

Report on the Potential Social and Cultural Impact of a Reopened Skye Airport

**SPARA 2020 Project
WP7 Additional Budget Deliverable
July 2018**

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**Northern Periphery and
Arctic Programme**
2014–2020



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Executive Summary

Introduction

This report presents the results of desk-based research conducted with part of the SPARA 2020 project's additional budget allocation. This research, which is related closely to the work conducted as Activity 7.1 within Work Package 7, explored the potential social and cultural impact of the reintroduction of scheduled passenger services at the Broadford airfield on the Isle of Skye, where services ceased in 1988.

It does *not* consider the wider economic, business, employment and tourism impacts of the Broadford airstrip reopening, as these have been explored extensively elsewhere. It is anticipated that it will complement the work of the Skye Air Service Short Life Working Group, created recently to progress proposals to establish a scheduled service between Skye and Scotland's Central Belt

Methodology

This research drew upon a range of sources, namely: the small body of extant literature on the socio-cultural impact of airports, particularly in remote, peripheral areas; the results of various feasibility and consultancy studies that have been conducted over the last 20 years and which have investigated the potential reintroduction of air services to Skye; the results of the qualitative research conducted as Activity 7.1 of the SPARA 2020 project, particularly that conducted with 78 Skye residents and visitors; over 2,600 posts made on the FlySkye campaign group's Facebook and Twitter pages, from 2012 to date; historical and contemporary documents produced by the key agencies involved with civil aviation in the Highlands and Islands; historical and contemporary newspaper articles; and other aviation literature.

Civil aviation in Skye

Civil aviation in Skye has a long, if fragmented history, beginning with a short-lived service which operated between Renfrew to Glenbrittle from 1935 to 1938. The Broadford airfield was constructed by the Royal Engineers between 1969 and 1971 and was officially opened in 1972. Loganair operated a Broadford-Inverness service between 1972 and 1974, and a Broadford-Glasgow service from 1972-1988. The Glasgow service ceased because of a significant fall in passengers numbers, the withdrawal of a government subsidy, and an argument that it could no longer be justified as a "lifeline" service.

Efforts to reopen Broadford Airfield

Over the last 20 years there have been numerous calls to reopen the Broadford airfield, and several feasibility and consultancy studies have been conducted. The most recent major study, by ekosgen and Reference Economic Consultants (2016), confirmed a demand for a twice-daily service to Glasgow, and concluded that the service would bring "significant economic and social benefits" to Skye and its environs. At the time of writing this report (July 2018), the focus had shifted to attempting to develop an air service "on a trial basis with the minimum capital investment".

Defining social and cultural impact

Throughout the academic and government literature there are no standard definitions of either social impact or cultural impact. Drawing largely from the literature on the socio-cultural impacts of transport services and projects, and on the social impact of cultural services and the arts, this report considers the socio-cultural impact of remote, peripheral areas under seven broad themes: 1) “Lifeline” services, accessibility, and connectivity; 2) Education and learning; 3) Health and well-being; 4) Local social networks and social capital; 5) Social inclusion/exclusion; 6) Community empowerment and development; and 7) Local identity and culture.

The potential social and cultural impacts of a reopened Skye Airport

Our findings suggest that a reintroduced Skye-Glasgow service may have impacts across all seven themes, as follows:

1) “Lifeline services”, accessibility, and connectivity.

There would appear to be mixed opinions amongst the Skye and Lochalsh community as to the ‘essentiality’ of an air service to Skye, at least when compared with other Scottish island communities. This would appear to be due largely to the existence of the road bridge connection to the Scottish mainland.

Improved journey times to Scotland’s Central when compared with surface transport, are seen by many as a benefit. Equally, many prefer the convenience and flexibility of driving to the mainland; and older Skye residents emphasise the financial importance of concessionary bus travel across Scotland.

Maintaining quick and convenient links with family and friends, particularly for important life events and in times of family crises, is seen as a significant benefit of air travel to and from Skye, albeit with some reservations about the potential affordability of the fares.

There is also some evidence of an air service being beneficial in allowing greater access to recreational and cultural opportunities on the mainland, as well as in allowing a wider range of cultural and artistic organisations to include Skye on their itineraries.

However, opinions were mixed on the perceived remoteness of Skye, and the extent to which the increased connectivity afforded by an air service will overcome this feeling of isolation.

2) Education and learning.

Much of the previous Skye-related work has focused on the benefits that might arise from increased numbers of incoming students and conference delegates to the Gaelic College, Sabhal Mòr Ostaig, at Sleat. Little attention has been paid to the potential use of an air service by Skye residents studying at universities on the mainland or elsewhere. Based on other comparator peripheral airports, particularly Donegal Airport, there might be potential for Skye to take advantage of this student market, should the fares structure be attractive and affordable.

There might also be scope for a new Skye Airport to become an educational resource in its own right, by engaging with, and receiving visits from, local schools, playgroups and youth organisations.

3) Health and well-being.

The health benefits of air travel, in enabling patients in remote areas to access specialist medical care and services in a less time-consuming and more comfortable manner, are discussed widely in the literature. This is also recognised as a potential benefit of reintroduced air services on Skye, although questions remain about the likely levels of use of a Broadford-Glasgow service, when many of the essential healthcare services will be provided at Raigmore Hospital in Inverness.

4) Local social networks and social capital.

Our earlier Activity 7.1 research revealed that remote, peripheral airports can act as social arenas in their own right, being venues for numerous serendipitous encounters and social exchanges between family, friends and acquaintances. We can find no evidence of the Broadford Airport having served this function when it last handled passenger traffic, in the 1970s and 1980s. The extent to which a new Broadford Airport will have this role will depend on: 1) the size, design and facilities of any new terminal building; and 2) the extent to which the airport will be used and visited by the wider Skye and Lochalsh community.

Our Activity 7.1 research also revealed that remote, peripheral airports can become 'destinations' and cultural venues in their own right, by acting as social spaces and hosting various exhibitions, artistic performances and other events. Opinions were mixed amongst Skye residents as to whether a new Broadford Airport might become such a venue. Again, much will depend here on the size, design and facilities of any new airport buildings.

5) Social inclusion/exclusion.

Some of the discussion around the reintroduction of Skye air services has focused on the economic inclusivity of the fares. Here, though, the evidence is contradictory. The RDC and ARUP studies (2013 & 2016) point to the lower levels of income deprivation in the Skye catchment area and forecast a healthy local demand for air travel. Our Activity 7.1 research, however, found that a significant proportion of our Skye participants have real concerns about the potential affordability of the fares, particularly when entire families wish to travel. They suggested that only tourists and wealthier local residents will be in a financial position to use the air service.

6) Community empowerment and development.

There is some evidence to suggest that a reopened Skye airport will contribute towards a stronger local community by influencing the in-migration of highly skilled people to the area, as well as the retention of younger people in the area, thus stemming population decline.

There is also some evidence, particularly on FlySkye's social media pages, that a new air service will help to overcome a sense of injustice and unfairness amongst

some sections of the Skye and Lochalsh community, in that they are currently the only major Scottish island without an air service.

7) Local identity and culture.

Our earlier Activity 7.1 research revealed that many communities in remote, peripheral areas have a clear sense of pride in, and ownership of, their local airport, making it a significant part of local identity. As Skye has a more fragmented civil aviation history, with the last scheduled Broadford-Glasgow service ceasing in 1988, this sense of local identity was perhaps not as keenly felt amongst our Broadford and Portree participants.

Using Kirkwall Airport as an exemplar, this report notes that the design, décor and contents of an airport terminal building can play a significant role in reflecting local history, culture and identity. And while some work along these lines has already been conducted in a Skye context, most notably the work of UHI students in designing a new terminal building (Restan, 2014), we would encourage those agencies involved in the plans to reopen the Broadford airfield to pursue this approach. Again, though, as with many of the other potential socio-cultural benefits noted above, the extent to which these can be exploited will depend very much on the eventual size, design and facilities of any new airport buildings.

1. Introduction

This report presents the results of desk-based research conducted with part of the SPARA 2020 project's additional budget allocation. This research, which is related closely to the work conducted as Activity 7.1 within Work Package 7, explores the potential social and cultural impact of the reintroduction of scheduled passenger services at the Broadford airfield on the Isle of Skye. It will *not* consider the wider economic, business, employment and tourism impacts of the Broadford airstrip reopening, as these have been explored extensively elsewhere (see Section 4 of this report). It is anticipated that this research will complement the work of the Skye Air Service Short Life Working Group, created recently to progress proposals to establish a scheduled service between Skye and Scotland's Central Belt (see HITRANS, 2018).

The report is structured as follows. Section 2 discusses our methodology, and the data sources and literature consulted in compiling the report. Section 3 provides a brief history of civil aviation to and from Skye, so that this current research might be put into some historical and cultural perspective. Section 4, meanwhile, outlines some of the main efforts that have been made to re-establish air passenger services on Skye, since Loganair ceased its Skye-Glasgow service in 1988. In Section 5 we explore the various definitions of social and cultural impact that have been used by government, by academia, and by aviation and other transport bodies; while Section 6 outlines the ways in which the socio-cultural impacts of airports, particularly in remote and peripheral regions internationally, have been investigated and measured. In Section 7 we present our observations on the potential socio-cultural benefits of reopening the Broadford airfield, as well as on aspects where there may be little, if any, socio-cultural impact. Finally, Section 8 presents our conclusions.

2. Methodology

As was noted in the introduction, this report has been compiled largely from desk-based research. In its preparation, various primary and secondary sources have been consulted.

First, the qualitative research data collected during Activity 7.1 of the SPARA 2020 project has been revisited. Activity 7.1 (reported in Bloice *et al.*, 2017) explored the social and cultural importance of small, remote airports to five communities in the Northern Periphery region, namely: Donegal in Ireland; Sundsvall-Timrå in Sweden; and Benbecula, Kirkwall, and the Isle of Skye in Scotland. Activity 7.1 centred on the research team holding exhibitions, within the five communities, of old photographs of their local airport. At these exhibitions, the researchers engaged with the individuals viewing the photos, prompting them to share their memories and experiences of using the airport – a research method known as photo elicitation. These exhibitions were supplemented by focus groups and by face-to-face and telephone interviews. Across the five case study communities, the research team spoke to a total of 575

individuals. On the Isle of Skye, where the photo exhibition was held in Broadford Village Hall (from 29-31 August 2016; see Figure 1) and in Portree Community Library (1-3 September 2016), we engaged with 75 people at the exhibition boards, and conducted a further three extended interviews. The research team's interview transcripts and field notes from the Skye case study have been re-examined, for any specific examples of potential socio-cultural benefits cited by our Skye participants. The transcripts and field notes from the other four case studies conducted in Activity 7.1 have also been re-examined, for examples of the perceived socio-cultural benefits of small, remote airports which may (or may not) be applicable in Skye, should the Broadford airfield be reopened to scheduled passenger services.



Figure 1: Photo exhibition at Broadford Village Hall on the Isle of Skye, August 2016

Second, an extensive literature search and review has been conducted. This literature, both online and in print (but in the English language only) has taken a number of forms:-

- Academic, government, parliamentary, and professional literature, relating largely to airports or other transport hubs, which has explored the concepts of social and cultural impact, and which has reported the ways in which such impacts might be identified or measured. This literature has been obtained via: Google and Google Scholar searches; advanced searches on the websites of the UK and Scottish Governments and Parliaments; and searches in multidisciplinary scholarly databases, such as *Emerald insight*, *SAGE Journals Online*, *Taylor & Francis Online*, and *Web of Science*.
- Newspaper and other press/media coverage, both historical and contemporary, and at national and local levels, which has reported on previous air passenger

services to and from Skye, and on the more recent campaigns and efforts to reopen the Broadford airfield. The key sources searched here were: *Lexis Library: News*; *ProQuest*; *The Scotsman Archive*; and *The Times Digital Archive*.

- Historical and contemporary documents (e.g., research reports, feasibility study findings, survey results, minutes of committee meetings, internal memos, etc.) originating from the key agencies involved with civil aviation in the Highlands and Islands over the last 50 years. These bodies include: the Highland Council; the Highlands and Islands Transport Partnership (HITRANS); Highlands and Islands Enterprise (HIE) and its predecessor, the Highlands and Islands Development Board (HIDB); the Civil Aviation Authority (CAA); and the pre-devolution Scottish Development Department of the Scottish Office. Many of these resources were available online; other, print-only sources were consulted at the University of Aberdeen Library, and at the National Records of Scotland search rooms in Edinburgh. Of particular interest here were: 1) the results of the various consultations and feasibility studies that have taken place over the last 15 years, to establish the extent to which any socio-cultural benefits of reopening Broadford have been explored (as opposed to only the economic impact); and 2) documents relating to the Loganair services that operated between Skye and Glasgow (1972-1988) and between Skye and Inverness (1972-1974), to better understand the factors behind their introduction and subsequent cessation.
- Historical aviation literature, to trace the origins of passenger services to and from Skye in the 1930s, and, again, to investigate the introduction and demise of Loganair's Skye services in the 1970s-1980s. Of particular value here was the online *Flight International* archive.¹

Third, and finally, the research team has conducted content analyses of the posts made on the two social media accounts operated by FlySkye, an independent body formed in 2012 by some prominent Skye residents to campaign for the resumption of a scheduled air service between Skye and Scotland's Central Belt. FlySkye created a Twitter page (at <https://twitter.com/flytoskye>) on 19 October 2012, on which 540 tweets were still publicly accessible at 2 July 2018 (although the most recent post was almost a year old, from 6 August 2017), and which had 1,194 followers. FlySkye's Facebook page (at <https://www.facebook.com/FlySkye.co.uk/>) was also created on 19 October 2012. On 2 July 2018, the page had 2,888 followers, had received 3,005 'likes', and 2,126 posts were still publicly accessible.² It is acknowledged, of course, that campaign social media sites, such as these, will typically be followed or 'liked' by organisations and individuals that support the cause or argument being presented.³ Indeed, a quick browse through these FlySkye

¹ Available at <https://www.flightglobal.com/products/flight-international/archive/>

² Although it should be noted that, on 31 July 2018, as this present report was nearing completion, neither the FlySkye Facebook page nor Twitter account was publicly accessible.

³ Much has been written about 'echo chambers', 'filter bubbles', and the 'ideological homophily' that exists among followers of particular political or campaign group social media accounts. See, for example: Quattrociocchi *et al.* (2016); Boutyline and Willer (2017); and Bright (2017).

accounts will reveal very few voices opposed to the reintroduction of air links to Skye. It is also unclear how many of the sites' followers live or work in the Skye and Lochalsh area,⁴ or the extent and nature of their personal connections to the area. With these points in mind, we would certainly not claim that FlySkye's social media following represents a true cross-section of the Skye and Lochalsh population, or that their views on reintroduced air services are representative of the local population, and its diaspora, as a whole. It is probably also fair to say that, of those posts that contain opinions on the potential impacts of a reopened Skye airport, the vast majority relate to broad *economic and business* (including tourism) impacts. However, these social media accounts do also offer some interesting insights into perceived socio-cultural benefits, which will be discussed more fully in Section 7 of this report.

⁴ Early FlySkye analysis suggested that the majority of Facebook 'likes' were from Glasgow, closely followed by Portree, Edinburgh, and Inverness. See <https://tinyurl.com/ycwuvq2e>

3. A brief history of civil aviation in Skye

For any readers unfamiliar with Scottish geography, the Isle of Skye is situated close to the north-west coast of the Scottish mainland and is the largest of the Inner Hebrides archipelago (see Figure 2). At the time of the most recent census, in 2011, Skye had a population of 10,008 (National Records of Scotland, 2013, p.2), although it is estimated that this figure increases six-fold to almost 66,000 during the peak summer tourist season (e.g., Woollard, 2017).



Figure 2: Map of Scotland, showing the position of Skye (Contains OS data © Crown copyright and database right 2018)

Currently, the key access routes to mainland Scotland from Skye are by ferry from Armadale at the south of the island, and by a road bridge, opened in 1995, which connects the Skye village, Kyleakin, with the mainland village, Kyle of Lochalsh. Historically, however, the island has also been served by air links to the mainland, with the first of these emerging in the 1930s, during the pre-war pioneering days of Scottish civil aviation.

In 1935, after surveying a number of possible landing strip sites on the island (including around Broadford), Northern & Scottish Airways (NSA) decided to establish an airfield on a large field at Glen Brittle, at the head of Loch Brittle on the south-west coast of Skye. This location was broadly equidistant from the main centres of population on the island, but more importantly allowed for an uninterrupted (and, in bad weather, relatively clear) approach over the sea from the south-west (Clegg, 1995, p.25). Talking to *The Scotsman* newspaper in July 1935, the NSA managing director was enthusiastic about the company's forthcoming Western Isles services:

“So far as we are concerned...the whole thing is in the nature of an experiment. We have no idea of the amount of passenger traffic which will be available for these machines, but there is no doubt that there is a definite demand for the air services. We have had interviews with influential people in Lewis and Skye, and they are very pressing that we should push on with our plans.” (Scotsman, 1935a)

On 5 December 1935, NSA started a twice-weekly service between Renfrew Airport in Glasgow and Glen Brittle, with fares for the 90-minute flight set at £3.5s. single, or £6.10s return (Clegg, 1995, p.26). Reporting from the inaugural flight (see Figure 3), *The Scotsman* (1935b) suggested that the service “should be particularly valuable to hustling Americans as enabling them to view a large part of the Highlands and the Hebrides in a forenoon”.



Figure 3: Inaugural flight between Renfrew and Skye, 5 December 1935 (Image courtesy of Am Baile)

In early 1936, the Renfrew-Skye route was extended to Askernish on South Uist, and to Sollas on North Uist, providing a service regarded as “a very definite advantage to the community in general” (Taylor, 1936). By late 1936, the NSA had extended the route further to provide a circular Hebridean service that included an additional stop at Northbay on Barra, and also provided for “on demand” connections to Benbecula and Harris, “subject to tide and weather” (Clegg, 1995, p.51).

In 1937, NSA merged with Highland Airways to form a new company, Scottish Airways, which operated as ‘Western Isles Airways’ for its Hebridean services. In its first winter (1937-38), Scottish Airways cut back significantly on its routes and also operated at reduced frequencies. In an effort to reduce empty leg flying, Skye was removed from the multi-stop route and given a terminator service of its own. However, this was short-lived, and the Renfrew-Glenbrittle service ceased on 2 May 1938. The *Glasgow Herald* of 9 May 1938 reported on the “considerable

disappointment...caused in Skye by the news that the air service to the island is to cease". The by then daily service, the *Herald* continued, had "not only brought Glasgow within an hour's journey but has also been a boon to inter-island passengers, as the boat passage is long and tedious". This sense of loss was echoed by John Grierson⁵ towards the end of the Second World War. Writing to *Flight* in February 1945, he reminisced about NSA's Chief Pilot, David Barclay, and the flying skills required on the Renfrew-Skye route, and reflected on the importance of air travel to Scottish island communities:

"But the whole story has not yet been written...of the incredible 2 x 4 field at the bottom of a valley on to which Barclay landed by means of the "Glen Brittle swerve" on the Isle of Skye. How these air services became part of the lives of the islanders before the war was evidenced by the scene of farmers, with their dogs, flying across to market on the mainland once a week."
(Grierson, 1945)

The late 1930s also saw efforts by West of Scotland Air Services to establish a flying boat service to Skye. In 1937, they were reportedly negotiating the lease of part of the former Harland and Wolff shipyard at Greenock, with a view to introducing a thrice-weekly Western Isles service to Tobermory, Portree and Stornoway (*Flight*, 1937a & 1937b). However, no reports can be found of this service having actually operated.

In the immediate post-war period, with the formation of the new British European Airways Corporation, the reinstatement of a direct service between Glasgow and Skye was mooted (*Flight*, 1946), but these proposals never came to fruition. In 1951, during a House of Commons debate on civil aviation, the need for significant public subsidies for Western Isles air services was discussed; while Lord Malcolm Douglas-Hamilton, the then MP for Inverness, proposed the development of flying boat services across the Highlands and Islands, including one between Ullapool and Skye (*Hansard*, 1951). It was to be July 1964, however, before Skye was provided with its first post-war air service to the mainland,⁶ when Strathallan Air Services (Strathair) started its on-demand 'Air Road to the Isles' service between Glasgow, Edinburgh and Skye, where landings were made in a field near Skeabost Bridge, some four miles from Portree (*Flight International*, 1964a & 1964b).

The mid-1960s also saw concerted calls for a new airstrip to be built on the island, although its proposed location was the subject of considerable local dispute. The Scottish section of the UK Government's Ministry of Aviation favoured a site on the south of the island, at Ashaig, near Broadford, with the British Army Corps of Royal

⁵ This was not John Grierson (1898-1972), the Scottish documentary filmmaker. Rather, it was John Grierson (1909-1977), the long-distance flier, test pilot, and aviation writer (see *Flight International*, 1977).

⁶ Although a small airline called Skyeways apparently operated intermittently between Broadford and Lochmaddy in North Uist, during the summer months in the late 1940s and early 1950s. Skyeways used a Dragon Rapide, rumoured to have been constructed from the salvaged parts of other Rapides (*Press and Journal*, 2004).

Engineers offering to build the airstrip as part of its Operation Military Aid to the Community (OPMAC) scheme. However, Skye District Council were opposed to the Broadford site and initially rejected the Ministry's proposal, preferring a site much further north, at Borge, just over four miles from the island's main town and administrative centre, Portree (*Glasgow Herald*, 1965). Eventually, though, the council agreed that Broadford should be the site (*Times*, 1966), and a 2,600ft x 100ft airstrip was constructed there, by the Royal Engineers, between 1969 and 1971. Some financial assistance was provided by the HIDB, because of the high costs associated with the "difficulty of construction in Skye" (HIDB, 1970, p.73). As the airstrip was being constructed, Loganair expressed an interest in operating scheduled services to and from Inverness and Glasgow. Citing the local catchment population of 9,000, estimated annual visitor numbers of 500,000, and a rapidly expanding shellfish industry, Loganair believed that "all the normal signs of traffic potential indicate that Skye aerodrome will be an important terminal on the Scottish Routes" (Civil Aviation Authority, 1972).

Under the control of the then Inverness County Council, Broadford Airfield was officially opened on 14 April 1972 by the Under-Secretary of State for Scotland, George Younger; and, in July 1972, Loganair launched its Skye-Glasgow and Skye-Inverness services (see Figure 4), which formed part of a small series of "experimental air services" receiving financial assistance from the HIDB (HIDB, 1973, p.62). Of these experimental services, the traffic on the Glasgow to Skye route was initially regarded as 'the most encouraging' (HIDB, 1974, p.31). However, the Skye-Inverness service was terminated in 1974; one of several short-lived Loganair routes around this time, their cessation being attributed to the rising aviation fuel costs and prohibitive fares caused by the 1973-74 oil crisis (Hutchison, 1987, p.20).

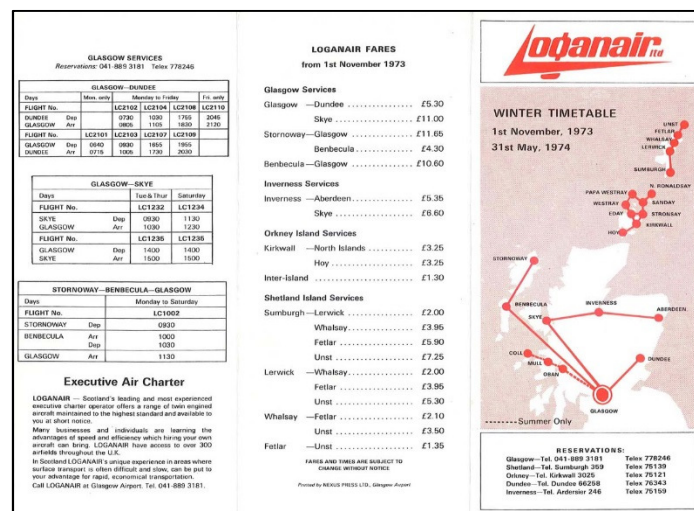


Figure 4: Loganair winter timetable for 1973-74, showing the Skye to Glasgow and Inverness services (Image from the Björn Larsson collection at <http://www.timetableimages.com/>)

In the same year that the Skye-Inverness service ceased (1974), the CAA produced a report entitled *Air Transport in the Scottish Highlands and Islands*, which concluded

that the air transport system made “an important contribution to the social and economic well-being” of the region, but that “in general...these services and facilities cannot be provided profitably”. The report added that, “If they are to be maintained and developed, then some at least of the services...must be supported from public funds” (CAA, 1974, p.3). As a consequence (*Hansard*, 1975), the parliamentary act establishing the Scottish Development Agency in 1975 allowed the Secretary of State, for a period of five years only, to provide financial assistance to those air services serving the Highlands and Islands (*Scottish Development Agency Act 1975*, chapter 69, section 21). These powers were “used sparingly” (*Hansard*, 1980), but were applied to Loganair’s Glasgow-Skye service; and when section 21 of the 1975 Act was replaced by the *Highlands and Islands Air Services (Scotland) Act 1980*, the Glasgow-Broadford route continued to be supported financially (*Hansard*, 1980), as it met the four eligibility criteria:

- 1) it crossed regional boundaries;
- 2) it crossed water;
- 3) it was essential to the life of a remote community; and
- 4) it could clearly be demonstrated that there was no prospect of the service becoming economically viable (Scottish Development Department, 1987a)

Between May and July 1976, at the request of the Scottish Office, Loganair conducted a market research survey of passengers on the Skye-Glasgow service. Of the 192 respondents, just over one-quarter (26.4%) resided in the Skye District. In terms of the purpose of their travel, 61.5% of passengers were travelling for business or work-related reasons; 18.8% for holidays or recreation; 18.2% to visit friends or relations; and just 1.0% for education or study. The existing departure times were regarded as ‘entirely convenient’ by 75.7% of passengers; while just 10.7% described the air fare as too expensive. Indeed, opinions on most aspects of the service were favourable, with the main criticisms being reserved for the noise and comfort of the aircraft (Scottish Development Department, 1987b). Figure 5 below gives some idea of the travelling experience on the Skye-Glasgow service.



Figure 5: Interior of a Loganair Islander on a Glasgow to Skye flight in 1981 (Photo courtesy of Duncan McCallum)

By early 1982, however, Loganair, who were experiencing financial difficulties at the time (see Hutchison, 1987, p.16), were beginning to express some concerns about the continuing viability of the Skye-Glasgow service. Passenger numbers had dropped to the extent that the subsidy equivalent per passenger carried (£32.33) now exceeded the price of a full fare; leaving Loganair to conclude that, "There seems to be no commercial justification and comparatively little social justification for retaining the air service" (Scottish Development Department, 1982). At that time, the Scottish Development Department appeared reluctant to cease the subsidy, "primarily because of a feeling that the political hassle of withdrawing support would be out of all proportion to the saving we might achieve" (Scottish Development Department, 1987b). Three years later, though, in March to May 1985, the Scottish Office Central Research Unit conducted a further survey of Skye-Glasgow air passengers (with 239 responses), with the aim of providing "a basis for the evaluation of the present deficit-subsidy arrangements" in support of the service. As was the case with the 1976 survey, only around one-quarter of the passengers lived in the Skye and Lochalsh area. And in terms of journey purpose, 43% were travelling for business reasons; 19% for holidays and recreation; 19% to visit friends and relations; 9% for medical reasons; and 5% for education. Senior civil servants in the Scottish Office believed the survey report to be "a bit thin, certainly to implement any changes, if these changes are likely to be unpopular". Significantly, in terms of this present report, they sought more details on the "essential social journeys" being undertaken in 1985. As one Scottish Office official put it:

"I would not like to recommend withdrawal because of the low proportion of legitimate users, only to find that this gave rise to some awful and newsworthy sob stories." (Scottish Development Department, 1987b).

By 1987, passenger numbers on the Skye-Glasgow service had more than halved, from a peak of 4,101 in 1978-79, to 1,662 in 1986-87; and a typical flight was 70% empty.⁷ The Scottish Development Department, therefore, sought the views of interested bodies on whether the subsidy paid to Loganair should continue, on the understanding that the service would most probably be discontinued should the subsidy be withdrawn. This consultation exercise was conducted from July to September 1987, with most of the 14 responses being in favour of retaining some

⁷ One major factor in the drop in passenger numbers, cited by Loganair, was the decline in operations at the Howard Doris manufacturing and fabrication yard at Kishorn. However, in its consultation response of 9 October 1987, the Convention of Scottish Local Authorities (COSLA) instead suggested that the low usage was attributable to the limited service offered; in particular that "the service does not offer the facility to make a return journey to or from Skye allowing a reasonable time to carry out business at the destination, with the result that the service is of very little use for business purposes". (Scottish Development Department, 1987a).

type of air service.^{8,9} Despite this general support amongst the consultees, as well as efforts made by a newly-created company, West Highland Aviation, to jointly operate the service with Loganair at a reduced subsidy, the Scottish Office decided to withdraw its financial assistance in March 1988, arguing that the Skye-Glasgow service could “no longer be justified as a “lifeline” service” (Scottish Office, 1988). One senior civil servant, writing in February 1988, summarised the decision as follows:

“It was quickly agreed that all the factors pointed to withdrawal of the subsidy. The service was not a lifeline service; there had been a substantial and continuing drop in passenger traffic; many flights were virtually empty; the subsidy per passenger broadly equalled the fare; and a very limited number of Skye inhabitants used the service. It was thought unlikely that more marketing would lead to a significant improvement.” (Scottish Development Department, 1987a)

Following the decision, the Skye-Glasgow service ceased almost immediately, with the final flight departing Broadford on Friday, 25 March 1988, at the end of Loganair’s published winter 1987-88 timetable (see Figure 6).



Figure 6: Loganair’s last flight from Skye, 25 March 1988 (Source: *West Highland Free Press*, 1 April 1988).

⁸ 15 of the 29 bodies invited to participate in the consultation chose not to respond. These included Highlands and Islands Airports Limited (HIAL), the Skye and Lochalsh Business Association, and 8 of the 15 community councils in the Skye and Lochalsh area (Scottish Development Department, 1987a).

⁹ Interestingly, the Scottish Tourist Board had no objection to the discontinuation of the subsidy, concluding that “there is not sufficient use of the service by tourists to justify a Board objection” (Scottish Development Department, 1987a).

While there have been no scheduled passenger services at Broadford since 1988, the airfield, now owned by the Highland Council, is still operational (see Figure 7)., being used by the Skye Flying Club, other private and commercial fixed-wing aircraft and helicopters, and the emergency services. The airfield is also occasionally used for wind turbine blade laydown operations (Highland Council, 2017).



Figure 7: Broadford Airfield in 2007 (Source: HITRANS, 2007)

4. Efforts to re-establish air passenger services to and from Skye, since 1988

Since the cessation of Loganair's Glasgow-Skye service in 1988, several efforts have been made to restore scheduled air services between the island and the mainland. Indeed, just three years later, Skeabost and District Community Council¹⁰ were urging Skye and Lochalsh District Council to pursue the matter, arguing that the level of subsidy required to operate the service would pale into insignificance when compared with the subsidies provided for ferry operations across the Highlands and Islands (*West Highland Free Press*, 1991).

In 1998, a newly formed company called West Highland Air Transport (WHAT) announced ambitious plans to transform the Broadford airfield by creating a new passenger terminal, cargo-handling facilities, hangars and an air traffic control tower, with these new facilities being operational by 2001. Using a 50-seater turboprop aircraft, the WHAT flights were to be aimed at the tourist industry, the business community, and the freight market. Potential destinations cited by WHAT included Glasgow, Edinburgh, London, Dublin, Amsterdam, Oslo, and Reykjavik. As part of a feasibility study, WHAT reportedly sent a questionnaire to over 2,000 businesses in and around Skye, to investigate demand for flights and preferred destinations. The project director was keen to emphasise that, "This is not pie in the sky stuff. This is a serious idea being properly researched by hard-nosed businessmen" (Calder, 1998). WHAT entered into an exclusive leaseholder contract with Highland Council, but, by late-2004, had not yet submitted a detailed planning proposal. At that stage, WHAT's revised plans were to introduce: twice-daily flights between the island and either Glasgow or Edinburgh, with more frequent flights in the summer; one return flight a day between Skye and Luton; and, eventually, a possible link to Inverness and on to Amsterdam (Dennier, 2004). In what was a "huge disappointment to Skye councillors" (Candlish, 2006), detailed plans had still not materialised by the end of the agreement in August 2006, and WHAT's lease on the Broadford airstrip was not renewed.

WHAT's plans to upgrade Broadford were mentioned as being "in an advanced stage" in a 2003 report (updated in 2004) for HITRANS by The Aviation & Travel Consultancy (A&TC), who provided an economic assessment of an expanded air services network for the Highlands and Islands. This study incorporated services to two potential new airports, at Oban and at Broadford, with the costs for the latter being based on a "modest lengthening" of the runway and a 37-seat Dash 8-100 aircraft (with a maximum of 33 occupied seats) flying twice daily to Edinburgh. This report concluded that obtaining a CAA Licence for Broadford was a "Priority Three" goal, i.e. that it was "essential by April 2007 or as soon as possible" (A&TC, 2004, p.33-34).

¹⁰ In their 1987 consultation response, Skeabost and District Community Council had highlighted the importance of the air service for the transportation of hospital patients, and in allowing at least two local children to return home at weekends from the Royal Blind School in Edinburgh (Scottish Development Department, 1987a).

The WHAT proposals were also discussed in another report for HITRANS, this time by Steer Davies Gleave (2004), who provided an “independent view” of the demand forecasts for air services between Skye and Scotland’s Central Belt and between Skye and London. They concluded that the proposed operations between Skye and the Central Belt would only be achievable if no other services from Skye operated, and if the characteristics of the service were fine-tuned to maximise the non-VFR (visiting friends and relatives) market. Extensive destination marketing of Skye, combined with attractive air packages, would also be required. In line with HITRANS proposals at the time for Skye services, they also suggested that if operations were limited to only one Central Belt airport (i.e. Edinburgh *or* Glasgow), then there would be sufficient demand for the service.

The year 2005 saw two studies commissioned by HIE, the first of which was conducted by Mott MacDonald and identified sites on Skye capable of accommodating a Code 3 runway with at least 1,300m take-off length and with an instrument approach. The process resulted in a short list of four potential sites, plus the current airfield at Broadford. This study concluded that the Broadford site was the only practicable location in terms of physical capacity and aviation landing, take off and approach (see HITRANS, 2007). The second study consisted of an environmental impact assessment of the Broadford airfield site, conducted by Halcrow. The Halcrow study noted that: the coastline to the north of the airstrip is a site of special scientific interest; that the watercourse to the east is an important otter habitat; and that an ancient burial ground and current graveyard lie to the west (see HITRANS, 2007).

In 2007, Mott MacDonald were again commissioned, this time to identify the detailed development options and costings for operating a scheduled service from Broadford. From this study, four principal options emerged:

- 1) do the minimum (although this option would not provide for the commercial services envisaged);
- 2) a 950m precision approach runway, with new apron and terminal areas, and an improved junction with the nearby trunk road, at an estimated total cost of £11 million;
- 3) a 1,319m precision approach runway (requiring land reclamation), with the above infrastructure, at a cost of £48 million; and
- 4) a 1,479m precision approach runway (also requiring some land reclamation) including two 160m starter strips at either end, at a cost of £24 million.

HITRANS concluded that the environmental impacts identified by Halcrow in 2005 could be satisfactorily mitigated under all but option 3 (HITRANS, 2007).

By 2008, the introduction of an air service from Skye to the Central Belt formed part of the HITRANS programme of initiatives designed to deliver the *Transport Strategy for the Highlands and Islands, 2008-2021* (HITRANS, 2008a). Although interestingly (given the socio-cultural focus of this current report) HITRANS appeared to view the reintroduction of Skye air services only in terms of the strategy’s *primary objective* of regional competitiveness and economic growth, and not in terms of the strategy’s

supporting objectives of enabling people to participate in everyday life, or improving the health of people in the area (see HITRANS, 2008b, p.15).

In 2010, Mott MacDonald conducted a review of air services in the Highlands and Islands, on behalf of HITRANS and the Shetland Transport Partnership (ZetTrans), and, again, the situation in Skye was discussed. This report made much of the location of the existing airfield, arguing that an airstrip located near Portree would be more convenient for the island as a whole. Mott MacDonald, in addition to the “do nothing scenario”, outlined four potential options:

- 1) for around £4m, providing some basic terminal and fire station facilities and extending the Broadford airstrip to 800m, allowing the operation of an 18-seat Twin Otter or a 13-seat Grand Caravan, although these aircraft were regarded as perhaps too small for the available market;
- 2) for around £12m, extending the existing airstrip to 1,300m, allowing the use of a 33-seat Saab 340;
- 3) for £15-£20m, constructing a new airstrip at Dunvegan, some 12 miles from Portree; or
- 4) for “minimal” costs, providing a sheltered pontoon area for seaplanes in the inner part of Portree Bay.

In their recommendations, which in many ways were reminiscent of proposed plans for flying boat services to Skye in the 1930s and 1950s, Mott MacDonald suggested that HITRANS should initially seek government grants to provide the necessary infrastructure at Portree to test-market seaplane routes to Glasgow and perhaps Inverness. Should the level of demand be such that the need for an airstrip capable of handling larger aircraft became apparent, Mott MacDonald argued that further studies into an extended Broadford runway or a new Dunvegan airstrip could then be conducted.

In 2012, HITRANS, HIE and the Highland Council jointly commissioned RDC Aviation and ARUP to conduct a Skye air services feasibility study. The main aims of this study were to: review the feasibility and the development and operational costs of the previously studied airfield options, particularly those identified in the 2007 Mott MacDonald study (see HITRANS, 2007); assess the aircraft types that could operate at the airfield, and the commercial viability of re-establishing scheduled services to Skye; assess passenger demand for air services between Skye and the Central Belt; and conduct an associated high level wider economic benefit assessment. In their final report (RDC Aviation and ARUP, 2013), the consultants identified the capital expenditure, and the annual operating and maintenance costs, that would be required for four runway options:

Table 1: Estimated costs of the four Skye runway options, identified in RDC Aviation and ARUP (2013)		
Runway Option¹¹	Capital Expenditure	Annual Operating and Maintenance Costs
A. Existing airstrip, 771m, Code 1C, Visual approach	£2.3m to £2.8m	£550k to £660k
B. 900m, Code 2C, Visual approach	£6.2m to £7.6m	£660k to £790k
C. 1,035m, Code 2C, Precision approach	£9.7m to £11.7m	£760k to £910k
D. 950m, Code 2C, Precision approach	£12.5m to £15.3m	£850k to £1,010k

They estimated that the unconstrained demand for air services from Skye to Glasgow/Edinburgh would be around 21,500 passengers p.a., with 52% (around 11,200) of these being Skye residents. Their more detailed bottom-up forecast, based on a 12x weekly service in a 19-seat aircraft, predicted a throughput of around 14,500 passengers p.a., giving an average load factor of 62% (p.81) and generating over £150k revenue for the airport p.a. (p.82). Based on their commercial analysis of airline costs, RDC and ARUP calculated the break-even one-way fare (including a 10% profit margin) as £110-£175 for Skye-Glasgow services and £120-£200 for Skye-Edinburgh services, assuming that the aircraft is dedicated to that route. Based on benchmark comparisons, and on the results of an online survey (with 684 usable responses), they established that passengers might be willing to pay fares within the lower end of these ranges. On this basis, they argued, “unsubsidised services are likely, at best, to be only marginally viable” (p.82); and they presented a range of potential subsidy costs for the first year of a Skye-Glasgow service, with the base demand figures ranging from around £170k to over £1.1m (p.60). They also calculated the Benefit-Cost Ratio (BCR) associated with a range of scenarios, with these BCRs ranging from 0.75 to 1.13 (p.84). RDC Aviation and ARUP concluded that “commencing scheduled air services from Skye would provide significant benefits¹² to the Island and adjacent region”, and recommended that a joint working group (comprising the Scottish Government, Transport Scotland, HIAL, the Highland Council, HITRANS and HIE) be established to progress the case. Following this recommendation, a joint working group was established later that year, with representatives of HITRANS, HIE and the Highland Council, and additional technical advice provided by HIAL (HITRANS, 2013).

In 2013, HITRANS commissioned Northpoint Aviation Services, and others, to identify opportunities for new and/or enhanced air routes using spare aircraft capacity available in the west Highlands and Islands; with a particular emphasis on maximising the use of two new Twin Otter aircraft that the Scottish Government had committed to purchase. In their report (Northpoint Aviation Services *et al.*, 2013) the consultative partners suggested that a Glasgow-Skye timetable could be combined

¹¹ Readers of the RDC Aviation and ARUP (2013) report should be aware of conflicting descriptions of the four runway options on p.18.

¹² The RDC and ARUP report touches slightly on the social benefits of a reintroduced Skye service. These will be discussed in Section 7 of this current report.

with one for Glasgow-Barra, although this would require the use of two Twin Otters. A suggested variant was operating a Glasgow-Skye service via Oban, combined with a Glasgow-Barra service, although this would create scheduling issues, potential service integrity risks, and greater operational costs than those calculated by RDC and ARUP (pp.61-63). They also recommended that further consideration be given to using an Islander aircraft for the Glasgow-Skye service, although this would require a hangar and additional infrastructure on Skye to allow the aircraft to overnight on the island (p.64). HITRANS subsequently commissioned Northpoint Aviation and Nineteen Hundred Aviation to provide an updated estimate of the annual subsidy requirements of a scheduled Skye air service, drawing on the RDC and ARUP operational model from 2013. Based on a base case passenger volume of 14,500 p.a. and a low-end fare of £100 per sector, the revised subsidy was estimated to be £923,764 (HITRANS, 2015).

In 2015, HIE commissioned ekosgen and Reference Economic Consultants to build upon the RDC and ARUP work of 2013 and to investigate the economic *and* the social benefits of re-establishing a Skye – Central Belt air service. This research was based on: an online survey (with 179 responses) of businesses and social enterprises across Skye and Lochalsh; 20 detailed interviews with local businesses; consultations with 15 “key stakeholders” and community groups; and comparative case studies of other small remote airports and other Highlands and Islands air services to Glasgow. Amongst all of the many feasibility studies and economic analyses conducted since 1988, the ekosgen and Reference Economic Consultants study [from hereon in referred to simply as the ekosgen study], in explicitly investigating the potential *social* benefits of reintroduced air services on Skye, is the one that is of most direct relevance to this present report. As such, it will be discussed in more detail in Section 7. What can be said here, however, is that it confirmed the demand for a twice-daily air service to Glasgow, and concluded that the service would bring “significant economic and social benefits” to Skye and its environs (ekosgen and Reference Economic Consultants, 2016, p.70)

The results of these more recent studies were incorporated into a *Skye Air Services Business Case*, prepared by RDC Aviation and ARUP in 2016, which now considered just two options (see Table 2), both based on Option A from their 2013 study: Option A1, requiring a capital investment of £3.1m to £4m, was based on supporting a 9-seat aircraft; Option A2 required capital expenditure of £4.1m to £5m and supported a 19-seater (p.4). Annual operating and maintenance costs for Option A1 were estimated to be between £460k and £560k, with the Option A2 costs being only around £20k p.a. higher (p.74).

Table 2: Estimated costs of the two Skye airfield options, identified in RDC Aviation and ARUP (2016)

Airfield Option	Capital Expenditure	Annual Operating and Maintenance Costs
A1. Existing airstrip, 771m, Code 1C, Non-instrument approach, supporting a 9-seater aircraft	£3.1m to £4m	£460k to £560k
A2. Existing airstrip, 771m, Code 1C, Non-instrument approach, supporting a 19-seater aircraft	£4.1m to £5m	£480k to £580k

Updated traffic forecasts indicated an unconstrained demand for Skye-Glasgow services of 23,800 passengers p.a.; with bottom-up estimates now suggesting 15,100 passengers p.a. on a 12x weekly 19-seat service, and 12,700 passengers p.a. on a 21x weekly 9-seat service (p.5). The required break-even one-way fare (including a 10% profit margin) was now £125-£160 for Glasgow services (p.5), slightly higher than the level deemed acceptable in the 2013 user survey. BCRs for all benefits were again calculated for the two options, with these ranging from 1.30 to 1.52 for Option A1 and from 1.87 to 2.21 for Option A2 (pp.8-10), leaving HITRANS to conclude that “for every £1 spent on capital and operating costs for the airport, £2 will come back to the area in terms of revenue, so for a transport project that’s a pretty good return” (Baynes, 2017). The potential subsidy costs for the first year of a Skye-Glasgow service, using the base case passengers figure of 15,100 p.a. on a 19-seat aircraft, now ranged from £0.31m to £0.76m (p.53). This business case was approved by the Highland Council in November 2016 (Ramage, 2016), and the joint working group subsequently undertook additional discussions with Transport Scotland and HIAL, in an attempt to advance the proposals (Highland Council, 2016), although a perceived lack of progress was viewed frustratingly by FlySkye campaigners (Ross, 2017).

Then, in April 2018, HITRANS and the other project promoters proposed the establishment of a short life working group that would aim to develop an air service linking Skye with Glasgow or Edinburgh “on a trial basis with the minimum capital investment”. Recognising the current “constrained public sector financial environment” these proposals now included, for example: a 200m² modular terminal building instead of the 720m² permanent building originally envisaged; a 30-space car park instead of one with 100 spaces; and the retention of an end-of-life HIAL Rescue and Fire Fighting Services vehicle, rather than the new vehicle originally costed (HITRANS, 2018). At the time of writing this present report (July 2018), the project promoters were to seek Ministerial support to develop the most viable option to reintroduce the Skye-Glasgow service. With the Loganair managing director having recently predicted a “70/30 probability” that flights between Skye and Glasgow will resume within the next two years (*Scotsman*, 2018), there are perhaps renewed grounds for optimism that Broadford will see its first scheduled passenger service in over 30 years.

5. Defining social and cultural impact

In exploring the potential social and cultural impact of a reopened Skye Airport, one immediate challenge emerges, in that there are no standard definitions of either social impact or cultural impact.

With regard to social impact, this problem has been highlighted by the likes of Maas and Liket (2011), who presented just some of the definitions appearing in the academic literature, across a range of disciplines (see Table 3).

Table 3: Definitions of social impact, adapted from Maas and Liket (2011)	
Term and author(s)	Definition
Social impact (Latané, 1981)	By social impact, I mean any of the great variety of changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behaviour that occur in an individual, human, or animal, as a result of the real, implied, or imagined presence or actions of other individuals
Social impact (Freudenberg, 1986)	Social impact refers to impacts (or effects, or consequences) that are likely to be experienced by an equally broad range of social groups as a result of some course of action
Social impact (Burdge & Vanclay, 1996)	By social impacts we mean the consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organise to meet their needs and generally act as a member of society
Social value (Emerson <i>et al.</i> , 2000)	Social value is created when resources, inputs, processes, or policies are combined to generate improvements in the lives of individuals or society as a whole
Social impact (Gentile, 2002)	Social impacts are the wider societal concerns that reflect and respect the complex interdependency between business practice and society
Social impact (International Association for Impact Assessment, 2009)	Social impacts are intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions

The problem of defining social impact is already recognised within the Scottish public sector. For example, Communities Challenge Scotland, who, since 2016, have coordinated the Scottish Government's 'Social Impact Pledge' initiative, observe:

"Social Impact can be difficult to define. It is often understood as the effects on people and communities that happen as a result of an action, activity, project, programme or policy" (Communities Challenge Scotland, n.d.).

This lack of a conceptual consensus is also acknowledged within the transport discipline (see, for example, Jones and Lucas, 2012). However, one definition of social impacts that is becoming increasingly recognised in the transport field is that provided by Geurs *et al.* (2009, p.71):

"...social impacts of transport are defined as changes in transport sources that (might) positively or negatively influence the preferences, well-being, behaviour or perception of individuals, groups, social categories and society in general (in the future)."

Meanwhile, with regard to definitions of cultural impact, these are less common, but just as diverse. For example, Sharpley and Stone (2011, p.349) describe cultural impacts as “transformations in the processes (values, traditions and norms) through which individuals and societies define themselves and their behaviour”. While Sagnia (2004) suggests that cultural impacts are:

“...the consequences to human populations of any public or private policies and actions that significantly change their norms, values, beliefs, practices, institutions as well as the way they live, work, socialize and organise themselves as part of their cultural life.”

The conceptual confusion is exacerbated by the fact that a clear distinction is not always made between ‘social’ and ‘cultural’ impacts. Indeed, Partal and Dunphy (2016, p.7) observe that cultural impact is often discussed as a “sub-dimension” of social impact; while Sharpley and Stone (2011, p.349) prefer to consider them collectively, as “socio-cultural impacts”.

The definitions above are all rather broad in nature, and lack any great detail on the more specific ‘types’ of impact encompassed by the overarching terms ‘social impact’ and ‘cultural impact’. In this present report, the authors will discuss the potential impact of a reopened Skye Airport in terms of seven narrower (and often interrelated) socio-cultural impact ‘themes’. These seven themes have been drawn from two strands of literature:

- literature on the social impact of cultural services and the arts, particularly the work of Matarasso (1997), and a literature review conducted by Ruiz (2004) on behalf of the Scottish Executive; and
- literature on the socio-cultural impacts of transport services and projects, particularly the reviews conducted by Parkhurst and Shergold (2009), Markovich and Lucas (2011), and Jones and Lucas (2012).

The seven themes, which are discussed more fully in Section 7 of this report, are as follows:

“Lifeline services”, accessibility, and connectivity. Where a reopened airport might be viewed largely by Skye and Lochalsh residents as a means of: more readily reaching the goods and services deemed essential to their everyday lives (“lifeline services”); enabling improved journey times, compared with using surface transport; maintaining links with family and friends; and accessing a wider range of recreational and cultural experiences. Or where the airport would be viewed more simply as a means of connecting the island with the “outside world”.

Education and learning. Where air services might be regarded as a means of people accessing educational and training opportunities, either on the mainland or on the Isle of Skye itself. And also where the airport might be regarded as an educational resource in its own right.

Health and well-being. Where a reopened airport might be seen as a more convenient and comfortable means of accessing specialist healthcare services on the Scottish mainland.

Local social networks and social capital. Where a new airport terminal at Broadford might be viewed as a potential social arena, where islanders can meet up purposely or serendipitously, thus reinforcing local social networks and social capital. Or where the airport might become regarded as a destination or artistic/cultural venue in its own right.

Social inclusion/exclusion. Where the provision of air services to and from Skye, and the associated fares structure, might be viewed in terms of their levels of inclusivity.

Community empowerment and development. Where the creation of a new airport might help to strengthen community involvement and co-operation on Skye, and instil a greater sense of community pride and positivity.

Local identity and culture. Where a reopened Skye airport might play a role in maintaining cultural identity and a sense of place.

6. Previous research into the social and cultural impact of airports, particularly in remote, peripheral areas

In their review of the social consequences of transport decision-making, Jones and Lucas (2012, p.4) state that “the social dimension appears to be the ‘poor relation’ in transport research, policy and practice”, arguing that this has much to do with its “limited recognition and poor articulation”. It will perhaps be unsurprising, then, to learn that, over the last 20 years, relatively little research has been conducted specifically into the socio-cultural impact of airports and air travel in remote, peripheral areas.

In a longitudinal series of studies, the Air Transport Action Group (ATAG) has provided a global view of the benefits of aviation. Based largely on data compiled from official national statistical agencies and aviation industry bodies, these studies have focused on the economic benefits of air transport, but have also touched upon wider social impacts. For example, in the most recent study, published in 2016, the ATAG talks broadly about the provision of medical care, access to educational opportunities, and increased connectivity in remote communities (Air Transport Action Group, 2016, p.10). Similarly, the Industry High Level Group, who draw on the ATAG report and on other aviation industry body reports, speak broadly of the role of air transport in allowing people in rural and remote areas to access healthcare and education, and in generally “improving quality of life by broadening people’s leisure and cultural experiences” (Industry High Level Group, 2017, pp.30-31).

A wide, international approach to examining the economic and social impacts of airports was also adopted by York Aviation in their 2004 study of airports across Europe. This study, a follow-up to one conducted by ACI EUROPE in 1998, was based on a survey of 41 (apparently larger) European airports, together with analyses of these airports’ reports and other publicly available literature. Here, too, the value of airports in remote regions was expressed in terms of access to essential services, such as hospitals and further education, and as “an important indicator of quality of life” (York Aviation, 2004, p.46).

With regard to specific countries throughout the world, it is probably fair to say that Australia’s airport network has received the most attention. For example, two reports by Deloitte Access Economics (2012 & 2018) and one by the Australian Airports Association (2012), have investigated the Australian network as a whole. Again, while these reports have focused largely on the economic contribution of the country’s airports, they are in broad agreement that airports in remote, rural communities also play an important role in delivering essential and emergency services (particularly the Royal Flying Doctors Service), and in connecting individuals, families and communities with the rest of the country and the world. Donehue and Baker (2012), meanwhile, conducted a survey of airport managers, regulators and local council officials in remote, rural and regional (RRR) areas across Australia, concluding that airports in these areas had a key role in instilling a “sense of social connectivity”, which in turn was seen as “vitally important to social

sustainability”. They also observed, however, that Australian RRR airports lack the capacity to quantify and demonstrate these less tangible benefits.

Other Australian studies have focused on the regional airports within particular states. In 2010, for example, Ernst & Young evaluated 14 completed aviation-related projects in Victoria that had been funded by the Regional Infrastructure Development Fund. This included a “social capital analysis”, which concluded that these airport projects had: resulted in “stronger personal (family and friends), business and institutional networks for regional residents”; “strengthened the capacity of regional airports to host a suite of health services”; and “enhanced the liveability of regional areas” (Ernst & Young, 2010, p.6). In 2016, AECOM Australia investigated the community benefits of 21 regional airports in South Australia, expressing these benefits in terms of: enabling connectivity; maintaining social ties; overcoming isolation; as a basis for accessing essential services (including healthcare and education); attracting arts and cultural events to remote areas; and encouraging civic participation by enabling access to elected representatives and government officials (AECOM Australia, 2016, pp.3-7). One interesting and unusual contribution to the Australian literature was made by Moogan (2007), who recounted her experiences of travelling on the twice-weekly flight between Brisbane and Mount Isa in Queensland, known locally as “The Milk Run” because the aircraft stops six times during its journey (see also Pfleger, 2016). In her paper, Moogan expressed surprise at the diversity of her fellow passengers, and the reasons for their journeys. These included: people travelling to and from training courses; a new mother and her week-old baby returning home from hospital; someone travelling for specialist medical treatment; a student returning to university; someone attending a funeral; and a young woman heading to Brisbane to attend a rugby match and do some shopping. Indeed, Moogan’s account of that one journey on the Queensland “Milk Run” appears to encompass many of the socio-cultural aspects of air travel to and from peripheral areas that are discussed in the rest of the Australian literature.

Some attention has also been paid to rural airports in the United States. In 1999, for example, Babcock, by means of surveys and an infrastructure inventory, monetised the benefits of medical service delivery (i.e. air ambulance and flying doctor services) using general aviation airports in rural Kansas. Özcan (2014) used a Web-based survey to gather data from 95 city officials representing 56 communities, from across the US, that were served by subsidised flights in the US Government’s Essential Air Service (EAS)¹³ programme. Interestingly, the EAS communities placed more of an emphasis on the potential economic contributions of EAS flights (e.g. attracting new businesses, creating new jobs, developing tourism) than on the potential social benefits, defined by Özcan as “increased local pride because you have a scheduled air service”, “feeling better and safer because you know that the world becomes a lot smaller for your community”, and “increasing/maintaining the population of your community” (Özcan, 2014, pp.115). Newkirk and Casavant (2002), meanwhile, used interviews and focus groups in three case study communities in rural Washington to

¹³ For further information on the EAS programme, see <https://www.transportation.gov/policy/aviation-policy/small-community-rural-air-service/essential-air-service>

explore the perceived benefits of their local airports. Echoing the concerns expressed by Donehue and Baker (2012) above, in terms of the difficulties in measuring these less tangible socio-cultural benefits, they concluded that:

“...the benefits that airports bring to rural communities are many, varied and critical. Rural airports improve the quality of life in rural communities. The individual benefits of rural airports range from improving the quality of health care, supporting local businesses, providing critical emergency and disaster response, strengthening community, providing opportunities for recreation, military training, economic development and much more. Airports are in several cases a symbol of hope for rural communities fighting for their economic life. It is difficult to quantify the value of these benefits, yet they are real, even if not always noticed, to the people who live and work in rural communities.” (Newkirk and Casavant, 2002, p.96)

Outside of the UK, Norway would appear to be the only European aviation network to have been the subject of any significant published socio-cultural research (at least in the English language).¹⁴ A series of reports by Avinor, the state-owned limited company that operates most of Norway’s civil airports, has highlighted the social benefits of Norwegian aviation, particularly in terms of: patient flights; its role in the country’s decentralised education system; and in providing access to nationwide cultural and sporting events (see, for example, Avinor 2008, 2011 & 2017). Interestingly, given the nature of this present report, Avinor also acknowledge Norway’s historical “culture of aviation” and have therefore mapped, and prepared landscape protection plans for, any historical structures and cultural monuments that still exist at their airports (Avinor, 2014, p.27). Also in Norway, Halpern and Bråthen (2010 & 2011) explored the “catalytic impact” (including “social development”) of regional airports, with desk-based research and case studies of two airports (Ålesund and Brønnøysund). The two case studies included postal surveys of local residents ($n = 2,125$) and businesses ($n = 356$). In common with many of the other studies outlined above, Halpern and Bråthen concluded that the existence of these airports enhances opportunities for the social development of their local residents:

“...such as being better able to: travel for work and leisure; maintain contact with friends or relatives; attend or participate in sport or cultural activities and events; and access basic services such as health and education... Local airports also have a wider impact on their region by influencing the location and retention of residents and businesses.” (Halpern and Bråthen, 2010, p.5)

Within the UK, previous empirical research into the socio-cultural impact of airports appears to have been almost exclusively limited to studies of air services in the Scottish Highlands and Islands. In 2002, for example, SQW explored the economic and social impact of no frills air services in the Highlands and Islands, including a

¹⁴ Although a student thesis, written in English, by Herbert (2012) did explore the socio-economic impact of Kokkola-Pietarsaari Airport in Finland. As that work appears to have been based on a minimal number of interviews with frequent flyers (possibly just three), it has not been included in the discussion above.

specific study of the easyJet Inverness to London Stansted service that existed at the time. Here, a passenger survey established that the easyJet service played an important role in overcoming peripherality, in making the Highlands a “better place to live”, “seem less remote”, and making it “more likely that they would continue to live there” (SQW, cited in York Aviation, 2004, p.26). In 2009, the Scott Wilson Group conducted an evaluation of the Scottish Air Route Development Fund (RDF), which was informed by “a major programme of surveys in Scotland: face-to face passenger surveys; surveys at retail outlets at airports; airport operations and business staff; and airline surveys”. They summarised the “social inclusion impacts” of RDF services as: improved journey times; access to education; helping the unemployed and others, such as migrant workers; and visiting friends and families (Scott Wilson, 2009, p.47; Smyth *et al.*, 2012, p.58). In 2011, meanwhile, Craig reported on an exploratory case study of the value of the air service to Barra (and Vatersay) in the Outer Hebrides. Based on a postal survey of 280 local residents, plus interviews with “five individuals with potentially differing perspectives” of the air service, he concluded that:

“...islanders consider their air service to have a high impact on their quality of life. This impact comprises both objective and subjective elements. The objective element comprises the air service’s contribution to the accessibility of work, friends and relatives, and healthcare, and its role in supporting the islands’ economic activities. The subjective element comprises its contribution to the islanders’ sense of identity, and its sheer existence value in reducing their sense of isolation and associated insecurities” (Craig, 2011, p.74).

From the literature reviewed above, it becomes clear that the aforementioned ekosgen (2016) research, and the previous work of the present authors (Bloice *et al.*, 2017), has added to what is a relatively sparse body of empirical work on the socio-cultural impact of remote, peripheral airports. These two studies will now be discussed in more detail in Section 7, which focuses on the potential social and cultural impacts of a reopened Skye Airport.

7. The potential social and cultural impacts of a reopened Skye Airport

Before discussing the potential socio-cultural impacts of a reintroduced air service to Skye, it is perhaps worthwhile considering what, if any, evidence exists that might reflect overall public opinion on its reintroduction, particularly amongst Skye residents. Certainly, as was outlined in Section 4 of this report, recent feasibility studies appear to have identified sufficient demand for an air service, with RDC and ARUP estimating that around half of the passengers will be Skye residents (RDC Aviation and ARUP, 2013, p.42; 2016, p.37). Indeed, based on the emerging results from the first 800 responses to the online survey conducted as part of the RDC and ARUP 2013 study, some press coverage suggested that “more than 90% of Skye residents” backed the plans to reopen Broadford (Ross, 2012). However, other, more recent press coverage suggested that “Islanders are split over the airport”, describing support as “tepid” among some sections of the community, with concerns that locals will be unable to afford the fares, and some religious figures reportedly being uncomfortable about the prospect of Sunday flights (Swindon, 2015), a scenario contested by FlySkye on their Facebook page (22 November 2015).

The ekosgen (2016) research into the potential social benefits of a reinstated air service was based largely on 15 “consultations” with community groups and other stakeholders, a list of which appears in Appendix A (p.71) of their report. And while ekosgen discuss the representativeness of their business participants (pp.20-22), the extent to which the qualitative data provided by these community groups and other stakeholders might (or might not) be representative of the wider Skye public is not really addressed. Indeed, at the time of the ekosgen research, some concerns were expressed on the FlySkye Facebook page about the business-focused online survey, and about the invitees to a “stakeholder workshop” in Broadford:

“Between Twitter and Facebook, we have 3,500 followers. They are all potential “stakeholders” and did not have the opportunity to attend.” (16 September 2015)

“Would like to have seen the Ekosgen survey open to individual residents living and working in Skye and Lochalsh. Strengthening communities?” (13 November 2015)

With regard to the present authors’ case study research conducted in Skye in 2016, we have previously reported that around two-thirds of our 78 participants were broadly in support of the reintroduction of passenger services from Broadford, but that relatively few of these individuals indicated that they would personally use these services (Bloice *et al.*, 2017, p.34), a finding which appears somewhat at odds with other, previous research. Indeed, just 14 (18%) of our 78 participants, envisaged themselves flying in and out of Broadford, with five of these adding a significant caveat, that their use would be very much dependent on the fares structure (of which more is discussed in Section 7.5 below).

Bearing these points in mind, we would urge caution in the interpretation of the opinions and perceptions expressed below: while we are confident that these are illustrative of the most significant socio-cultural issues surrounding the reopening of Broadford, we would make no claims that they are truly representative of the 10,000+ residents on the island.

7.1 “Lifeline services”, accessibility, and connectivity

“Lifeline services”

As was noted in Section 3 of this report, Loganair’s Broadford-Glasgow flights ceased partly because they could “no longer be justified as a “lifeline” service” (Scottish Office, 1988). But what exactly constitutes a lifeline service? Here, we encounter further conceptual difficulties, in that there appears to be no universally accepted definition of “lifeline” air services (see, for example, Jarvis, 2006; Braathen, 2011; RP Erickson & Associates, 2015).¹⁵ With regard to “lifeline” air services in the Scottish Highlands and Islands, McGregor and Laird (2005) describe these as any services to the mainland that allow people to “undertake activities, such as health appointments, leisure activities and business related activities, such as marketing, conferences and training”. While the UK Government (2010), in discussing Orkney’s “lifeline” air services, define these as services where there is:

“...no rapid alternative means of transport...for the services (financial, commercial, professional, advisory, health, etc.) which cannot be provided locally and which are essential for the maintenance of the economic and social fabric of the islands.”

Interestingly, there is very little evidence of reintroduced flights to and from Skye being explicitly described as a “lifeline” service by residents, community groups or public bodies. While the HIE brief for the research conducted by ekosgen (2016, p.1) expressed a desire to discover the role that small rural airports can play in “providing life-line services”, the resultant report does not use the term when presenting the findings; nor do any of the other feasibility and consultancy reports described in Section 4 of this present report. Perhaps surprisingly, none of the 2,666 posts on FlySkye’s two social media accounts uses the term when discussing the Skye situation specifically. Meanwhile, only one of the 78 Skye participants explicitly described reintroduced air services as a potential “lifeline” during Activity 7.1 of the SPARA 2020 project. This was in contrast to the situation in the two other Scottish island airports studied in Activity 7.1 (Benbecula and Kirkwall), where the existing air services were described more frequently as “lifelines” by local users. This contrast may, of course, be simply down to definitional and linguistic factors. However, it is probably fair to say that, during our photo exhibitions in Broadford and Portree, the present authors did sense a different perspective on the ‘essentiality’ of an air service on Skye, perhaps due to the existence of the road bridge connection to the mainland.

¹⁵ While definitions of lifeline air services may vary, there does appear to be a general consensus that they incorporate access to healthcare services. In this present report, access by air to medical services is discussed separately, in Section 7.3.

Improved journey times

In discussing the potential benefits of an air service to Skye, a number of the feasibility and consultancy reports outlined in Section 4 have considered these in terms of improved journey times to Scotland's Central Belt, compared with the use of surface transport. For example, RDC and ARUP monetised the potential time savings for business and leisure passengers flying to Glasgow, both in their 2013 feasibility study (p.68) and in their updated business case in 2016 (see Highland Council, 2016, pp.63-64). The ekosgen report (2016, p.59), meanwhile, highlighted the importance of such time savings to those "without car access or for non-car drivers", and for those "with mobility issues". Shorter journey times has also been a relatively regular theme amongst the posts on FlySkye's social media accounts. For example:

"I just want to fly from Glasgow to Skye rather than a 6 hour bus journey."
(Facebook, 20 May 2015)

"Drive is spectacular from every direction, but time-consuming. Air services are not just about visitors. #community" (Twitter, 28 September 2015)

"Be fabby .. hate driving to Glasgow in winter xx." (Facebook, 3 December 2017)

Amongst the 78 Skye participants in Activity 7.1, however, opinions were decidedly mixed. There were those who acknowledged the potential time that could be saved in flying to Glasgow, but with some also expressing concerns about the likely affordability of the fares. There were those who preferred the flexibility, convenience, and relatively low costs of taking their car to the mainland, particularly if other family members are also travelling. While several older participants pointed out that they are entitled to concessionary bus travel throughout Scotland, and that they can currently make the 5- to 6-hour coach journey from Skye to Glasgow for the price of a booking fee only:

"I travel to the mainland regularly for personal and business trips. It can be a really long journey by road, especially if there's been an accident and you have delays and detours." (Portree exhibition visitor, 1 September 2016)

"If I can get there on a 45-minute flight, it would be much better than sitting on a bus for six hours. But it would depend on the pricing structure." (Portree exhibition visitor, 1 September 2016)

"When I travel to the mainland I would always take the car. I have my children and the dog with me. And I always take back shopping." (Portree exhibition visitor, 3 September 2016)

"I've got relatives in Glasgow and Grangemouth, and when I visit them I tend to travel by bus. At my age, I travel free, I only have to pay a booking fee. The bus to Glasgow takes about six hours, but I don't mind the journey – I find it restful." (Broadford exhibition visitor, 29 August 2016)

The last point above, concerning concessionary bus travel for older people in Scotland, was also acknowledged in the 2016 ekosgen report, which concluded that this may result in a “relatively small shift in [travel] mode, unless the time saving proves important” (p.59).

Maintaining links with family and friends

The final point above also relates to another theme that occurs throughout the literature: that of air services in remote regions allowing residents to maintain links with family and friends (e.g., Ernst & Young, 2010; Halpern and Bråthen, 2010; Smyth et al., 2012). A number of the feasibility and consultancy reports discussed in Section 4 of this report address the potential VFR (visiting friends and relatives) impact of a reopened Skye airport. For example, the 2004 Steer Davies Gleave study considered the potential VFR traffic for Skye to be “much more significant” (p.21) than in the existing comparator airports they studied (Campbeltown, Wick and Stornoway), although not as significant as Skye’s potential “in-bound leisure market” (p.23). The ekosgen 2016 report, meanwhile, argued that an air service to and from Skye would have “the ability to contribute socially, allowing individuals increased ease of access to/for visiting family and friends” (p.57), would allow access to the Central Belt for “family events” (p.59), and also allow “rapid access in the case of family illness or funerals for example” (p.59). The potential to visit, or receive visits from, family and friends by air was also a recurring theme in the FlySkye social media posts. For example:

“Yes please - anything to make it easier to visit my grandchildren!!!”
(Facebook, 19 October 2012)

“It would also be great for me personally - my sons both live abroad and it takes me 2 to 3 days at present to get to either Glasgow or Edinburgh then to Heathrow for connecting long haul flights! Also more of my friends would certainly come up to Skye if the airport was up and running!” (Facebook, 9 Aug 2013)

“If there were flights to Skye I could visit my parents in Raasay but a bus trip of 8 hours - please no.” (Facebook, 21 April 2014)

The point made in the ekosgen report, about the importance of air travel in attending key family events, or at times of family illness, was echoed in some very personal and poignant comments on the FlySkye Facebook page:

“I wish the airport had been open when my mum was dying. It would have made her last months easier for me to get through if I'd have been able to see her more. The mission of a drive was impossible to do from Plymouth very often but if there had been air links it would have taken the pressure off. She may have even been able to come see me in my new life, that the drive kept her from managing. So bring on the airport opening I say, so nobody else has to go through the torture I did.” (20 November 2015)

This link between remote, peripheral airports and the ability to travel, or return home, at key moments in the life cycle (births, christenings, marriages, graduations, anniversaries, funerals, etc.) was also discussed regularly by participants in Activity 7.1, particularly in Orkney and Donegal (Bloice *et al.*, 2017, pp.26-27). In Skye, however, air travel to important family events was mentioned by just a handful of participants, whose opinions were sometimes qualified by observing that the cost of the air fares would have to be balanced against the urgency of the trip:

“My family are coming up from London in a few weeks’ time, for my son’s 1st birthday party. I can see a connecting flight appealing to them for future visits to Skye.” (Portree exhibition visitor, 1 September 2016)

“It would actually depend on the price. And also the urgency as well. If there was an emergency down south with my family, and the plane would get me there quicker, then yeah, it wouldn’t matter on the cost – I’d actually take that.” (Telephone interview with Portree resident, 27 September 2016)

Access to recreational and cultural opportunities

Another social benefit of peripheral airports, occasionally discussed in the literature, is that of enabling greater access to a wider range of leisure and cultural events and experiences (e.g., Halpern and Bråthen, 2010; AECOM Australia, 2016; Industry High Level Group, 2017). The ekosgen 2016 report certainly identified this as a potential benefit of reintroducing a Skye-Glasgow service, noting that:

“The shorter travel times afforded by an air service enhance the potential for residents of all ages to access the Central Belt for leisure, entertainment, cultural or family events” (p.60).

This was also a relatively common theme expressed by participants in the Activity 7.1 case studies, especially in Donegal, where several people spoke of flying to Dublin or Glasgow to attend rock and pop concerts, or big sporting events (with Celtic Football Club matches in Glasgow proving a particular attraction). In our Skye case study, however, just one of the 78 participants made any comments relating to this type of journey, suggesting that these would be undertaken by “young people” only. Similarly, there was little or no evidence of the potential for sporting or cultural trips to Glasgow on the FlySkye social media accounts. Although, interestingly, a number of FlySkye’s posts did suggest that an air service would help to attract cultural events to the Isle of Skye, ranging from Scottish Ballet to the Royal Air Force Aerobatic team, the Red Arrows (Facebook, 10 January 2018 and 28 June 2015, respectively).

Connection to the outside world

The literature on peripheral airports has also talked broadly about the benefits of connecting remote communities with the wider world, in, for example, “instilling a sense of social connectivity” (Donehue and Baker, 2012) and “overcoming isolation” (AECOM Australia, 2016). In terms of Skye, specifically, the ekosgen 2016 report concluded that a reintroduced air service “has the potential to reduce actual and perceived sense of isolation and remoteness felt by communities” in the Skye

catchment area (p.61). This theme, of connectivity with the wider world, is also repeated throughout the FlySkye social media posts:

"We know it makes sense to connect Skye with the rest of the World."
(Facebook, 11 Apr 2017)

"The airport is not solely about visitors. It is about choice of transport, convenience, and speed of travel, plus maintaining connections with the modern world in which we are all living and many other reasons." (Facebook, 11 November 2017)

"Let's all hope we can make much more significant progress during 2018. By then, we will have been without a community connection direct to the wider world for 30 years." (Facebook, 21 November 2017)

This was also a common theme expressed by our Activity 7.1 participants (Bloice *et al.*, 2017, pp.26-27), including, to a certain extent, those in Skye. Indeed, opinions on the remoteness of Skye, and the related need for an air service, were decidedly mixed amongst our Broadford and Portree participants:

"The island feels a bit remote. Having an airport would make it feel less isolated." (Portree exhibition visitor, 1 September 2016)

"I do think that Skye is remote, even with the bridge. Stornoway and Benbecula have air links, why shouldn't we?" (Portree exhibition visitor, 1 September 2016)

"I'm not so sure about the 'reduced isolation' idea in the ekosgen report. The isolation was part of why I moved here. I moved here to get away from places like Glasgow and London" (Broadford exhibition visitor, 31 August 2016)

"I can understand why an air service would be essential for some of the more remote Scottish islands, but with our road bridge and ferry services I don't think an air service is necessary" (Portree exhibition visitor, 3 September 2016)

In some respects, these mixed opinions about Skye's remoteness and lack of connectivity are reflected in the 2013 RDC and ARUP report. While 85% of their online survey respondents indicated that onward air connections from either Glasgow or Edinburgh would be "important" or "very important" in making their travel choice decisions, "this sentiment was not necessarily backed up with evidence that people would regularly use the air service for connections" (p.62). RDC and ARUP concluded that this "may be more related to the perception of making Skye less remote and offering connectivity possibilities, rather than being a vital part of demand" (p.62). This may provide some evidence of what Craig (2011, p.70)

describes as the “existence value”¹⁶ of air services to small, island communities, where the perceived value to many local residents lies more in knowing the service exists, rather than their actual use of the service.

7.2 Education and learning

As was seen in Section 6 of this report, one recurring theme throughout much of the literature on the social benefits of air transport in remote regions has been that of providing access to education and learning opportunities (e.g., York Aviation, 2004; Industry High Level Group, 2017).

Incoming student traffic

In terms of the potential educational use of a reintroduced air service to Skye, the focus appears to have been largely on *incoming* students to Skye, particularly those attending the Gaelic College, Sabhal Mòr Ostaig (SMO), at Sleat. The 2010 Mott MacDonald report (p.129) suggested that “good and affordable air access” (to either Broadford or Portree Bay) would help to attract students and research activity to Skye. Meanwhile, the ekosgen (2016) report (p.54) appeared to place an emphasis on a reintroduced air service helping to facilitate SMO’s growing conference business, but also noted that there “may be some additional usage” of the air service by students, particularly amongst the increasing number of international students taking short Easter and summer residency courses related to Gaelic culture. An air service, ekosgen continued, “would be an alternative travel option for those with higher levels of disposable income and/or those looking to take short breaks”, and “may be a modest but important influence on overall student numbers”. The potential positive impact on the SMO was also a theme running (albeit irregularly) throughout the FlySkye social media posts.¹⁷ For example:

“One of the largest Gaelic-speaking areas in Scotland, but the only one without an airport! Imagine how beneficial the Airport would be to Skye’s Gaelic College! Ironical!” (Facebook, 27 June 2014)

“FlySkye is in no doubt that reinstatement of Skye airport will greatly enhance interest in our Gaelic College.” (Twitter, 22 January 2016)

Similarly, of the 78 Skye participants in Activity 7.1, just two (one of them an SMO employee) spoke of the potential impact on the Gaelic College:

“Each spring and summer, when its full-time students are away on recess, the college has short courses that run for two weeks over Easter and around 7-8

¹⁶ The concept of “existence value” is generally attributed to Krutilla (1967) who applied it to natural resources, such as landscapes, threatened species, or entire ecosystems.

¹⁷ This is perhaps unsurprising: the ekosgen report (2016, p.54) notes that the SMO “is a strong advocate of an introduced air service”; and the current Principal of SMO was one of the founders of the FlySkye campaign in 2012 (see, for example, *Scotsman*, 2012).

weeks in the summer months... So, that's another market. The college itself hosts a number of conferences, year-round. So, people potentially could fly in to Glasgow, and then fly across to Skye." (Telephone interview with Sleat resident, 27 September 2016)

Skye residents attending university on the mainland or elsewhere

While the comments above relate to *incoming* students, the feasibility studies discussed in Section 4 of this report do not appear to have explored the potential for air travel for those Skye residents who attend university in the Central Belt, or elsewhere. Nor has this possibility been mentioned in any of the posts on FlySkye's social media accounts. This is perhaps surprising, given that Lochaber, Skye and Wester Ross is the area of Scotland with the highest proportion of young people leaving to go to university (Highlands and Islands Enterprise, 2015, p.2). In Activity 7.1, though, three of the 78 Skye participants spoke of the possibility of outward student air travel, although reservations were expressed about the likely affordability of the fares. For example:

"I've got two children away at University, one in Aberdeen and the other in Edinburgh. It takes the best part of a day for my daughter to travel home to Skye from Edinburgh, so I can see the advantages of reopening the airfield. But it would depend on the cost..." (Broadford exhibition visitor, 31 August 2016)

"The 20s to 30s, we have quite a lot of people who leave and go away to university, to the bigger cities. So maybe their parents, who could afford it, would pay for them to go backwards and forwards on the plane." (Telephone interview with Portree resident, 27 September 2016)

In many respects, the Skye situation appears similar to that encountered by the present authors in Donegal during Activity 7.1.¹⁸ Donegal receives large numbers of incoming students attending various Gaeltacht summer schools across the County; while many Donegal students attend university in either Dublin or Glasgow. And while Donegal Airport's 2013 passenger survey established that just 1% of users were flying for education-related reasons (see ekosgen, 2016, p.38), and the 5-hour bus journey between Donegal and Dublin was viewed as an important travel alternative by students, on cost grounds (ekosgen, 2016, p.35), in April 2016, at the time of our Activity 7.1 case study, the student market was being regarded as increasingly important by Donegal Airport. A special student fare to and from both Glasgow and Dublin (including a 20kg baggage allowance) had been developed with the carrier Aer Lingus, and this was proving increasingly popular:

"The main issue, really, is a free bag of 20 kilos. Because you know what students are like, with their reading materials, and also their washing! That was important, and we can see a big difference in the student travel." (Donegal Airport staff member, 13 April 2016)

¹⁸ Indeed, Donegal Airport is used as a comparative case study in the ekosgen 2016 study (pp.35-40).

Bearing this last point in mind, we would suggest that, should Broadford Airport be reinstated, and a Skye-Glasgow service be reintroduced, the airport management and carriers might explore the possibilities of introducing a similar arrangement for student travel.

The airport as an educational resource

Another potential social benefit raised across the Activity 7.1 case study airports (but not, apparently, explored in any of the Skye feasibility studies, nor considered in any of the FlySkye social media posts) is that remote, peripheral airports might be regarded as educational resources in their own right. This is an aspect that has been touched upon only briefly in the literature, with, for example, the Airport Operators Association (2014, p.9) outlining some of the larger UK airports' community initiatives aimed at inspiring children and young people. During Activity 7.1, staff at Benbecula, Donegal and Kirkwall Airports told of receiving organised visits from local playgroups, schools and youth groups, and spoke positively about their experiences and the feedback received. Staff at Benbecula Airport also spoke of the importance of their work experience arrangements for local schoolchildren, where, each year, four students are given a week-long introduction to all aspects of airport work, from fire and rescue to working in the control tower. At Sundsvall-Timrå, meanwhile, the airport helps to prepare students for a potential career as an airport technician through its Airport Academy, an initiative run in partnership with a local high school, Timrå Gymnasium. The Academy covers all aspects of field, ramp and emergency services, plus some security. During the course of the Sundsvall-Timrå case study, the present authors spoke to a number of current and former Academy students, all of whom spoke highly of their experiences. Should a new airport facility be developed at Broadford, then, we would recommend that the airport management explore opportunities for engagement with schools and youth organisations across Skye and Lochalsh.

7.3 Health and well-being

Another common theme emerging throughout most of the literature on “lifeline” air services, and on the social benefits of air transport in remote regions, was that of access to medical and healthcare services (e.g., York Aviation, 2004; Ernst & Young, 2010). This was also a recurring theme throughout Activity 7.1, particularly amongst the participants in Benbecula, Kirkwall and Donegal, where local hospital and other medical facilities are relatively basic, and where local residents must travel to the Scottish mainland (and in Donegal's case, Dublin) for specialist treatments and in emergencies.¹⁹ The point was made repeatedly here that alternative forms of surface transport were too time-consuming and uncomfortable, particularly for people with chronic or terminal illnesses. Several participants in Kirkwall and Benbecula spoke of

¹⁹ Medical travel appeared to be less of an issue at Sundsvall-Timrå in Sweden, because of better road and rail connections, and the facilities provided locally by the Sundsvall-Härnösand County Hospital.

their respective health boards' (i.e. NHS Orkney and NHS Western Isles) patient travel arrangements, where, as part of the Highlands and Islands Patient Travel Scheme, the health boards pay most of the patient's travel and accommodation expenses, and sometimes those of an authorised patient escort.²⁰ In Donegal, meanwhile, air travel to and from Dublin was considered particularly important for cancer patients, with a local charity (the North West Cancer Group) helping to arrange discounted fares for patients (subsidised by the health board, HSE West) and raising money for companions to travel with these patients.²¹

So, what of the situation in Skye? Both the 2013 RDC and ARUP study (pp.32-33), and their 2016 Skye Air Services Business Case (see Highland Council, 2016, pp.27-28), highlighted the lack of accurate route-by-route statistics on passengers travelling for medical purposes, and also noted that medical travel would "not necessarily" be a demand driver from Skye. Meanwhile, in considering the potential medical travel benefits of a reinstated Broadford-Glasgow service, the 2016 ekosgen study concluded, rather tentatively, that "health service delivery in the Skye catchment area could benefit from the introduction of an air service, through improved access to wider healthcare services, including tertiary care" (ekosgen and Reference Economic Consultants, 2016, pp.57-58). They noted that a large proportion of the required secondary care provision is currently available within the NHS Highland area, most importantly at Raigmore Hospital in Inverness, but that "some secondary care" is provided in the Central Belt. They also suggested that, "should an air service be available, patients requiring more specialised care may be able to use the air service to access Glasgow" (most notably the Queen Elizabeth University Hospital); whilst acknowledging that "the first preference of NHS Highland may be to use Raigmore Hospital wherever possible". ekosgen also forecast "modest use" of an air service by inbound medical specialists, and by NHS staff on Skye accessing training in the Central belt. They also suggested that a licensed Broadford Airport might provide some benefits (in terms of speed, patient comfort, and lower operating costs for the Air Ambulance Service) in allowing patient transfers to be made in fixed-wing aircraft.

This apparently limited demand for non-emergency medical transport was reflected in the responses from our photo exhibition visitors in Activity 7.1. Echoing some of the comments in the ekosgen report, a number of our participants observed that Inverness was the most frequent destination for medical travel:

"Most patient travel from Skye is likely to be to Raigmore in Inverness. Anyway, for "people of a certain age", a patient minibus leaves Skye daily for Inverness, picking up folk from their homes." (Portree exhibition visitor, 2 September 2016)

²⁰ For details of the NHS Orkney arrangements, see

<https://www.ohb.scot.nhs.uk/service/patient-travel>

For details of the NHS Western Isles arrangements, see

<http://www.patienttravelwi.scot.nhs.uk/>

²¹ See <http://www.dacc.ie/html/travel.html>

Indeed, just five of the 78 participants spoke about the potential benefits of patient air travel from Skye, whilst also arguing that these would have to be subsidised in some way. Two of these five participants had elderly or infirm friends on Lewis, who had spoken positively about their own experiences on medical-related trips between Stornoway and Inverness.

In FlySkye's social media accounts, meanwhile, only four of the 2,666 posts touched upon a potential need for such services. For example:

"Driving is great if you are not on a tight schedule! Also it is physically exhausting, especially if you have to go to Edinburgh or Glasgow for a hospital appointment, when you aren't feeling too great to begin with!"
(Facebook, 28 September 2015)

"I would love to be able to fly down easily to visit family or attend hospital appointments without stressing further over the pain from long-distance travel." (Facebook, 11 November 2017)

It would appear, then, that although the benefits of air travel for non-emergency medical appointments are recognised, there may be limited opportunities for such journeys on a Broadford-Glasgow service.

7.4 Local social networks and social capital

The airport as a social arena

One aspect of peripheral airports that does not appear to have been discussed in the literature, at least outwith the SPARA 2020 Project, is that of the airport having a social function in its own right. During Activity 7.1, the current authors (see Bloice *et al.*, 2017, pp.24-25) found that Kirkwall, Benbecula and Donegal Airports were the venues for numerous serendipitous encounters and social exchanges between family, friends and acquaintances.²² Indeed, there was frequently a general expectation amongst our participants in these three small and relatively close-knit communities that any visit to their local airport – to fly, to drop off or pick up other passengers, or just to use the airport's café – would result in them bumping in to someone they know. Indeed, a number of individuals indicated that, on arriving at their local airport, they would make a point of looking around the terminal to see who was present. Participants also noted that the comfortable surroundings and relaxed atmosphere in these three airports helped to facilitate and prolong these social exchanges. And while there was a sense amongst our participants that such encounters were becoming less common – due to increased numbers of tourists and inward migrants using these airports – they did appear to reinforce social networks and social capital locally.

²² Such encounters were far less common at Sundsvall-Timrå, where the majority (around 80%) of passengers are business users who spend very little time in the airport, usually checking in online and arriving at the airport as close as possible to the departure time.

But what of Skye? What, if any, evidence is there to indicate that a new terminal building at Broadford would have such a social function? Certainly, amongst the older visitors to our Skye photo exhibitions, who had vague memories of flying from, or visiting, the Broadford terminal in the 1970s or 1980s, there was little evidence to suggest that it had such a role. Most could only remember a “prefab with some chairs” (see Figure 8).



Figure 8: Broadford Airport in 1977 (Source: Air Pictorial, 26 September 1977)

Perhaps understandably, the various feasibility and consultancy reports appearing over the last 20 years have not really discussed a new airport in terms of social capital; nor has any of the posts on FlySkye’s social media accounts. With these points in mind, we would suggest that the extent to which a future Skye terminal building will facilitate social exchanges is still very much a matter of conjecture and will depend on two key factors: 1) the size, design and facilities of any new terminal building, which are, of course, still the subject of some debate (see HITRANS, 2018); and 2) the extent to which the airport will be used and visited by members of the wider Skye and Lochalsh community (this second point has already been discussed throughout this report, and will be explored further in Section 7.5).

The airport as a social ‘destination’ and cultural venue

One socio-cultural aspect of remote, peripheral airports that has received no attention in the literature is that of the airport being a social destination or cultural venue in its own right. However, across the four Activity 7.1 case study airports this was a common theme. For example, at each of the four airports, the terminal café or restaurant was used by people who were neither flying themselves, nor picking up or dropping off other passengers. In this regard, the cafés/restaurants were very much seen as social spaces in their own right, with patrons being drawn by their accessibility, food quality, prices (at least when compared with larger airports’ prices), and/or their general “environment”, particularly in allowing users to view aircraft movements whilst dining. The café, and its associated small shop, at Donegal Airport was deemed particularly important, as it was really the only place in the immediate area where one could have a cup of tea, use the WiFi, or buy some newspapers or sweets (Bloice *et al.*, 2017, p.28). The four case study airports in Activity 7.1 had also been the venue for various social and cultural events, both outdoors and indoors, including art, photography and craft exhibitions, book launches, small acoustic musical performances, aviation festivals, and charity fun runs and sky dives. And

while heightened security arrangements, and the time and capacity of airport staff, now increasingly challenged these non-aeronautical uses of airport spaces, there was still an appetite to continue with such events (Bloice *et al.*, 2017, p.28).

So, what potential will there be for any new Broadford terminal to become a socio-cultural 'destination' in its own right? Amongst our Skye participants, opinions were mixed. For example:

"I'd say that potentially wouldn't work, because you've got Broadford, which is a really up-and-coming township...And you've got cafes in there. Only 5 minutes up the road you've got a significant township with a number of cafes and restaurants that can cater for all different tastes and pockets." (Telephone interview with Portree resident, 27 September 2016)

"There are other community halls. But art exhibitions and events...if you're going to build an airport terminal that's going to be only operational potentially four times a day for movement, then why not be able to build into it some form of events base. Because there's always something mystical about people being in places like airports or railway stations, that's got this romantic idea of travel..." (Telephone interview with Sleat resident, 27 September 2016)

"We've got a lot of artists... They tend to have their own studios, based in their own places. So there's a trail around Skye that you can do for all the different studios and artists. And they may have a couple in there, but whether people would purchase there is a different matter. I think people like going to the individual studios." (Telephone interview with Portree resident, 27 September 2016)

Meanwhile, with the FlySkye campaign, they certainly envisaged a terminal facility that might well act as an attraction:

"...a beautiful, neat, inspiring, arrivals and departures hall for the Isle of Skye & Lochalsh. The new building could include a refreshment area, specialising in Skye produce of course, a gift shop for last-minute souvenirs - all produced in the area of course, an information point for the whole island, car hire facilities, taxis and perhaps even a bus service to connect with the rest of Skye and Lochalsh. The scope for job opportunities and a modern, bright, gateway to Skye." (Facebook, 30 October 2012)

More recently, however, on learning about the plan to initially use "modular buildings and redundant equipment from other airports" (see HITRANS, 2018), their disappointment was obvious:

"As a world-class destination and an airport that will attract an enormous amount of attention when it finally opens, we do feel strongly that we deserve the best and that redundant buildings from other airports are not necessarily the best way to portray ourselves. The airport hub will be small, no doubt, but it ought to be representative of all the world-class services and experiences

available throughout the area which the airport will serve!” (Facebook, 8 June 2018)

Again, then, the extent to which any new Broadford terminal might act as a socio-cultural venue is difficult to predict, as it will be dependent on a range of factors, including: the size and design of the building; the time and the capacity of the airport staff to introduce and manage such activities; and the degree to which the terminal would be viewed as ‘competing’ against other local catering outlets, studios and galleries.

7.5 Social inclusion/exclusion

In considering the issues of social inclusion and social exclusion, we are again faced with definitional difficulties. While Farrington and Farrington (2005, p.4) understand social inclusion to be the converse of social exclusion, Lucas (2012, p.106) notes that, in transport policy and research, “there is no overarching consensual view about what precisely constitutes social exclusion”. One frequently cited paper in this subject is that by Church *et al.* (2000), who presented a “conceptual framework” of seven interrelated factors that may limit the mobility (i.e. in terms of transport and travel) of socially excluded people.

During the Activity 7.1 case studies in the four existing peripheral airports, two of Church *et al.*’s seven factors emerged as the most prominent:

Physical exclusion. Where people are excluded from using a transport service because of physical or psychological difficulties. Although, in Activity 7.1, it should be said that this related more to perceived (rather than actual) barriers to disabled passengers using Kirkwall Airport, which appeared to be caused by poor two-way communication (see Bloice *et al.*, 2017, pp.35-36).

Economic exclusion. Where the high monetary costs of travel can prevent or limit access to transport services. This was a common issue across the four case study airports and (as will be seen below) on Skye, where prohibitive flight costs (actual and potential) were the subject of much of the discussion during our photo exhibitions.

With regard to the potential impact of a reopened airport on Skye, although none of the feasibility and consultancy studies have explicitly referred to “social inclusion” or “social exclusion”, some have touched upon household economic factors. Both RDC and ARUP’s original feasibility study in 2013, and their revised business case in 2016, spoke about income deprivation in the area, with the most recent (and slightly amended) version stating that:

“Skye’s catchment has a lower than average level of income deprivation than the surrounding areas and therefore, other things being equal, Skye should

have at least a similar demand for air travel, if not greater.” (see Highland Council, 2016, p.30)

The 2016 ekosgen report, meanwhile, discussed the potential impacts on “fragile areas”, where such areas were defined as “those characterised by weakening communities through population loss, low incomes, limited employment opportunities, poor infrastructure and remoteness” (p.59). However, the impacts (positive or negative) on those with low incomes were not really addressed.

This is in sharp contrast to the comments of many of the Skye participants in Activity 7.1. As was noted earlier in this report, although two-thirds of our 78 participants were broadly in support of the reintroduction of passenger services from Broadford, very few believed that they would personally use the services; with most of their reservations being related to the affordability of the fares. Younger participants with children believed that the cost of transporting an entire family by air would be particularly prohibitive. And several exhibition visitors felt that the flights would be affordable only to “rich tourists” and the more “well-heeled” Skye residents:

“There’s some considerable deprivation on Skye. Some people have two or three jobs, just to make ends meet. I think they’d be excluded from air travel.” (Portree exhibition visitor, 2 September 2016)

“I don’t feel it’s the normal, local people who would potentially use it. Everything’s going to suit the high-end tourist industry” (Portree exhibition visitor, 2 September 2016)

“I’d say there’s an element of the community who would pay it, because Skye’s a very popular retirement place. We get a lot of people coming in, and they do have surplus income. It would potentially be used by them. But you’re looking at, I don’t know, the top 20%, maybe. But I think, when you’re looking at it as a community, public mode of transport, and if the average, normal family would use it, I honestly don’t think they would, just because of the cost.” (Telephone interview with Portree resident, 27 September 2016)

“The fares will exclude the ordinary people of Skye. If the high society of Skye want an airport they should invest their own money and call it the XXXXX²³ Airport.” (Portree exhibition visitor, 1 September 2016)

As was mentioned earlier, the vast majority of followers and comments on FlySkye’s social media accounts strongly supported the reintroduction of passenger services at Broadford. The few dissenting voices did, however, tend to focus on potentially prohibitive fares, and other negative economic impacts on less well-off islanders:

“I feel rather ambivalent about a commercial airfield. I think I am mainly in favour because I want to see improved infrastructure for the island but I do also see disadvantages. A major one would be an increase in property prices

²³ The name of a prominent FlySkye campaigner was mentioned here.

further forcing out younger economically active people in favour of older people and second home owners. If fares were too high for general use but acceptable for wealthy weekenders there would be an increased demand for weekend homes especially in the south of the island driving up prices.” (Facebook, 2 February 2014)

“So basically, the people who can afford £200 trips to Glasgow can enjoy that and the rest can continue to toil with citylink? To that scenario, I (and a great many others I would wager) would happily say no... Affordable for all or not at all.” (Facebook, 19 April 2015)

“All the seats would be taken by tourists and money people in the FlySkye club.” (Facebook, 11 November 2017)

A fear “that the community at large would think this campaign is all for high-flying tourists with lots of money” has been expressed by the FlySkye campaigners (see Swindon, 2015); and in replying to some of the posters’ concerns about fare affordability, a typical FlySkye response was:

“We are aiming for that, don't worry. Remember just how much it already costs for the return bus fare and return train fare, plus the cost of petrol and wear and tear on cars. PLUS, the time involved, extra overnight stays and meals out. It all adds up.” (Facebook, 27 September 2015)

Despite such reassurances, though, it is clear that there remain some genuine concerns about the inclusivity of the likely Broadford-Glasgow fares structure.

7.6 Community empowerment and development

In the small body of work on the social benefits of remote, peripheral airports, the existence of air services is sometimes linked to less tangible concepts such as “increased local pride” (Özcan, 2014, pp.115) or a “stronger community” (Newkirk and Casavant, 2002, p.86). This was also a theme encountered at the four airports studied in Activity 7.1, where participants appeared to display a real sense of pride in, and ownership, of their local airport (see Bloice et al. 2017, p.19).

Strengthening the Skye and Lochalsh community

In Skye, where, of course, there has been no scheduled air services for 30 years, and where the current facilities at the Broadford Airfield are decidedly basic, this sense of pride does not currently exist. Instead, it would appear that a sense of injustice and embarrassment surround the non-existence of air services, at least among some sections of the Skye community. Perhaps unsurprisingly, this has been most prominent on FlySkye’s social media pages, where posters have regularly pointed to the existence of airports in other Scottish island communities, or have accused those in government of being biased towards the Central Belt or Inverness:

"We are the largest population in the UK living the furthest from a local airport." (Facebook, 12 Apr 2016)

"Other islands have airports and much faster access to the mainland due to greatly improved choices in travel connectivity." (Facebook, 22 January 2016)

"I will never understand why Skye is always ignored! Anyone would think that we were invisible....." (Facebook, 5 February 2016)

"If we are a modern country looking to exploit tourism and regenerate remote areas, we badly need a more robust and widespread transport system across Scotland and not just concentrate our capital expenditure on bridges and trams for Edinburgh." (Facebook, 29 October 2013)

"For a relatively low outlay it could be re-opened relieving pressure on roads, boosting jobs on Skye and making travel easier. But no, all money must be spent in Inverness - bloody disgraceful." (Facebook, 25 April 2018)

"The signpost to the abandoned Ashaig Airstrip on the road between Kyleakin and Broadford. Out of action for almost 30 years. Skye's Shame!" (Facebook, 23 October 2012, accompanying a photograph of the signpost)

Bearing these points in mind, it might be argued that reopening the Skye Airfield will contribute towards a stronger sense of community pride, and what ekosgen (2016, pp.60-61) termed "regional cohesion".

Stemming population decline

Another related issue discussed in the literature is that of peripheral airports contributing towards stronger communities by influencing the location and retention of residents in the local area (e.g., York Aviation, 2004; Ernst & Young, 2010; Halpern and Bråthen, 2010; Özcan, 2014). This aspect, of airports helping to attract people (particularly professionals) to the area and stem population drain, was also identified in the four Activity 7.1 airports (Bloice *et al.*, 2017, p.27). With regard to Skye, the 2016 ekosgen report suggested that an air service would help "to attract higher skilled workers to live in the area whilst working elsewhere, deriving the quality of life benefits the location [Skye] offers" (p.60), "help retain or attract young people back" (p.57), and "help by allowing in-migrants to feel more connected to the Central Belt where they may have strong existing ties" (p.60). There was also some (albeit minimal) evidence of this forming part of FlySkye's argument on social media:

"We wonder if VisitScotland, HIE, The Highland Council, HIAL, HITRANS, Transport Scotland, Kate Forbes MSP, Ian Blackford MP, understand how beneficial it would be towards retaining young people on the island and developing their careers in top-quality businesses, if we had an air service connecting them to the World in rapid time - real world time - modern times." (Facebook, 23 March 2018)

“Better transport connections, faster and more direct, are an essential element of retaining young people in the islands, to build careers and bring-up their families for the future. Support FlySkye!” (Facebook, 27 March 2018)

Similarly, only three of our 78 Skye participants in Activity 7.1 identified this as a potential social benefit, all three focusing on attracting professionals to live and work in the area:

“I know it can be difficult to recruit professionals like teachers and GPs on the island, but if the airport was there it wouldn’t be so difficult to recruit these people. Stornoway has more success in recruiting professionals, maybe because they’ve got an airport link.” (Portree exhibition visitor, 1 September 2016)

Potential for a community-led project

Another potential aspect of community empowerment that has been discussed, although solely on the FlySkye Facebook page, is that of Skye’s airport becoming a community-led project with private investment:

“Looking at the Scottish govts recent budget this project will not secure govt money anytime soon, best to swallow the bad news and look towards a private/community project with the emphasis on community.” (21 February 2016)

“Could we not set up a Crowd Funding project and enable the greater Skye & Lochalsh Community to own and operate the Airport ourselves?” (12 April 2016)

“Might be worth seeing if it can be funded privately or as a community project with council support in the form of peppercorn rent.” (10 May 2017)

“Build your own airport, plenty of other places have done it. Don’t socialise the costs and privatise the gains. my point is that if there is a commercial case for the airport you should be able to raise the funds. Why should Glasgow do without an education outreach worker so that Skye can have a working airport. Lookup Toowoomba Wellcamp airport²⁴ as an example of the private sector building infrastructure.” (22 March 2018)

FlySkye’s responses to these suggestions, however, have tended to be lukewarm, and accompanied with an insistence that a reopened Skye Airport should be state funded:

“It is too much to crowdfund and anyway, we should not be ignored by Government. This should be regarded as a public infrastructure project the

²⁴ In Queensland, Australia; formerly known as Brisbane West Wellcamp Airport. See <https://www.wellcamp.com.au/>

same as any other similar project in Scotland. The population of Skye and Lochalsh more than deserves this.” (12 April 2016)

“This is not just about tourism. It is about the social and economic benefits for the whole island and its community. We have a vast amount to pay for in Skye. No-one could expect the accommodation sector to cough-up the money - especially after they have already contributed such a massive amount to the Treasury in terms of business rates, tax and VAT.” (22 March 2018)

Airport consultative committee

One aspect of community empowerment that arose during the Activity 7.1 case studies (more specifically at Kirkwall Airport) was that of remote, peripheral airports having dialogue with their users and with local residents via some form of user panel or committee. Kirkwall Airport, along with some of the other airports in the HIAL group, has an Airport Consultative Committee designed to meet twice a year²⁵ and act as “a forum for consultation, communication and feedback on the airport’s operations, customer performance and future developments” (Highlands and Islands Airports Limited, n.d.). Should the decision be made to reopen the Broadford airfield to scheduled passenger services, we would suggest that the creation of a similar committee be explored by airport management.

Encouraging civic participation

Another aspect of community empowerment that is touched upon briefly in the literature is that of “encouraging civic participation”, with peripheral airports providing a “mechanism by which equity of access to government services can be sustained” (AECOM Australia, 2016, p.5). AECOM considered this aspect largely in terms of citizens having access to their elected representatives. Similar opinions emerged during the Activity 7.1 case studies, particularly in Kirkwall, where the airport was seen as allowing rapid travel between Orkney and Scotland’s political centre, with councillors, local authority officials, and Members of the Scottish Parliament being able to readily visit (or receive visitors from) Edinburgh when important local issues arise (Bloice *et al.*, 2017, p.26). At our Skye photo exhibitions, though, just one visitor spoke about such journeys, suggesting that “the flights will be full of local councillors on expenses-paid trips”. Meanwhile, on the FlySkye social media accounts, the subject has occasionally been raised with regard to the local Member of Parliament accessing Westminster, and high-profile politicians and other dignitaries visiting Skye. For example:

“Skye and Lochalsh welcomed Scotland’s First Minister, Nicola Sturgeon, to Portree yesterday. She flew in by helicopter from Inverness. FlySkye hopes she now realises, first-hand, how important it is for our community to have our airport reopened and running a regular, scheduled service to the Central Belt.” (Facebook, 3 May 2015)²⁶

²⁵ Although at the time of our Kirkwall case study, in October 2015, the Committee had not met in some considerable time.

²⁶ Although, somewhat ironically, back in 1999, when the new Sabhal Mòr Ostaig campus was due to be officially opened, an aircraft carrying the Scottish Secretary, Donald Dewar,

7.7 Local identity and culture

In Activity 7.1, three of the four airports studied have long histories: Benbecula first saw scheduled air services in 1936, Sundsvall-Timrå in 1945, and Kirkwall in 1948. Benbecula and Kirkwall were also military airfields during the Second World War. Donegal Airport, meanwhile, commenced passenger services in 1986. During these case studies, participants spoke knowledgeably about the history and development of their local airport. These accounts were frequently intertwined with very personal memories of the physical fabric of the airfields and the airport buildings, and of their air travel experiences. As was mentioned earlier, in Section 7.6, these stories appeared to invoke a sense of pride in, and ownership of, their local airport, making it a significant part of local identity (Bloice *et al.*, 2017, p.16).

In Skye, however, very few of our participants were previously aware of the Glenbrittle-Renfrew service in the 1930s, and only a small proportion had personal memories of the Broadford airfield, when it was operational between 1972 and 1988. Some spoke of the rather “Spartan” conditions at the prefabricated terminal building in its earliest days, with no refreshment facilities, no public telephone, and no connecting bus service. Others remembered their embarrassment on being personally (and publicly) weighed on stand-on scales at the check-in desk. Those who had flown on the Loganair Glasgow service looked back on their experiences with mixed emotions. On stormy days with high cross-winds, travel on the cramped Islander aircraft was described as “real wing and a prayer stuff”; while on calm, clear days, the dramatic Skye scenery made the journey a much more enjoyable event. Passengers seated immediately behind the cockpit spoke of their pilot providing a running commentary on scenic landmarks throughout the journey, or of allowing them to choose the route they took when leaving Skye:

“I said: “Can you go down the south end of Skye so I can wave to my uncle?”, and that’s what we did and then we went off to Glasgow. I chose the route, you see. Because we were allowed to do it then. Health and safety these days...” (Interview with Broadford resident, 29 August 2016)

The relative importance of the airport as a local employer during the 1970s and 1980s was also mentioned, with a number of people naming relatives and acquaintances who had worked at the airfield, as firemen, maintenance men or cleaners. While perhaps not as keenly felt as in the other four case study communities, Skye’s fragmented civil aviation history did appear to have instilled a sense of local identity amongst at least some of our participants.

Throughout Activity 7.1, this link between remote, peripheral airports and local history, culture and identity was occasionally reflected in the design, décor and contents of the terminal buildings hosting our photo exhibitions. This was most notable at Kirkwall Airport where the terminal building contains several items of

and the Irish Arts and Heritage Minister, Éamon Ó’Cuív, was unable to land at Broadford because of low cloud (Ross, 1999).

memorabilia that illustrate Orkney's aeronautical past. Indeed, when the current terminal building at Kirkwall Airport was being constructed in 2001, conscious efforts were made to ensure that its interior reflected Orcadian heritage and culture. With input from a working group that comprised representatives of HIAL, Orkney Islands Council, Orkney Enterprise, and the Orkney Tourist Board, local artists and craftspeople were commissioned to produce a range of artwork that illustrated Orkney's history, landmarks, scenery and wildlife (see Figure 9). This included the installation of some large Scandinavian runic text above the terminal's main entrance, reading 'krimsitir', which represents the airport's original name of Grimsetter (see Figure 10). As one former working group member explained, this overall design was aimed at ensuring that "the minute you got off the plane, you knew you'd arrived in Orkney".



Figure 9: Part of the interior of Kirkwall Airport (Copyright: the authors)



Figure 10: Entrance to Kirkwall Airport (Source: www.visitorkney.com)

At our Portree and Broadford photo exhibitions, participants generally responded positively when we asked if the development of any new terminal building at Broadford should adopt a similar approach. For example, two participants expressed an interest in forming part of any similar working group that might be formed on Skye, while another noted that "there are plenty of local artists and designers who would be keen to get involved". In terms of potential designs, one participant suggested that

the terminal might contain a mural depicting Skye, similar to the one at the Fingal Centre in Portree; while another suggested “something quite traditional and subtle, that gives the feeling of that Highland experience”. One interviewee said:

“In a way, I think it should be Skye themed, and reflective of the mountains and the shore – the bay and the Cuillin, etc., etc.” (Telephone interview with Sleat resident, 27 September 2016)

Interestingly, designs reflecting the Cuillin formed part of a student project conducted in 2013-14, in conjunction with the FlySkye campaign. Here, in work that was mentioned by a small number of the Skye photo exhibition visitors, architectural technology students from the University of the Highlands and Islands (UHI) produced some designs (see Figure 11) for a potential new terminal hub building, which were described as “unmistakably Skye”, took “full account of the local environment and built heritage”, and incorporated a tetrahedral roof that echoes the shape of the island’s Cuillin mountain range (Restan, 2014).



Figure 11: UHI students’ design for Skye Airport (Copyright UHI; Source: www.urbanrealm.com 5 January 2014)

And while the Highland Council (2016, section 6.6) notes that “the cultural aspect of the area has been recognised as part of the socio-economic benefit” of an upgraded Broadford airport, and therefore suggests that it “could include Gaelic promotion material”, we believe that a more ambitious and sophisticated approach would better engender a sense of local identity. This might be reflected in the external structure of the terminal buildings (as in the UHI student designs), in the interior décor, or in the display of historical aviation photographs and memorabilia. We do, of course, recognise here that the extent to which this might be achieved will very much depend on the deliberations and outcomes of the Skye Air Service Short Life Working Group. If an air service is to be reintroduced first on a trial basis, and at a minimum cost (HITRANS, 2018), then we appreciate that cultural and heritage design features will be of low priority.

8. Conclusions

The aim of this report was to explore the potential social and cultural impacts of a reopened Skye Airport. In doing so, it drew upon: the small body of extant literature on the socio-culture impact of airports, particularly in remote, peripheral areas; the results of various feasibility and consultancy studies that have been conducted over the last 20 years and which have investigated the potential reintroduction of air services to Skye; the results of the qualitative research conducted as Activity 7.1 of the SPARA 2020 project, particularly that conducted with 78 Skye residents and visitors; over 2,600 posts made on the FlySkye campaign group's Facebook and Twitter pages, from 2012 to date; historical and contemporary documents produced by the key agencies involved with civil aviation in the Highlands and Islands; historical and contemporary newspaper articles; and other aviation literature.

The findings suggest that a reintroduced Skye-Glasgow service may have impacts in seven broad socio-cultural areas:

“Lifeline services”, accessibility, and connectivity. There would appear to be mixed opinions amongst the Skye and Lochalsh community as to the ‘essentiality’ of an air service to Skye, at least when compared with other Scottish island communities. This would appear to be due largely to the existence of the road bridge connection to the Scottish mainland. Improved journey times to Scotland’s Central when compared with surface transport, are seen by many as a benefit. Equally, many prefer the convenience and flexibility of driving to the mainland; and older Skye residents emphasise the financial importance of concessionary bus travel across Scotland. Maintaining quick and convenient links with family and friends, particularly for important life events and in times of family crises, is seen as a significant benefit of air travel to and from Skye, albeit with some reservations about the potential affordability of the fares. There is also some evidence of an air service being beneficial in allowing greater access to recreational and cultural opportunities on the mainland, as well as in allowing a wider range of cultural and artistic organisations to include Skye on their itineraries. However, opinions were mixed on the perceived remoteness of Skye, and the extent to which the increased connectivity afforded by an air service will overcome this feeling of isolation.

Education and learning. Much of the previous Skye-related work has focused on the benefits that might arise from increased numbers of incoming students and conference delegates to the Gaelic College, Sabhal Mòr Ostaig, at Sleat. Little attention has been paid to the potential use of an air service by Skye residents studying at universities on the mainland or elsewhere. Based on other comparator peripheral airports, particularly Donegal Airport, there might be potential for Skye to take advantage of this student market, should the fares structure be attractive and affordable. There might also be scope for a new Skye Airport to become an educational resource in its own right, by engaging with, and receiving visits from, local schools, playgroups and youth organisations.

Health and well-being. The health benefits of air travel, in enabling patients in remote areas to access specialist medical care and services in a less time-consuming and more comfortable manner, are discussed widely in the literature. This is also recognised as a potential benefit of reintroduced air services on Skye, although questions remain about the likely levels of use of a Broadford-Glasgow service, when many of the essential healthcare services will be provided at Raigmore Hospital in Inverness.

Local social networks and social capital. Our earlier Activity 7.1 research revealed that remote, peripheral airports can act as social arenas in their own right, being venues for numerous serendipitous encounters and social exchanges between family, friends and acquaintances. We can find no evidence of the Broadford Airport having served this function when it last handled passenger traffic, in the 1970s and 1980s. The extent to which a new Broadford Airport will have this role will depend on: 1) the size, design and facilities of any new terminal building; and 2) the extent to which the airport will be used and visited by the wider Skye and Lochalsh community. Our Activity 7.1 research also revealed that remote, peripheral airports can become 'destinations' and cultural venues in their own right, by acting as social spaces and hosting various exhibitions, artistic performances and other events. Opinions were mixed amongst Skye residents as to whether a new Broadford Airport might become such a venue. Again, much will depend here on the size, design and facilities of any new airport buildings.

Social inclusion/exclusion. Some of the discussion around the reintroduction of Skye air services has focused on the economic inclusivity of the fares. Here, though, the evidence is contradictory. The RDC and ARUP studies (2013 & 2016) point to the lower levels of income deprivation in the Skye catchment area and forecast a healthy local demand for air travel. Our Activity 7.1 research, however, found that a significant proportion of our Skye participants have real concerns about the potential affordability of the fares, particularly when entire families wish to travel. They suggested that only tourists and wealthier local residents will be in a financial position to use the air service.

Community empowerment and development.

There is some evidence to suggest that a reopened Skye airport will contribute towards a stronger local community by influencing the in-migration of highly skilled people to the area, and the retention of younger people in the area, thus stemming population decline. There is also some evidence, particularly on FlySkye's social media pages, that a new air service will help to overcome a sense of injustice and unfairness amongst some sections of the Skye and Lochalsh community, in that they are currently the only major Scottish island without an air service.

Local identity and culture. Our earlier Activity 7.1 research revealed that many communities in remote, peripheral area have a clear sense of pride in, and ownership of, their local airport, making it a significant part of local identity. As Skye has a more fragmented civil aviation history, with the last scheduled Broadford-Glasgow service ceasing in 1988, this sense of local identity was perhaps not as keenly felt amongst our Broadford and Portree participants. Using Kirkwall Airport as an exemplar, this

report has noted that the design, décor and contents of an airport terminal building can play a significant role in reflecting local history, culture and identity. And while some work along these lines has already been conducted in a Skye context, most notably the work of UHI students in designing a new terminal building (Restan, 2014), we would encourage those agencies involved in the plans to reopen the Broadford airfield to pursue this approach. Again, though, as with many of the other potential socio-cultural benefits noted above, the extent to which these can be exploited will depend very much on the eventual size, design and facilities of any new airport buildings.

References

- A&TC (2004). *An expanded air services network for the Highlands & Islands. Volume I – text*. Available at <http://stratus.cne-siar.gov.uk/techservices/documents/report.pdf> (Accessed 11 July 2018)
- ACI EUROPE (1998). *Creating employment and prosperity in Europe: a study by ACI EUROPE of the social and economic impact of airports*. Available at <https://www.yumpu.com/en/document/view/30661790/creating-employment-and-prosperity-in-europe> (Accessed 24 July 2018)
- Air Transport Action Group (2016). *Aviation: benefits beyond borders*. Available at https://aviationbenefits.org/media/149668/abbb2016_full_a4_web.pdf (Accessed 24 July 2018)
- Airport Operators Association (2014). *Airports in the community: the story of how UK airports help their local communities*. Available at <https://www.aoa.org.uk/wp-content/uploads/2014/06/AOA-AIRPORTS-IN-THE-COMMUNITY.pdf> (Accessed 27 July 2018)
- Australian Airports Association (2012). *Australia's regional airports: facts, myths and challenges*. Available at <http://flysafe.raa.asn.au/regulations/AAA-Regional-Airports-Research-Paper.pdf> (Accessed 24 July 2018)
- Avinor (2008). *Aviation in Norway: sustainability and social benefit: project report: summary*. Available at <https://avinor.no/globalassets/konsern/miljo-lokal/miljo-og-samfunn/sustainability-and-social-benefit-summary.pdf> (Accessed 24 July 2018)
- Avinor (2011). *Aviation in Norway: sustainability and social benefit: report 2*. Available at <https://avinor.no/globalassets/konsern/miljo-lokal/miljo-og-samfunn/hovedrapport-engelsk.pdf> (Accessed 24 July 2018)
- Avinor (2014). *Communication on progress 2014*. Available at https://www.unglobalcompact.org/system/attachments/cop_2015/163791/original/COP_2014_Avinor.pdf?1432999786 (Accessed 24 July 2018)
- Avinor (2017). *Avinor and Norwegian aviation 2017*. Available at https://avinor.no/globalassets/konsern/om-oss/rapporter/en/avinor-rapport_uk_v1.pdf (Accessed 24 July 2018)
- Avinor (2018). *Avinor and Norwegian aviation 2018*. Available at https://avinor.no/globalassets/konsern/om-oss/rapporter/en/avinor-and-norwegian-aviation-2018_4.pdf (Accessed 24 July 2018)
- Babcock, M.W. (1999). *The role of general aviation airports in medical service delivery to rural Kansas communities*. Available at <https://rosap.ntl.bts.gov/view/dot/13926> (Accessed 24 July 2018)
- Baynes, R. (2017). Skye airport plan gets a boost as costs fall. *The National*, 8 July.

- Bloice, L., Baxter, G. and Gray, D. (2017). *Report on the social and cultural importance of remote and peripheral airports*. Available at <https://openair.rgu.ac.uk/handle/10059/2433> (Accessed 4 July 2018)
- Boutyline, A. and Willer, R. (2017). The social structure of political echo chambers: variation in ideological homophily in online networks. *Political Psychology*, 38(3), pp.551-569.
- Braathen, S. (2011). *Air transport services in remote regions*. International Transport Forum Discussion Paper No. 2011-13. Available at <https://www.itf-oecd.org/sites/default/files/docs/dp201113.pdf> (Accessed 26 July 2018)
- Bright, J. (2017). *Explaining the emergence of echo chambers on social media: the role of ideology and extremism*. Available at <https://arxiv.org/abs/1609.05003v2> (Accessed 5 July 2018)
- Calder, C. (1998). Come Skye with me: Isle airport will take off. *Daily Mirror*, 11 November, p.11.
- Candlish, J. (2006). Air operator loses island runway lease. *Press and Journal*, 20 October, p.3.
- Church, A., Frost, M., Sullivan, K. (2000). Transport and social exclusion in London. *Transport Policy*, 7, pp.195-205.
- Civil Aviation Authority (1972). *Aerodrome development: proposal for airfield at Ashaig, Broadford, Isle of Skye, and subsequent construction*. CAA2/175. National Records of Scotland, Edinburgh.
- Civil Aviation Authority (1974). *Air transport in the Scottish Highlands and Islands*. London: CAA.
- Clegg, P.V. (1995). *Wings over the glen*. Peterborough: GMS Enterprises, 1995.
- Communities Channel Scotland (n.d.). *What is social impact?* Available at <http://www.communityscot.org.uk/social-impact-pledge/what-social-impact/> (Accessed 18 July 2018)
- Craig, R.H. (2011). The value of the air bridge to the Islands. *Scottish Geographical Journal*, 127(1), pp.61-78.
- Deloitte Access Economics (2012). *Connecting Australia: the economic and social contribution of Australia's airports*. Available at <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-contribution-australian-airport-industry-210512.pdf> (Accessed 24 July 2018)
- Deloitte Access Economics (2018). *Connecting Australia: the economic and social contribution of Australia's airports*. Available at <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-contribution-australian-airport-industry-080318.pdf> (Accessed 24 July 2018)
- Dennier, C. (2004). Major boost in plans for new Skye air services. *Press and Journal*, 1 March, p.3.

Donehue, P. and Baker, D. (2012). Remote, rural, and regional airports in Australia. *Transport Policy*, 24, pp.232-239.

ekosgen and Reference Economic Consultants (2016). *Economic and social benefits of proposed air services at Skye Airport*. Available at <http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/skye-air-services-study-2016.html> (Accessed 17 July 2018)

Ernst & Young (2010). *Evaluation of regional aviation developments under the Regional Infrastructure Development Fund*. Available at https://www.rdv.vic.gov.au/_data/assets/pdf_file/0004/1147819/Regional-aviation-report-FINAL-17-sept-10-vsn-3.pdf (Accessed 24 July 2018)

Farrington, J. and Farrington, C. (2005). Rural accessibility, social inclusion and social justice: towards conceptualisation. *Journal of Transport Geography*, 13, pp.1-12.

Flight (1937a). Flying boats to the Hebrides? 6 May, p.459.

Flight (1937b). Western Isles service. 7 October, p.366.

Flight (1946). Internal route expansion. 20 June, p.628.

Flight International (1964a). By air to the Isle of Skye. 2 July, p.9.

Flight International (1964b). Strathallan Air Charter Ltd. 20 August, p.306.

Flight International (1977). John Grierson. 11 June, p.1689.

Geurs, K.T., Boon, W. and Van Wee, B. (2009). Social impacts of transport: literature review and the state of the practice of transport appraisal in the Netherlands and the United Kingdom. *Transport Reviews*, 29(1), pp.69-90.

Glasgow Herald (1938). Skye disappointment at loss of service. 9 May, p.14.

Glasgow Herald (1965). Army aid for Skye airfield rejected: site nearer Portree preferred. 11 February, p.12.

Grierson, J. (1945). Organising for efficiency: pre-war success with slow aircraft. *Flight*, 22 February, p.211.

Halpern, N. and Bråthen, S. (2010). *Catalytic impact of airports in Norway*. Report 1008. Available at https://www.regjeringen.no/contentassets/2066b0de5fda4cfdb141a11f9c2f2e75/catalytic_impact_airports_norway267815_1_a.pdf (Accessed 24 July 2018)

Halpern, N. and Bråthen, S. (2011). Impact of airports on regional accessibility and social development. *Journal of Transport Geography*, 19, pp.1145-1154.

Hansard (1951). H.C. Vol. 485. (19 March).

Hansard (1975). H.C. Vol. 890 (14 April).

Hansard (1980). H.L. Vol. 407 (25 March).

Herbert, N.S. (2012). *The socio-economic impact of air transport on small regions in Finland: case study: the Kokkola-Pietarsaari Airport region*. Available at <https://www.theseus.fi/handle/10024/48945> (Accessed 25 July 2018)

Highlands and Islands Airports Limited (n.d.). *Kirkwall Airport Consultative Committee*. Available at <http://www.hial.co.uk/kirkwall-airport/about-us/kirkwall-airport-consultative-committee/> (Accessed 31 July 2018)

Highland Council (2017). *Isle of Skye and Raasay Committee: Skye aerodrome update*. Available at [https://www.highland.gov.uk/meetings/meeting/3873/isle of skye and raasay committee/attachment/72636](https://www.highland.gov.uk/meetings/meeting/3873/isle%20of%20skye%20and%20raasay%20committee/attachment/72636) (Accessed 17 July 2018).

HIDB (1970). *Highlands and Islands Development Board, Fourth Report (1st January 1969 to 31st December 1969)*. Inverness: HIDB.

HIDB (1973). *Highlands and Islands Development Board, Seventh Report, 1st January 1973 to 31st December 1973*. Inverness: HIDB.

HIDB (1974). *Highlands and Islands Development Board, Eighth Report, 1st January 1972 to 31st December 1972*. Inverness: HIDB.

Highlands and Islands Air Services (Scotland) Act 1980. c.19. Available at http://www.legislation.gov.uk/ukpga/1980/19/pdfs/ukpga_19800019_en.pdf (Accessed 10 July 2018)

Highlands and Islands Enterprise (2015). *Our next generation: young people in Lochaber, Skye and Wester Ross: attitudes and aspirations*. Available at <http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/young-people-and-the-highlands-and-islands--attitudes-and-aspirations-research.html> (Accessed 29 July 2018)

HITRANS (2007). *Broadford Airport, Skye: background note for meeting with Civil Aviation Authority*. Available at [https://hitrans.org.uk/Documents/Broadford Airport CAA Report.pdf](https://hitrans.org.uk/Documents/Broadford%20Airport%20CAA%20Report.pdf) (Accessed 11 July 2018)

HITRANS (2008a). *The transport strategy for the Highlands and Islands, 2008-2021*. Available at [https://hitrans.org.uk/userfiles/file/Regional Transport Strategy.pdf](https://hitrans.org.uk/userfiles/file/Regional%20Transport%20Strategy.pdf) (Accessed 11 July 2018)

HITRANS (2008b). *The transport strategy for the Highlands and Islands: draft delivery plan and associated documentation*. Available at [https://hitrans.org.uk/userfiles/file/Proposed Delivery Plan.pdf](https://hitrans.org.uk/userfiles/file/Proposed%20Delivery%20Plan.pdf) (Accessed 11 July 2018)

HITRANS (2013). *Report to Partnership meeting 23 August 2013. Research and strategy delivery. Skye air service feasibility study*. Available at [https://hitrans.org.uk/Documents/Item 10 - Skye Air Service Feasibility Study.pdf](https://hitrans.org.uk/Documents/Item%2010%20-%20Skye%20Air%20Service%20Feasibility%20Study.pdf) (Accessed 17 July 2018)

HITRANS (2015). *Report to Partnership meeting 6 February 2015. Research and strategy delivery. Skye air service development strategy*. Available at [https://hitrans.org.uk/Documents/Item_14 -
_Skye Air Service Development Strategy Update.pdf](https://hitrans.org.uk/Documents/Item_14_-_Skye_Air_Service_Development_Strategy_Update.pdf) (Accessed 17 July 2018)

HITRANS (2018). *Report to Partnership meeting of 20 April 2018. Research and strategy delivery. Skye Air Service Short Life Working Group – delivery of air services at a minimum cost*. Available at [https://hitrans.org.uk/Documents/Item_15 -
_Skye Air Service Short Life Working Group.pdf](https://hitrans.org.uk/Documents/Item_15_-_Skye_Air_Service_Short_Life_Working_Group.pdf) (Accessed 2 July 2018)

Hutchison, I. (1987). *The story of Loganair: Scotland's airline – the first 25 years*. Stornoway: Western Isles Publishing.

Industry High Level Group (2017). *Aviation benefits 2017*. Available at <https://www.iata.org/policy/Documents/aviation-benefits-%20web.pdf> (Accessed 24 July 2018)

Jarvis, T. (2006). *Beyond lifeline services: how investing in transport can unlock the economic potential of peripheral areas*. Paper presented at the Scottish Transport Applications and Research Conference, Glasgow, 19 April 2006. Available at http://www.starconference.org.uk/star/2006/Tony_Jarvis.pdf (Accessed 26 July 2018)

Jones, P. and Lucas, P. (2012). The social consequences of transport decision-making: clarifying concepts, synthesising knowledge and assessing implications. *Journal of Transport Geography*, 21, pp.4-16.

Krutilla, J.V. (1967). Conservation reconsidered. *The American Economic Review*, 57(4), pp.777-786.

Lucas, K. (2012). Transport and social exclusion: where are they now? *Transport Policy*, 20, pp.105-113.

Maas, K. and Liket, K. (2011). Social impact measurement: classification of methods. In Burritt, R.L. et al. (Eds.) *Environmental management accounting and supply chain management*. Dordrecht: Springer, pp.171-202.

Markovich, J. and Lucas, K. (2011). *The social and distributional impacts of transport: a literature review*. Transport Studies Unit Working Paper No. 1055. Available at <http://www.tsu.ox.ac.uk/pubs/1055-markovich-lucas.pdf> (Accessed 19 July 2018)

Matarasso, F. (1997). *Use or ornament? The social impact of participation in the arts*. Available at <http://www.artshealthresources.org.uk/wp-content/uploads/2017/01/1997-Matarasso-Use-or-Ornament-The-Social-Impact-of-Participation-in-the-Arts-1.pdf> (Accessed 19 July 2018)

McGregor, A. and Laird, J. (2005). *Economic benefits of improvements to infrequent lifeline services: a case study of air services in the Highlands and Islands*. Paper presented at the Scottish Transport Applications and Research Conference, Glasgow, 26 April 2005. Available at http://www.starconference.org.uk/star/2005/anne_mcgregor.pdf (Accessed 26 July 2018)

Moogan, E. (2007). *A “fare” go for regional communities – the challenge of providing accessibility to regional and remote communities*. Paper presented at Thredbo 10, the 10th

International Conference on Competition and Ownership in Land Passenger Transport, Hamilton Island, Australia, 12-17 August 2007. Available at https://thredbo-conference-series.org/downloads/thredbo10_papers/thredbo10-themeD-Moogan.pdf (Accessed 23 July 2018)

Mott MacDonald (2010). *A review of air services in the Highlands & Islands*. Available at https://hitrans.org.uk/Documents/A_Review_of_Air_Services_In_the_Highlands_and_Islands.pdf (Accessed 11 July 2018)

National Records of Scotland (2013). *2011 census: first results on population and household estimates for Scotland – release 1C (part two)*. Available at <http://www.scotlandscensus.gov.uk/documents/censusresults/release1c/rel1c2sb.pdf> (Accessed 5 July 2018)

Newkirk, J. and Casavant, K. (2002). *Functions and benefits of rural airports in Washington*. Available at <https://www.wsdot.wa.gov/Research/Reports/500/557.1.htm> (Accessed 24 July 2018)

Northpoint Aviation Services, Reference Economic Consultants, The Spyria Partnership, and Nineteen Hundred Aviation (2013). *Regional air service development opportunities study*. Available at https://hitrans.org.uk/Documents/Regional_Air_Opportunities_Study.pdf (Accessed 17 July 2018)

Özcan, İ.Ç. (2014). A community evaluation of Essential Air Services. *Journal of Air Transport Management*, 36, pp.110-119.

Parkhurst, G. and Shergold, I. (2009). *Literature review: the treatment of social and distributional impacts in appraisal and evaluation*. Available from http://eprints.uwe.ac.uk/10826/1/shergold-parkhurst_Social_and_distributional_impacts_in_appraisal.pdf (Accessed 19 July 2018)

Partal, A. and Dunphy, K. (2016). Cultural impact assessment: a systematic literature review of current methods and practice around the world. *Impact Assessment and Project Appraisal*, 34(1), pp.1-13.

Pfleger, J. (2016). The true Aussie “Milk Run”. *Airline Reporter*, 2 December. Available at <https://www.airlinereporter.com/2016/12/true-aussie-milk-run/> (Accessed 24 July 2018)

Press and Journal (2004). Short-lived air link mystery. 15 March, p.14.

Quattrociocchi, W., Scala, A. and Sunstein, C.R. (2016). *Echo chambers on Facebook*. Harvard Law School Discussion Paper No.877. Available at http://www.law.harvard.edu/programs/olin_center/papers/pdf/Sunstein_877.pdf (Accessed 5 July 2018)

Ramage, I. (2016). Airport revival closer to take-off. *Press and Journal*, 3 November 2016, p.8.

RDC Aviation and ARUP (2013). *Skye air services feasibility study: final issue*. Available at <http://www.hie.co.uk/regional-information/economic-reports-and-research/archive/skye-air-services-feasibility-study.html> (Accessed 17 July 2018)

- RDC Aviation and ARUP (2016). *Skye air services business case – 2016: final draft issue*. Available at https://www.highland.gov.uk/download/meetings/id/71139/item_14_skye_air_services_business_case_2016 (Accessed 17 July 2018)
- Restan, S. (2014). Mountains inspire students to fly high for Skye airport. *Press and Journal*, 15 January, p.4.
- Ross, C. (2017). Campaigners seek take-off in battle to re-open airport. *Press and Journal*, 18 April, p.4.
- Ross, D. (1999). £6m Gaelic campus gets off the ground. *Herald*, 23 March, p.4.
- Ross, D. (2012). Skye residents support air service restoration plans. *Herald*, 26 December, p.6.
- RP Erickson & Associates (2015). *Comparison of approaches for supporting, protecting & encouraging remote air services*. Available at <http://www.assembly.nu.ca/study-comparison-approaches-supporting-protecting-and-encouraging-remote-air-service> (Accessed 26 July 2018)
- Ruiz, J. (2004). *A literature review of the evidence base for culture, the arts and sport policy*. Available at <http://www.gov.scot/Publications/2004/08/19784/41533> (Accessed 19 July 2018)
- Sagnia, B.K. (2004). *Framework for cultural impact assessment*. Available at [http://www.dmeforpeace.org/sites/default/files/Framework%20for%20Cultural%20Impact%20Assessment%20\(INCD\)_2004.pdf](http://www.dmeforpeace.org/sites/default/files/Framework%20for%20Cultural%20Impact%20Assessment%20(INCD)_2004.pdf) (Accessed 18 July 2018)
- Scotsman* (1935a). New air services: Western Isles and the mainland: early start to be made. 9 July, p.14.
- Scotsman* (1935b). Flying to Skye: new Scottish air service: over snowy hill passes. 6 December, p.10.
- Scotsman* (2012). Fresh call for Skye air services to be restored. 29 October.
- Scotsman* (2018). Flights to Isle of Skye 'likely to resume'. 22 June.
- Scott Wilson (2009). *Evaluation of the Scottish Air Route Development Fund: study report*. Available at <http://www.evaluationsonline.org.uk/evaluations/Search.do?ui=basic&action=show&id=384> (Accessed 24 July 2018)
- Scottish Development Agency Act 1975*. c.69. Available at <https://www.legislation.gov.uk/ukpga/1975/69/contents> (Accessed 10 July 2018)
- Scottish Development Department (1982). *Civil aviation, 1981-1982*. DD17/2099. National Records of Scotland, Edinburgh.
- Scottish Development Department (1987a). *Civil aviation: air services and operators, 1985-1987*. DD17/1935. National Records of Scotland, Edinburgh.

Scottish Development Department (1987b). *Civil aviation, 1983-1987*. DD17/1976. National Records of Scotland, Edinburgh.

Scottish Office (1988). *Glasgow-Skye air subsidy withdrawn*. News release, 9 March.

Sharpley, R. and Stone, P.R. (2011). Socio-cultural impacts of events: meanings, authorized transgression and social capital. In Page, S.J. and Connell, J. (Eds.). *The Routledge handbook of events*. London: Routledge, pp.347-361.

Smyth, A., Christodoulou, G.; Dennis, N., Al-Azzawi, M. and Campbell, J. (2012). Is air transport a necessity for social inclusion and economic development? *Journal of Air Transport Management*, 22, pp.53-59.

Steer Davies Gleave (2004). *Air services from Skye: assessment of proposed services*. Available at [https://hitrans.org.uk/Documents/Skye Air Service Proposals - Assessment.pdf](https://hitrans.org.uk/Documents/Skye_Air_Service_Proposals_-_Assessment.pdf) (Accessed 11 July 2018)

Swindon, P. (2015). Blue Skye thinking: the battle to build an airport which will change Scotland's most beloved island. *Sunday Herald*, 22 November, p.35.

Taylor, H.A. (1936). Summer's end. *Flight*, 5 November, pp.456-458.

Times (1966). Skye airstrip dispute ends. 24 August, p.8.

United Kingdom Government (2010). *Public service compensation for air links to the islands*. Available at http://ec.europa.eu/competition/consultations/2010_sgei/uk_1_en.pdf (Accessed 26 July 2018)

West Highland Free Press (1991). Plea to restore Skye air link. 9 March.

Woollard, C. (2017). Skye's the limit as island infrastructure buckles under tourist numbers. *The Sunday Herald*, 2 July, p.19.

York Aviation (2004). *The social and economic impact of airports in Europe*. Available at <http://www.yorkaviation.co.uk/uploads/Social-and-economic-impact-of-airports-in-Europe.pdf> (Accessed 24 July 2018)