

Glen Urquhart and Strathglass Transport Feasibility Study

PREPARED FOR: Soirbheas





Soirbheas is a registered charity, whose objectives are to strengthen and support the communities of Glen Urquhart and Strathglass, through investment in local renewable energy schemes. The organisation aims to improve energy efficiency of the housing within our communities, strengthen the local economy, protecting our environment for future generations and providing services that enable elderly people to live longer in their own homes.



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Front page photo credit Jill Hodge.

Executive Summary

This report evidences the transport challenges faced by residents and visitors in the Glen Urquhart and Strathglass through a process of stakeholder engagement. To address these challenges, this document explores different transport options which also aim to reduce private car dependency in the area. These options have been developed to produce an understanding of the scope, timelines and approximate cost of the different opportunities moving forward.

Through a series of engagement activities including targeted interviews, surveys and a stakeholder workshop the key transport challenges for residents and visitors to the area were identified. This stakeholder engagement aimed to capture the views of the different demographics and community groups active in the area as well as representing the population spread across the two Glens. The main aims of the stakeholder engagement include to ascertain where people are travelling, how they are travelling and why they are opting for that particular mode of transport.

The key challenges were identified as:

- 1. Taking children to school within Drumnadrochit without a fossil fuelled car
- 2. Taking children to school in Drumnadrochit from outside the village without a fossil fuelled car
- 3. Commuting to Inverness without a fossil fuelled car
- 4. Leisure travel to Inverness and around Glen Urquhart and Strathglass without a fossil fuelled car
- 5. Travel between Cannich and Beauly without a fossil fuelled car
- 6. Funding transport for school trips
- 7. Attending community groups without a fossil fuelled car

The proposed solutions that are explored include:

- 1. A Walking Bus within Drumnadrochit to encourage active travel for the primary school
- 2. **Developing safer paths** in Drumnadrochit and Balnain to allow for active travel and safer routes to school
- 3. Expansion of the EV charging network in Glen Urquhart and Strathglass
- 4. Increase Ride Sharing provision formalising and expand
- 5. Car share scheme
- 6. Improving the Public transport information availability
- 7. Introducing e-bike hire to Glen Urquhart and Strathglass
- 8. Introduce a Community Transport Scheme
- 9. Establishing a Transport Hub

How these solutions addressed these challenges is summarised in Figure E.1. The timeframe of these different solutions, the funding streams available and the timeline of execution has been investigated in this report.

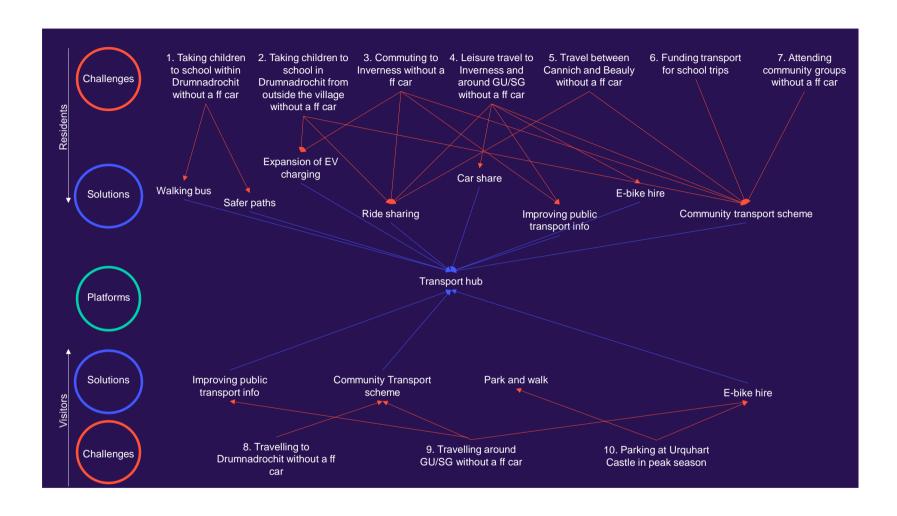


Figure E.1: Challenges and solutions for the Glen Urquhart and Strathglass region.

The immediate next step following the finalisation of this report would be for the community to review the options presented here and decide collectively if and how they would like to pursue each one. A detailed delivery programme could then be worked up as a framework for moving forward.

Contents

Ex	recutive Summary	3
1.	Introduction	2
2.	Methodology	6
3.	Challenges for the Glen Urquhart/ Strathglass region	7
	3.1 Residents challenges	7
	3.2 Visitor challenges	11
4.	Options appraisal	13
	4.1 A Walking Bus within Drumnadrochit to encourage active travel for school15	the primary
	4.2 Developing safer paths in Drumnadrochit and Balnain to allow for a and safer routes to school	
	4.3 Expansion of the EV charging network in Glen Urquhart and Strath	glass 24
	4.4 Formalising and expanding the Ride Sharing provision	
	4.5 Car share scheme	31
	4.6 Improving the Public transport information availability	33
	4.7 Introducing e-bike hire to Glen Urquhart and Strathglass	35
	4.8 Introducing a Community Transport Scheme	37
	4.9 Establishing a Transport Hub	46
5.	Funding Options	49
6.	Next Steps	54
Αŗ	opendix A: Stakeholder list	56
Αŗ	opendix B: Copy of surveys	56
Αŗ	opendix C: Bus timetables	87
Δr	opendix D. Original list of options	99

1. Introduction

1.1 Scope

Through a process of stakeholder engagement, this report evidences the transport challenges faced by residents and visitors in the Glen Urquhart and Strathglass. To address these challenges, this document explores different transport options which also aim to reduce private car dependency in the area. These options have been developed to produce an understanding of the scope, timelines and approximate cost of the different opportunities moving forward.

This document has been commissioned by Soirbheas the community charity for Glen Urquhart and Strathglass, though it aims to be a community owned report. The key objective is to inform those taking the project forward of the next actionable steps and associated costs. The detail provided here produced an understanding of how to support development of the transport provision in the short, medium and long term.

1.2 Background

Soirbheas in the national context

The Scottish Government's Economic Strategy calls for sustainable investment that tackles emissions, enhances our natural capital and supports the transition to a low carbon economy. In particular, it recognises that the potential of Scotland's islands and remote communities in generating renewable energy. Through its partnership with Corrimony Energy Ltd, Soirbheas has deployed an innovative financial model which enables it share of the income to be used to directly benefit the communities of Strathglass and Glen Urquhart. The Charity also receives community benefit from SSE and Green Highland Renewables. The funds are redistributed to the community through 4 grants programme and via number of strategic community development initiative.

Rural transport challenge

Transport can have a significant impact on quality of life in rural communities. It is a key enabler for economic activity and allows ease of access to leisure, education and health facilities.

When considering options for improving transport in rural communities, it is recognised that the success of interventions targeted at improvement in services, provision of jobs, and support for economic growth all hinge in connecting sparse and dispersed populations to the key locations. Rural communities encounter specific challenges related to long distances between dispersed settlements and connection to major transport routes, especially during colder months. The challenges are more profound for people without access to private vehicles or have accessibility difficulties such as people with disabilities or elderly residents.

Low rural population density has traditionally made the viability of public transport difficult and, as result, rural communities are often inadequately served by sustainable transport. The regions

of Glen Urquhart and Strathglass are no exception; current bus services are restrictive, particularly in supporting commuters.

The result is a very high dependence on car ownership. As described in the Drumnadrochit Local Energy Plan¹, 75% of the population are economically active and predominantly travel to work by car. The vast majority of these trips will be using fossil fuelled vehicles. This, of course, contributes to both global and local environmental issues.

Environmental impact

Latest figures show 37% of Scotland's greenhouse gas emissions are accounted for by transport. The Scottish Government is committed to continuing to drive down emissions and has set targets to reduce emissions of greenhouse gases by at least 42 per cent by 2020, as a step towards an 80% reduction by 2050 (compared to 1990 levels).

Scotland's Cleaner Air for Scotland strategy notes that the impact of poor air quality has been estimated to cost around £15bn annually in the UK. In Scotland in 2010, fine particulate matter was associated with 2,000 premature deaths and around 22,500 lost life-years across the population. A large proportion of harmful emissions effecting local air quality are emitted from the exhaust pipes of petrol and diesel fuelled vehicles, particularly at roadsides.

The UK government's Clean Growth Strategy stipulates a growing need to reduce emissions for road transport, ultimately ending the sale of new conventional petrol and diesel cars and vans by 2040. The Scottish Government echoed this strategy and set out an ambitious target to reduce greenhouse gas emissions and promote the electrification of the road network, with the aim of removing the need for new petrol or diesel cars or vans on Scotland's roads by 2032.

Tourism is a significant part of Scotland's economy, this is even stronger in rural areas. With this comes challenges regarding the impact on local transport and infrastructure. The number of visitors coming to Scotland is expected to increase in the coming decades², therefore their environmental impact needs considered.

Exploring the options

In Drumnadrochit, transport accounts for 36% of its total annual energy use, equivalent to 11.4 GWh and contributing 9,485 tCO $_{2e}$ in carbon emissions. The communities of Glen Urquhart and Strathglass care about enabling accessible, low carbon mobility for all to help address these challenges hence Soirbheas wishes to start addressing how public and community transport services can be improved and car usage can be reduced.

¹ Available at https://www.soirbheas.org/local-energy-plan/

 $^{^2\} https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers/scottish-tourism-futures-2069.pdf$

Communities in rural areas across the UK are deploying a number of alternatives to fixed schedule public transport services. The Welsh Government, for example, are exploring two main approaches: flexible scheduling of regular bus services to allow deviations and a 'demand-response' service to enable transport services to get closer to people's home and at time required.

Another approach is sharing of vehicles, which Soirbheas has particular interest in developing to ensure best use of resources. There has been significant growth in the sharing economy in recent years, and this is widely expected to continue. The UK Government has identified the significance of this opportunity and has stated that the UK's ambition should be to be the world's leading sharing economy. The UK Government's Independent Review of the Sharing Economy recommended that all public bodies that maintain car fleets should investigate whether they can save money by sharing their vehicles with the public when not otherwise in use, or by replacing their fleets with membership of an existing car club scheme. The review also suggested that government and regional transport authorities should work with car clubs to integrate them into public sector transport systems.

Electromobility

Electric vehicles (EVs) and renewable energy generation technologies have been acknowledged as part of the UK's long-term energy pathways to 2050. The recent publication of the Office for Low Emission's (OLEV) Road to Zero Strategy, has further sought to accelerate this change, by announcing a £400 million programme to accelerate coverage of electric vehicle infrastructure and at least 50%, and as many as 70%, of new car sales and up to 40% of new van sales being ultralow emission by 2030.

Working with Urban Foresight, the Scottish Government published Switched On Scotland: A Roadmap to Widespread Adoption of Plug-in Vehicles in 2013. The roadmap establishes an ambition that by 2050 Scottish towns, cities, and communities will be free from the damaging effects of petrol and diesel fuelled vehicles. To achieve this, Transport Scotland's ambition is that from 2032 all new light duty vehicles sold will be electric.

1.3 Feasibility study

The success of any new transport service in a rural community will depend on how well that service works within the specific needs and context of the community. As an example, understanding how commuting by bus could be incentivised given the limits of the infrequent bus service. Careful investigation of the options in a way which involves 'local champions' from the local community is vital to the design and implementation of any new services.

To be able to have the confidence and information to start to address transport needs Soirbheas commissioned a Transport Feasibility Study. This project seeks to identify viable options that lead to a reduction in private car use and increase the use of public transport and other low carbon mobility solutions. The outcome of the study will lead to the development of a fit for purpose, multi-modal and sustainable transport system for the Glen Urquhart and Strathglass region.

The ultimate goal of this study is to improve links between the main communities, increasing the use and availability of community transport and exploring the potential of green and active travel options where possible. There are a variety of solutions detailed here, including those that will harness the benefits of renewable energy and generate income for the local community. This study aims to assess these solutions and to ascertain which options are more viable. As well as what the associated benefits would be and how this can contribute to long term resilience.

Finally, it is recognised that there can be significant costs associated with improving transport and that while Soirbheas has community funding, drawing funding from other sources will greatly enhance the scale and chances of success of any solution. In this study other funding sources are identified, as well as detailing how to develop commercially sustainable business models for the initiatives identified.

2. Methodology

Through a series of engagement activities including targeted interviews, surveys and a stakeholder workshop the key transport challenges for residents and visitors to the area were identified. This stakeholder engagement aimed to capture the views of the different demographics and community groups active in the area as well as representing the population spread across the two Glens (see Appendix A for list of stakeholder groups consulted).

The main aims of the stakeholder engagement include to ascertain where people are travelling, how they are travelling and why they are opting for that particular mode of transport. In total over 20 interviews were carried out across different community groups, different areas of the Glen and different demographics. For the survey there were 154 respondents to the adult resident's survey, 156 for the youth resident survey and 49 for the visitor survey (copies of the survey can be found in the Appendix B).

2.1 Survey demographics

Across the adult residents surveyed: 45% of residents lived in Drumnadrochit, with 19.2% from Balnain and 8.8% from Cannich, with the other respondents from the other hamlets and villages within the Glen Urquhart and Strathglass. This geographic spread indicated that views were represent across the two Glens. Regarding employment, 42.8% of respondents were in full time employment, 24.3% were in part time employment and 30.9% were retired, these groups have different transport needs therefore it is important to ensure these groups are sufficiently represented.

For the young people's survey, there was a similar geographic split, with 42.2% of respondents from Drumnadrochit, 22.7% from Cannich and 8.4% from Balnain. All respondents were of secondary school age, with an equal spread across 12 - 17 years olds.

There is high car ownership in the region, with 93% of adult residents surveyed indicating that car travel is their main mode of travel, and 54% of households owning two cars or more. This high car dependency is typical of rural communities but creates issues both for the younger demographic who don't necessarily have access to a car, and also the older generation. When older people can no longer drive this can lead to social isolation; with an aging demographic in the Glen Urquhart and Strathglass this problem is growing.

Visitors surveys were gathered predominantly from engagement at the Highland Games. The survey results evidenced that most visitors to the area (93%) travelled by car and had not even considered public transport as an option. Visitors had travelled from other parts of Scotland, Europe and the USA, with a spread of ages ranging from the 18-34 age bracket to the 60-69 age bracket.

Challenges for the Glen Urquhart/ Strathglass region

3.1 Residents challenges

The challenges identified in this section illustrate the main concerns of residents and visitors to the area across different age groups, geographic spread occupations. The topics raised here illustrate how everyone in the Glen³ interacts with the local transport system. Long-term resilience can support economic growth in the area, allowing locals and visitors to access opportunities without the necessity of a fossil-fuel car.

Glen Urquhart Primary School and Glen Urquhart High School reported that there are issues with congestion during pick up and drop off times. Drop off/pick up times are already staggered to accommodate this traffic but this continues to be a problem and is likely to worsen due to the number of new houses being built in Drumnadrochit. Survey results indicate that 65% of parents drive their children to school rather than opt for other transport modes.

 Taking children to school within
 Drumnadrochit without a fossil fueled car Approximately 50% of students at Glen Urquhart High School are within walking distance, however a proportion of them still drive/are driven because of a lack of safe routes in the village for students to walk and cycle to school.

Because of the number of heavy goods/logging trucks and high levels of seasonal visitors passing through the village, roads are not perceived as safe to cycle on. Approximately half of secondary school students cycle to school, but 30% of students report they do not cycle more because roads are unsafe. Although traffic is not necessarily exceeding the speed limit, the volume and type of traffic makes it unpleasant and unappealing to pursue active travel in the Drumnadrochit.

Concerns exist about the safety of crossing the A82 in Drumnadrochit. Parents are afraid that cars will not stop at the traffic lights outside the post office, that the zebra crossing is not visible enough near the turning to Cannich (A831), and that there is not a sufficient pedestrian crossing to the new supermarket/shopping development (at present

 $^{^{\}rm 3}$ 'The Glen' refers to the Glen Urquhart and Strathglass region as a whole.

there is only a dropped pavement). All these concerns contribute to choosing to drive children to school rather than pursuing active travel.

At present some parents pick their children from the car park on Balmaccan Road allowing children to walk across the playing fields from the school to meet them. However, this area is due for redeveloped and it is uncertain if park will continue to be available.

2. Taking children to school in
Drumnadrochit from outside the village without a fossil fueled

School children who are more than 3 miles from the school are provided with free transport to and from school. The bus service is paid for by the Highland Council and only operates in term time. This bus service provided by the current provider is considered to be unreliable, with reports that there are times that students have been late to exams because buses have broken down or arrived late. However, there are students who live closer but cannot walk or cycle to school because of a lack of safe routes. This includes lack of paths beside roads and worries of safety when cycling on the main particular the trunk roads.

The Study bus provides transport 4 evenings a week for students wishing to stay at the high school after school for extracurricular activities. Approximately 10% of survey respondents regularly use the study bus. This is a 25-seater bus which is operated by Ross's buses, dropping students off where needed. This bus does not run during the school exam periods, therefore students wishing to attend extracurricular activities during this time either need to find alternative transport provision or leave the school at normal time to catch the school bus.

3. Commuting to Inverness without a fossil fueled car Most residents from Glen Urquhart and Strathglass who commute to Inverness use their own car (79%) as their main method of transport because of flexibility, reliability and time.

Residents find that the bus timetable along the A82 does not allow for shift work (see Appendix C for bus timetables and routes). The earliest bus arrives in Inverness at o8:40, and the latest bus leaves Inverness at 20:15 (although the penultimate bus leaves at 17:40). The bus provision up the Glen is not sufficient to enable residents to commute by bus (see Appendix C for bus timetable). There is a very limited service that only runs twice a day (see Appendix C for details of times). Only 15% of residents who use the bus do so to commute, with 76% of respondents primarily using the bus for leisure, social visits or shopping.

Additionally, the bus service is deemed unreliable, with many different timetable versions depending on term time, day of the week and season (see Appendix C for details of summer bus timetable). Three different operators (Stagecoach, Shiel and Citylink) run the same part of the bus route along the A82 between Drumnadrochit and Inverness, these three operators have different ticket and pricing systems. Cost (which varies across operators) is also cited as prohibitive, especially for the younger demographic.

For those wishing to pursue active travel options, the A82 is not perceived as a safe cycling route, every year there are several cyclist deaths, along with dozens of other traffic accidents⁴. Because of the lack of safe cycle paths, 85% of those respondents who cycled only did so for leisure. The Great Glen Way runs alongside the A82, but due to the severe gradients and gravel track, this is not a viable option for commuting each day.

4. Leisure travel to
Inverness and around
Glen Urquhart and
Strathglass without a

Leisure travel either between Glen Urquhart and Inverness or around the Glens presents challenges. For many journey types including medical appointments, shopping and places of worship, the majority of residents drive because of the time factor, flexibility and reliability.

In summer months the bus service along the A82 is very busy, often residents cannot board the bus in Drumnadrochit because there is no capacity. This can lead to long wait times until the next bus which could also be full. In addition, there is no information on when the buses will arrive. Many of the bus shelters do not have up to date timetables, and there is no provision for finding out if the bus is delayed on route. Added to this it is difficult to find information online without the knowledge of the different service provide.

If residents wish to travel to Inverness for the evening there is no public transport provision. There is also a very limited taxi service and the cost is prohibitively expensive. Historically, there was a subsidised minibus service provided by Ross's Buses on a Friday evening, however, lack of

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uptake lead to this not being financially viable when the Council subsidy was no longer available.

Timetables of different transport modes do not necessarily align; the bus timetable does not link with the train timetable, therefore leading to long wait times for those who arrive by train and need to use public transport to travel back to the Glens. With three different bus operators, it is also challenging to find up to date reliable bus timetabling information.

Young people living further up the Glen often wish to visit Drumnadrochit in their free time for either extracurricular activities or to visit friends. This presents challenges with the very limited public transport provision and lack of car access for most young people. 54% of young people said they most often use the bus for travelling to go shopping or to the cinema, but they would like to be able to access Drumnadrochit and Inverness via bus or bike.

5. Travelling between Cannich and Beauly without a fossil fueled car There is no public transport provision connecting Cannich and Beauly (17 miles). From the resident's surveys, half a dozen residents indicated this is a location they would like to be able to access by bus but are unable to do so. To travel between these locations without a car requires going via Inverness on two buses. Also travelling to Inverness from Cannich requires taking a bus via Drumnadrochit. [There is very limited provision from Cannich to Beauly via Struy with services provided twice a week by Ross's buses]

6. Funding transport for School trips

The 4 schools in the area, and the childcare centre, hire minibuses or coaches to take their students on school trips. These vary in nature but the cost is generally a prohibitive factor in the number of trips offered. Much of this cost needs to be fundraised by the schools, or grants are sought to cover this e.g. from Soirbheas or Cairngorms Trust.

The Primary schools all take their pupils to Inverness for swimming lessons. This consists of 10 weeks blocks which require a 29-seater coach. This service is currently provided by Ross's Buses who are significantly cheaper than the other providers, with costs of approximately £160-180 for each trip (this is approximately half of that charged by the providers who have to travel in from Inverness). Because of other contracts, the bus also needs to be back in the Glen before the afternoon school runs. (approximate annual school transport costs are given in Appendix D).

The Primary schools and the childcare centre would like the opportunity to take their students on more trips to provide them with greater life experiences. These include exploring the local wilderness such as Glen Affric, cultural events, or trips into Inverness to experience the city. Such trips are currently prohibitively expensive.

Sports competitions also present transport challenges. All the schools in the area compete in the Great Glen football league on Friday afternoons. Currently parents take children to the matches, but there are disclosure issues with parents driving other people's children.

Numerous community groups exist across the Glens. The inclusion of different demographics is socially good for the whole community, helping to reduce social isolation and encouraging community spirit.

Attending these groups is very challenging for those without a car. The public transport provision and the taxi service is very limited. Therefore, transport often falls to other individuals in the community to provide lifts.

7. Attending community groups without a fossil fueled car

At present the Strathglass Shinty team does not have their own minibus. This presents challenges for attending Shinty matches which are on Tuesday pm, Friday pm, Saturday and Sunday (note - Glen Urquhart Shinty team have matches at the same times).

Other groups which have transport issues include; the Heritage group which runs trips twice a year consisting of 10-15 members; the Bowls club who need to travel to matches and consists of around 15 people; residents wishing to attend events at the Craigmonie centre in Drumnadrochit.

There are a number of community owned vehicles (e.g. minibuses) across Glen Urquhart and Strathglass but these are currently available for different community groups to use though some informal or ad hoc use does happen. There are additional challenges in sourcing drivers for minibuses and the cost of training people.

3.2 Visitor challenges

Visitor numbers to the area are increasing year on year. This is partly due to the growing interest in the area and Urquhart Castle. This increase is having an impact on the transport infrastructure in the area. Tourism is a key revenue stream for the area: Glen Affric was recently voted one of the

most beautiful glens in Scotland⁵, and the attractions surrounding Loch Ness attract hundreds of thousands of visitors annually. As tourism in the Highlands grows, the resulting impact on amenities and transport infrastructure needs to be sustainably managed.

8. Travelling to
Drumnadrochit without
a fossil fueled car

Visitors to the area without a car struggle to find information regarding the provision of public transport; it is not clear where buses go to and when. In addition, it is impossible to know if a bus is late or if it has been cancelled - real time information is not currently available.

9. Travelling aroundGlen Urquhart andStrathglass without a fossil fueled car

Visitors to the area find it particularly challenging to travel around without a car. The bus provision up the Glens form Drumnadrochit or Beauly is very limited. Historically there was a shuttle to Glen Affric from Drumnadrochit but this was cancelled from lack of uptake.

Information regarding public transport around the Glen is challenging to find in the village, there are not always up to date timetables in the bus shelters.

Currently most visitors drive into Glen Affric because there are limited alternatives. As Glen Affric becomes more popular then issues with parking will become more prevalent. The car parks are currently managed by the Forestry and Land Scotland.

Improvement to the Affric and Kintail Way to replace road section with a new off road would enhance the walk, improve road safety and improved cycling and walking route between Drumnadrochit and Cannich

⁵ Reference



Urquhart Castle is positioned around a mile outside of Drumnadrochit on the A82 The Castle attracts around half a million visitors to the area each year. There are issues with parking at the castle in summer months, with the car park reaching full capacity and visitors being turned away. There is no prior information that the car park is full until outside the venue, and this can often lead to highly unsafe three-point-turns on the A82 as cars seek to turn around.

The lack of coach parking at the castle leads to issues with coaches parking in the village car park, which is often at full capacity in the summer months.

4. Options appraisal

The Options Appraisal aims to address the challenges identified in Section 2. Providing an overview of the benefits, dependencies, costs, timeline of implementation and best practice examples for these transport options. These transport options aim to improve mobility in the regions of Glen Urquhart and Strathglass whilst reducing car dependency and taking steps towards decarbonisation of the local transport system.

All the options here can be introduced on a standalone basis. However, the introduction and the long-term success of these options could be significantly supported by the existence of a community managed Transport Hub. Where this is the case, the option description refers to this, a full description of the Hub is provided under option 9 (Section 4.9).

The scope of options assessed in this document are detailed in Figure 1. A number of these options were originally identified as a result of the outcomes of the Local Energy Plan for Drumnadrochit, but the scope and detail of these options has been developed through the stakeholder engagement process as part of this study. Funding options are referenced within the description of the different options and are detailed fully in Section 5 of the report.

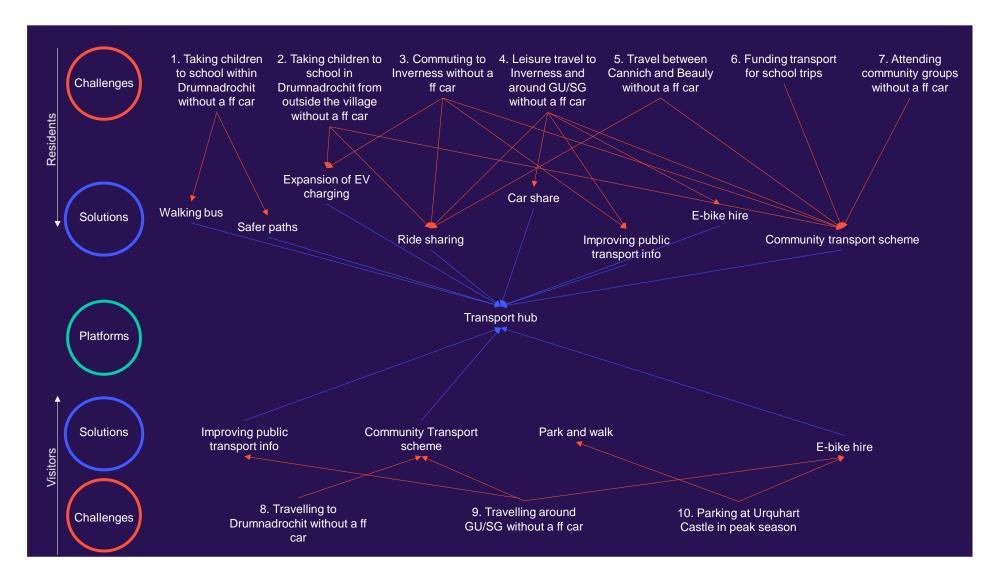


Figure 1: Transport challenges and solutions for the Glen Urquhart and Strathglass region

4.1 A Walking Bus within Drumnadrochit to encourage active travel for the primary school

What is it?

Active travel primarily means walking and cycling. A walking bus is a recognized active form of travel to and from school. It is designed for younger children who are still in need of supervision. There is a minimum of two adults, one that leads the group at the front and a 'conductor' at the rear. The convoy walks along a set route, picking up children from their houses and/or set locations in the village at specific times (e.g. a timetable). There can be several convoys that operate different routes around the village as per image below.

What identified challenges does it address?

Challenge 1: Walking children to school within Drumnadrochit without a fossil fuelled car

What is the scope?

The introduction of a walking bus in Drumnadrochit for Glen Urquhart Primary School can ease congestion at the primary school during drop off/pick up times, also reducing car dependency in the village. The children who live within a mile can be picked up by the walking bus rather than being driven by their parents. Although this would mainly be designed for primary school children, the students in the lower years at the high school could also use this.⁶ Four potential routes have been proposed (see Figure 2 for details):

Route 1: Down Balmacaan Road,

Route 2: Around the new housing estate,

Route 3: Up Pitkerrald road,

Route 4: Park and stride with pick up point from Tourist info Centre or the Scotmid car parks.

⁶ Note that this option was discussed and explored for Cannich and/or Balnain primary but there was consensus among stakeholders that there were not the same challenges in these areas and that a walking bus was not necessary.

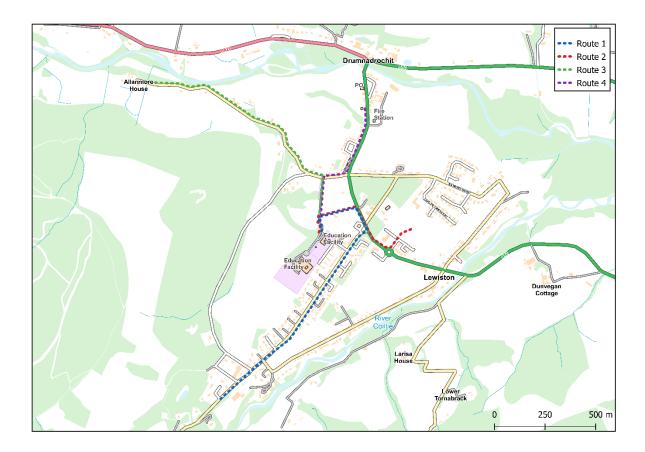


Figure 2: Walking bus routes in Drumnadrochit

Additional benefits

Aside from addressing the specific challenges identified from stakeholder engagement, there are several additional benefits to the implementation of the walking bus in Drumnadrochit. This scheme will improve the health and wellbeing for pupils, encouraging them to choose active travel modes. Walking Buses are useful tools for teaching young children how to cross the road safely, engage with the local environment and educate them in the physical and mental health, social and environmental benefits of active travel. The older school children can have the opportunity to 'drive' the bus. By doing this they can achieve their young leader award, community achievement award, youth achievement award, Saltire award, and John Muir award. This is also an opportunity for an intergenerational project, where walk leaders from the village could volunteer to conduct the bus.

Challenges and dependencies

The walking bus could either be operated through the Active Schools Co-ordinator at High Life Highland or the proposed Transport Hub (see Option 9). High Life Highland are already working with Soirbheas to employ a sports coach for the Active Schools.

For each bus route requires two volunteers each morning and afternoon. There would need to be a minimum of one adult for every six children for the safety and wellbeing of the children

(although this changes with the age of the children), this is inclusive of the two volunteers.⁷ Ultimately this scheme would need parent buy-in to opted for their children to participate in the scheme and support from the schools to encourage uptake.

Associated Costs

This option would be low cost but would require time and commitment for initial implementation. The set-up costs of coloured high vis jackets (different colours for each route) would need to be covered as well as promotional information and the cost of PVG checks for volunteers (approximately £59 per volunteer)⁸.

Timeline

A pilot needs to be designed to run for 6 weeks, this has the best chance of success if it is established in the autumn or spring. This pilot will give an indication of parents buy-in and understand how the different routes could operate. This pilot could be implemented by the Community Sports Coach. An awareness raising session and launch of the walking bus to build up community interest and support.

For the pilot to operate, a number of administrative duties need to be completed. These include:

- Undertaking a risk assessment for each walking bus route;
- Obtaining permission from parents;
- Drafting a 'bus timetable' that has been tested;
- Investigate how the scheme would be insured, whether this would be covered under High Life Highlands activities or whether the council cover it under public liability insurance;
- Walk leaders need to be PVG9 checked;
- Walk leaders need to be trained such that they are aware of the school's first aid policy, they are aware of procedures to follow in the event of an emergency, and they are road safety trained;
- Rules and contingency plans need to be drafted and circulated concerning situations where for example, students are late/do not show up, the walk leader is unable to escort on a particular day, there is inclement weather.
- Register of passengers.

 $https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/596629/EYFS_STATUTORY_FRAMEWORK_2017.pdf$

⁸ https://www.mygov.scot/apply-for-pvg/

⁹ Protecting Vulnerable Groups check, this is through Disclosure Scotland which ensures that adults do not have a criminal record

In the medium to long term there is an opportunity to expand to a supported a cycling bus for longer commutes or for older children.

Best practice examples

Walking buses are becoming more common across the country as there is a shift towards active travel. Villages such as Fraserburgh¹⁰ in Aberdeenshire have successfully implemented a walking bus that increased walking rates in the school from 36% to 52%.

Lessons learnt from other schemes indicate that buy-in from the children is paramount to the scheme succeeding. 5-day or month-long walking challenges can motivate children to continue to walk to school each day. This requires support from the Primary school. In this case Glen Urquhart Primary is fully supportive of such a scheme.

Incentives of the scheme should also be communicated to parents in order to secure buy-in to the concept to support uptake of the solution. Knowing their children will arrive at school safely under the supervision of the Walking Supervisors alleviates the pressure of the morning rush. It also improves safety around the school gates at school start and end times by reducing the number of cars on the road at peak times, and there is a social and well-being impact on schoolchildren participating in the scheme.

Toolkits are available through the Living Streets Five-Day Walking Challenge to support schools in participating in the scheme. The toolkits can be purchased at minimal cost (£10 per kit) and contain teacher guidance and parent information, a pledge poster for the classroom, wallcharts, stickers, pupil activity diaries and activity sheets.

It should be recognised that families living in outlying villages and hamlets are excluded from Walking Bus schemes due to the length of journey to school. However, it is still vital to include these families in awareness campaigns related to the importance of reducing car use.

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 $^{^{10}\,}https://www.aberdeenshire.gov.uk/media/2498/stpcasestudy-walkingbusproof.pdf$

4.2 Developing safer paths in Drumnadrochit and Balnain to allow for active travel and safer routes to school

What is it?

This option considers long term planning to develop better paths, and better crossings through Drumnadrochit. This option identifies areas in Drumnadrochit and Balnain where paths could be developed away from the main road to encourage active travel around the villages.

What identified challenges does it address?

Challenge 1: Taking children to school within Drumnadrochit without a fossil fuelled car

What is the scope?

Pedestrians and cyclists do not feel safe on pavements or roads through the village. Although generally it is felt that traffic does keep within the speed limit, pavements are narrow in places, and large vehicles often travel through the village. The volume, proximity of traffic and poor crossing provision are the main challenges in Drumnadrochit rather than vehicle speed.

Residents voiced concerns about several points in the village where it is particularly unpleasant or unsafe to walk/cycle. These include the zebra crossings on the A82, the pinch points at the bridge on the A82, and the lack of proper crossing at the new development (at present there is only a dropped curb).



In this section, there are two safe routes to school (SRTS) considered below (see Figure 3 for details of SRTS in Drumnadrochit) as well as several other options for safer movement around Drumnadrochit. Additionally, there are options to improve the walkability around Balnain with the expansion of the path network (see Figure 3 for details of proposed routes).

This option also considers whether there should be chevrons placed outside the primary school in Cannich. As parked cars outside the primary school cause issues with traffic flow.

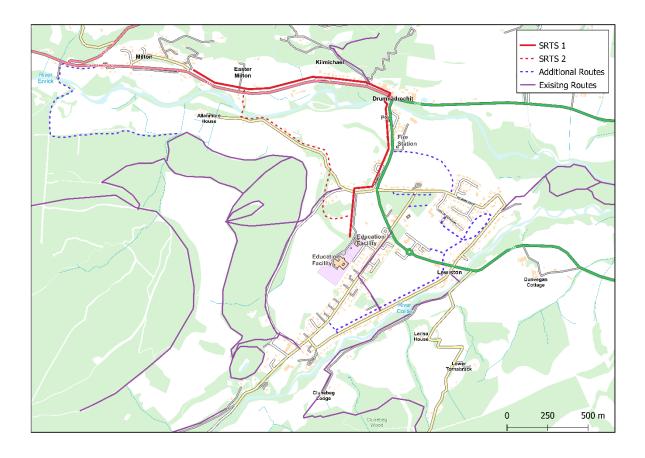


Figure 3: Safe Routes to School in Drumnadrochit (purple routes are existing routes)

The proposed SRTS for Drumnadrochit are:

Proposed route 1 (from Milton):

The section from Milton to Drumnadrochit Bridge has a wide pavement, but there is an issue from Drumnadrochit Bridge to Druimlon. This would be improved by a footpath out-with bridge. This idea was originally rejected by Transport Scotland but has been used elsewhere by installing an independent structure or cantilever off the bridge. The footpath from the south side of the bridge is narrow and quite steep as well as busy with pedestrians particularly in the summer months.

Proposed route 2 (via Pitkerrald):

This route would require rebuilding the bridge on its original site near the West End garage, then use the Pitkerrald Rd as far as the back of Culcreuch avoiding the narrowest section of Pitkerrald Rd.

This route would need 1) a crossing at West End garage, 2) a new bridge, 3) the full length of Pitkerrald road from the bridge to Culcreuch widened (it is very narrow and traffic can be fast), and the section from Ladys Well is a mud track. One very significant difficulty is getting landowner permission to rebuild the bridge and currently the landowner of Lady's Well to Cnocan Burraidh isn't looking to sell that land.

Other options that can improve the walkability of the village (indicated in green on the map) include:

- Path 1 The link between Balmacaan & Lewiston.
- Path 2 A new route to be created in the greenspace between Balmacaan & Lewiston this would provide good amenity value and take people away from the narrow Lewiston street. The main problem is that most of the land is currently fields, land owners would need to support the plan.
- Path 3 The new path networks in the Loch Ness Homes Parkland and Tulloch greenspace.
- Path 4 The well-established path through Beech Wood [this has a step to cross over so has limited accessibility].
- Path 5 Paths through the new Springfield development.
- Path 6 The woodland path along Kilmore Road much of this exists as informal route but a path is needed opposite Cobbs / old school to avoid bottlenecks.
- Path 7 Extend the lower Craigmonie path to Drumclune, then use the existing bridge to create a circular walk back to Drum via Milton. This would need agreement of the landowner at Drumclune and Forest Scotland. It would also require a footpath at the A831 extended from Free Church to Drumclune Road, and consideration of a crossing point on the A831. This option would be an asset for locals and tourists.

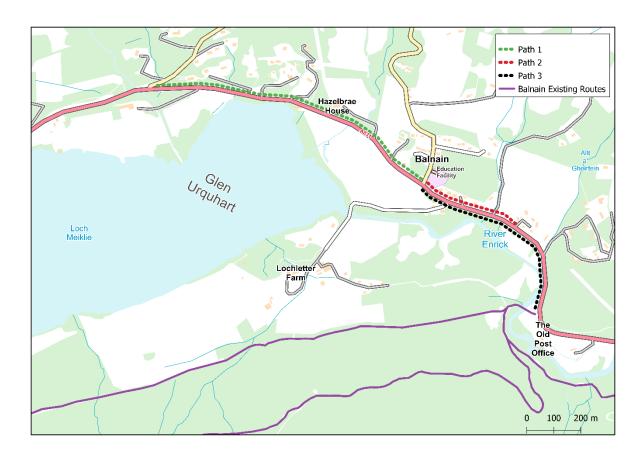


Figure 4: Proposed paths for safe active travel in Balnain (purple routes indicate existing routes).

Options that can improve the walkability in Balnain (indicated in green on the map) include:

Path 1	a safe route to school.
Path 2	Develop a footpath on north side of road Balnain to Dal, this supports a safe route to school.

Path 3 Develop a footpath on the south side of the road Balnain crossing point to Balnain forest.

The Affric and Kintail Way starts in Drumnadrochit leading to Glen Affric. The majority of this long-distance walk is on off-road forest tracks but there is a section of approximately 5 miles between Balnain and Cannich that is on the main road. Planning permission has already been sought and granted to divert this section to a safer off-road route.

Additional benefits

Safer paths in Drumnadrochit would enable more children to cycle and walk to school safely, it would, encourage greater numbers of residents to walk/cycle around the village thereby reducing congestion in the village. Community groups such as the Health Walk group would benefit as well

as schools who would feel more comfortable taking groups of students out of the school on foot.

Research and evaluation of existing schemes have identified four main benefits to communities. The first is improved safety, with evidence pointing to a reduced rate of traffic accidents involving pedestrians and cyclists. Secondly, improved uptake of Active Travel contributing to a range of health, social and environmental benefits. Thirdly, a strong correlation between traffic calmed zones and improved social cohesion. Research shows an increase in social interaction in quieter streets due to more outdoor and communal activities. Fourthly, calmer streets can improve economic activity in the local area, as studies have shown that people who walk and cycle are more likely to spend money in local businesses. Generally, people also feel safer if routes are well used.

Challenges and dependencies

The A82 is a trunk road and therefore it comes under the responsibility of the trunk road authority (Bear) rather than Highland Council. For this reason, it is challenging to implement any traffic calming measures through Drumnadrochit. Additionally, because the traffic is not necessarily speeding, but the issues concern volume and type (e.g. logging trucks), traffic calming measures such as speed bumps, rumble strips, live speed signs would not necessarily solve the problem. The implementation of safer paths is a solution that instead aims to move footfall away from the traffic.

Many of these options rely on either the acquisition of land or the permission from land owners to develop paths. Managing these relationships can be challenging and relies on continual management of that relationship and any ongoing concerns that may arise.

Associated Costs

The costs of implementing this option would be highly variable and dependent on whether land needs to be acquired or whether permission can be sought from the land owner, the costs of developing the land into proper paths, and/or the cost of installing infrastructure such as a footbridge. Such costs would need to be assessed on a case by case basis.



None of the options for path development are mutually exclusive, therefore several of these options can be pursued at once.

Timeline

Realistically this is a long-term plan that needs ongoing community commitment. It will require a dedicated number of individuals (e.g. a subset of the community council or GURCA) to work on this option identifying land that could be developed into paths and overseeing maintenance of these routes.

There could also be opportunities to improve paths in conjunction with other works that are carried out in the relevant areas, e.g. when flood maintenance measures are installed.

4.3 Expansion of the EV charging network in Glen Urquhart and Strathglass

What is it?

Electric Vehicle (EV) charge points have been installed across Scotland to support the uptake of EVs. The number of publicly available charge points is expanding exponentially. Fast charge points encourage tourists to explore the local area while the vehicle charges, typically charging an EV will take approximately 2-4 hours on a fast charger, whereas, rapid charge points will charge an EV in approximately 30 mins to 1 hour¹¹.

Expanding EV charging supports locals in the transition to EVs, as well as offering tourists an alternative to bringing conventional petrol/diesel vehicles into the area. At present the number of EVs in Glen Urquhart and Strathglass is very low (only 3.8% of survey responses indicate ownership of an electric vehicle), but 38% of residents surveyed indicate that they are contemplating purchasing an EV. Concerns over range, infrastructure provision and initial vehicle costs are key barriers to purchase for local residents.

 $^{^{11}\,}https://www.zap-map.com/charge-points/connectors-speeds/$



What identified challenges does it address?

Challenge 2: Taking children to school in Drumnadrochit from outside the village without a fossil fuel car.

Challenge 3: Commuting to Inverness without a fossil fuelled car.

What is the scope?

Installing EV charge points in Drumnadrochit and Cannich, thereby expanding the charging provision could encourage EVs to be adopted by locals and would encourage tourists in EVs to stop in either location.

In Drumnadrochit there is currently one rapid charger in the tourist information car park, this provision could be expanded. Analysis of the existing charge point in Drumnadrochit shows that in 2018 the charge point had 540 sessions in the last year and drew a total of 6916 kWh. The charge point in Drumnadrochit is not particularly visible. Publicising the charge point and making it appear more prominent in the car park may stimulate charging sessions.

In Cannich there is potential to place a charging point beside the community hall which already has a power supply with solar panels installed on the roof. The is also a disused toilet block on the A831 in Cannich which has power and a layby which could be considered and would be a very visible option.

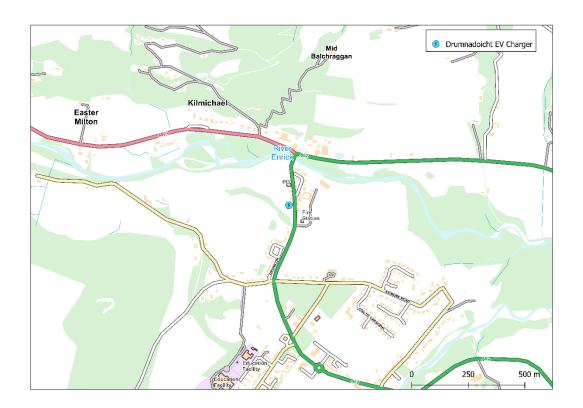


Figure 5: Location of Drumnadrochit charge point

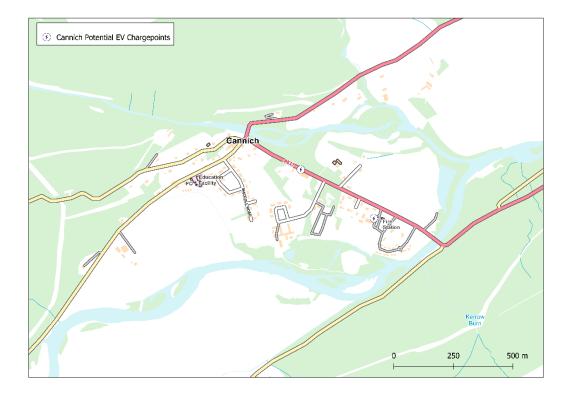


Figure 6: Locations of potential Cannich charge points



Figure 7: Old Public Toilet in Cannich - potential location of a charge point

Additional benefits

An expansion of the charging infrastructure in Glen Urquhart and Strathglass could serve as an extension of the electric A9 project. The electric A9 is a national project that aims to install charge points in towns and villages along the A9, such that there is no more than 20 miles between charging infrastructure. With the high numbers of tourists visiting every year, this is a key opportunity to expand the current offering.

Challenges and dependencies

To date most of the publicly available charge points installed across Scotland have been funded by local councils through Transport Scotland. Therefore, in exploring this option the local council was approached to ascertain their strategy and whether there was potential to expand the network as proposed here. The Highland Council indicated that as there is already a charge point in Drumnadrochit they do not view it as a priority to invest in this location.

Associated Costs

Highland Council have been given money to install charge points across the region. However, with the current usage of the charge point in Drumnadrochit they don't necessarily see the business case for this expansion of the charging network at this time. However, they see the expansion of the charging network to Cannich as more promising.

If the community was looking to proceed with council support then there are options to install charge points with solar canopy and battery storage (see Table 1 for approximate costs).

Table 1: Component costs for installation of EV charge points, solar cells and battery storage

Component	Approximate Capital Cost
1 x Rapid charger + average installation cost	£35,000 (not including DNO costs)
2 x 22kw + average installation cost	£20,000 (not including DNO)
Solar Panels on roof of Tourist Information: 6 x 310W (all black, mono crystalline panel) = 1.9kW	£6,250. ¹²
Battery solution: 10kWh capacity domestic-style system	£10,000-£20,000

Note there would be an additional £1,800/£600 per year for maintenance for rapid/fast charge points.

Charging tariffs can be used to offset the cost of maintenance to the charge points. At present most charging points are free to use, but tariffs are being introduced. For example, 35p/kWh plus 50p connection fee, in this scenario the revenue for the charging point in Drumnadrochit in 2018 would have been £2,690.50. It is important to highlight that usage can fall with the introduction of tariffs.

Transport Scotland's Low Carbon Travel and Transport Challenge Fund was launched in the Summer of 2019, administered by the Energy Saving Trust. This fund allows Public Bodies, Community Groups or 3rd Sector Organisations to apply for funding to support the development of low carbon travel hubs, active travel hubs or development of paths, with an application deadline of 25th October 2019.

Each project must be over £250,000 with no upper limit (although funding will reduce for projects over £2million) and can attract up to 80% grant funding through a combination of ERDF and Transport Scotland funding, any match funding must be in place by February 2020. All projects that are to be submitted must be linked to one of the key strategic aims;

- Increase the number of journeys made by public transport, active travel and low carbon vehicles;
- Support Active Travel Hubs (facilities and routes to support cycling, walking and public transport use as an alternative to the car);
- Provide low carbon transport hubs and reliable low carbon refuelling services at strategic sites.

Soirbheas Transport Feasibility Study

¹² The make-up of the roof would need to be checked and the fixings screwed into roof trusses, add flashings over the fixings and reslate around. If it was possible to double the size and put the panels on 2 elevations, this would cost £12,500.

4.4 Formalising and expanding the Ride Sharing provision

What is it?

Ride sharing (often referred to a carpooling) is the offering of lifts to other people who need go to the same location at approximately the same time. In a rural setting, this often happens informally to some degree, but formalising elements of this can widen the offering to a larger proportion of the local residents. Only 15% of survey respondents regularly ride share, indicating that inconvenience and difficulty in finding someone to ride share with are the key barriers.

What identified challenges does it address?

Challenge 2: Taking children to school in Drumnadrochit from outside the village without a fossil fuelled car

Challenge 3: Commuting to Inverness without a fossil fuelled car

Challenge 4: Leisure travel to Inverness and around Glens without a fossil fuelled car

Challenge 5: Travel between Cannich and Beauly without a fossil fuelled car

What is the scope?

By formalising ride sharing through a dedicated platform such as a closed Facebook page (which could be managed by the transport hub described in Option 9 below) a large number of the community could access the site and the membership of the page could be regulated. On the page people could post when they were willing to give lifts and when they were looking for a lift. This page could also be used to coordinate shared taxis to/from Inverness.

Raigmore Hospital in Inverness subscribes to LiftShare so that employees can easily connect with each other within a closed network. Highlighting that this service exists for commuters is important. Correspondence with LiftShare indicates there are opportunities for employees from the Glen Urquhart/ Strathglass region to take advantage of this service. However, it should be noted that the workshop illustrated that generally people looked more favourably upon a Facebook page platform than utilising a pre-existing dedicated platform such as LiftShare.

Concerns have been raised over vulnerable groups accessing a ride share scheme. There could be a separate 'carpool+' scheme specifically for elderly/young/vulnerable people. To give lifts to this group of people, the driver would need to be PVG checked. This part of the scheme, and the register of drivers which are PVG checked, would optimally be managed through the transport hub. There are already befrienders at the care centre, and this presents an opportunity for member of this group to become volunteer drivers.

Additional benefits

By publicizing ride sharing as a mode of travel, traffic can be reduced in Glens. Implementing a scheme like this can also save residents money. By offering a scheme for the young and elderly residents, this increases social inclusion.

Challenges and dependencies

One of the key challenges to the success of this option is changing public behaviour and attitudes. It needs to be culturally acceptable to ride share for it to be adopted on a large scale. Local champions who are seen to be participating will give credibility to the scheme. Encouraging change of habits can take time but a consorted marketing campaign can help to create wider byin.

Associated Costs

The costs to implement the basic ride share scheme are minimal. This would essentially require a dedicated person to manage the Facebook page and market the basic scheme.

The logistics and cost of implementing the Carpool+ scheme will be greater, requiring time for logistical management from the Transport Hub.

Timeline

The initial ride share Facebook page can easily be implemented. This would be publicized through both the transport hub and local champions such that everyone is aware of the scheme and how it operates.

Coordinating 'Carpool+' for vulnerable groups is more challenging and it is advisable to roll out the standard model before extending it to this group.

Best practice examples

The Mull and Iona Sustainable Transport (MIST) project was developed to encourage uptake of sustainable transport solutions in a rural island community. Initially, they appraised commercial ride share schemes for the community. Following a pilot, the commercial schemes proved too expensive and too inflexible to meet the needs of a rural, sparsely populated island location. In response, members of the community created a platform themselves through a Facebook group. It was tested first among a small sample of users, and then later expanded membership once initial trials were deemed successful. The Facebook Group is "closed," which means access must first be permitted by an administrator, however the scheme is open to all inhabitants of Mull and Iona over the age of 18. A free online calendar tool, TeamUp is used for bookings and matching lifts with requests. Stickers are also available to members to stick in their cars, as well as flyers distributed to the community. Members of the scheme have reported that in the tightknit island community, information on the scheme has been effectively disseminated by word-of-mouth and the Facebook Group membership is around 15% of the local population.

4.5 Car share scheme

What is it?

Car share (often referred to as car clubs) allows residents or tourists to book/rent a vehicle on a per hour or daily basis. These vehicles are usually collectively owned by a company who operates the booking and maintains the vehicles. Car share schemes aim to assist people who do have low utility of a vehicle, often only using a car sporadically, and therefore can avoid second car ownership in a household.

What identified challenges does it address?

Challenge 4: Leisure travel to Inverness and around Glen Urquhart and Strathglass without a fossil fuelled car

What is the scope?

Enterprise are looking at rolling out a number of vehicles in Inverness with the possibility of extending the scheme to Drumnadrochit. Highland Council are currently in discussion with Enterprise around developing this in Inverness.

The other option is for the community to purchase vehicles which they can have for a community car share scheme. These vehicles could be hired out to locals and visitors, potentially at different rates, as a revenue stream to the community.

Additional benefits

In addition to meeting the challenges identified, there are a number of additional benefits to introducing a car share scheme. Car share vehicles can allow tourists to arrive on public transport and explore the area up the Glen. Also, this can allow locals who do not have a car to access the Glen and/or Inverness, or potentially allow residents to reduce the number of cars in their household. There is the potential for car share vehicles to be electric, promoting sustainability in the area. There is also the opportunity for these vehicles to be dual control and therefore could be used for driving lessons. At present learner drivers have to travel to Inverness to learn to drive, as there is no provision in the Glens

Challenges and dependencies

Deciding where the cars can be located will present a challenge. The tourist information car park in Drumnadrochit can be very busy, and these vehicles would need dedicated bays. Also, there would need consideration as to whether vehicles were placed primarily in Drumnadrochit so that people arriving on public transport could then use them to continue up the Glens, or whether vehicles were located in Strathglass.

Associated Costs

If the community decided to buy their own vehicles then this would need to be operated through

the Transport Hub. For the service to be cost neutral there needs to be adequate utilisation. There is also the potential to charge different rates for residents and visitors. It's worth noting that this is a challenging business model with many car share companies operating in the red.

Car clubs such as Co-wheels have pricing schemes, e.g.

Type	Cost
Per hour	£5.50
Overnight	£11
Per day	£38.50
Per mile	£0.18

If an existing car share provider such as Enterprise or Co-wheels positioned vehicles in Drumnadrochit (or elsewhere in the Glen), they would take all the risk if uptake was lower than expected.

Best practice examples

The Harbury Village E-Wheels car club scheme in the rural West Midlands developed from a community transport scheme which was established in 2015 to provide a free local transport service primarily for vulnerable people in Harbury Village. The Community Transport Scheme comprised of 8 volunteer drivers, who offered lifts to take those unable to afford transport to medical appointments, the dentist and in particular to the hospital. Volunteers also doubled up driving deliveries from Tesco and the local foodbank to the homes of vulnerable citizens. The Community Transport Scheme proved so popular that a grant was sought to purchased two EVs free to use to benefit the whole community. Upon securing the grant, local residents received flyers and the local BBC news featured a story about the grant funding win. The Club currently receives an average of 28 bookings per week, and regularly contacts members with a newsletter and a monthly feature in the local magazine. It also interacts directly with members via a Facebook Group.

Moray Carshare is a community-based car club based in rural North-east Aberdeenshire. The car club aim to provide inexpensive and convenient access to mainly low emissions vehicles to local community. The goal is to reduce the number of cars within the local community, creating a safer living environment. Over the last 4 years, the programme has been funded by Transport Scotland's Developing Car Clubs Scotland programme and since then the car club has introduced two EV, with charge points funded by Scottish Energy Saving Trust. Currently the car club has 200 members and a fleet of 17 cars and 2 e-bikes placed across 9 different locations in and around Forres, Findhorn and Kinloss. In June 2018, extra funds were provided by Moray LEADER and HiTrans to expand their operations into Elgin and Aberlour, with an emphasis on EV and E-bikes.

4.6 Improving the Public transport information availability

What is it?

For ease of access of public transport, information on routes, ticket prices, and delays needs to be simple and straightforward to access. Public information services encapsulate static and dynamic timetables, cost of fare information and clear guidance on which bus route to use to arrive at the required destination.

What identified challenges does it address?

Challenge 3: Commuting to Inverness without a fossil fuelled car

Challenge 4: Leisure travel to Inverness and around Glen Urquhart and Strathglass without a fossil fuelled car

What is the scope?

Static information boards across Glen Urquhart and Strathglass (and/or hand outs in the transport hub) would tell tourists what to see and how to get there. Static boards can include maps of the villages they are placed within, indicating where the main attractions are located, as well as points of interest further afield and how to access these.

Dynamic information boards would give information on public transport options. This would include when buses were arriving, if they were delayed or if they were cancelled. The buses which currently run in the area already have tracking devices on them, the Highland council is in talks with Stagecoach to determine how dynamic information boards can be introduced. At present the boards in Inverness display the timetable but not live information on when buses are arriving.

The buses that operate up the Glen function on a hailing basis (where residents can stand beside the road and flag down the bus). If the bus is late or delayed it can lead to vulnerable people (young and/or elderly) waiting beside the road for the bus. By request, the transport hub can inform people further up the Glen when the bus is leaving Drumnadrochit so that they are aware if the bus is late or cancelled.

An online app would be a beneficial addition. This would enable residents to check when the bus was arriving, without having to wait at the bus stop. However, this would rely on an internet connection. Outside the main bus stops the bus can be hailed to stop, therefore these locations would not benefit from dynamic signage and would need to be able to access tracking information.

Additional benefits

Many young people use the local bus service for leisure activities. With an online app, adults can safely check on young people to ensure the bus is operating as expected.

Challenges and dependencies

It would be optimum to have the Transport Hub as the centre for the information services, ensuring that signage stays up to date and is properly maintained.

The implementation of dynamic information boards is dependent on the Highland Council and their engagement with the bus operator. Ideally, this would also be an online service, with the potential for buses travelling from Drumnadrochit up the Glen to be communicated by a text service. A text service would need to be organised by the transport hub unless this could be built into the online app.



Associated Costs

The costs associated with dynamic signage would not necessarily stem from the community. Because the software is already installed on the buses, the costs of implementing dynamic signage would ultimately lie with the council.

Timeline

The community would need permissions to implement static information systems at ideally placed locations. Static information boards can be introduced within a short time scale. At a minimum this should include up-to-date bus timetables at the bus stops. It would also be highly beneficial to improve the readability of these timetables to ensure it is clear when buses are coming and the routes they take. There is a lack of visitor information signage across the villages in the Glen, therefore there is the opportunity to perhaps commission a local artist to design attractive information boards¹³.

¹³ A similar option was followed recently in Falkland (Fife), where local artists designed information boards that were placed strategically around the village to make the village more walkable.

The timeline of implementation for dynamic information boards is currently under discussion with the Highland council. Similarly, the development of an online app is dependent on the roll out of dynamic information boards.

4.7 Introducing e-bike hire to Glen Urquhart and Strathglass

What is it?

E- bikes are a more accessible option for many locals and visitors who would find the distances and gradients in the area a challenge a normal pedal bike. E-bikes can encourage active travel over short distances, reducing car dependence.

What identified challenges does it address?

Challenge 4: Leisure travel to Inverness and around Glen Urquhart and Strathglass without a fossil fuelled car

What is the scope?

Introduction of e- bikes in the area which could be hired on an hourly/daily basis to both locals and visitors. The introduction of e-bikes could support sustainable tourism further up the Glen. Logistically, e-bikes could be located in Cannich at the campsite. There is already bike hire in Cannich at the camping site. In the interests of local business, the campsite could be supported in expanding their offering. Another option is a Tourist route to from Drumnadrochit, but at present there is no safe route available.



Challenges and dependencies

If the e-bikes were located in Cannich, it would be ideal for the transport hub to ensure they are

maintained and serviced regularly. Additionally, information on suggested cycling routes would need to be provided. There would also need to be restrictions on taking the e-bikes on the A82.

At present, there are no safe cycle routes for tourists from the tourist information in Drumnadrochit without passing onto the A82. Safe routes must be developed before there is roll out of e-bikes in Drumnadrochit.

Associated Costs

Depending on the scope of the scheme (e.g. whether there was a purpose-built docking station built or not) the costs for this scheme would be approximately:

Туре	Cost
Capital Cost	£1000-1500
Running cost	Assuming approximately 0.5 kWh this would cost 7p per charge which would assist riding for approximately 50 miles

Timeline

Cannich was identified as an optimal location for the installation of e-bikes. With cooperation from the campsite, the timeline for implementation could be within 6-12 months. For optimum utilization of this service it would be beneficial to publicize the availability of e-bikes to hire through the transport hub.

The introduction of e-bikes to Drumnadrochit is a long-term plan. The A82 and A831 are too dangerous to cycle on, therefore safer routes around and out of the village need to be implemented first. Building on this, in the long term there is the scope for developing a safe cycle route to the castle, so visitors could park in the village and cycle.

Best practice examples

Totnes is a rural community in South-West England, and they have developed a community e-bike sharing scheme through the Transition Town Initiative.

The scheme comprises of 7 e-bikes purchased through a rural development grant. Membership of the scheme is open to all, and each bike is "owned" by a cluster of 3-5 members for a small annual fee. One of the members in each cluster "hosts" the bike in a suitable accessible place for others in the cluster to use. Sharing and access is arranged through a coordinator in each cluster.

The e-bikes are also regularly serviced and fully kitted out with panniers and lights. As part of the initiative, the local doctor's surgery also has one e-bike available for hire for a small daily rate. Bookings are made through the reception desk at the surgery.

4.8 Introducing a Community Transport Scheme

What is it?

A community transport scheme is a transport service that is operated by the community for the community. It uses vehicles (cars, MPVs (Multipurpose Vehicles) and/or minibuses) that are community-owned to improve mobility for those for whom the current system is not meeting their needs.

What identified challenges does it address?

Challenge 2: Taking children to school in Drumnadrochit from outside the village without a fossil fuelled car

Challenge 3: Commuting to Inverness without a fossil fuelled car

Challenge 4: Leisure travel to Inverness and around Glen Urquhart/Strathglass without a fossil fuelled car

Challenge 5: Travel between Cannich and Beauly without a fossil fuelled car

Challenge 6: Funding transport for school trips

Challenge 7: Attending community groups without a fossil fuelled car

What is the scope?

A community transport system could complement the existing public transport service, enabling those who currently do not have access to a private car to move more freely (e.g. children and the elderly) as well as shifting those dependent on cars to using public and shared transport more.

Ideally, this would take the form of a dial-a-bus service up the Glen connecting people to the bus service on the A82. In addition, there would be shuttle services to Glen Affric for visitors to the area, and to Inverness in the evenings/weekend. There is also scope to introduce a park-and-ride shuttle bus to Urquhart Castle from the centre of the village. The main car park in the village could be expanded into the field behind the Tourist Information to increase parking provision and create space for shuttle bus operation. Finally, current minibuses/community vehicles in the community could be shared by different community groups, and potentially used for the services detailed above.



From the stakeholder interviews the vehicles currently used in the community are given in Table 2a and 2b.

Table 2a: Current Asset register (owners indicated willingness to share vehicles)

Minibus 1 (M1): Owned and primarily used by Glen Urquhart Shinty Club (17-seater) – based

in Drumnadrochit (this vehicle will need replaced in the near future)

Minibus 3 (M3): Owned and primarily used by Care centre (14-seater) (Note this vehicle has

wheelchair access.)

Car Owned and primarily used by Care centre (Citroen Berlingo)

Table 2b: Other vehicles which already exist within the community (either owners indicated concerns regarding sharing of vehicles at present or owners have not been approached)

Minibus Glen Urquhart High school minibus

Several of the restaurants in Drumnadrochit own minibuses which are

highly utilised only in the summer months

Beauly Cares minibus

Table 2c: Proposed vehicle purchases

Minibus 2 (M2): Primarily used by Strathglass Shinty Club (17-seater). Based in Cannich.

MPV Based in Drumnadrochit – potential to be electric.

Taking current vehicle usage into account, along with the challenges identified from stakeholders in Section 3, Table 3 indicates a potential community vehicle timetable. This preliminary timetable illustrates how the existing vehicles with the purchase of an additional minibus and MPV (see Table 2c) could meet many of the community transport challenges currently faced. The MPV proposed would be necessary for the initial stages of the community transport scheme. Utilising an MPV would be easier for charging for trips, attracting volunteer drivers and would be cheaper to run and maintain than a minibus.

Table 3: Vehicle demand timetable. Note that Bold text indicates primary use of the vehicle.

Mon-Fri 9am-5pm

M1 Glen Urquhart Primary (no drivers): September to June

- Swimming (once a week for 10-week blocks)
- School trips (3-9 times a year)
- Would need both M1 + M2
- Great Glen football league (Friday)

Childcare centre

- School trips (1-4 times a year)
- Would need both M1 + M2

M2 Strathglass Primary (drivers available) – September to June

- Swimming (once a week for 10-week blocks)
- School trips Biannual residential
- Would need both M₂ + M₁
- Great Glen football league (Friday)

Strathglass community groups

- Heritage Group (twice a year)
- Bowls (away games)
- Shopping trips for pensioners

Summer Shuttle between Glen Affric and Drumnadrochit (June – August: 2 days a week?)

Mon-Fri – After 5pm Weekends

Glen Urquhart Glen Urquhart
Shinty (March-Oct Shinty (March-Tuesday and Friday) Oct)

Strathglass Shinty Strathglass Shinty (March-Oct Tuesday (March-Oct) and Friday)

	Mon-Fri 9am-5pm	Mon-Fri – After 5pm	Weekends
М3	Care centre minibus	Study bus Mon-Thurs (no drivers) – service extended to exam time as well	Craigmonie Centre (no drivers)
		Friday night shuttle to Inverness	
MPV1	Community run transport linking the Glen (inc Beauly) to Drumnadrochit	Community run transport linking the	Community run transport linking the
	Meals on Wheels	Glen (inc Beauly) to	Glen to
	Shopping for the elderly	Drumnadrochit and to Inverness	Drumnadrochit and to Inverness
		Collect students from	
		Balnain Primary School to bring to	
		childcare centre	

Additional benefits

A community transport scheme can enable residents (individuals and community groups) and tourists to move more freely around the area, reducing congestion and improving mobility.

The primary schools and childcare centre have cited cost as a barrier to giving children the life experiences they would like to provide.

As Glen Affric becomes more popular, parking and safety on single-track roads is becoming a greater issue. By providing a shuttle bus, this would reduce the need for tourists to take their cars into Glen Affric.



Challenges and dependencies

Community buy-In

Community buy-in is needed for the scheme to be successful. There has to be support from those who own the vehicles, as well as the community groups to support sharing of vehicles. Also, access requirements for elderly and young people need to be considered when considering the implementation of a community transport scheme.

Challenges surround how community assets can be managed fairly. There could be high demand on shared community vehicles. Therefore, it could be challenging to ensure that different groups can access vehicles when needed.

Community transport cannot replace the bus service because they cannot run on the same routes as the public bus service. If the community complimented this service, e.g. in the summer when the services are full, then they could be challenged by the bus operator.

Ross's Minibuses in Struy has historically serviced many community groups offering minibus/bus hire for reasonable prices. This is an important service for the community upon which many groups depend. Introducing a community transport service should be complementary to this service while enabling more extensive, more resilient and – in some cases – more affordable minibus provision.

Managing drivers

For a community transport scheme, drivers of the vehicles can either be volunteers or paid. Managing volunteers is challenging as dependability varies, on the other hand financing drivers is expensive. In addition, paid drivers must adhere to a certain competence of driving. There is a risk that volunteer drivers could put people off using the scheme if people using the scheme feel unsafe in any way as a result of the drivers handling of the vehicle.

Different driving licences are needed for different categories of vehicle. MPV (<9 seater) can be driven on a standard driving licence. Minibuses under 3.5 tonnes (<12-seater) can be driven under a standard driving licence, although a MIDAS (Minibus Driver Awareness Scheme) course is compulsory if the vehicle is purchased through Highland Council, and still advised otherwise. A D1 licence is required for minibuses >3.5 tonnes (>12 seats and <17 seats), the cost of a D1 licence is approximately £1500. For a vehicle with more than 17 seats (PSV – Passenger Service Vehicles) an operator's licence is required.

For some categories of vehicle permits are needed. Permits allow community groups to operate minibuses without hire or reward and therefore they do not need to pay an operator's licence. Minibuses can only operate under Section 19 or 22 permits; therefore, they cannot operate for profit, hire or reward. A section 22 permit operates a particular specified route, which can charge a ticket price which covers the running costs. Running costs under a section 19 permit can be recuperated through donations (although this cannot be recommended or specified). Each group that uses a minibus needs their own Section 19 licence. MPVs can be operated with a payment system. If vehicles that already exist in the community are to be shared with other community groups, insurance policies must cover this.

Table 4: Summary of licences and permits for different vehicle types

Vehicle Type	Definition	Licence required	Permit required
MPV	Up to 9 seats	Standard driving licence	None
Minibus	Up to 12 seats	Standard driving licence	Section 19 or 22

	(<3.5 tonnes)	+MIDAS	
Minibus	Up to 17 seats (>3.5 tonnes)	D1 licence	Section 19 or 22
PSV	Greater than 17 seats	Operators licence	-

Associated Costs

In Table 5 below is the approximate purchase and maintenance costs for the different vehicle types. At present the cost of an electric minibus is prohibitively high, but as new models are introduced to the market, this cost will become more reasonable.

Table 5: Vehicle costs for acquisition and maintenance of MPVs and minibuses

Vehicle Type	RRP	Discounted Price (available through the Highland Council)	Annual maintenance
17 Seat Minibus	£39,525	£25,335	£800 - £1000
12 Seat Minibus	£34,845	£26,802	£800 - £1000
9 Seat Minibus	£25,845	£16,489	£400-600
Electric minibus	£170,000 ¹⁴	£165,000	£500-£700
Electric MPV ¹⁵	£27,850	£25900.50	£300-£400

Because of restrictions from the need for permits (see previous section) for operating a minibus, groups that use minibuses can only operate without hire or reward. Therefore, groups can compensate the owner to cover fuel and maintenance costs but this cannot constitute an income stream. Operating an MPV does not require a permit therefore these vehicles can be hired out with a cost per hour or per day.

¹⁴ Currently only one model available

¹⁵ Quoted as the Nissan eNV200 – 7 seater

Timeline

For a successful community transport scheme, this should start small and evolve as the scheme picks up demand. The first steps are to assess the existing vehicle stock and how this can meet the challenges of the community – as has been done above.

The community transport scheme would greatly benefit from being operated by the Transport Hub. With a designated person who would operate the scheme, this would give it the greatest chance of success.

The dial-a-bus scheme should ideally start small, with only a limited service. Challenges will arise in this phase and should be dealt with early before the scheme scales up.

Introducing a park and ride to Urquhart Castle would be a longer-term goal. This would require liaising with the castle on this issue and working with them to acquire the land and set up the scheme. However, it should be noted that this service would be limited to shuttle from Drumnadrochit to the Castle. Extending this to Inverness would conflict with the existing bus services and therefore be prohibited.

There is also potential in the future to take on scheduled routes such as some of the school services. These services are expensive for the Highland council to run through operator services.

Best practice examples

From engaging with other community transport schemes, several pieces of advice were given. It is important to identify the needs and the potential users. It is important to ensure there is a group to manage the project. A scheme should start small with a few volunteer drivers and evolve in time. Volunteer drivers should be adequately trained in emergency first aid, safe moving and handling, disability awareness, minibus driver awareness, use of wheelchairs. Finally, booking services are important to initially set up, and must be easy to use.

The communities of Badenoch and Strathspey's Community Transport Scheme (BSCTS) was established in November 1999. It started as a small-scale community car scheme but expanded following grants from the Highland Council and the Big Lottery Fund. Today the scheme consists of a vehicle sharing service, with a pool of 130 volunteer drivers who used their own vehicles to take passengers to and from their destinations on demand. Clients register for the service and are allocated an ID code which they can use to request transport from a centralised phone number routed to a pool of 11 volunteer administrators. The administrators match up the request with an available driver. Grant funding was also used to purchase several 17-seater minibuses which are available for hire on a mileage-based rate for social excursions. The scheme also runs a shopping trip at set times through the week, offering a door-to-door service to the supermarket. The scheme also runs several registered bus routes for which seats are allocated in advance. The bus runs daily and picks passengers up from their homes. BSCTS is supported by NHS Highland, HITRANS, Transport Scotland and Highland Council, and currently receives funding from The Robertson Trust and Big Lottery Fund.

Note that there is funding available through X for a community transport group to visit another community transport group to gain insights and advice on best practice.

4.9 Establishing a Transport Hub

What is it?

The vision would be to create a rural transport hub to provide information and co-ordinate transport services for the community and visitors to the area. The hub would be a place from which a range of transport services can be managed. It is also a key node in the provision of those services and communicates information about transport services. Many of the services described in the options appraisal could operate as stand-alone measures, but the introduction of a hub can tie all these strands together supporting the roll out of these different options in the long term. A transport hub has both physical (e.g. vehicle hire) and digital (e.g. website) aspects.



What is the scope?

A hub that would operate to centralise the transport options introduced in this document. The hub would centrally managed (although assets would not all be centrally located). The roles the hub could play in supporting the different options described here include:

- Organise Section 19 permits for all community groups using the minibuses
- Central organisation of permission slips from parents for transport hub minibuses to transport children
- Central co-ordination of minibus drivers
- Central register of driving licences and PVG checks
- Manage booking of minibus and community vehicles
- Ensure minibuses, vehicles and e-bikes are correctly maintained
- Manage bookings of car share scheme
- Manage maintenance of vehicles for the car share scheme
- Operate information service for public transport services
- Facilitate the informal ride share scheme e.g Facebook page
- Facilitate the ride share+ scheme
- Manage public transport signage around the village ensuring it is up to date
- Manage the dial-a-bus service
- Coordinate the walking buses with the schools

The hub must have a phone and a person to interact with who can manage these services. Ideally this would be located at the tourist information office in the centre of Drumnadrochit. At present the Glen Urquhart Rural Community Association) are looking at a community transfer of the Tourist Information Centre from the Highland Council. In addition, they are looking at the options of purchasing an established local baggage transfer business. This baggage transfer business could also operate out of the hub providing a revenue stream for the community.

Challenges and dependencies

For successful operation, the hub needs to have a key person in charge who is available to answer phones and deal with operations. This needs to be a paid position potentially full time in summer and part time winter. The critical jobs need to be executed by paid staff, whereas volunteer staff could be used for tasks which are not time critical. If Glen Urquhart Rural Community Association are successful in their purchase of the baggage transfer business then there is the potential to utilize the same staff for both the hub and the transfer management. In the initial stages the duties for the hub manager might not be a full-time job, but the need to be accessible to take bookings and information would be important. As the community transport scheme develops the time needed for the role will grow, as has been seen with other community transport schemes.

A 'Master planner' needs to be used for community vehicles and drivers. This system needs to be easy to use and should be operated by the transport hub. The UHI could potentially develop software, this provides an education link with the potential for partnerships with UHI/apprenticeships.

Best practice examples

Cambridgeshire County Council have funded two pilot Rural Travel Hubs in the villages of Sawston and Oakington. The design of the hubs has been developed in conjunction with local residents and commuters, following a series of consultation events. The Rural Travel Hubs are bespoke interchanges to connect residents in South Cambridgeshire with public transport options

and walking or cycling routes. The underlying aim is to reduce the number of cars in the village at peak times. Many residents in the villages commute by train to Cambridge, London and other cities in the South East to work, but many drive to the station, park during the day and return to the car in the evening. This contributes to heavy congestion in the villages in the morning and evening rush hours. A secondary aim is to improve connections between the local villages using active and sustainable travel. The feedback from community consultations informed the design of new infrastructure for the hubs, including CCTV, toilet facilities, lighting, surfacing, bike parking, passenger waiting shelters, real-time travel information displayed on screens and information on public transport links. This information underpinned a business case for each site. In addition to the feedback from the consultant, the project team at Cambridgeshire County Council address issues related to environment, conservation and an impact assessment.

Buckinghamshire County Council have developed a Community Transport Hub to deliver information, signposting, advice and guidance to residents without access to public or private transport. The Hub is open Monday to Friday for drop-in advice sessions. The concept is designed as a one-stop-shop providing information on all aspects of community transport providers in the County, from Dial-a-Ride services to community ride sharing schemes, wheelchair-accessible taxi services and minibus hire. It is open to all but specifically targeted to those who are struggling to maintain independence, and who have a wide variety of needs and circumstances.

Taxistop are a Belgian company trialling a new concept in rural area of Flanders, called Mobihubs. The principle is to create an intermodal transport hub with travel information available in one place. Mobihubs have been designed specifically to provide simple, clear information for passengers looking to use a variety of sustainable travel modes. Each Mobihub includes a bus stop with information to connecting rail services (if applicable), bike storage facilities, spaces for car club parking, electric vehicle charge points, seating areas and some also include accessible public toilet facilities and changing spaces. The aim is for the community to take care of their Mobihub and ensure it is kept clean, tidy and pleasant for use by the local community and visitors to the area. A toolkit has been designed for local authorities seeking to establish a Mobihub, and additional information for local residents on the benefits of the Mobihub to promote community engagement. Feedback is also regularly gathered from local residents on continuous improvement of the spaces.

5. Funding Options

Most of the options investigated will require some funding to implement. The table below presents a list of funding sources which could be potentially accessed for the region.

Fund	What's on offer	Amount	Deadline	Solution addressed
Paths for All: Smarter Choices, Smarter Places Open Fund	Open Fund is supported by Transport Scotland and aims to help public, community and third sectors run projects to encourage uptake of sustainable and active travel options.	£5,000 - £50K (match-funded by public, community or third sector)	Ongoing	Walking busesCar shareCommunity transport
Keep Scotland Beautiful: Climate Challenge Fund (CCF)	Development grants to help community-led organisations tackle climate change by running projects that support local reduction of carbon emissions.	£500	Ongoing	Walking busesCar share schemesE-bike schemes
National Lottery Fund: Grants for community- led activity	Medium-sized grants for community-led activities to improve places in which they live and the wellbeing of those most in need. They fund projects that demonstrate they are place-based, connected and strengths-based.	£10K - £150K	Ongoing	 Walking buses Car share schemes E-bike schemes Community Transport Public transport information services Traffic calmed zones
National Lottery Fund: Community Assets	Grants for voluntary or community organisations to create strong and resilient communities through assets.	£10K- £1M	October 2019	 Car share schemes E-bike schemes Community Transport Public transport information services
National Lottery Funds for All (Scotland)	Grants for voluntary or public sector organisations for projects that support their local communities and contribute to social cohesion.	£300 - £10K	Ongoing	 Walking buses Car share schemes E-bike schemes Community Transport Public transport

Fund	What's on offer	Amount	Deadline	Solution addressed
				information services • Traffic calmed zones
Robertson Trust: Wee Grants for Wee Groups	Grant scheme for community groups or small registered charities to support projects improving the quality of life in their local communities.	£500 - £2,000	Opens 27 th June 2019	Walking busesCar share schemesE-bike schemesCommunityTransport
Localgiving: Magic Little Grants 2019	Development grants to support set up of projects related to physical activity and getting people active.	£500	Ongoing	• Walking buses
Veolia Environmental Trust Grants	Grants for not-for-profit organisations to develop new infrastructure for communities, including community building, parks, paths and cycle lanes, multiuse games areas and recreational activities.	Up to £75K	Ongoing	 Public transport information services Traffic calmed zones Transport hubs
Trusthouse Grants	Grants for running costs or one-off capital costs for charities and not-for-profit organisations for projects tackling rural issues such as transport for the elderly, disabled and disadvantaged, and projects encourage a sense of community.	£25K	Ongoing	 Public transport information services Community transport Transport hubs
Morrison Foundation Grant Funding	Grant funding to support local good causes to improve community well-being and improve people's lives.	£25K	Ongoing	 Walking buses Car share schemes E-bike schemes Community Transport Public transport information services Traffic calmed zones
Joseph Rowntree	Grants for projects developing sustainable, low-carbon	Various	Ongoing	• Public transport information

Fund	What's on offer	Amount	Deadline	Solution addressed
Sustainable Futures Fund	alternatives promoting well- being and sustainability, driving behavioural change to move to more sustainable lifestyles.			services • Community transport • Transport hubs • Car share
The Weir Charitable Trust	Supports small Scottish-based charities and community-groups to provide services across Scotland to help the Scottish community. Projects should improve the quality of life for people and encourage social cohesion.	Up to £25K for exceptional projects, average award £3,500	Ongoing – twice annually Next deadlines: 30 th August 2019 & 28 th February 2020	 Walking buses Car share schemes E-bike schemes Community Transport Public transport information services Traffic calmed zones
Scottish Communities Alliance Learning Exchange Fund	Fund for one community transport scheme to visit another	Up to £750	Ongoing until March 2020	
Sustrans Scotland: Places for Everyone	The aim of Places for Everyone is to create safe, attractive, healthier places by increasing the number of trips made by walking, cycling and wheeling for everyday journeys.		Ongoing throughout 2019/2020 from 25 July 2019	• Traffic calming measures
On-Street Residential Chargepoint Scheme	Local authorities can apply for funding to help with the costs of procurement and installation of on-street charging points for residential use.	75% of the capital costs of procuring and installing the chargepoint and an associated dedicated parking bay (where applicable). Capped at £7,500 per chargepoint.	Ongoing	• EV Charge Points
OLEV Electric Vehicle Homecharge	Grant provided towards to cost of purchasing and installing a domestic charging	75% off total capital costs	Ongoing	• EV Charge Points

Fund	What's on offer	Amount	Deadline	Solution addressed
Scheme (EVHS)	system for private individuals.	(capped at £500)		
Work Place Chargepoint Scheme	This scheme provides support for up-front costs of the purchase and installation of EV charge points for eligible businesses, charities and public sector organisations	75% off total capital costs (capped at £500)	Ongoing	• EV Charge Points
Energy Saving Trust: Domestic Charge Point Funding	Grant provided on behalf of Transport Scotland, in addition to the OLEV Electric Vehicle Homecharge Scheme (EVHS)	Up to £300	Ongoing	• EV Charge Points
Energy Saving Trust: E-Bike Grant Fund	To support adoption of e-bikes for local authorities, public and third sector organisations and higher education institutions.	Category A fund to trial e-bikes with up to £25Kper application. Category B fund for large-scale uptake with up to £200K available per application.	20 September 2019 – Category A 29 November 2019 - Category A 9 December 2019 – Category B	• E-bike schemes
Energy Saving Trust: Electric Vehicle Loan	Transport Scotland continues to provide interest free loans to support the purchase of EVs for both domestic and business use	Up to £35K to cover the cost of new pure electric/ plug-in hybrid vehicles Up to £10K to cover the cost of purchasing a new electric motorcycle/ scooter	Ongoing	• Electric vehicles
Energy Saving Trust: eBike Loan	Interest-free loans for households looking to purchase e-bikes.	Up to £6,000	Ongoing	• E-bikes

Fund	What's on offer	Amount	Deadline	Solution addressed
Highland LEADER Funding	A fund supporting development, sustainability and innovation in rural areas. LEADER will fund projects including feasibility and commissioning. Projects must align with Highland LEADER's aims.	Up to £50,000; must be match funded	Ongoing	 Walking buses Car share schemes E-bike schemes Community Transport Public transport information services Community transport
SP Energy Network: Green Economy Fund	This fund aims to support initiatives that will benefit the people of Scotland and support Scotland's ambitious green energy plans and local economic growth.	Minimum £10K	Unknown- usually opens once a year	• EV Charge Points
SSE Sustainable Development Fund	SSE have also established a fund for more significant projects which seek to deliver transformational social, economic and/or environmental changes in the community and develop sustainable ventures for the future		The Highlands fund will open in Autumn 2019	• Electric car clubs

6. Next Steps

The immediate next step following the finalisation of this report would be for the community and key partners to review the options presented here and decide collectively if and how they would like to pursue each one. A detailed delivery programme could then be worked up as a framework for moving forward.

The table below suggests a high-level action plan for delivering the options, assuming that all of the proposed options are taken forward.

Rather than a suggested owner of these different measures, the success of each option would be offered the best chance of success if a working group was established with the stakeholder from the area, these stakeholders are given in Appendix E.

Re f	Action	Timeframe
001	 Establish the Transport Hub organisation, including: Operating model; Organisational design; Ownership and governance; Funding model; Branding and communications; Role specification; Establish team. 	1-3 months
002	Explore and pursue funding opportunities in relation to the Transport Hub or any of the interventions.	1-6 months
003	Implement the Walking Bus service, starting with a pilot on a particular route and managed by the Transport Hub team.	3-6 months
004	 Establish ride sharing platform for the region, including: Agreeing most appropriate method for the community; Promotion; Pilot and evaluation. 	3-6 months
005	Introduce 'soft' improvements to the provision of public transport information, i.e. improving on-line information and the dissemination of paper-based timetables, etc.	3-6 months
006	Set-up the Transport Hub as a physical centre for transport services, including: • Redevelopment of the Tourist Information building; • Realignment of parking provision and signage.	6-12 months
007	Implement a car club scheme at the Transport Hub.	12 - 18 months

Soirbheas Transport Feasibility Study: Draft

Re	Action	Timeframe
f		
008	Introduce dynamic infrastructure for public transport information.	6-12 months
009	Implement a Community Transport service centred around the Transport Hub.	6-12 months
010	Deliver Safer Paths in Drumnadrochit.	18-24 months
011	Deploy new public EV charging infrastructure in the region.	12-24 months
012	Establish an e-bike cycle hire scheme in Cannich.	12-24 months

Appendix A: Stakeholder list

The following community groups were engaged and consulted in the Transport Feasibility Study:

- Glen Urquhart Primary School
- Glen Urquhart High School
- Glen Urquhart Childcare Centre
- Cannich Bridge Primary School
- Balnain Primary School
- Highlife Highland
- GURCA: Glen Urquhart Rural Community Association
- SACC: Strathglass and Affric Community Company
- Strathglass Shinty Club
- Glen Urquhart Shinty Club
- Strathglass Community Council
- Craigmonie Centre
- Glen Urquhart Community Council
- Strathglass Whist Group
- Glen Urquhart Care Centre
- Strathglass youth group
- Heritage group
- Strathglass bowls club

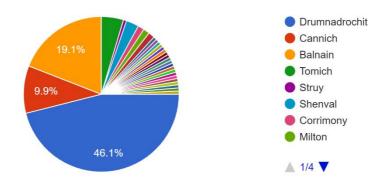
Appendix B: Copy of survey results

Glen Urquhart and Strathglass Transport Feasibility Study Residents Survey

1: Personal travel habits

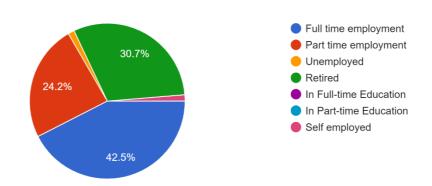
1. Where do you live?

152 responses

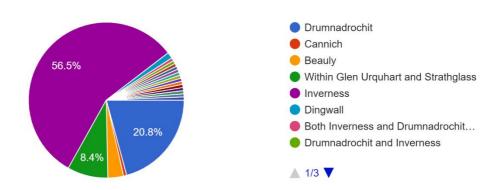


2. What is your employment situation?

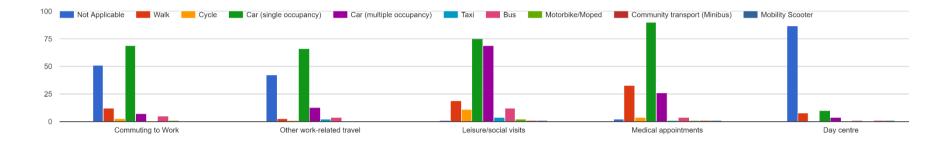
153 responses



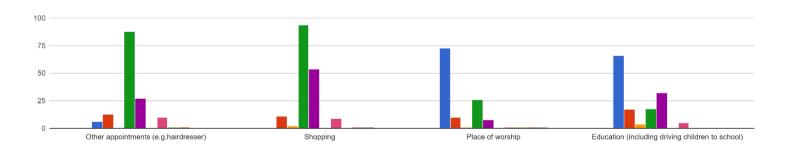
3. Where do you most frequently travel?



4. Which mode of transport do you use most frequently for the following journeys:



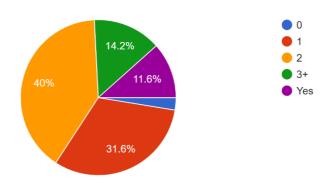
4.



2: Car travel choices

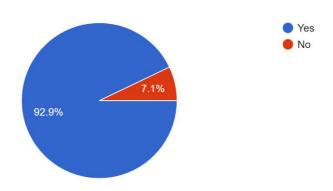
1. How many cars are owned by your household?

155 responses

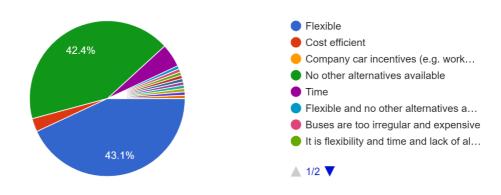


2. Is car travel your main mode of transport?

155 responses

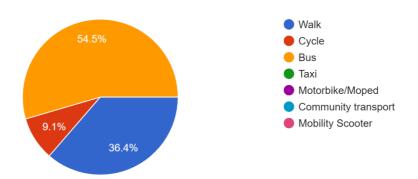


a. If yes: Why is car travel your main form of car travel



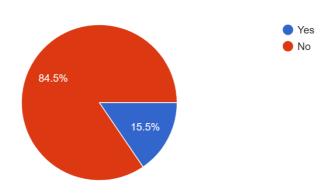
b. If not, which mode is your main form of transport?

11 responses

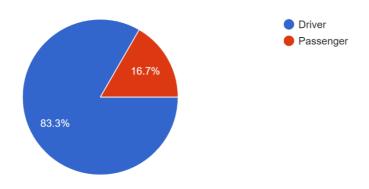


3. Do you regularly share a car with someone who is not a member of your household?

155 responses

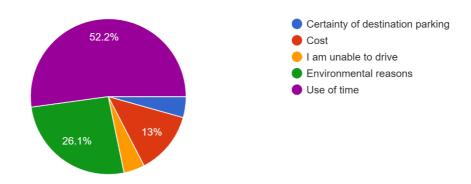


a. If yes, are you mainly the driver or passenger?



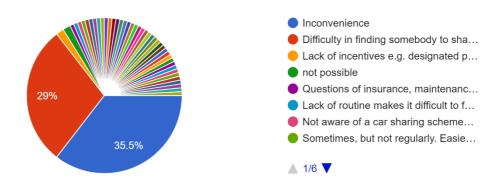
b. If yes, please indicate your main motivation?

23 responses



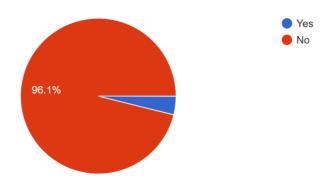
a. If not, what are the barriers to you doing so?

124 responses



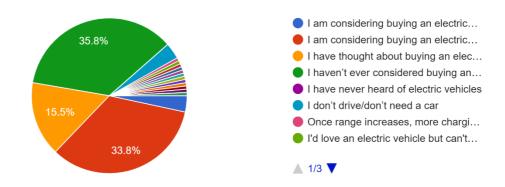
3: Sustainable Transport Options

1. Do you or someone who lives in your household own an Electric Vehicle?



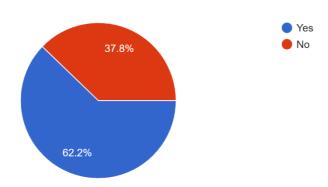
a. Which statement below best describes your attitude to buying an Electric Vehicle?

148 responses

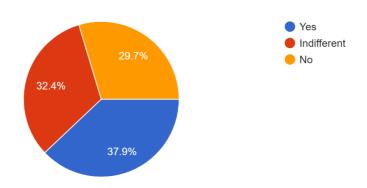


b. Are you concerned that your travel patterns/distances traveled would not be compatible with an EV?

127 responses

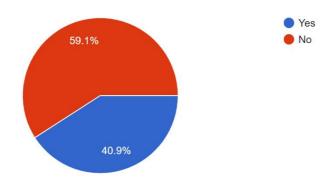


c. Would the provision of local charging infrastructure change your likelihood of purchasing an Electric Vehicle?

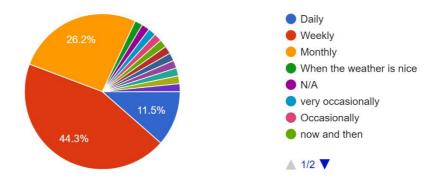


2. Do you cycle?

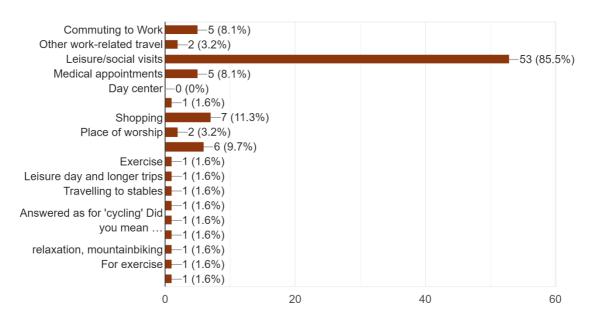
154 responses



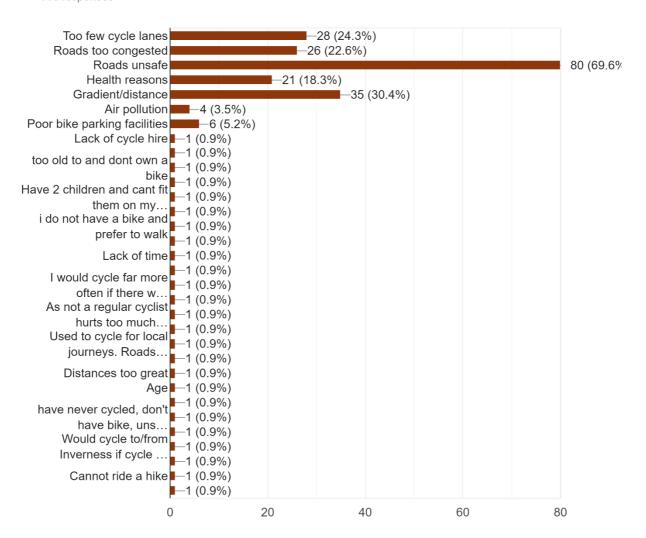
a. How often do you cycle?



b. Where do you travel?

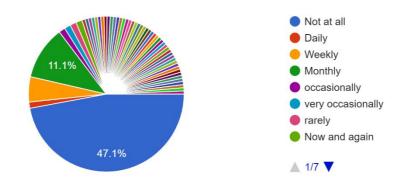


a. If no, why not: (Tick all that apply):

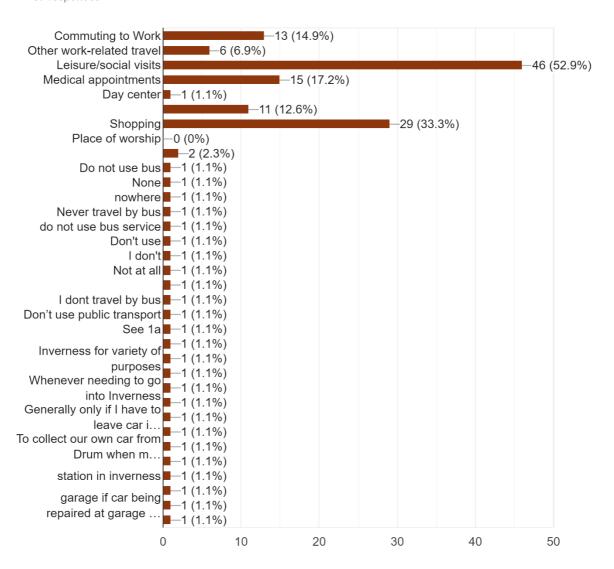


4: Bus and Community travel options

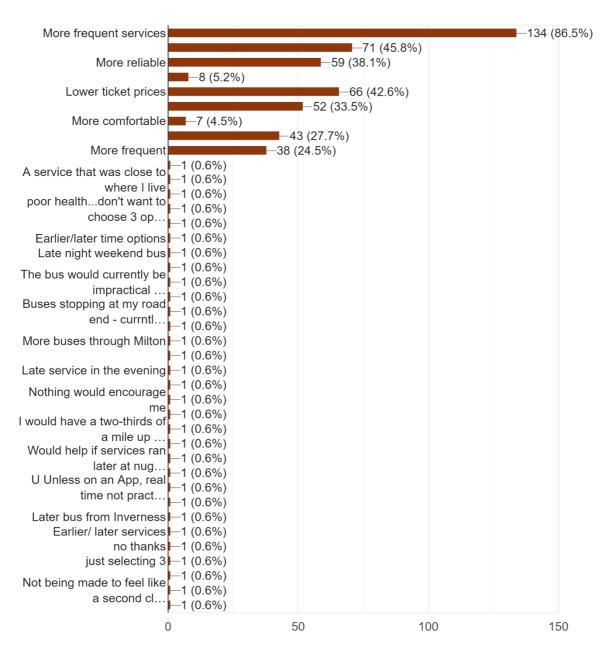
1. How often do you currently use the existing bus service (please state)?



a. Where do you travel using existing bus service?

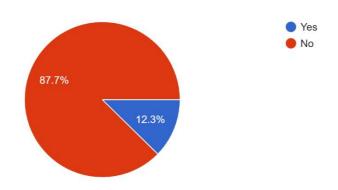


2. What would encourage you to use the public bus service more often (choose 3):

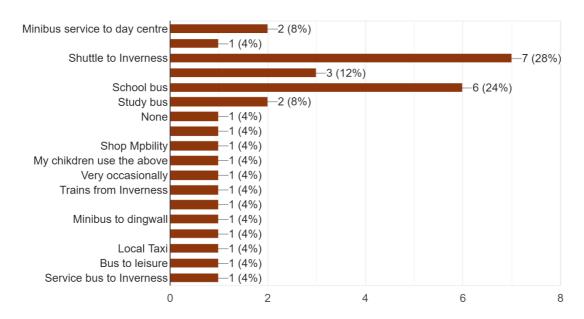


3. Do you use any local transport?

154 responses



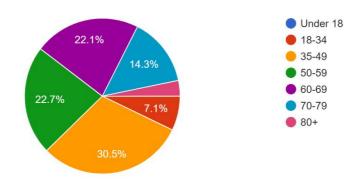
a. If yes, which?



5: Personal Data

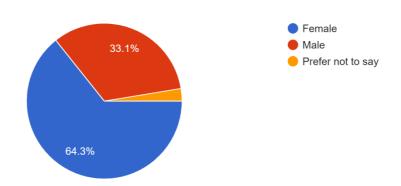
1. What is your age group?

154 responses

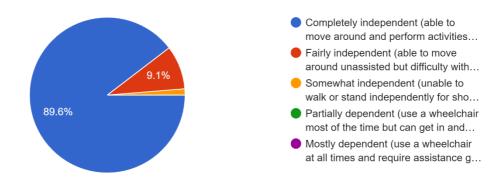


2. What gender do you identify with?

154 responses

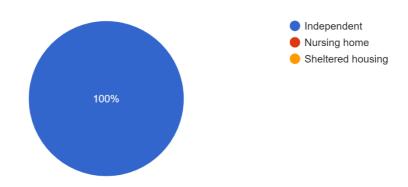


3. How independent do you feel with regards to your mobility?

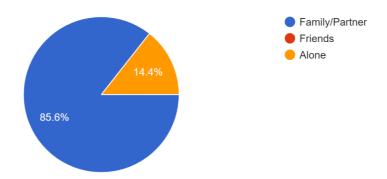


4. What is your living situation?

152 responses



5. Who do you live with?

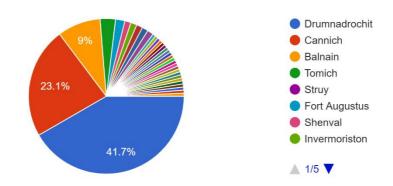


Glen Urquhart and Strathglass Transport Feasibility Study Youth Survey

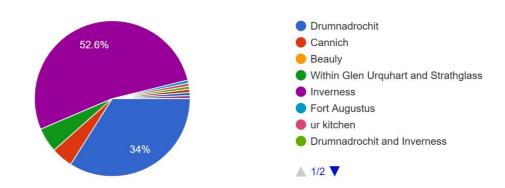
1: Personal travel habits

1. Where do you live?

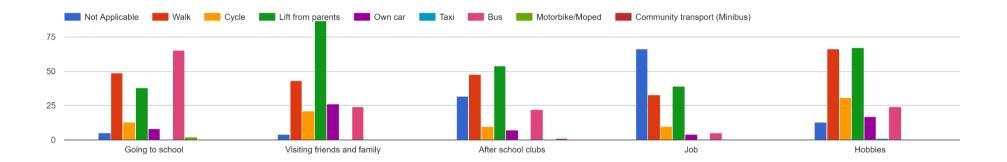
156 responses



2. Where do you most frequently travel to?



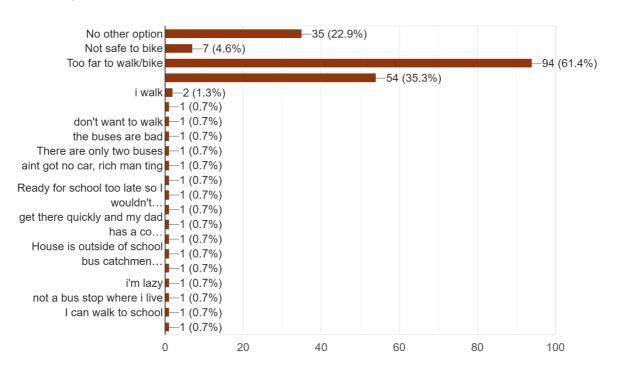
3. How do you usually travel for the following journeys:



2: Travelling by car

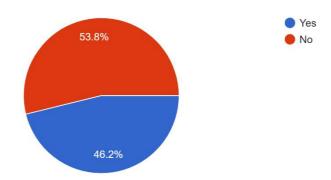
4. If you mostly travel by car, what are the reasons?

153 responses

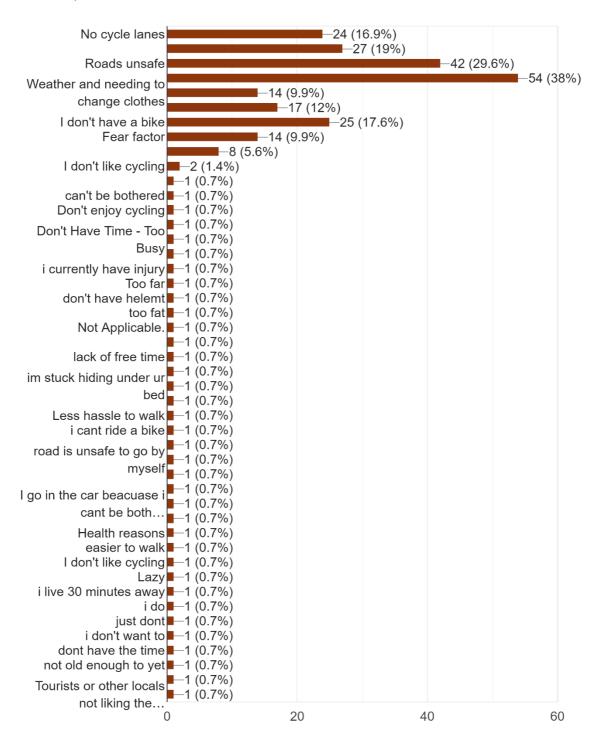


3: Travelling by bike

5. Do you cycle?

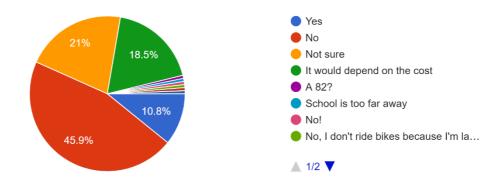


6. Are any of these a reason why you don't cycle more often? (Tick all that apply):



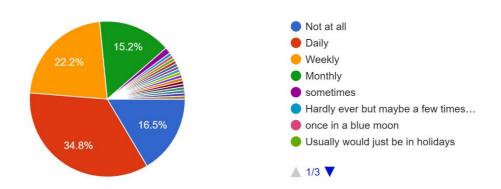
7. Would you consider using an electric bike if it was available for hire or loan?

157 responses



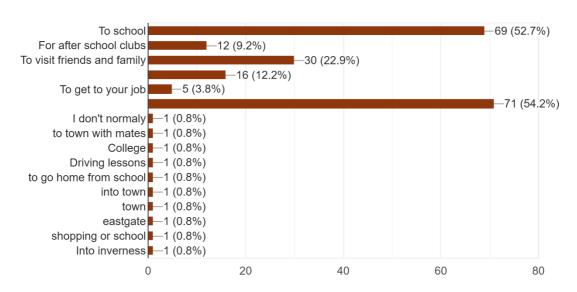
3: Travelling by bus

8. How often do you currently use the bus?

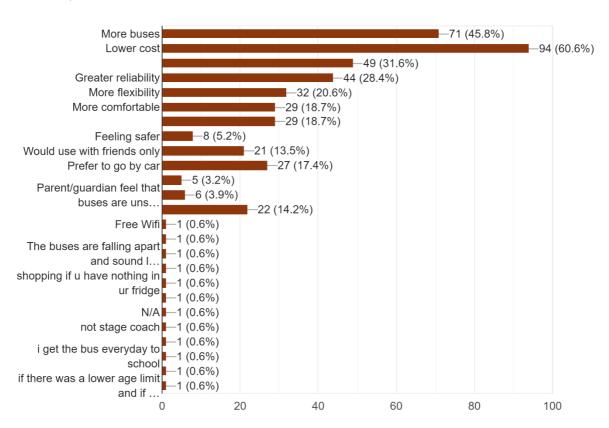


a. Where do you travel using the bus?

131 responses

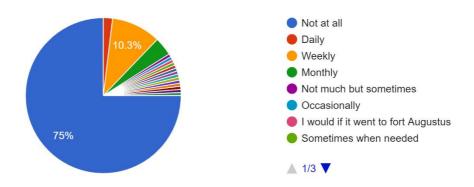


9. What would encourage you to use the bus more often (choose 3):



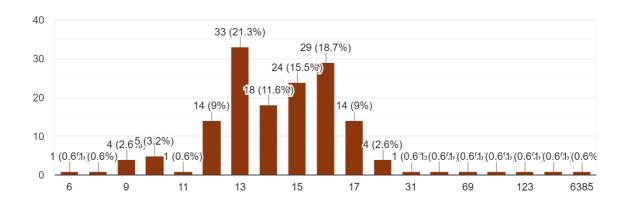
10. How often do you currently use the study bus?

156 responses



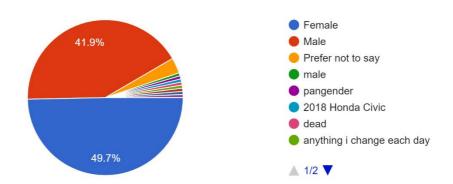
4: About you

13. How old are you



14. What gender do you identify with?

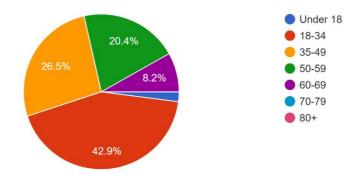
155 responses



Glen Urquhart and Strathglass Transport Feasibility Study Visitors Survey

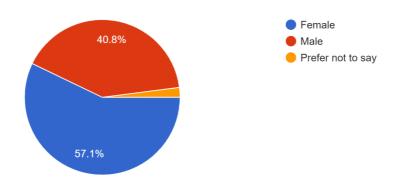
1: Personal data

What is your age group?



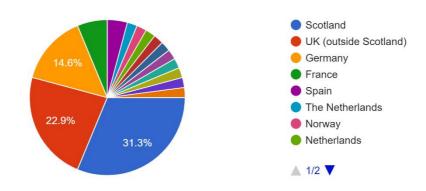
What gender do you identify with?

49 responses

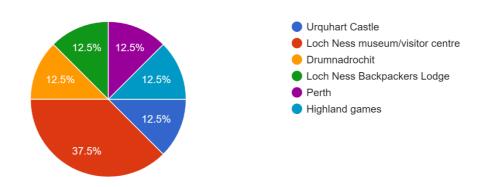


Where do you live?

48 responses



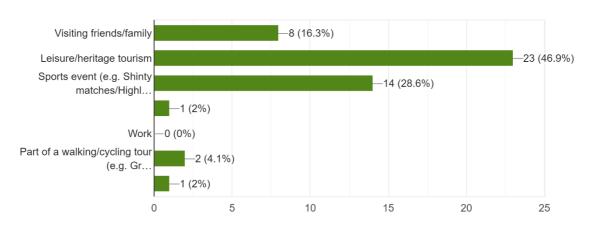
If you are within this area, what is your location at this moment in time?



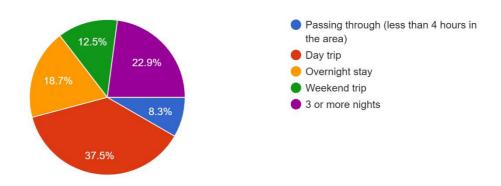
2: Reasons for travel

What is your primary reason for visiting the area?

49 responses

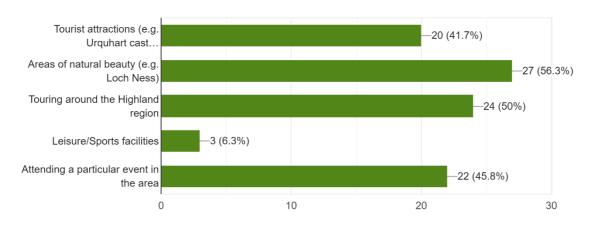


How long do you intend to stay in the area?



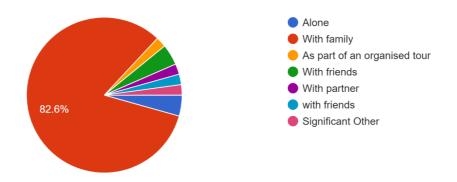
Where do you intend to visit during your stay (tick all that apply):

48 responses



How are you traveling?

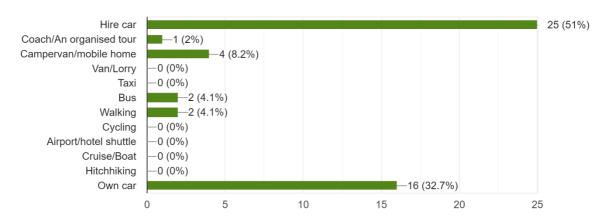
46 responses



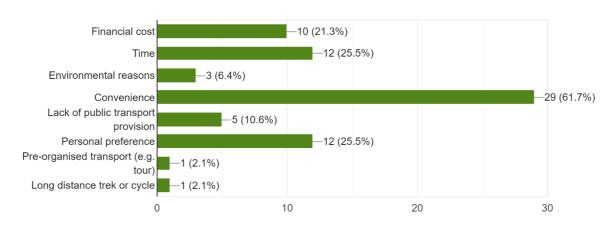
3: Experience of travelling

How did you travel to the area? (tick all that apply)

49 responses

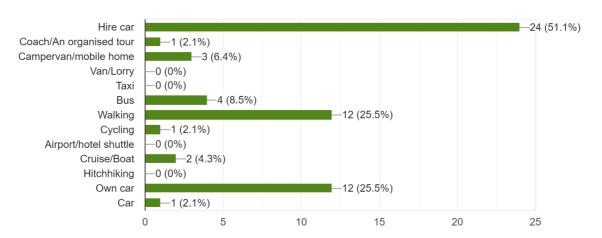


What were the key reasons for this choice?

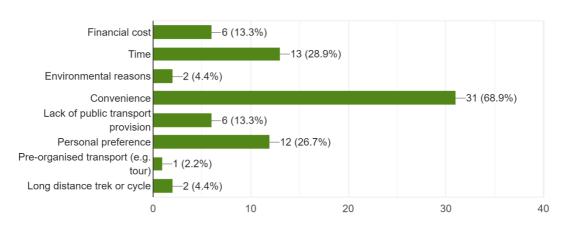


How do you intend to travel around the area during your stay? (tick all that apply)

47 responses



What are the key reasons for this choice?

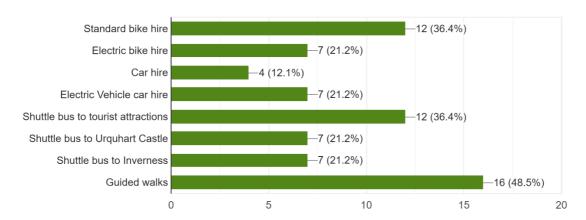


1

2

If available, which of the following would you consider using during your stay? (Tick all applicable)

33 responses



How do you rate the availability of information on local transport options? 30 responses

10.0
7.5
5.0
2.5
0.0

3

4

5

Appendix C: Bus timetables

Pre-existing bus schedule: Summer Drumnadrochit to Inverness Monday to Friday

Time from Drum	Service Number	Operator	Origin	Destination	Days service runs	Notes
08.07	17	Stagecoach	Tomich	Inv UHI campus	M-F	
08.42	17	Stagecoach	Tomich	Inv UHI campus	M-F	Does not run when Charleston Academy not open
08.55	513	Shiel	Fort William	Inverness	M-F	
09.05	920	Citylink	Fort William	Inshes	M-F	
10.04	17	Stagecoach	Cannich	Inverness BS	M-F	
10.15	919	Citylink	Fort William	Inverness	M-F	
11.41	917	Citylink	Portree	Inverness	M-F	
12.05	919	Citylink	Fort William	Inverness	M-F	

12.46	917	Citylink	Portree	Inverness	M-F	
13.15	17	Stagecoach	Drum	Inverness	Friday ONLY	Does not run when Charleston Academy not open
13.35	919	Citylink	Fort William	Inverness	M-F	
13.58	17	Stagecoach	Tomich	Raigmore	M-F	
14.45	919	Citylink	Fort William	Inverness	M-F	
15.05	919	Citylink	Fort William	Inverness	M-F	
15.39	17	Stagecoach	Cannich	Inverness BS	Friday ONLY	
16.01	17	Stagecoach		Inverness BS	Friday ONLY	Does not run when Charleston Academy not open
16.05	919	Citylink	Fort William	Inverness	M-F	
16.11	917	Citylink	Portree	Inverness	M-F	
16.20	17	Stagecoach	Drum	Inverness BS	M-T ONLY	Does not run when Charleston Academy not open

16.30	17	Stagecoach	Drum	Inverness	M-F	Does not run when Charleston Academy not open
16.34	119	Stagecoach	Invermoriston	Inverness	M-F	
17.03	17	Stagecoach	Tomich	Inverness BS	M-T ONLY	Does not run when Charleston Academy not open
17.16	513	Shiel	Fort William	Inverness	M-F	
17.18	919	Citylink	Fort William	Inverness	M-F	
19.15	919	Citylink	Fort William	Inverness	M-F	
19.31	17	Stagecoach	Tomich	Inverness BS	M-F	

Pre-existing bus schedule: Summer Drumnadrochit to Inverness, Saturday/Sunday

Time from Drum	Service Number	Operator	Origin	Destination	Days service runs	Notes
08.55	513	Shiel	Fort William	Inverness	Saturday	

09.00	513	Shiel	Fort William	Inverness	Saturday	
9.05	920	Citylink	Fort William	Inshes	Saturday	
09.11	17	Stagecoach	Tomich	Raigmore	Saturday	
10.15	919	Citylink	Fort William	Inverness	Saturday and Sunday	
11.41	917	Citylink	Portree	Inverness	Saturday and Sunday	
11.45	919	Citylink	Fort William	Inverness	Saturday and Sunday	
12.05	919	Citylink	Fort William	Inverness	Saturday and Sunday	
12.46	917	Citylink	Portree	Inverness	Saturday and Sunday	
13.35	919	Citylink	Fort William	Inverness	Saturday and Sunday	
13.58	17	Stagecoach	Tomich	Raigmore	Saturday	

14.45	919	Citylink	Fort William	Inverness	Saturday and Sunday	
15.05	919	Citylink	Fort William	Inverness	Saturday and Sunday	
16.05	919	Citylink	Fort William	Inverness	Saturday and Sunday	
16.11	917	Citylink	Portree	Inverness	Saturday and Sunday	
17.18	919	Citylink	Fort William	Inverness	Saturday and Sunday	
19.15	919	Citylink	Fort William	Inverness	Saturday	
19.22	17	Stagecoach	Tomich	Inverness BS	Saturday	
20.16	917	Citylink	Portree	Inverness	Saturday	

Pre-existing bus schedule: Summer Inverness to Drumnadrochit Monday to Friday

Time arriving into Drum	Service Number	Operator	Origin	Destination	Notes
6.46	17	Stagecoach	Inverness BS	Tomich	
7.05	17	Stagecoach	Inverness	Tomich	Does not run when Charleston Academy not open
7.35	119	Stagecoach	Inverness	Invermoriston	
08.56	17	Stagecoach	Inverness BS	Cannich	ONLY runs when Charleston Academy not open
9.15	917	Citylink	Inverness	Fort William	
9.30	919	Citylink	Inverness	Fort William	
10.00	919	Citylink	Inverness	Fort William	
10.30	919	Citylink	Inverness	Fort William	
11.45	919	Citylink	Inverness	Fort William	

12.30	919	Citylink	Inverness	Fort William	
12.27	17	Stagecoach	Inverness BS	Tomich	M-F
13.00	917	Citylink	Inverness	Fort William	
13.06	17	Stagecoach	Inverness BS	Drum	FRIDAY ONLY Does not run when Charleston Academy not open
13.30	513	Shiel	Inverness	Fortwilliam	
14.30	919	Citylink	Inverness	Fort William	
14.31	17	Stagecoach	Inverness BS	Cannich	
15.27	17	Stagecoach	Inverness BS	Tomich	M-T ONLY Does not run when Charleston Academy not open
15.52	17	Stagecoach	Inverness BS	Drum	FRIDAY ONLY Does not run when Charleston Academy not open
16.11	17	Stagecoach	Inverness BS	Drum	M-T ONLY Does not run when Charleston Academy not open
16.30	917	Citylink	Inverness	Fort William	

17.45	919	Citylink	Inverness	Fort William	
18.05	917	Citylink	Inverness	Fort William	
18.07	17	Stagecoach	Inverness UHI	Tomich	
20.40	513	Shiel	Inverness	Fort William	

Pre-existing bus schedule: Summer Inverness to Drumnadrochit Saturday/Sunday

Time arriving into Drum	Service Number	Operator	Origin	Destination	Notes
07.51	17	Stagecoach	Inverness BS	Tomich	Saturday
9.15	917	Citylink	Inverness	Fort William	Saturday and Sunday
9.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
10.00	919	Citylink	Inverness	Fort William	Saturday and Sunday

10.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
11.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
11.45	919	Citylink	Inverness	Fort William	Saturday and Sunday
12.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
12.27	17	Stagecoach	Raigmore	Tomich	Saturday
13.00	917	Citylink	Inverness	Fort William	Saturday and Sunday
13.28	513	Shiel	Inverness	Fortwilliam	Saturday
14.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
15.30	919	Citylink	Inverness	Fort William	Saturday and Sunday
16.30	917	Citylink	Inverness	Fort William	Saturday and Sunday
17.45	919	Citylink	Inverness	Fort William	Saturday and Sunday
18.05	917	Citylink	Inverness	Fort William	Saturday and Sunday

18.07	17	Stagecoach	Raigmore	Tomich	Saturday
20.45	920	Citylink	Inshes	Fort William	Saturday

Pre-existing bus schedule between Glen Urquhart and Strathglass

Time from Drum	Service Numbe r	Operator	Origin	Destination	Notes
15.30	17	Stagecoach	Cannich	Drumnadrochit	Monday to Thursday
09.05	17	Stagecoach	Drum	Cannich	M-F
12.50	308	Ross Minibuses	Inverness	Tomich	Friday
12.10	308	Ross Minibuses	Inverness	Tomich	Tuesday
09.25	324A	Ross Minibuses	Cannich	Dingwall	Tuesday

09.25	324A	Ross Minibuses	Cannich	Dingwall	Saturday
10.19	420	Ross Minibuses	Tomich	Dingwall	Monday
10.19	420	Ross Minibuses	Tomich	Dingwall	Wednesday
09.35	420	Ross Minibuses	Tomich	Dingwall	Saturday

Map of bus route 308:



Map of bus route 324A:



Map of bus route 420:



Appendix D: Estimates of transport cost from schools

Cannich Bridge Primary School – approx. £1950-£2100

- Approx. £900 on bus for swimming;
- £300 residential bus cost;
- £100 in fuel and donation to use GU Shinty bus for cross country;
- £150 for bus for music festival, if two classes enter this rises to £300;
- Approx. £200 for trips throughout year fuel for GU High School use of their bus for football/school Shinty comps, safe highlanders for P7;
- £300 for whole school trip e.g. to beach.

Glen Urquhart Primary School – approx. £3615

- £1890 of this was on swimming into the Aquadome;
- £340 for the residential to Loch Insh;
- The remainder is one off trips for classes.

Glen Urquhart High School

Awaiting Costs

Aside from these costs, the schools are heavily reliant on parents for transport, for example to take students to football matches, and they have expressed a desire to be able to provide more formal transport, this would increase potential expenditure.

Appendix E: Original list of options

- Map community ownership of vehicles, current provision of service and transport needs (including schools' usage, Glen Urquhart Care Project, Shinty clubs and neighbouring communities etc) including vehicle age, current hour/usage patterns and average annual mileage. Establish if there is capacity for sharing vehicles in the future or improving utilisation of current vehicles.
- Identify alternative transport options including partnerships to improve existing services available to the community and to address seasonal usage/demand e.g. shuttle bus to Inverness and park and ride for visitors to the area and to Urquhart castle, along with community usage and out of season usage etc.
- Explore community ownership options and partnership and management models for a small fleet of vehicles including electric vehicles.
- The development of a ULEV shuttle bus service to Inverness
- Identify need and potential locations for additional electric charge points.
- Provide examples of how to improve public transport information, availability and dissemination.
- Explore if public transport timings could be adjusted to improve connectivity e.g. bus times to and from Inverness to better match with train times and airport connections.

- Identify what incentives would encourage people to reduce car usage, start to car share or use public transport:
 - 1. Options to contract taxis services for regular routes.
 - 2. Volunteer car lift schemes and lift share for commuters.
 - 3. Look at viability of a car club and/or electric bike hire.
- Identify potential funding for the key initiatives/recommendations.



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