salmon but is no less dependent on logistics. Mussels are farmed around Unst and Yell, whilst shellfish are landed at numerous smaller piers across the islands. Due to the perishability of the products, timing is everything.
- 5.3.15 Live shellfish are collected by specialist vivier<sup>39</sup> trucks twice weekly. These vehicles arrive from Europe and return to these markets over 2-3 days. If a product misses the arrival of these trucks due to inter-island connection issues, the sale window is lost, the product cannot be stored, and it is therefore wasted.
- 5.3.16 Mussels are even more delicate. Harvesting is avoided unless ferry capacity and weather allow certainty of delivery. A single delay at Yell Sound can cause a complete loss of load. In such scenarios, local producers suffer irrecoverable financial loss.
- 5.3.17 This time sensitivity reinforces how critical regular and reliable inter-island crossings are, not just to move goods efficiently but to protect the integrity of perishable food chains.

**Key Point:** Shellfish and mussels are extremely time sensitive products and depend heavily on the provision of regular and reliable inter-island services. Delays and cancellations can cause a complete loss of product value.

### Agriculture and crofting

- 5.3.18 The crofting and wider agricultural sector in Shetland, while smaller in economic scale than aquaculture, remains central to rural island life and land management. There is crofting and livestock activity on most islands but greater volume in the North Isles. Crofting is often practised alongside other employment. Though few derive full livelihoods from crofting alone, the movement of livestock, agricultural inputs and the delivery of supporting services like veterinary provision is highly dependent on inter-island ferry services.
- 5.3.19 Whilst there are background movements of stock and materials year-round, livestock sales are seasonal, peaking during September and October when sheep (in the main, although much smaller volumes of cattle, ponies and other livestock are also moved) are moved off of the islands to auction marts in Lerwick, or in some cases, directly to the mart in Aberdeen or others on mainland Scotland.
- 5.3.20 No exact figures were found that indicated the scale of livestock activity in the individual islands, but annually Shetland exports between 80,000 and 100,000 sheep (96,000 in 2023). Of these, 80,000 were traded through Lerwick Auction Mart and 16,000 were shipped directly to other marts or for direct sale on mainland Scotland.
- 5.3.21 Movement off Shetland is via purpose-built livestock containers and coordinated bookings on NorthLink. During the peak, there is high demand, which motivates crofters to both make sure

<sup>39</sup> Vivier trailers are adapted trucks with water tanks that allow for the transportation of live shellfish.



their stock is booked for sale in the livestock auction and that, once sold, can quickly be transferred to the ferry for onward shipment. The reliability of the inter-island ferry services is particularly important during these windows, when tight timetables are needed to meet auction sale days or onward sailings. Stakeholders noted that a missed auction or missed ferry could mean missing an entire sale cycle, affecting both livestock pricing and animal welfare. These are planned and periodic events that, if missed, can significantly affect household income for crofters and producers, for whom incomes are already generally low.

- 5.3.22 Whereas livestock movements on Shetland were previously undertaken extensively by commercial and livestock hauliers, many crofters now use their own vehicles and livestock trailers. This has allowed a more manageable feed into the auction mart and greater flexibility, whilst the improved capability of pickups and livestock trailers is an additional reason for this. This trend is observed in the carryings data, where the profile and volume of movements for 'non-commercial trailers' to islands correlates well with the seasonality of livestock movements, as is shown in the figure below:

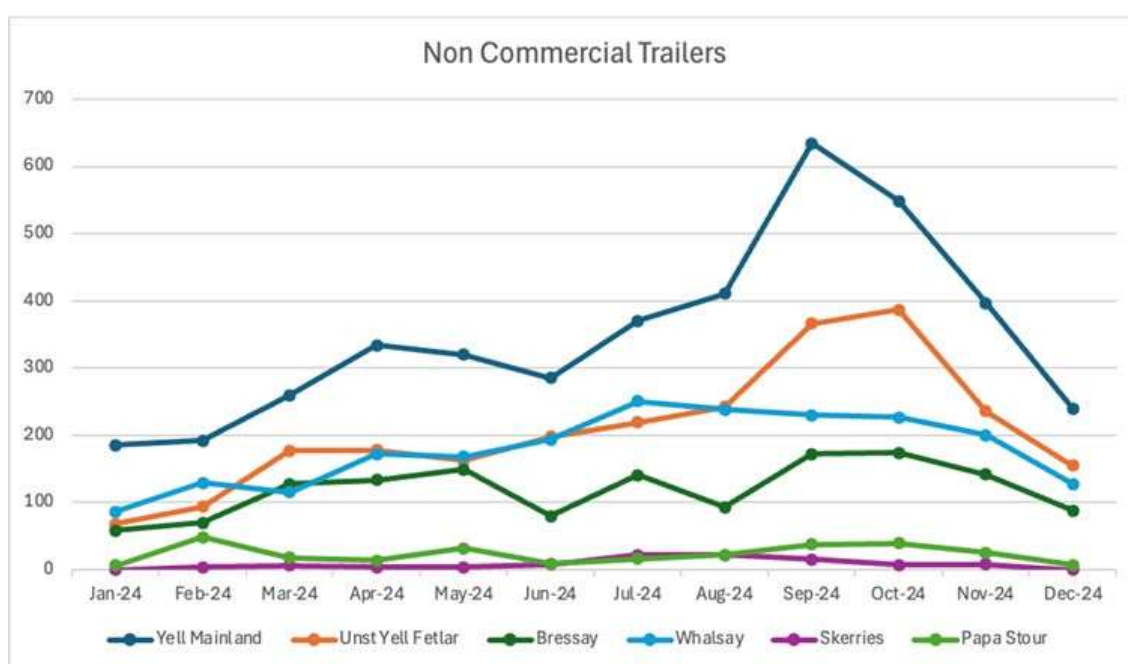


Figure 5.1: Profile of non-commercial trailer movements (Source: Shetland Islands Council)

- 5.3.23 Vet visits are typically planned well in advance but can be disrupted by weather or mechanical issues on inter-island crossings. There is one veterinary service on Unst, but on-call supports for the sector are generally based on mainland Shetland. As with the supply of many trades to the islands, the cost of providing these services must reflect travel and non-productive time at ferry ports and often relatively short productive days unless staying over. This contributes to an increasingly reactive, rather than preventative, approach to animal welfare in island communities.
- 5.3.24 Many crofters are generally self-sufficient in feed, growing what they can locally, but ferry delays can still impact delivery of specialist feeds and supplements when required. Agricultural support services, such as equipment repairs, fencing materials and building supplies all follow similar logistics patterns to general construction freight. Contractors or tradespeople often must factor in a full day for what should be a short job, making routine improvements or urgent fixes slower and more expensive.
- 5.3.25 In Unst and Yell, transport limitations have compounded demographic pressures on crofting. With few young people staying or returning to take up crofting, the knowledge base and sustainability of these practices are increasingly at risk. Limited connectivity reduces the



feasibility of combining crofting with employment elsewhere, a model that historically supported the continuation of crofting in these communities.

**Key Point:** Agricultural movements (livestock, primarily sheep) in Shetland are highly concentrated in September and October, the traditional livestock export season. These movements require a reliable connection to ensure that stock makes it to market at the appointed time. Livestock movements place significant demand on the ferry service, compounding the daily background traffic from the aquaculture / seafood sector.

A recent trend in Shetland has been a reduction in the movement of livestock by hauliers, offset by a growth in self-haulage (vehicle and trailer). Whilst more efficient and potentially lower cost for the crofter, it puts added pressure on ferry vehicle deck capacity, as it is a much more space intensive way to move product.

### Retail supplies and domestic products

- 5.3.26 Retail supply-chains and domestic parcel deliveries are essential for island residents, supporting both the local economy and quality of life. From groceries and household goods to internet orders and replacement parts, these movements rely on a regular, timely and predictable inter-island transport system.

#### Retail

- 5.3.27 Shops that serve the community are typically 'general stores', receiving the bulk of their deliveries from Lerwick wholesalers such as J.W. Gray & Co and Hughson Bros - on Tuesdays and Thursdays. Tuesdays typically bring in fresh produce like bread and milk, while Thursdays serve as a weekend stock-up. These Lerwick based wholesalers will make additional runs to fulfil orders if there is sufficient volume. They also often have van load freight to serve vessels berthed at ports in the islands.
- 5.3.28 RS Henderson is a key player in the North Isles, operating daily shuttles between their depots in Cullivoe and Scalloway from which they routinely collect, deliver and move general freight.
- 5.3.29 Community retailers do not exclusively use Lerwick wholesalers. Stakeholders noted that in the quest for improved choice and value, products are also sourced from mainland wholesalers. For example, bulk dry goods may be ordered from Booker Wholesale in Aberdeen, where arrangements are made for the goods (on pallets typically) to be collected by a main haulier (Streamline, Northwards or DFDS) to bring back to Shetland. From there, the local sub-contract network with RS Henderson or Whalsay Haulage will complete the delivery.
- 5.3.30 Delivery cost is a key consideration, meaning small retailers often maintain a mix of purchasing and supply across: Lerwick wholesaler delivery; collection from cash and carry in the shopkeeper's car; ordering from mainland wholesalers in Aberdeen or even Glasgow; or for smaller volume, non-perishable 'fancy goods', using online sources like Amazon Business Accounts, where goods are delivered free of charge as a regular parcel delivery.
- 5.3.31 Shops strive to limit waste by holding minimal stock, especially for perishables, but this model makes them more vulnerable to transport delays. A missed ferry can result in delayed deliveries arriving after shop closing hours, especially when deliveries are timed for early afternoon. Retailers are often forced to absorb financial loss or attempt to reschedule deliveries at short notice.
- 5.3.32 The capacity of ferries affects both delivery schedules and the cost of service. Larger vans and increasing volumes of consumer goods, particularly in the summer months, make bookings more competitive. In some instances, island retailers reported abandoning planned

shopping trips altogether due to lack of ferry vehicle deck capacity or concern about delays on the return journey.

- 5.3.33 Fetlar relies heavily on coordinated deliveries via North Yell. The local shop on Fetlar places orders through the North Yell shop, which then consolidates deliveries for ferry transfer. Deliveries of the goods are made to the pier, where ferry crew assist in loading and offloading. This system, while effective, is fragile and sensitive to ferry reliability issues. Alternatives, such as minibus shuttling of goods with informal ferry assistance, are being explored to maintain cost-efficiency.

**Key Point:** Island retail needs are primarily served from Lerwick and mainland Scotland wholesalers, with delivery from Lerwick sub-contracted to local hauliers.

#### Domestic

- 5.3.34 Domestic parcel traffic has grown steadily with the rise in internet shopping. While Royal Mail operate their own delivery network, commercial carriers such as Amazon, DHL, DPD and Evri rely on Shetland hauliers, primarily Streamline and to a lesser extent Northwards and DFDS Shetland, for delivery and distribution in Shetland. RS Henderson sub-contracts to these main hauliers for the North Isles and Whalsay Haulage does similar for Whalsay. Deliveries to the islands of small population is via the 'pier drop' arrangement outlined previously. Bressay is typically treated as an extension of Lerwick for the delivery of domestic parcels.

**Key Point:** The delivery of domestic parcels works in a similar manner to the supply of retailers.

#### Project delivery

- 5.3.35 Major infrastructure projects on Shetland's islands require the movement of substantial volumes of materials, equipment and personnel, often over extended but defined timeframes. Whilst local contractors and national developers are experienced in adapting to island environments, the constraints of working around ferry services introduces planning challenges, adds cost and requires bespoke logistical strategies. Examples are provided below for Spaceport on Unst, Council roads maintenance and renewable energy projects on Yell.

#### Coordinating flows to the Saxa Vord Spaceport, Unst

- 5.3.36 The Saxa Vord Spaceport development on Unst has brought a significant flow of construction activity. These flows include aggregates, structural materials, large plant and equipment, fuel and specialist labour, all of which must pass through the Yell and Unst ferry crossings. This two-stage route is manageable for smaller-scale activity but, when scaled-up to construction project levels, complex challenges emerge which have to be overcome.
- 5.3.37 The contractor leading groundworks and infrastructure at the Spaceport, coordinated delivery of materials around ferry capacity and sailing schedules but encountered several challenges in doing so. A specific example of economic loss for Shetland related to aggregates, where the ideal solution was to source from local Shetland quarries. There was no problem with supply, quality or cost but, due to volume and frequency requirements (at one point, 40-50 truckloads per day were needed), aggregates ultimately had to be sourced from Norway and delivered by sea to Baltasound, as direct loading to the vessel at the quarry was possible and the required volume could be moved more efficiently. This approach was a necessity in de-risking the Spaceport project timeline but resulted in a several million Pounds financial loss to the Shetland economy.
- 5.3.38 Staff and contractor travel is also a key planning factor. With limited accommodation on Unst and only a very limited pool of resident trades, most workers travelled from Lerwick daily. This required scheduling around morning and evening ferry windows, and contingencies in case of

disruption. Site productivity was carefully matched to the ferry timetable - a constraint that shaped everything from shift lengths to delivery sequencing, increasing the cost of project delivery.

### **Roads maintenance and upgrades**

- 5.3.39 The above cited problems also apply to maintaining and developing the road network in the islands. For example, plans to construct a four-kilometre access road to the Spaceport required the movement of hot bitumen from Scord Quarry in Scalloway, the only such facility in Shetland. Given the perishability of bitumen (it cannot be used if cooled too much) and the journey time between Scalloway and Unst, the access road could not be delivered as planned.
- 5.3.40 The Council's Roads Service noted the same issue. Everyday maintenance can be delivered, but major road resurfacing works demand high volume movements of hot asphalt from the Scord quarry. The requirement to maintain the asphalt's temperature means the work can only realistically be done in summer when demand on the crossings is at its highest.
- 5.3.41 Another example of the challenges faced is the B9082 Cullivoe Road Improvement Project. Stakeholder feedback suggests that contractors' rates are higher than they would be in mainland Shetland due to having to work around ferry connections with limited capacity and the additional journey times.

### **Renewable energy projects on Yell**

- 5.3.42 Large-scale renewable energy developments on Yell are already prompting forward planning from the scheme developers. Statkraft and SSE Transmission are progressing two onshore windfarms (Energy Isles and Beaw Field) and grid infrastructure projects (to connect these to the substation at Kergord, central Shetland) that will require the movement of turbines, cable reels, transformers and other heavy components (alongside the regular movement of labour and contractors).
- 5.3.43 Both organisations are engaged in early logistical planning. Flows to and from Yell will likely include daily movements of aggregates, steel, electrical components and housing units for workforce accommodation. Transport will run alongside other ferry users, including residents, business freight and essential services, requiring a careful balance of priorities.
- 5.3.44 Statkraft and SSE have begun identifying potential pinch points, particularly the Yell Sound crossing and the use of pier infrastructure for the receipt of large equipment planned to move by barge from Lerwick (Greenhead Base). To mitigate the pressures, the developers are exploring options such as:
- Consolidated bulk shipments to reduce the number of individual vehicle movements
  - Temporary staging areas on Yell to smooth the timing of deliveries
  - Early engagement with ferry operators and hauliers to secure consistent access
- 5.3.45 Again, whilst contractors will work around the available connections, such workarounds can add to both cost and programme.

### **Broader challenges with developing the islands**

- 5.3.46 Other infrastructure projects-including housing developments, school improvements and health centre upgrades experience similar challenges. Contractors must plan jobs meticulously around ferry times. If ferry crossings do not align with working hours, projects either stretch across more days than necessary or require expensive overtime payments. This can result in housing projects being 30%-50% more expensive than comparable work on mainland Shetland (further exacerbating the commercial challenges associated with housebuilding).

- 5.3.47 Machinery transport is another pinch point. Large plant vehicles such as diggers, rollers and specialist plant often require significant deck space and are difficult to schedule around other ferry users. This is particularly the case on Bluemull Sound, where such vehicles must be lashed. With a fixed number of sailings, any breakdown or timetable disruption can delay delivery of equipment by a full day or more. When equipment is stranded on the islands due to missed return crossings, it reduces fleet availability and increases project costs. Foula, Skerries and Papa Stour to some degree require specialist arrangements altogether, either chartered vessels or landing craft, adding time, cost, complexity and risk to any project.
- 5.3.48 Access to the more geographically remote islands such as Foula and Skerries can also dictate whether certain projects proceed at all. A stakeholder reported that a proposed NHS refurbishment in Foula was delayed over a year due to recurring flight cancellations and ferry reliability issues. For small-scale projects requiring minimal materials or short-duration work, the cost of the logistics can often outweigh the value of the work itself. This dissuades private contractors and even larger firms from quoting at all. The result is either long delays for work, self-delivery by residents or ongoing underinvestment in essential facilities.

**Key Point:** Businesses are accustomed to working around the challenges of delivering projects in island locations. However, it is a truism that the requirement to work around timed connections with fixed capacities makes delivering projects logistically difficult and more expensive.

### Other end businesses

- 5.3.49 Beyond the key sectors already discussed, a number of other commodities flows and logistical patterns were highlighted in the stakeholder evidence. These movements, while sometimes smaller in scale, are essential to everyday life and service delivery in the islands.

#### Commodities and materials

##### Aggregates and construction inputs

- 5.3.50 One local example is aggregate sourced from a quarry at Gutcher on Yell, which is used for local construction and road projects. The supply-chain is relatively short, but ferry availability still plays a role, especially when larger plant or bulk transport is needed. Timing deliveries around ferry schedules remains a planning constraint, even for intra-island projects.

##### Scrap vehicles and waste flows

- 5.3.51 Scrap vehicle movements from Fetlar, Unst and Yell to Lerwick occur on a rolling *ad hoc* basis. The build-up of scrap cars is linked in part to the MOT exemption granted to the isles, which can result in 'isles cars' remaining in use longer and eventually accumulating.
- 5.3.52 Whilst white goods are collected by the Council, skips for bulky household rubbish were withdrawn in 2014, with Unst Partnership now stepping in to provide the service for a small subscription. These arrangements contribute to regular but low volume freight flows to the mainland for waste management.

##### Utilities and maintenance

- 5.3.53 The water system on Unst, though still operational, relies on an ageing network of pipework that requires frequent repair. This drives additional movements of tradespeople and small equipment. Similarly, the maintenance of public buildings and utility infrastructure results in light but essential goods movement and contractor travel, often by local trades teams or specialist sub-contractors from Lerwick, and at costs that reflect the risks and low productivity that result from travel to and from the islands.

### **Operators and hauliers**

- 5.3.54 RS Henderson remains the key logistics operator in the North Isles, with regular daytime vehicle movements (typically 07:00-17:00). In addition to seafood haulage, they deliver general freight and parcels, often picking up consolidated loads from Lerwick. Their operations also support Royal Mail's daily van deliveries across the islands.
- 5.3.55 Royal Mail provides a daily service, bringing both letters and parcels to even the most remote islands. However, delivery efficiency is affected by ferry delays, especially when island-to-island transfers are required.
- 5.3.56 Unst Partnership also plays a logistics role in managing local recycling and waste movement, stepping in where Council services have been reduced.

### **Seasonal patterns and peaks**

- 5.3.57 Freight and service flows tend to follow clear weekly and seasonal rhythms. Mondays, Wednesdays and Fridays are described as "peakier" days, aligning with NorthLink's 'via Kirkwall' sailings. Early morning arrivals on the NorthLink ferry into Lerwick triggers spikes in bookings on the Yell Sound ferry between 08:00 and 10:00. This period sees a concentration of inbound seafood sector supplies such as packaging, polyboxes and similar industrial inputs, inbound trades and general travel. This creates capacity pressure on the ferry service.
- 5.3.58 Tourism adds a seasonal overlay, typically peaking from April to September, with specific spikes around Up Helly Aa in January / February and during September / October, which is also livestock season. Local services adjust around these seasonal pressures and residents and businesses plan accordingly.

### **Common themes and constraints**

- 5.3.59 Whilst many of these flows are routine and low-profile, they all rely on predictability. Delays, disruptions or loss of service can quickly cause small issues to escalate — missed waste collections, postponed repairs, delayed tradespeople or overloaded return sailings. Communities and operators compensate by planning ahead, combining trips, or holding local stock. This however increases the cost of doing business and erodes convenience.
- 5.3.60 Planning and personal organisation were described as key to making the system work - a theme echoed across sectors. The cumulative result is a system that functions, but only because communities, businesses, hauliers and ferry crews invest significant effort to make it do so.

## **5.4 Staffing, recruitment and workforce mobility**

- 5.4.1 Whilst much of this chapter has focused on the movement of products and plant, a consistent message across stakeholders was that inter-island connectivity plays a critical role in shaping workforce availability, recruitment and how services are delivered across Shetland's islands. Whilst each island group has its own local context, a shared set of challenges emerged around attracting staff, sustaining local employment and enabling residents to access wider economic opportunities.
- 5.4.2 In Unst and Yell, where the majority of larger employers are located, ferry reliability and scheduling were seen as major constraints on recruitment. Cooke Aquaculture, which operates both sea sites and a processing factory on Yell, faces ongoing difficulty in filling roles, particularly night shift and on-call positions. The company noted its focus on good pay and conditions, including covering the ferry fare of workers who commute. Staff retention is however an ongoing challenge, especially on Unst, where the pool of potential candidates is largely limited to those who live on Unst, Yell or Fetlar, or those with the flexibility and

resilience to manage a two-ferry commute every day. Even then, for some roles, it is simply not possible to get to the place of work at a time that makes taking a given job an option.

- 5.4.3 Employers described how shift-based roles on mainland Shetland require staff to be available at fixed times. The risk of missed ferries, cancellations or delays means that island residents often cannot meet these expectations. As a result, many have relocated from the islands to mainland Shetland to provide the necessary certainty in meeting job requirements. This feature contributes to depopulation and makes it harder to retain young people in the islands.
- 5.4.4 For companies which work across all of Shetland's islands, the movement of skilled trades and site workers highlighted several specific issues. Increasingly, tradespeople must be certificated, for example for working on oil boilers, as plumbers, as electricians etc. To do so has increasingly meant qualified trades are based in Lerwick, where there is ample work for their skills. This is not the case in the islands, so staff regularly travel to Bressay, Unst, Whalsay and Yell, but ferry schedules shape both the length of the working day and the feasibility of quoting for jobs. On Unst for example, working around ferry connections often means that full-day costs must be charged for relatively small jobs. Stakeholders in this sector noted that this pushes up prices by 20%-50% and that, for smaller projects, they may decline to quote altogether.
- 5.4.5 These constraints also shape where people live. Several stakeholders identified that staff originally from Unst and Yell often now reside in mainland Shetland. Others have opted not to return to the islands after training or university, citing the lack of dependable access to Lerwick-based employment. Employers across sectors noted that younger workers in particular are making housing and life choices based on access to opportunity, not just local availability.
- 5.4.6 Housing availability is a related concern. On Unst and Yell, limited housing stock, especially energy-efficient or affordable options, makes it harder to attract new staff. Much of the existing housing is dated. On Yell, no new social housing has been built since 2000, and prospective tenants or homebuyers are deterred by both transport issues and housing quality. In Unst, more accommodation is available, partly due to legacy infrastructure at the former MoD site now used by the Spaceport, but housing options remain constrained in the longer-term.
- 5.4.7 In the smaller islands - Fetlar, Foula, Papa Stour and Skerries - the challenge is even more acute. Service providers such as the NHS or housing officers face barriers in arranging visits, let alone sustaining a resident workforce. Contractors and professionals are often unwilling to commit to jobs that may involve being stranded overnight or losing days to travel. One stakeholder described how a simple property survey for an NHS refurbishment in Foula was delayed by over a year due to recurring transport cancellations. Even where services can be delivered, the time and cost overheads are substantial.
- 5.4.8 Communities have responded in different ways. Some, like the North Yell Development Council (NYDC), are investing in multi-use hubs that can provide accommodation for visiting workers or emergency beds for those delayed by ferry disruption. There is also growing interest in new models of flexible or self-service businesses that reduce the need for constant staffing. For example, NYDC is considering a self-service café. However, these responses are compensatory, not transformative. Many stakeholders spoke of a persistent sense that while the islands are rich in potential, the transport network imposes a hard ceiling on what is possible.



**Key Point:** The inter-island transport network determines who can live where, who can work where and how services are delivered. Whilst employers and communities have found ways to adapt, the cumulative effect of limited ferry capacity, reliability concerns and restricted timetables is a narrowing of opportunity. Stakeholders stressed that unlocking economic and social potential in the islands depends not just on transport for goods, but on enabling people to move confidently, consistently, and cost-effectively between Shetland's communities.

## 5.5 Summary

- 5.5.1 In summary, the stakeholder depth interviews highlighted that improved inter-island transport connectivity is **not just a transport issue, it is a structural enabler of growth, equity and opportunity across Shetland**. Whether through larger, more frequent ferries or the development of fixed links, stakeholders see real potential to unlock economic value, support vibrant communities and ensure that Shetland's islands of small population remain not just viable, but thriving in the years to come.

## 6 Network Problems

### 6.1 Overview

- 6.1.1 This chapter is the first to consider the ‘transport problems’ that will form the basis of the business case. It adopts a **network perspective**, effectively considering the **supply-side problems faced by the Council** in operating and maintaining the inter-island ferry network. This chapter precedes the island-by-island review of problems (i.e., those on the demand-side / faced by the passenger), many of which are a consequence of the constrained supply-side.

#### Ferries Resilience Review

- 6.1.2 It is important to note that the Council is facing immediate resilience problems associated with its ageing fleet, including longer refit periods and more frequent breakdowns, and a shortage of crew. In order to address this problem, the Council commissioned an internal **Ferries Resilience Review in 2024** to consider short-term measures which could be adopted to put the service on a more sustainable footing.
- 6.1.3 This review, which reported in September 2024, has highlighted a number of recommendations / actions including changes to crew shifts and pay and the requirement for the procurement of an additional vessel for the fleet.

#### How does the Ferries Resilience Review relate to the IITCP?

- 6.1.4 The Ferries Resilience Review is a standalone piece of work intended to deliver short-term improvements to the service. However, it is related to the IITCP in three ways:
- It provides **evidence on the current problems** facing the inter-island ferry service which has been used to inform this case for change
  - The immediate options emerging from it, for example a change in crew shift patterns, amends the ‘**reference case**’ against which options developed in this study will be considered. It should be noted that these changes are in progress but not yet complete, so any changes in e.g., shift patterns will be accounted for at OBC stage
  - The **options with a longer delivery period, a new vessel for example, will be fed into the option generation, development and appraisal stage** of this study (unless it is committed, in which case it would feature in the reference case)

### 6.2 Fleet Age

- 6.2.1 The most fundamental problem facing the Council at present is that of an ageing fleet. The ‘rule of thumb’ for the replacement of a passenger ferry operating in Scottish waters was defined in the *Scottish Ferries Plan 2013-2022* as 30-years<sup>40</sup>. This is not a hard and fast rule as ferries can operate for many years beyond this date so long as their steelwork is in good condition – indeed one of the world’s most luxurious small cruise ships, MV *Hebridean Princess*, was launched in 1964 as the Mull Ro-Ro ferry MV *Columba*. That said, as vessels get older:
- Breakdowns become more common
  - Refits take longer either because more work is required, or parts are harder to source
  - Systems become obsolete

<sup>40</sup> *Scottish Ferries Plan 2013-2022* (Transport Scotland, 2012), p. 9.

- Compliance with modern legislation and regulations becomes harder to maintain, with a dependence on 'grandfather rights' often required
- 6.2.2 These types of issues have very much come to the fore in Scotland in recent years. The most recent and high-profile cases have obviously been on the Clyde and Hebridean Ferry Services (CHFS) network and for the Corran Ferry, but Shetland Islands Council has also begun to experience these problems in recent years (which was part of the justification for undertaking the Ferries Resilience Review).
- 6.2.3 The table below summarises the age of the Shetland ferry fleet in chronological order (note the Fair Isle vessel *MV Good Shepherd IV* is excluded as she is in the process of being replaced and is out of scope for this study):

Table 6.1: Shetland Islands Council internal ferry fleet – vessel age as of May 2025

| Vessel                | Primary Route                      | Entered Service | Age in 2025 |
|-----------------------|------------------------------------|-----------------|-------------|
| <i>MV Hendra</i>      | Symbister – Laxo / Vidlin          | 1982            | 43          |
| <i>MV Snolda</i>      | West Burrafirth – Papa Stour       | 1983            | 42          |
| <i>MV Fivla</i>       | Spare                              | 1985            | 40          |
| <i>MV Geira</i>       | Bluemull Sound                     | 1988            | 37          |
| <i>MV Bigga</i>       | Bluemull Sound                     | 1991            | 34          |
| <i>MV Leirna</i>      | Lerwick – Bressay                  | 1992            | 33          |
| <i>MV New Advance</i> | Foula – Walls                      | 1996            | 29          |
| <i>MV Linga</i>       | Symbister – Laxo / Vidlin          | 2001            | 24          |
| <i>MV Filla</i>       | Skerries – Laxo / Lerwick / Vidlin | 2003            | 22          |
| <i>MV Dagalien</i>    | Toft – Ulsta                       | 2004            | 21          |
| <i>MV Daggri</i>      | Toft – Ulsta                       | 2004            | 21          |

- 6.2.4 The key points of note from the above table are as follows:
- The **average age of the fleet** as of May 2025 is **31.5 years**
  - **Six of the eleven vessels in the Shetland fleet are over 30-years old**, with three of these vessels now having entered their fifth decade
  - There have been **no new vessels introduced into the Shetland fleet for over 20-years**, and none are currently on order
- 6.2.5 In addition to the age of the vessels, there are several ships in the fleet which do not comply with modern legislation – for example:
- *MV Hendra*, *MV Fivla*, *MV Geira* and *MV Bigga* all have passenger accommodation below the waterline, accessed by steep steps
  - *MV Snolda* is limited to carrying 12 passengers due to insufficient watertight sub-division
- 6.2.6 There is therefore evidently a requirement for a significant fleet renewal over the next 10-15 years and / or potential replacement of some ferry services with fixed links.

**Key Point:** The Shetland internal ferry fleet is ageing, with an average age of 31.5 years and with six of the eleven vessels over 30-years old. As a consequence of their age, a number of the vessels in the fleet do not comply with modern legislation and fall below passenger expectations. Significant fleet renewal will be required over the next 10-15 years, for which there is at present no committed funding.

## 6.3 Crewing

- 6.3.1 Attracting and retaining crew has been a major challenge for the Council in recent years and it is an issue which is affecting both reliability and resilience. For example, there was significant disruption to the Bluemull Sound service in 2024, most notably with amended timetables in place between 22<sup>nd</sup> and 28<sup>th</sup> May 2024<sup>41</sup> and 10<sup>th</sup> to 12<sup>th</sup> October 2024<sup>42</sup> due to crew sickness and insufficient cover.
- 6.3.2 Securing sufficient seafarers with the appropriate ‘tickets’ (qualifications) is becoming an increasing challenge for the Council, with several posts having gone unfilled for long periods. It is understood that this is a particular issue for engineers. A shortage of qualified seafarers is a global issue, with Drewry’s 2023/24 Manning Annual Review and Forecast finding that seafarer labour shortages are at a 17-year high.<sup>43</sup> However, there are several Shetland-specific factors that are contributing to this issue:
- Most of the ferry crew jobs in Shetland have conventionally been filled by residents of the archipelago, and in many cases by island residents (i.e., those living in the islands rather than mainland Shetland) themselves. However, at 1.12, Shetland has **one of the highest job densities<sup>44</sup> in Great Britain, ranked 23<sup>rd</sup> out of 350 local authorities** and second only to Aberdeen City in Scotland. In short, there are more jobs than prospective employees, making recruitment difficult. Demographic change is exacerbating this problem
  - Shetland Islands Council adopted a **Single Status Agreement (SSA)** in 2009. An SSA was a mechanism by which all ‘Manual Workers’ and ‘Administrative, Professional, Technical and Clerical’ staff had their jobs formally reviewed, ‘scored’ and then matched against a new pay and grading structure – this was a UK national process intended to address historic pay inequality, particularly with respect to gender. The application of the SSA to ferry crew is somewhat challenging because seafarers who work for ferry / shipping companies are paid within a different structure and more generously. Qualified Council ferry crew therefore have access to more lucrative opportunities elsewhere, and it is often the combined draw of being able to go home each evening and remain on-island that keeps them in Shetland. This issue has affected other Council-run ferry companies, The Highland Council with the Corran Ferry for example
  - Connected to the above point, there are **a range of other seafaring jobs available in and around Shetland**. Whilst diminished from its peak, the North Sea oil industry remains a key employer, whilst opportunities are also available in the expanding offshore wind and aquaculture industries
  - Finally, for compelling socio-economic reasons, and in some cases for operational reasons, **the Council has chosen to base ferries in several of the islands (Bressay, Fetlar, Foula, Whalsay (three vessels) and Yell (also three vessels, two at Ulsta and**

<sup>41</sup> <https://www.shetland.gov.uk/news/article/2651/operational-note-ferry-services-on-bluemull-sound-%E2%80%93-22-28-may-2024>

<sup>42</sup> <https://www.shetland.gov.uk/news/article/2565/operational-note-ferry-services-%E2%80%93-yell-sound-and-bluemull-sound>

<sup>43</sup> <https://www.imarest.org/resource/solving-the-seafarer-shortage.html>

<sup>44</sup> Jobs density is the total number of filled jobs in an area divided by the resident population of working age in that area. A jobs density of >1 implies that there are more jobs than prospective workers.

**one at Gutter / Cullivoe).** Continuing to crew these vessels from islands with small, diminishing and ageing populations presents a further challenge

6.3.3 The Council has had to contend with long-term unfilled crew vacancies, particularly on Bluemull and Yell Sounds. It has addressed these crew shortages through employing agency staff, which has been critical in being able to continue operating the service at its current level. Total ferry service agency costs first appear in the data in FY2021/22, when **£135,749** was spent on agency crew. By FY2024/25, this had escalated to **£1,097,958**, an **eightfold increase**. Agency crew have been a feature of all directly Council operated routes in the last three years, but **Bluemull Sound accounted for 46% of total agency expenditure in FY2024/25**.

6.3.4 Whilst the service could not operate to its current level without agency staff, the use of such crew is not sustainable at scale and in the long-term, for the following reasons:

- It is **expensive for the Council** as agency crew have to be paid at a higher rate (although this in-part reflects the fact that they do not get other benefits such as employer pension contributions) and have travel and accommodation covered. Most if not all agency crew also come from outside of Shetland which means that **money 'leaks' out of the islands** in a way that it would not with Shetland domiciled crew
- Transient crew do not develop the longer-term **vessel and route knowledge** that permanent crew have
- There are potential issues on the **morale of permanent crew** associated with frequent changes of personnel and being paid less than agency crew

**Key Point:** The availability of qualified ferry crew, and in particular engineers, is placing a significant resilience challenge on the Council Ferry Service. There is a global shortage of qualified seafarers (and engineers in particular), but this issue is being compounded by several Shetland specific factors. Agency crew members are playing a crucial role in maintaining the current level of service (by and large) but this is not a sustainable long-term solution.

## Succession planning

6.3.5 In addition to the current crewing pressures faced by the Council Ferry Service, there is a longer-term question around succession planning, particularly on routes where the crewing position is already precarious.

6.3.6 The age profile of the Council's ferry crew is skewed towards the older demographics – this is shown in the table below which illustrates the proportion of contracted sea staff (i.e., it excludes relief crew) by age band:

Table 6.2: Shetland Islands Council Ferry Service contracted sea staff by age band

| Age Band     | No. of crew | % of total |
|--------------|-------------|------------|
| 16-25        | 12          | 9%         |
| 26-35        | 36          | 26%        |
| 36-45        | 19          | 14%        |
| 46-55        | 29          | 21%        |
| 56-65        | 37          | 27%        |
| 66-75        | 3           | 2%         |
| <b>Total</b> | <b>136</b>  |            |

6.3.7 The key points of note from the above table are as follows:

- Exactly **half of the crew are 46 or older** – they are therefore closer to state retirement age than the start of their career
- Just **over a quarter** of crew are within ten years of state retirement age
- Only **9% of crew are aged 16-25**, which suggests an insufficient replacement rate for those over or approaching state retirement age within the next decade (**29%**)

6.3.8 This is of itself a challenge, but it is compounded by the fact that the populations of the islands and Shetland more generally are ageing. This is a particular problem in islands like Fetlar, where there are no children. In short, the long-term 'domestic' labour market is diminishing in size and, in an archipelago where labour shortages are already problematic, the difficulties of maintaining (let alone expanding) the required number of skilled crew may become more acute.

**Key Point:** The demographics of the current ferry crew are skewed towards the older age groups and there is a clear challenge around long-term succession planning given the ageing population of the islands and Shetland overall.

## 6.4 Fleet Resilience

6.4.1 In addition to the issues around crew resilience, there is a further significant challenge around fleet resilience. At present, the Council has one very versatile 'spare' ferry, MV *Fivla* which can operate on all routes except that to Foula. This provides a degree of resilience if there is a vessel out of service, but service reductions are required if there is more than one vessel not operating. Moreover, **drydock** and **interchangeability** also present further resilience challenges.

### Drydock

6.4.2 Whilst there is nominally a spare ferry in the fleet, it should be noted that all of the vessels need to be drydocked annually. This process generally takes around four weeks per vessel on average and, with twelve vessels in the fleet, implies forty-eight weeks in total where fleet complement is reduced (albeit the vessels are not docked sequentially, with some routes going to a single vessel for a period). However, it is important to note that:

- The time spent in drydock is generally increasing as the vessels get older and refits take longer
- Six vessels in the fleet - MV *Bigga*, MV *Dagalien*, MV *Daggri*, MV *Filla*, MV *Leirna* and MV *Linga* – all have to be docked outside of Shetland due to the absence of suitable local drydock facilities. This extends the period of time the vessel and supervising crew are away from Shetland

6.4.3 There is therefore a significant period of the year where there is simply no cover vessel, and any breakdown thus requires a reduction in service.

6.4.4 It is also worth noting here that, due to the high standards of maintenance that the fleet has received, several vessels only need to be taken out of the water every second year. This makes service reliability much more resilient as work can be undertaken in Lerwick every second year rather than repositioning vessels to mainland Scotland.

### Interchangeability

6.4.5 A further challenge faced by the Council is that not all of the vessels in the fleet are interchangeable. This means that, in the event of a breakdown or when drydock cover is



required, only certain vessels can be deployed to certain routes. This is summarised in the table below:

Table 6.3: Routes to which the current fleet can be deployed

| Vessel                | Bluemull Sound | Lerwick - Bressay | Foula - Walls | West Burravirrh –<br>Papa Stour | Skerries - Mainland | Symbister – Laxo /<br>Vidlin | Toft - Uista |
|-----------------------|----------------|-------------------|---------------|---------------------------------|---------------------|------------------------------|--------------|
| MV <i>Bigga</i>       | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>Dagalien</i>    |                |                   |               |                                 |                     |                              | ✓            |
| MV <i>Daggri</i>      |                |                   |               |                                 |                     |                              | ✓            |
| MV <i>Filla</i>       | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>Fivla</i>       | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>Geira</i>       | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>Hendra</i>      | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>Leirna</i>      |                | ✓                 |               |                                 |                     |                              |              |
| MV <i>Linga</i>       | ✓              | ✓                 |               | ✓                               | ✓                   | ✓                            | ✓            |
| MV <i>New Advance</i> |                |                   | ✓             | ✓                               |                     |                              |              |
| MV <i>Snolda</i>      |                |                   |               | ✓                               | ✓                   |                              |              |

6.4.6 It should be noted that, whilst the fleet deployment in the table is accurate, crew familiarisation and vessel certification relating to approved areas of operation can preclude immediate redeployment in some cases.

6.4.7 The vessels and routes with the most limited deployment potential are as follows:

- As the largest vessels in the fleet, the Yell Sound ferries MV *Dagalien* and MV *Daggri* cannot be redeployed to any other routes. Both vessels are capable of working off the linkspan at Hamars Ness but cannot access Belmont or Gutcher
- MV *Leirna* can only operate the Lerwick – Bressay route as she is only certified for operation in Category D waters
- MV *New Advance* is the only vessel capable of routinely serving Foula due to the limitations of Ham Harbour. It is understood that MV *Snolda* has previously called at Foula, but the entrance channel has since silted up such that she can no longer easily access it

**Key Point:** Fleet resilience is a major challenge with the Shetland ferry fleet. A combination of an ageing fleet, only having one spare vessel (and even that only outside of drydock periods) and harbour and vessel certification limitations on certain routes means that there are several potential points of failure.

## 6.5 Vehicle Deck Capacity

6.5.1 A further pressure on the ferry service on some routes is the provision of adequate vehicle deck capacity at times when people want to travel. Overall, there is plentiful capacity across the day on all routes, but there are specific sailings across the day and week which are

routinely full, and there is evidence from the resident survey that this is preventing people from undertaking socially and economically valuable activities.

- 6.5.2 Whilst network car carryings have been broadly steady over the last decade, a key challenge in Shetland (and indeed elsewhere in Scotland) is that the average car has been getting bigger over time. This has been driven in large part by the growth in popularity of Sports Utility Vehicles (SUVs) which, according the European Automobile Manufacturers' Association, accounted for **51%** of total new car sales in the European Union in 2023.<sup>45</sup> A particular feature in Shetland is the use of pick-up trucks such as the Toyota Hilux for moving agricultural goods, as described in Chapter 5.
- 6.5.3 The consequence of this increase in vehicle size is that, on the older vessels, many vehicle types now take-up more space and can often straddle two lanes. This means that the actual vehicle deck capacity of several vessels is lower than their stated capacity. For example, on the Whalsay route, MV *Linga* and MV *Hendra* can only carry **16** and **11** cars respectively (which compares to their advertised carrying capacity of **18** and **12**). This loss of capacity, driven purely by vehicle size, puts added pressure on peak sailings, the 07:50 departure from Symbister for example. This trend is repeated across much of the network, Yell Sound perhaps being the one exception where the two vessels can generally carry their advertised capacity.
- 6.5.4 For context, the table below shows the proportion of total sailings within given time windows where **vehicle deck utilisation exceeded 75%** - i.e., sailings which were full or nearly full. It covers all Shetland Ro-Ro routes in the calendar year 2024:

Table 6.4: Proportion of total sailings where vehicle deck utilisation exceeded 75%

|                        | Tuesday-Friday<br>0700-1900 | Monday<br>0700-1900 | Saturday<br>0800-1900 | Sunday<br>0900-1800 | Average<br>(7 days, 0700-1900) |
|------------------------|-----------------------------|---------------------|-----------------------|---------------------|--------------------------------|
| Bluemull: Fetlar -Unst | 2.1%                        | 2.0%                | 5.0%                  | 1.8%                | 2.1%                           |
| Bluemull: Fetlar-Yell  | 2.5%                        | 3.5%                | 4.5%                  | 4.7%                | 2.9%                           |
| Bluemull: Unst-Yell    | 24.2%                       | 23.9%               | 23.5%                 | 26.9%               | 23.8%                          |
| Bressay                | 6.0%                        | 5.5%                | 3.7%                  | 3.2%                | 5.2%                           |
| Papa Stour             | 2.0%                        | 1.0%                | 0.5%                  | 0.0%                | 1.4%                           |
| Skerries               | 3.9%                        | 0.7%                | 0.9%                  | 7.1%                | 3.4%                           |
| Whalsay                | 32.8%                       | 32.8%               | 23.2%                 | 38.1%               | 30.8%                          |
| Yell Sound             | 13.8%                       | 14.3%               | 21.6%                 | 13.9%               | 14.3%                          |

|               |
|---------------|
| under 5%      |
| 5%-15%        |
| more than 15% |

- 6.5.5 Whilst routes will be considered individually in the chapters which follow, the headline points of note from the above table are:
- Capacity is routinely pressured on both the **Symbister – Laxo / Vidlin** and **Gutcher – Belmont** routes
  - Around **14%** of sailings on **Yell Sound** are effectively full across the week
  - Weekends** are also problematic on the routes where a single vessel service is operated compared to a two-vessel service during the week (although Whalsay does now have a two-vessel service on a Saturday)

<sup>45</sup> <https://www.acea.auto/figure/new-passenger-cars-by-segment-in-eu/>

- Whilst there are few capacity issues overall on the other routes, there are certain sailings that are routinely under pressure (and which will be set out in more detail in the island specific chapters which follow)

6.5.6 Addressing the capacity problem poses a challenge for the Council and indeed for this study. The Shetland network in its current form was developed around close to unfettered car-based travel and thus there are very limited public transport connections from mainland ferry terminals to Lerwick or other destinations. Directly addressing the capacity challenge will require more or larger vessels (with corresponding infrastructure works) and additional crew but which would be largely empty outside of the peak periods and could effectively be stood down. Whilst this study must appraise this option, it also has to consider alternative connectivity such as increased bus services at mainland ports, demand management measures and, of course, fixed links.

**Key Point:** Providing and managing vehicle deck capacity is a daily challenge faced by the Council. There are evident capacity problems on certain routes and at particular times of the day or week, exacerbated by the recent growth in average vehicle size. The approach to accommodating the future demand for travel is an important strategic choice for the IITCP.

## 6.6 Cost

6.6.1 The backdrop to the challenges set out above has been a significant increase in the cost of operating the ferry service, as shown in the figure below:

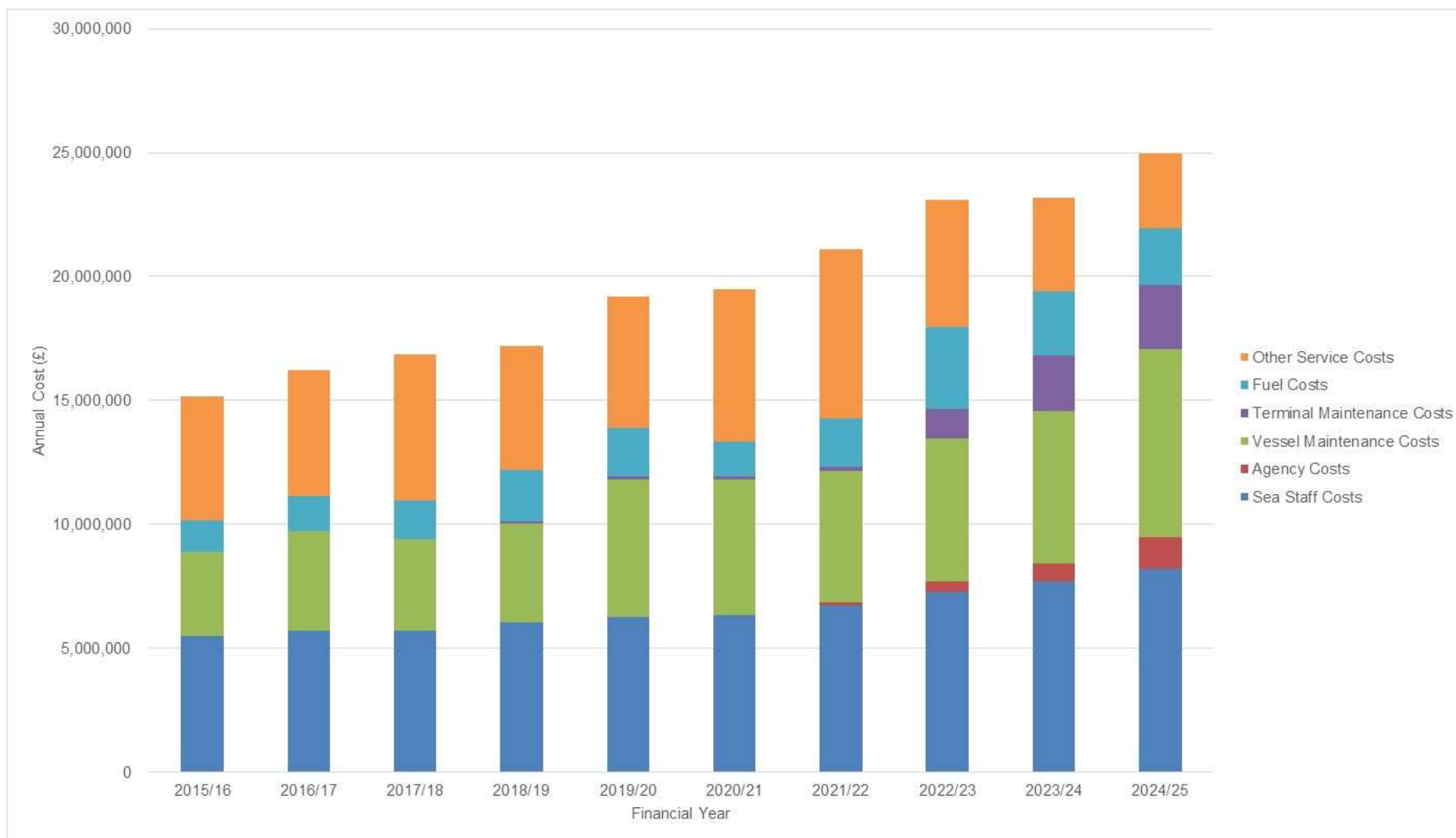


Figure 6.1: Shetland Ferry Service costs 2015/16 to 2024/25 (Source: Shetland Islands Council)

6.6.2 The key points of note from the above figure are as follows:

- There has been a year-on-year increase in the cost of operating the ferry service. The total cost in 2015/16 was circa **£15m**, but this increased to circa **£25m** in 2024/25, an **increase of around £10m per annum over a period of ten years**
- All components of cost have increased over the last decade. Related to preceding discussion, **increasing maintenance costs** (vessels and terminals) has been a major cause of this cost escalation. **Fuel costs** have also increased significantly
- These steep cost increases have been set against **broadly static revenue**, meaning that the annual deficit has increased year-on-year
- As detailed in **Section 3.2**, the Scottish Government has provided additional Section 70 funding since FY2018/19 to at first partially and later fully offset the annual revenue deficit. This has relieved the immediate funding burden on the Council, but the funding is only allocated in single year settlements via the Scottish Government Budget and, in any case, still represents a net cost to the public sector

**Key Point:** The operational challenges facing Shetland's internal ferry network have been compounded by sharp increases in cost and the annual revenue funding deficit. Whilst the additional Section 70 provided by the Scottish Government has offset this, the widening differential between cost and revenue remains a cost to the public sector overall.

## 7 Bluemull Sound

### Key facts

- **Population in 2022**
  - Fetlar: 66
  - Unst: 635
- **Ports**
  - Hamars Ness, Fetlar
  - Belmont, Unst
  - Gutcher, Yell
- **Vessels**
  - MV *Bigga*
  - MV *Geira*
- **Relief vessel**
  - MV *Fivla*
- **Overnight berth**
  - MV *Bigga*: Gutcher, Yell
  - MV *Geira*: Hamars Ness, Fetlar
- **Crossing time**
  - Gutcher – Belmont: 10 minutes
  - Gutcher – Hamars Ness: 25 minutes
  - Belmont – Hamars Ness: 25 minutes
- **2024 car carryings: 73,461**
- **2024 passenger carryings: 141,841**

### 7.1 Overview

- 7.1.1 Bluemull Sound is the strait separating the islands of Yell and Unst and the name used colloquially to describe the triangular ferry route between Gutcher (Yell), Belmont (Unst) and Hamars Ness (Fetlar). The Bluemull Sound is the only route of this nature in Shetland, with two vessels regularly serving three ports, operating a combination of point-to-point and triangular services to and from Gutcher.
- 7.1.2 Whilst the Bluemull Sound route serves the communities of Fetlar and Unst, they are very distinct islands and the analysis which follows therefore considers them separately where appropriate.

### 7.2 Community Needs Assessment Step 1: Route Service Level

- 7.2.1 The table below sets out the incremental 'Route Service Levels' which have been developed as part of the Transport Scotland Community Needs Assessment methodology:



Table 7.1: Route Service Level definitions

| Level | Description                                                             | Example                                                                                                                |
|-------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| A     | Shared single vessel, single crewed <sup>46</sup>                       | Several routes in Orkney including: Rousay, Egilsay and Wyre; Stromness - Graemsay / Hoy; and Houton – Lyness / Flotta |
| B     | Shared single vessel, with more than a single crew                      | Uig – Tarbert / Lochmaddy (summer, currently)                                                                          |
| C     | Dedicated single vessel, single crewed                                  | Various 'small vessel' routes in the CHFS network, e.g., Sconser - Raasay, Tayinloan - Gigha etc                       |
| D     | Dedicated single vessel with more than a single crew                    | Colintraive – Rhubodach, which uses a shift system to offer an extended operating day                                  |
| E     | Two dedicated vessels, each with a single crew                          | Wemyss Bay - Rothesay                                                                                                  |
| F     | Two dedicated vessels, with one operating with more than a single crew  | Several routes on the Shetland inter-island network, e.g., Symbister – Laxo / Vidlin                                   |
| G     | Two dedicated vessels, with both operating with more than a single crew | CalMac Ferries Ltd (CFL) Gourock – Dunoon route                                                                        |

7.2.2 Where the table refers to '**more than a single crew**' (Levels B, D, F and G), this could be a small additional crew complement to extend the day or a full second crew.

7.2.3 The table below allocates the **Bluemull Sound** route to its relevant Route Service Level for both the winter and summer timetables:

Table 7.2: Allocation of Bluemull Sound routes to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         |         |         |         | ✓       |         |
| Summer |         |         |         |         |         | ✓       |         |

7.2.4 The Bluemull Sound routes currently operate with a 'shift vessel' (MV *Bigga*), which operates over a circa 18-hour day, and a day vessel (MV *Geira*) which operates over two split shifts Monday to Friday only.

## What are the main features of the route?

### Categorisation of waters

7.2.5 The Maritime and Coastguard Agency provides a categorisation of all waters around the United Kingdom. To ensure safe navigation, all vessels are assigned to a 'Class' which defines the waters in which they can operate and any restrictions associated with this. **Appendix B** provides further details on the categorisation of waters and vessel classification.

7.2.6 The **Bluemull Sound** route between Gutcher and Belmont is in categorised waters (Category D). Fetlar however is not in categorised waters and thus the Bluemull Sound route overall is considered 'open sea'.

<sup>46</sup> The operating day of a single crewed vessel is limited to the maximum hours that can be delivered by a single crew within the hours of work regulations and crew contractual agreements.

## Vessels

7.2.7 The Bluemull Sound route is operated by two vessels, the Yell-based MV *Bigga* and the Fetlar-based MV *Geira*. The key features of these vessels are summarised in the table below

Table 7.3: Key features of MV *Bigga* and MV *Geira*

| Parameter                         | MV <i>Bigga</i>                                                                   | MV <i>Geira</i>                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |
| Entered service                   | 1991                                                                              | 1988                                                                                |
| Passenger Certificate             | MCA Class IV, VI and VIA and also Euro C restricted                               |                                                                                     |
| Length Overall (m)                | 33.0                                                                              | 30.0                                                                                |
| Beam (m)                          | 10.1                                                                              | 9.0                                                                                 |
| Draught (m)                       | 2.61                                                                              | 2.61                                                                                |
| Passenger Capacity                | Maximum 96, but can be varied with passenger certificate                          |                                                                                     |
| Published Vehicle Capacity (PCUs) | 14                                                                                | 10                                                                                  |
| Crew                              | 5                                                                                 | 4                                                                                   |

7.2.8 The following points should be noted in relation to the Bluemull Sound vessels:

- The Bluemull Sound vessels have a series of **different passenger certificates** which are used to reflect seasonal operating conditions and passenger demand. An additional crewman can be deployed to increase the passenger capacity
- Both vessels can operate year-round on an **MCA Class IV certificate whilst solely within categorised waters** (a legacy classification for vessels built before 2010), which is equivalent to a **Euro C**. This allows the vessels to carry the full complement of passengers and crew year-round, between Gutcher – Belmont
- When on route **to / from Hamars Ness**, the vessels operate on either an **MCA Class VI or VI(A) certificate** depending on the time of year and weather conditions. Maximum passenger numbers vary between 46 and 95 depending on the vessel and certification being used
- Both vessels are **ageing**, which is increasing maintenance costs, extending docking periods and making it harder to source spare parts
- The size of modern vehicles means that **neither MV *Bigga* nor MV *Geira* can carry their published vehicle capacity**
- The **passenger accommodation on both vessels is below the waterline**. This is non-compliant with modern legislation, with both vessels operating under ‘grandfather rights’
- The situation of the passenger accommodation also makes it **inaccessible (or at best difficult to access) for Persons of Reduced Mobility (PRM)**, with steep stairs leading down from the car deck to the passenger lounge
- MV *Bigga* has **limited cargo deadweight capacity**. This means that, on occasions, traffic may need to be turned away even if there is car deck space available. This could become increasingly problematic once Spaceport comes onstream

- 7.2.9 In a more recent development, on 17<sup>th</sup> October 2024, a cement mixer toppled over on the deck of MV *Bigga*. Following this incident, the Maritime and Coastguard Agency mandated that all vehicles over 3.5 tonnes and special vehicles (i.e., dangerous goods) travelling between Gutcher and Belmont (and vice versa) must now be securely lashed (this was previously at the Master's discretion). This provision has always applied on the Fetlar leg of the route as it is in open sea.

**Key Point:** The Bluemull Sound vessels are ageing and are thus becoming more expensive to maintain. They are non-compliant with modern legislation in terms of the passenger accommodation being below the waterline, which presents physical accessibility issues for passengers.

## Ports

- 7.2.10 The map below shows the three ports on the Bluemull Sound route:

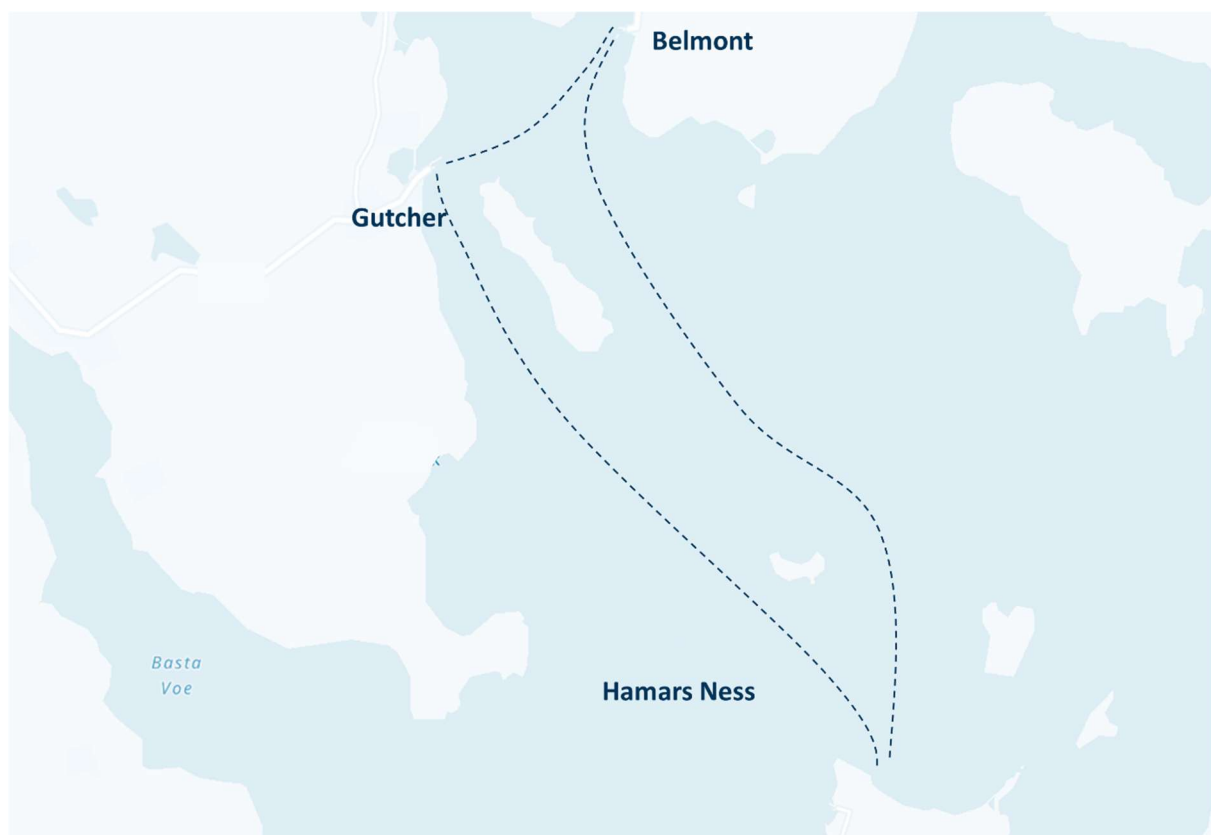


Figure 7.1: Bluemull Sound ports

- 7.2.11 The principal features of note are as follows:

- All three ports are linkspan berths capable of accommodating the Bluemull Sound and relief vessels. **Hamars Ness** ferry terminal was rebuilt in 2004 and has a larger linkspan than Gutcher and Belmont – it is the only other port on the network capable of accommodating the Yell Sound vessels MV *Dagalien* and MV *Daggri*
- **Gutcher** and **Hamars Ness** are the overnight berths for the vessels. Belmont is not suitable for this purpose

- When **MV Bigga** is stood down for drills and maintenance for a period on a Monday, she berths at Cullivoe (Yell) during this time
- The berthing structures at **Belmont** and **Gutcher** are approaching the point at which they will need to be replaced

### How is the Bluemull Sound route operated?

- 7.2.12 It should be noted at the outset of this section that the resilience and reliability issues experienced on the route in recent years have led to the Council reassessing the operating model. It is therefore probable that both the timetable and crewing arrangements on the Bluemull Sound route will change over the duration of the IITCP. **The information presented below is correct as of March 2025 and will be updated as required at OBC stage.**

#### Crewing

- 7.2.13 As is common on the short routes in Shetland, the Bluemull Sound route operates with a combination of a shift vessel (MV *Bigga*) and a day vessel (MV *Geira*), each of which has different crewing arrangements. Crewing arrangements are liable to change in the future, however the current arrangements are set out below:

##### MV Bigga

- MV *Bigga* typically operates with a crew of **five** at any given time although she can operate with minimum of **four**. As the shift vessel on the Bluemull Sound, she operates with two shifts on any given day, a dayshift and a backshift. Three crews are required to deliver this roster
- Each crew has a ten-week work pattern – this consists of three blocks of:
  - One week of twelve-hour dayshifts
  - One week of approximately 6-hour backshifts (with the backshift crew on standby through the night)
  - One week off
  - A single week of rostered leave (week 10)
- The crew work an average 42-hour week over each ten-week period
- MV *Bigga* overnights in Yell and the crew are predominantly Yell-based. The first departure (06:10 in summer and winter) and last arrival (23:45 (on-request) summer and winter) are therefore to and from Gutcher

##### MV Geira

- MV *Geira* is the 'day-vessel' and typically operates with a crew of four at any given time. She operates with a single crew Monday – Friday, with a fortnight Christmas shutdown
- The crew have a five-week work pattern consisting of four weeks-on and one week-off. Leave is rostered, with a different crewman being on leave each week, ensuring a crew of four is available at any given time
- The crew work a ten-hour day when on-duty, which averages to a 40-hour week in any five-week period. The service is however delivered through a split shift arrangement, with a period of downtime in the middle of the day (less on a Monday when MV *Geira* provides cover when MV *Bigga* is out of service for drills and maintenance). The current Tuesday – Friday split shift arrangements are set out below:
  - Winter: 06:25 – 09:35 and then 14:15-18:20 (7h 15 minutes)
  - Summer: 06:25 – 12:10 and then 14:15-18:20 (9h 50 minutes)

- MV *Geira* overnights in Hamars Ness and the crew are thus Fetlar-based. The first departure (06:55 in summer and winter) and last arrival (17:50 summer and winter) are therefore to and from Hamars Ness

### Length of operating day

#### Summer

- 7.2.14 The table below summarises the length of the operating day and week for MV *Bigga* in summer:

Table 7.4: MV *Bigga*, length of operating day - summer

| Day          | Start-Up    | Sailing-Day   | Close Down  | Length of operating day |
|--------------|-------------|---------------|-------------|-------------------------|
| Monday       | 0:30        | 17:50         | 0:30        | 18:50                   |
| Tuesday      | 0:30        | 17:50         | 0:30        | 18:50                   |
| Wednesday    | 0:30        | 17:50         | 0:30        | 18:50                   |
| Thursday     | 0:30        | 17:50         | 0:30        | 18:50                   |
| Friday       | 0:30        | 17:50         | 0:30        | 18:50                   |
| Saturday     | 0:30        | 17:50         | 0:30        | 18:50                   |
| Sunday       | 0:30        | 16:30         | 0:30        | 17:30                   |
| <b>Total</b> | <b>3:30</b> | <b>123:30</b> | <b>3:30</b> | <b>130:30</b>           |

- 7.2.15 The following points should be noted with respect to the above table:

- MV *Bigga* operates almost continuously across the day Monday to Saturday from her first departure from Gutcher at 06:10 through to her last arrival at midnight
- The one exception to this is on a Monday where, following her arrival into Belmont at 12:30, she is repositioned (with no passengers) to Cullivoe and taken out of service for drills and maintenance. She commences operation again with the 16:30 departure from Gutcher to Belmont
- There are several request sailings in the late evening, where the service must be booked before the booking office closes or by 18:00 if booking online. These are:
  - 21:40 Hamars Ness to Gutcher
  - 22:30 Belmont to Gutcher
  - 22:50 Gutcher to Belmont
  - 23:05 Belmont to Hamars Ness
  - 23:35 Hamars Ness to Gutcher
- It should be noted that the 22:50, 23:05 and 23:35 request sailings will only operate four nights from any six Monday to Saturday
- The Sunday timetable reduces in intensity slightly. The first seven sailings of the day are also request only, whilst the 22:50, 23:05 and 23:35 request sailings do not operate on a Sunday

- 7.2.16 The table below summarises the length of the operating day and week for MV *Geira* in summer:

Table 7.5: MV *Geira*, length of operating day - summer

| Day          | Start-Up     | Sailing-Day  | Close Down   | Length of operating day |
|--------------|--------------|--------------|--------------|-------------------------|
| Monday       | 0:45         | 8:15         | 0:45         | 09:45                   |
| Tuesday      | 0:45         | 8:20         | 0:45         | 09:50                   |
| Wednesday    | 0:45         | 8:20         | 0:45         | 09:50                   |
| Thursday     | 0:45         | 8:20         | 0:45         | 09:50                   |
| Friday       | 0:45         | 8:20         | 0:45         | 09:50                   |
| Saturday     | 0:00         | 0:00         | 0:00         | 0:00                    |
| Sunday       | 0:00         | 0:00         | 0:00         | 0:00                    |
| <b>Total</b> | <b>03:45</b> | <b>41:35</b> | <b>03:45</b> | <b>49:05</b>            |

7.2.17 The following points should be noted with respect to the above table:

- MV *Geira* has a slightly longer start-up and close down time than MV *Bigga*. This is because she has a 15-minute close down and start-up period either side of her split shift
- On a Monday, the first shift finishes earlier on arrival into Hamars Ness at 09:20. This allows MV *Geira* to re-enter service ahead of MV *Bigga* standing down for drills and maintenance. MV *Geira* repositions from Hamars Ness to Gutcher to form the 12:30 departure from Gutcher back to Hamars Ness

#### Winter

7.2.18 The table below summarises the length of the operating day and week for MV *Bigga* in winter:

Table 7.6: MV *Bigga*, length of operating day - winter

| Day          | Start-Up    | Sailing-Day   | Close Down  | Length of operating day |
|--------------|-------------|---------------|-------------|-------------------------|
| Monday       | 0:30        | 17:50         | 0:30        | 18:50                   |
| Tuesday      | 0:30        | 17:50         | 0:30        | 18:50                   |
| Wednesday    | 0:30        | 17:50         | 0:30        | 18:50                   |
| Thursday     | 0:30        | 17:50         | 0:30        | 18:50                   |
| Friday       | 0:30        | 17:50         | 0:30        | 18:50                   |
| Saturday     | 0:30        | 17:50         | 0:30        | 18:50                   |
| Sunday       | 0:30        | 16:30         | 0:30        | 17:30                   |
| <b>Total</b> | <b>3:30</b> | <b>123:30</b> | <b>3:30</b> | <b>130:30</b>           |

7.2.19 As can be seen from the table, the length of the operating day of MV *Bigga* in the winter is the same as the summer in terms of the times of the first and last sailing. However, there are slightly fewer sailings across the day in winter, with frequency marginally reduced to reflect lower demand.

7.2.20 Whilst MV *Bigga*'s day remains the same in winter, MV *Geira* is operated slightly less intensively, as summarised in the table below:



Table 7.7: MV *Geira*, length of operating day - winter

| Day          | Start-Up     | Sailing-Day  | Close Down   | Length of operating day |
|--------------|--------------|--------------|--------------|-------------------------|
| Monday       | 0:45         | 8:15         | 0:45         | 09:45                   |
| Tuesday      | 0:45         | 5:45         | 0:45         | 07:15                   |
| Wednesday    | 0:45         | 5:45         | 0:45         | 07:15                   |
| Thursday     | 0:45         | 5:45         | 0:45         | 07:15                   |
| Friday       | 0:45         | 5:45         | 0:45         | 07:15                   |
| Saturday     | 0:00         | 0:00         | 0:00         | 0:00                    |
| Sunday       | 0:00         | 0:00         | 0:00         | 0:00                    |
| <b>Total</b> | <b>03:45</b> | <b>31:15</b> | <b>03:45</b> | <b>38:45</b>            |

7.2.21 The following points should be noted with respect to the above table:

- The winter Monday timetable is the same as that operated in summer, whereby MV *Geira* covers the drills and maintenance of MV *Bigga* in the early afternoon
- However, Tuesday through Friday, she operates a shorter day than in the summer, with a reduced number of sailings in the morning. The service stops upon arrival into Hamars Ness at 09:20, which compares to 11:55 in the summer. The afternoon shift is the same as in the summer

**Key Point:** The Bluemull Sound route broadly operates in the basis of the 'Shetland model', with a shift vessel providing circa 18-hour operating day and a day vessel strengthening the service across the day.

## 7.3 Community Needs Assessment Step 2: Connectivity

7.3.1 Whilst Fetlar and Unst are served by shared vessels, their connectivity differs significantly, as would be expected given their relative populations. Given this difference, it is necessary to consider the connectivity of the two islands separately.

7.3.2 As a general point for the study, the published Bluemull Sound timetable is difficult to follow for those less familiar with the route. It would as minimum benefit from being split by island, as is the case in the analysis which follows.

### Fetlar

#### Timetable

7.3.3 The graphic below shows the winter timetable from both Gutcher and Hamars Ness. As noted above, the winter and summer timetables are broadly similar, with the exception of the slightly shorter break between MV *Geira* split shifts in the summer. The current timetable is subject to change in the near future for the reasons previously outlined and will be updated in the OBC as required.

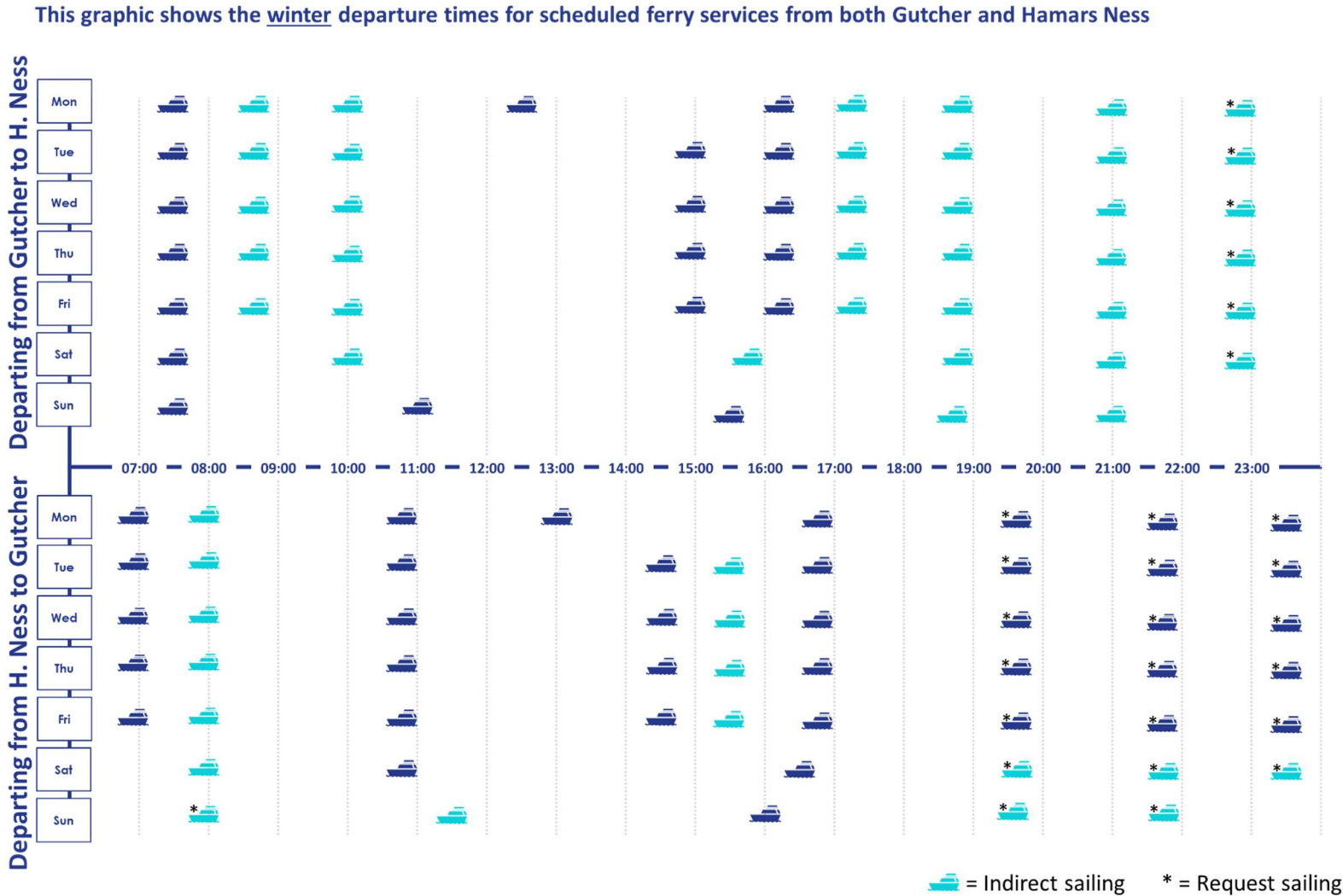


Figure 7.2: Hamars Ness – Gutcher timetable - winter 2024/25

7.3.4 The key points of note with regards to the Fetlar timetable are as follows:

- Overall, Fetlar has a relatively high level of service for an island of its size
- The **majority of sailings from Gutcher to Hamars Ness are operated via Belmont (including all evening sailings)**. There are two implications of this:
  - **Journey times are significantly extended**, with a ten-minute crossing to Belmont plus turnaround time added to the standard 25-minute journey time to Fetlar
  - The routing of the ferry via Belmont means that Fetlar residents are **sharing capacity with those travelling to Unst** – there will be occasions where there is plentiful capacity between Belmont and Hamars Ness but where a Fetlar resident has been unable to get a space on the sailing between Gutcher and Belmont. This is a perennial issue with triangular routes, experienced in other places such as the Orkney Outer North Isles and Oban – Coll / Tiree
- There is a significant gap in the middle of the day (except on a Monday), largely associated with MV *Geira*'s split shift. This is particularly the case in the Gutcher to Hamars Ness direction
- The **majority of sailings from Hamars Ness are direct to Gutcher** as this is the primary movement for Fetlar residents
- All three **evening sailings from Hamars Ness to Gutcher are request only**. This is operationally sensible given low demand, but it reduces the scope for last minute journeys given that request sailings need to be booked by 18:00 the evening before

**Key Point:** Fetlar has a relatively high level of service for an island of its size. However, indirect sailings can be problematic in terms of both journey times and shared vehicle deck capacity.

#### Public transport integration

7.3.5 It is important to note at the outset for this, and all other island profiles, that the Shetland ferry network has largely been designed around car-based travel. The Shetland bus network, which is currently subject to a separate network study, is complex and generally characterised by low frequency. Services change by day of the week and depending on whether it is a school day or non-school day. The commentary below therefore summarises connecting bus services as of March 2025.

7.3.6 The **No.24** bus provides a **through bus service from Gutcher to Lerwick via the Yell Sound ferry**. This is a single return service per day (Monday to Friday) which:

- Departs Gutcher at 08:40 (the closest arrival from **Hamars Ness** is the **07:55** via Belmont), travels on the **09:15 sailing from Ulsta** and arrives in Lerwick at 10:26
- In the reverse direction, the bus leaves Lerwick at 14:20, travels on the **15:25 sailing from Toft** and arrives in Gutcher at 16:12, connecting with the **16:15 sailing to Hamars Ness**

7.3.7 On Yell, the **24Y** bus/dial-a-ride service (**Cullivoe to Ulsta**) provides a public transport connection between the Bluemull and Yell Sound ferries:

- The 24Y does not however integrate well with Fetlar ferry services – it only **connects with the following sailings from Gutcher: 10:05** (via Belmont); **16:15** (Monday); **16:40** (Tuesday to Friday); and the **18:55** (via Belmont)
- On a **Saturday**, the bus connects with the **10:05** and **18:55** services to Hamars Ness via Belmont

7.3.8 On **Unst**, the **No.28** operates from **Belmont to Baltasound**:

- The Hamars Ness to Belmont ferry does not connect particularly well with the **No.28**, which is more orientated around the busier Gutcher – Belmont route
- The end-to-end journey time between Belmont and Baltasound is approximately **20 minutes**

7.3.9 There is a **dial-a-ride bus service on Fetlar**.

**Key Point:** There is limited bus connectivity on both Unst and Yell for those travelling as ferry foot passengers to and from Fetlar. That said, it is possible to make a day return trip to Lerwick on a single through bus service (No. 24 bus) Monday to Friday.

#### What level of connectivity is provided?

7.3.10 The table below defines the level of connectivity provided for Fetlar residents and those travelling to the island in terms of:

- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

7.3.11 Given the preceding point made above about limited bus connectivity, this **table is focused on car travel only**:

Table 7.8: Fetlar's connectivity

| Destination | Can the following journeys be made? |          |         | Can this be done on all days? |          |             |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|-------------|
|             | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening     |
| Fetlar      | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✗ - Not Sun |
| Unst        | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✗ - Not Sun |
| Yell        | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✗ - Not Sun |
| Lerwick     | ✓                                   | ✓        | ✗       | ✓                             | ✓        | ✗           |

**Key Point:** Fetlar's connections offer a high-level of connectivity, allowing a working day and part-day in Lerwick, Unst and Yell seven days a week. It is not possible to return to Fetlar if leaving Lerwick after 22:00, but this is unsurprising given the length of the journey and requirement to use two ferries – demand would likely be very low in any case.

## Unst

### Timetable

7.3.12 The graphic below shows the winter timetable from both Gutcher and Belmont. As noted above: (i) the winter and summer timetables are broadly similar; and (ii) this information may need to be updated at OBC to reflect potential forthcoming timetable changes:

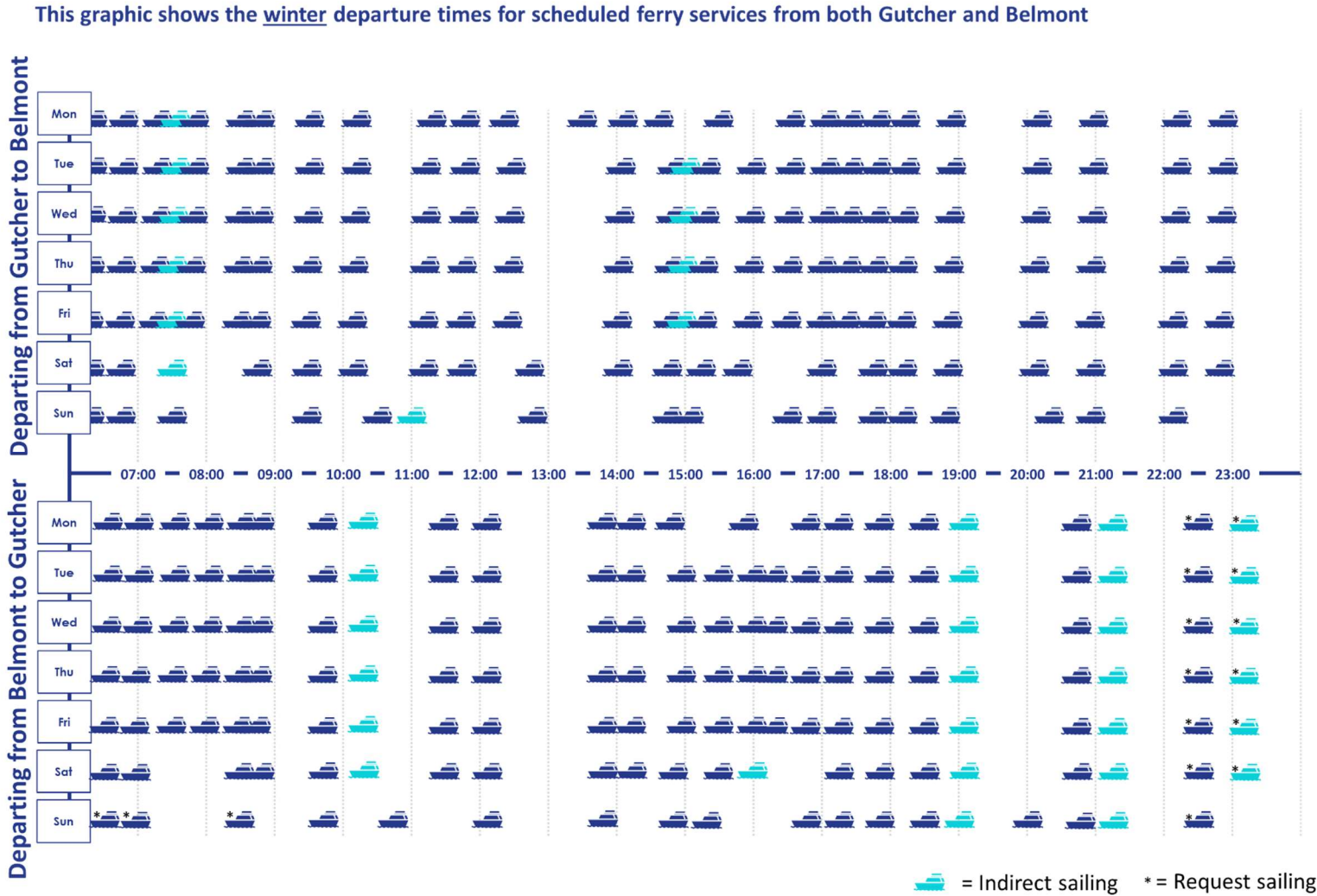


Figure 7.3: Belmont – Gutcher timetable - winter 2024/25

7.3.13 The key points of note with regards to the Unst timetable are as follows:

- Unst has a very high level of connectivity with frequent services offered over a very long operating day. This is a much higher level of connectivity than other Scottish islands of a similar size and crossing length
- As the 'trunk route' on the Bluemull Sound, the **majority of sailings between Gutcher and Belmont (and vice versa) are direct**
- Where a **sailing is operated via Hamars Ness, journey times are significantly extended**, from ten minutes to almost one hour
- Whilst most sailings to Gutcher are direct, **several will arrive from Hamars Ness or be travelling to Hamars Ness when departing Belmont**. This means that capacity between Unst and Fetlar is shared and can lead to demand being frustrated if one leg of the triangle is fully booked. As previously noted, this is a perennial issue with triangular routes
- The **final two departures from Belmont Monday to Saturday are request only**. As noted with respect to Fetlar, this is operationally sensible given low demand, but it reduces the scope for last minute journeys given that request sailings need to be booked by 18:00 the evening before

**Key Point:** Unst has a very high level of connectivity, with frequent sailings across a long operating day. The main challenge faced is the availability of vehicle deck capacity when a sailing is routed via Hamars Ness in either direction. This also significantly extends journey times.

#### Public transport integration

7.3.14 The commentary below summarises connecting bus services as of March 2025.

7.3.15 The **No.24** bus provides a through bus service from Gutcher to Lerwick via the Yell Sound ferry. This is a single return service per day (Monday to Friday) which:

- Departs Gutcher at 08:40 (connecting with the **08:25 ferry from Belmont**), travels on the **09:15 sailing from Ulsta** and arrives in Lerwick at 10:26
- In the reverse direction, the bus leaves Lerwick at 14:20, travels on the **15:25 sailing from Toft** and arrives in Gutcher at 16:12, connecting with the 16:15 sailing to Belmont

7.3.16 On Yell, the **24Y** bus / dial-a-ride service (Cullivoe to Ulsta) provides a public transport connection between the Bluemull and Yell Sound ferries:

- There are **three** buses per day in each direction **Monday to Saturday** (there is an additional Ulsta – Cullivoe service on a **Friday**, four in total)
- There is an additional bus between **Cullivoe and Mid Yell / Mid Yell and Cullivoe** on certain days of the week (although the **08:20** departure from Cullivoe only operates on school days)
- There are no connecting buses on a **Sunday**
- The end-to-end journey time between **Gutcher** and **Ulsta** is just over **40 minutes**

7.3.17 On Unst, the **No.28** bus / dial-a-ride operates from **Belmont to Baltasound** providing Unst residents with a connection to the Bluemull Sound services:

- There are **three** buses per day from Baltasound to Belmont and four from Belmont to Baltasound **Monday to Saturday** (there is an additional service from Belmont to Baltasound on a Friday during school term)



- There are no connecting buses on a **Sunday**
- The end-to-end journey time between Belmont and Baltasound is approximately **20 minutes**

**Key Point:** There is limited bus connectivity on both Unst and Yell for those travelling as ferry foot passengers. That said, it is possible to make a day return trip to Lerwick from Unst on a single through bus service (No. 24 bus) Monday to Friday

#### What level of connectivity is provided?

- 7.3.18 The table below defines the level of connectivity provided for Unst residents and those travelling to the island, using the same categories as those described for Fetlar:

Table 7.9: Unst's connectivity

|             | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
| Destination | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Fetlar      | ✓                                   | ✓        | ✗       | ✓                             | ✓        | ✗       |
| Unst        | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |
| Yell        | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |
| Lerwick     | ✓                                   | ✓        | ✗       | ✓                             | ✓        | ✗       |

**Key Point:** Unst has a high-level of connectivity, allowing a working day and part-day in Lerwick, Fetlar and Yell seven days a week. It is not possible to return to Unst if leaving Lerwick after 22:00, but this is unsurprising given the length of the journey and requirement to use two ferries.

## 7.4 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

- 7.4.1 This section sets out how the Bluemull Sound ferry service is being used by Fetlar and Unst residents and those visiting the two islands. **The data are largely presented at the overall route level**, although pertinent points in relation to each island are drawn out.

#### How many sailings are made on each route leg in each year?

- 7.4.2 The figure below shows the number of sailings made on **each leg of the Bluemull Sound route** (i.e., Gutcher – Belmont, Belmont – Hamars Ness etc):

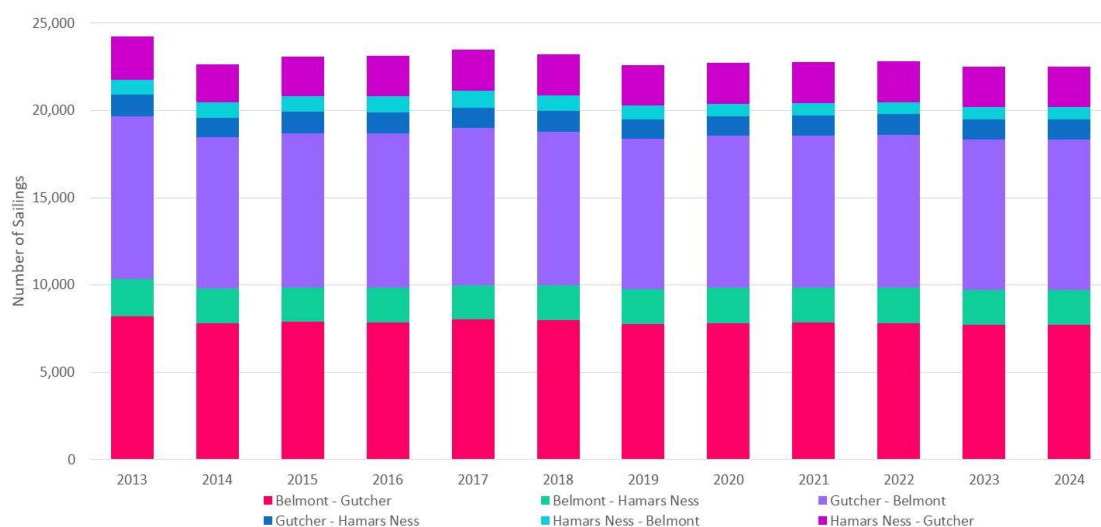


Figure 7.4: Bluemull Sound - total sailings by route leg, 2013-2024 (Source: vessel logbooks)

7.4.3 The key points of note in relation to the above figure are as follows:

- The inter-island ferry service was subject to a programme of **service reductions in 2013**. As part of these service reductions, MV *Geira* was withdrawn from service at the weekend and the split shift introduced during the day
- For **Unst**, the reductions were mainly focused on **weekends**. There was a **5%** reduction in scheduled sailings between **Belmont and Gutcher** and a **2%** reduction in sailings between **Belmont and Hamars Ness** between 2013 and 2015
- The service reductions were likewise focused on the **weekend for Fetlar**. There was a **2%** reduction in scheduled sailings between **Hamars Ness and Belmont** and a much steeper **7%** reduction in sailings between **Hamars Ness and Gutcher** between 2013 and 2015
- Following these one-off service reductions, there has been broad stability in the number of sailings operated, even during the COVID-19 pandemic
- It should be noted again here that a new timetable will need to be introduced to reflect the time required to lash all commercial vehicles over 3.5 tonnes travelling between Gutcher and Belmont, which will reduce the number of scheduled sailings that can be operated

**Key Point:** The 2013 programme of service reductions led to fewer sailings being operated on Bluemull Sound, particularly at the weekend. There was broad stability in sailings thereafter, but the forthcoming introduction of a new timetable to allow for the lashing of vehicles over 3.5 tonnes travelling between Gutcher and Belmont may lead to a further reduction in the number of sailings.

#### How have vehicle lane metre carryings changed over time?

7.4.4 The figure below shows vehicle carryings in terms of total lane metres<sup>47</sup> (LMs) carried on each leg of the Bluemull Sound route for each year between 2013 and 2024. These figures have been built-up from sailing-by-sailing carryings recorded in the vessel logbooks:

<sup>47</sup> A lane metre is the standard unit of measurement for all vehicular traffic using a roll-on, roll-off (Ro-Ro) ferry. For example, a typical car would be five lane metres

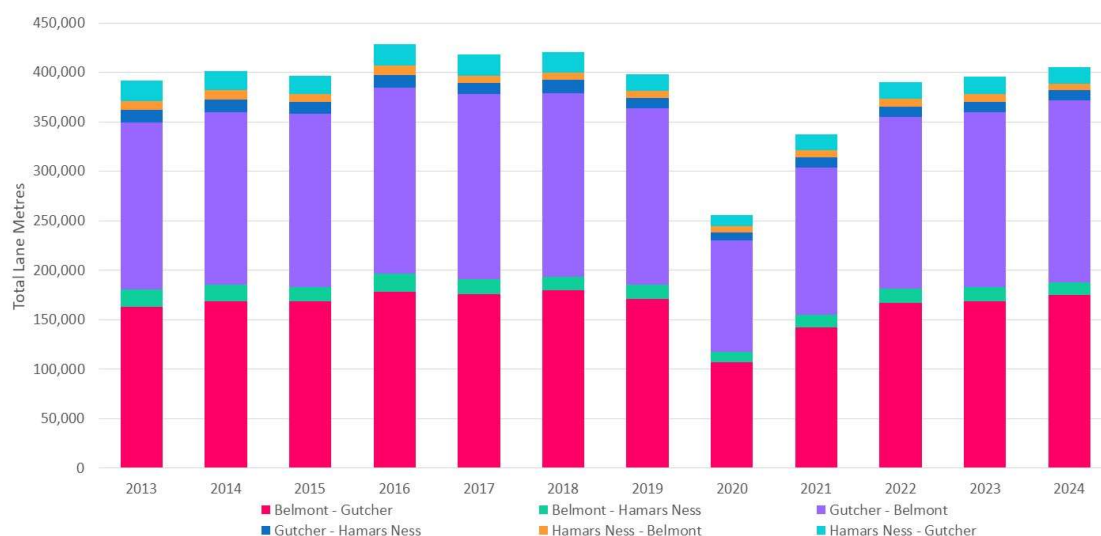


Figure 7.5: Bluemull Sound – total vehicle lane metre carryings by route leg, 2013-2024 (Source: vessel logbooks)

7.4.5 The key points of note from the above figure are as follows:

- Despite the reduction in sailings post-2013, carryings on the **Belmont – Gutcher** route leg grew until 2016, after which they largely plateaued. Carryings in the last full pre-pandemic year (2019) were **5% above their 2013 level**
- Carryings on the **Belmont – Hamars Ness** route leg remained stable (2015 aside) following the 2013 service reductions but declined quite significantly thereafter. Carryings in the last full pre-pandemic year were **19% below their 2013 level**
- There is a degree of year-on-year variation on the **Hamars Ness – Gutcher** route, with around **30,000-35,000 LMs carried per annum**. However, there was a significant reduction in carryings in **2019**, which were **18% down on their 2013 level**

**Key Point:** Despite broad stability in carryings on the Bluemull Sound route overall, there was variation between route legs. Gutcher – Belmont carryings grew relatively strongly between 2013 and the pandemic, but carryings on both Fetlar legs reduced by almost one fifth.

#### What was the impact of COVID-19?

7.4.6 The table below shows the 2024 passenger, car and commercial vehicle carryings as a percentage of 2019 carryings for each route leg. This is a measure how close each route leg has got to recovering its pre-pandemic position:

Table 7.10: Bluemull Sound - 2024 carryings as a percentage of 2019 carryings

| Carrying type                                  | Belmont - Gutcher | Hamars Ness - Gutcher | Belmont – Hamars Ness |
|------------------------------------------------|-------------------|-----------------------|-----------------------|
| <b>2024 carryings as a % of 2019 carryings</b> |                   |                       |                       |
| Passengers                                     | 99%               | 92%                   | 90%                   |
| Cars                                           | 99%               | 99%                   | 92%                   |
| Commercial vehicles                            | 128%              | 77%                   | 95%                   |

7.4.7 The main points of note from the above table are as follows:

- The **Belmont – Gutcher** route leg has largely recovered its pre-COVID position, with passenger and car carryings in 2023 both standing at **99%** of their pre-pandemic level. Total lane metres have fully recovered due to a growth in commercial vehicle carryings
- Carryings on the **Hamars Ness – Gutcher** route leg were declining pre-COVID-19. Car carryings have however largely returned to their pre-pandemic level (standing at **99%** of 2019 carryings) but passenger recovery has been slower, standing at only **92%** of pre-pandemic carryings. CV traffic is much reduced
- Recovery on the **Belmont – Hamars Ness** leg has been slightly slower, which remains somewhat below its pre-pandemic carryings level
- It should be noted when interpreting these figures that the route was subject to significant disruption in 2024, which likely have reduced total carryings

**Key Point:** The Bluemull Sound route had overall largely recovered its pre-pandemic carryings position by 2024 (particularly given that service disruption in 2024 likely depressed carryings). As per the overall route trend however, much of this recovery was driven by growth on the trunk Gutcher – Belmont route.

### When are the busiest sailings?

7.4.8 Capacity is rarely an issue on Fetlar services. However, many Fetlar sailings are via another island, e.g., Gutcher to Hamars Ness via Belmont. This makes utilisation on the **Gutcher – Belmont** route leg essential, as it determines available capacity for Fetlar passengers on most sailings.

7.4.9 The chart below shows the proportion of **direct Belmont – Gutcher** sailings for each scheduled departure time where **vehicle deck utilisation exceeded 75%** - i.e., sailings which were **full or nearly full** in 2024. It should be noted that the chart covers all seven days of the week and records all sailing times for which there were **50 or more recorded sailings** in 2024, so some of the sailings times listed do not directly align with the timetable.



Figure 7.6: Proportion of Gutcher – Belmont route leg sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks)

7.4.10 The Yell – Unst service is generally quite highly utilised, with several peaks across the day, and strong commuter flows to and from Unst. The **08:25 ex Belmont** is the key morning outbound commuter sailing.

**Key Point:** The Belmont – Gutcher route has several high utilisation sailings across the day, with pronounced commuter peaks.

### Is capacity a problem?

- 7.4.11 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted above, is a reasonable proxy for when sailings are full or almost full:

Table 7.11: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                       | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|-----------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| Hamars Ness – Belmont | 2.1%                   | 2.0%                  | 5.0%                    | 1.8%                  | 2.1%                               |
| Hamars Ness – Gutcher | 2.5%                   | 3.5%                  | 4.5%                    | 4.7%                  | 2.9%                               |
| Belmont - Gutcher     | 24.2%                  | 23.9%                 | 23.5%                   | 26.9%                 | 23.8%                              |

- 7.4.12 Key headlines for Bluemull Sound include:

- Around **a quarter of weekday sailings** between 07:00-19:00 on the **Gutcher – Belmont route leg** are full or nearly full
- Similarly, around a **quarter of Saturday and Sunday** sailings on the **Gutcher – Belmont route leg** are also routinely full or nearly full
- Capacity is **not a significant problem on the Fetlar legs**, although it does have to be borne in mind that the triangular nature of the route means that carryings on each leg are additive (so, for example, the 10:15 from Belmont routes via Hamars Ness, so the Fetlar traffic is additional to the Unst traffic, all of which has to be accommodated on the ferry)

**Key Point:** Vehicle deck capacity is becoming increasingly pressured on the Gutcher – Belmont route, with around a quarter of all sailings being full or near to full. Capacity is not routinely an issue on the Hamars Ness legs, but Fetlar is affected by capacity constraints on the Gutcher – Belmont route leg given the triangular nature of the route.

### How are the ferry services performing?

- 7.4.13 Ferry service reliability is always an essential issue for island communities, but this is particularly so for Fetlar and Unst given the frequent need to make a second ferry connection across Yell Sound.
- 7.4.14 This section therefore sets out key data in relation to service performance. It is though important to note that available cancellation data recorded by the Council Ferry Service is of variable quality. In particular, the cause of cancellations is not systematically recorded.

### How often is the ferry cancelled?

- 7.4.15 The figure below shows the percentage of all Bluemull Sound sailings cancelled by route leg between 2013 and 2024:

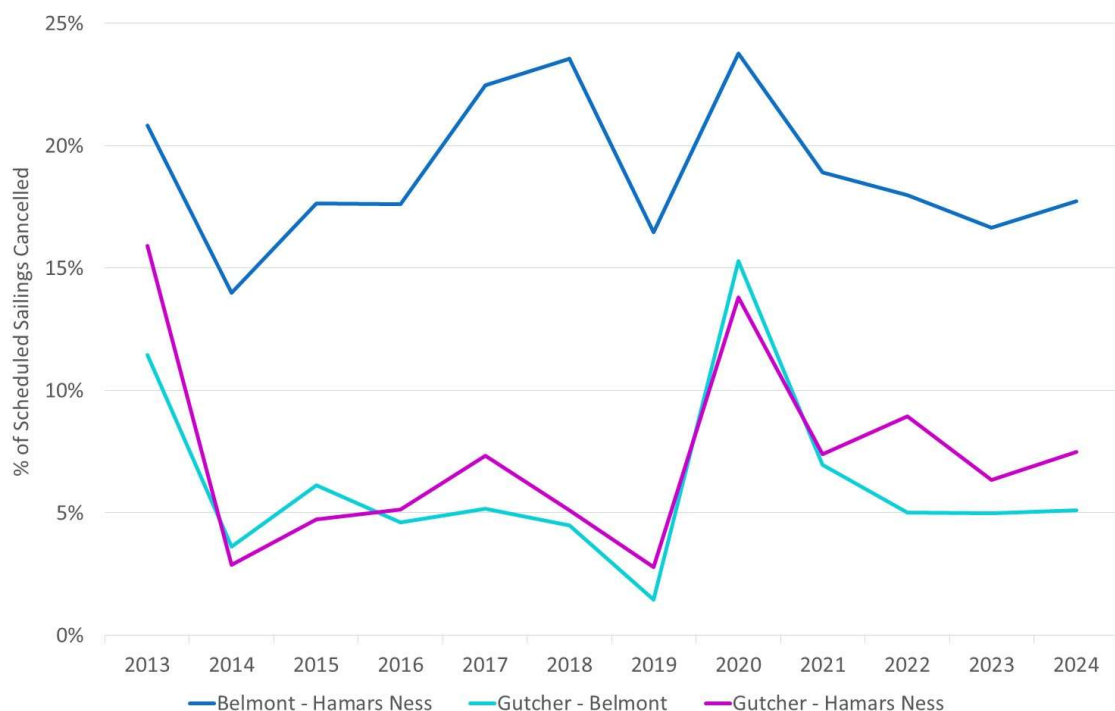


Figure 7.7: Annual percentage cancellation rate by route leg (Source: vessel logbooks)

7.4.16 The main points of note from the above figure are as follows:

- There is considerable year-on-year variation in cancellations, which is likely to be primarily due to the weather
- However, it is evident that the **longer and more exposed Fetlar route** is subject to a much higher level of cancellation than the more sheltered Gutter – Belmont route
- While the average for the route is shown in 2024, it should be noted that there were reliability challenges around crew availability which led to periods of concentrated disruption across the year

**Key Point:** Whilst there is significant year-on-year variation in cancellations, ferry service resilience issues (crewing and breakdowns) mean that 2024 was a particularly challenging year on Bluemull Sound. The longer and more exposed Fetlar crossings are subject to greater disruption than those between Unst and Yell.

#### How many sailing days and individual sailings operate to timetable?

7.4.17 The figure below shows the proportion of:

- All Bluemull Sound sailing days that operate to timetable (i.e., every individual sailing across the day is operated to timetable)
- Individual sailings that are operated to time



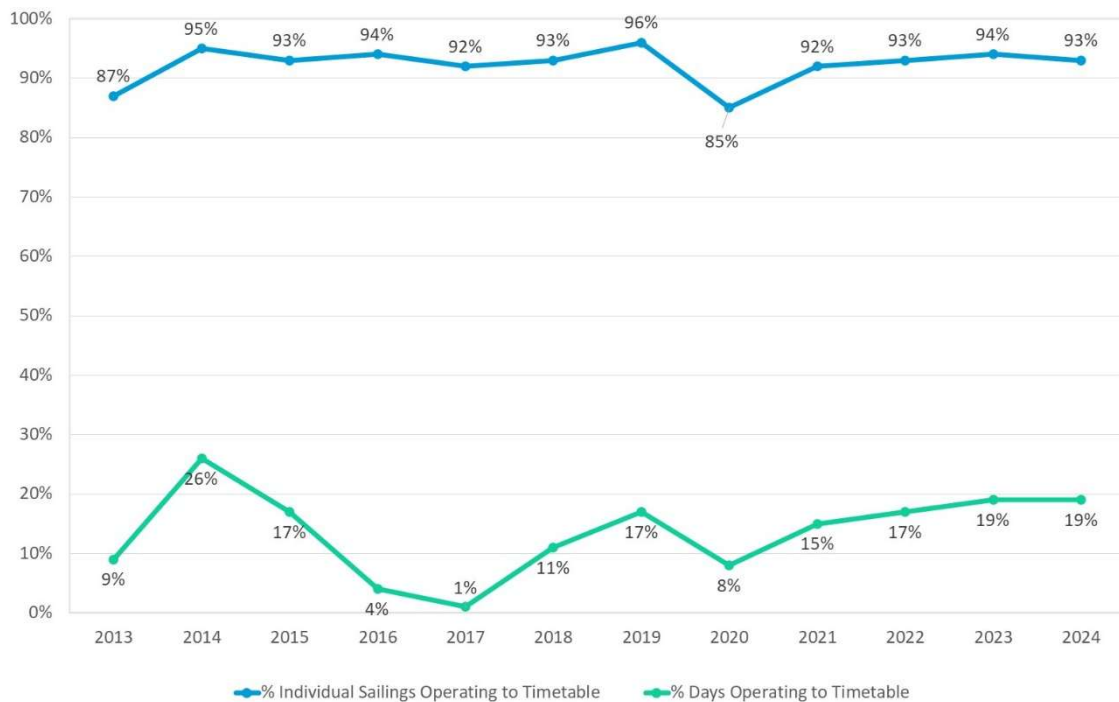


Figure 7.8: Bluemull Sound – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks)

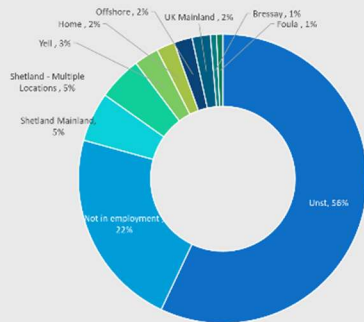
**Key Point:** Despite the relatively intense service and the multi-leg nature of the route, the majority of sailing legs (over nine in ten) on the Bluemull Sound route operated to timetable in 2024. It should be noted that it only takes one of many sailing legs across the day to be late for the day overall not to operate to timetable.

## Resident survey headlines

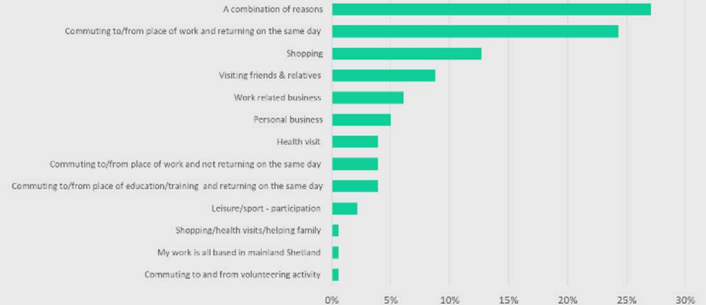
- 7.4.18 The graphics overleaf draw out the main headlines from the resident survey for both Fetlar and Unst residents.

# Resident Survey – Unst Headlines

## Place of Employment



## Main Reason for Journeys



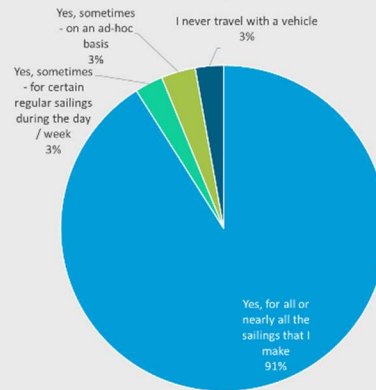
## Travel to Ferry

The majority of journeys on this route are made by car – **87%** always/mostly take their car on the ferry.

A further **3%** always/mostly parked their cars at the terminal and travelled on the ferry as a foot passenger.

Public transport use is negligible

## Vehicle Booking onto Ferry



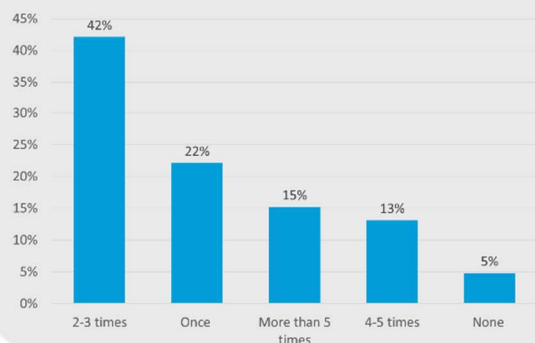
The following sailings were identified as the 'top 3' most essential to book when travelling from **Belmont**

**08:25 (30%)**  
**08:55 (14%)**  
**16:45 (6%)**

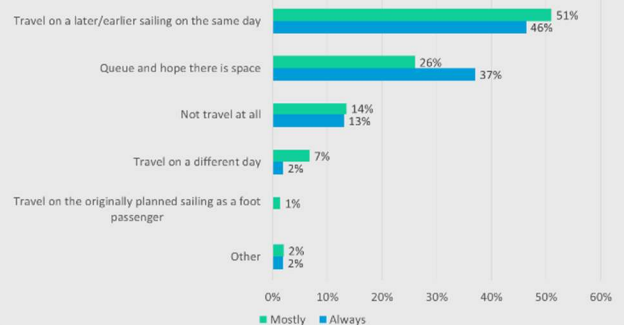
The following sailings were identified as the 'top 3' most essential to book when travelling from **Gutcher**

**17:15 (11%)**  
**08:25 (11%)**  
**17:00 (11%)**

## In a typical month, how often are you unable to book onto your intended sailing?



## Unable to book on a day (action)



## Top 5 areas of dissatisfaction (total percentage of people who indicate they are either dissatisfied or very dissatisfied)

1. The number of service cancellations (short notice) **[84%]**
2. Ability to catch the first flight **[81%]**
3. Service during vessel refit periods **[79%]**
4. Monday timetables (Yell Sound, Bluemull Sound, Whalsay only) **[71%]**
5. The number of service cancellations (notified in advance) **[70%]**

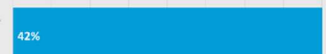
I travel off-island as much as I need to, and my day-to-day activities are not unduly impacted by the current ferry service



I travel off-island less than I would like, and this has a negative impact on the things I would like to do

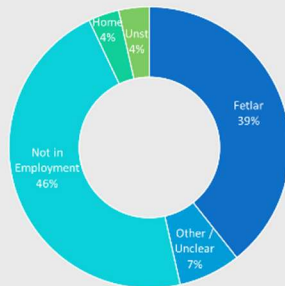


I travel off-island as much as I need to, but my day-to-day activities are negatively impacted by the current ferry service

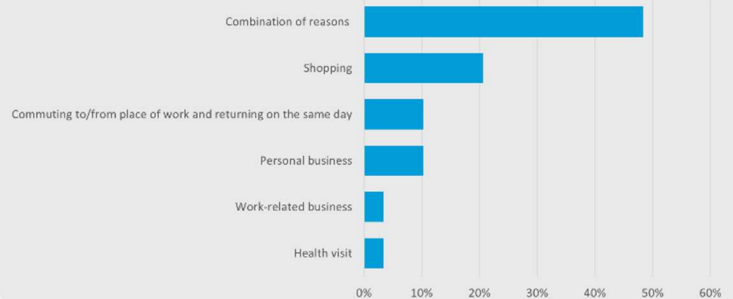


# Resident Survey – Fetlar Headlines

## Place of Employment



## Main Reason for Journeys



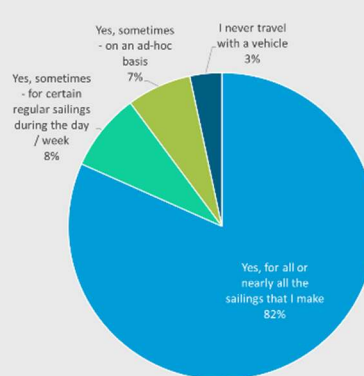
## Travel to Ferry

The majority of journeys on this route are made by car – **76%** always/mostly take their car on the ferry

A further **6%** of passengers use the bus on the ferry

**6%** also used community transport to complete their journeys

## Vehicle Booking onto Ferry



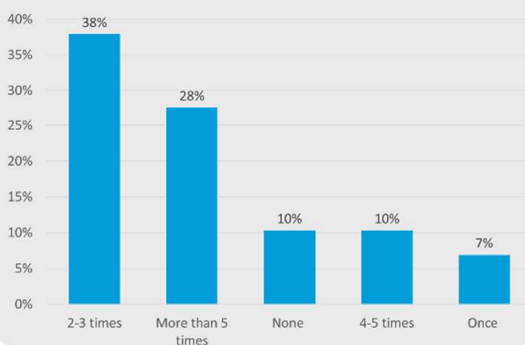
The following sailings were identified as the 'top 3' most essential to book when travelling from Hamars Ness

**07:55 (44%)**  
**10:50 (20%)**  
**06:55 (11%)**

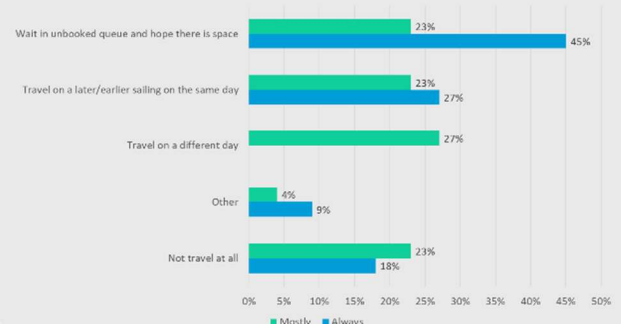
The following sailings were identified as the 'top 3' most essential to book when travelling from Gutcher

**16:15 (13%)**  
**17:15 (11%)**  
**15:00 (10%)**

## In a typical month, how often are you unable to book onto your intended sailing?



## Unable to book on a day (action)

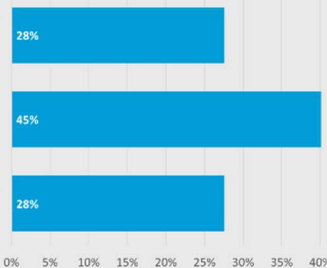


## Top 5 areas of dissatisfaction

(total percentage of people who indicate they are either dissatisfied or very dissatisfied)

1. Ability to return home from last flight **[81%]**
2. Ability to catch the first flight **[79%]**
3. Service during vessel refit periods **[79%]**
4. Service frequency – Saturday **[72%]**
5. Level of standard fares: commercial vehicles **[71%]**

I travel off-island as much as I need to, and my day-to-day activities are not unduly impacted by the current ferry service



I travel off-island less than I would like, and this has a negative impact on the things I would like to do

I travel off-island as much as I need to, but my day-to-day activities are negatively impacted by the current ferry service

## 7.5 Community Needs Assessment Step 4: Island Narrative

### Socio-economic profile

- 7.5.1 Whilst there are strong and historic connections between Fetlar and Unst, they have markedly different economies and societies and are thus considered separately in the analysis which follows:

#### Fetlar

- 7.5.2 Fetlar is classed as one of the Shetland's islands of small population (<100 population) and has never had the industrial scale of neighbouring Unst and Yell. The island is primarily agricultural in nature but has a growing tourism product.

#### How has population changed over time?

- 7.5.3 Fetlar had a population of **66** at the time of the 2022 Census, making it the fifth most populous of the islands served by the Council's ferry network. The population of the island has however been on a long-term downward trend, as is illustrated in the figure below, which shows the trend in population indexed to 1981. It should be noted here that 'Other Shetland Islands' excludes data for the island under review (and this repeats throughout the report).

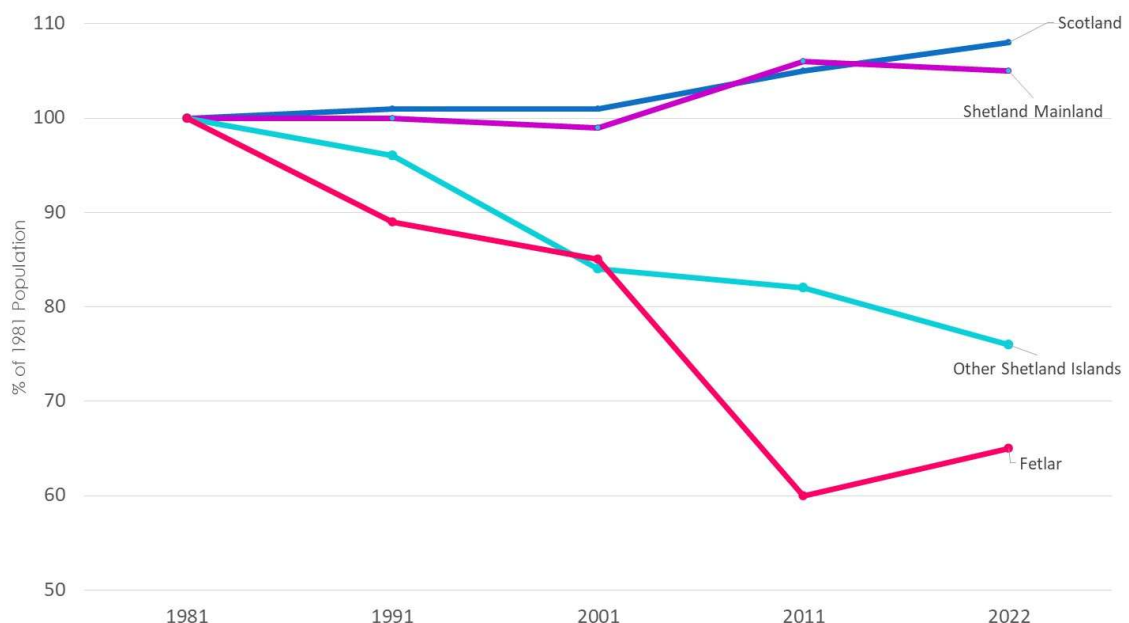


Figure 7.9: Population trend for Fetlar and comparator areas (1981=100) (Source: Census)

- 7.5.4 The key points of note from the above figure are as follows:
- Fetlar's population reduced by **40% between 1981 and 2011, falling from 101 to 61**. This is a significant reduction, particularly in terms of maintaining the required critical mass of population in a small community
  - Population did however stabilise between the 2011 and 2022 Censuses, which perhaps suggests that a more settled position has now been reached. That said, discussions with the community at the public drop-in session in March 2025 suggested that the population is now just **54**, implying that it has dropped below its 2011 level

**Key Point:** Fetlar's population declined sharply between 1981 and 2011. The 2022 Census suggests that the population found broad stability over the 2010s but discussions with the community suggest a further reduction in headcount since 2022.

#### Population age profile

7.5.5 Whilst Fetlar's overall population has broadly stabilised, it is a very much an ageing population. The figure below shows the proportion of Fetlar's population aged under-16, 16-64 and over 64 in the 2011 and 2022 Censuses and compares this to mainland Shetland and the other island communities in Shetland. It should be noted here that 'Other Shetland Islands' excludes data for the island under review.

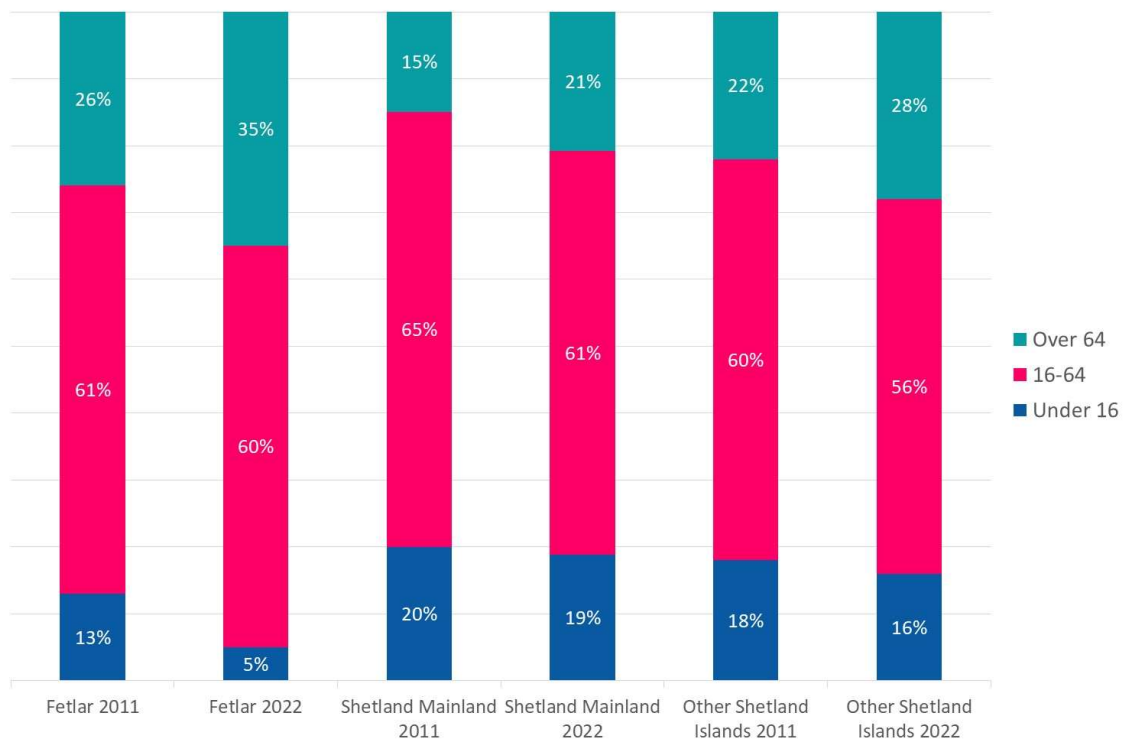


Figure 7.10: Population age profile for Fetlar and comparator areas (Source: Census 2011 and 2022)

7.5.6 In 2022:

- The proportion of Fetlar's population **aged 65+** was **35%** compared to **21%** on mainland Shetland. Indeed, Fetlar has the **highest proportion of people aged 65+ of all Shetland's island communities**
- At the time of the Census, Fetlar also had the smallest proportion of **under-16s** across all of Shetland's island communities, standing at just **5%** of the total population. Indeed, we were informed at the March 2025 public drop-in session that **there are now no Fetlar residents aged under 23**

**Key Point:** Fetlar's demographics are clearly very challenging, with a small and ageing population. This has implications for service delivery on the island, including the ability to fill island jobs (of which succession planning for an island-based vessel is a particular consideration here).

What is the economic structure of Fetlar?

- 7.5.7 The figure below shows the sectoral split of employee jobs in Fetlar in 2022 – note that this is a measure of **resident employment** (i.e., jobs filled by island residents irrespective of whether they work in Fetlar):

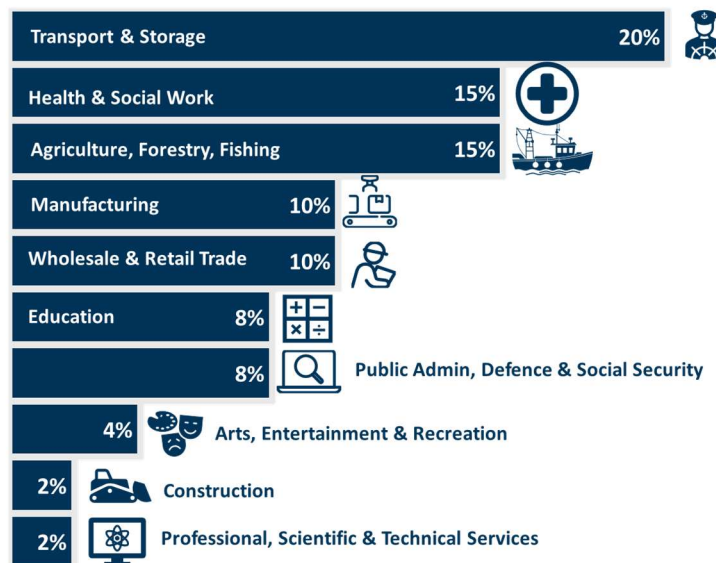


Figure 7.11: Employee jobs by industry – Fetlar (Source: 2022 Census)

- 7.5.8 The key points of note from the above figure are as follows:
- Like most of Shetland's island communities, Fetlar has an above average concentration of resident employment in '**Agriculture, Forestry<sup>48</sup> and Fishing**'. Whilst there is little to no island-based fishing activities, it is understood that Fetlar residents commute to the salmon farms on Unst and Yell. Crofting is the primary source of on-island industry
  - '**Transport and Storage**' accounts for the largest proportion of resident employment, a significant component of which will be the crew of MV *Geira*
  - Whilst not immediately apparent from the data, Fetlar has a growing **tourism industry**, with several high-quality visitor lets and caravan and camping facilities adjacent to the community hall
  - The limited scale of on-island activity does though mean **that commuting to jobs off-island is essential**:
    - **21%** of all Fetlar adults in employment **travel over 5km to work**, which implies that they work off-island
    - A further **13%** responded '**Other**' in the Census with respect to their distance travelled to work – this is likely to combine working at sea / offshore with staying off-island for the working week (e.g., staying in Lerwick Monday to Friday)

<sup>48</sup> It should be noted that this is the Office of National Statistics sectoral definition, hence the inclusion of forestry alongside agriculture and fishing throughout this report.



**Key Point:** Fetlar has a mixed economy broadly combining crofting and off-island commuting to work, although there is a growing tourism industry in the island. It is important to note that the crew of MV Geira account for a significant proportion of overall resident employment, highlighting the importance of an island-based crew to the Fetlar economy.

What public services are available on Fetlar?

7.5.9 The table below summarises the public services that are available on Fetlar:

Table 7.12: Availability of public services in Fetlar

| Service                                                                               | Fetlar                                         |
|---------------------------------------------------------------------------------------|------------------------------------------------|
| Nursery                                                                               | Yes – mothballed                               |
| Primary school                                                                        | Yes – mothballed                               |
| Junior high school                                                                    | No                                             |
| Shop                                                                                  | Yes                                            |
| GP                                                                                    | No                                             |
| Dentist                                                                               | No                                             |
| Post Office                                                                           | Yes                                            |
| Bank                                                                                  | Yes, delivered through the Post Office         |
| Care home                                                                             | No                                             |
| Council leisure centre                                                                | No                                             |
| Hotel or visitor accommodation                                                        | Holiday lets and caravan / campervan provision |
| Proportion of households with superfast broadband <sup>49</sup>                       | 0%                                             |
| Proportion of households meeting broadband Universal Service Obligation <sup>50</sup> | 92%                                            |

**Key Point:** Fetlar has few on-island services and thus residents need to travel relatively frequently. The on-island nursery and primary school are currently mothballed due to their being no children on the island at present.

## Unst

7.5.10 Unst is Shetland's most northerly inhabited island. Its distance from Lerwick and the requirement to take two ferries when travelling to mainland Shetland has meant that the island has faced a number of social and economic challenges in recent years, accelerated by the closure of RAF Saxa Vord in 2006. However, Unst's prospects are now looking much brighter, with a several positive developments including its emerging Spaceport, established aquaculture industry and a growing tourism industry.

How has population changed over time?

7.5.11 Unst had a population of **635** at the time of the 2022 Census, making it the third most populous island served by the Council's ferry network. The population of the island has

<sup>49</sup> Ofcom 2025 broadband data

<sup>50</sup> The Universal Service Obligation was launched in March 2020 and provides premises with the legal right to request a decent broadband service of at least 10 megabits per second download and 1 Megabits per second upload speed subject to meeting certain eligibility criteria.

however been on a long-term downward trend, as is illustrated in the figure below, which shows the trend in population indexed to 1981:

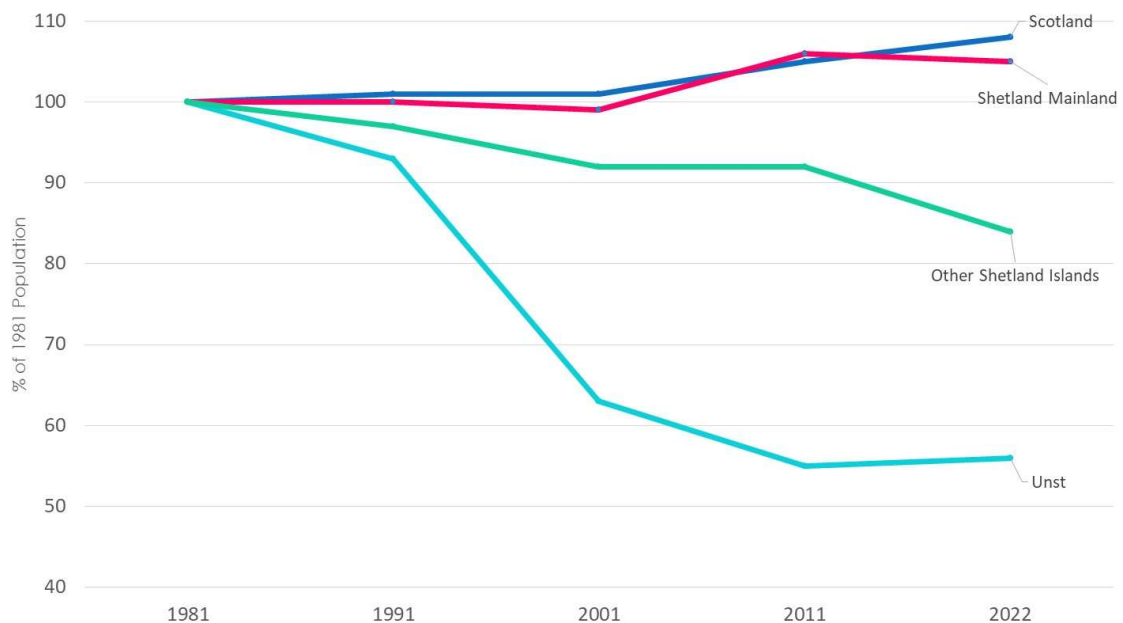


Figure 7.12: Population trend for Unst and comparator areas (1981=100) (Source: Census)

7.5.12 The key points of note from the above figure are as follows:

- Unst's population was only **56% of its 1981 level in 2022** – this is a **very stark reduction**, with the **population having almost halved** over circa two generations. It is a precipitous decline matched by few if any other islands in Scotland
- The scale of population loss in Unst is brought into even sharper relief by its **contrast with the picture of broad stability for the Shetland Islands overall**, and modest growth in mainland Shetland
- The population of Unst did however stabilise between the 2011 and 2022 Census periods and as noted above, there are several emerging economic opportunities on the island which should further assist in stabilising and growing the population

**Key Point:** The population of Unst has declined significantly over the last two generations, standing at only 56% of its 1981 level in 2022.

#### Population age profile

7.5.13 The decline in the absolute population of Unst has coincided with a worsening demographic profile. The figure below shows the proportion of Unst's population aged under-16, 16-64 and over 64 in the 2011 and 2022 Censuses and compares this to mainland Shetland and the other island communities in Shetland:

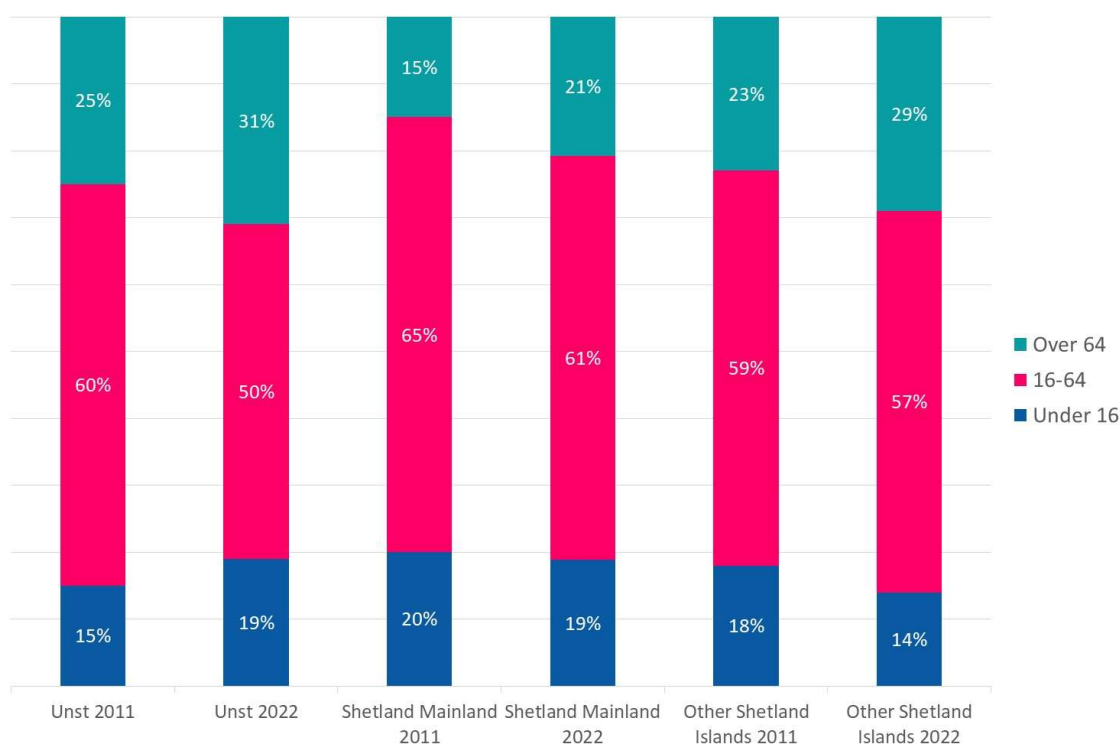


Figure 7.13: Population age profile for Unst and comparator areas (Source: Census 2011 and 2022)

7.5.14 The main points of note from the above figure are:

- Unst has an **ageing population** relative to mainland Shetland, and indeed Shetland overall. In 2022:
  - The proportion of the population **aged 65+** was **31%** compared to only **21%** on mainland Shetland
  - The proportion of **under-16s** in Unst (**19%**) was equivalent to mainland Shetland
  - As a consequence, Unst has the **smallest proportion of working age residents** across all of Shetland's island communities (**50%**)

7.5.15 Unst's ageing population has implications for service delivery on the island and the ability to fill island jobs, as the working age population gradually reduces.

**Key Point:** Unst's sharply declining population has been compounded by the ageing demographic of the remaining population. This places pressure on island service delivery and the ability to fill island jobs.

What is the economic structure of Unst?

7.5.16 The figure below shows the sectoral split of employee jobs in Unst in 2022 – note that this is a measure of **resident employment** (i.e., jobs filled by island residents irrespective of whether they work in Unst):

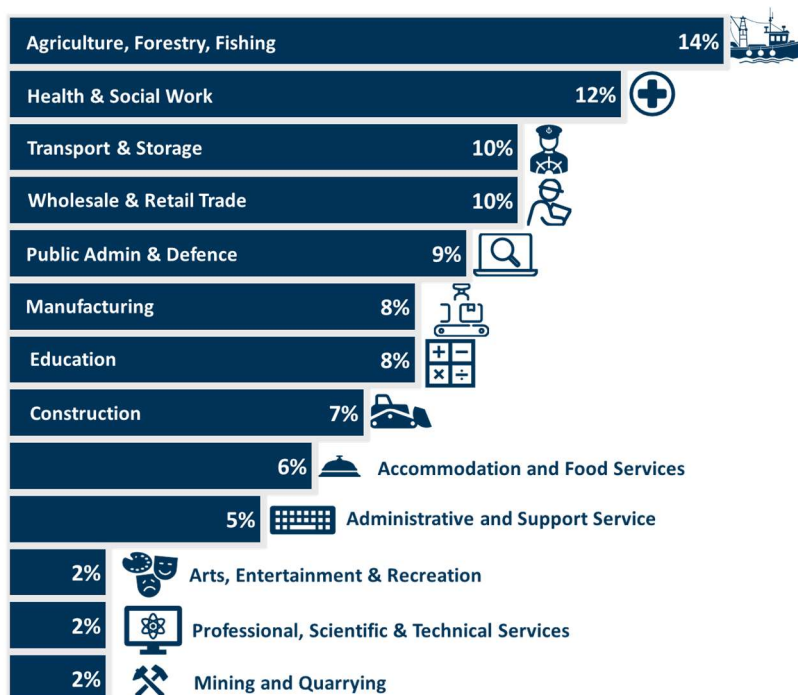


Figure 7.14: Employee jobs by industry – Unst (Source: 2022 Census)

- 7.5.17 Like many of Shetland's island communities, Unst has an above average concentration of employment in '**Agriculture, Forestry and Fishing**', although it is less prominent than in Whalsay and Yell, the two other larger population islands served by the ferry network. This point was identified in Chapter 5, where the relatively high volumes of outbound freight generated by Unst relative to population was highlighted.
- 7.5.18 Unst overall has a relatively **mixed economy** with, for example, public sector employment in Baltasound Junior High School, manufacturing at the Shetland Reel Distillery and a growing visitor market. The big opportunity is however **Spaceport**, which is anticipated to be ready for its first launch in July 2025. This will create direct and indirect jobs on the island and will also provide it with a national and indeed international profile.
- 7.5.19 Despite these opportunities however, **commuting to jobs off-island** remains a central feature of Unst's economy:
- **17%** of all Unst residents in employment travel **over 20km to work**, which implies that they work off-island. Much of this employment is likely to be in the aquaculture industry in Yell
  - A further **15%** responded '**Other**' in the Census with respect to their distance travelled to work – this is likely to combine working at sea / offshore with staying off-island for the working week (e.g., staying in Lerwick Monday to Friday)

**Key Point:** Unst has a relatively mixed economy and a major opportunity associated with the Spaceport. Nonetheless, the core of its economy remains in fishing (primarily aquaculture), agriculture and off-island commuting.

#### What services are available on Unst?

- 7.5.20 The table below summarises the public services that are available on Unst:

Table 7.13: Availability of public services in Unst

| Service                                                                 | Unst                                   |
|-------------------------------------------------------------------------|----------------------------------------|
| Nursery                                                                 | Yes                                    |
| Primary school                                                          | Yes                                    |
| Junior high school                                                      | Yes                                    |
| Shop                                                                    | Yes                                    |
| GP                                                                      | Yes                                    |
| Dentist                                                                 | Yes                                    |
| Post Office                                                             | Yes                                    |
| Bank                                                                    | Yes, delivered through the Post Office |
| Care home                                                               | Yes                                    |
| Council leisure centre                                                  | Yes                                    |
| Hotel or visitor accommodation                                          | Yes, although limited in scale         |
| Proportion of households with superfast broadband                       | 15%                                    |
| Proportion of households meeting broadband Universal Service Obligation | 94%                                    |

**Key Point:** Unlike neighbouring Fetlar, Unst has a wide range of public services that allow most day-to-day activities to be undertaken on-island.

## 7.6 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

- 7.6.1 The Transport Problems Framework being used to shape the case for change was set out in Chapter 2. In the interests of brevity, it is not repeated in full here. A summary of the transport problems by theme for each island is however presented below.

### What are the transport problems in Fetlar?

- 7.6.2 The problem themes relevant to **Fetlar** are set out in the table below:

Table 7.14: Fetlar - transport problem 'themes'

| All modes of travel                                                                                           | Public transport specific                                                                              |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                   | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                              | Capacity                                                                                               |
| Fuel / power issues                                                                                           | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                           | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult | Ease of use / convenience                                                                              |
| Journey quality                                                                                               | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                 | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                     | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                           |                                                                                                        |

| All modes of travel                                                                                                                                                                                          | Public transport specific |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                           |
| Personal security (fear of crime)                                                                                                                                                                            |                           |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                           |

7.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1 of the Transport Problems Framework) and the **underlying supply-side cause** (Step 2):

Table 7.15: Fetlar – transport problems and supply-side causes

| Problem Theme                                      | Step 1: Problem(s)                                                                                                                                                                                                                      | Step 2: Supply-side cause(s)                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel        | - Greenhouse gas emissions from vessels                                                                                                                                                                                                 | - MV <i>Bigga</i> and MV <i>Geira</i> are both conventional diesel vessels                                                                                                                                                                                                                           |
| Cost of travel and affordability                   | - The level of fares was a source of dissatisfaction in the resident survey                                                                                                                                                             | - High-frequency of travel means that the cost of travel can account for a high proportion of income                                                                                                                                                                                                 |
| Integration of travel between modes – ferry-to-bus | - Majority of ferries do not connect with a bus at Gutcher or Belmont – this is a particular issue for journeys to Lerwick given the need to connect with the Yell Sound ferry and then travelling onwards from Toft                    | - Limited and fragmented bus network<br>- High cost of bus service provision relative to demand<br>- Available buses generally focused on the higher volume Gutcher – Belmont route leg                                                                                                              |
| Journey times                                      | - Extended journey times for indirect sailings. This is a particular issue in the ‘to Fetlar’ direction, where most sailings route via Unst                                                                                             | - Requirement for two vessels to serve three islands – this is a particular issue when travelling to Fetlar as the majority of sailings are indirect                                                                                                                                                 |
| Personal accessibility                             | - Physical accessibility to the passenger lounge on MV <i>Bigga</i> and MV <i>Geira</i>                                                                                                                                                 | - Passenger lounge on both MV <i>Bigga</i> and MV <i>Geira</i> is below the waterline and only accessible by steep stairs                                                                                                                                                                            |
| Booking and journey planning                       | - Most Fetlar residents have to book sailings when taking a car – may not be able to get booking on preferred sailing and general ‘hassle factor’                                                                                       | - High vehicle deck utilisation on some indirect sailings (either via Gutcher / Belmont or where the ferry has called at Gutcher / Belmont first)                                                                                                                                                    |
| Capacity                                           | - Inability to secure a place on the ferry, either unable to get a booking or travel on demand when unbooked                                                                                                                            | - Insufficient vehicle deck capacity at peak times, an issue which will be worsened by the new requirement to lash commercial vehicles on the Gutcher – Belmont route leg<br>- Little alternative to taking the car given the very limited bus service and poor connections for Fetlar in particular |
| Service reliability                                | - Cancellations, particularly in 2024, were highlighted as a major source of dissatisfaction in the resident survey                                                                                                                     | - Ageing vessels more prone to breakdown and, more recently, the requirement to lash vehicles on the Gutcher – Belmont route leg<br>- Crew numbers / availability                                                                                                                                    |
| Timetables                                         | - Some relatively long gaps in the timetable during the day<br>- One vessel service at the weekend<br>- One vessel service during refit<br>- Recent disruptions to timetable<br>- Connections with first and last flights from Sumburgh | - Limited resilience in the fleet to cover refit<br>- Cost and crewing implications of operating the second vessel at the weekend<br>- Lower demand on a Sunday                                                                                                                                      |



| Problem Theme | Step 1: Problem(s)                                                                                                                                                                 | Step 2: Supply-side cause(s)                                                                                                                                                                                                                                                               |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | <ul style="list-style-type: none"> <li>- One vessel service in the middle of the day on a Monday on Yell Sound</li> <li>- One vessel service on Yell Sound during refit</li> </ul> | <ul style="list-style-type: none"> <li>- Requirement to lash all commercial vehicles over 3.5 tonnes in weight on the Gutcher – Belmont route means the published timetable cannot be operated</li> <li>- Monday late morning / early afternoon used for drills and maintenance</li> </ul> |

### What are the transport problems in Unst?

7.6.4 The problem themes relevant to **Unst** are set out in the table below:

Table 7.16: Unst - transport problem 'themes'

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                                                                                                                  | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                                                                                                                             | Capacity                                                                                               |
| Fuel / power issues                                                                                                                                                                                          | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                                                                                                                          | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                              |
| Journey quality                                                                                                                                                                                              | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                        |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                        |
| Personal security (fear of crime)                                                                                                                                                                            |                                                                                                        |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                                                                                                        |

7.6.5 The table below provides further detail on the **transport problem(s) under each theme** (Step 1 of the Transport Problems Framework) and the **underlying supply-side cause** (Step 2):

Table 7.17: Unst – transport problems and supply-side causes

| Problem Theme                                      | Step 1: Problem(s)                                                                                                                                                 | Step 2: Supply-side cause(s)                                                                                                                            |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel        | - Greenhouse gas emissions from vessels                                                                                                                            | - MV <i>Bigga</i> and MV <i>Geira</i> are both conventional diesel vessels                                                                              |
| Cost of travel and affordability                   | - The level of fares was a source of dissatisfaction in the resident survey                                                                                        | - High-frequency of travel means that the cost of travel can account for a high proportion of income                                                    |
| Integration of travel between modes – ferry-to-bus | - Majority of ferries do not connect with a bus at Gutcher or Belmont – this is a particular issue for journeys to Lerwick given the need to connect with the Yell | <ul style="list-style-type: none"> <li>- Limited and fragmented bus network</li> <li>- High cost of bus service provision relative to demand</li> </ul> |

| Problem Theme                | Step 1: Problem(s)                                                                                                                                                                                                                                                                                     | Step 2: Supply-side cause(s)                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | Sound ferry and then travelling onwards from Toft                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                             |
| Journey times                | - Extended journey times for any sailings that route via Fetlar, although these are few in number                                                                                                                                                                                                      | - Requirement for two vessels to serve three islands                                                                                                                                                                                                                                                                                                                                                        |
| Personal accessibility       | - Physical accessibility to the passenger lounge on MV <i>Bigga</i> and MV <i>Geira</i>                                                                                                                                                                                                                | - Passenger lounge on both MV <i>Bigga</i> and MV <i>Geira</i> is below the waterline and only accessible by steep stairs                                                                                                                                                                                                                                                                                   |
| Booking and journey planning | - Most Unst residents have to book sailings when taking a car – may not be able to get booking on preferred sailing and general ‘hassle factor’                                                                                                                                                        | - High vehicle deck utilisation on peak sailings, booking required to guarantee travel                                                                                                                                                                                                                                                                                                                      |
| Capacity                     | - Inability to secure a place on the ferry, either unable to get a booking or travel on demand when unbooked                                                                                                                                                                                           | - Insufficient vehicle deck capacity at peak times, an issue which will be worsened by the new requirement to lash commercial vehicles on the Gutcher – Belmont route leg<br>- Little alternative to taking the car given the very limited bus service<br>- Sailings via Hamars Ness, or which travel to Hamars Ness after leaving Belmont mean that Unst and Fetlar traffic are sharing available capacity |
| Service reliability          | - Cancellations, particularly in 2024, were highlighted as a major source of dissatisfaction in the resident survey                                                                                                                                                                                    | - Ageing vessels more prone to breakdown and, more recently, the requirement to lash vehicles on the Gutcher – Belmont route leg<br>- Crew numbers / availability                                                                                                                                                                                                                                           |
| Timetables                   | - One vessel service at the weekend<br>- One vessel service during refit<br>- Recent disruptions to timetable<br>- Connections with first and last flights from Sumburgh<br>- One vessel service in the middle of the day on a Monday on Yell Sound<br>- One vessel service on Yell Sound during refit | - Limited resilience in the fleet to cover refit<br>- Cost and crewing implications of operating the second vessel at the weekend<br>- Lower demand on a Sunday<br>- Requirement to lash all commercial vehicles over 3.5 tonnes in weight on the Gutcher – Belmont route means the published timetable cannot be operated<br>- Monday late morning / early afternoon used for drills and maintenance       |

## 8 Bressay

### Key facts

- **Population in 2022:** 349
- **Ports**
  - Bressay
  - Lerwick
- **Vessel:** MV *Leirna*
- **Relief vessel:** MV *Fivla*
- **Overnight berth:** Bressay
- **Crossing time:** 7 minutes
- **2024 car carryings:** 67,241
- **2024 passenger carryings:** 184,128

### 8.1 Overview

- 8.1.1 The very close proximity of Bressay to Lerwick means that the island is somewhat different to the other island communities served by Shetland's internal ferry network. It is characterised by close social and economic interactions with Lerwick, which in-turn generates more frequent travel.

### 8.2 Community Needs Assessment Step 1: Route Service Level

- 8.2.1 The table below allocates the **Bressay - Lerwick** route to its relevant Route Service Level for both the winter and summer timetables:

Table 8.1: Allocation of Bressay - Lerwick route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         |         | ✓       |         |         |         |
| Summer |         |         |         | ✓       |         |         |         |

- 8.2.2 The **Bressay - Lerwick** route currently operates with a single vessel with a dayshift and backshift crew, thereby providing an extended operating day.

### What are the main features of the route?

#### Categorisation of waters

- 8.2.3 The **Bressay - Lerwick** route operates entirely in categorised waters (Category D).

#### Vessels

- 8.2.4 The Bressay route is operated by MV *Leirna*, the key features of which are summarised in the table below

Table 8.2: Key features of MV *Leirna*

| Parameter                         | MV <i>Leirna</i>                                                                   |
|-----------------------------------|------------------------------------------------------------------------------------|
|                                   |  |
| Entered service                   | 1992                                                                               |
| Passenger Certificate             | MCA Class IV                                                                       |
| Length Overall (m)                | 32.5                                                                               |
| Beam (m)                          | 10.7                                                                               |
| Draught (m)                       | 2.0                                                                                |
| Passenger Capacity                | 124                                                                                |
| Published Vehicle Capacity (PCUs) | 19                                                                                 |
| Crew                              | 5                                                                                  |

8.2.5 The following points should be noted in relation to MV *Leirna*:

- MV *Leirna* holds an MCA Class IV certificate and Bressay - Lerwick is therefore the **only route in Shetland which she is certified to operate**. This limits wider fleet resilience
- At 33-years old (at the time of writing), she is an **ageing** vessel, extending docking periods and making it harder to source spare parts. Her age is also leading to progressively **increasing maintenance costs** – for example, in FY 2024/25, her maintenance costs (£690,548) were almost treble (£234,896) those of FY2015/16.
- The layout of MV *Leirna*'s vehicle deck is such that she can generally **carry at or near to her published car carryings figure**

**Key Point:** MV *Leirna* was custom built for the Bressay service and it is the only route in Shetland on which she can trade. However, like much of Shetland's fleet, MV *Leirna* is ageing, and the costs of maintaining her are increasing.

#### Ports

8.2.6 The map below shows the ports on the Bressay - Lerwick route:

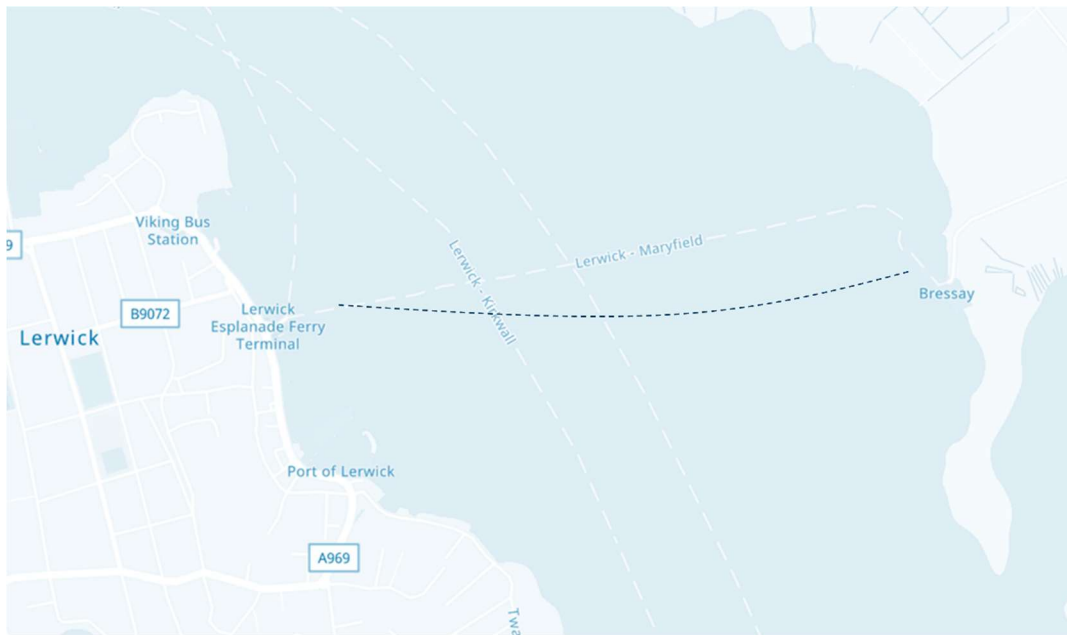


Figure 8.1: Lerwick – Bressay ports

8.2.7 The principal features of note are as follows:

- The **Lerwick terminal** for the Bressay service is the only one **not owned by the Council** – it falls under the jurisdiction of Lerwick Port Authority (LPA) and thus the **Council pays LPA dues for its use**
- **MV *Leirna* overnights on the linkspan berth in Bressay** and the crew are therefore based on the island

### How is the Bressay route operated?

8.2.8 The Bressay route is one of the more operationally simple routes on the network given its short length and operation in categorised waters.

8.2.9 It should be noted that, as with Bluemull Sound, the crewing arrangements and timetable may be subject to change in the near future. This will be reflected in the OBC where required.

### Crewing

8.2.10 The Bressay – Lerwick route is operated by a single vessel on a shift basis. Crewing arrangements are liable to change in the future, however the current arrangements are set out below:

- MV *Leirna* typically operates with a crew of four at any given time, although her passenger certificate can be increased with a crew of five
- She operates with two shifts on any given day, a dayshift and a backshift. Three crews are required to deliver this roster.
- Each crew has a three-week work pattern – this consists of:
  - One week of 12-hour dayshifts
  - One week of 6-hour backshifts (with the backshift crew on standby through the night)
  - One week off
- The crew work an average 42-hour week over each three-week period

- The crew complement on the route allows for a system of flexible rather than rostered leave
- MV *Leirna* overnights in Bressay and the crew are thus island-based or make use of shore side accommodation

### Length of operating day

- 8.2.11 There is no summer and winter variation in the timetable for the Bressay route. The table below summarises the length of the operating day and week for MV *Leirna*:

Table 8.3: MV *Leirna*, length of operating day

| Day          | Start-Up    | Sailing-Day   | Close Down  | Length of operating day |
|--------------|-------------|---------------|-------------|-------------------------|
| Monday       | 0:30        | 16:07         | 0:30        | 17:07                   |
| Tuesday      | 0:30        | 16:07         | 0:30        | 17:07                   |
| Wednesday    | 0:30        | 16:07         | 0:30        | 17:07                   |
| Thursday     | 0:30        | 16:07         | 0:30        | 17:07                   |
| Friday       | 0:30        | 18:07         | 0:30        | 19:07                   |
| Saturday     | 0:30        | 18:07         | 0:30        | 19:07                   |
| Sunday       | 0:30        | 16:07         | 0:30        | 17:07                   |
| <b>Total</b> | <b>3:30</b> | <b>116:49</b> | <b>3:30</b> | <b>123:49</b>           |

- 8.2.12 The following points should be noted with respect to the above table:

- MV *Leirna* operates continuously across the day Monday to Saturday from her first departure from Bressay at 07:00 through to her last arrival at 23:07 on a weekday, and 01:07 on a Friday and Saturday
- The timetable is however relatively relaxed. There is a 20-minute frequency between 08:00 and 09:00 on a weekday but the timetable is generally hourly, with some variation across the day
- On a Friday and Saturday, there are late evening sailings, with the last departure from Lerwick at 01:00, arriving in Bressay at 01:07
- The Sunday timetable reduces in intensity slightly, as is common on ferry routes across Scotland. The standard weekday operating day is though maintained

**Key Point:** The Bressay - Lerwick operates a 17–19-hour day across the week using a dayshift / backshift model.

## 8.3 Community Needs Assessment Step 2: Connectivity

### Timetable

- 8.3.1 The graphic below shows the Bressay timetable, which is the same summer and winter:



This graphic shows the departure times for scheduled ferry services from both Bressay and Lerwick

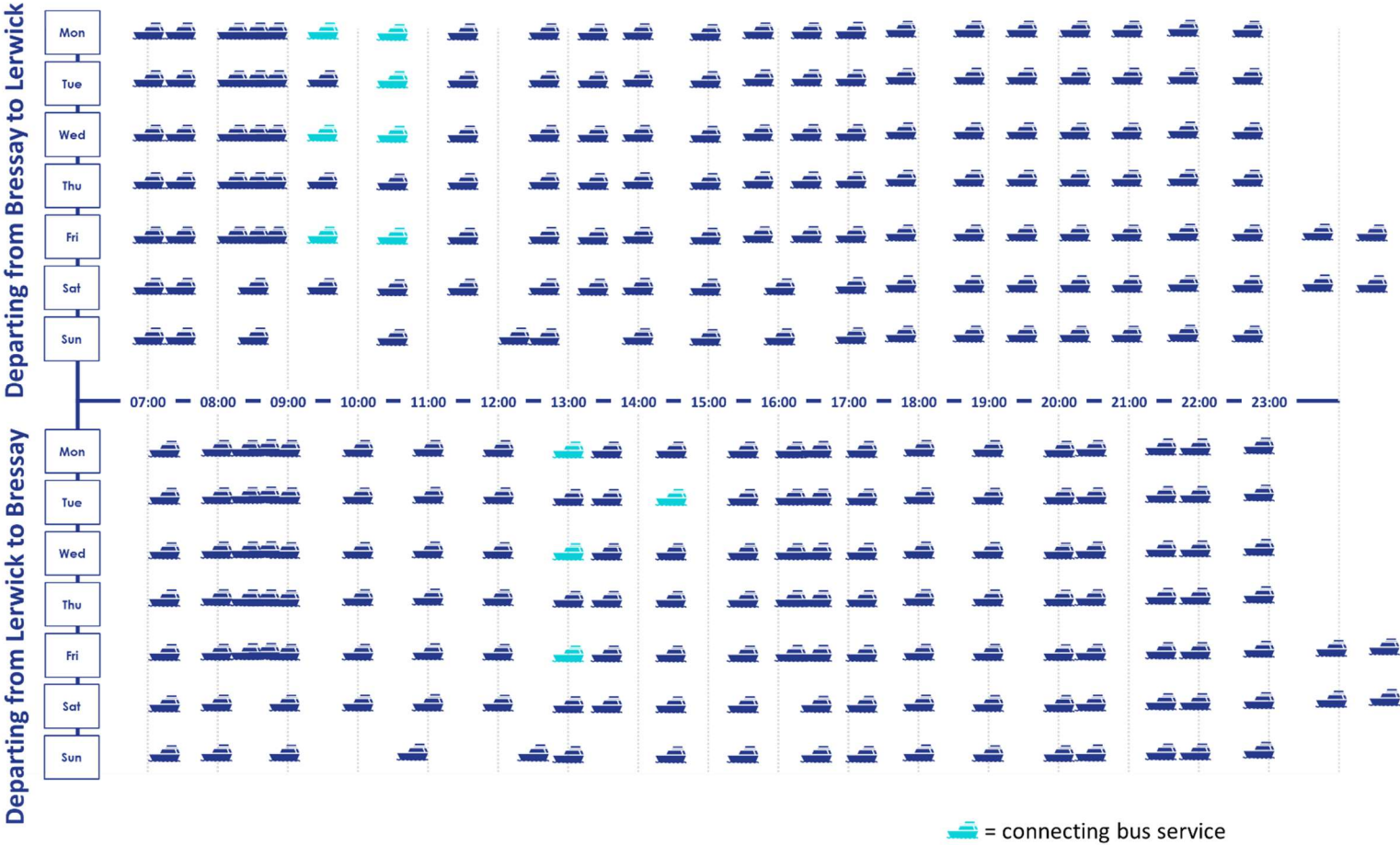


Figure 8.2: Bressay timetable - winter 2024/25

8.3.2 The key points of note with regard to the Bressay timetable are as follows:

- MV *Leirna* operates on a shift basis, facilitating an extended sailing day. Her first departure from Bressay is at 07:00, with her sailing day finishing late in the evening, and early the following morning on a Friday and Saturday
- There are slightly fewer sailings on a **Saturday (21)** and **Sunday (17)** relative to a weekday (**22 Monday to Thursday and 24 on a Friday**)
- Despite the long operating day, the service generally **only operates on an hourly frequency**, with some additional sailings in the peak period. This is a fairly relaxed schedule given that a return crossing can be completed in circa 20 minutes

**Key Point:** The Bressay service operates over a very long day, particularly on a Friday and Saturday, but it is not particularly frequent (generally hourly across the day).

### Public transport integration

8.3.3 There is a very limited bus service on Bressay – this consists of (as of March 2025):

- **No.41 Weekly Shopper:** This service runs **every Tuesday**, picking up from all main roads on Bressay before crossing on the **10:30** ferry and running to the Lerwick Tesco and Co-op. The service then runs in the reverse direction, returning on the **14:30** ferry
- **No.42:** This service operates on a **Monday, Wednesday and Friday** connecting with the **09:30** and **10:30** ferry departures from Bressay. The return service meets the ferry on the Bressay side of the crossing on the arrival of the **13:00** ferry from Lerwick

8.3.4 The ferry berths in the heart of Lerwick, with the nearby Esplanade bus stops providing onward connections across Shetland.

8.3.5 Several members of the public explained at the drop-in session that they leave a car at the Lerwick end of the crossing either on occasions or permanently (a common arrangement on the west coast of Scotland where residents often have separate island and mainland cars). This can offer a significant cost saving for frequent travellers, allowing them to travel as foot passenger and then pick-up their car in Lerwick. It should be noted that it is not clear how widespread this practice is.

**Key Point:** There is limited bus connectivity on Bressay, with most journeys made by car or as a foot passenger, on occasions with a car left at the Lerwick end of the crossing.

### What level of connectivity is provided?

8.3.6 The table below defines the level of connectivity provided for Bressay residents and those travelling to the island in terms of:

- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

8.3.7 Given the point made above about limited bus connectivity, this table is focused on car travel only:

Table 8.4: Bressay's connectivity

|             | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
| Destination | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Bressay     | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |
| Lerwick     | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |

**Key Point:** Bressay has a very high level of connectivity, allowing a working day, part-day and evening in Lerwick and on the island. The last sailings on a Friday and Saturday run well after most public transport services in Scotland as a whole finish for the day.

## 8.4 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

- 8.4.1 This section sets out how the Bressay ferry service is being used by residents and those visiting the island.

#### How many sailings are made in each year?

- 8.4.2 The figure below shows the number of sailings made by vessel on the Bressay route each year:



Figure 8.3: Bressay - total sailings by vessel, 2013-2024 (Source: vessel logbooks)

- 8.4.3 The key points of note in relation to the above figure are as follows:

- The inter-island ferry service was subject to a programme of **service reductions in 2013** – for **Bressay**, the reductions were mainly focused on **weekends**
- There was an overall **4% reduction in scheduled sailings** between 2013 and 2015, and then broad stability thereafter. However, the number of **Saturday** sailings reduced by **14%** and **Sunday** sailings by **9%**
- While frequency was reduced, the length of the operating day was largely maintained

**Key Point:** The 2013 programme of service reductions led to fewer sailings being operated on the Bressay route, particularly at the weekend. There was broad stability in the number of sailings following these cuts. Whilst frequency was reduced, the length of the operating day was maintained, which was important for a commuter route of this nature.

How have vehicle lane metre carryings changed over time?

8.4.4 The figure below shows vehicle carryings in terms of total lane metres (LMs) carried on the Bressay route for each year between 2013 and 2024. These figures have been built-up from sailing-by-sailing carryings noted in the vessel logbooks:

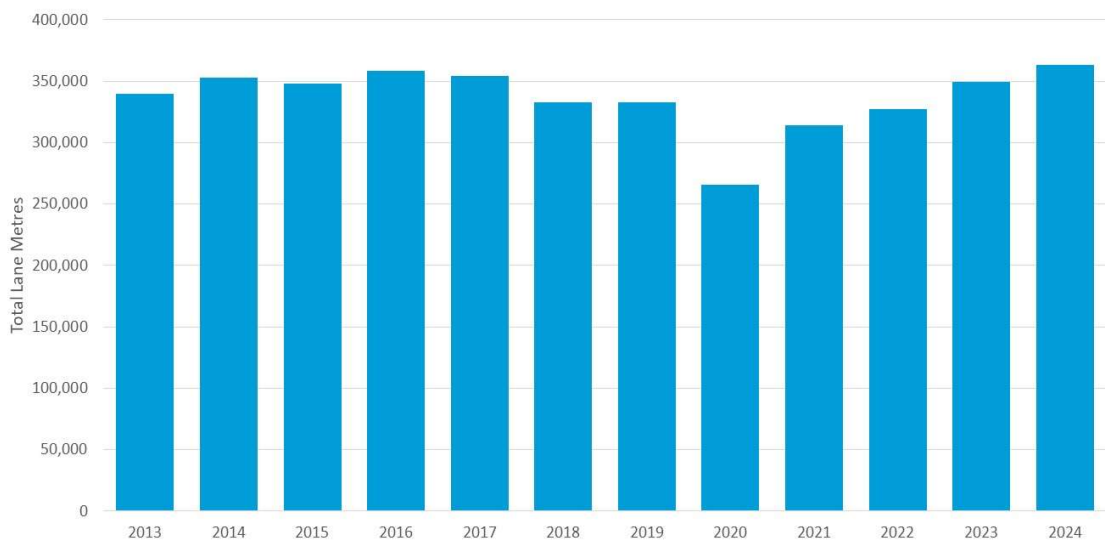


Figure 8.4: Bressay – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks)

**Key Point:** While carryings on the Bressay route have varied year-on-year, they have been broadly stable overall. Total LMs carried in 2019 were however 2% less than in 2013, which may reflect the impact of the 2013 service reductions.

What was the impact of COVID-19?

8.4.5 The table below shows the 2024 passenger, cars and commercial vehicle carryings as a percentage of 2019 carryings. This is a measure how close the route has got to recovering its pre-pandemic position:

Table 8.5: Bressay - 2024 carryings as a percentage of 2019 carryings

| Carrying type                           | Bressay - Lerwick |
|-----------------------------------------|-------------------|
| 2024 carryings as a % of 2019 carryings |                   |
| Passengers                              | 96%               |
| Cars                                    | 102%              |
| Commercial vehicles                     | 205%              |

8.4.6 The main points of note from the above table are as follows:

- The Bressay route has **largely recovered its pre-COVID-19 position**, with passenger and car carryings in 2024 standing at **96%** and **102%** respectively of their pre-pandemic position

- CV carryings increased significantly in proportional terms, but 2019 appeared to be an abnormally low year for CV traffic on the route

**Key Point:** The Bressay route had largely recovered its pre-pandemic carryings position by 2024.

### When are the busiest sailings?

- 8.4.7 The chart below shows the proportion of **Bressay – Lerwick** and **Lerwick - Bressay** sailings for each scheduled departure time where **vehicle deck utilisation exceeded 75%** - i.e., sailings which were **full** or **nearly full** in 2024. It should again be noted that the chart covers all seven days of the week and records all sailing times for which there were **50 or more** sailings in 2024, so some of the sailing times listed may not directly align with the timetable.

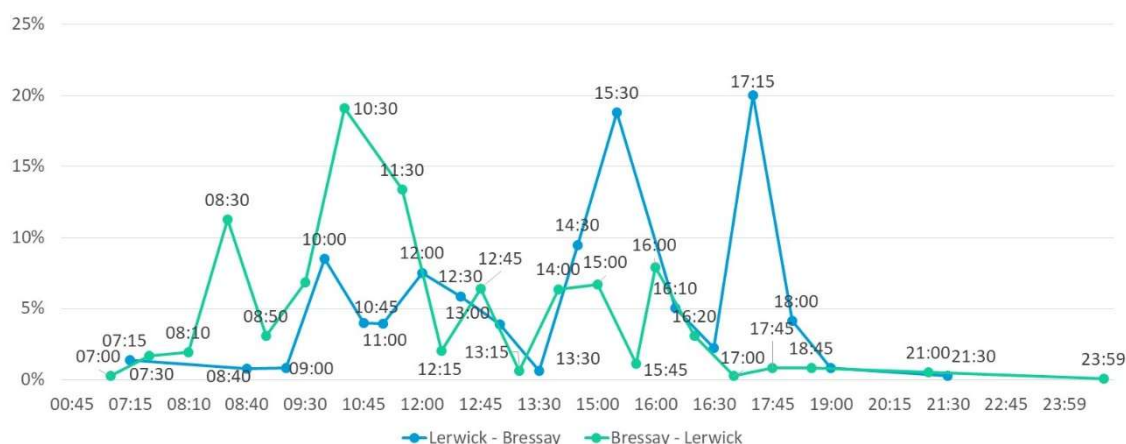


Figure 8.5: Proportion of Bressay - Lerwick sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks)

**Key Point:** Capacity is rarely an issue on the Bressay route, with only around 5% of sailings above the 75% threshold. However, there are clear peaks on certain sailings, including the 08:30 and 10:30 from Bressay and the 15:30 and 17:15 sailing from Lerwick.

### Is capacity a problem?

- 8.4.8 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted above, is a reasonable proxy for when sailings are full or almost full:

Table 8.6: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                                           | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|-------------------------------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| Bressay –<br>Lerwick (both<br>directions) | 6.0%                   | 5.5%                  | 3.7%                    | 3.2%                  | 5.2%                               |

**Key Point:** The table above highlights that capacity is rarely a problem on the Bressay route, outside of certain weekday peak sailings, as previously indicated.

### How are the ferry services performing?

8.4.9 This section sets out key data in relation to service performance. It is again though important to note that available cancellation data recorded by the Council Ferry Service is of variable quality. In particular, the cause of cancellations is not systematically recorded.

#### How often is the ferry cancelled?

8.4.10 The figure below shows the percentage of all sailings cancelled on the Bressay route in 2024:

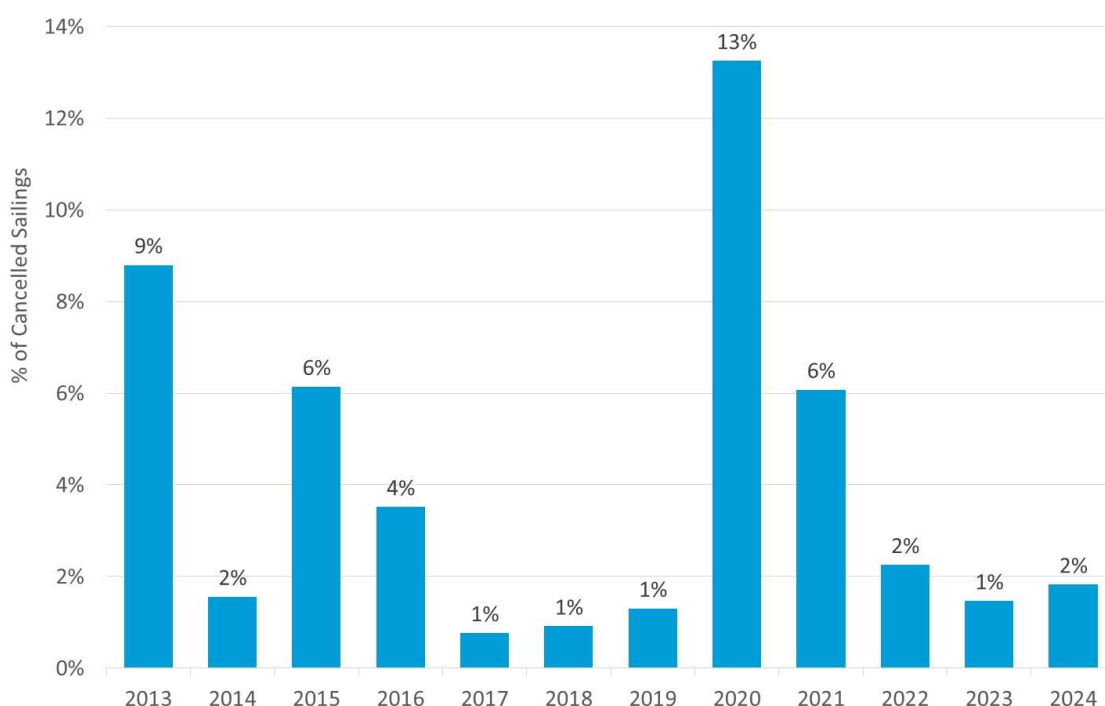


Figure 8.6: Annual percentage cancellation rate on the Bressay route (Source: vessel logbooks)

8.4.11 The main points from the above figure are as follows:

- **Cancellations have not been a significant issue on this route** in most years since 2017 – typically only **1%-2%** of circa **16,000 sailings** are cancelled annually
- It should be noted that the high rate of cancellations in 2020 and 2021 is likely due to crewing issues / self-isolation during the pandemic

**Key Point:** The Bressay service is highly reliable with only around 1%-2% of 16,000 sailings annually cancelled since 2017 (the pandemic years excepted).

#### How many sailing days and individual sailings operate to timetable?

8.4.12 The figure below shows the proportion of:

- All Bressay sailing days that operated to timetable (i.e., every individual sailing across the day is operated to timetable)
- Individual sailings that are operated to timetable



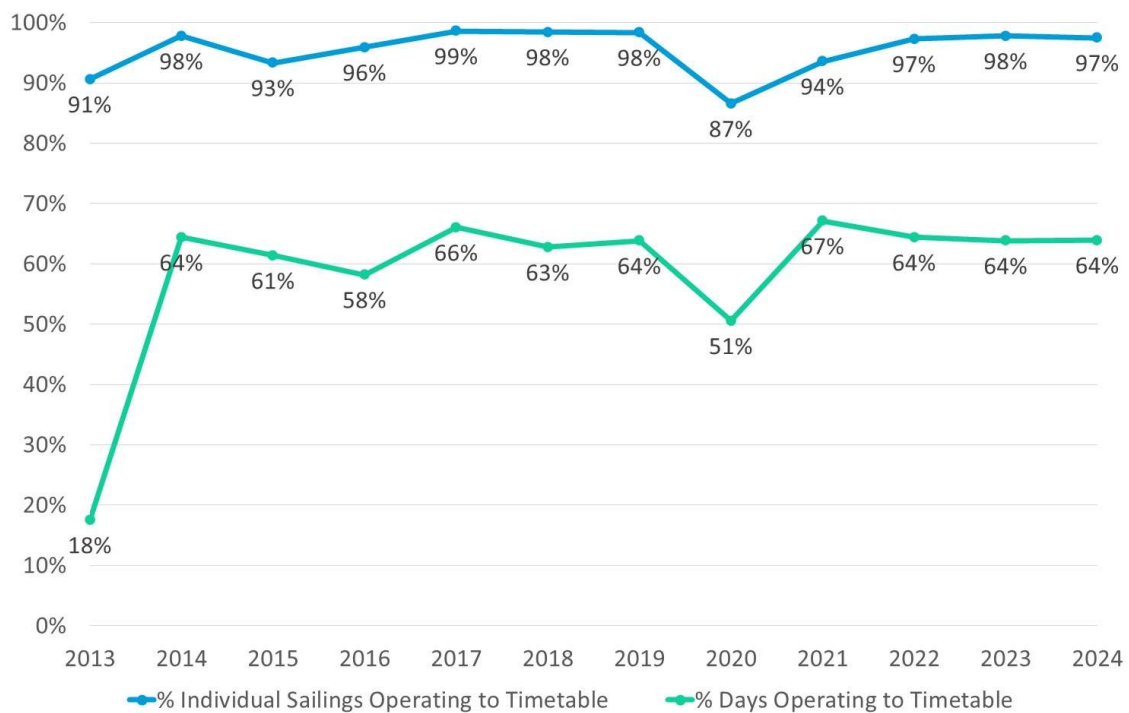


Figure 8.7: Bressay – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks)

8.4.13 The key points of note from the above figure are as follows:

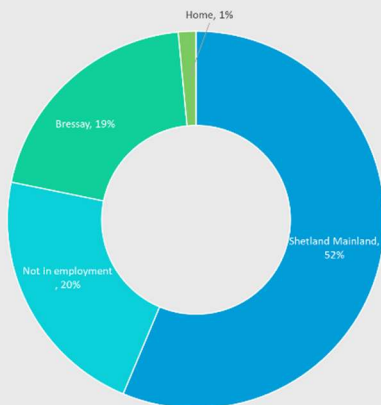
- The proportion of days when all sailings operate to timetable varies significantly by year. In 2024, all sailings operated to timetable on just under **two thirds of days**
- It should be noted that the 2013 figure of 18% is likely due to anomalies with the raw data (possible reflecting the 2013 service reductions) and should be viewed as an outlier
- Nine in every ten individual sailings do operate to timetable, so there are high levels of reliability overall on the Bressay route

**Key Point:** Analysis of sailings operated to timetable confirms the overall high level of reliability on the Bressay route, with nine in every ten sailings operated to timetable (out of a total of circa 16,000 sailings).

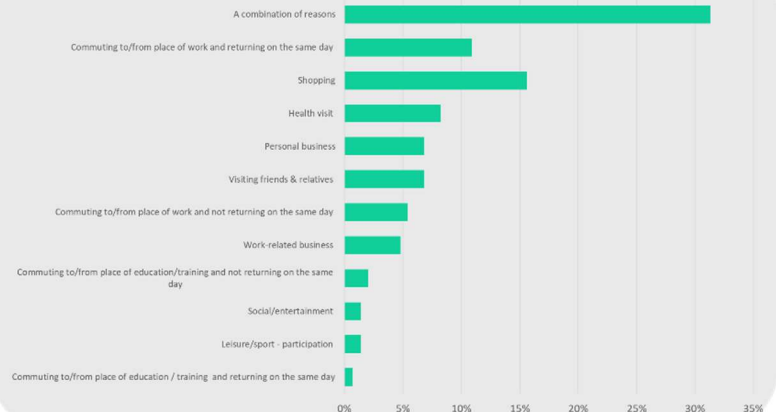
### Resident survey headlines

8.4.14 The graphic overleaf draws out the main headlines from the resident survey for Bressay residents.

### Place of Employment



### Main Reason for Journeys



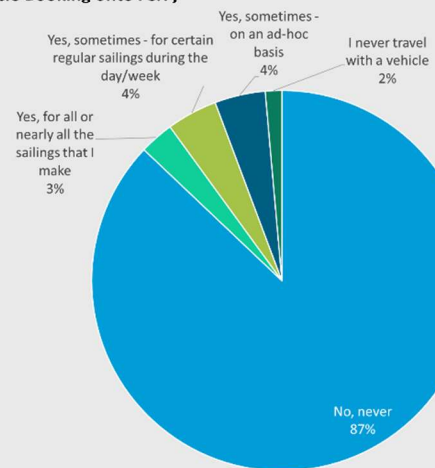
### Travel to Ferry

The majority of journeys on this route are made by car - **43%** always/mostly take their car on the ferry

A further **33%** always/mostly parked their cars at the terminal and travelled on the ferry as a foot passenger

**7%** of passengers walked to the terminal

### Vehicle Booking onto Ferry



### Top 5 areas of dissatisfaction

(total percentage of people who indicate they are either dissatisfied or very dissatisfied)

1. Ability to catch the first flight **[81%]**
2. Level of 10-journey fares: vehicle **[69%]**
3. Level of standard fares **[68%]**
4. Time of the first sailing of the day **[63%]**
5. Level of standard fares: commercial vehicle **[53%]**

I travel off-island as much as I need to, and my day-to-day activities are not unduly impacted by the current ferry service



I travel off-island less than I would like, and this has a negative impact on the things I would like to do



I travel off-island as much as I need to, but my day-to-day activities are negatively impacted by the current ferry service



## 8.5 Community Needs Assessment Step 4: Island Narrative

### Socio-Economic Profile

- 8.5.1 As alluded to above, every facet of Bressay's society and economy is shaped by its close proximity to Lerwick, as will be demonstrated in the narrative that follows.

#### How has population changed over time?

- 8.5.2 Bressay had a population of **349** at the time of the 2022 Census, making it the fourth most populous of the islands served by the Council's ferry network. The figure below shows the trend in population for Bressay and comparator areas, indexed to 1981:

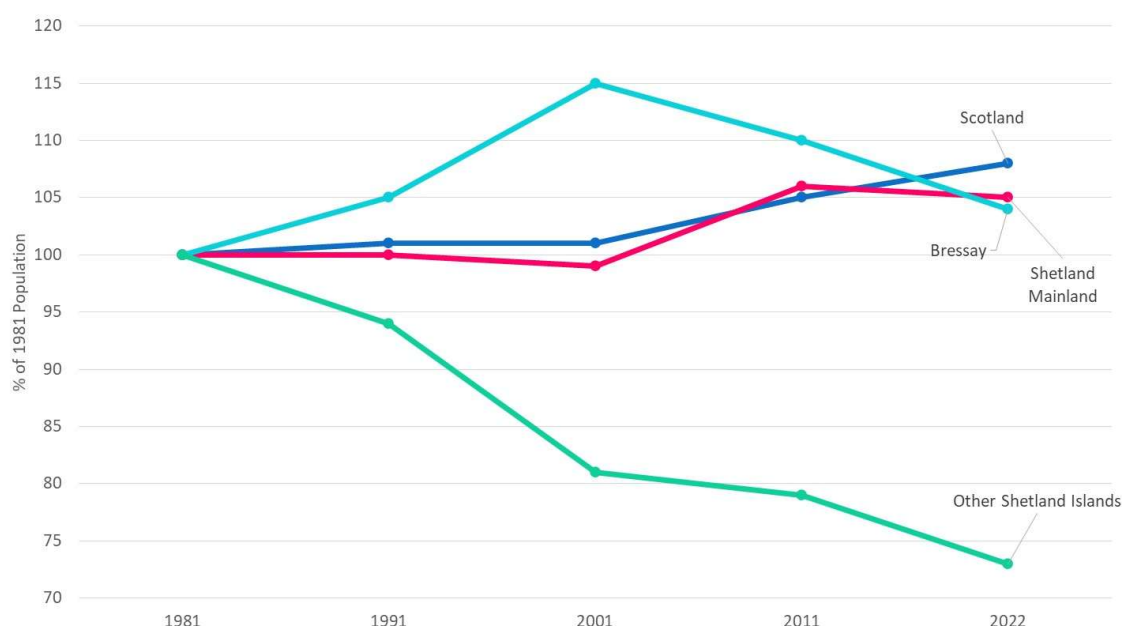


Figure 8.8: Population trend for Bressay and comparator areas (1981=100) (Source: Census)

- 8.5.3 The key points of note from the above figure are as follows:

- Unlike Shetland's island communities overall, the population of Bressay actually **increased** over the period 1981 to 2022. Whilst this increase was only **4% (15 people)**, it is nonetheless significant that Bressay has managed to avoid the precipitous population decline experienced by other islands such as Unst
- Despite this overall long-term stability, population has declined by **10% (35 people)** since 2001, which suggests that population challenges have emerged in more recent years

**Key Point:** Bressay has performed relatively well in population terms over the last four decades, experiencing a marginal increase in the number of residents between 1981 and 2022. It has not been dissimilar to Shetland overall in this respect. However, the island's population reduced by one tenth over the period 2001 to 2022, which hints at more recent challenges.

#### Population age profile

- 8.5.4 Whilst Bressay's overall population trend has been broadly positive, it has, like most of Shetland's island communities, an ageing population. The figure below shows the proportion

of Bressay's population aged under-16, 16-64 and over 64 in the 2011 and 2022 Censuses and compares this to mainland Shetland and the other island communities in Shetland:

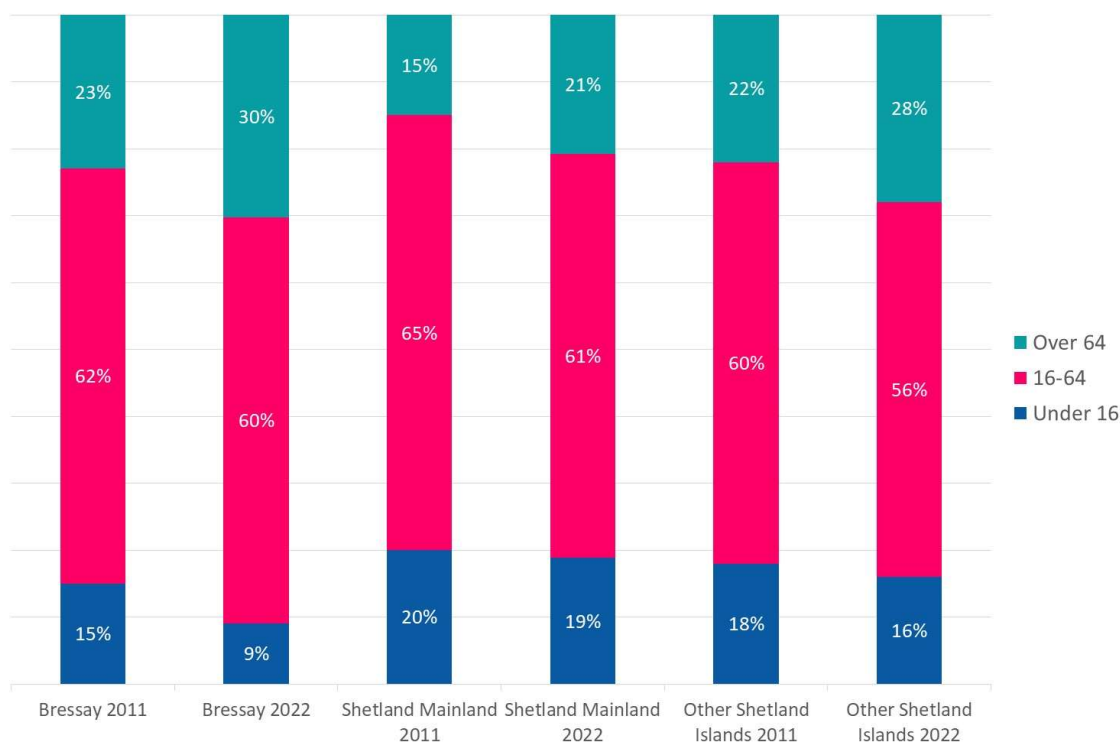


Figure 8.9: Population age profile for Bressay and comparator areas (Source: Census 2011 and 2022)

#### 8.5.5 In 2022:

- The proportion of Bressay's population **aged 65+** was **30%** compared to on **21%** on mainland Shetland.
- Perhaps more importantly, Bressay has a smaller proportion of its population **aged under-16 (9%)** relative to mainland Shetland (**19%**) – this potentially suggests that families are choosing to live in Lerwick instead
- Bressay's demographics are however more favourable than for several of Shetland's other island communities, Fetlar, Unst and Yell for example

**Key Point:** Whilst Bressay's population has been stable over the long-term, its population is ageing, with a particularly small proportion of under-16s resident on the island.

#### What is the economic structure of Bressay?

- 8.5.6 The figure below shows the sectoral split of employee jobs in Bressay in 2022 – it should be reiterated that this is a measure of **resident employment** (i.e., jobs filled by island residents irrespective of whether they work in Bressay):

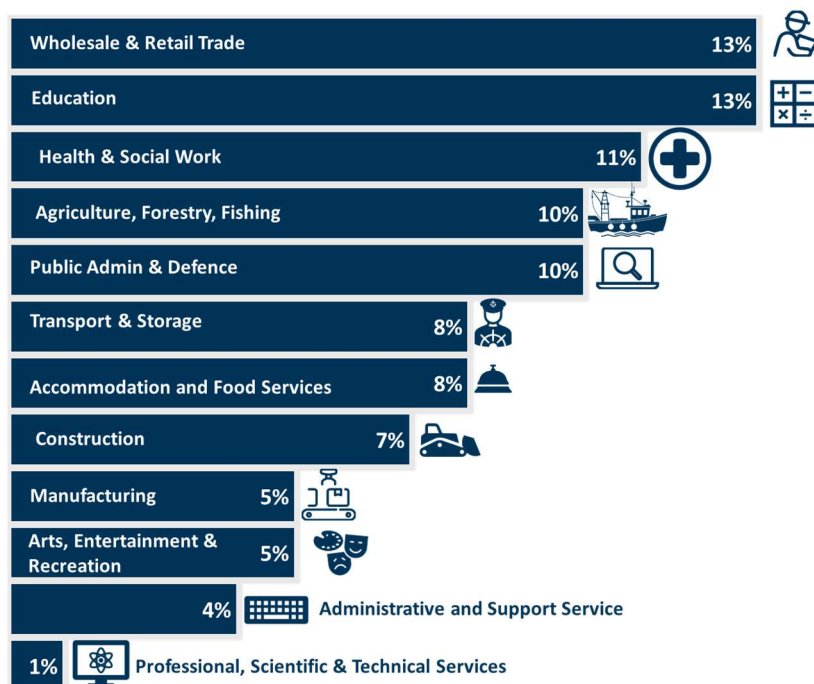


Figure 8.10: Employee jobs by industry – Bressay (Source: 2022 Census)

8.5.7 The key points of note from the above figure are as follows:

- The economic structure of Bressay is **materially different to Shetland's other island communities but is not dissimilar to Shetland overall**. The proximity of the island to Lerwick means that both its economy and services are highly integrated with those of the town, health and education for example
- Proximity to Lerwick is both advantageous in terms of making a wide range of jobs easily accessible but also a challenge in that it makes developing on-island employment difficult. The absence of a school may have also incentivised parents to leave the island
- In progressing this study, it will be **important to ensure that Bressay's transport connectivity needs are viewed in the wider context of its economic connectedness with Lerwick**
- The main island-based employer is the **Pelagia Bressay fish factory**, whose activities were introduced in Chapter 5. There is also a small marina, café and caravan park on the island

**Key Point:** Bressay's economy is heavily intertwined with that of Lerwick – out with Pelagia Bressay, there are no significant employers on the island. There is however a high level of commuting to Lerwick for employment and also for accessing public and personal services, retail and leisure.

#### What public services are available on Bressay?

8.5.8 The table below summarises the public services that are available on Bressay:

Table 8.7: Availability of public services in Bressay

| Service        | Bressay |
|----------------|---------|
| Nursery        | No      |
| Primary school | No      |

| Service                                                                 | Bressay                                      |
|-------------------------------------------------------------------------|----------------------------------------------|
| Junior high school                                                      | No                                           |
| Shop                                                                    | Yes                                          |
| GP                                                                      | No                                           |
| Dentist                                                                 | No                                           |
| Post Office                                                             | Yes                                          |
| Bank                                                                    | Yes, delivered through the Post Office       |
| Care home                                                               | No                                           |
| Council leisure centre                                                  | No                                           |
| Hotel or visitor accommodation                                          | Maryfield House Hotel and small caravan park |
| Proportion of households with superfast broadband                       | 64%                                          |
| Proportion of households meeting broadband Universal Service Obligation | 100%                                         |

**Key Point:** Bressay has relatively few on-island services, with residents travelling to Lerwick for education, health and larger scale retail. It is the only island within the scope of the IITCP which has no on-island nursery or primary school provision (active or mothballed).

## 8.6 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

8.6.1 A summary of the transport problems by theme for Bressay is presented below.

### What are the transport problems in Bressay?

8.6.2 The problem themes relevant to **Bressay** are set out in the table below:

Table 8.8: Bressay - transport problem 'themes'

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                                                                                                                  | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                                                                                                                             | Capacity                                                                                               |
| Fuel / power issues                                                                                                                                                                                          | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                                                                                                                          | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                              |
| Journey quality                                                                                                                                                                                              | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                        |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                        |



| All modes of travel                         | Public transport specific |
|---------------------------------------------|---------------------------|
| Personal security (fear of crime)           |                           |
| Travel safety (collisions, personal injury) |                           |

8.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1 of the Transport Problems Framework) and the **underlying supply-side cause** (Step 2):

Table 8.9: Bressay– transport problems and supply-side causes

| Problem Theme                                      | Step 1: Problem(s)                                                                                                                                                                                                                                                            | Step 2: Supply-side cause(s)                                                                                                                                                                                                                 |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel        | - Greenhouse gas emissions from the vessel                                                                                                                                                                                                                                    | - MV <i>Leirna</i> is a conventional diesel vessel                                                                                                                                                                                           |
| Cost of travel and affordability                   | - The level of fares was a source of dissatisfaction in the resident survey                                                                                                                                                                                                   | - Common fares across all Ro-Ro routes, making the cost per mile for Bressay comparatively high, particularly given the higher frequency of travel on the route                                                                              |
| Integration of travel between modes – ferry-to-bus | - The bus network on Bressay is extremely limited, meaning many people drive and park at the ferry terminal and others take their car on the ferry<br>- It is understood that some Bressay residents also leave their main or a second car in Lerwick some or all of the time | - Limited and fragmented bus network<br>- High cost of bus service provision relative to demand                                                                                                                                              |
| Capacity                                           | - Capacity overall is not a major problem but between 10% and 20% of 08:30, 10:30 and 11:30 sailings from Bressay and the 15:30 and 17:15 sailings from Lerwick are full or close to full                                                                                     | - Occasional insufficient vehicle deck capacity on these peak sailings                                                                                                                                                                       |
| Connectivity and network coverage                  | - Bressay is generally very well connected for island of its population, with a relatively frequent service over a long operating day. However, its economic inter-dependence on Lerwick heightens the need for good transport connectivity                                   | - There is no specific supply-side cause of this problem, rather it reflects the requirement to work around a ferry service to access employment, services etc which are only a very short distance away and on which Bressay wholly depends |
| Timetables                                         | - The first sailing from Bressay at 07:00 is relatively late for an island so close to Lerwick and also prevents Bressay residents catching the first flights from Sumburgh without a costly overnight stay                                                                   | - Current crew rostering                                                                                                                                                                                                                     |

## 9 Foula

### Key facts

- **Population in 2022:** 35
- **Ports**
  - Foula
  - Walls, West Mainland
- **Vessel:** MV *New Advance*
- **Relief vessel:** Generally provided directly by BK Marine, but MV *Snolda* can access Foula
- **Overnight berth:** Foula
- **Crossing time:** 120 minutes

### 9.1 Overview

- 9.1.1 Foula's transport connections are materially different to those of the other in-scope islands in this study, although not dissimilar to Fair Isle, for which new investment is currently being progressed. The island is situated some 15 nautical miles from mainland Shetland and the ferry route is long and exposed, a feature which is compounded by the requirement to use a small vessel to fit within the shallow and spatially constrained harbour at Ham (Foula).
- 9.1.2 The limitations on the ferry service means that almost all passenger travel from and to the island is by air, with the ferry fulfilling a largely supply-chain role. As will be explained below, the current setup of the ferry service works very well for the community and has several features which are crucial to the economic vitality of the island, most notably an island-based crew.
- 9.1.3 It should be noted at the outset of this chapter that:
- As the majority (circa 90%) of passenger journeys from Foula are made using the air service, there is no connectivity section for Foula
  - For the same reason, Foula was not included in the resident survey. The community was engaged directly through a detailed online engagement meeting
  - As the Foula ferry service is contracted out, there is not an equivalent data with respect to carryings and performance

### 9.2 Community Needs Assessment Step 1: Route Service Level

- 9.2.1 The table below allocates the **Foula - Walls** route to its relevant Route Service Level for both the winter and summer:

Table 9.1: Allocation of Foula – Walls route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         | ✓       |         |         |         |         |
| Summer |         |         | ✓       |         |         |         |         |

- 9.2.2 The **Foula – Walls** route currently operates with a dedicated and island-based single vessel.

## What are the main features of the route?

### Categorisation of waters

- 9.2.3 Whilst the route to Foula is in 'open seas' MV *New Advance* is coded as a workboat rather than as a passenger ferry. She is therefore restricted to carrying **12** passengers.

### Vessel

- 9.2.4 The Foula route is operated by MV *New Advance*, the key features of which are summarised in the table below

Table 9.2: Key features of MV *New Advance*

| Parameter                         | MV <i>New Advance</i>                                                               |
|-----------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |
| Entered service                   | 1996                                                                                |
| Passenger Certificate             | MCA Workboat                                                                        |
| Length Overall (m)                | 9.75                                                                                |
| Beam (m)                          | 4.05                                                                                |
| Draught (m)                       | 1.72                                                                                |
| Passenger Capacity                | 12                                                                                  |
| Published Vehicle Capacity (PCUs) | 1                                                                                   |
| Freight Capacity                  | 10 tonnes                                                                           |
| Crew                              | 3/4                                                                                 |

- 9.2.5 The following points should be noted in relation to MV *New Advance*:

- MV *New Advance* is the smallest vessel in the Shetland fleet. She is classified as a '**workboat**' which means she is limited to carrying **12 passengers** on any sailing
- As will be explained in more detail later in this section, the Foula service is contracted out by the Council and is currently operated by BK Marine. As part of this contract, the tendered operator secures relief cover when MV *New Advance* is in drydock. Feedback from the crew and community highlighted that this arrangement works very well – the solution may not be the same every time, but service to the island is maintained
- The crew also noted that the vessel is in **generally good condition**, although ongoing investment will be required to maintain her as she gets older

**Key Point:** MV *New Advance* is a custom-built workboat for the Foula route. She is limited to carrying 12 passengers, one car and 10 tonnes of freight but the community noted that she meets the island's needs well. Refit cover is provided by BK Marine through their contract with the Council.

## Ports

9.2.6 The map below shows the ports on the Foula - Walls route:

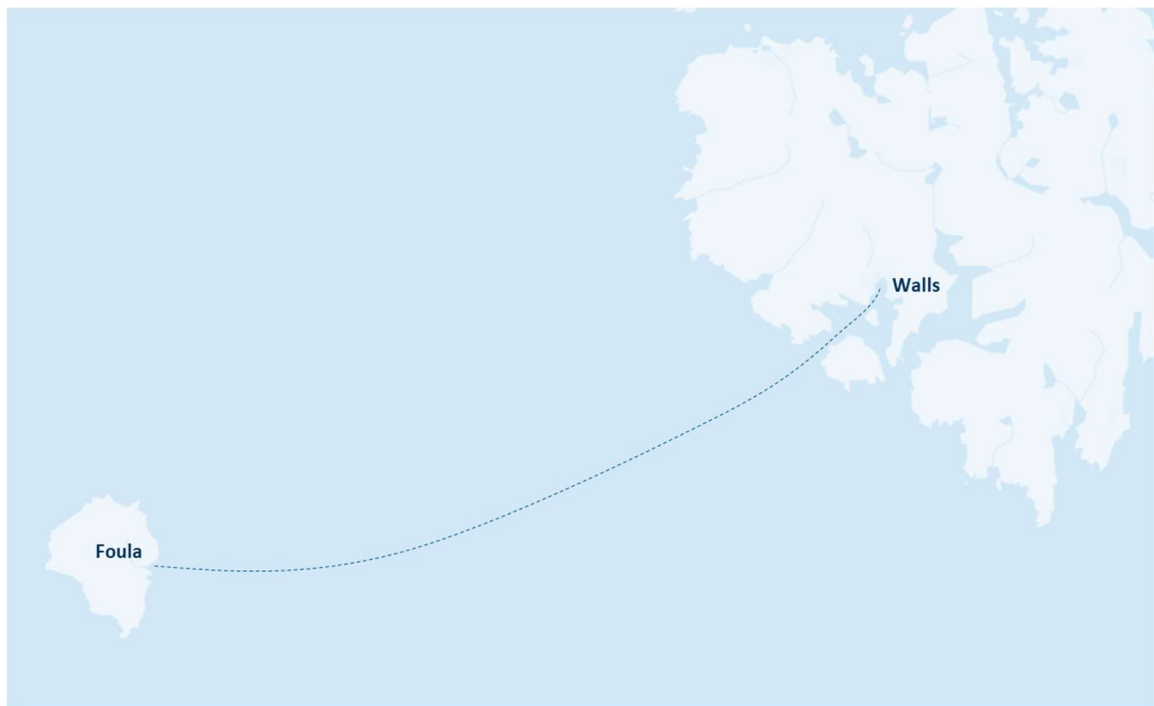


Figure 9.1: Foula - Walls ports

9.2.7 The principal features of note are as follows:

- Walls is located in West Mainland and offers a pontoon landing stage for the Foula ferry. Cargo is craned onto the pier
- Ham Harbour in Foula is **spatially constrained, relatively shallow and prone to siltation**. Given the conditions within the harbour, MV *New Advance* is withdrawn from the water at the end of each sailing on a bespoke set of davits
- There is a **quayside crane** in Ham which has a lifting capacity of 15 tonnes. This is used for ferry cargo handling but also has a range of other community uses. The Council owns the crane, BK Marine has the responsibility for maintaining it and several members of the community have sat the appropriate qualification to operate it
- When disembarking passengers in Foula, the crew generally berth the vessel alongside the **boat steps**

**Key Point:** A bespoke solution (large davits) has been developed in Foula to allow the vessel to overnight in the island. Ham Harbour itself is spatially constrained, relatively shallow and prone to siltation.

## How is the Foula - Walls route operated?

9.2.8 The route between Foula and Walls is one of the most challenging and constrained in the Shetland internal network. It is highly exposed to any winds and waves from northerly through

westerly to southerly. Despite this, the operational constraints at Ham limit the size of the vessel to circa 10-metres.

- 9.2.9 Like Fair Isle to the south, the operational constraints on the route have conventionally favoured an island-based vessel, where the crew can operate the service in response to weather windows rather than to a fixed timetable. Again, like the Fair Isle vessel MV *Good Shepherd IV*, MV *New Advance* is coded as a workboat and is thus limited to 12 passengers, but this makes it easier to crew the vessel from the island. Unlike Fair Isle however, the Foula service is contracted out to BK Marine by Shetland Islands Council.

### Crewing

- 9.2.10 The Foula – Walls service is operated on a single vessel, single crew basis. She generally operates with a crew of four but can operate with three if required.
- 9.2.11 The key point in relation to the crewing of the Foula service is the deployment of an **island-based crew** – this is fundamental to the sustainability of the service and the community at large for several reasons:
- An island-based crew allows the service to be entirely **responsive to weather windows**, maximising the number of sailings that can be operated (and operated to timetable) across the year
  - The crew also fulfil a range of **other important jobs on the island**. If the ferry was not based in Foula, it is possible and indeed probable that some of these crew and their families would leave the island. In a small island community, it only takes a handful of families to leave to pose a fundamental threat to island sustainability
  - Employment on the ferry service is amongst the few salaried jobs in the island. It retains traditional maritime skills and provides a **career pathway for young people**, providing scope for them to stay in Foula in the long-term
  - With a maximum of one rotation per sailing day, basing the ferry in the island provides the **opportunity for a very short day return trip to West Mainland**. Whilst this is a maximum of two hours, and almost all passenger journeys are made by air, the occasional use of the ferry allows for attending a GP appointment. This would not be possible if the vessel was mainland based
  - Less tangibly, but perhaps most importantly, the **crew are completely committed to and invested in delivering the ferry service**, which is essential to the sustainability of their community
- 9.2.12 Whilst options are not considered at case for change stage, **retaining an island-based vessel is the clearly expressed aspiration of the Foula community**. It should also be noted that the importance of this point and its justification for investment was explicitly recognised in the successful business case for the new Fair Isle ferry, where an off-island solution would have been considerably less expensive.

**Key Point:** The basing of MV *New Advance* in Foula and its crewing from the island is of fundamental importance to the Foula community and the economic sustainability of the island.

### Length of operating day

- 9.2.13 There is no summer / winter variation in the published timetable for the Foula route. However, the community did note that an additional return sailing is operated on summer Saturdays, but this is not formally listed in the timetable. The table below summarises the length of the operating day and week for MV *New Advance* based on the published timetable:

Table 9.3: MV *New Advance*, length of operating day

| Day          | Start-Up    | Sailing-Day  | Close Down   | Length of operating day |
|--------------|-------------|--------------|--------------|-------------------------|
| Monday       | 0:00        | 0:00         | 0:00         | 0:00                    |
| Tuesday      | 1:00        | 06:00        | 1:00         | 08:00                   |
| Wednesday    | 0:00        | 0:00         | 0:00         | 0:00                    |
| Thursday     | 1:00        | 06:00        | 1:00         | 08:00                   |
| Friday       | 0:00        | 0:00         | 0:00         | 0:00                    |
| Saturday     | 0:00        | 0:00         | 0:00         | 0:00                    |
| Sunday       | 0:00        | 0:00         | 0:00         | 0:00                    |
| <b>Total</b> | <b>2:00</b> | <b>12:00</b> | <b>02:00</b> | <b>16:00</b>            |

9.2.14 The following points should be noted with respect to the above table:

- The Foula route is operated on a broadly similar basis to that of Fair Isle, whereby the published timetable cannot always be maintained due to weather and sea conditions and the crew therefore operate the service within available weather windows
- Given the requirement for manual cargo handling and the need to release and secure the vessel on the davits at the start and end of the day, start-up and close down time is assumed to be an hour, although may be longer depending on the cargo handling process

**Key Point:** Whilst there is a published timetable for the Foula – Walls route, the conditions en-route means that the service is operated flexibly within available weather windows.

### 9.3 Community Needs Assessment Step 2: Connectivity

9.3.1 Foula's connectivity is by and large provided by the air service. The ferry allows for a very short return trip to Walls on a Tuesday and Thursday, and it is understood that it is occasionally used by young people / students returning to the island.

### 9.4 Community Needs Assessment Step 3: Service Performance

9.4.1 As noted above, the Foula route is tendered and this there is limited detail on service performance. What is available will also be less meaningful, as the service is operated in a very flexible manner by the island-based crew.

### 9.5 Community Needs Assessment Step 4: Island Narrative

9.5.1 A key challenge in developing a socio-economic profile of Foula (and indeed the other small islands of Papa Stour and Skerries) is the availability of data described in Chapter 2 (i.e., spatial disaggregation of data, lag and under-reporting).

9.5.2 Key headlines from published data are set out below and we have cross-checked these with representatives of the Foula community as part of the consultation process:

- The **base population** of Foula was recorded as **35** in the 2022 Census. The community confirmed that this figure is broadly correct, although some residents do live off-island and travel back at different points across the week, month or year. The island's population has been broadly steady over time, although it has declined slightly since the 1980s

- Unlike several of Shetland's other island communities, Foula has a reasonably **balanced demographic**, with a good number of children on the island
- Foula has an **on-island nursery and primary school** - there are six primary school aged children, four children who board in Anderson High for three weeks at a time (and sometimes longer if the weather does not allow for them to return) and one other child who has recently finished school
- Island residents travel to Walls for **GP appointments** and Lerwick for **hospital appointments** and **larger scale retail**. The island generally has a resident District Nurse, but this post is currently unfilled and is being advertised at the time of writing (April 2025)
- There is **little in the way of industry on the island outwith crofting and small-scale fishing and crafts**. The island is also understood to be increasingly popular amongst **tourists**, particularly those with an interest in ornithology
- No households in Foula have access to Superfast Broadband, with only **70%** meeting the broadband Universal Service Obligation

## 9.6 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

9.6.1 A summary of the transport problems by theme for Foula is however presented below.

### What are the transport problems in Foula?

9.6.2 Given the scope of this commission, **the problems set out below relate specifically to the ferry service.**

Table 9.4: Transport problem 'themes'

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                                                                                                                  | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                                                                                                                             | Capacity                                                                                               |
| Fuel / power issues                                                                                                                                                                                          | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                                                                                                                          | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                              |
| Journey quality                                                                                                                                                                                              | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                        |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                        |
| Personal security (fear of crime)                                                                                                                                                                            |                                                                                                        |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                                                                                                        |

9.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1) and the **underlying supply-side cause** (Step 2):



Table 9.5: Foula ferry service – transport problems and supply-side causes

| Problem Theme                                       | Step 1: Problem(s)                                                                                                                                                                                      | Step 2: Supply-side cause(s)                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel         | - Greenhouse gas emissions from vessel                                                                                                                                                                  | - MV <i>New Advance</i> is a conventional diesel vessel built in 1996                                                                                                                                                                                                                                                                                                                                                              |
| Personal accessibility                              | - Access to the ferry for Persons of Restricted Mobility and older people etc can be difficult, and in some instances, carriage may not be permitted if there is considered a risk to passenger welfare | - Access arrangements to MV <i>New Advance</i> at both Foula and Walls. However, it is recognised that the vessel is not widely used by passengers and the constraints in Ham Harbour are well understood                                                                                                                                                                                                                          |
| Capacity                                            | - MV <i>New Advance</i> has a limited cargo capacity. She can also only take one small car on her deck and cannot accommodate any heavy plant or freight                                                | - MV <i>New Advance</i> is a small workboat coded vessel specifically designed to fit within the constraints of Ham Harbour and the lifting capacity of the davits                                                                                                                                                                                                                                                                 |
| Service reliability (cancellations and punctuality) | - The route is subject to significant disruption, especially in the winter months                                                                                                                       | - Long and exposed crossing on a small vessel. However, as the vessel is island-based, there is flexibility to work around available weather windows, and this is a generally accepted fact of life in Foula<br>- Ham Harbour is subject to siltation and requires dredging to maintain access. It is understood that the current under keel clearance means that MV <i>Sno/da</i> cannot visit the island as she did in the past. |

9.6.4 Whilst the transport problems set out in the above table were confirmed through discussions with the Foula community, it is important to note that the community overall is very satisfied with the service, which is run by and for the community.

9.6.5 Moreover, there is a general acceptance of the limitations of the service. For example, whilst hold capacity can occasionally be insufficient, the crew work with the community to prioritise which goods are shipped (generally in the order of human food, animal food, possessions, building supplies and then luxuries). Larger goods are occasionally brought in by other vessels. This is a generally and widely accepted fact of life in Foula.

## 10 Papa Stour

### Key facts

- **Population in 2022:** 7
- **Ports**
  - Papa Stour
  - West Burrafirth
- **Vessel:** MV *Snolda*
- **Relief vessel:** MV *Fivla*
- **Overnight berth:** West Burrafirth
- **Crossing time:** 40 minutes

### 10.1 Overview

- 10.1.1 Papa Stour is the smallest island (in permanent population terms) served by the Council's ferry network. As will be set out below however, the island's characteristics are much more nuanced than this and its ferry service is required to meet a range of different community needs.
- 10.1.2 The Papa Stour – West Burrafirth route is the most lightly used of the Shetland Ro-Ro network but provides the essential connectivity for the island following the withdrawal of its air service in April 2020. It should be noted that, to mitigate the withdrawal of the air service, two return sailings between West Burrafirth and Papa Stour were introduced on a Monday.

### 10.2 Community Needs Assessment Step 1: Route Service Level

- 10.2.1 The table below allocates the **West Burrafirth – Papa Stour** route to its relevant Route Service Level for both the winter and summer timetables.

Table 10.1: Allocation of West Burrafirth – Papa Stour route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         | ✓       |         |         |         |         |
| Summer |         |         | ✓       |         |         |         |         |

- 10.2.2 The **West Burrafirth – Papa Stour** route currently operates with a dedicated single vessel, which is also single crewed.

### What are the main features of the route?

#### Categorisation of waters

- 10.2.3 Whilst the route to Papa Stour is in 'open seas', MV *Snolda* is coded as a Class VIIIA merchant / cargo vessel rather than a ferry because of her insufficient watertight subdivision. She is therefore **limited to carrying 12 passengers**.

#### Vessel

- 10.2.4 Built in 1983, MV *Snolda* is the second oldest vessel in the fleet (after MV *Hendra*, which was built in 1982).

Table 10.2: Key features of MV *Snolda*

| Parameter                         | MV <i>Snolda</i>                                                                   |
|-----------------------------------|------------------------------------------------------------------------------------|
|                                   |  |
| Entered service                   | 1983                                                                               |
| Passenger Certificate             | Class VIIIA                                                                        |
| Length Overall (m)                | 24.4                                                                               |
| Beam (m)                          | 7.0                                                                                |
| Draught (m)                       | 3.36                                                                               |
| Passenger Capacity                | 12                                                                                 |
| Published Vehicle Capacity (PCUs) | 6                                                                                  |
| Freight Capacity                  | 115 tonnes                                                                         |
| Crew                              | 4                                                                                  |

10.2.5 The following points should be noted in relation to MV *Snolda*:

- As previously indicated, she is limited to carrying **12 passengers** due to her being designed with insufficient watertight subdivision
- She is a stern loading vessel, which means that **vehicle drivers have to reverse on**. This was a common practice across Shetland and indeed Scotland in years gone by but is now relatively rare as it slows down vessel turnaround and increases safety risks
- MV *Snolda* operates on **single propellor propulsion** and thus has no resilience in the event of a failure of that propulsion unit

**Key Point:** MV *Snolda* has generally been an appropriate vessel for Papa Stour over many years. However, she is an old vessel, has limited passenger capacity and still requires reversing on.

## Ports

10.2.6 The map below shows the ports on the West Burrafirth – Papa Stour route:

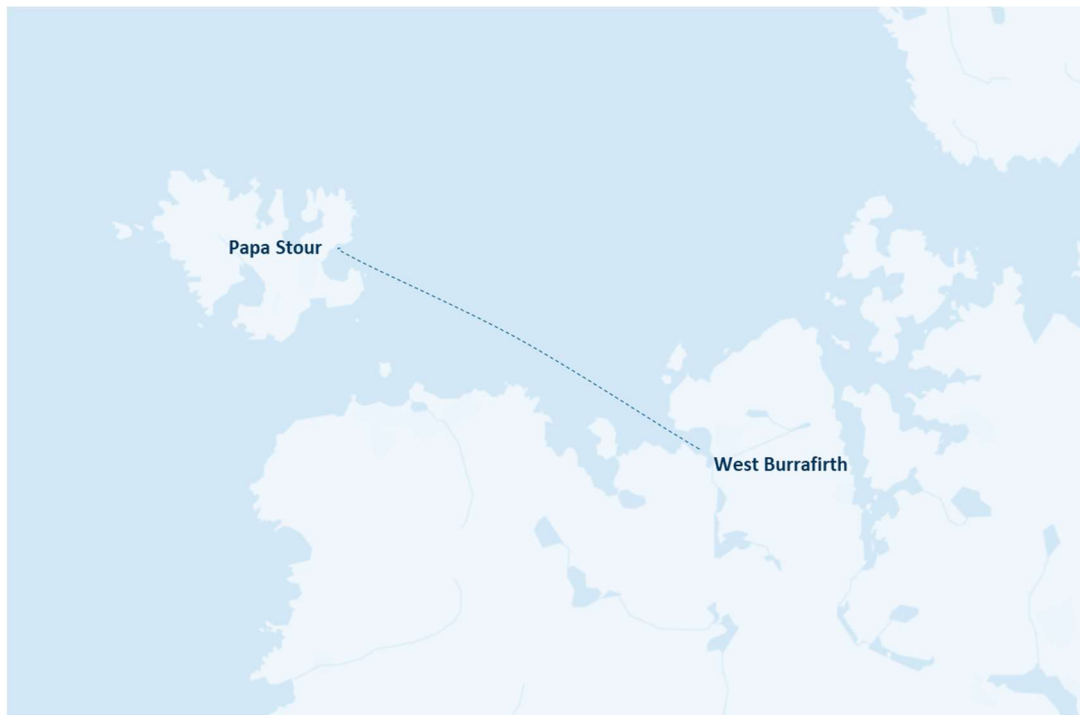


Figure 10.1: West Burrafirth – Papa Stour ports

10.2.7 The principal features of note are as follows:

- West Burrafirth is located in a sheltered voe in West Mainland. MV *Snolda* has a dedicated linkspan berth alongside a finger pier on the east side of the harbour
- There is a similar arrangement at Papa Stour. Neither port has a formally lined and marked marshalling area

### How is the Papa Stour route operated?

#### Crewing

10.2.8 The West Burrafirth – Papa Stour route is operated on a single vessel, single crew basis. The crewing arrangements are set out below:

- MV *Snolda* typically operates with a crew of four at any given time. The crew is mainland based
- The crew is contracted to work an average week of 41 hours, with the week consisting of two return sailings on a Monday, Wednesday, Saturday and Sunday and three return sailings on a Friday<sup>51</sup>
- On Monday, Wednesday, Friday and Saturday, there is a significant gap between the sailings. On Mondays and Wednesdays, the crew remain on duty between the sailings, providing an opportunity to deliver additional sailings where required and / or undertake drills and maintenance

<sup>51</sup> The third return sailing on a Friday was only added to the timetable for summer 2025 and is intended to support travel to and from school in mainland Shetland.

## Length of operating day

- 10.2.9 It is understood that there is no significant summer / winter variation in the timetable for the Papa Stour route (albeit the 2024/25 winter timetable only had one return sailing on a Sunday). The table below summarises the length of the operating day and week for MV *Snolda* based on the summer 2025 timetable. It should be noted that the table shows the vessel's running and sailing times, but the crew work more hours than this as they remain on duty between sailings on a Monday and Wednesday.

Table 10.3: MV *Snolda*, length of operating day – summer timetable 2025

| Day          | Start-Up     | Sailing-Day  | Close Down   | Length of operating day |
|--------------|--------------|--------------|--------------|-------------------------|
| Monday       | 1:00         | 3:05         | 1:00         | 05:05                   |
| Tuesday      | 0:00         | 0:00         | 0:00         | 00:00                   |
| Wednesday    | 1:00         | 3:05         | 1:00         | 05:05                   |
| Thursday     | 0:00         | 0:00         | 0:00         | 00:00                   |
| Friday       | 1:00         | 4:45         | 1:00         | 06:45                   |
| Saturday     | 1:00         | 3:05         | 1:00         | 05:05                   |
| Sunday       | 0:30         | 2:55         | 0:30         | 03:55                   |
| <b>Total</b> | <b>04:30</b> | <b>16:55</b> | <b>04:30</b> | <b>25:55</b>            |

- 10.2.10 The following points should be noted with respect to the above table:

- On days with a double rotation, it is assumed that start-up and close down time is one hour, reflecting the split shift arrangement
- The timetable can be accommodated within the single crew's weekly working hours, although drills and maintenance time (undertaken on a Monday and Wednesday) are additive to the above hours

## 10.3 Community Needs Assessment Step 2: Connectivity

### Timetable

- 10.3.1 The graphic below shows the Papa Stour timetable. As previously noted, a third rotation on a Friday has been added in the 2025 summer timetable to support travel to and from school. It is assumed that this additional sailing (as well as the second Sunday sailing) will be retained in the winter 2025/26 timetable given its essential function.

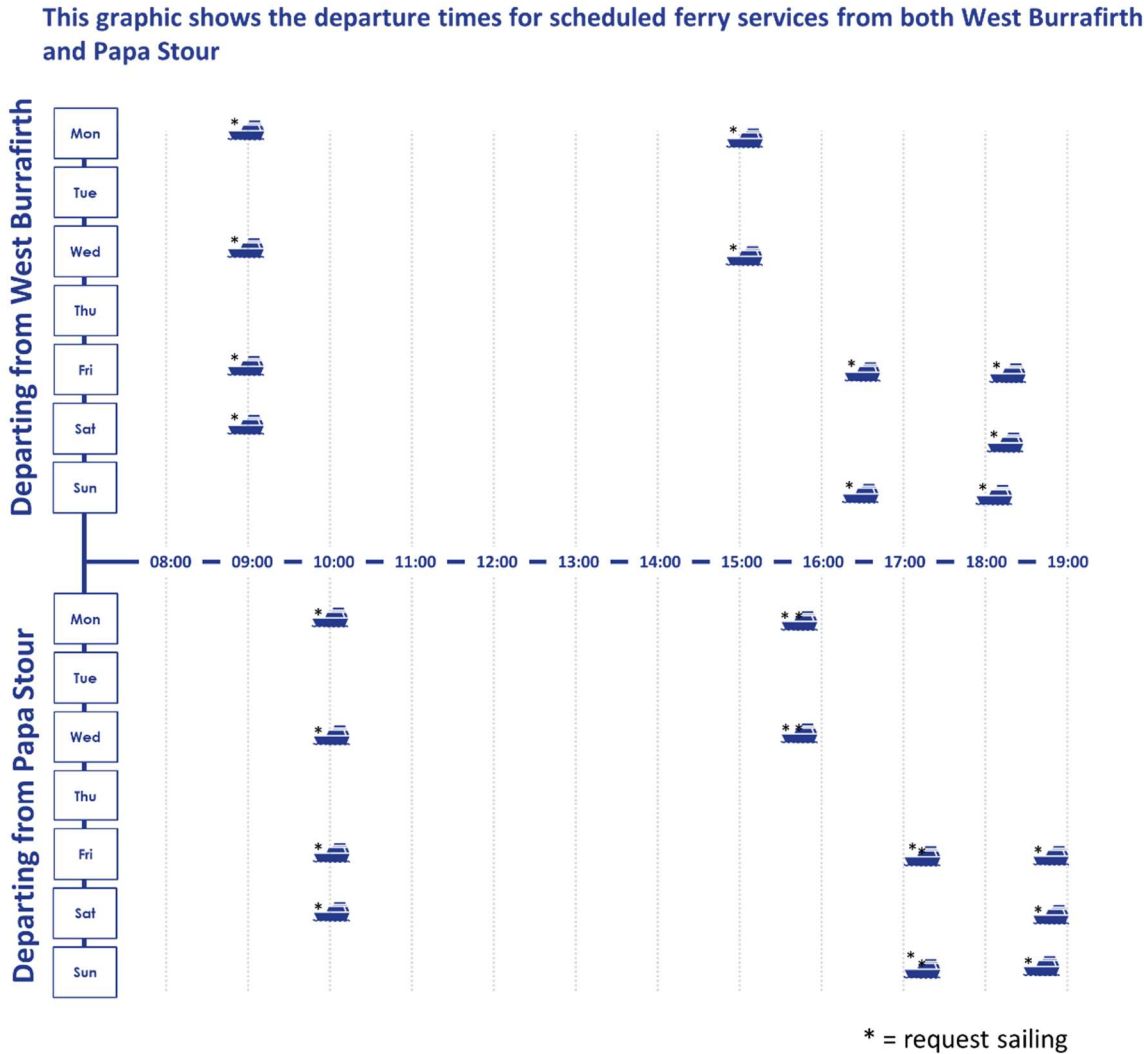


Figure 10.2: West Burrafirth – Papa Stour 2025

10.3.2 The key points of note with regards to the Papa Stour timetable are as follows:

- All sailings are **request only** and must be booked by 18:00 the evening before if they are to operate
- There are no sailings on a **Tuesday** and **Thursday**. This was also previously the case on a **Monday**, but the withdrawal of the air service in 2020, which previously operated a double rotation on a Tuesday, led to a double ferry rotation being added on a Monday (which was the community preference)
- The structure of the timetable on sailing days, with a long gap between the first and second / last sailing allows for a **half day return trip to Papa Stour**. This allows contractors and visitors to make a trip to the island without a requirement to stay overnight but offers relatively limited time on island.
- The timetable also facilitates a slightly shorter return trip to mainland Shetland. This connectivity is important for **primary school children**, allowing them to attend a part-day at Whiteness School in West Mainland on a Monday, Wednesday and Friday. It is understood however that the preference of the community is for the reopening of the island school
- A **family consisting of ten people (two adults and eight children) has recently moved into Papa Stour**. Four of the children board at Anderson High School between Monday and Friday, whilst the younger children attend part-days at school in West Mainland as previously described. This however creates a ferry capacity issue on a Friday afternoon, with ten children and at least one adult travelling back during school term time, effectively using all of the capacity of the ferry. This is the reason for the introduction of the second Friday afternoon sailing in summer 2025

**Key Point:** The West Burrafirth – Papa Stour ferry service enables a half-day on island and mainland five days per week. However, there are two non-sailing days (Tuesday and Thursday).

### Public transport integration

10.3.3 As would perhaps be expected given the small population of Papa Stour and the limited passenger carrying capacity of the ferry, public transport connections are limited:

- There is a dial-a-ride service from West Burrafirth to Lerwick (service **18**) on a **Monday, Wednesday, Friday and Saturday** which connects with the **10:40** arrival into West Burrafirth
- On a Monday and Wednesday, there is a return dial-a-ride service on the **no.18** connecting with the **15:00** departure to Papa Stour
- On a **Friday and Saturday**, the **no.18** operates from Bixter only, connecting with the 18:00 departure to Papa Stour
- There are no connecting bus services on a **Sunday**
- The **no.18** dial-a-ride **must be booked by 16:00 the previous working day** (which would imply Friday for the Monday service)
- There is no public transport on Papa Stour

10.3.4 Despite the limited bus service and the cost of taking a car on the ferry, the community confirmed that there is no routine practice of leaving a car or second car at West Burrafirth.



**Key Point:** There is dial-a-ride service to Lerwick from West Burrafirth, connecting with the first arrival from Papa Stour on a Monday, Wednesday, Friday and Saturday. Direct return travel from Lerwick is possible on a Monday and a Wednesday.

### What level of connectivity is provided?

10.3.5 The table below defines the level of connectivity provided for Papa Stour residents and those travelling to the island in terms of:

- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

10.3.6 Given the point made above about limited bus connectivity, this table is focused on car travel only:

Table 10.4: Papa Stour's connectivity

| Destination   | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|---------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
|               | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Papa Stour    | x                                   | ✓        | x       | x                             | x        | x       |
| West Mainland | x                                   | ✓        | x       | x                             | x        | x       |
| Lerwick       | x                                   | ✓        | x       | x                             | x        | x       |

**Key Point:** The Papa Stour timetable facilitates a half-day on mainland and on-island five days a week. Time on island is slightly longer than time on mainland because MV *Snolda* overnights at West Burrafirth.

## 10.4 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

10.4.1 This section sets out how the West Burrafirth – Papa Stour ferry service is being used by residents and those visiting the island.

#### How many sailings are made in each year?

10.4.2 The figure below shows the total number of scheduled sailings on the West Burrafirth – Papa Stour route between 2013 and 2024 – it should be noted that all Papa Stour sailings are request only:

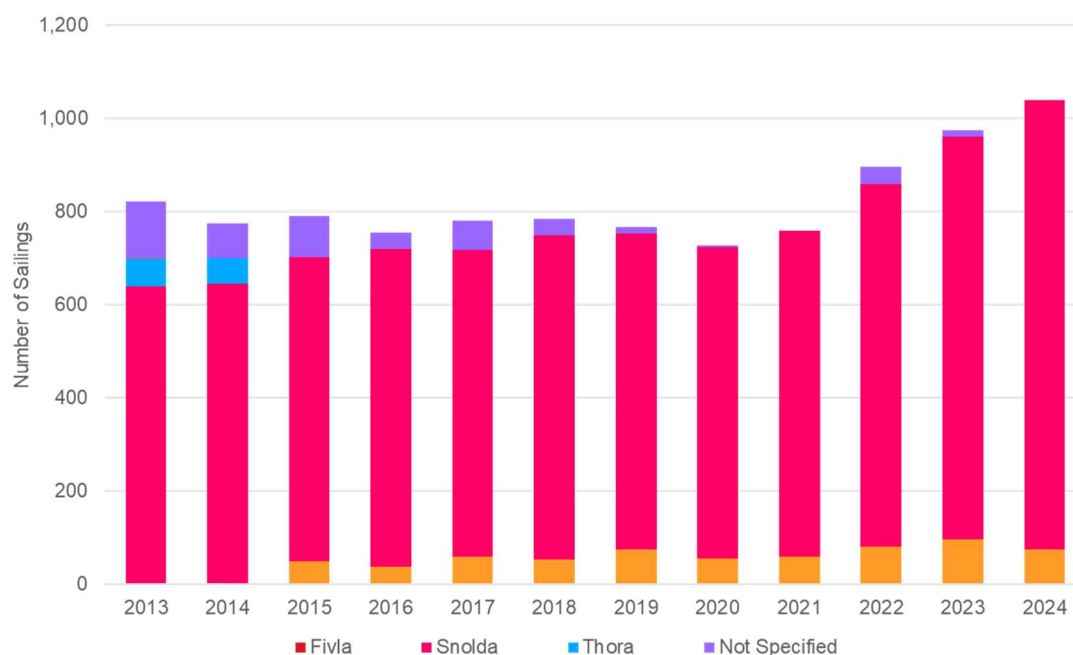


Figure 10.3: Papa Stour - total sailings by vessel, 2013-2024 (Source: vessel logbooks)

#### 10.4.3 The key points of note from the above figure are as follows:

- Like most routes across the network, Papa Stour experienced a reduction in the number of sailings post-2013, which it is assumed relates to wider 2013 service reductions. There was a **5%** reduction in the number of sailing legs between 2013 and 2014. The overall scale of reductions was less than on several other routes on the network, but Papa Stour had fewer sailings to start with
- There was broad stability in the number of sailings between 2016 and 2021, with a slight reduction during the COVID-19 pandemic (2020)
- Following the withdrawal of the Tuesday Papa Stour air service in April 2020, the ferry service was scaled up as previously described. There is now also a double rotation on a Sunday where there was previously only a single sailing and an additional rotation on a Friday in 2025 (not shown in the graph). These changes have led to a **37%** increase in the number of sailings between 2021 and 2024

**Key Point:** There has been progressive expansion of the Papa Stour ferry service since 2021, with the addition of a double rotation on a Monday and an extra return sailing on a Sunday and Friday.

#### How have passenger and vehicle lane metre carryings changed over time?

#### 10.4.4 The figure below shows total passenger<sup>52</sup> and lane metre carryings on the West Burrafirth – Papa Stour route over the period 2013-2024. These figures have been built-up from sailing-by-sailing carryings noted in the vessel logbooks:

<sup>52</sup> Whilst passenger carryings are not reported for other routes, they are included for West Burrafirth – Papa Stour given the capacity limitation imposed by the vessel classification.

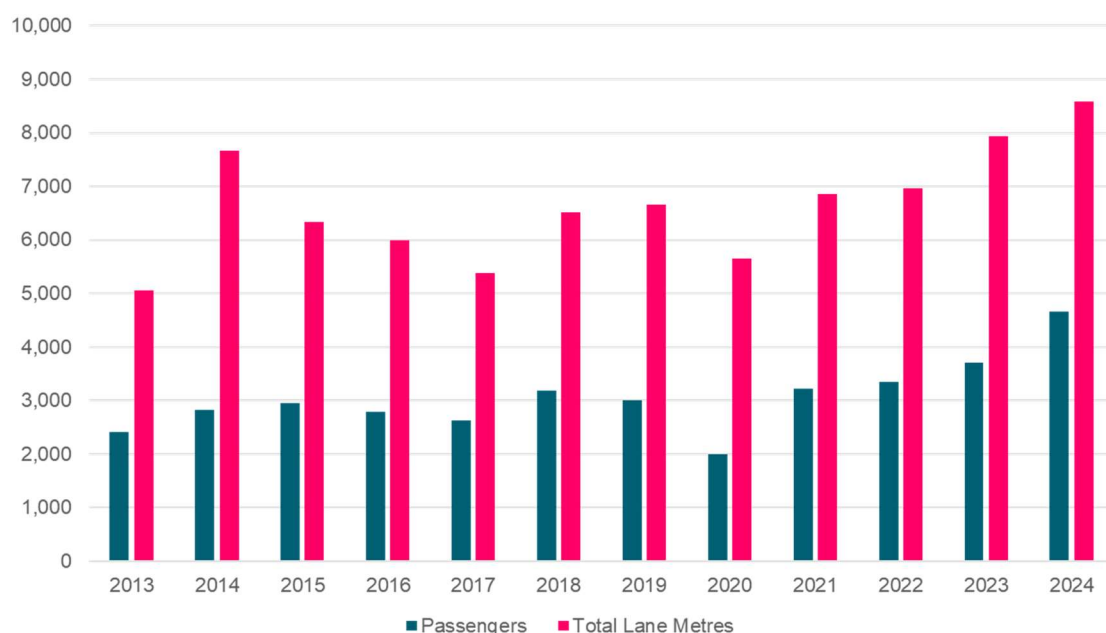


Figure 10.4: Papa Stour – total passenger vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks)

10.4.5 The key points of note from the above figure are as follows:

- Carryings on the West Burrafirh – Papa Stour route show significant year-on-year variation with no obvious trend in the data. They are however low in absolute terms, with only **4,655** passengers and circa **8,585** lane metres carried in 2024
- Overall, however, there was strong growth pre-pandemic, with passenger and lane metre carryings in 2019 being **24%** and **32%** respectively higher than their 2013 level
- It is notable that there has been a steady growth in carryings since 2021 as the service has been progressively scaled up. Continued growth is expected in 2025 following the introduction of a third sailing on a Friday

**Key Point:** Whilst relatively low in absolute terms, passenger and vehicle lane metre carryings on the Papa Stour route have been growing strongly since 2021, which is partly a product of the expansion in the number of sailings creating new opportunities for travel.

#### What was the impact of COVID-19?

10.4.6 The table below shows the 2024 passengers, cars and commercial vehicle carryings as a percentage of 2019 carryings. This is a measure how close the route has got to recovering its pre-pandemic position:

Table 10.5: Papa Stour - 2024 carryings as a percentage of 2019 carryings

| Carrying type                                  | West Burrafirh – Papa Stour |
|------------------------------------------------|-----------------------------|
| <b>2024 carryings as a % of 2019 carryings</b> |                             |
| Passengers                                     | 155%                        |
| Cars                                           | 135%                        |
| Commercial vehicles                            | 322%                        |

- 10.4.7 The table above reflects the narrative of the preceding section, demonstrating strong post-pandemic growth which is reflective of the expansion of the supply-side and growth in demand. It is though important to bear in mind that, whilst the percentage numbers are large, the actual numbers are relatively small. For example, in 2019, the route carried circa 3,000 passengers, increasing to 4,655 in 2024.

**Key Point:** The Papa Stour route has recovered strongly from pandemic, driven by an expansion of the supply-side and a growth in demand.

### Is capacity a problem?

- 10.4.8 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted above, is a reasonable proxy for when sailings are full or almost full:

Table 10.6: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                                                   | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|---------------------------------------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| West Burrafrith – Papa Stour<br>(both directions) | 2.0%                   | 1.0%                  | 0.5%                    | 0.0%                  | 1.4%                               |

- 10.4.9 It is evident from the table that vehicle deck utilisation is not routinely a problem on this route. However, it is important to note that the community did highlight this as a problem in the engagement. It is unclear whether this is a perception issue based on occasional capacity problems or a more widespread issue with the way the data are collected.
- 10.4.10 The data does suggest that the 12-passenger limit on MV *Snolda* can be more of a problem – in 2024, **12.5% of sailings had a passenger utilisation of 75% or greater (i.e., nine passengers or more)**

**Key Point:** The table above highlights that vehicle deck capacity is rarely a problem on the West Burrafrith – Papa Stour route, although the community did report some problems with capacity. Passenger capacity can however be an issue given the 12-passenger capacity of MV *Snolda*.

### How are the ferry services performing?

- 10.4.11 Despite the age of MV *Snolda*, the West Burrafrith – Papa Stour route is on the whole very reliable. The combination of a dedicated vessel and a relatively relaxed timetable, with long gaps between sailings facilitates these high levels of reliability.

### Resident Survey Headlines

- 10.4.12 **Three** Papa Stour residents completed the survey – the small sample size makes drawing overall conclusions challenging but some key headlines which emerged were as follows:

- The average Papa Stour resident makes **several return journeys** each month, typically 4-6
- As is common in small island communities some distance from the main population centre, journeys are often multi-purpose, combining several activities in each trip. Shopping was cited as the main reason for travel, but residents also undertake health and leisure visits

- Most respondents take a car onboard the ferry when travelling
- Respondents to the survey were also asked whether the ferry service allows them to make all the journeys that they wish to – the responses were as follows for Papa Stour:
  - **33% (n=1)** travel off-island as much as they need to, and their day-to-day activities are not unduly affected by the ferry service
  - **66% (n=2)** noted that they travel off-island less often than they would like to, and this has a negative impact on the things they would like to do

## 10.5 Community Needs Assessment Step 4: Island Narrative

10.5.1 As was explained in relation to Foula, developing the socio-economic profile of islands of small population is challenging due to several issues with the data, including the level of spatial disaggregation, lag and under-reporting. We therefore sought insights from the Papa Stour community with respect to the current socio-economic position of the island. Key headlines included:

- The **base population** of Papa Stour was recorded as **7** in the 2022 Census continuing a long-term decline in population. However, A new family of ten (two adults and eight children) has since moved into the island, increasing the permanent population to **17**
- Whilst the permanent population is low, Papa Stour has a comparatively large **itinerant population** who work on mainland Shetland during the week but return to the island at the weekend or periodically. It is estimated that this itinerant population is in the region of **30-35** people, taking the total island population to nearer **50**
- There is **no school, shop, health, dentistry or social care provision on the island**, which means that residents must travel to access these services
- There is **little in the way of industry on the island outwith crofting**
- **Tourism** to the island has however been growing. Papa Stour has a range of different attractions, including genealogy, archaeology, walking and ornithology. The Kirk / community centre has recently been successfully redeveloped, and creating a genealogy resource has been a component of this redevelopment
- No households in Papa Stour have access to Superfast Broadband, although all households do meet the broadband Universal Service Obligation. There are plans in place for piloting **satellite broadband**, which would make it easier to live on the island and work remotely

## 10.6 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

10.6.1 A summary of the transport problems by theme for Papa Stour is presented below.

### What are the transport problems in Papa Stour?

10.6.2 The problem themes relevant to **Papa Stour** are set out in the table below:

Table 10.7: Transport problem 'themes'

| All modes of travel                         | Public transport specific                                                |
|---------------------------------------------|--------------------------------------------------------------------------|
| Concern over environmental impact of travel | Booking and journey planning (e.g., making connections between services) |
| Cost of travel and affordability            | Capacity                                                                 |
| Fuel / power issues                         | Comfort, safety and security                                             |

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Integration of travel between modes                                                                                                                                                                          | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                              |
| Journey quality                                                                                                                                                                                              | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                        |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                        |
| Personal security (fear of crime)                                                                                                                                                                            |                                                                                                        |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                                                                                                        |

10.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1) and the **underlying supply-side cause** (Step 2):

Table 10.8: Papa Stour – transport problems and supply-side causes

| Problem Theme                                                                                          | Step 1: Problem(s)                                                                                                                                                                                                                             | Step 2: Supply-side cause(s)                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                            | - Greenhouse gas emissions from vessel                                                                                                                                                                                                         | - MV <i>Snolda</i> is a conventional diesel vessel built in 1983                                                                                                                                                                                    |
| Integration between modes                                                                              | - There is no connecting bus service with the morning departure and evening arrival at West Burrafirth<br>- Same-day connections with Loganair and NorthLink services                                                                          | - Low population of Papa Stour<br>- Limited and fragmented bus network<br>- High-cost of bus service provision relative to demand<br>- Non-sailing days to Papa Stour make same day connections with Loganair and NorthLink impossible on some days |
| Personal accessibility                                                                                 | - Access to the passenger lounge is straight from the car deck. Whilst this is on the same level as the vehicle deck, there are doorway sills, which can be a problem for Persons of Restricted Mobility                                       | - MV <i>Snolda</i> is an older vessel and is therefore not built to modern design standards                                                                                                                                                         |
| Capacity                                                                                               | - The 12-passenger limit on MV <i>Snolda</i> , combined with a low sailing frequency, can pose a capacity problem, particularly when tourists visit in summer (although day visitors will generally be on the opposite sailing from residents) | - MV <i>Snolda</i> is limited to 12-passengers because of insufficient watertight sub-division                                                                                                                                                      |
| Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups | - No sailings on a Tuesday or Thursday<br>- Limited time on-island and mainland                                                                                                                                                                | - Low demand is the main reason for this<br>- Depending on the scale of any service increase, there would be crew cost (and potentially availability) implications                                                                                  |

# 11 Skerries

## 11.1 Overview

11.1.1 Out Skerries is the most easterly of Shetland's island communities and is served by MV *Filla*, which is based in Whalsay. For this reason, there are interdependencies between future solutions for Whalsay and Skerries, which the IITCP will need to take account of. In the meantime, however, this chapter sets out the pertinent information for Skerries.

## 11.2 Community Needs Assessment Step 1: Route Service Level

11.2.1 The table below allocates the **Skerries** route to its relevant Route Service Level for both the winter and summer timetables.

Table 11.1: Allocation of the Skerries route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         | ✓       |         |         |         |         |
| Summer |         |         | ✓       |         |         |         |         |

11.2.2 The **Skerries** route currently largely operates with a dedicated single vessel, which is also single crewed on any given day – it is therefore a **Level C** route. It should be noted that MV *Filla* does operate five crossings on a Monday between Symbister – Laxo / Laxo – Symbister, so could be considered a Level A. However, this short period on a Monday, when she covers MV *Linga*'s drills and maintenance is the only time that she does this and thus Level C appears a more appropriate designation here.

### What are the main features of the route?

#### Categorisation of waters

11.2.3 The route to Skerries operates in 'open seas', i.e., outside of categorised waters.

#### Vessel

11.2.4 MV *Filla* is one of the newest vessels in the Council fleet, albeit it is over 20-years old, having been built in 2003. The key parameters of this vessel are summarised in the table below:

Table 11.2: Key features of MV *Filla*

| Parameter       | MV <i>Filla</i>                                                                      |
|-----------------|--------------------------------------------------------------------------------------|
|                 |  |
| Entered service | 2003                                                                                 |



| Parameter                         | MV <i>Filla</i> |
|-----------------------------------|-----------------|
| Passenger Certificate             | Euro B          |
| Length Overall (m)                | 35.5            |
| Beam (m)                          | 9.0             |
| Draught (m)                       | 3.05            |
| Passenger Capacity                | 30              |
| Published Vehicle Capacity (PCUs) | 8               |
| Freight Capacity                  | 106 tonnes      |
| Crew                              | 4               |

11.2.5 The following points should be noted in relation to MV *Filla*:

- MV *Filla* **overnights in Symbister and is crewed from Whalsay**. This is an important consideration for the design of any future vessel on the Skerries run as the maximum length of vessel that can routinely access Symbister is 45 metres (as will be explained in more detail in Chapter 12)
- She was designed with a **ten-tonne freshwater tank**, primarily to serve the salmon industry in Skerries at that time. However, this activity no longer takes place on the island and these tanks are unused. MV *Filla* also has two refrigerated holds
- MV *Filla* is a **very fuel intensive vessel** - she consumes **225 litres per hour (lph)** relative to 204 lph for MV *Dagalien*, the largest vessel in the Shetland fleet and is thus 'emission heavy' relative to her size
- She is a stern loading vessel, which means that **vehicle drivers have to reverse on**. This was a common practice across Shetland and indeed Scotland in years gone by but is now relatively rare as it slows down vessel turnaround and increases safety risks

**Key Point:** MV *Filla* is one of the newest vessels in the Council fleet but she is still over 20-years old. She was designed with facilities to support the Skerries' salmon industry, but these facilities are now unused. She is a very fuel intensive vessel.

## Ports

11.2.6 The map below shows the ports on the Skerries route:

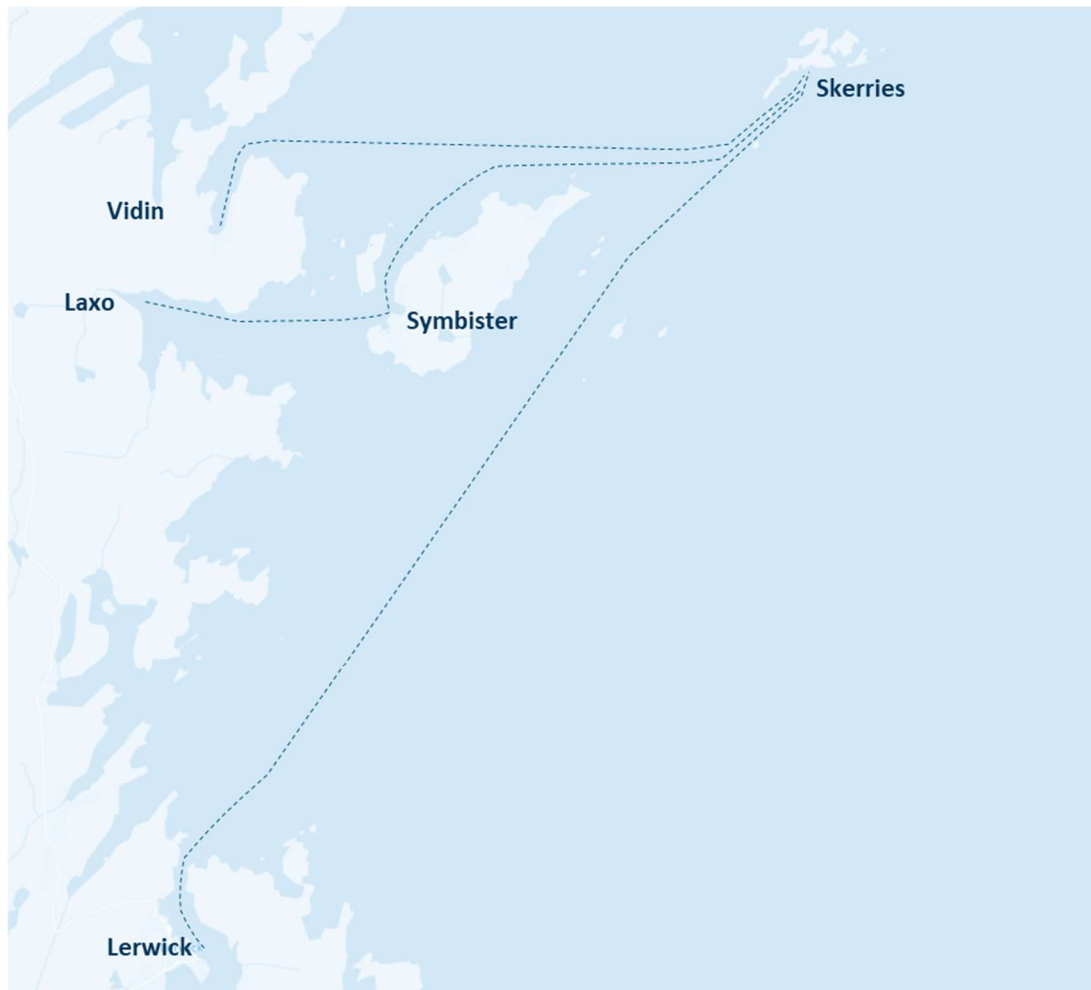


Figure 11.1: Skerries' route ports

11.2.7 The principal features of note are as follows:

- When MV *Snolda* operated the route prior to the introduction of MV *Filla*, she normally operated through the **south mouth** of the harbour at Skerries, which is the quickest means of access to the island. However, the channel is relatively shallow and the larger MV *Filla* takes a longer route in and out, rounding the north or south of the isles and then approaching the harbour from the north-east
- As noted in the previous section, MV *Filla* **overnights in Symbister, Whalsay**
- The Skerries service operates to **three mainland Shetland landfalls**, Laxo, Lerwick and Vidlin
  - **Vidlin** offers the shortest crossing and is the primary route for island residents
  - In **Lerwick**, MV *Filla* uses the linkspan for the Bressay service, described in Chapter 8
  - The use of **Laxo** is less common (Monday only) and purely a product of MV *Filla* being used to strengthen the Whalsay run when the larger ferry MV *Linga* is stood down for drills and maintenance
- The **finger pier in Skerries is in very poor condition** and has a load restriction in force – it is in need of short-term replacement
- The **access road to the ferry terminal is suffering from erosion** and there is a risk of flooding which could cut island households off from the ferry terminal

## How is the Skerries route operated?

- 11.2.8 The Skerries route is one of the most operationally complex on the network. It is the longest Ro-Ro route on the network, serves three mainland ports (Vidlin, Lerwick and Laxo) and the vessel *MV Filla* overnights in and is crewed from Whalsay.
- 11.2.9 A consequence of the requirement to overnight in Symbister is that there is a **75-minute 'dead-leg'** at the start and end of the operating day, as *MV Filla* positions to and from Skerries. This eats into the operating day and imposes a limitation on the number of sailings that can be operated by a single crew.
- 11.2.10 There has been a long-term ambition in the Skerries community for an island-based vessel and passage via the 'south mouth' of the harbour, as previously described. However, there is a recognition from the community at present that they are not in a position to crew an island-based vessel.
- 11.2.11 Skerries also previously had an air service to Tingwall, but this was suspended in 2015 due to a lack of Rescue and Fire Fighting Services (RFFS) at the airstrip. The air service was permanently withdrawn in April 2020.

### Crewing

- 11.2.12 As with several other routes, the crewing arrangements for the Skerries route are subject to change in the near future. The description which follows was accurate as of the winter 2024/25 timetable and will be updated in the OBC as required.
- 11.2.13 As *MV Filla* overnights in Symbister, she has a predominantly Whalsay-based crew, although a handful of crewmen commute from mainland Shetland. The crewing arrangements are set out below:

- There are two crews covering *MV Filla* each working a four-week pattern – this consists of
  - Two weeks on
  - Two weeks off
  - Rostered leave

### Length of operating day

- 11.2.14 There is no summer / winter variation in the timetable for the Skerries route. The table below summarises the length of the operating day and week for *MV Filla*:

Table 11.3: *MV Filla*, length of operating day

| Day          | Start-Up    | Sailing-Day  | Close Down  | Length of operating day |
|--------------|-------------|--------------|-------------|-------------------------|
| Monday       | 0:30        | 09:20        | 0:30        | 10:20                   |
| Tuesday      | 0:30        | 11:30        | 0:30        | 12:30                   |
| Wednesday    | 0:00        | 0:00         | 0:00        | 0:00                    |
| Thursday     | 0:30        | 11:05        | 0:30        | 12:05                   |
| Friday       | 0:30        | 12:05        | 0:30        | 13:05                   |
| Saturday     | 0:30        | 12:05        | 0:30        | 13:05                   |
| Sunday       | 0:30        | 08:30        | 0:30        | 09:30                   |
| <b>Total</b> | <b>3:00</b> | <b>64:35</b> | <b>3:00</b> | <b>70:35</b>            |

11.2.15 The following points should be noted with respect to the above table:

- The Skerries timetable has changed significantly in recent years – key changes include:
  - There are now sailings to Lerwick on a **Tuesday** and a **Thursday**, which were previously non-sailing days
  - **Wednesday**, when the service previously operated to Lerwick, is now a non-sailing day
  - On a **Monday**, MV *Filla* is used to strengthen the Symbister – Laxo / Vidlin route when MV *Linga* is stood down for drills and maintenance
- Across the week, the Skerries service now provides a combination of connections to Laxo (Monday), Lerwick (Tuesday and Thursday) and Vidlin (Friday, Saturday and Sunday)
- There is a period of downtime in Symbister on a Saturday and Vidlin on a Sunday, which may be used for a combination of rest, drills and maintenance

## 11.3 Community Needs Assessment Step 2: Connectivity

### Timetable

11.3.1 The graphic below shows the Skerries timetable, which is the same summer and winter:

|           | Monday | Tuesday | Thursday | Friday |      |        | Saturday | Sunday |
|-----------|--------|---------|----------|--------|------|--------|----------|--------|
| Laxo      | 0700Sy |         | 0700Sy   | 0700Sy |      |        |          |        |
| Symbister | 0810   |         | 0810     | 0810   |      |        |          |        |
| Skerries  | 0920La | 0800Ler | 1000     | 0930   | 1230 | 1600   | 1130     | 1730   |
| Vidlin    |        |         |          | 1100   | 1430 | 1730   | 1000     | 1600   |
| Laxo      | 1400Sy |         |          |        |      |        |          |        |
| Lerwick   |        | 1445    | 1545     |        |      |        |          |        |
| Skerries  | 1615Sy | 1700Sy  | 1800Sy   |        |      | 1900Sy |          |        |
| Symbister | 1900La | 1900La  | 2115La   |        |      | 2115La |          |        |

Figure 11.2: Skerries timetable - winter 2024/25

11.3.2 The key points of note with regards to the Skerries timetable are as follows:

- As noted above, the Skerries timetable has been improved in recent years, with there now being **only one non-sailing day (Wednesday) rather than two (previously Tuesday and Thursday)**
- **Friday** is the only day of the week on which it is possible to undertake day return trip to Skerries from mainland Shetland. A day return trip routing via Symbister is possible on a **Monday and Thursday**
- The **two Lerwick days – Tuesday and Thursday** – allow Skerries residents to travel directly into town thus reducing or negating the need to take a car, although the sailing time is one hour longer than to Vidlin. The Lerwick service is essential to Skerries' supply chain, allowing goods to be dropped at the pier, loaded on to the ferry and taken out to Skerries
- **Indirect connections** to and from Skerries (with a change onto the Whalsay ferry in Symbister) are shaded in pink

**Key Point:** The Skerries timetable is complex, but it has been improved in recent years with the addition of an extra sailing day. The Lerwick connection is important in meeting the supply-chain needs of the island.

### Public transport integration

11.3.3 There is no meaningful public transport connection with the Skerries service at either Laxo or Vidlin. The handful of daily bus services that operate to the two ports primarily support the Whalsay service.

11.3.4 The ferry berth in Lerwick is in the town centre, with all amenities as well as bus connections to elsewhere in Shetland all within walking distance.

11.3.5 There is no public transport on Skerries.

**Key Point:** There are effectively no public transport services which connect with the Skerries ferry service at either end of the route.

### What level of connectivity is provided?

11.3.6 The table below defines the level of connectivity provided for Bressay residents and those travelling to the island in terms of:

- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

11.3.7 Given the point made above about limited bus connectivity, this table is focused on car travel only:

Table 11.4: Skerries' connectivity

| Destination | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
|             | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Skerries    | x                                   | ✓        | x       | x                             | x        | x       |

|             | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
| Destination | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Lerwick     | ✗                                   | ✓        | ✗       | ✗                             | ✗        | ✗       |
| Symbister   | ✗                                   | ✓        | ✗       | ✗                             | ✗        | ✗       |

**Key Point:** Skerries has very limited levels of connectivity. It is possible to undertake a part-day visit to the island on a Friday (and on other days via Whalsay), whilst a part-day trip can be made to Lerwick on six days out of seven. Crossing times are long however.

## 11.4 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

- 11.4.1 This section briefly summarises the recent trends on the Skerries route in terms of the number of sailings operated, carryings and reliability.
- 11.4.2 It should be noted that as Skerries is a multi-point route (i.e., it operates to different ports each day and sometimes across the day), the **data are presented by individual route leg** (e.g., Symbister – Skerries, Skerries – Laxo etc). This should be borne in mind when interpreting the information below.

### How many sailings are made in each year?

- 11.4.3 The figure below shows the number of sailing legs made by each vessel on the Skerries route each year:

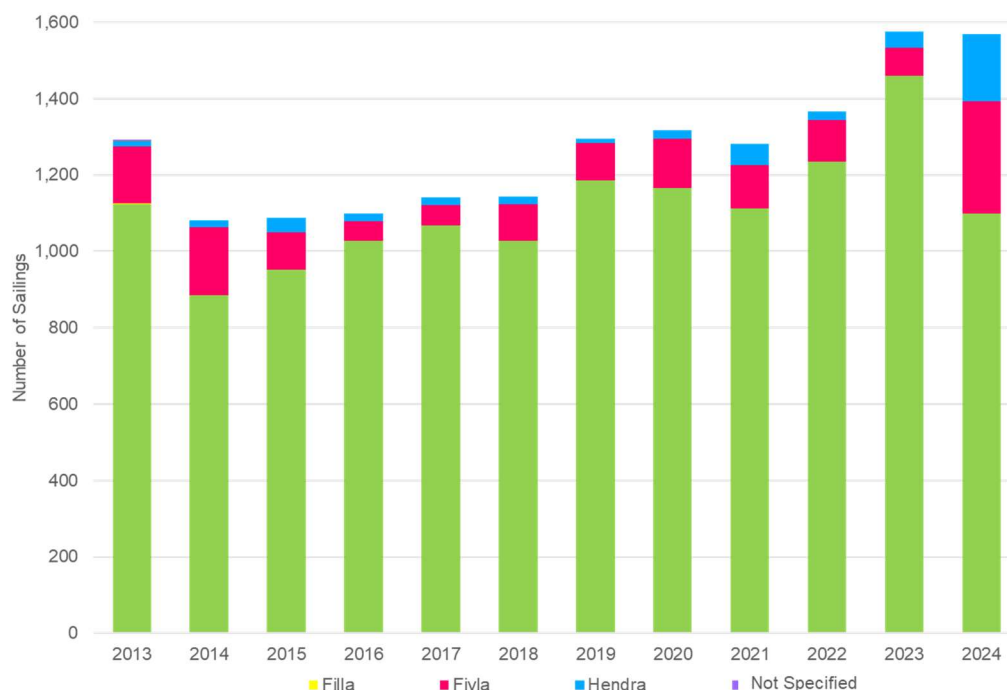


Figure 11.3: Skerries - total sailings by vessel, 2013-2024 (Source: vessel logbooks)

- 11.4.4 The key points of note from the above figure are as follows:



- Like most routes across the network, Skerries experienced a reduction in the number of sailings post-2013, which it is assumed relates to the wider 2013 service reductions. There was a **14%** reduction in the number of sailing legs between 2013 and 2015
- Since 2015, there has been broad stability in the number of sailing legs year-on-year. The one exception was 2018 where there was a significant uplift in sailings, although it is not clear why this was as the timetable appears to have been the same in that year as in 2017 and 2019. As all Skerries sailings are bookings only, this may just be due to more bookings in that year
- A new Skerries timetable was introduced in 2023, with the introduction of Tuesday and Thursday sailings to Lerwick, but the withdrawal of Wednesday sailings. Laxo calls were also introduced and the balance of Vidlin and Lerwick sailings changed slightly in that year. This led to an **18%** increase in sailings between 2022 and 2023, taking the overall number of connections above their 2013 level

**Key Point:** The 2013 programme of service reductions led to fewer sailings being operated on the Skerries route. However, a recasting of the timetable in 2023, with the introduction of sailings on a Tuesday and Thursday (but their withdrawal on a Wednesday) has taken the total number of sailings above their 2013 level.

#### How have vehicle lane metre carryings changed over time?

11.4.5 The figure below shows vehicle carryings in terms of total lane metres (LMs) carried on the Skerries route for each year between 2013 and 2024. These figures have been built-up from sailing-by-sailing carryings noted in the vessel logbooks:

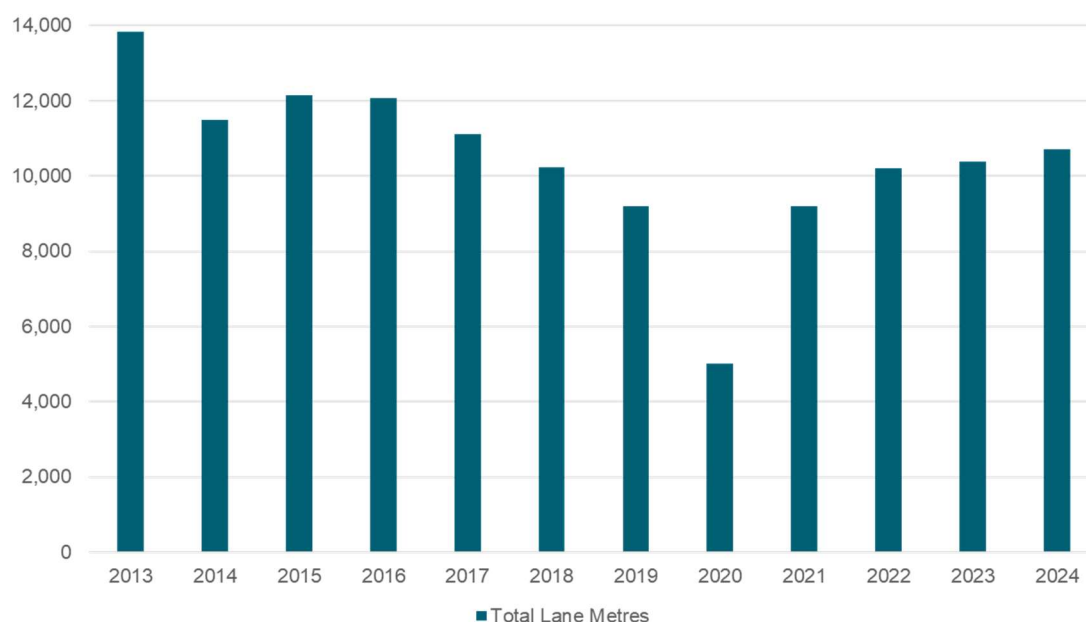


Figure 11.4: Skerries – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks)

11.4.6 Feedback from the community highlighted that the decline in carryings between 2013 and 2019 is strongly related to the loss of population caused by the closure of the salmon farm and subsequent mothballing of the school. This was likely offset to some degree by increased resident use of the ferry following the suspension of the air service in 2015.

**Key Point:** Vehicle carryings (lane metres) pre-pandemic declined sharply post-2013, with a continuous downward trend between 2016 and 2019. Total lane metres carried in 2019 were 34% down on their 2013 level

### What was the impact of COVID-19?

- 11.4.7 The table below shows the 2024 passengers, cars and commercial vehicle carryings as a percentage of 2019 carryings. This is a measure how close the route has got to recovering its pre-pandemic position:

Table 11.5: Skerries - 2024 carryings as a percentage of 2019 carryings

| Carrying type                                  | Skerries |
|------------------------------------------------|----------|
| <b>2024 carryings as a % of 2019 carryings</b> |          |
| Passengers                                     | 114%     |
| Cars                                           | 120%     |

- 11.4.8 The key points of note from the above table are as follows:

- Passenger carryings have recovered very strongly from the pandemic, standing at **114%** of their 2019 level in 2024
- Vehicle carryings have recovered even more strongly from the pandemic than passenger carryings, standing at **120%** of their 2019 level in 2024

**Key Point:** The Skerries route has recovered strongly from the pandemic, aided largely by the expansion in the number of sailing days in 2023. Passenger and vehicle carryings do though remain some way below their 2013 level.

### Is capacity a problem?

- 11.4.9 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted previously, is a reasonable proxy for when sailings are full or almost full:

Table 11.6: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                                           | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|-------------------------------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| Bressay –<br>Lerwick (both<br>directions) | 3.9%                   | 0.7%                  | 0.9%                    | 7.1%                  | 3.4%                               |

- 11.4.10 As can be seen from the table, capacity utilisation is not routinely a problem on the Skerries route. However, it is notable that **7.1% of Sunday sailings** have a vehicle deck utilisation greater than 75%, despite there being two sailings on that day. Further analysis of the data suggests that **Friday sailings from Vidlin to Skerries**, and in particular the **17:30** departure from Vidlin are routinely busy. From our conversations with the community, it is understood that this demand is driven primarily by weekend visits to the island by extended families of island residents, as well as some weekly commuting and visitor trips (primarily bird watchers).

**Key Point:** Whilst vehicle deck capacity is not routinely a problem on the Skerries route, there are some sailings in the week where capacity is under pressure, most notably on a Sunday and on the 17:30 departure from Vidlin.

## How are the ferry services performing?

11.4.11 This section sets out key data in relation to service performance. It is though important to again note that available cancellation data recorded by the Council Ferry Service is of variable quality. In particular, the cause of cancellations is not systematically recorded.

### How many sailing days and individual sailings operate to timetable?

11.4.12 The figure below shows the proportion of:

- All Skerries sailing days that operate to timetable (i.e., every individual sailing (route leg) across the day is operated to timetable)
- Individual sailings that are operated to timetable

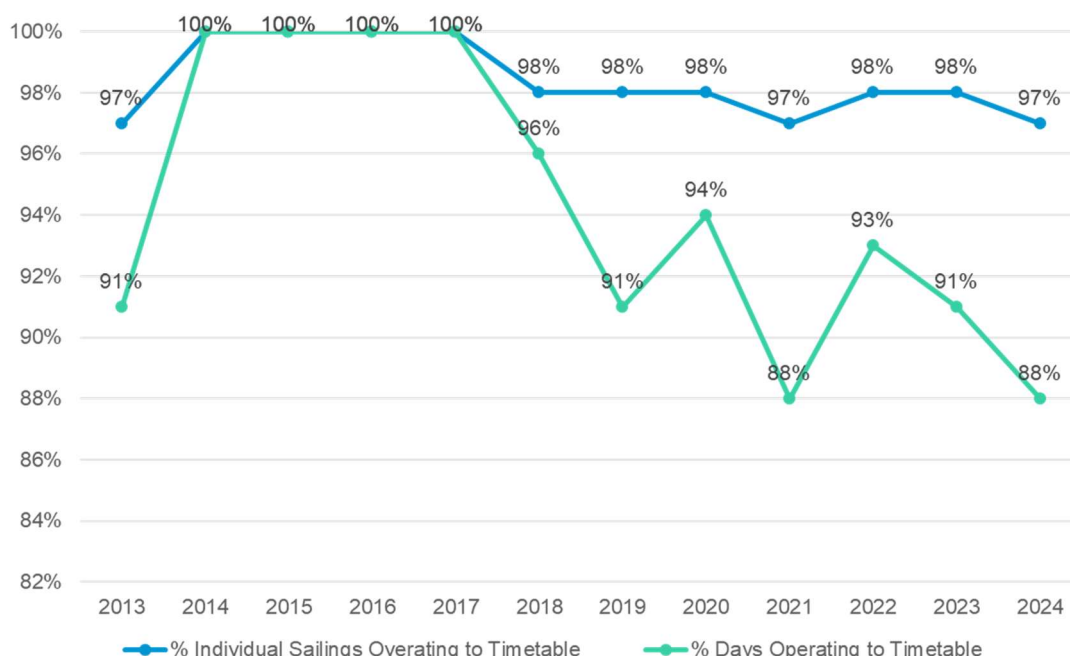


Figure 11.5: Skerries – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks)

**Key Point:** Given the nature of the crossing and the relatively small vessel, the Skerries route is very reliable overall. Around nine-in-ten sailing days operate to timetable and most individual sailing legs also operate to timetable.

## Resident survey headlines

11.4.13 **Seven** Skerries residents completed the survey – whilst acknowledging the small sample size, some key headlines emerging are as follows:

- The majority of respondents make several return journeys from Skerries each month – **29% (n=2)** noted that they make 1-3 return journeys per month and **43% (n=3)** make 4-6 return journeys per month
- As is common in small island communities some distance from the mainland, journeys are often multi-purpose, combining several activities in each trip

- Most respondents take a car onboard the ferry when travelling
- Vehicle deck capacity overall is not identified as a problem, although two respondents did report occasions in a typical month when they cannot secure a place on the ferry. Where this is the case, these respondents tend to either not travel at all, or travel on a different day
- The primary sources of **satisfaction** with the current ferry service are:
  - Vehicle marshalling arrangements
  - Ability to book a vehicle on my preferred sailing
  - Availability of suitable seating onboard
  - Crossing time
  - Weekday service frequency
  - Time of the first sailing of the day
- The primary sources of **dissatisfaction** with the current ferry service are:
  - Onward public transport connections from the mainland ferry terminal (Vidlin and Laxo)
  - Convenience of (or lack of) 'booking only' sailings
  - Public transport connections to and from the island ferry terminal
  - The ease and convenience of the booking process
  - The timetable during vessel refit period
- Respondents to the survey were also asked whether the ferry service allows them to make all the journeys that they wish to – the responses were as follows for Skerries:
  - **57% (n=4)** travel off-island as much as they need to, and their day-to-day activities **are not** unduly affected by the ferry service
  - **29% (n=2)** travel off-island as much as they need to, but their day-to-day activities **are** affected by the ferry service
  - **14% (n=1)** noted that they travel off-island less often than they would like to, and this has a negative impact on the things they would like to do

## 11.5 Community Needs Assessment Step 4: Island Narrative

11.5.1 As per Foula and Papa Stour, a key challenge in developing a socio-economic profile of Skerries is the availability of data, again reflecting the challenges of spatial disaggregation, lag and under-reporting. This profile has therefore been informed by a detailed discussion with the Skerries community – the key points are as follows:

- The **base population** of Skerries is around **35** but many former island residents retain a house on the island. The population can therefore rise to around **45 at weekends and 80-90 over the summer holidays**. The population is however ageing and there are no primary school age children living on the island. Increasing the population and achieving a more balanced demographic is an important aspiration for the years ahead
- There is a **mothballed school on Skerries**. There are two school age children on the island, one of whom is home schooled and the other is at Anderson High School, where they board Monday to Friday
- There is no **dentistry or social care provision on the island**, which means that island residents must travel to access health services. There is however a **Health Care Assistant** on the island
- There are currently **two shops** on the island, but it is understood that they may close in the near future. This would mean that all daily consumables would require to be imported

by the ferry or through travel to Lerwick. Resilience is already a challenge for the island and the loss of on-island retail would heighten it

- There is **limited available property stock** on the island, with only two empty properties and they are reported to be in a relatively poor condition
- The introduction of **R100 broadband** has been beneficial and supports the ability to live on Skerries and work remotely
- The primary industry is **fishing** with scallop, lobster and shellfish vessels based in the island. The reliability and resilience of the ferry service is key to these businesses as their stock reduces quickly in value if there is a delay in getting the product to market
- **Aquaculture** is a potential growth area and there are plans to open a brood stock farm (i.e., juvenile fish). Skerries' distance from the main aquaculture areas is beneficial in this respect as it insulates it from the risk of disease that can affect other fish farms
- There is a **significant offshore windfarm being developed to the west of Skerries** and this creates a potential opportunity for basing a small operations and maintenance workboat in the islands to deal with any emergency maintenance
- No households in Skerries have access to Superfast Broadband, but **all households** meet the broadband Universal Service Obligation

## 11.6 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

11.6.1 A summary of the transport problems by theme for Skerries is however presented below.

### What are the transport problems in Skerries?

11.6.2 The problem themes relevant to **Skerries** are set out in the table below:

Table 11.7: Transport problem 'themes'

| All modes of travel                                                                                                                                                                                          | Public transport specific                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                                                                                                                  | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                                                                                                                             | Capacity                                                                                               |
| Fuel / power issues                                                                                                                                                                                          | Comfort, safety and security                                                                           |
| Integration of travel between modes (e.g., ferry to bus)                                                                                                                                                     | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult                                                                                                | Ease of use / convenience                                                                              |
| Journey quality                                                                                                                                                                                              | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                                                                                                                | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                                                                                                                    | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                                                                                                                          |                                                                                                        |
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                                                                                                        |
| Personal security (fear of crime)                                                                                                                                                                            |                                                                                                        |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                                                                                                        |

11.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1) and the **underlying supply-side cause** (Step 2):

Table 11.8: Skerries – transport problems and supply-side causes

| Problem Theme                                                            | Step 1: Problem(s)                                                                                                                                                                                                                                                                                                             | Step 2: Supply-side cause(s)                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                              | - Greenhouse gas emissions from vessel                                                                                                                                                                                                                                                                                         | - MV <i>Filla</i> is a conventional diesel vessel built in 2003. She is also very fuel intensive                                                                                                                                              |
| Cost of travel                                                           | - With few on-island services, and questions over the future viability of the island's two shops, relatively frequent travel is required and thus the cost of these journeys can be problematic                                                                                                                                | - High requirement / propensity to travel to access almost all services (e.g., health, retail etc)<br>- Requirement to take a car on Laxo / Vidlin days given the absence of meaningful bus connectivity                                      |
| Integration of travel between modes (e.g., ferry to bus)                 | - Bus connectivity in both directions at Laxo and Vidlin is poor to non-existent. This is a key issue for any Skerries residents trying to make a day return trip to Lerwick without a car                                                                                                                                     | - Limited and fragmented bus network<br>- High cost of bus service provision relative to demand                                                                                                                                               |
| Journey times                                                            | - Whilst crossing time was highlighted as an area of satisfaction in the survey (albeit from a small sample), journey times to Vidlin (90 minutes) and Lerwick (150 minutes) are long                                                                                                                                          | - Inability to use the south mouth in Skerries extends journey times<br>- Requirement to route via Symbister at the start (to Skerries) and end (from Skerries) of the operating day                                                          |
| Booking and journey planning (e.g., making connections between services) | - All Skerries sailings are booking only. Whilst perhaps prudent for a low volume long-distance sailing, it reduces the ability to travel at very short notice as the sailing must be booked by 18:00 the evening before travel<br>- The process of booking is also considered to be cumbersome                                | - Low demand and the high-cost of operating a relatively long route                                                                                                                                                                           |
| Capacity                                                                 | - Whilst vehicle deck capacity overall is not an issue, the evidence suggests that Sunday sailings from Skerries and Friday evening sailings from Vidlin can be pressured                                                                                                                                                      | - The vehicle carrying capacity of MV <i>Filla</i> is limited, albeit there is plentiful capacity on most sailings<br>- The Sunday / Friday issue is understood to be related to extended families of Skerries' residents visiting the island |
| Timetables                                                               | - No sailing day on a Wednesday (events on Tuesday evenings, late appointments, social occasions etc all require overnight accommodation off-island. This also impacts on getting live shellfish to market and impacts when the scallop boat can operate<br>- 'Dead-leg' to and from Symbister at the start and end of the day | - Crew hours<br>- Requirement for the vessel to overnight in Symbister                                                                                                                                                                        |

## 12 Whalsay

### Key facts

- **Population in 2022:** 966
- **Ports:**
  - Symbister
  - Laxo
  - Vidlin
- **Vessels:**
  - *MV Hendra*
  - *MV Linga*
- **Relief vessel:** *MV Fivla*
- **Overnight berth:** Symbister (both vessels)
- **Crossing time:** 30 minutes (Laxo)
- **2024 car carryings:** 81,936
- **2024 passenger carryings:** 156,197

### 12.1 Overview

- 12.1.1 Whalsay is the most populous of the islands served by Shetland's inter-island ferry network. Home to much of Shetland's pelagic fishing fleet, there is also significant off-island commuter travel from Whalsay to employment on mainland Shetland.
- 12.1.2 The Symbister – Laxo / Vidlin route has experienced a range of recent challenges, including vehicle deck capacity problems at peak times and the increasing age of its 'day vessel', *MV Hendra*. Recognising these challenges, the need for investment in the Whalsay route was identified as a short-term priority in the Shetland Inter-Island Transport Study in 2016. This chapter therefore recaps on the recent work undertaken for Whalsay and provides an up-to-date island profile to inform this study.

### 12.2 How does the IITCP relate to the 2022 Whalsay Outline Business Case?

- 12.2.1 As noted above, developing a solution for Whalsay was identified as a short-term priority in SIITS. Reflecting this, the Council commissioned the Whalsay Outline Business Case which reported in 2022. The OBC recognised the desire of some residents of Whalsay for a fixed link and therefore set out a **phased approach** to delivering the preferred option. This is summarised below

#### Whalsay OBC (2022) - Preferred Option

##### Short-Term (Phase 1)

In the **short-term (i.e. immediately)**, the following should be progressed:

- Subject to agreement in principle of funding for a **replacement for *MV Hendra***, the design and Full Business Case (FBC) should be developed for this vessel and the supporting small-scale harbour works



- The design progressed through FBC should ensure that this vessel can be redeployed elsewhere in Shetland (e.g., Bluemull Sound) to ensure that there are no irrecoverable costs in the event that a fixed link is progressed through the IITCP
- The new vessel should be accompanied by a **package of measures to improve travel choices**. These should be developed in consultation with the Whalsay community but could include:
  - Reduced vehicle fares on the 'quieter' peak sailings (e.g., from Symbister at 06:30, 07:00, 08:30), potentially to as low as zero
  - Establishment of a Whalsay residents' car-club at Laxo (likely electric vehicles)
  - Additional connecting bus services to Lerwick for all peak sailings
  - Analysis of current peak hour timetables in consultation with Whalsay community to determine whether current timetables could be modified to broaden commuting options
- Implementation of the measures recommended in the Revenue OBC, reversing the 2013 service reductions (*note, this has been done in part through the introduction of a two-vessel Saturday service*)
- Continue to work with Transport Scotland on making the case for a fixed link, whilst also considering fixed links in the context of the emerging ZetTrans RTS (*note, the IITCP is the outcome of these discussions*)

12.2.2 It was noted in the OBC that the short-term (Phase 1) measures will ensure that the current transport problems on the Whalsay route are addressed in a proportionate manner, whilst providing a window of opportunity to further develop fixed link proposals. They also align with the National Transport Strategy 2 *Sustainable Investment Hierarchy*, which states that targeted infrastructure options should only be progressed when other options (e.g., reducing the need to travel unsustainably, making better use of existing capacity etc) have been exhausted.

### Medium to Long-Term (Phase 2)

- In the event that a fixed link is not progressed, a Full Business Case should be developed for **Option 2a** of the OBC – the procurement of two 45m LOA vessels and the redevelopment of the pelagic basin in Symbister Harbour – but only if the short-term solution demonstrably does not meet the needs of the route. Phase 2 should only progress if there is clear evidence that the Phase 1 measures are not addressing the evidenced problems
  - Note – if a fixed link is prioritised, this option would no longer be required
- Laxo and Vidlin would also need to be upgraded to accommodate the 45m LOA design vessels, the latter also providing a new overnight berth for the Skerries vessel MV *Filla*
- The measures to improve travel choices could be retained as an option if: (i) the above solution still does not provide sufficient peak vehicle-deck capacity; and / or (ii) there is a wider desire to prompt behavioural change in terms of e.g. use of public transport, use of electric pool cars, car sharing etc
- The FBC should be informed by the Phase 1 monitoring exercise undertaken, ensuring that any solution is predicated on a complete awareness of the capacity problem

It should be noted that, in the public engagement feedback survey, the Phase 2 preference expressed was **Option 3, relocating the ferry terminal to North Voe by a margin of almost 3-to-1 (83 plays 31)**. It is likely that there will be a difference in views between those who live close to / overlook North Voe, who are less likely to want a new ferry terminal developed at that location, and the wider community who see the benefits of a purpose-built ferry terminal removed from Symbister Harbour. Whilst the OBC identified **Option 2a** – 2 \* 45m LOA vessels operating from the pelagic basin – as the preferred option, the public engagement

feedback survey highlighted that this choice should be re-examined more fully if Phase 2 is ultimately progressed.

### How does this study relate to the IITCP?

- 12.2.3 The IITCP is the vehicle through which the options identified in the 2022 Whalsay OBC will be considered further and compared with the case for a fixed link. This study will provided Council Members with the evidence required to select a preferred option for Whalsay and will determine its phasing relative to all other investments on the inter-island transport network.

## 12.3 Community Needs Assessment Step 1: Route Service Level

- 12.3.1 The table below allocates the **Whalsay** route to its relevant Route Service Level for both the winter and summer timetables:

Table 12.1: Allocation of Whalsay route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         |         |         |         | ✓       |         |
| Summer |         |         |         |         |         | ✓       |         |

- 12.3.2 The Whalsay route currently operates with a 'shift vessel' (MV *Linga*), which operates over a circa 18-hour day, and a day vessel (MV *Hendra*) which operates over a circa eleven-and-a-half-hour day Monday to Saturday.

### What are the main features of the route?

#### Categorisation of waters

- 12.3.3 The **Symbister – Laxo / Vidlin** route operates entirely in 'open seas'.

#### Vessels

- 12.3.4 The Whalsay route is operated by MV *Hendra* and MV *Linga*, the key features of which are summarised in the table below. It should be noted that the Skerries ferry MV *Filla* operates a handful of Monday sailings on the Whalsay run, covering for the drills and maintenance period on MV *Linga*, but this is not her primary roster.

Table 12.2: Key features of MV *Hendra* and MV *Linga*

| Parameter             | MV <i>Hendra</i>                                                                    | MV <i>Linga</i>                                                                       |
|-----------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                       |  |  |
| Entered service       | 1982                                                                                | 2002                                                                                  |
| Passenger Certificate | Euro C (Restricted) / VI / VI(A) / VIII(A)                                          | Euro B                                                                                |
| Length Overall (m)    | 33.6                                                                                | 36.2                                                                                  |
| Beam (m)              | 9.4                                                                                 | 10.8                                                                                  |
| Draught (m)           | 2.61                                                                                | 3.19                                                                                  |

| Parameter                         | MV <i>Hendra</i> | MV <i>Linga</i> |
|-----------------------------------|------------------|-----------------|
| Passenger Capacity                | 95               | 95              |
| Published Vehicle Capacity (PCUs) | 12               | 18              |
| Crew                              | 5                | 5               |

12.3.5 The following points should be noted in relation to the Whalsay vessels:

- **MV *Hendra*** is the **smaller of the two vessels** and continues to operate under the MCA classification system - she is dual certified, operating on a Class VI certificate in summer (95 passengers) and a Class VIA in winter (50 passengers). She is an **older vessel (having been built in 1982) for which parts are becoming harder to source and repairs / life extension are becoming less economical**
- The **passenger accommodation on MV *Hendra* is also below the waterline** which does not comply with modern regulations for new vessels (the vessel has 'grandfather' rights) and makes access for persons of reduced mobility challenging due to the absence of step free access to the passenger lounge
- **MV *Linga*** is an EU B (Restricted) vessel and can in theory be used on other routes in Shetland, although her specific design characteristics mean that training would be required for any new crew. Whilst a more modern vessel, **MV *Linga* is complex to operate and maintain**. She normally has all three gensets running when manoeuvring in confined spaces in strong winds and her power management system is difficult to maintain with Council staff and local contractors
- MV *Linga* has to be **drydocked outside of Shetland**, although MV *Hendra* can undergo her **refits locally**
- The dimensions of modern cars means that **both MV *Hendra* and MV *Linga* cannot routinely carry their published PCU capacity**
- **Vessel maintenance costs on the Whalsay route are steadily increasing** – for example, in FY 2024/25, vessel maintenance costs for the route (£1,571,810) were more than double those of FY2015/16 (£663,767). Terminal maintenance costs have also been increasing over time

**Key Point:** Whilst MV *Linga* is one of the newer vessels in the Shetland fleet, she is still 24-years old. MV *Hendra* is over 40-years old. The Whalsay vessels are therefore becoming harder and more expensive to maintain, whilst the increase in the size of an average car over time means that they cannot now routinely carry their advertised vehicle capacity.

## Ports

12.3.6 The map below shows the ports on the Symbister – Laxo / Vidlin route:



Figure 12.1: Symbister – Laxo / Vidlin ports

12.3.7 The principal features of note are as follows:

- **Symbister**
  - Symbister is the ferry terminal for Whalsay and the overnight berth of MV *Hendra*, MV *Linga* and the Skerries vessel MV *Filla*
  - Symbister is a **mixed-use and spatially constrained harbour** – the ferry service has to operate around other harbour users, including the pelagic fleet and leisure craft
  - The **narrow harbour entrance and strong cross-current** means that MV *Linga* is towards the maximum size of vessel which can routinely and reliably operate from the port
- **Laxo** is the principal mainland port for the Whalsay service. The route to this port from Symbister is **affected by southerly / south-easterly winds**, with Vidlin maintained as a diversionary port
- **Vidlin** is an occasional **diversionary port for the Whalsay service** and the principal mainland port for the Skerries service

**Key Point:** Symbister is the home port of the Whalsay vessels, as well as the Skerries ferry MV *Filla*. However, it has a number of limitations including space, the width of the harbour entrance and the cross-current at that entrance. Laxo is the primary mainland port for the Whalsay service, but Vidlin is maintained as a diversionary port in the event that a sailing cannot be operated to Laxo.

### How is the Whalsay route operated?

12.3.8 The Whalsay route is based largely around a two-vessel service Monday to Saturday, with a 'shift vessel' (MV *Linga*) operating over an extended day supported by a day vessel (MV

*Hendra*), but there are also interactions with the Skerries service, operated by MV *Filla*. Both vessels (plus MV *Filla*) are Whalsay-based and the service commences from and finishes in Symbister each day.

### Crewing

12.3.9 As with several other routes, the crewing arrangements for the Whalsay route are subject to change in the near future. The description which follows was accurate as of the winter 2024/25 timetable and will be updated in the OBC as required.

12.3.10 The Whalsay route operates with a combination of a shift vessel (MV *Linga*) and a day vessel (MV *Hendra*), each of which has different crewing arrangements. The two route specific vessels are supplemented by five sailings undertaken by MV *Filla* on a Monday. The crewing arrangements for the primary vessels are as follows:

#### MV Linga

- MV *Linga* typically operates with a crew of five at any given time. As the shift vessel, she operates with two shifts on any given day, a dayshift and a backshift. As of the 2<sup>nd</sup> of April 2025, four crews are required to deliver this roster
- Each crew has a four-week work pattern – this consists of:
  - One week of twelve-hour dayshifts
  - One week of twelve-hour backshifts (including through the night cover)
  - Two weeks off
- MV *Linga* overnights in Symbister and the crew are predominantly Whalsay-based

#### MV Hendra

- MV *Hendra* is the 'day-vessel' and also typically operates with a crew of five at any given time. She overnights in Symbister and is largely crewed from Whalsay
- There are two crews covering MV *Hendra*. Each crew works on a four-week pattern – this consists of
  - Two weeks on
  - Two weeks off
  - Rostered leave
- Over the four weeks on duty, the crew work an approximate 12.5-hour day, or an average 39.5-hour week across the four-week period

### Length of operating day

12.3.11 The Whalsay timetable has been recast for summer 2025, but there is conventionally no summer / winter variation in the timetable for the Whalsay route. The table below summarises the length of the operating day and week for the two main vessels.

Table 12.3: MV *Linga* length of operating day

| Day       | Start-Up | Sailing-Day | Close Down | Length of operating day |
|-----------|----------|-------------|------------|-------------------------|
| Monday    | 0:30     | 19:00       | 0:30       | 20:00                   |
| Tuesday   | 0:30     | 19:00       | 0:30       | 20:00                   |
| Wednesday | 0:30     | 19:00       | 0:30       | 20:00                   |

| Day          | Start-Up    | Sailing-Day   | Close Down  | Length of operating day |
|--------------|-------------|---------------|-------------|-------------------------|
| Thursday     | 0:30        | 19:00         | 0:30        | 20:00                   |
| Friday       | 0:30        | 20:00         | 0:30        | 21:00                   |
| Saturday     | 0:30        | 20:00         | 0:30        | 21:00                   |
| Sunday       | 0:30        | 19:00         | 0:30        | 20:00                   |
| <b>Total</b> | <b>3:30</b> | <b>135:00</b> | <b>3:30</b> | <b>142:00</b>           |

Table 12.4: MV *Hendra* length of operating day

| Day          | Start-Up    | Sailing-Day  | Close Down  | Length of operating day |
|--------------|-------------|--------------|-------------|-------------------------|
| Monday       | 0:30        | 11:25        | 0:30        | 12:25                   |
| Tuesday      | 0:30        | 11:25        | 0:30        | 12:25                   |
| Wednesday    | 0:30        | 11:25        | 0:30        | 12:25                   |
| Thursday     | 0:30        | 11:25        | 0:30        | 12:25                   |
| Friday       | 0:30        | 11:25        | 0:30        | 12:25                   |
| Saturday     | 0:30        | 11:25        | 0:30        | 12:25                   |
| Sunday       | 0:00        | 0:00         | 0:00        | 0:00                    |
| <b>Total</b> | <b>3:00</b> | <b>68:30</b> | <b>3:00</b> | <b>74:30</b>            |

12.3.12 The following points should be noted with respect to the above table:

- MV *Linga* operates almost continuously across the day Monday to Sunday from her first on-request departure from Symbister at 05:00 through to her last arrival at midnight Monday to Thursday and Sunday or 01:00 on a Friday and Saturday. The last scheduled sailing (i.e., not on request) is the 22:00 departure from Laxo
- MV *Linga*'s timetable does however differ slightly on a Monday. Upon arrival into Symbister at 11:00, she is stood down until 14:45, during which time drills and maintenance are undertaken. This period of downtime was previously identified as a problem by the Whalsay community, whereby only the much smaller MV *Hendra* is in operation. This issue has been addressed to some degree by MV *Filla* operating five sailings (three from Laxo to Symbister and two from Symbister to Laxo). Whilst these additional sailings close the connectivity gap, MV *Filla* carries fewer than half of the cars that MV *Linga* carries. She is also not a 'through-and-through' vessel and thus motorists must either reverse-on or reverse-off
- MV *Hendra* is the 'day vessel', operating from 07:00 to 18:25 Monday to Friday. She now also operates on a Saturday which was not the case when the Whalsay Outline Business Case was completed in 2022. However, she only operates 10 single sailings on a Saturday relative to 14 on a weekday – upon arrival back into Symbister at 11:45, she is stood down until 15:30, which it is assumed is time used for drills and maintenance
- The route is operated by a single vessel – MV *Linga* – on a Sunday

**Key Point:** The Symbister – Laxo / Vidlin route operates over a very long day – 05:00 to midnight or 01:00. Between 07:00 and 18:25, the route is operated as a two-vessel service, although there is a period of downtime for MV *Linga* and MV *Hendra* respectively on a Monday and Saturday. MV *Filla* strengthens the route on a Monday when MV *Linga* is stood down for drills and maintenance.

## 12.4 Community Needs Assessment Step 2: Connectivity

### Timetable

12.4.1 The graphic below shows the Whalsay timetable, which is the same summer and winter:



This graphic shows the departure times for scheduled ferry services from both Symbister and Laxo

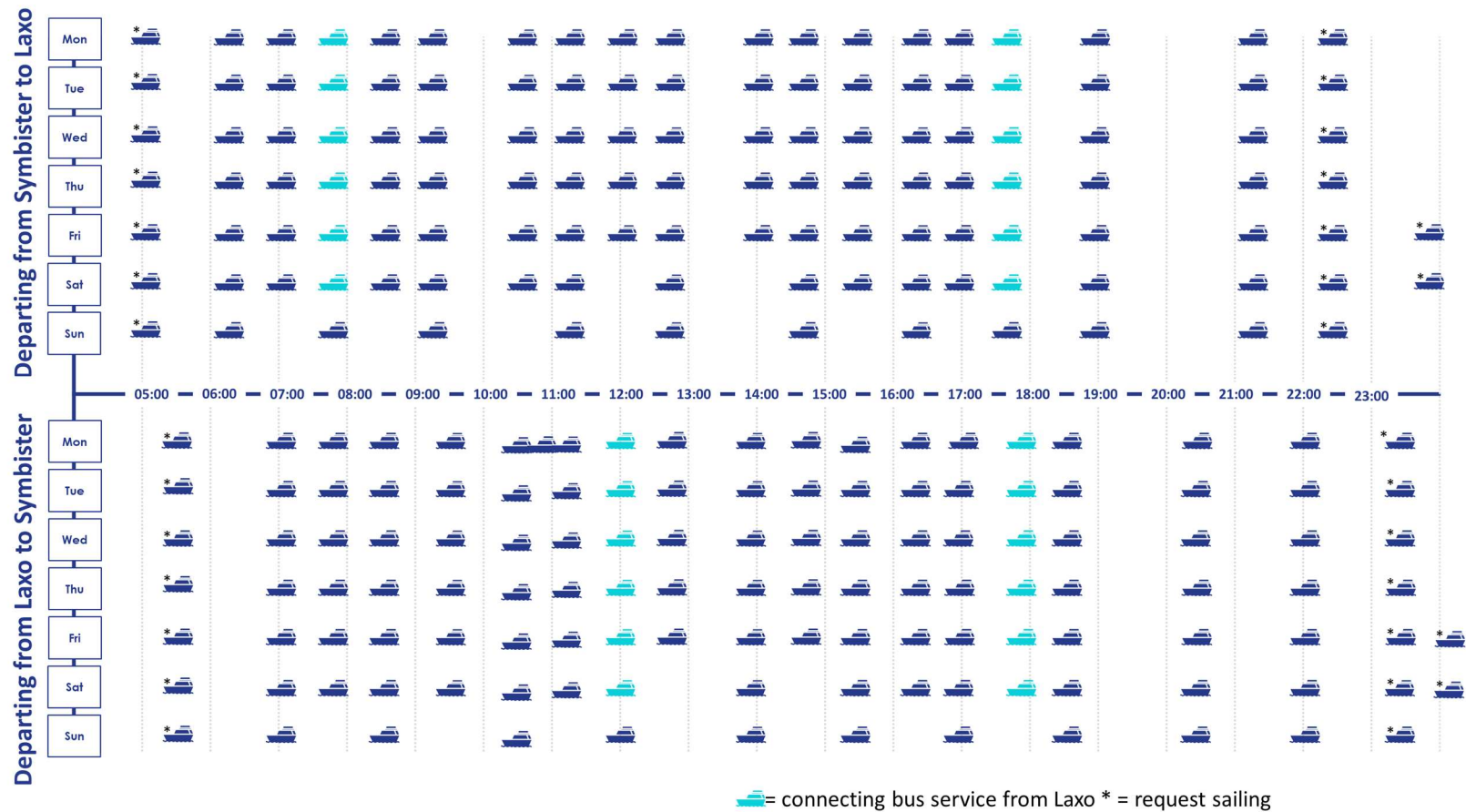


Figure 12.2: Whalsay timetable – summer 2025

12.4.2 The key points of note with regard to the Whalsay timetable are as follows:

- As previously noted, the Whalsay service is operated over a **very long day**, with a two-vessel service over much of the day
- Importantly, the **Saturday timetable is now broadly the same as a weekday** (except for the single vessel service in the middle of the day) following the reintroduction of MV *Hendra*, which was withdrawn on a Saturday as part of the 2013 service reductions. The 2022 Whalsay OBC identified vehicle deck capacity and connectivity on a Saturday as a significant problem and recommended the reintroduction of a two-vessel service, which has now been implemented
- The service is less frequent on a **Sunday** as it is operated by MV *Linga* only. The length of the operating day is however maintained
- **Evening frequency does reduce** and can leave relatively lengthy gaps between sailings for a short crossing. For example, following the 19:00 departure from Symbister, the next sailing is not until 21:15
- The **sailing time is extended slightly on occasions where the service is diverted to Vidlin**, which can disrupt the timetable. Whalsay residents are however used to working around this and a Vidlin diversion is evidently preferable to a cancellation
- The **most recent refit period (2025) saw a reduction to a single vessel on the Whalsay run** for the first time. This led to a major reduction in connectivity and was a product of the fleet-wide resilience issues being experienced

**Key Point:** The Whalsay timetable has recently been enhanced to extend the operating day marginally and reintroduce a second vessel on a Saturday.

### Public transport integration

12.4.3 There is a very limited bus service on to and from Laxo and Vidlin. The **No.19** bus operates three return journeys between Viking Bus Station in Lerwick and Vidlin, Monday to Saturday. Only two of these services call at Laxo, both which connect with an inbound and outbound ferry service. The **No.19** does not operate on a Sunday.

**Key Point:** The very limited bus service means that almost all users of the Whalsay service travel by car, either taking a car on the ferry or travelling as a foot passenger.

### What level of connectivity is provided?

12.4.4 The table below defines the level of connectivity provided for Whalsay residents and those travelling to the island in terms of:

- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

12.4.5 Given the point made above about limited bus connectivity, this table is focused on car travel only:

Table 12.5: Whalsay's connectivity

|             | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
| Destination | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Symbister   | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |
| Lerwick     | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |

**Key Point:** Whalsay has a very high level of connectivity, allowing a working day, part-day and evening in Lerwick and on the island. The last sailings on a Friday and Saturday run well after most public transport services in Scotland as a whole finish for the day.

## 12.5 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

12.5.1 This section sets out how the Whalsay ferry service is being used by residents and those visiting the island.

#### How many sailings are made in each year?

12.5.2 The figure below shows the number of sailings made by vessel on the Symbister – Laxo / Vidlin route each year:



Figure 12.3: Whalsay - total sailings by vessel, 2013-2024 (Source: vessel logbooks)

12.5.3 The key points of note in relation to the above figure are as follows:

- The inter-island ferry service was subject to a programme of **service reductions in 2013** – for **Whalsay**, the reductions were mainly focused on **weekends**
- There was a **5% reduction in scheduled sailings** between 2013 and 2015, and then broad stability thereafter
- There were circa **700 additional sailings in 2023 relative to 2022**, largely due to the restoration of a **two-vessel service on a Saturday**

**Key Point:** The 2013 programme of service reductions led to fewer sailings being operated on the Whalsay route, particularly at the weekend. There was broad stability in the number of sailings following these cuts. The restoration of a two-vessel service on a Saturday has however taken the total number of sailings back to around their 2013 level

How have vehicle lane metre carryings changed over time?

12.5.4 The figure below shows vehicle carryings in terms of total lane metres (LMs) carried on the Whalsay route for each year between 2013 and 2024. These figures have been built-up from sailing-by-sailing carryings noted in the vessel logbooks:

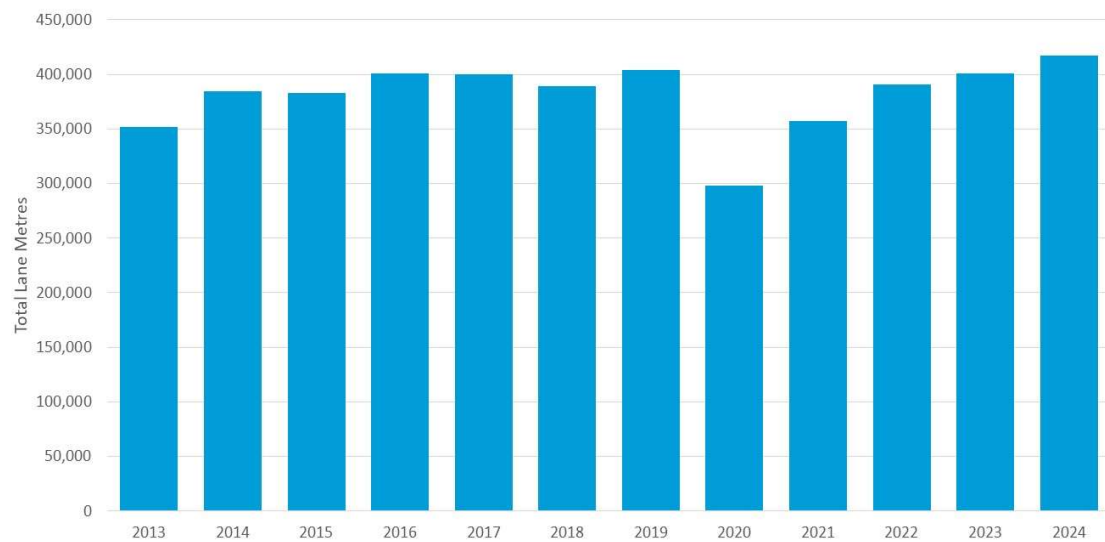


Figure 12.4: Whalsay – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks)

**Key Point:** There was growth in carryings on the Whalsay route between 2013 and 2016 but they were largely static thereafter – evidence from the Whalsay OBC suggests that travel is being constrained by vehicle deck capacity in the weekday peak periods.

What was the impact of COVID-19?

12.5.5 The table below shows the 2024 passenger, cars and commercial vehicle carryings as a percentage of 2019 carryings. This is a measure how close the route has got to recovering its pre-pandemic position:

Table 12.6: Whalsay - 2024 carryings as a percentage of 2019 carryings

| Carrying type                           | Symbister – Laxo / Vidlin |
|-----------------------------------------|---------------------------|
| 2024 carryings as a % of 2019 carryings |                           |
| Passengers                              | 95%                       |
| Cars                                    | 104%                      |
| Commercial vehicles                     | 96%                       |

12.5.6 The Whalsay route has **largely recovered its pre-COVID position**, with passenger and car carryings in 2024 standing at **95%** and **104%** respectively of their pre-pandemic level.

**Key Point:** The Whalsay route had overall largely recovered its pre-pandemic carryings position by 2024.

**When are the busiest sailings?**

12.5.7 The chart below shows the proportion of **Symbister - Laxo** and **Laxo - Symbister** sailings for each scheduled departure time where **vehicle deck utilisation exceeded 75%** - i.e., sailings which were **full** or **nearly full** in 2024. It should again be noted that chart covers all seven days of the week and records all sailing times for which there were **50 or more** sailings in 2024, so some of the sailings times listed may not directly align with the timetable.

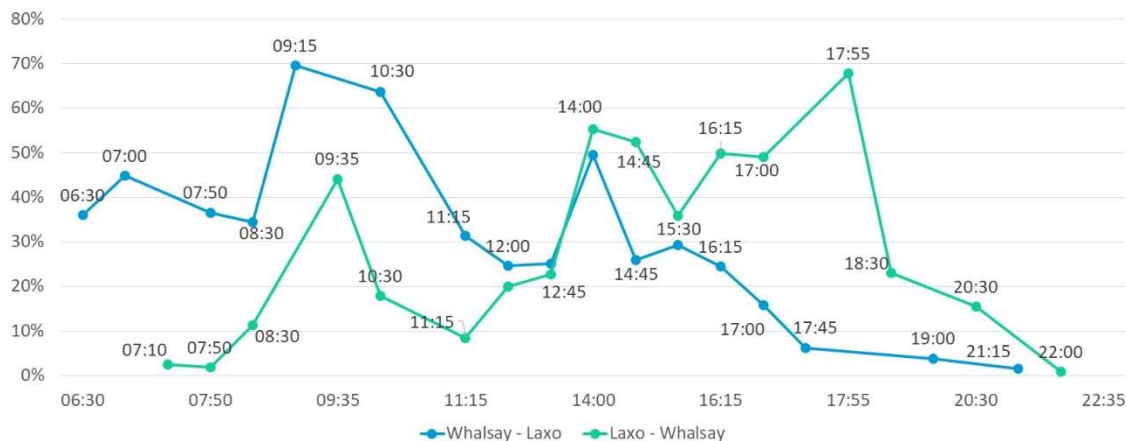


Figure 12.5: Proportion of Symbister – Laxo / Vidlin sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks)

12.5.8 In the **‘to Laxo’** direction, morning commuter and late morning sailings are the busiest, with **09:15** departure routinely full or near to full. In the **‘to Symbister’** direction, the evening commuter sailings are the most pressured, particularly the **17:55** departure

**Key Point:** Peak vehicle deck capacity is one of the main problems on the Symbister – Laxo / Vidlin route, reflecting the comparatively high level of commuting amongst Whalsay residents.

**Is capacity a problem?**

12.5.9 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted above, is a reasonable proxy for when sailings are full or almost full:

Table 12.7: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                                                      | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|------------------------------------------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| Symbister –<br>Laxo / Vidlin<br>(both<br>directions) | 32.8%                  | 32.8%                 | 23.2%                   | 38.1%                 | 30.8%                              |

12.5.10 The key points of note from the above table are as follows:

- Around **one third of weekday sailings** between 07:00 and 19:00 are full or almost full

- Many of the busiest sailings will be clustered together around commuting times or mid-morning / mid-afternoon travel to and from Lerwick for shopping, appointments etc
- Despite the restoration of a two-vessel service on a **Saturday**, around **one quarter** of sailings are full or nearly full
- The single vessel service on a **Sunday** leads almost **40%** of sailings being full or nearly full

**Key Point:** Peak vehicle deck capacity on the Whalsay route is a significant problem – it is the most capacity pressured route on the network in this respect.

## How are the ferry services performing?

### How often is the ferry cancelled?

12.5.11 The figure below shows the percentage of all sailings cancelled on the Symbister – Laxo / Vidlin route in 2024:

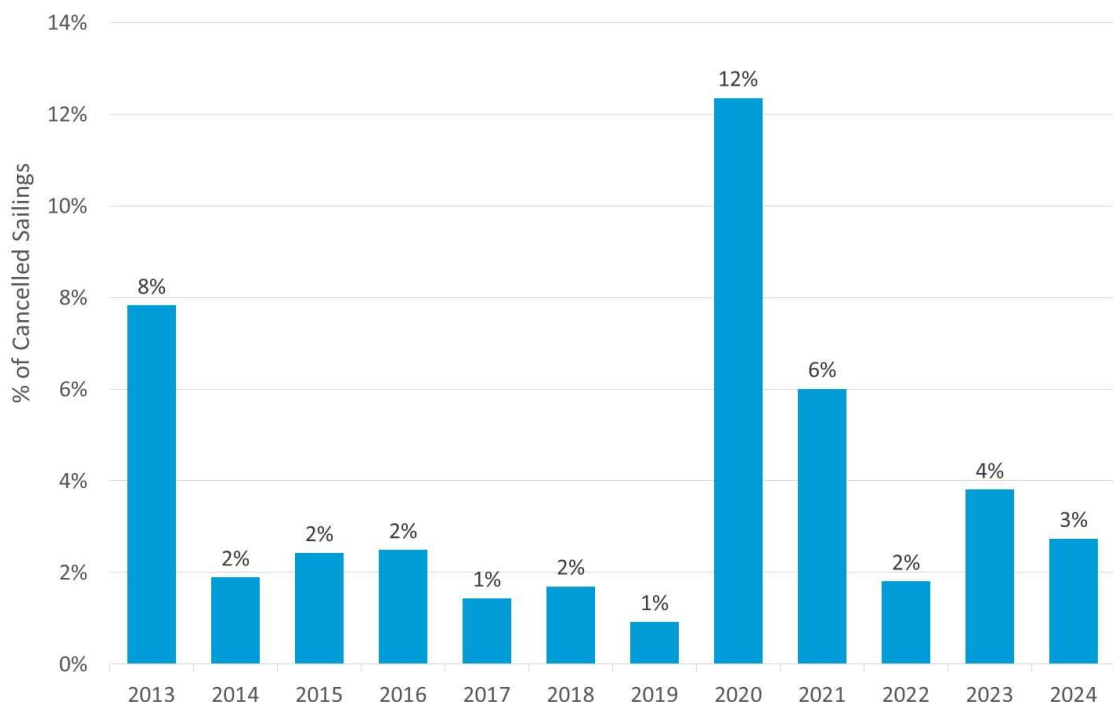


Figure 12.6: Annual percentage cancellation rate on the Symbister – Laxo / Vidlin route (Source: vessel logbooks)

12.5.12 The main points from the above figure are as follows:

- Given the number of sailings operated, **cancellations have not generally been a significant problem on this route**. However, the trend since 2019 has been a growth in cancellations, but there is considerable variation within this and **2024** was not dissimilar to the period 2014-2019
- It should be noted that the high rate of cancellations in 2020 and 2021 is likely due to crewing issues / self-isolation during the pandemic

**Key Point:** The Whalsay service is highly reliable with around only 1%-3% of circa 12,000 sailings annually cancelled since 2017. However, reliability has worsened slightly since 2019.

### How many sailing days and individual sailings operate to timetable?

12.5.13 The figure below shows the proportion of:

- All Whalsay sailing days that operate to timetable (i.e., every individual sailing across the day is operated to timetable)
- Individual sailings that are operated to timetable

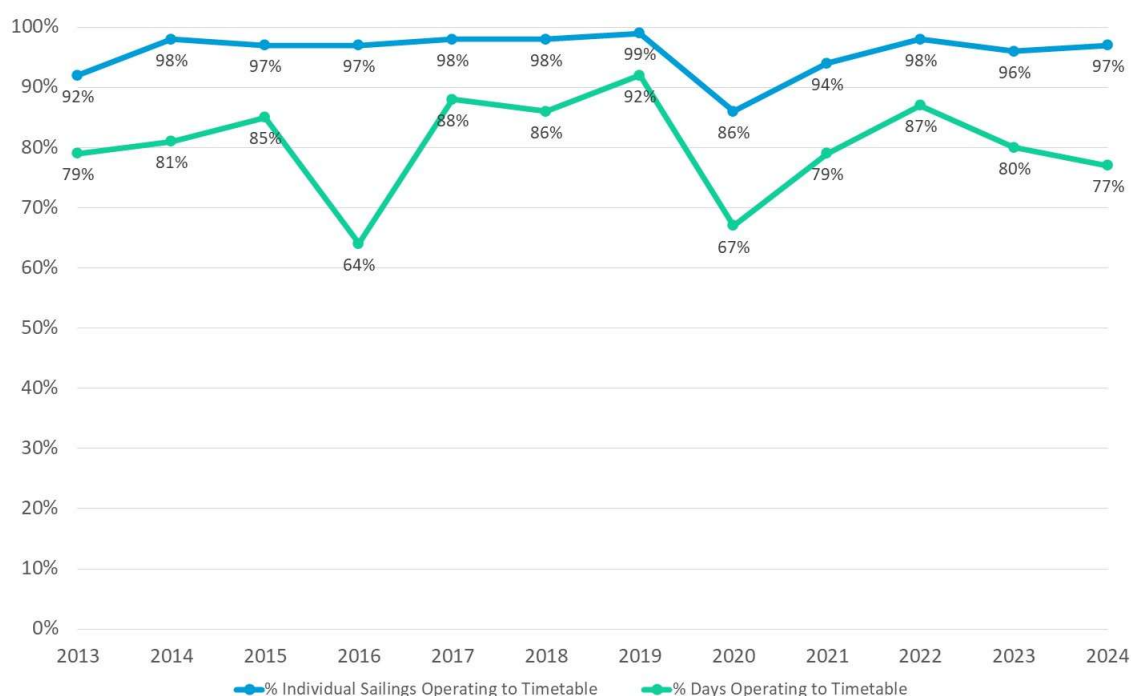


Figure 12.7: Whalsay – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks)

12.5.14 The key points of note from the above figure are as follows:

- The proportion of days when all sailings operate to timetable varies year-on-year with no obvious trend or pattern in the data
- However, around **nine in every ten individual sailings typically operate to timetable**, so there are high levels of reliability overall
- The dip in reliability in 2020 is likely to be related to the pandemic

**Key Point:** Analysis of sailings operated to timetable confirms the overall high level of reliability on the Whalsay route, with nine in every ten sailings operated to timetable (out of a total of circa 12,000 sailings).

### How often is the service diverted to Vidlin?

12.5.15 Whalsay is unique amongst Scottish islands in that it has a dedicated diversionary port (Vidlin) when weather or unplanned outages affect the primary mainland landfall (Laxo). The Symbister – Laxo crossing is very exposed to any wind with a south-easterly component, and



the ability to divert to Vidlin is a major contributor to the generally high levels of reliability on the route.

12.5.16 The figure below shows the number of days where **at least one sailing** has been diverted to Vidlin:

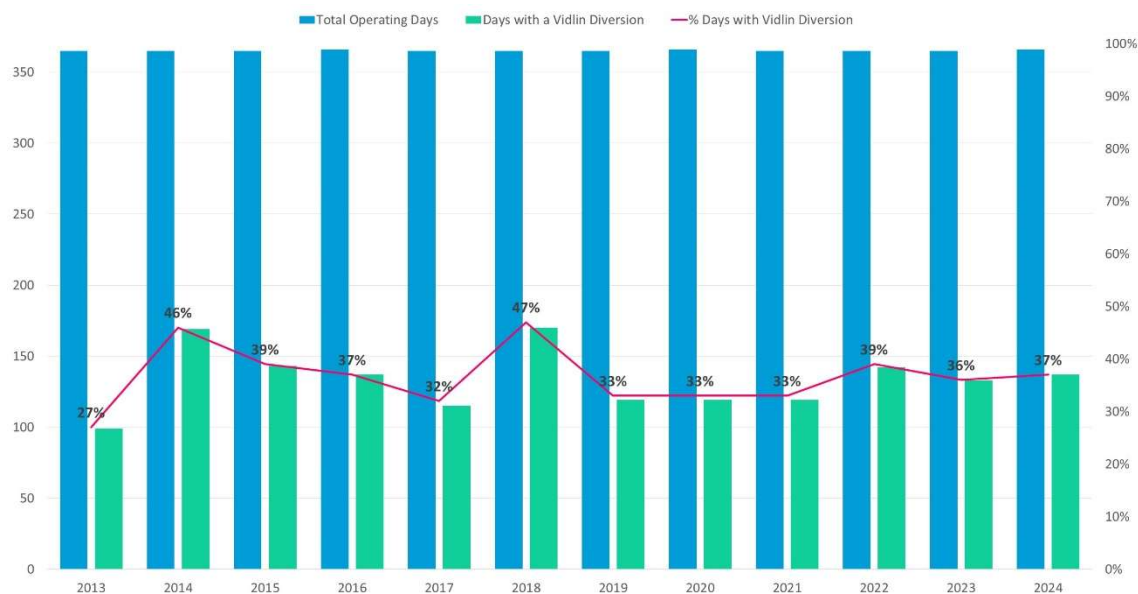


Figure 12.8: Number of days where at least one Symbister – Laxo sailing has been diverted to Vidlin (Source: vessel logbooks)

12.5.17 The number of days with a diversion to Vidlin varies by year but is generally around **3-4 days in every 10** on average. The number of sailings days with a diversion is generally higher in winter.

12.5.18 The figure below shows how many **individual sailings** are diverted to Vidlin:

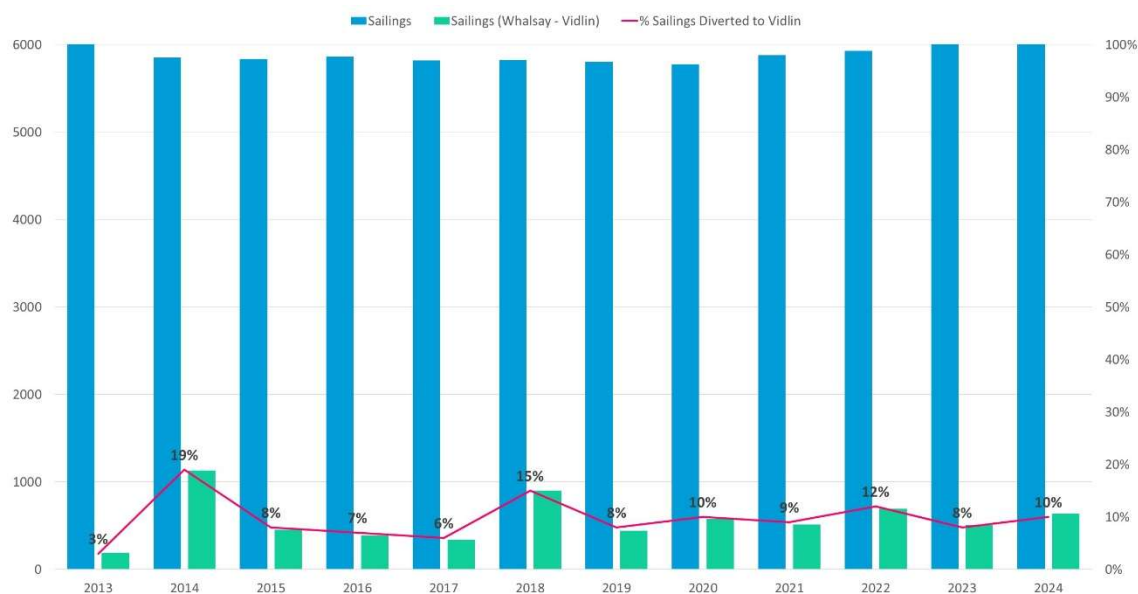


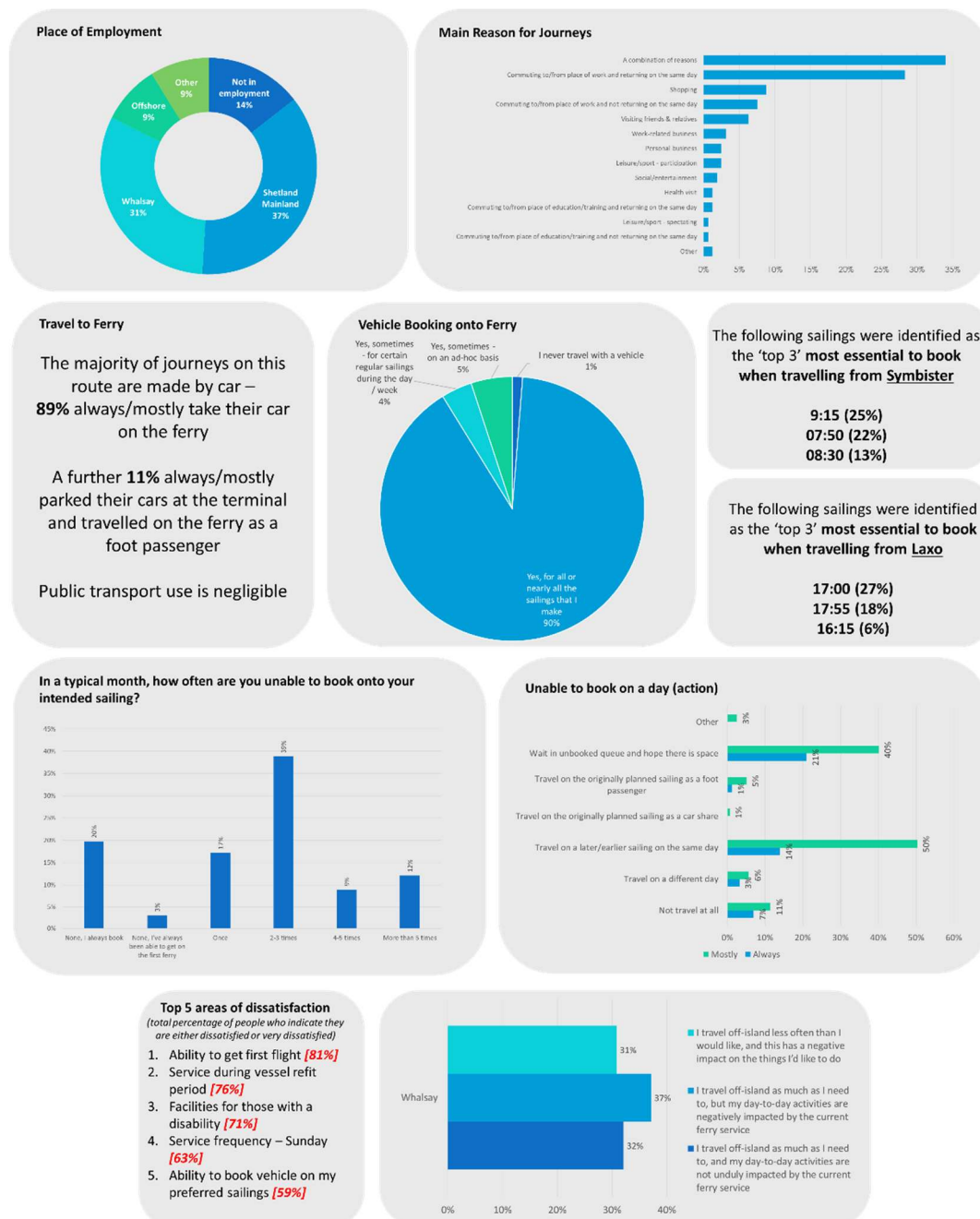
Figure 12.9: Number of individual sailings diverted to Vidlin (Source: vessel logbooks)

12.5.19 Only a small number of sailings are diverted to Vidlin, typically fewer than around 1-in-10 across the year.

**Key Point:** The ability to divert the Whalsay service to Vidlin is integral to the reliability of the route. Whilst only 1-in-10 sailings are diverted on average, there is at least one diversion every 3-4 days on average.

## Resident survey headlines

12.5.20 The graphic below draws out the main headlines from the resident survey for Whalsay residents.



## 12.6 Community Needs Assessment Step 4: Island Narrative

### How has population changed over time?

12.6.1 Whalsay had a population of **966** at the time of the 2022 Census, making it the most populous of the islands served by the Council's ferry network. The figure below shows the trend in population for Whalsay and comparator areas, indexed to 1981:

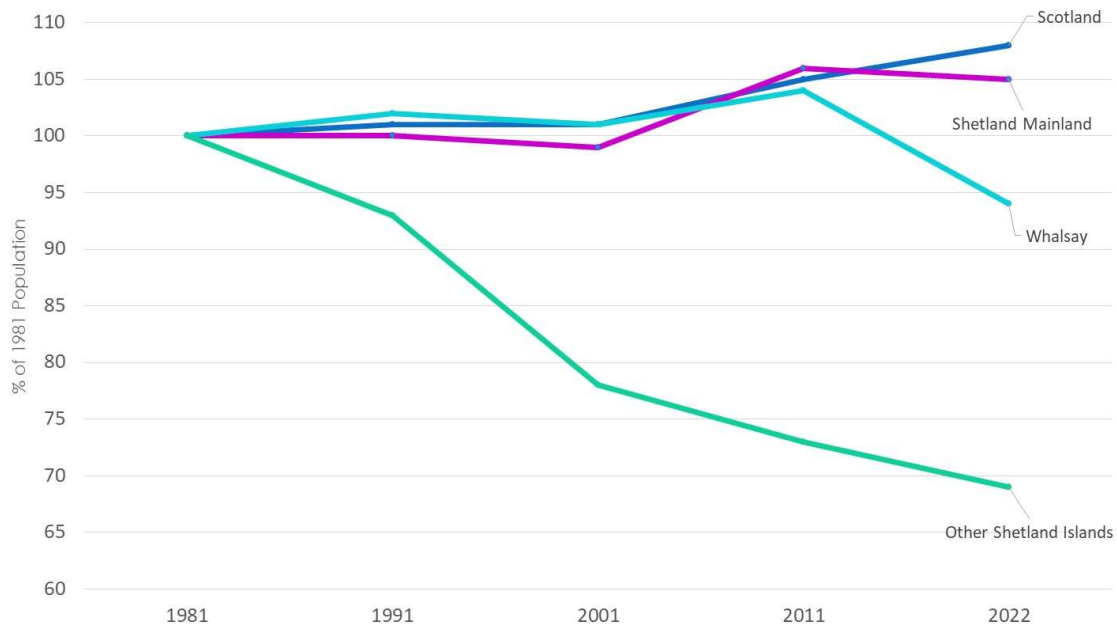


Figure 12.10: Population trend for Whalsay and comparator areas (1981=100) (Source: Census)

12.6.2 The key points of note from the above figure are as follows:

- Whalsay's population has been fairly stable over a long period: However:
  - Population in 2022 was only **94%** of its 1981 level, highlighting that there has been some decline
  - Perhaps more materially, the island's population did reduce by **9%** between 2011 and 2022, highlighting that population loss has been a more significant challenge in recent years
- The decline in Whalsay's population over the two periods cited above compares with **modest growth at the Shetland level overall**

**Key Point:** Whalsay has experienced a modest decline in its population over the last four decades, but much of this was concentrated in the period between 2011 and 2022, highlighting some of the more recent challenges facing the island.

### Population age profile

12.6.3 Like most of Shetland's island communities, Whalsay has an ageing population. The figure below shows the proportion of Whalsay's population aged under-16, 16-64 and over 64 in the 2011 and 2022 Censuses and compares this to mainland Shetland and the other island communities in Shetland:

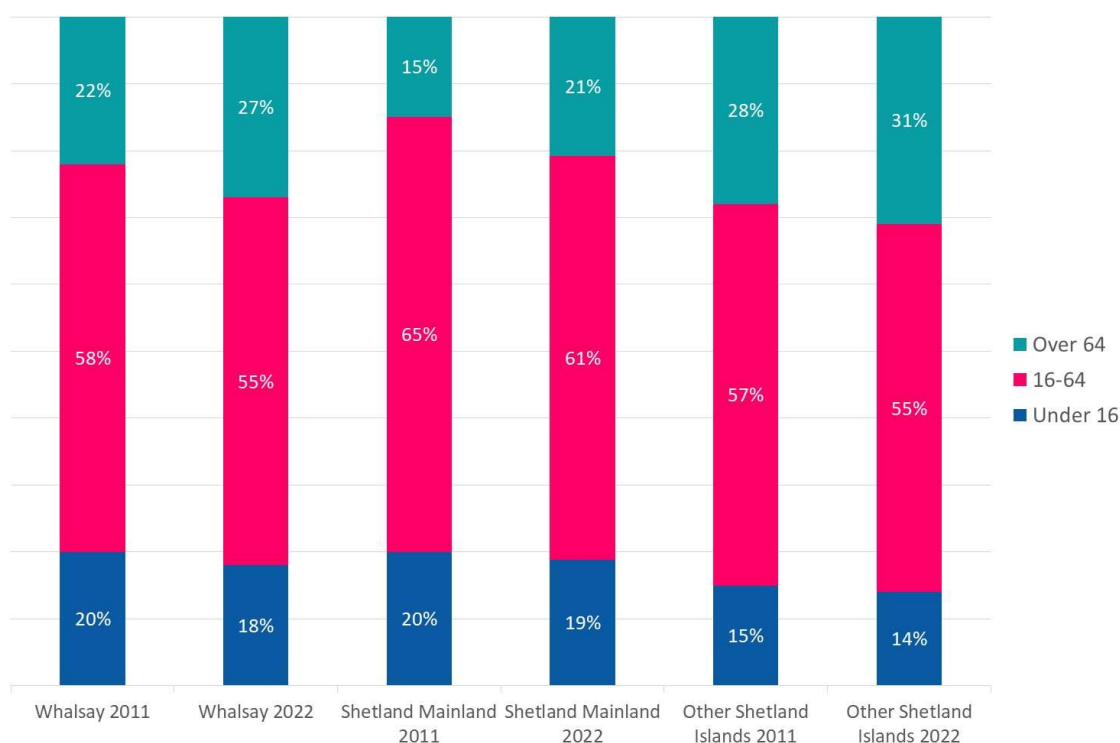


Figure 12.11: Population age profile for Whalsay and comparator areas (Source: Census 2011 and 2022)

#### 12.6.4 In 2022:

- The proportion of Whalsay's population **aged 65+** was **27%** compared to only **21%** on mainland Shetland
- Whalsay also had a slightly smaller proportion of its population aged under-16 (**18%**) relative to mainland Shetland (**19%**)
- As a consequence, its working age population (16-64) is smaller at **55%** of the population relative to **61%** for mainland Shetland

**Key Point:** Whalsay's population is ageing, compounding its more recent population decline.

### What is the economic structure of Whalsay?

- 12.6.5 The figure below shows the sectoral split of employee jobs in Whalsay in 2022 – it should be reiterated that this is a measure of **resident employment** (i.e., jobs filled by island residents irrespective of whether they work in Whalsay):

*Note that Census data geography groups Whalsay and Skerries together*

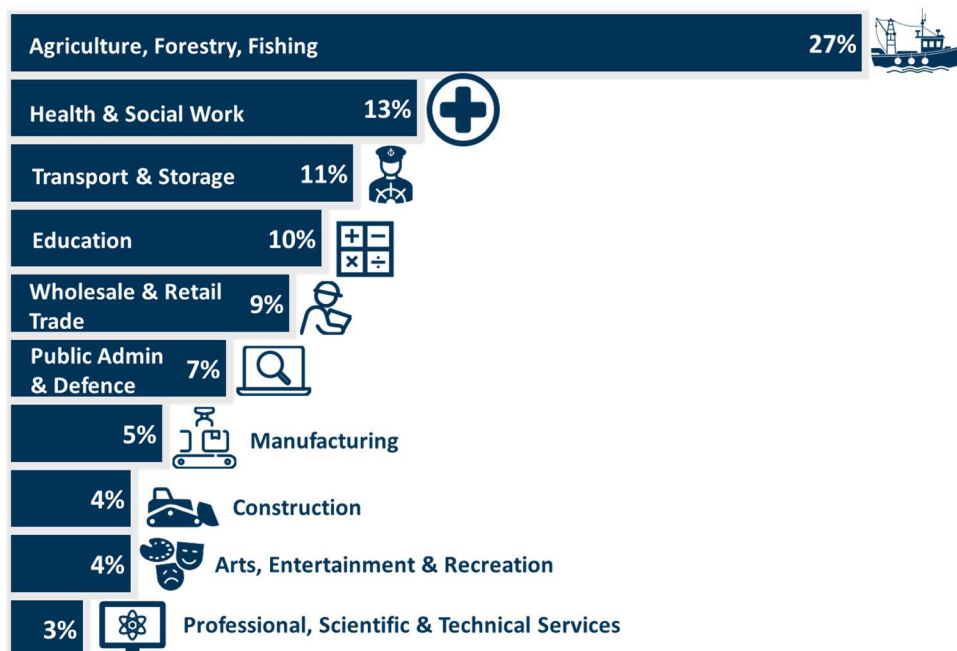


Figure 12.12: Employee jobs by industry – Whalsay (Source: 2022 Census)

12.6.6 The key points of note from the above figure are as follows:

- Whalsay has a strong presence in the **pelagic** and, to a lesser extent, **whitefish** sectors:
  - Over a **quarter of all resident jobs** in Whalsay are in '**Agriculture, Forestry and Fishing**'
  - This is also reflected in **employee jobs by occupation** with **31%** employed in '**Skilled Trade Occupations**', relative to the Shetland and Scotland averages of **19%** and **12%** respectively
- **Commuting** to jobs off-island is though essential
  - **18%** of all Whalsay adults in employment travel **over 5km to work**, which implies that they work off-island
  - A further **31%** responded '**Other**' with respect to their distance travelled to work, a significant proportion of which will be in the fishing industry
  - Levels of **car ownership** and **car-based travel-to-work** are well in excess of the Shetland and national averages

**Key Point:** Whalsay has a significant concentration of resident employment in the fishing industry and is the home of much of Shetland's pelagic fleet. Commuting to off-island employment is however important, and it is essential that the inter-island transport network facilitates this.

### What public services are available on Whalsay?

12.6.7 The table below summarises the public services that are available on Whalsay:

Table 12.8: Availability of public services in Whalsay

| Service                                                                 | Whalsay                                 |
|-------------------------------------------------------------------------|-----------------------------------------|
| Nursery                                                                 | Yes                                     |
| Primary school                                                          | Yes                                     |
| Junior high school                                                      | Yes                                     |
| Shop                                                                    | Yes                                     |
| GP                                                                      | Yes                                     |
| Dentist                                                                 | Yes, dental clinic in health centre     |
| Post Office                                                             | Yes                                     |
| Bank                                                                    | Yes, delivered through the Post Office  |
| Care home                                                               | Yes                                     |
| Council leisure centre                                                  | Yes                                     |
| Hotel or visitor accommodation                                          | Limited bed and breakfast accommodation |
| Proportion of households with superfast broadband                       | 95%                                     |
| Proportion of households meeting broadband Universal Service Obligation | 100%                                    |

**Key Point:** As a comparatively large island some distance from Lerwick, Whalsay has relatively extensive on-island service provision, including a Junior High School, GP practice, leisure centre and care home.

## 12.7 Community Needs Assessment Step 5: What are the transport problems (gap analysis)?

12.7.1 A summary of the transport problems by theme for Whalsay is presented below.

### What are the transport problems in Whalsay?

12.7.2 The problem themes relevant to **Whalsay** are set out in the table below:

Table 12.9: Whalsay - transport problem 'themes'

| All modes of travel                                                                                           | Public transport specific                                                                              |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                   | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                              | Capacity                                                                                               |
| Fuel / power issues                                                                                           | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                           | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult | Ease of use / convenience                                                                              |
| Journey quality                                                                                               | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                 | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                     | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                           |                                                                                                        |

| All modes of travel                                                                                                                                                                                          | Public transport specific |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                           |
| Personal security (fear of crime)                                                                                                                                                                            |                           |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                           |

12.7.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1 of the Transport Problems Framework) and the **underlying supply-side cause** (Step 2):

Table 12.10: Whalsay – transport problems and supply-side causes

| Problem Theme                                       | Step 1: Problem(s)                                                                                                                                                                                                                                                                                                                  | Step 2: Supply-side cause(s)                                                                                                                                              |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel         | - Greenhouse gas emissions from vessels                                                                                                                                                                                                                                                                                             | - MV <i>Hendra</i> and MV <i>Linga</i> are both conventional diesel vessel                                                                                                |
| Cost of travel and affordability                    | - The level of fares was a source of dissatisfaction in the resident survey                                                                                                                                                                                                                                                         | - High frequency of travel means that the cost of travel can account for a high proportion of income                                                                      |
| Integration of travel between modes – ferry-to-bus  | - Majority of ferries to / from Laxo / Vidlin do not connect with a bus                                                                                                                                                                                                                                                             | - Limited and fragmented bus network<br>- High cost of bus service provision relative to demand                                                                           |
| Personal accessibility                              | - Physical accessibility to the passenger lounge on MV <i>Hendra</i>                                                                                                                                                                                                                                                                | - Passenger lounge below the waterline and only accessible by steep stairs                                                                                                |
| Booking and journey planning                        | - Most Whalsay residents have to book sailings both ways when taking the car – there are occasions on which they are not able to get a booking on their preferred sailing and there is also a general ‘hassle’ factor associated with this                                                                                          | - High vehicle deck utilisation on peak sailings, including at the weekend, means that a booking is often required to guarantee travel                                    |
| Capacity                                            | - Inability to secure a place on the ferry, either unable to get a booking or travel on demand when unbooked                                                                                                                                                                                                                        | - Insufficient vehicle deck capacity on peak sailings, particularly on MV <i>Hendra</i><br>- Little alternative to taking the car given the extremely limited bus service |
| Service reliability (cancellations and punctuality) | - Cancellations / diversions in south-easterly through southerly winds                                                                                                                                                                                                                                                              | - Route alignment, although diversion port at Vidlin assists with reducing impacts                                                                                        |
| Timetables                                          | - One vessel service on a Sunday<br>- One vessel service during refit (2025)<br>- Connections with first flights from Sumburgh were highlighted as a problem in the engagement. <i>However, it should be noted that the new 05:00 request departure from Symbister now makes catching at least some of these flights achievable</i> | - Limited resilience in the fleet to cover refit<br>- Cost and crewing implications of operating the second vessel on a Sunday<br>- Lower demand on a Sunday              |



## 13 Yell

### Key facts

- **Population in 2022:** 897
- **Ports:**
  - Toft
  - Ulsta
- **Vessels:**
  - MV *Dagalien*
  - MV *Daggri*
- **Relief vessel:** MV *Fivla*, although the route has operated as a single vessel service during refit in more recent years
- **Overnight berth:** Ulsta (both vessels)
- **Crossing time:** 10 minutes
- **2024 car carryings:** 139,808
- **2024 passenger carryings:** 260,553

### 13.1 Overview

- 13.1.1 Yell is the second most populous of the islands served by Shetland's inter-island ferry network. However, the Yell Sound route is by some distance the busiest on the network. As well as handling all domestic travel to and from Yell, Unst and Fetlar, Chapter 5 set out in some detail the significant freight flows across Yell Sound. This is therefore a strategically and economically important route for Shetland overall, as well as for residents and businesses in Yell.

### 13.2 Community Needs Assessment Step 1: Route Service Level

- 13.2.1 The table below allocates the **Yell Sound** route to its relevant Route Service Level for both the winter and summer timetables:

Table 13.1: Allocation of Yell Sound route to levels

|        | Level A | Level B | Level C | Level D | Level E | Level F | Level G |
|--------|---------|---------|---------|---------|---------|---------|---------|
| Winter |         |         |         |         |         | ✓       |         |
| Summer |         |         |         |         |         | ✓       |         |

- 13.2.2 The Yell Sound route currently operates with a 'shift vessel', which operates over a circa 17.5-hour day, and a day vessel which operates over a circa ten-hour day Monday to Friday. It should be noted that one of the two Yell Sound vessels is partially manned through the night, but the service concludes at 23:40 when the last request sailing is called.

### What are the main features of the route?

#### Categorisation of waters

- 13.2.3 The **Toft - Ulsta** route operates exclusively in categorised waters (Category D).

## Vessels

- 13.2.4 The Yell Sound route is operated by the largest and newest vessels in the Shetland fleet, the sister vessels MV *Dagalien* and MV *Daggri*. Whilst the vessels are relatively new compared to their peers, they are nonetheless both now over 20-years old. The key features of the Yell Sound vessels are summarised in the table below:

Table 13.2: Key features of MV *Dagalien* and MV *Daggri*

| Parameter                         | MV <i>Dagalien</i>                                                                | MV <i>Daggri</i>                                                                    |
|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |
| Entered service                   | 2004                                                                              |                                                                                     |
| Passenger Certificate             | Euro B                                                                            |                                                                                     |
| Length Overall (m)                | 65.36                                                                             |                                                                                     |
| Beam (m)                          | 13.8                                                                              |                                                                                     |
| Draught (m)                       | 3.7                                                                               |                                                                                     |
| Passenger Capacity                | 144                                                                               |                                                                                     |
| Published Vehicle Capacity (PCUs) | 31                                                                                |                                                                                     |
| Crew                              | 5/6                                                                               |                                                                                     |

- 13.2.5 The following points should be noted in relation to the Yell Sound vessels:

- MV *Dagalien* and MV *Daggri* are **sister ships** which were specifically built for the Yell Sound route. They are the **largest vessels in the fleet and therefore cannot routinely serve any other Shetland linkspans except Hamars Ness, Fetlar**
- Whilst Yell Sound is within categorised waters, both vessels have a **Euro B certificate** and thus could operate anywhere else in Shetland if the landside infrastructure could accommodate them
- Both vessels are **drydocked outside of Shetland**
- The design of the Yell Sound vessels means that they can generally **carry close to their advertised vehicle capacity**
- **Vessel maintenance costs on the Yell Sound route are steadily increasing** – for example, in FY 2024/25, vessel maintenance costs for the route (£2,041,918) were more than two and half times (£811,957) those of FY2015/16. Terminal maintenance costs have also been increasing over time

**Key Point:** The Yell Sound vessels are the largest and most modern in the Shetland fleet. They are however restricted to serving the Toft – Ulsta route as they cannot be accommodated at any of the other linkspans on the Shetland internal network except Hamars Ness.

## Ports

- 13.2.6 The map below shows the ports on the Yell Sound route:

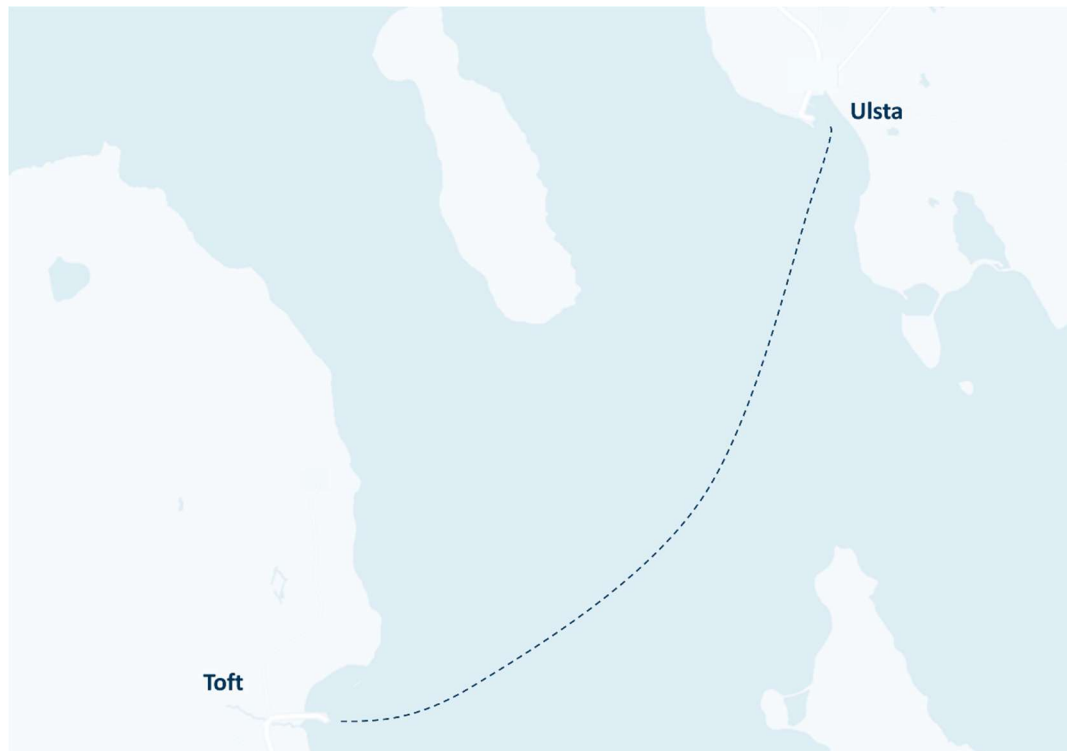


Figure 13.1: Yell Sound ports

13.2.7 The principal features of note are as follows:

- Both Toft and Ulsta were **modernised for the introduction of MV *Dagalien* and MV *Daggri***
- Both **vessels overnight at Ulsta**, with the shift vessel overnighing on the linkspan berth and the day vessel on the layby berth

**Key Point:** Toft and Ulsta were upgraded specifically to accommodate MV *Dagalien* and MV *Daggri*. These are the only two ferry terminals on the Shetland internal network except for Hamars Ness that can accommodate the Yell Sound vessels.

### How is the Yell Sound route operated?

13.2.8 The Yell Sound route based around a two-vessel service Monday to Friday, with a 'shift vessel' operating over an extended day supported by a 'day vessel'.

#### Crewing

13.2.9 As with several other routes, the crewing arrangements for the Yell Sound route are subject to change in the near future. The description which follows was accurate as of the winter 2024/25 timetable and will be updated in the OBC as required.

13.2.10 The operation on Yell Sound is similar to that on Bluemull Sound (and to some degree Whalsay) in that it runs on the basis of a shift vessel and a day vessel in terms of the published timetable. However, a major difference with Yell Sound is that one of the two vessels is manned by a partial crew through the night. The crewing arrangements differ between Masters and Engineers, who cover the night manning, and Mates and Deckhands who do not work through the night.

### Masters and Engineers

13.2.11 Masters and Engineers work a six-week shift pattern, which consists of:

- 5 days of 12-hour dayshifts
- 4 days of 12-hour night shifts
- 7 days off
- 7 days of 12-hour dayshifts
- 3 days of 12-hour night shifts
- 16-days off
- Average 42-hour week with leave rostered

### Mates and Deckhands

13.2.12 Mates and Deckhands operate a five-week shift pattern:

- 5 days of 12-hour dayshifts
- 2 days off
- 7 days of 12-hour dayshifts
- 7 days of 6.5 hour backshifts
- 14 days off
- Average 38-hour week with leave rostered

13.2.13 The crew of both vessels are a mix of Yell and mainland Shetland-based crew. All crew rely on either swaps or onboard accommodation whilst on shift as both MV *Dagalien* and MV *Daggri* lie in Ulsta overnight.

### **Length of operating day**

13.2.14 There is no summer and winter variation in the timetable for the Yell Sound route. The table below summarises the length of the operating day and week for the two vessels (as the vessels are interchangeable, they are referred to as 'shift vessel and 'day vessel' in the tables below):

Table 13.3: Shift vessel - length of operating day

| Day          | Start-Up    | Sailing-Day   | Close Down  | Length of operating day |
|--------------|-------------|---------------|-------------|-------------------------|
| Monday       | 0:30        | 17:25         | 0:30        | 18:25                   |
| Tuesday      | 0:30        | 17:25         | 0:30        | 18:25                   |
| Wednesday    | 0:30        | 17:25         | 0:30        | 18:25                   |
| Thursday     | 0:30        | 17:25         | 0:30        | 18:25                   |
| Friday       | 0:30        | 17:25         | 0:30        | 18:25                   |
| Saturday     | 0:30        | 17:25         | 0:30        | 18:25                   |
| Sunday       | 0:30        | 17:25         | 0:30        | 18:25                   |
| <b>Total</b> | <b>3:30</b> | <b>121:55</b> | <b>3:30</b> | <b>128:55</b>           |

Table 13.4: Day vessel - length of operating day

| Day          | Start-Up    | Sailing-Day  | Close Down  | Length of operating day |
|--------------|-------------|--------------|-------------|-------------------------|
| Monday       | 0:30        | 09:55        | 0:30        | 10:55                   |
| Tuesday      | 0:30        | 09:55        | 0:30        | 10:55                   |
| Wednesday    | 0:30        | 09:55        | 0:30        | 10:55                   |
| Thursday     | 0:30        | 09:55        | 0:30        | 10:55                   |
| Friday       | 0:30        | 09:55        | 0:30        | 10:55                   |
| Saturday     | 0:00        | 0:00         | 0:00        | 0:00                    |
| Sunday       | 0:00        | 0:00         | 0:00        | 0:00                    |
| <b>Total</b> | <b>2:30</b> | <b>49:35</b> | <b>2:30</b> | <b>54:35</b>            |

13.2.15 The following points should be noted with respect to the above tables:

- The shift vessel operates continuously across the day Monday to Sunday from her first departure from Ulsta at 06:15 through to her last arrival at midnight 23:40 (or 22:10 if the final on-request rotation is not requested in either direction)
- The day vessel enters service at 07:45 and operates through until 17:40
- The vessels undertake drills and maintenance on a Monday, alternating which vessel is on maintenance on a weekly basis
- The timetable therefore differs on a Monday as the Yell Sound Service is reduced to a single vessel during the maintenance period. The 09:45 from Toft and Ulsta are the last sailings using two vessels through until 16:30. Between these times, a single vessel service is in operation
- The service reduces to a single vessel at the weekend, with one sailing fewer on a Sunday than a Saturday
- Whilst MV *Fivla* is capable as acting as the relief vessel, she is significantly smaller than the regular Yell Sound vessels. In recent years, the service has reduced to a single vessel during refit periods, and the reduced frequency has had a negative impact on the community and businesses

**Key Point:** The Yell Sound route operates 06:15 to 22:40, although this is a shorter day than Whalsay despite being a busier route. Between 07:45 and 17:40, the route is operated as a two-vessel service, although there is a period of downtime for one of the vessels each Monday for drills and maintenance. The service has recently reduced to single vessel during refit, which has had negative impacts on the community.

### 13.3 Community Needs Assessment Step 2: Connectivity

#### Timetable

13.3.1 The graphic below shows the Yell Sound timetable, which is the same summer and winter:

This graphic shows the departure times for scheduled ferry services from both Ulsta and Toft

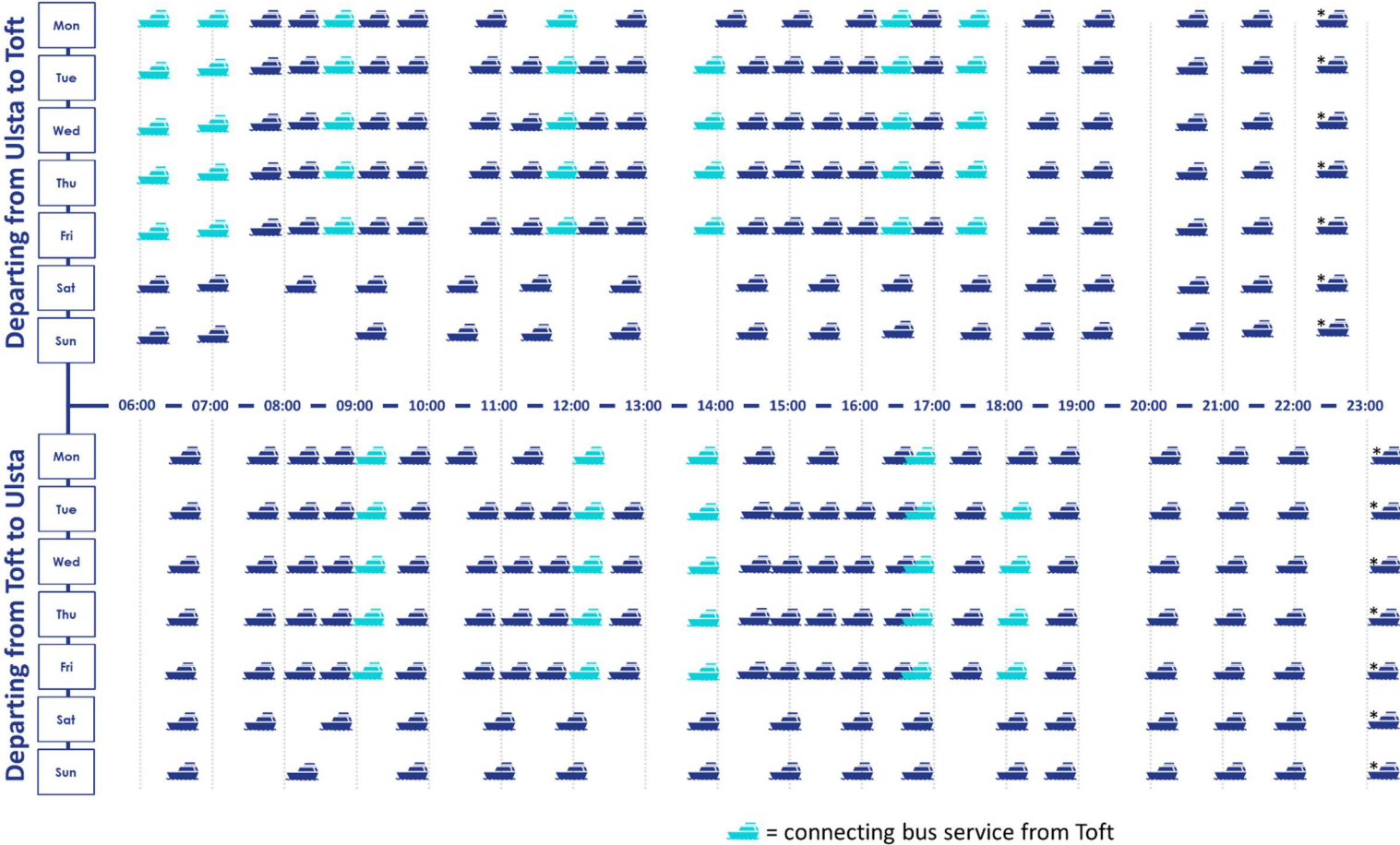


Figure 13.2: Yell Sound timetable - winter 2024/25

- 13.3.2 Several of the pertinent points in relation to the Yell Sound timetable were highlighted in the previous section, including the reduced Monday service and single vessel refit service.
- 13.3.3 It should though be noted that Yell Sound previously operated with two vessels on a Saturday prior to the 2013 service reductions. The switch to a single vessel service represented a significant reduction in connectivity for Yell residents (and also those of Fetlar and Unst).
- 13.3.4 The timetable of the Yell Sound service is of particular importance for residents of Fetlar and Unst, which need to make two ferry journeys on any trip to mainland Shetland. The timetables of the two routes are coordinated as far as possible, but there is a tension between allowing sufficient time to safely travel between Gutcher and Ulsta (and vice versa) whilst minimising waiting time.

**Key Point:** The Yell Sound route is operated frequently and over a long operating day. The timetable is coordinated with that of Gutcher – Belmont / Hamars Ness as far as practically possible.

### Public transport integration

- 13.3.5 The **No.23** bus connects **Lerwick (Viking Bus Station)** with **Toft**:
- On a **weekday**, there are **six** buses from Lerwick to Toft and **seven** from Toft to Lerwick (six on non-school days)
  - There are also **six** services in each direction on a **Saturday**, with **no connecting buses on a Sunday**
  - The end-to-end journey time between Lerwick and Toft is around **one hour**
- 13.3.6 The **No.24** bus provides a **through bus service from Gutcher** (the embarkation point for the ferry to **Fetlar** and **Unst**) **to Lerwick via the Yell Sound ferry**. This is a single return service per day (Monday to Friday) which:
- Departs Gutcher at 08:40 (the bus actually starts at Greenbank at 08:20), travels on the **09:15 sailing from Ulsta** and arrives in Lerwick at 10:26
  - In the reverse direction, the bus leaves Lerwick at 14:20, travels on the **15:25 sailing from Toft** and arrives in Gutcher at 16:12
- 13.3.7 In Yell, the **No.24Y** bus / dial-a-ride (**Cullivoe to Ulsta**) provides a public transport connection to the Yell Sound ferry:
- There are **three** buses per day in each direction **Monday to Saturday** (there is an additional Ulsta – Cullivoe service on a Friday, four in total)
  - There are no connecting buses on a **Sunday**
  - The end-to-end journey time is just over **40 minutes**

**Key Point:** Ferry / bus interchange is better on the Yell Sound route than it is on most other routes. Overall, however, the majority of sailings do not connect with a bus service. One key advantage on this route is the No.24 service between Gutcher and Lerwick, which provides passengers from Fetlar, Unst and Yell with a seamless through bus service to Lerwick.

### What level of connectivity is provided?

- 13.3.8 The table below defines the level of connectivity provided for Yell residents and those travelling to the island in terms of:



- **Working day connectivity** – i.e., you can get to the destination for 09:00 and return around 17:30
- **Part-day connectivity** – i.e., you can get to the destination and conveniently return after two hours or so
- **Evening connectivity** – i.e., you can return home after 22:00

13.3.9 Given the point made above about limited bus connectivity, this table is focused on car travel only:

Table 13.5: Yell's connectivity

|             | Can the following journeys be made? |          |         | Can this be done on all days? |          |         |
|-------------|-------------------------------------|----------|---------|-------------------------------|----------|---------|
| Destination | Working day                         | Part-day | Evening | Working day                   | Part-day | Evening |
| Yell        | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |
| Lerwick     | ✓                                   | ✓        | ✓       | ✓                             | ✓        | ✓       |

**Key Point:** Yell has a very high level of connectivity, allowing a working day, part-day and evening in Lerwick and on the island.

## 13.4 Community Needs Assessment Step 3: Service Performance

### How are the ferry services being used?

13.4.1 This section sets out how the Yell Sound ferry service is being used by residents and those visiting the island.

#### How many sailings are made in each year?

13.4.2 The figure below shows the number of sailings made by each vessel on the Yell Sound route each year:

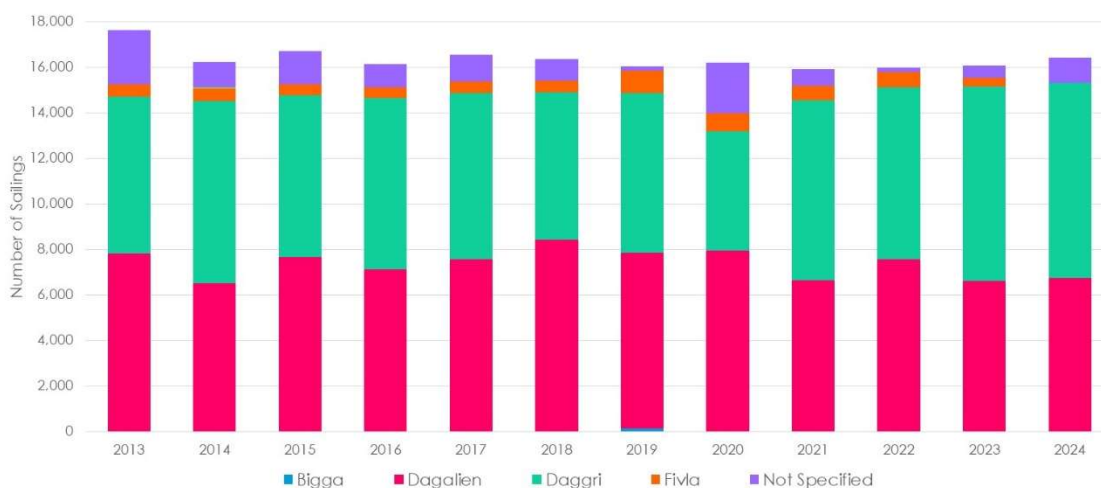


Figure 13.3: Yell Sound - total sailings by vessel, 2013-2024 (Source: vessel logbooks)

13.4.3 The key points of note in relation to the above figure are as follows:

- The inter-island ferry service was subject to a programme of **service reductions in 2013** – for **Yell**, the reductions were mainly focused on **Saturdays**

- There was a **6% reduction in scheduled sailings** between 2013 and 2015, and then broad stability thereafter
- **Saturday** sailings reduced by **23%** between 2013 and 2015 due to the route being operated by the shift vessel only

**Key Point:** The 2013 programme of service reductions led to fewer sailings being operated on the Yell Sound route on a Saturday. There was broad stability in the number of sailings following these cuts.

#### How have vehicle lane metre carryings changed over time?

- 13.4.4 The figure below shows vehicle carryings in terms of total lane metres (LMs) carried on the Yell Sound route for each year between 2013 and 2024. These figures have been built-up from sailing-by-sailing carryings noted in the vessel logbooks:

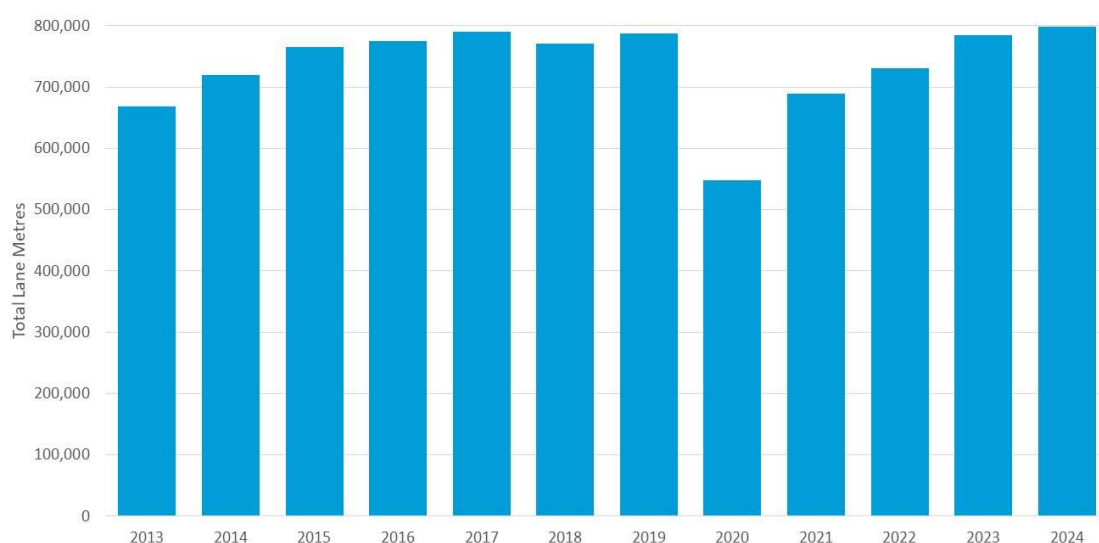


Figure 13.4: Yell Sound – total vehicle lane metre carryings, 2013-2024 (Source: vessel logbooks)

**Key Point:** There was strong growth in carryings pre-pandemic, with total lane metres up by 18% in 2019 relative to 2013, despite the 6% reduction in sailings.

#### What was the impact of COVID-19?

- 13.4.5 The table below shows the 2024 passengers, cars and commercial vehicle carryings as a percentage of 2019 carryings. This is a measure how close the route has got to recovering its pre-pandemic position:

Table 13.6: Yell Sound - 2024 carryings as a percentage of 2019 carryings

| Carrying type                                  | Toft - Ulsta |
|------------------------------------------------|--------------|
| <b>2024 carryings as a % of 2019 carryings</b> |              |
| Passengers                                     | 97%          |
| Cars                                           | 101%         |
| Commercial vehicles                            | 103%         |

- 13.4.6 The Yell Sound route has **largely recovered its pre-COVID position**, with passenger and car carryings in 2024 standing at **97%** and **101%** respectively of their pre-pandemic level. CV

carrying capacity have also recovered their pre-pandemic level, reflecting Yell's extensive supply-chain as introduced in Chapter 5.

**Key Point:** The Yell Sound route had overall largely recovered its pre-pandemic carrying position by 2024.

When are the busiest sailings?

13.4.7 The chart below shows the proportion of **Toft - Ulsta** and **Ulsta - Toft** sailings for each scheduled departure time where **vehicle deck utilisation exceeded 75%** - i.e., sailings which were **full** or **nearly full** in 2024. It should again be noted that the chart covers all seven days of the week and records all sailing times for which there were **50 or more** sailings in 2024, so some of the sailings times listed may not directly align with the timetable.

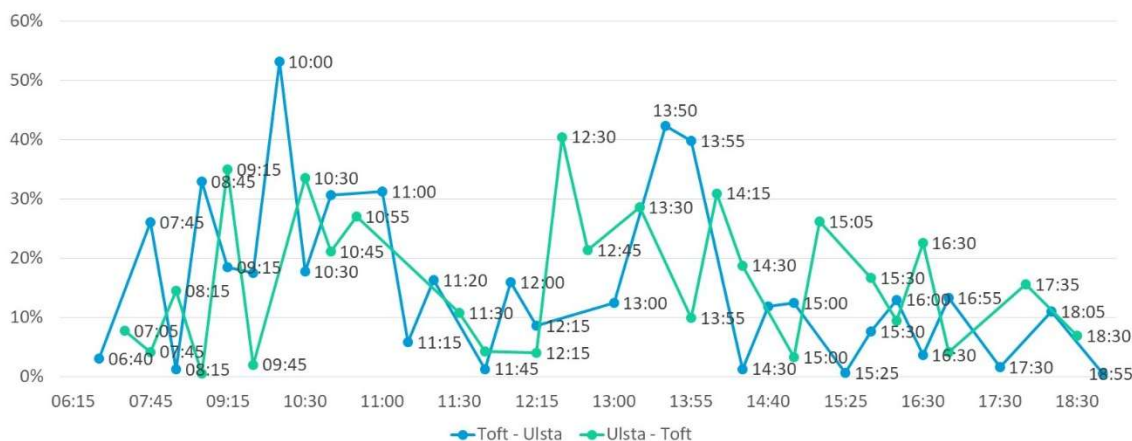


Figure 13.5: Proportion of Yell Sound sailings in 2024 where vehicle deck utilisation exceeded 75% (Source: vessel logbooks)

13.4.8 With the exception of the 07:45 departure from Toft, the majority of the busier sailings on this route are in the late morning or the middle of the day. The comparatively large vessels operating a frequent service generally provide sufficient capacity for commuter demand but the build-up of commercial traffic over the day, particularly associated with the aquaculture industry, can put pressure on capacity.

13.4.9 Sailings after 19:00 are very lightly utilised in both directions.

**Key Point:** The Yell Sound route typically has sufficient capacity for general commuter demand in both directions. However, capacity can become more pressured mid-morning and in the afternoon as commercial traffic builds, particularly that associated with the aquaculture industry.

Is capacity a problem?

13.4.10 The table below shows the proportion of 2024 sailings in given time windows where vehicle deck utilisation exceeded 75% which, as noted previously, is a reasonable proxy for when sailings are full or almost full:

Table 13.7: Proportion of sailings by selected time periods where vehicle deck utilisation exceeds 75% (Source: vessel logbooks)

|                                      | Tue-Fri<br>07:00-19:00 | Monday<br>07:00-19:00 | Saturday<br>08:00-19:00 | Sunday<br>09:00-18:00 | Average<br>7 days, 07:00-<br>19:00 |
|--------------------------------------|------------------------|-----------------------|-------------------------|-----------------------|------------------------------------|
| Toft - Ulsta<br>(both<br>directions) | 13.8%                  | 14.3%                 | 21.6%                   | 13.9%                 | 14.3%                              |

13.4.11 The key points of note from the above table are as follows:

- **Nearly 15% of weekday sailings** between 07:00-19:00 are full or nearly full
- Utilisation is higher on a **Monday** due to the reduction of the service to a single vessel in the middle of the day
- **Saturday** is the most capacity constrained day on Yell Sound – the single vessel service means that over a fifth of all sailings are full or nearly full
- The single vessel service on a **Sunday** also leads to **14%** of sailings being full or nearly full

**Key Point:** Whilst not of the same scale as the Whalsay and Bluemull Sound routes, vehicle deck capacity can be an issue on Yell Sound. Over one fifth of all Saturday sailings are high utilisation, highlighting the pressures imposed by operating a single vessel service.

## How are the ferry services performing?

### How often is the ferry cancelled?

13.4.12 The figure below shows the percentage of all sailings cancelled on the Yell Sound route in 2024:

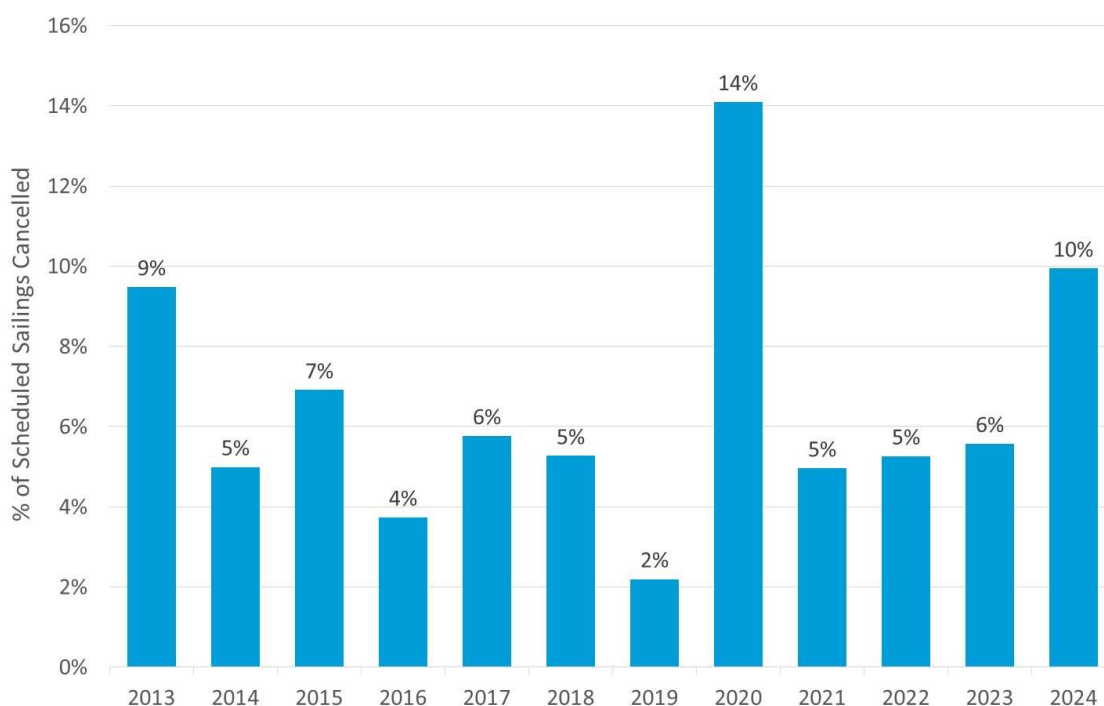


Figure 13.6: Annual percentage cancellation rate on the Yell Sound route (Source: vessel logbooks)

13.4.13 The main points from the above figure are as follows:

- Cancellations on the Yell Sound route have been broadly stable over time
- However, there was a sharp increase in cancellations in 2024, accounting for **one-in-ten sailings**
- It should be noted that the high rate of cancellations in 2020 and 2021 is likely due to crewing issues / self-isolation during the pandemic

**Key Point:** Cancellations on the Yell Sound route have been broadly stable over time, but there was a significant increase in 2024, with one-in-ten sailings cancelled.

#### How many sailing days and individual sailings operate to timetable?

13.4.14 The figure below shows the proportion of:

- All Yell Sound sailing days that operate to timetable (i.e., every individual sailing across the day is operated to timetable)
- Individual sailings that are operated to timetable

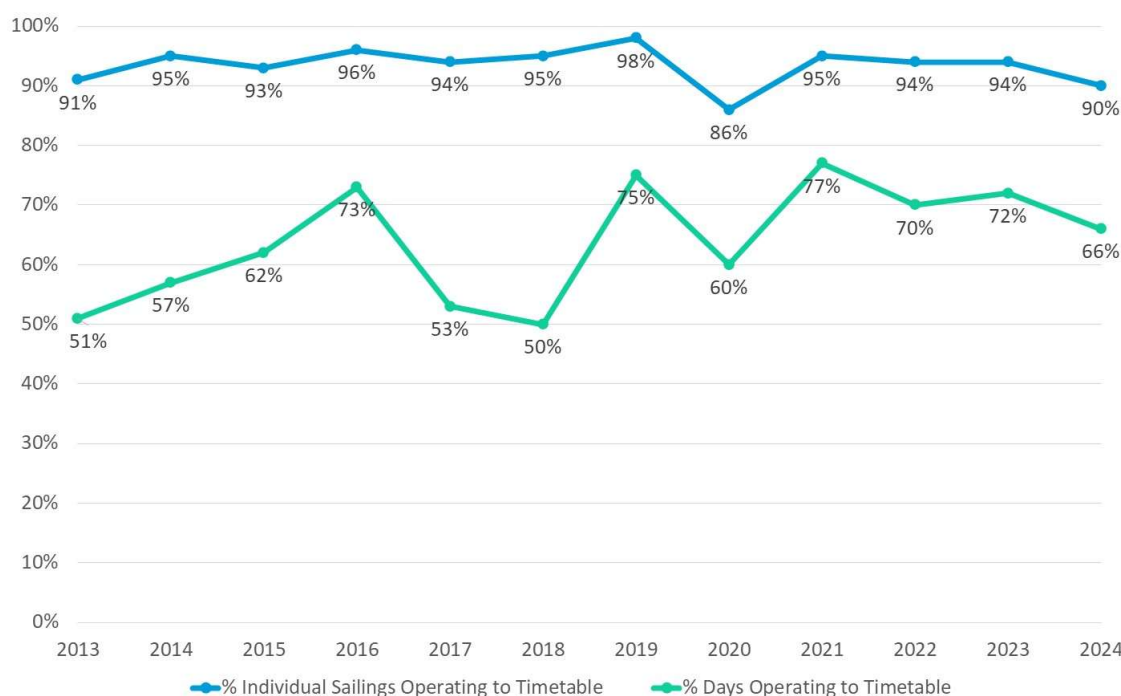


Figure 13.7: Yell Sound – proportion of sailing days and individual sailings operated to timetable (Source: vessel logbooks)

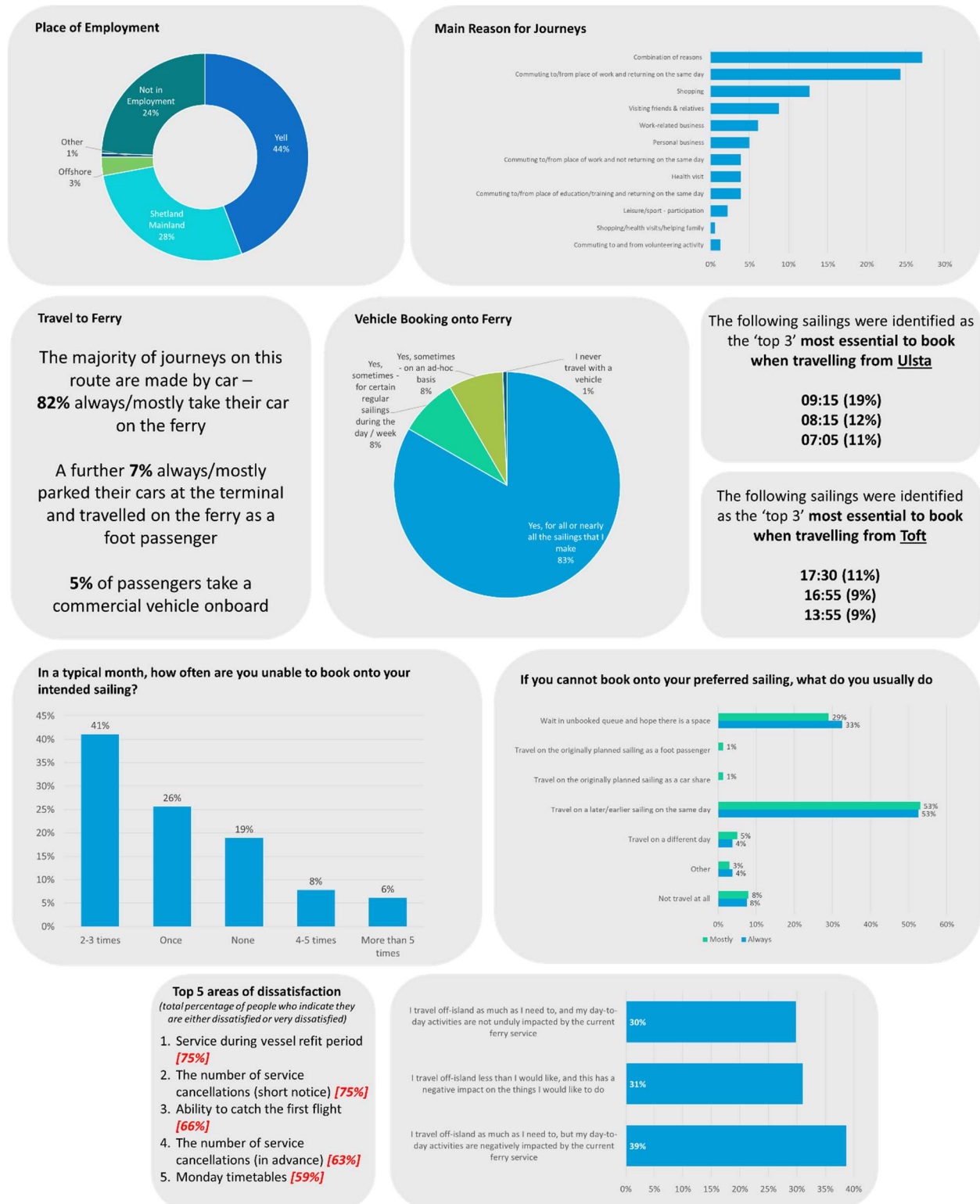
13.4.15 The key points of note from the above figure are as follows:

- In 2024, all sailings operated to timetable on **only two thirds of days**
- However, around **nine in every ten individual sailings typically operate to timetable**, so there are high levels of reliability overall
- The dip in reliability in 2020 is likely to be related to the pandemic

**Key Point:** Analysis of sailings operated to timetable confirms the overall high level of reliability on the Yell Sound route, with nine in every ten sailings operated to timetable.

## Resident survey headlines

13.4.16 The graphic below draws out the main headlines from the resident survey for Yell residents.



## 13.5 Community Needs Assessment Step 4: Island Narrative

### How has population changed over time?

13.5.1 Yell had a population of **897** at the time of the 2022 Census, making it the second most populous of the islands served by the Council's ferry network. The figure below shows the trend in population for Yell and comparator areas, indexed to 1981:

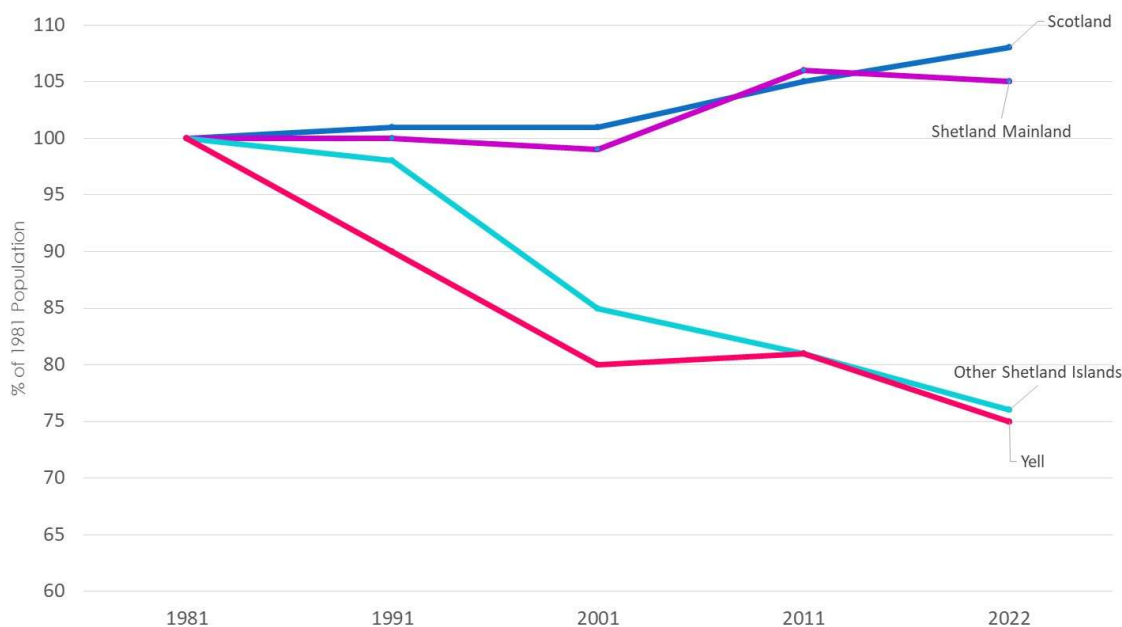


Figure 13.8: Population trend for Yell and comparator areas (1981=100) (Source: Census)

13.5.2 The key points of note from the above figure are as follows:

- Yell's population has been on a **long-term downward trend**, despite some growth between the 2001 and 2011 Census periods
- The island's population has **reduced by one quarter since 1981** – this is a very stark reduction over a relatively short time-period in demographic terms
- This reduction contrasts with a picture of stability for the Shetland Islands overall, and modest growth in mainland Shetland, but **reflects a wider issue of population loss in the North Isles** (Fetlar, Unst and Yell)
- Unlike neighbouring Unst, where the population stabilised between the 2011 and 2022 Census periods, **Yell's population has continued on a downward trend**, reducing by **7%** between 2011 and 2022

**Key Point:** Yell has experienced significant population decline over the last four decades, with its population reducing by a quarter. This is consistent with a challenging population trend overall for the North Isles.

### Population age profile

13.5.3 Like most of Shetland's island communities, Yell has an ageing population. The figure below shows the proportion of Yell's population aged under-16, 16-64 and over 64 in the 2011 and 2022 Censuses and compares this to mainland Shetland and the other island communities in Shetland:



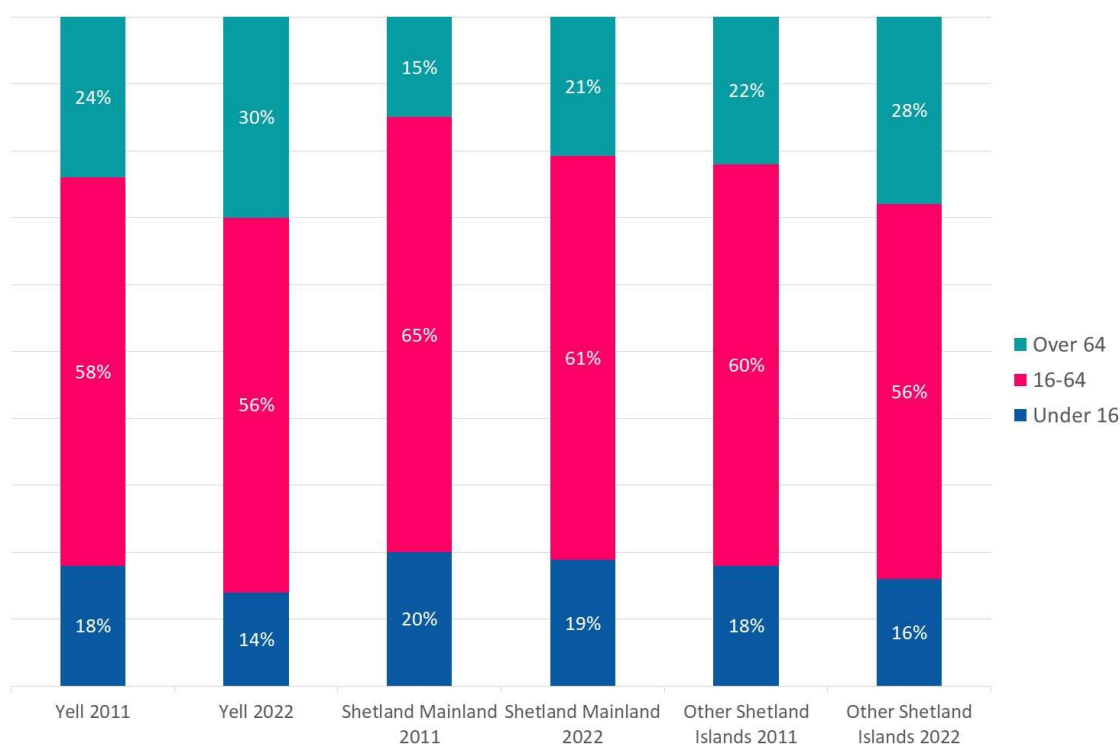


Figure 13.9: Population age profile for Yell and comparator areas (Source: Census 2011 and 2022)

13.5.4 Yell has an ageing population relative to mainland Shetland and indeed to the other Shetland islands - in 2022:

- The proportion of Whalsay's population **aged 65+** was **30%** compared to only **21%** on mainland Shetland
- The proportion of under-16s in Yell (**14%**) was relatively low compared to mainland Shetland (**19%**) and the Shetland Islands overall
- Yell's ageing population has implications for service delivery on island, the ability to fill island jobs and for future resident travel demand

**Key Point:** Yell's population is sharply ageing, compounding its long-term population decline.

### What is the economic structure of Yell?

13.5.5 The figure below shows the sectoral split of employee jobs in Yell in 2022 – it should be reiterated that this is a measure of **resident employment** (i.e., jobs filled by island residents irrespective of whether they work in Yell):

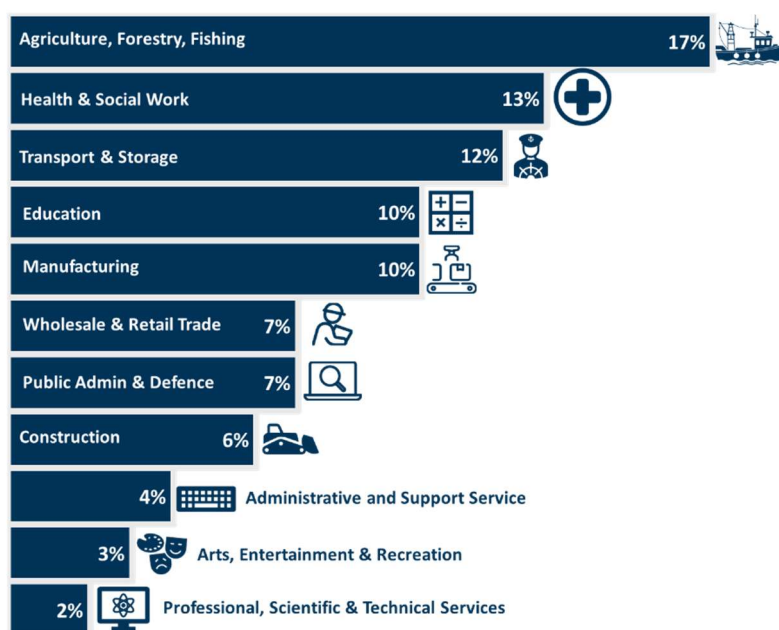


Figure 13.10: Employee jobs by industry – Yell (Source: 2022 Census)

13.5.6 The key points of note from the above figure are as follows:

- Like many of Shetland's island communities, Yell has an above average concentration of resident employment in '**Agriculture, Forestry and Fishing**' (**17%**). The island has a strong presence in the aquaculture and shellfish sectors in particular, as well as a fish processing plant
- The economy is otherwise relatively mixed with, for example, public sector employment at Mid Yell Junior High School and growing renewable energy production
- There are several major economic opportunities for Yell at present, including further development of the renewable energy sector and commercial kelp production
- Commuting to jobs off-island is though essential:
  - **19%** of all Yell adults in employment travel **over 20km to work**, which implies that they work off-island
  - A further **15%** responded '**Other**' with respect to their distance travelled to work – this is likely to combine working at sea / offshore and potentially staying off-island for the week (e.g., staying Monday to Friday in Lerwick, although this will likely be less prominent than for Unst and Fetlar, which are more distant)
  - Levels of **car ownership** are not however dissimilar to the Shetland average

**Key Point:** Yell has the largest economy of Shetland's island communities, with a particularly strong presence in the aquaculture and fish processing sectors. The island also has several major economic opportunities at present, most notably in renewable energy.

### What public services are available on Yell?

13.5.7 The table below summarises the public services that are available on Yell:

Table 13.8: Availability of public services in Yell

| Service                                                                 | Whalsay                                 |
|-------------------------------------------------------------------------|-----------------------------------------|
| Nursery                                                                 | Yes                                     |
| Primary school                                                          | Yes                                     |
| Junior high school                                                      | Yes                                     |
| Shop                                                                    | Yes                                     |
| GP                                                                      | Yes                                     |
| Dentist                                                                 | Yes                                     |
| Post Office                                                             | Yes                                     |
| Bank                                                                    | Yes, delivered through the Post Office  |
| Care home                                                               | Yes                                     |
| Council leisure centre                                                  | Yes                                     |
| Hotel or visitor accommodation                                          | Limited bed and breakfast accommodation |
| Proportion of households with superfast broadband                       | 76%                                     |
| Proportion of households meeting broadband Universal Service Obligation | 98%                                     |

**Key Point:** As a comparatively large island some distance from Lerwick, Yell has relatively extensive on-island service provision, including a Junior High School, GP practice and care home.

## 13.6 Community Neds Assessment Step 5: What are the transport problems (gap analysis)?

13.6.1 A summary of the transport problems by theme for Yell is presented below.

### What are the transport problems in Yell?

13.6.2 The problem themes relevant to **Yell** are set out in the table below:

Table 13.9: Yell - transport problem 'themes'

| All modes of travel                                                                                           | Public transport specific                                                                              |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel                                                                   | Booking and journey planning (e.g., making connections between services)                               |
| Cost of travel and affordability                                                                              | Capacity                                                                                               |
| Fuel / power issues                                                                                           | Comfort, safety and security                                                                           |
| Integration of travel between modes                                                                           | Connectivity and network coverage (availability of services)                                           |
| Journey information, including for protected groups who may find accessing information particularly difficult | Ease of use / convenience                                                                              |
| Journey quality                                                                                               | Integration between services e.g., bus-to-bus                                                          |
| Journey times                                                                                                 | Service reliability (cancellations and punctuality)                                                    |
| Journey time reliability (including public transport service punctuality)                                     | Timetables (first and last / frequency / days of the week etc.) and their accessibility for all groups |
| Lack of awareness of travel options                                                                           |                                                                                                        |

| All modes of travel                                                                                                                                                                                          | Public transport specific |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Personal accessibility – being able to access transport networks and public transport services specifically including people with disabilities or other protected characteristics which affect accessibility |                           |
| Personal security (fear of crime)                                                                                                                                                                            |                           |
| Travel safety (collisions, personal injury)                                                                                                                                                                  |                           |

13.6.3 The table below provides further detail on the **transport problem(s) under each theme** (Step 1 of the Transport Problems Framework) and the **underlying supply-side cause** (Step 2):

Table 13.10: Yell – transport problems and supply-side causes

| Problem Theme                                       | Step 1: Problem(s)                                                                                                                                                                                                                      | Step 2: Supply-side cause(s)                                                                                                                                                                                      |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern over environmental impact of travel         | - Greenhouse gas emissions from vessels                                                                                                                                                                                                 | - MV <i>Dagalien</i> and MV <i>Daggri</i> are both conventional diesel vessels                                                                                                                                    |
| Cost of travel and affordability                    | - The level of fares was a source of dissatisfaction in the resident survey                                                                                                                                                             | - High-frequency of travel means that the cost of travel can account for a high proportion of income                                                                                                              |
| Integration of travel between modes – ferry-to-bus  | - Majority of ferries to / from Toft / Ulsta do not connect with a bus                                                                                                                                                                  | - Limited and fragmented bus network<br>- High cost of bus service provision relative to demand                                                                                                                   |
| Booking and journey planning                        | - Most Yell residents have to book sailings both ways when taking the car – there are occasions on which they are not able to get a booking on their preferred sailing and there is also a general ‘hassle’ factor associated with this | - High vehicle deck utilisation on peak sailings, including at the weekend, means that a booking is often required to guarantee travel<br>- Single vessel service at the weekend and, more recently, during refit |
| Capacity                                            | - Inability to secure a place on the ferry, either unable to get a booking or travel on demand when unbooked                                                                                                                            | - Insufficient vehicle deck capacity on some sailings, but a particular problem on a Saturday<br>- Little alternative to taking the car given the limited bus service                                             |
| Service reliability (cancellations and punctuality) | - 63% of Yell residents are unhappy with advance cancellations and 75% with short notice cancellations                                                                                                                                  | - It is understood that recent problems in this respect have been more to do with crew availability and breakdowns rather than weather                                                                            |
| Timetables                                          | - One vessel service in the middle of the day on a Monday and all day on a Saturday and Sunday delivers a lower frequency<br>- Connections with the first and last flights from Sumburgh<br>- One vessel service during refit           | - Monday late morning / early afternoon used for drills and maintenance<br>- Limited resilience in the fleet to cover refit<br>- Cost and crewing implications of operating the second vessel at the weekend      |

## 14 Transport Planning Objectives

### 14.1 Approach

- 14.1.1 The analysis and primary research undertaken as part of this SOC case for change has provided a wealth of information on the transport problems affecting inter-island connectivity and how these problems are manifested in Shetland society. This information has been drawn on directly to develop the Transport Planning Objectives.
- 14.1.2 The surveys generated around 1,000 responses, with around 600 from island residents and 400 from mainland residents, a very high response rate for a survey of this nature. These surveys asked respondents about their level of satisfaction / dissatisfaction with **38** aspects of their ferry services. Those who stated that aspects of the ferry services prevented them making all the journeys they'd like to make (around **1/3** of island respondents and **39%** of mainland respondents) were asked how significant **20** key aspects of the ferry services were in not travelling as much as they'd like. These '**dissatisfaction**' and '**barriers to travel**' metrics form the basis of the TPO setting process.
- 14.1.3 The quantitative analysis of the surveys focussed on responses from the four most populous islands (Bressay, Unst, Whalsay, Yell) plus Fetlar, and mainland Shetland. Survey responses from the lower population islands (where the absolute number of responses is low by definition) have been used in a more qualitative sense and supplemented by community depth interviews. A low number of business surveys were also returned, and these were used in a more qualitative sense to support the wider analysis.

### 14.2 Theory of Change

- 14.2.1 With regards to TPOs, the STAG Managers Guide (2022) states that: *The objective must express the change sought in the study area without indicating potential solutions.* With this in mind, when considering and developing TPOs it is helpful to place them in the context of the following simplified transport intervention logic map.

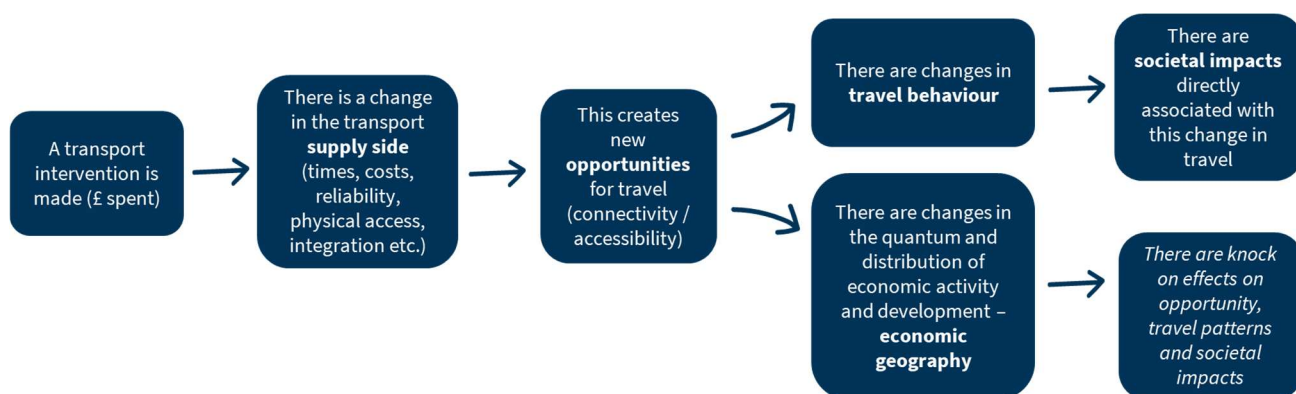


Figure 14.1: Simplified transport intervention logic map

- 14.2.2 Whilst there is no guidance from Transport Scotland regarding at which 'stage' in the logic map TPOs should be directed, measures of *supply-side* and *opportunity* are the most measurable in any appraisal, and changes in *travel behaviour* (and environmental *societal impacts*) are the most readily quantifiable / forecastable.
- 14.2.3 In the Shetland case, it is clear that significantly improved inter-island connectivity would have implications across this full extent of the logic map, and the graphic below illustrates how improved island connectivity can lead to changes in economic geography and greater



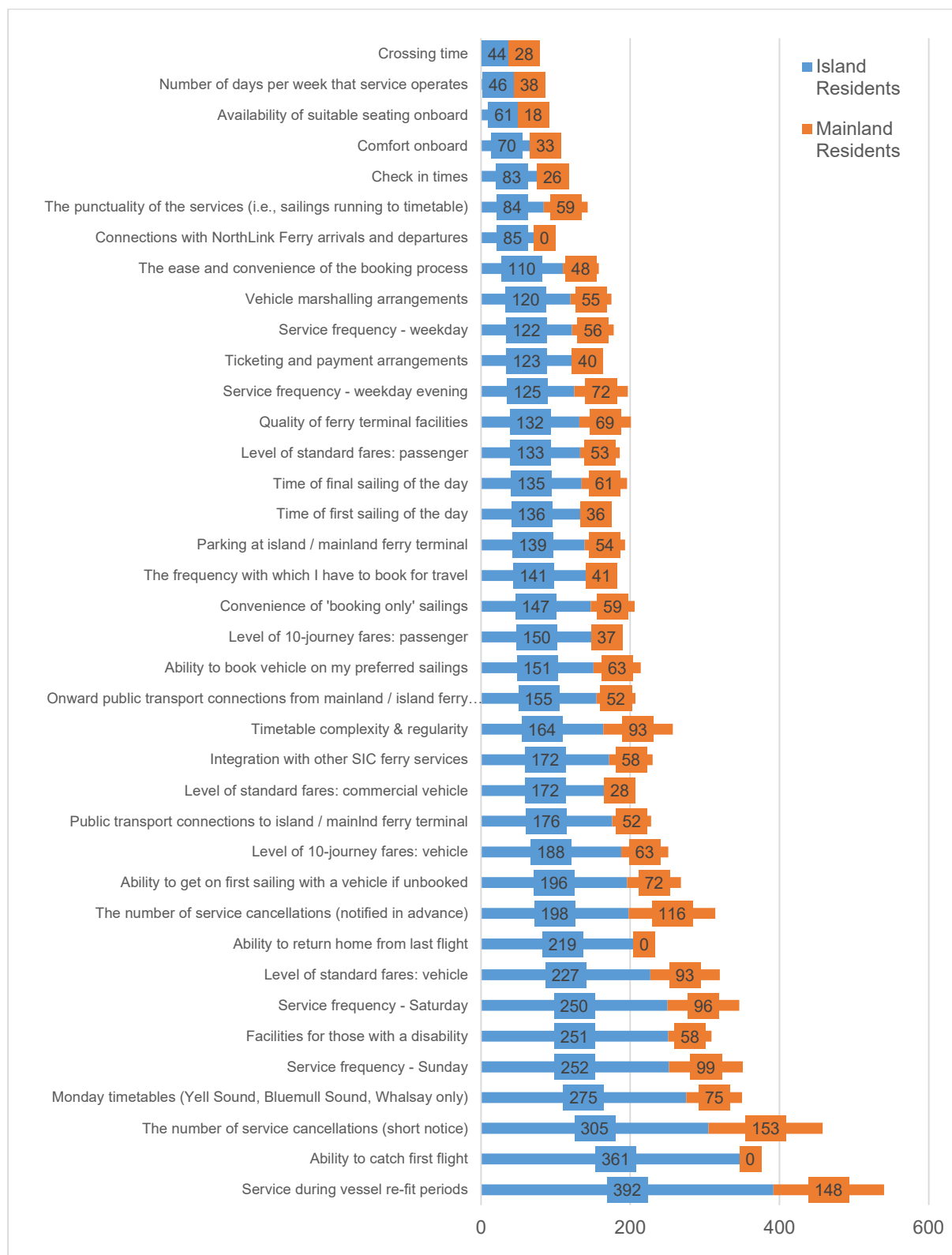


Figure 14.3: Island and mainland resident surveys – Respondents expressing dissatisfaction with elements of the ferry service

14.3.3 Levels of dissatisfaction therefore vary widely across the 38 factors, but the key issues that are causing dissatisfaction are evident in the graphic, with service levels during refit followed by short notice cancellations the leading two sources of dissatisfaction.



14.3.4 The above graphic does though conceal some key differences by island and these are highlighted below, for each section of the survey:

- **Booking and fares**
  - *Ability to book vehicle on my preferred sailings*
    - Whalsay, Fetlar and Unst have net-dissatisfaction<sup>54</sup>
  - *Fares*
    - High levels of net dissatisfaction with fares in Bressay
  - *The frequency with which I have to book for travel*
    - Fetlar and Whalsay particularly dissatisfied
- **Connections to and from the ferry**
  - *Integration with other SIC ferry services*
    - High levels of net dissatisfaction in Unst and Fetlar, reflecting cross-Yell connections
  - *Parking at island ferry terminal*
    - Dissatisfaction with parking arrangements (assumed in Lerwick) amongst Bressay residents
  - *Public transport connections to island ferry terminal*
    - High net dissatisfaction in Whalsay
- **Making the trip**
  - *Ability to get on first sailing with a vehicle if unbooked*
    - High net dissatisfaction in Unst, Whalsay and Fetlar
  - *Facilities for those with a disability*
    - Net dissatisfaction for all except Yell, most so in Whalsay
  - *Quality of ferry terminal facilities*
    - Lowest satisfaction in Bressay and Whalsay
  - *Vehicle marshalling arrangements*
    - High net dissatisfaction in Unst
- **Punctuality and Reliability**
  - High levels of satisfaction in Bressay and net satisfaction in Whalsay
  - Otherwise high levels of net dissatisfaction with the number of service cancellations, most so in Unst and Yell
- **Timetable**
  - *Monday timetables*
    - High net dissatisfaction in Unst, Fetlar and Yell
  - *Service during vessel re-fit periods*
    - High net dissatisfaction for all except Whalsay (although the survey was undertaken prior to the single vessel 2025 refit timetable being in place for the first time)
  - *Saturday and Sunday timetables*

<sup>54</sup> Net dissatisfaction is where more people expressed 'dissatisfaction' than 'satisfaction'

- Very high net dissatisfaction in Unst and Fetlar, also high in Whalsay
- *Weekday evening timetables*
  - Net dissatisfaction in Whalsay
- *Time of final sailing of the day*
  - Net dissatisfaction in Whalsay
- *Time of first sailing of the day*
  - High net dissatisfaction in Bressay
- *Timetable complexity and regularity*
  - Net dissatisfaction in Fetlar and Whalsay

## Barriers to Travel

14.3.5 As noted previously, 33% of island respondents and 39% of mainland respondents indicated that the current services acted as a barrier to travelling as often as they'd like. The higher percentage in mainland Shetland responses suggests they were more likely to complete the survey if they saw the current services as a particular problem to them. Mainland residents who rarely or never use the ferries are less likely to complete the survey.

14.3.6 In the survey, these respondents were given a shorter list of potentially key service factors (20) and asked if each was a barrier to travel, and if so, how much of an impact that had on them not travelling as often as they would wish to.

14.3.7 The figure below shows the number of times each factor was cited as having a 'major impact' on people being able to use the ferry as much as people would like.

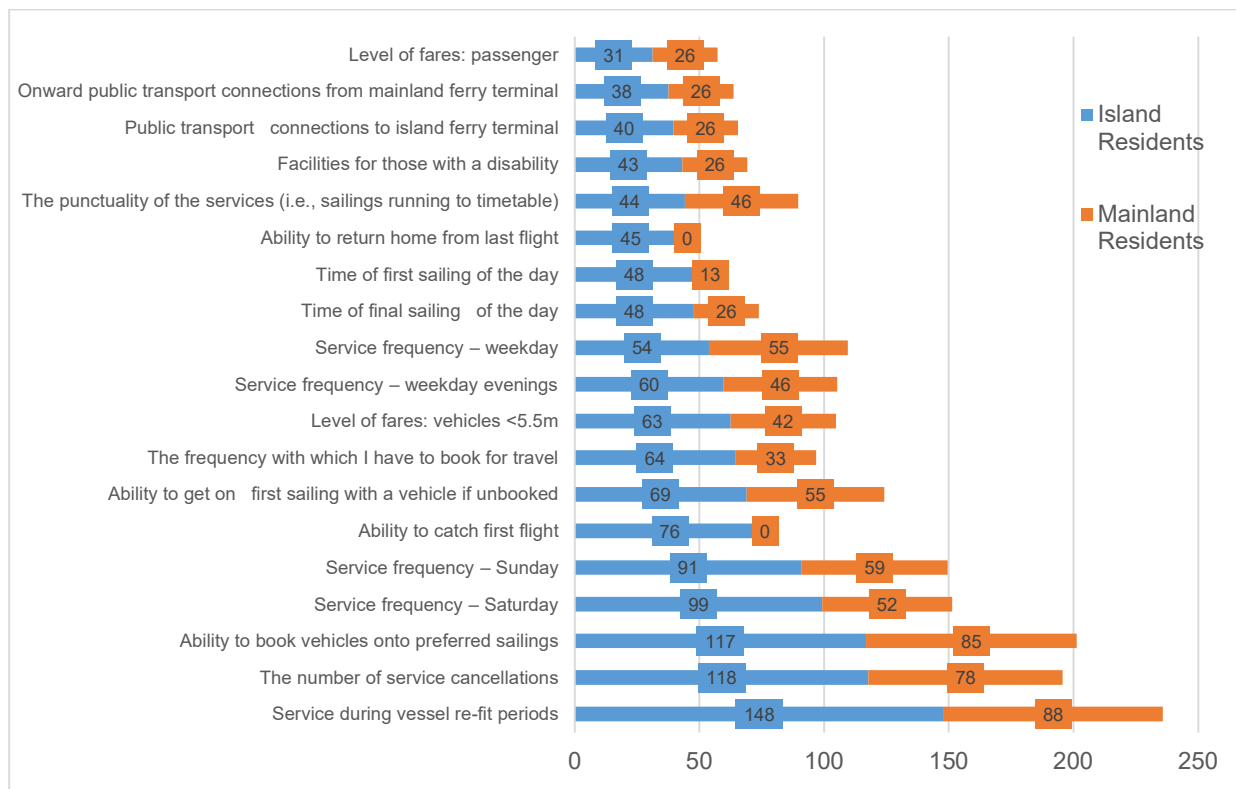


Figure 14.4: Island and mainland resident surveys – Barriers to travel – 'Major Impact'

14.3.8 Whilst the results are broadly similar to those for dissatisfaction, some timetabling and capacity issues are higher up this list. This perhaps illustrates subtle differences between the things people find an inconvenience, and the things which actually stop people from travelling, with the latter more important for the purposes of this work.

14.3.9 Of the **34** businesses who responded to the survey, **62%** stated that the ferry services restricted travel related to their business and **29%** said their travel was not restricted but the ferry services had negative impacts on their businesses.

14.3.10 The most frequently cited factors which have a major impact on business travel being restricted are:

- Service during vessel re-fit periods (**90%**)
- Number of service cancellations (**76%**)
- Ability to get on first sailing with a vehicle if unbooked (**76%**)
- Weekday service frequency (**67%**)
- The frequency with which we have to book for travel (**67%**)

## 14.4 Consequences of Problems

### Island and mainland Shetland residents

14.4.1 Those who noted that the ferry service prevented them travelling as often as they would like (Step 3 of the Transport Problems Framework set out in Chapter 2) were asked what opportunities / activities they were missing out on (in 11 categories) by being unable to travel due to the barriers imposed by the ferry network (Step 4 of the Transport Problems Framework set out in Chapter 2).

14.4.2 The number of times each activity / opportunity was cited is shown in the figure below.

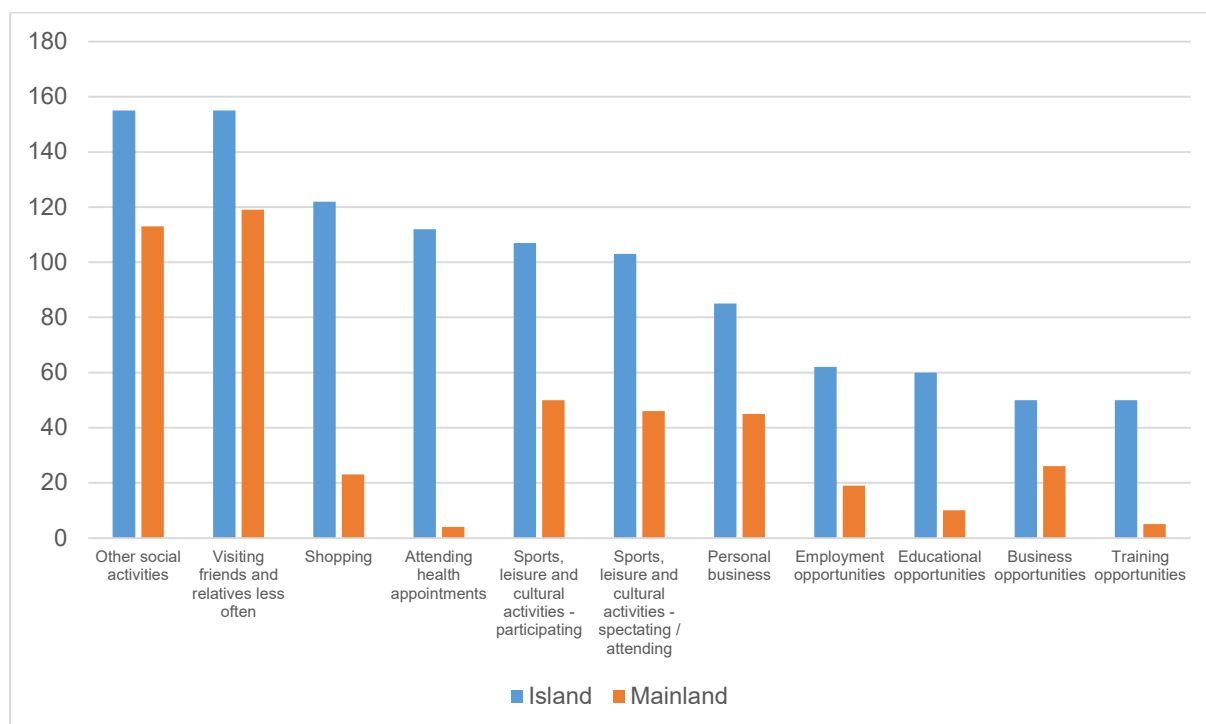


Figure 14.5: Island and mainland resident surveys – activities and opportunities missed out on

14.4.3 It can be seen that island residents cite a wide range of activities / opportunities missed out on, with those which apply to all demographic groups appearing most often. Significant numbers do report missing out on healthcare, employment, education, business and training opportunities. This will be having an impact on people's health, labour markets, attainment levels and the Shetland economy more generally.

14.4.4 As would be expected, mainland respondents mainly cite leisure and family related activities, with much less in the way of shopping, health, employment etc.

### Mainland Shetland residents and living in the islands

14.4.5 Mainland Shetland respondents were also asked some questions about their relationship with the islands more generally with the key findings as follows:

- **34%** (n=137) had previously lived in one of Shetland's other islands
  - Of these, **69%** (n=95) said that the ferry service was a factor in them moving to mainland Shetland
- **48%** (n=195) said that they might or would consider a move from mainland Shetland to one of the islands
  - Of these, **94%** said that improved connectivity would be a factor in encouraging such a move
- Of those who said they would not consider such a move (n=207), **58%** said that the current level of transport connectivity was a factor in this

14.4.6 Whilst these findings cannot be taken as typical of the mainland Shetland population (given the response bias), these figures do suggest that: (i) perceptions of poor connectivity have been a factor in people moving from the islands (reflecting the demographic trends outlined previously); and (ii) there is an appetite amongst some to move to the islands if connectivity is improved. This provides evidence that the current levels of connectivity are impacting on economic geography across Shetland.

### Island and mainland Shetland businesses

14.4.7 The businesses that noted that the ferry services restricted their amount of business-related travel (**21** of the **34** responses), were asked how this negatively affects the way their business operates, with eight categories to choose from (where more than one could be picked). The figure below shows the percentage of the **21** businesses who indicated that the factor was an issue for them.

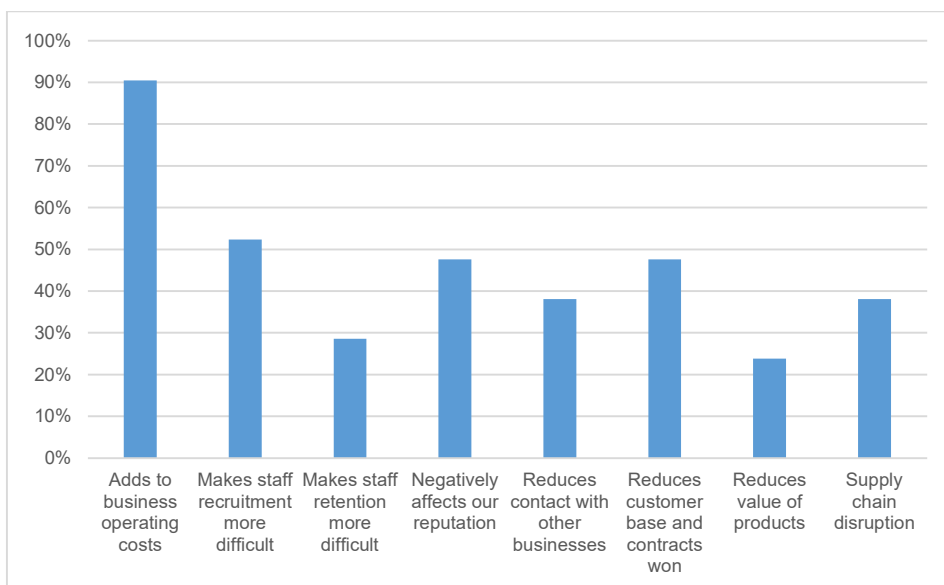


Figure 14.6: Island and mainland business surveys – impacts on business operation

14.4.8 Nearly all businesses noted that this added to business operating costs whilst impacts on staffing (recruitment and retention), reputation and customer base were widely felt.

14.4.9 Businesses were then asked how these operational impacts affect the performance of their business. This is shown in the graphic below.

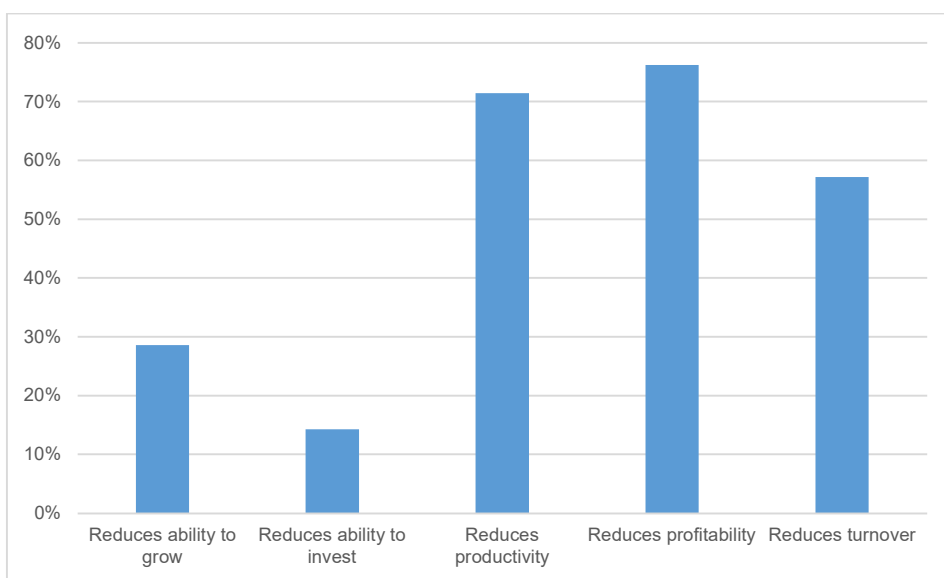


Figure 14.7: Island and mainland business surveys – impacts on business performance

14.4.10 The main impacts of these operational difficulties were therefore seen to be on profitability, productivity and turnover.

14.4.11 Whilst the sample size is relatively small, the surveys do provide some evidence of how Shetland businesses perceive the current level of inter-island connectivity as having a negative effect on business operation and performance. This is consistent with the findings of

the supply-chain analysis set out in Chapter 5. This will clearly be impacting on the performance of the Shetland economy.

## 14.5 Transport Planning Objectives

### TPO Themes

14.5.1 In order to make the analysis more manageable, the **38 ferry dissatisfaction factors** and **20<sup>55</sup> barriers to travel factors** were allocated into one of **nine prospective 'TPO themes'** as set out in the table below.

Table 14.1: Survey ferry service factors and prospective TPO themes

| TPO theme                                                                        | Survey dissatisfaction factors                                                                                                                                                                                                                                                                                                                                                                                                                                   | Survey barriers to travel factors                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Accessibility – physical accessibility</b>                                    | <ul style="list-style-type: none"> <li>- Facilities for those with a disability</li> <li>- Availability of suitable seating onboard</li> </ul>                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>- Facilities for those with a disability</li> </ul>                                                                                                                                                                                   |
| <b>Capacity – ability to take a car on the ferry</b>                             | <ul style="list-style-type: none"> <li>- Ability to get on first sailing with a vehicle if unbooked</li> <li>- Ability to book vehicle on my preferred sailings</li> <li>- The frequency with which I have to book for travel</li> </ul>                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>- Ability to get on first sailing with a vehicle if unbooked</li> <li>- Ability to book vehicle on my preferred sailings</li> <li>- The frequency with which I have to book for travel</li> </ul>                                     |
| <b>Cost – fares</b>                                                              | <ul style="list-style-type: none"> <li>- Level of standard fares: vehicle</li> <li>- Level of 10-journey fares: vehicle</li> <li>- Level of standard fares: commercial vehicle</li> <li>- Level of 10-journey fares: passenger</li> <li>- Level of standard fares: passenger</li> </ul>                                                                                                                                                                          | <ul style="list-style-type: none"> <li>- Level of standard fares: vehicle</li> <li>- Level of standard fares: passenger</li> </ul>                                                                                                                                           |
| <b>Journey times</b>                                                             | <ul style="list-style-type: none"> <li>- Check in times</li> <li>- Crossing time</li> </ul>                                                                                                                                                                                                                                                                                                                                                                      | NA                                                                                                                                                                                                                                                                           |
| <b>Limited, fixed times of travel, within operating day – current timetables</b> | <ul style="list-style-type: none"> <li>- Service frequency - Sunday</li> <li>- Service frequency - Saturday</li> <li>- Integration with other SIC ferry services</li> <li>- Timetable complexity &amp; regularity</li> <li>- Convenience of 'booking only' sailings</li> <li>- Service frequency - weekday evening</li> <li>- Service frequency - weekday</li> <li>- Connections with NorthLink Ferry arrivals and departures (island residents only)</li> </ul> | <ul style="list-style-type: none"> <li>- Service frequency - Sunday</li> <li>- Service frequency - Saturday</li> <li>- Service frequency - weekday evening</li> <li>- Service frequency - weekday</li> </ul>                                                                 |
| <b>Operating day restriction – service start and end times</b>                   | <ul style="list-style-type: none"> <li>- Ability to catch first flight (island residents only)</li> <li>- Ability to return home from last flight (island residents only)</li> <li>- Time of first sailing of the day</li> <li>- Time of final sailing of the day</li> <li>- Number of days per week that service operates</li> </ul>                                                                                                                            | <ul style="list-style-type: none"> <li>- Ability to catch first flight (island residents only)</li> <li>- Ability to return home from last flight (island residents only)</li> <li>- Time of first sailing of the day</li> <li>- Time of final sailing of the day</li> </ul> |

<sup>55</sup> There were 19 specified barriers plus an 'Other' option, but this was not selected by any respondents.

| TPO theme                                                                          | Survey dissatisfaction factors                                                                                                                                                                                                                                                                                                                                                       | Survey barriers to travel factors                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Other</b>                                                                       | <ul style="list-style-type: none"> <li>- Ticketing and payment arrangements</li> <li>- Vehicle marshalling arrangements</li> <li>- The ease and convenience of the booking process</li> <li>- Comfort onboard</li> </ul>                                                                                                                                                             | NA                                                                                                                                                                                                                                      |
| <b>Poor non-car travel options – public transport and foot passenger provision</b> | <ul style="list-style-type: none"> <li>- Public transport connections to island / mainland ferry terminal</li> <li>- Onward public transport connections from mainland / island ferry terminal</li> <li>- Parking at island / mainland ferry terminal</li> <li>- Quality of ferry terminal facilities</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>- Public transport connections to island / mainland ferry terminal</li> <li>- Onward public transport connections from mainland / island ferry terminal</li> </ul>                               |
| <b>Resilience – service consistency, reliability and punctuality</b>               | <ul style="list-style-type: none"> <li>- Service during vessel re-fit periods</li> <li>- The number of service cancellations (short notice)</li> <li>- Monday timetables (Yell Sound, Bluemull Sound, Whalsay only)</li> <li>- The number of service cancellations (notified in advance)</li> <li>- The punctuality of the services (i.e., sailings running to timetable)</li> </ul> | <ul style="list-style-type: none"> <li>- Service during vessel re-fit periods</li> <li>- The number of service cancellations (short notice)</li> <li>- The punctuality of the services (i.e., sailings running to timetable)</li> </ul> |

14.5.2 In order to get a sense of the relative importance of the prospective TPO Themes to Shetland residents:

- The **dissatisfaction factors and barriers to travel factors were ranked in terms of their frequency of being cited** – where being ranked 1 is the most dissatisfaction / biggest barrier to travel
- An average **TPO Theme dissatisfaction rank has been calculated** (the average ranking of all the factors allocated to each theme) for island and mainland Shetland residents with respect to both dissatisfaction and barriers to travel
- These **averages have then been ranked** and the results are shown in the table below, where a high ranking (low number) indicates greater significance – the **top three** shown in bold and orange shading in each case

Table 14.2: Survey ferry service factors, barriers to travel and prospective TPO themes

| TPO Theme                                            | Dissatisfaction Rank    |                           | Barrier to Travel Rank  |                           |
|------------------------------------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
|                                                      | Rank (Island Residents) | Rank (Mainland Residents) | Rank (Island Residents) | Rank (Mainland Residents) |
| Accessibility                                        | 7                       | 7                         | 6                       | 4                         |
| Capacity                                             | <b>3</b>                | <b>3</b>                  | <b>1=</b>               | <b>2</b>                  |
| Cost                                                 | <b>2</b>                | 5                         | 5                       | 4                         |
| Journey times                                        | 9                       | 9                         | NA                      | NA                        |
| Limited, fixed times of travel, within operating day | 6                       | <b>2</b>                  | <b>3</b>                | <b>3</b>                  |
| Operating day restriction                            | 5                       | 8                         | 4                       | 7                         |
| Other                                                | 8                       | 6                         | 8                       | 8                         |



| TPO Theme                   | Dissatisfaction Rank    |                           | Barrier to Travel Rank  |                           |
|-----------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
|                             | Rank (Island Residents) | Rank (Mainland Residents) | Rank (Island Residents) | Rank (Mainland Residents) |
| Poor non-car travel options | 4                       | 4                         | 7                       | 6                         |
| Resilience                  | 1                       | 1                         | 1=                      | 1                         |

14.5.3 The key barriers to travel therefore surround **resilience; capacity; and limited, fixed times of travel, within operating day**. The results are very similar for island and mainland Shetland residents.

14.5.4 The highest levels of dissatisfaction are associated with **resilience; cost; limited, fixed times of travel, within operating day; and capacity**. Cost is a greater source of dissatisfaction with island residents because they travel more frequently.

## TPOs

14.5.5 In the light of the evidence set out above, the following TPOs have been set in response to the TPO Themes of most significance. The TPO themes below are ordered in terms of their significance as barriers to travel.

Table 14.3: Survey ferry service factors, barriers to travel and prospective TPO themes

| TPO Theme                                            | TPO                                                                                                        |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Resilience                                           | Reduce or remove <b>departures from regular timetable</b>                                                  |
| Capacity                                             | Reduce or remove the ferry <b>capacity</b> barrier associated with ferry travel                            |
| Limited, fixed times of travel, within operating day | Improve the <b>flexibility of travel</b> within the operating day                                          |
| Cost                                                 | Reduce or remove the <b>cost</b> barrier associated with ferry travel                                      |
| Accessibility                                        | Make inter-island travel fully <b>accessible</b> to all                                                    |
| Operating day restriction                            | Improve travel options beyond the current <b>operating day</b>                                             |
| Poor non-car travel options                          | Improve provision for those <b>not travelling by car</b> / who would <b>prefer not to travel to by car</b> |
| Other                                                | <b>No TPO set</b>                                                                                          |
| Journey times                                        | <b>No TPO set</b>                                                                                          |

14.5.6 In terms of the logic map set out previously (Figure 14.1) these TPOs are aimed at the **transport supply-side**. The resident survey did also explore the degree to which people would make more trips to take-up activities and opportunities so there is evidence to suggest that resolving these supply-side problems will lead to the travel behaviours and societal impacts set out in the logic map.

14.5.7 Whilst these TPOs will be used universally in the appraisal, it is recognised that their relevance will differ somewhat between islands. To this end, narrative based logic maps for each island / option will be developed in the OBC.

14.5.8 The options will be developed based on an incremental approach to addressing the TPOs, i.e., different levels of ferry service improvement will address these TPOs to different extents, whilst a fixed link package could resolve all of these TPOs.

## **Appendix A   Transport Scotland Community Needs Assessment Guidance**



# Community Needs Assessment Methodology

## Final Report

On behalf of **Transport Scotland**



Project Ref: 330610702 | Date: May 2023

---

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU  
Office Address: 3rd Floor, Randolph House, 4 Charlotte Lane, Edinburgh EH2 4QZ  
T: +44 (0)131 297 7010 E: [info.Edinburgh@stantec.com](mailto:info.Edinburgh@stantec.com)



## Contents

|                                                     |          |
|-----------------------------------------------------|----------|
| <b>Community Needs Assessment Methodology .....</b> | <b>1</b> |
| Carryings .....                                     | 7        |
| Capacity utilisation .....                          | 8        |
| Vehicle-deck utilisation .....                      | 9        |
| Passenger utilisation .....                         | 10       |
| Cabin utilisation .....                             | 11       |
| Potential Indicators .....                          | 15       |
| Potential Indicator .....                           | 16       |
| Potential Indicators .....                          | 17       |
| Potential indicators.....                           | 19       |
| Revenue measures.....                               | 21       |
| Capital measures .....                              | 23       |

This page is intentionally blank

# **Community Needs Assessment - Guidance Paper**

## **Overview**

Transport Scotland is currently developing the Islands Connectivity Plan (ICP), which will replace the Ferries Plan 2013-2022. Central to the ICP will be a set of 'Community Needs Assessments' (CNA), which will provide a consistent means of identifying the current level of ferry service provision received by an island or peninsular community, any problems associated with this service in meeting the needs of the community and, where relevant, options for service improvements or reductions.

## **What is the purpose of this guidance paper?**

The purpose of this guidance paper is to ensure that a consistent analytical approach to assessing community needs and developing options is adopted. This will facilitate comparability and overall network and investment planning.

It is though important to note that, whilst the paper establishes a consistent analytical approach to conducting CNAs, it generally avoids defining a formulaic approach to carrying out each individual CNA. Potential data sources and indicators are outlined in the sections which follow, but each island and peninsular community has its own unique characteristics and it is the role of the party carrying out the CNA to tailor the analysis to the community in question.

## **Who should use this guidance paper?**

This guidance paper has been developed specifically for the undertaking of CNAs relating to the Transport Scotland contracted ferries networks – i.e., the Clyde and Hebridean Ferry Services (CHFS) and the Northern Isles Ferry Services (NIFS).

However, the approach set out would support Scottish Transport Appraisal Guidance (STAG) studies and business cases undertaken by local authorities in relation to their own services.

## **Background and Context**

The 'exam question' here is to set out the current and future 'needs' of ferry dependent island and peninsular communities in terms of their ferry service (Community Needs Assessment) and align this with an appropriate level of service, in the process identifying potential under or over-provision of services compared to



the service currently provided on the route. Note that, for brevity, the term 'island' is used forthwith and all references to islands also apply to peninsular communities, unless otherwise stated.

Scotland's ferry services perform four main roles:

- Meeting the travel needs of island residents.
- Meeting the travel needs of visitors to the islands.
- Meeting the supply-chain needs of islands in terms of inbound supplies and raw materials and outbound exports.
- Supporting business travel and services delivered to islands by mainland suppliers, particularly in smaller communities.

To determine whether island needs are being met or not, a six-stage process is proposed. These steps are summarised below and are set out in more detail thereafter.

**Step 1** – Allocation of current service to one of seven defined 'Route Service Levels' (summer / winter).

**Step 2** – Analysis of connectivity provided by the current service (summer / winter).

**Step 3** – Analysis of the performance of the current service – carryings, capacity, performance and connectivity.

**Step 4** – Narrative and, where appropriate, indicators around travel by island residents, leisure visitors / tourists, the island supply-chain and service delivery.

*Engagement point: confirm understanding of operational situation and community needs.*

**Step 5** – Gap analysis

If no gaps identified CNA concludes at Step 5.

**Step 6** – Option generation and appraisal / business case scoping.

*Engagement point: present the options and proposed next steps and seek feedback from communities.*

## Steps 1: Route Service Level

In order to provide a degree of structure to the process, a 'Route Service Level' typology has been developed within which every route can be allocated to a 'level' based on current supply-side arrangements, i.e., number of vessels and crews. This provides a consistent means of comparing all routes across the network in terms of the service offered in the present day.

The Below sets out the incremental 'Route Service Levels' which have been developed for this methodology:

**Level A.** Shared single vessel, single crewed - the operating day of a single crewed vessel is limited to the maximum hours that can be delivered by a single crew within the hours of work regulations and crew contractual agreements. For example: Several routes in Orkney including: Rousay, Egilsay and Wyre; Stromness - Graemsay / Hoy; and Houton – Lyness / Flotta.

**Level B.** Shared single vessel, with more than a single crew - more than a single crew' is where a small number of additional crew are added to the complement to extend the operating day. However, this falls short of a full extra crew. For example: Uig – Tarbert / Lochmaddy (summer, currently).

**Level C.** Dedicated single vessel, single crewed. For example: Various 'small vessel' routes in the CHFS network, e.g., Sconser - Raasay, Tayinloan - Gigha etc.

**Level D.** Dedicated single vessel with more than a single crew. For example: Colintrave – Rhubodach, which uses a shift system to offer an extended operating day

**Level E.** Two dedicated vessels, each with a single crew. For example: Wemyss Bay – Rothesay.

**Level F.** Two dedicated vessels, with one operating with more than a single crew. For example: Several routes on the Shetland inter-island network, e.g., Symbister – Laxo / Vidlin.

**Level G.** Two dedicated vessels, with both operating with more than a single crew. For example: CalMac Ferries Ltd (CFL) Gourock – Dunoon route.

The allocation of each route to a level would have to be undertaken for the summer and winter timetable as these can vary significantly between routes. Differences from core winter provision associated with drydock / refit cover should also be drawn out where appropriate.

The service frequency which can be provided will be a reflection of: (i) crossing and turnaround time; and (ii) the number of vessels operating. The number of connections per day will be a reflection of the service frequency and the length of the operating day (itself determined by the crewing arrangement). The direction of travel of the first and last sailing can be influenced by the location of crew residences (for vessels where the crew do not live aboard), the availability of overnight berths and indeed the ability for a vessel to safely lie overnight at a given port.

In assigning a route to a level, it is important to engage with the relevant operator to understand any other constraints out with crewing which may shape how a route operates (e.g., overnight berthing arrangements, tidal conditions, vessel classification etc).

## **Step 2: Analysis of connectivity provided by the current timetabled service**

For any route (or routes, where an island is served by more than one route, e.g., Mull) being assessed, it is essential to understand what the ferry service enables for passengers and freight, based in the first instance on the current published summer and winter timetables. It should be noted that timetables on routes can be affected by various external factors such as vessel maintenance, tidal restrictions etc. The focus should be on the 'standard' timetable, but factors which routinely affect how a route operates should be identified and discussed, for example the tidal restrictions on the Sound of Harris service or the refit timetable on internal services in Orkney. This can be most easily understood through the development of a set of route connectivity indicators, as follows:

- Length of operating day (i.e., the elapsed time between the first departure and last arrival of the ferry service).
- Time of the first sailing from the island.
- Time of the last departure to the island.
  - And hence maximum time on mainland per day.
- Time of the first sailing from the mainland.

- Time of the last sailing to the mainland.
  - And hence maximum time on island per day.
- The ability to make a meaningful day-return trip to mainland / island without one or more overnight stays. The extent to which the day return trip offered is 'meaningful' will depend on the travel needs of each community and will be considered further in Step 4. Note, on routes such as Stornoway – Ullapool, it is technically possible to make a day return trip to Lewis, but time on island is limited to the turnaround time of the vessel (i.e., it arrives at 13:10 and departs at 14:00). The focus therefore has to be on the ability to make a 'meaningful' day return trip – the extent to which this is the case will vary by island and is a matter of judgement.
- Total ferry connections per day (i.e., frequency), split by direction.
- Connecting bus and rail services (departures and arrivals) – these can be shown graphically as part of a combined ferry / rail / bus timetable or in tabular format. Any other connecting transport options such as e.g., car or bike hire should also be listed.
- Public transport and car-based connectivity mapping, showing mainland onward travel times in colour contours based on selected ferry arrivals.

The above analysis should be undertaken separately for both the summer and winter timetable.

The route connectivity indicators provide a consistent basis around which a route narrative can be built. This narrative should also include:

- Commentary on any air-based connectivity where appropriate. This includes scheduled commercial flights (e.g., Stornoway – Glasgow) and Public Service Obligation flights (e.g., from the Inner Hebrides to Oban).
  - On most islands, flights serve a different market need or provide a specific service such as travel-to-school or island service delivery that the ferry delivers less well or not at all. It is important through the research and any engagement to understand the markets served as fully as possible, as well as any constraints on air service operation.
- For peninsular communities, where there is an alternative road route to the ferry, commentary on how the two interact for personal, business, leisure, supply-chain and service delivery travel.

It should be noted that understanding the respective use of air and ferry services (and road-based routes where appropriate) may require bespoke primary research with communities and stakeholder interviews. This should be assessed on a case-by-case basis.

The combination of Steps 1 and 2 effectively set out the ferry service supply-side in terms of the assets and resources used and the connectivity that these enable.

### **Step 3: Analysis of the performance of the current service**

This step considers the performance of each route in terms of reliability (cancellations), punctuality (running to timetable) and capacity utilisation (the ability to travel with a vehicle) and provides commentary on underlying causes and consequences for island communities. Given the impact of the COVID-19 pandemic, it is recommended that all detailed analysis includes data to capture the pre-pandemic position, the pandemic itself and the emerging post-pandemic position.

To inform this, 10 years of sailing-by-sailing data will be required, which is available for both the CHFS and NIFS networks. Such data are also available for local authority services, but the extent and format varies.

Note that the data itemised below is that which would be available for CFL routes. Serco NorthLink Ferries (SNF) data are broadly similar but there are some differences in how it is reported, which would need to be accounted for in any CNA for the Orkney and Shetland Islands.

### **Route performance - reliability and punctuality**

The following indicators have been developed in relation to punctuality and reliability, with the required data shown in italics below. These indicators should be presented for the route(s) in question and the average for selected comparable routes (e.g., on the Clyde and Hebrides network, the route comparison could be based on other 'Major vessel' and 'Small vessel' routes as defined by CFL or geographic groupings of routes). For each indicator, the data should be presented in the CNA, accompanied by an explanatory narrative and statement of any major operational or supply-side changes which may impact upon it. For example, on the Stornoway – Ullapool route, cancellations reduced significantly when MV *Loch Seaforth* commenced operation of the overnight freight service.

- How has punctuality and reliability changed over time?
  - 10-year time series showing annual proportion of scheduled sailings:

- Cancelled.
- Diverted, where appropriate.
- Level 1 lateness (definition varies by route length).
- Level 2 lateness (definition varies by route length).
- How does reliability and punctuality vary across the year?
  - Monthly operator performance statistics, for the most recent year (unless that year is an obvious outlier) split by:
    - Cancelled.
    - Diverted, where appropriate.
    - Level 1 lateness (definition varies by route length).
    - Level 2 lateness (definition varies by route length).
- Why are sailings cancelled?
  - 10-year time series showing reasons for cancellation.
- Is the impact of weather increasing?
  - 10-year time series showing proportion of sailings cancelled due to adverse weather.
- Why are sailings delayed?
  - 10-year time series showing reasons for delay.
- How many days per month does the 'normal' timetable operate?
  - For the most recent year, analyse performance data to identify how many days across the year the published timetable has been operated to schedule.

The above indicators can be used to inform a narrative around route performance and the factors which contribute towards cancellations and late running, e.g., deployment of a particular vessel or delayed turnarounds in peak summer etc.

## **Route carryings and capacity utilisation**

### **Carryings**

In order to provide context for the capacity utilisation analysis, there is benefit in setting out the aggregate trend for each route in terms of carryings – this should be built-up from published data sources such as Scottish Transport Statistics and

sailing-by-sailing data over a circa ten-year period. The following indicators have been developed in relation to carryings, with the required data shown in *italics* below:

- How have passenger and vehicle carryings changed over time?
  - 10-year time series (a longer time-series could be used where appropriate, for example where a new vessel was introduced at or just before the start of the 10-year period).
  - Presented in absolute terms and indexed to e.g., 2013.
  - For routes on the CHFS network, a statement of the year in which Road Equivalent Tariff was introduced should be provided.
- How have coach and commercial vehicle (CV) carryings (absolute numbers and lane metres) changed over time?
  - 10-year time series (a longer time series could be used where appropriate).
  - Presented in absolute terms and indexed to e.g., 2013.
  - Ideally these data would also disaggregate motorhomes – some CFL datasets do provide this and should be obtained if possible.
- How do passenger and car carryings vary across the year?
  - Monthly carryings statistics for the most recent year.
  - Ratio of 'deep' winter (i.e., November to February inclusive) to peak summer (i.e., July and August) carryings for cars, CVs and coaches.
- How do passenger and car carryings vary by day of the week?
  - Sailing-by-sailing data for the most recent calendar year used to calculate % travel by day of the week.
  - Carryings should be shown separately for each direction to pick-up peak travel days.
  - Ratio of vehicles to passengers.

## **Capacity utilisation**

The ability to secure a vehicle booking (and cabin booking on SNF) on the ferry is an issue of primary concern for many island residents and businesses. The passenger certificate of most vessels means that passenger capacity is rarely a problem on most routes, although there are isolated sailings which are fully booked. It is therefore important that detailed analysis of vehicle-deck capacity utilisation is



undertaken (analysis of passenger utilisation can be undertaken where it adds value).

That said, the analysis undertaken needs to be proportionate to the extent of the potential problem – on some routes, vehicle-deck capacity will:

- Rarely, if ever, be a problem.
- Be concentrated in a specific season – on most routes, this will be in summer but the reduction in services in the winter timetable, vessel redeployment during drydock periods or winter operating restrictions does cause capacity issues on some routes.
- Be concentrated on a specific sailing or day.
- Be a problem on most sailings.

### **Vehicle-deck utilisation**

Vehicle-deck utilisation is the main area of interest from a capacity perspective, as it is the component of capacity which is most frequently under pressure on ferry services throughout Scotland. Ideally, the analysis would be split by periods of:

- Normal timetabled operations.
- Disruption (requiring a cross-reference with the performance data introduced above).

However, vehicle deck utilisation is currently difficult to calculate precisely. Note, on the Clyde and Hebrides network, outputs from the new booking system – Ar Turas – may simplify the process of calculating vehicle deck utilisation. If this is the case, this guidance paper will be updated at the appropriate juncture. The current data are complex and inexact, as e.g., on the CHFS network:

- Reported carryings data records only 'cars' plus CVs / CV lane metres and coaches / coach lane metres - 'cars' includes vans, some campervans, trailers, caravans etc, so 'Car lane metres (LM)' are not known and have to be estimated.
- Wider vehicles can straddle two lanes, leading to dead space on the vehicle deck. A sailing may therefore appear to have deck space from an LM perspective, but this deck space cannot be used.
- Deployment or otherwise of mezzanine decks affects total lane metre capacity and is not systematically recorded – this can sometimes be inferred from the data though.

- Report vessel carrying capacity has been eroded as vehicles get larger.
- Whilst a diminishing problem as vessels are gradually replaced, vessel deadweight limitations can also be an issue. In such instances, the vehicle deck may not be full in terms of LM usage but, because a weight threshold has been reached, no other vehicles can be carried.
- Attempted but failed bookings, stand-by lists etc. are not systematically recorded so any suppressed demand is not known.

Acknowledging the above caveats, it is possible to build-up analysis of estimated vehicle deck utilisation (load factors) from sailing-by-sailing data. The following indicators have been developed in relation to carryings, with the required data shown in italics below:

- How much capacity is there across the year?
  - Aggregate figures showing the proportion of sailings within set load factor bandings of <25%, 25%-50%, 50%-75%, 75%-90%, >90% across the year, by season etc. This can be for all sailings or by individual sailing (e.g., the weekday 07:00 departure from Stornoway).
  - Development of a 'loadings calendar' (or equivalent) showing load factors for each day of the year (within set bandings of <25%, 25%-50%, 50%-75%, 75%-90%, >90%) by direction for every day of the year. These can be set up to show maximum, mean, median or total daily load factors or load factors on any specific sailing and can be tailored to the route in question.
  - This can be for the most recent calendar year or for a longer time series, as appropriate for the route in question.
- How often is capacity a problem?
  - Development of 'box and whisker' load factor charts – these can be by month, season, week, day and / or sailing.
  - This can be for the most recent calendar year or for a longer time series, as appropriate for the route in question.

## **Passenger utilisation**

Passenger utilisation is fairly straightforward to calculate – i.e., it is the passenger carryings on any individual sailing as a proportion of the vessel's passenger certification and / or maximum passenger capacity for that sailing where variable passenger certificates are used. Equivalent indicators to those developed for vehicle

deck utilisation could be developed for passenger utilisation. However, in the interests of proportionality, it is recommended that effort is targeted at routes and / or individual sailings where this is understood to be a problem, which are currently relatively few and far between.

### **Cabin utilisation**

Equivalent analysis could also be undertaken with regards to cabin and sleeping pod utilisation on SNF sailings. It should though be noted that the analysis will show the number of cabins booked as a proportion of the total, which is one measure of utilisation. However, it is common on SNF services for the cabins themselves to be under-utilised (e.g., a four-berth inside cabin booked by a single occupant) and the data will not readily capture this, although the discontinuation of shared cabins makes this less of an issue than it once was.

The output of this step will be a clear set of current route performance metrics which will provide some quantification of how well the service is meeting the needs of the island in terms of reliability, punctuality and the ability to travel with a vehicle and / or secure sole occupancy accommodation when travelling on SNF.

## **Step 4: Narrative and indicators around travel by island residents, visitors and the island supply-chain**

Step 4 is the first step in the process which focuses specifically on the travel needs of each community, although it should be noted that these are not defined in a formulaic way. Whilst Steps 1-3 develop comparable indicators across all routes, this step must consider the particulars of each community individually. This section sets out some of the issues that should be considered in relation to each segment of demand.

Potential indicators are provided where appropriate but these will not tell the full story and must be supplemented by proportionate research on each community.

It is highly recommended that at least some primary research is carried out to understand resident and potentially visitor travel to and from an island. Whilst the type and extent of this research will be dependent on available information and data, an understanding of basic resident travel behaviour through an online survey should be considered an absolute minimum requirement.

## Island Context

To provide context and inform the potential island drivers of demand for ferry travel, the key features of the community in question should be set out / mapped, including provision for:

- Delivery of the various forms of health and social care services (e.g., health visitors / nurse / GP / cottage hospital / general hospital / dentist etc).
- Primary, Secondary and Tertiary Education.
- Retail: food and non-food.
- Fuel: petrol, diesel, electric vehicle charge points etc.
- Personal services: e.g., banking, post office etc.
- Leisure: e.g., swimming pool, cinema etc.
- Key industries, particularly those which place a significant demand on the ferry service (e.g., manufacturing and construction).
- Any other service of relevance to the island in question, e.g., veterinary practice, Council offices, utilities, trades etc.

This can be done through a combination of desk-based research and any primary research or stakeholder engagement undertaken.

The availability of services and opportunities on-island is largely shaped by the size of the permanent island population and the proximity (or otherwise) of such services on the 'mainland' (which in some cases will be another island). The way in which people access services will be combination of:

- (a) On island – from a provider / supplier permanently based there.
- (b) On island – from a provider / supplier travelling to the island or delivered to the island .
- (c) Off-island travel – by ferry.
- (d) Off-island travel – by air.

For each service on each island, the means by which these are delivered / accessed should be established. Where services are only provided off-island, the location of these should be noted and supplemented by a commentary on travel options and journey times.

There is also benefit in reviewing the relevant Local Development Plan and / or engaging with the local authority / Community Planning Partnerships, Highlands and Islands Enterprise and island stakeholders (including haulage firms, developers, trade bodies etc) to understand any forthcoming developments or projects that would have a significant bearing on the ferry service, e.g., windfarm construction, new school or hospital projects etc.

## **Ferry Service Role(s)**

Any island's relationship with its ferry service will be largely dictated by a number of factors as set out below in terms of the ferry service role(s). For each community, these should be considered in turn in a narrative, supported by quantitative indicators where these can be developed and are meaningful. The below highlights the different roles played by an island ferry service.

The 'needs' of island residents to travel for regular, day-to-day activities, such as commuting, education, shopping etc:

- Islands with larger populations naturally host a greater range of public services and other services (i.e., they are largely self-contained). In the largest islands, there will therefore be very low ferry travel volumes for day-to-day purposes.
- Where islands have lower populations, short crossing times and where their mainland landfall is or is near to a town of some significance / a transport hub, there will be higher levels of day-to-day travel, including potentially commuting, as the services offered on the mainland are less likely to be provided on-island.
- It is not possible to make a meaningful day trip to the mainland from some islands. In these cases, very few trips will be made for day-to-day purposes, or a range of travel purposes will be combined in a small number of less frequent trips incorporating one or more overnight stays.
- Where crossing times are short, and islands are connected to centres of population / commerce, there may be a case to run services into the evening to allow island residents to better access these services.

The 'needs' of island residents to travel for more occasional activities, e.g., visiting friends and relatives:

- For more self-contained islands, holiday, leisure and visiting friends and relatives (VFR) journeys will form the majority of trips made. This will often coincide with the demand for tourism travel to the island. There will evidently be marked summer / winter variation here.

- In many cases, 'chained trips' will be common, where an island resident will undertake multiple activities on a single trip.
- For islands with higher levels of ferry travel for day-to-day use, these journeys will form a far lower proportion of travel.
- Any island air service will also be used for these trips by some people although this may be cost prohibitive for others.

The island supply-chain arrangements for inbound supplies and the export of goods:

- Larger islands with a full range of facilities will require a retail and public sector supply-chain (e.g., Lewis), like any bigger town.
- Less populous islands will have more informal supply chains or will see individuals travelling to the mainland themselves for goods and services.
- Islands with very low populations and long crossing times which preclude day-to-day travel will see some services delivered by the service provider travelling to the island for a number of days per month (particularly where there is an air service).
- Some islands will import more raw materials than others to supply indigenous industry, e.g., Islay.
- Some islands will have a higher 'export intensity' of physical goods and products than others, e.g., Orkney and Shetland.

The volume and nature of tourism to the island:

- Tourism levels vary widely across the network.
- Those with short crossing times and close to centres of population or tourism will see greater numbers of day-trip visits (e.g., Bute, Mull etc). There may be a case to run services into the evening to facilitate the day-tripper market (as happens on e.g., Cumbrae).
- Large numbers of day-trippers associated with 'weather peaks' may inhibit travel by residents, a particularly common feature on the Firth of Clyde routes.
- A day-trip to some islands is not possible (other than by air) so most ferry-based tourism will involve an overnight stay.

As part of the strategic network for through traffic:

- Some routes act as a 'through' route in terms of the wider road network rather than as a single in-out access to an island or peninsula, e.g., Tarbert (Loch Fyne) – Portavadie.

- For an island where two ferry crossings are required to reach the Scottish mainland, e.g., Jura – Port Askaig – Kennacraig.

Potential areas of research (and where appropriate, potential indicators) to inform these ferry ‘service roles’ are set out below. It should be noted that the potential indicators set out should not be prescriptively applied but are intended to guide the type of analysis that could be undertaken depending on the nature of the community in question.

## **Island resident regular day-to-day travel**

Regular travel undertaken by island residents will typically comprise:

- Part-day journeys, typically for leisure, shopping, personal business (including health), sport, visiting friends and relatives – the extent of this will depend on provision on-island (which will be set out above).
- Longer / full-day journeys, typically for employment and education.
  - Where an island is within commuting distance of a major employment or tertiary education centre, it is reasonable to expect the ferry service to facilitate daily 09:00-17:00 commuting. There is however a maximum commuting time beyond which people will not typically regularly travel.

The commentary in this section should draw upon: travel behaviour research; the ‘island context’ set out earlier in this section; economic and demographic data where available; and carryings data as a means of understanding the scale and nature of regular travel.

### **Potential Indicators**

- The number of jobs within say 60 or 90 minutes drive and public transport) of an island port (including any check-in time) would be an indicator of the potential for commuting. In Scotland in 2019, 91% of commuting trips were less than 60 minutes and 97% were less than 90 minutes (DfT Table TSGB0110b, derived from Labour Force Survey). If this is a significant number and the number of jobs on-island is low, then this would indicate the potential for viable commuting. BRES data can be used to inform this, with the caveat that this reports workplace jobs at datazone level, which can be a coarse measure in rural areas.
- A ‘regular travel requirement’ indicator could be developed based on (i) the range of day-to-day services and other services available on-island and (if available) (ii)



the percentage of ferry users who make at least say three return ferry journeys per week.

## **Evening Services**

On shorter routes, the main decision point is whether the route is operated on the basis of a single crew day (Service Levels A, C and E identified in 'Step 1') or uses a different crewing model to extend services into the evening. Islands with short journey times to population centres may merit evening services for example, allowing them to access the evening social / sporting economy there (potentially also providing an economic benefit to these centres without displacement from the island community (assuming no similar facilities exist there). Conversely the withdrawal of evening services could negatively affect the town's evening economy.

### **Potential Indicator**

- For relevant island communities, it may be appropriate to benchmark the island's ferry service against the level of public transport connectivity (time of last bus, journey times, fares etc) provided for mainland settlements a comparable distance away from the town in question to establish the degree to which the island is disadvantaged in terms of access to the evening economy.

## **Island resident more occasional travel**

As crossing times increase, island residents' use of the ferry will be more occasional, e.g., health trips; visiting friends and family; sport (spectating / participating); holidays; shopping trips for major, occasional purchases; business trips; and commuting to e.g., offshore jobs.

With respect to more occasional travel, the 'need' here is that the ferry service should:

- Allow people to reliably (recognising that, on some occasions, weather will prevent or delay travel even with the highest quality vessel and infrastructure) make essential journeys say within plus or minus one day of their preferred travel date.
- Provide meaningful connectivity where practicable with national bus and rail connections.

The extent and purpose(s) of more occasional travel could only be defined through a survey of island residents, supported by reference to the 'island context' set out earlier in this section.

## Island supply-chain

The island's population will generally dictate the level of retail and other services provided and hence the volume of goods brought in to meet the direct needs of residents. Island-based industries will have an impact on the import of raw materials and the export of products and goods. There are three main components to the island supply-chain:

- **Imports** – will reflect:
  - The scale of on-island public services (including retail).
  - Imports to support on-island industry.
- **Exports** – will reflect:
  - The presence of exporting industry.
- **Service based activity** – e.g., Scottish Water, BT Openreach etc.

The extent and importance of each of these components including narrative on the type of import / export (e.g., fuel, gas, food, newspapers, waste, livestock etc) should be explored through desk-based research, stakeholder engagement and analysis of the route carryings data (Step 3).

## Potential Indicators

As the movement of freight is inelastic and essentially non-discretionary, the best indicators would be the measures of actual freight carried. The following indicators should be considered:

- Operator booking data (if available) may provide a breakdown of the balance of island export / import and the extent of empty running in one direction.
- Annual CV LM per head of population.
- Average CV LM per week.
- Ratio of cars to commercial vehicles (i.e., the absolute number of vehicles) monthly and annually.

## Tourism

This will establish how important tourism is to the island and the impact of tourism on the ability of residents to travel. Day trip and overnight stayers will have different requirements – the presence of day-trippers will largely reflect crossing times, tourist attractions on-island and the proximity of major centres of population or other centres of tourism. Day trippers could potentially justify evening sailings to allow a full day on the island, which would benefit the evening economy.

For some islands, the ferry service acts as a ‘cap’ on car-based tourism numbers and the number of cars going to the island closely mirrors the number of cars leaving the island over an in-season week. This will be heavily influenced by weekend ferry services coinciding with established holiday changeover patterns. Car-based tourism is typically a significant proportion of tourism in many islands given the dispersed nature of self-catering accommodation in particular and the need to carry families, pets, luggage, outdoor equipment etc.

There has been a significant increase in tourists travelling in motorhomes and campervans in recent years in both owned and hired vehicles. These vehicles can take up a significant volume of deck space.

Whilst the cap imposed by ferry capacity could be seen as an effective barrier against ‘over-tourism’, particularly with respect to island road infrastructure, it may also be seen as an inhibitor by the local tourism sector. The island’s tourism offer (including accommodation) will generally reflect this ‘cap’.

With respect to tourism, the ‘need’ here is that the ferry service is:

- Reliable enough so that tourism is not deterred.
- Potentially expanded to facilitate more sustainable / higher levels of tourism.
  - This could be through increased frequency, deployment of additional or larger vessels at peak periods (either through cascades within the existing fleet or the introduction of new vessels over time) or through improved public transport links.

It should be noted that data on tourism volumes in Scotland, in general, and tourism in the islands in particular, is currently very poor.

## Potential indicators

- Ratio of (i) shoulder (April-June, September, October) and (ii) peak (July, August), to Winter (November to March) car and passenger carryings plus equivalent data for the relevant airport if available.
  - High ratios indicate high levels of tourism, although these figures do conflate resident and visitor holiday travel
- Recording of motorhome / campervan carryings where the data allows this.

## Through Traffic

This ferry service role should be covered by narrative in relation to how the ferry facilitates through traffic, the journey time savings offered, resilience benefits etc.

## Output of Step 4

The output of 'Step 4' should be a clearly elaborated statement of current community travel needs, informed by cross-references to Steps 1-3 and the indicators where this is appropriate. This should combine the insights gained from the operator data, desk-based research and any primary research to provide a sense of how the community functions and the role of ferry (and air) services therein.

## Step 5: Gap analysis

This step draws together Steps 1-3 (which consider how ferry services are supplied, used and perform) with Step 4 (which sets out community needs). The objective here is to determine whether there is a misalignment between the needs of the community and the ferry service(s) provided – i.e., a 'gap'. All routes serving an island should be considered in the CNA. Indeed, in cases where there are dependencies or complementarities between routes, there would be value in undertaking a mini-network based CNA rather than analysing a given island in isolation. It is again important to emphasise that this cannot be a formulaic exercise but should be based on the specific needs of each community and the transport problems that they face – this is consistent with the STAG guidance.

Given the significant variation in the scale and uses of different routes across the Scottish ferry networks, the identification of problems (or 'gaps') at the route level requires a systematic approach which:

- Considers each element of the service / connectivity to ensure that all relevant 'gaps' have been identified.

- In order to provide a focus for future option generation, undertakes a predominantly qualitative assessment of the relative magnitude of each problem (as evidenced by the data and any consultation that has been undertaken – i.e., the outputs from Step 4).

The following assessment scale will be used when identifying the extent of the problem / 'gap':

- Neutral
- Minor problem / gap
- Moderate problem / gap
- Major problem / gap

This step is predominantly focused on the service rather than infrastructure and operational issues, although the service is obviously defined by these factors to some degree. Using the outputs from Steps 1-4, the gap analysis should focus on three service components - connectivity, capacity and performance. For each of these 'components' several sub-components are defined and should be assessed individually to complete the gap analysis:

- Connectivity:
  - Number of operating days.
  - Length of operating day, including first and last sailing.
  - Variation in timetable by day, week and / or season.
  - Convenience of timetable (for e.g., day-trips, travelling at anti-social hours etc).
  - Frequency.
  - Onward public transport connections.
- Capacity:
  - Passenger (where appropriate).
  - Vehicle deck.
  - Sleeping accommodation (where appropriate).
- Performance:
  - Reliability.

- Punctuality.

Having undertaken this analysis:

- Where one or more 'gaps' are identified (e.g., poor reliability, lack of capacity etc or indeed over-provision of services etc). these should be identified and progressed to Step 6.
- Where no evidenced 'gaps' are identified, no further action is required at this stage – the route would thereafter be considered as part of the wider monitoring of network performance.

## **Step 6: Option generation and appraisal / business case scoping**

This final step in the process is concerned with addressing gaps in service provision (under or over-provision) through generating options and scoping the level of proportionate appraisal / business case development that would be required to progress these options. In some cases, an improvement could be delivered through the bi-annual timetable setting process or a simple single stage business case where a small investment is required. Other service changes may require a more detailed appraisal or programme or project business case (e.g., a major service increase or reduction; a new vessel etc). This will have to be determined on a case-by-case basis in each CNA.

The option generation should be split into revenue and capital measures, with the approach adopted for each set out below.

### **Option Generation**

#### **Revenue measures**

Revenue measures could be used to address identified gaps with respect to connectivity.

The following potential 'gaps' exist from a connectivity perspective and should be considered for both the summer and winter timetable periods (note that, for each of the below 'gaps', the opposite could also be true in the event of 'over-provision' being identified – e.g., the operating day is too long):

- The service operates on too few days.
- The operating day is too short.

- The first sailing of the day is too late.
- The last sailing of the day is too early.
- The service is not frequent enough.
- Different timetables operate on different days / weeks etc.
- The timetable is inconvenient / does not support socially or economically beneficial travel.

Whilst not connectivity issues *per se*, the following ‘gaps’ can be a product of the level of connectivity (and in particular frequency) offered:

- Insufficient (or excessive) passenger, vehicle or accommodation capacity.
- Poor punctuality, where there is evidence that delays are caused by extended vessel turnaround due to high-capacity utilisation (primarily on the vehicle deck).
- Poor / no integration with onward public transport connections.

Step 1 of the process defined ‘Route Service Levels’ based on the number of vessels operating on a route and how these vessels are crewed. Having allocated a route to the appropriate level, the option generation and development should therefore identify:

- Potential variations within the levels, where appropriate.
- Whether there is an evidence-based case to progress through one or more additional ‘levels’ (up or down).

For each option, an indication of the impact on the following should be established:

- Number of vessels.
  - As new vessels enter the fleet, there may periodically be opportunities to increase frequency through cascading vessels to a route without significant capital expenditure – such opportunities are however irregular.
- Number of crew shifts required and associated crew complement.
- Qualitative description of the change in operating costs and carbon emissions
- Number of connections per day / week.
- Length of operating day.



With respect to potential over-provision, the only realistic available indicator of over-provision is low usage on successive sailings, particularly on the same day, i.e., a revealed preference that the sailings are perhaps unnecessary.

### **Capital measures**

Whilst 'gaps' in terms of capacity could potentially be addressed through a change in 'Route Service Level' (i.e., a revenue funded measure which provides more capacity through additional sailings), it may also become evident that the 'gap' can only be closed through a capital investment in vessels and / or associated infrastructure. Where this is the case (and significant investment is implied), the CNA should not attempt to resolve this but should scope the necessary business case work (incorporating STAG) to progress a solution.

It is important to note that the case for any investment in new vessels to address capacity or reliability issues should align with the Transport Scotland Sustainable Investment Hierarchy established in the National Transport Strategy 2 (see image inset), which is a key part of STAG. This hierarchy establishes a structured set of steps to be followed when planning investment in transport provision, with 'targeted infrastructure improvements' the final step once all other options have been exhausted.

## **Options Summary**

At the conclusion of Step 6, a clear summary of options developed should be set-out, together with a recommendation as to how these should be progressed within the context of Transport Scotland's appraisal and business case guidance. This would either take the form of the recommendation to develop:

- For minor operational changes such as small timetable amendments, an internal case for approval within Transport Scotland
- For proposals focused on primarily revenue measures only, a single stage business case based on a light touch STAG appraisal. The project business case consists of three stages – Strategic, Outline and Final / Full. For relatively low-cost investments for which firm prices are available, it is possible to prepare a single stage business case – this is known as a Business Justification Case (BJC).
- For larger interventions where capital investment is required, a full three stage business case incorporating a STAG approach

It should be noted that any business case should look beyond ferry services alone and consider options in relation to road (for peninsular communities), air services and fixed links.

## **When should communities and stakeholders be engaged?**

In addition to any primary research and stakeholder engagement undertaken as part of the CNA, there are two gateway points in the CNA at which communities and stakeholders should be engaged – at the end of:

- Step 4, to confirm that the understanding of the current operational situation and community needs are well understood.
- Step 6, to present the options / proposed next steps and seek feedback from communities.

The type and scale of engagement should be proportionate and agreed with Transport Scotland for each CNA, but could take the form of:

- Face-to-face public drop-in sessions.
- One-to-one stakeholder interviews.
- Online engagement using a platform such as ArcStory Map, with an embedded survey.

## **Reporting**

The CNA should conclude with a succinct report setting out all six steps of the process and any actions emerging from it. This report should be written such that it can inform much of the Strategic Dimension and the early sections of the (Socio) - Economic Dimension of any later business case.

## Appendix B      Categorisation of Waters and Vessel Classifications

- B.1.1 There are four categories of waters designated by the UK Maritime & Coastguard Agency (MCA) are as follows:
- **Category A:** Narrow Rivers and canals where the depth of water is generally less than 1.5 metres.
  - **Category B:** Wider rivers and canals where the depth of water is generally 1.5 metres or more and where the significant wave height could not be expected to exceed 0.6 metres 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 1.2 metres at any time.
  - **Category D:** Tidal rivers and estuaries where the significant wave height could not be expected to exceed 2.0 metres at any time.
- B.1.2 These categorisations apply specifically to the operation of Class IV, V and VI Passenger Ships and also determine which waters are not regarded as 'open sea' for the purposes of regulations made, or treated as made, under Section 85 of the UK Merchant Shipping Act 1995. Three Council ferry routes come within categorised waters; namely Toft - Ulsta, Belmont - Gutcher and Lerwick - Bressay, which all come under Category D. All other routes are considered open sea. This has a bearing on the vessels required for these routes.
- B.1.3 Where economically and financially practical, vessels should meet the same Class rules of construction instead of the present regime which has differences of classifications for different routes, weather or time of year. This causes management problems and is limiting in operational terms. As a result, at present some vessels are largely confined to their present trading routes.
- B.1.4 These restrictions may cover:
- Where the ship operates - a ship with a Class VI(A) certificate can operate no more than three miles from land.
  - When a ship operates - a ship with a Class VI certificate cannot operate in winter or at night; the ship will not be a qualifying ship.
  - How many passengers may be carried - a ship with a Class VI(A) certificate cannot carry more than 50 passengers.
- B.1.5 Current ferries that have been issued with these certificates are only certificated for navigation at sea if they are operating in accordance with the restrictions set out in their trading certificate. This means that a ship with a Class VI certificate is not certified as seagoing if it is operational in winter or at night, although a Class VI(A) allows for operation with lower passenger numbers. Circumventing these restrictions requires a Class II(A) vessel (ships engaged on voyages of any kind other than international voyages, which are not ships of Classes III to VI (A)).
- B.1.6 More recently EU class has come into force (although the MCA classification can still apply in domestic waters) and new builds should comply with the EU directive for the relevant class listed below:
- **EU Class A** means a passenger ship engaged on domestic voyages other than voyages covered by Classes B, C and D.

- **EU Class B** means a passenger ship engaged on domestic voyages in the course of which it is at no time more than 20 miles from the line of the coast, where shipwrecked persons can land, corresponding to the medium tide height.
  - **EU Class C** means a passenger ship engaged on domestic voyages in sea areas where the probability of exceeding 2.5m significant wave height is smaller than 10% over a one-year period for all-year round operation, or over a specific restricted period of the year for operation exclusively in such period (e.g. summer period operation), in the course of which, it is at no time more than 15 miles from a place of refuge, nor more than 5 miles from the line of the coast, where shipwrecked persons can land, corresponding to the medium tide height.
  - **EU Class D** means a passenger ship engaged on domestic voyages in sea areas where the probability of exceeding 1.5m significant wave height is smaller than 10% over a one-year period for all-year round operation, or over a specific restricted period of the year for operation exclusively in such period (e.g. summer period operation), in the course of which, it is at no time more than 6 miles from a place of refuge, nor more than 3 miles from the line of the coast, where shipwrecked persons can land.
- B.1.7 The winter restriction of passenger numbers (between October and April) placed on all but the EU B vessels can be up to around 33% and is in force irrespective of the sea state. When considering looking at new vessels, these restricted vessels should be avoided where economically and financially practical and EU B vessels should ideally be the way to proceed as this will ensure a consistent lifeline service all year round.