



Pilot Blueprint

Contents

1	Ger	General idea		
2	Sky	e Pilot Project	4	
	2.1	Geographic context	4	
	2.2	General statistics	5	
	2.3	Integration into the public transport network	5	
	2.4	Political context	6	
3	Pilo	t description	6	
	3.1	Target groups	6	
	3.2	Organisation	6	
	3.3	Communication	6	
	3.4	Service description	7	
	3.5	Financial aspects	9	
4	Feri	ntosh Pilot Project	9	
	4.1	Geographic context	9	
	4.2	General statistics	10	
	4.3	Integration into the public transport network	11	
	4.4	Political context	11	
5	Pilo	t description	11	
	5.1	Target groups	11	
	5.2	Organisation	11	
	5.3	Communication	12	
	5.4	Service description	12	
	5.5	Financial aspects	13	
6	E-Ca	argo Bike Pilot Context	13	
	6.1	Geographic context	13	
	6.2	General statistics	16	
	6.3	Integration into the public transport network	16	
	6.4	Political context	16	
7	Pilo	t description	16	
	7.1	Target groups	16	
	7.2	Organisation	16	
	7.3	Communication	18	





7.4	Service description	. 20
7.5	Financial aspects	. 22





1 General idea

The MOVE project aims to shape a new approach to develop innovative and sustainable mobility initiatives through co-creation, bringing together local authorities, knowledge centres and local economic players which specifically targets transport in rural or semi-rural areas. The MOVE project will share best practice in sustainable mobility and governance to increase take up in other regions, and support the greening of transport and stimulate rural areas in the North Sea Region.

HITRANS is leading on the delivery of three pilots to address social exclusion by improving accessibility and low carbon travel opportunities into main population centres from rural and periurban areas. HITRANS main aims are outlined as;

- Reducing the use of private cars in local mobility streams a 10% reduction in car trips of specific target groups within the pilot area.
- Increase the usage of sustainable mobility solutions 20% increase in passenger numbers from the existing sustainable mobility solutions. Baseline will be 0 passengers.
- Increase social integration through mobility. 20% increase in km travelled by target groups. Baseline will be 0 as currently no sustainable mobility solutions.

HITRANS is conducting three pilot projects

- 1. Skye Pilot Project
- 2. Ferintosh Pilot Project
- 3. E-Cargo Bike Pilot Project

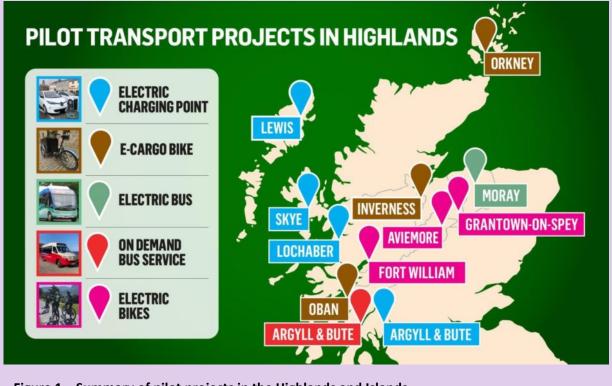


Figure 1 – Summary of pilot projects in the Highlands and Islands





2 Skye Pilot Project

2.1 Geographic context

Sleat is located in the southern peninsula of the Isle of Skye consisting of a number of small crofting township including Camuscross, Teangue, Drumfearn, Ferrindonald, and Tarskavaig, as well as the village of Ardvasar and the ferry port at Armadale.

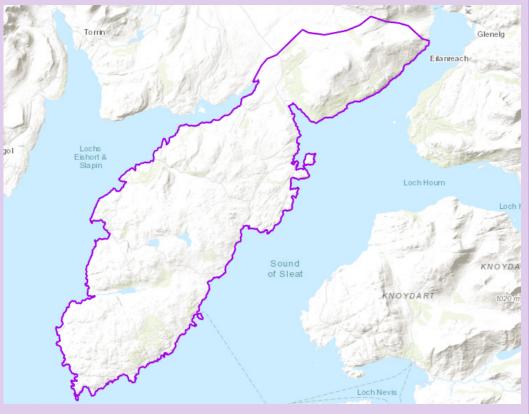


Figure 2 – Boundary map of Sleat Peninsula, Isle of Skye



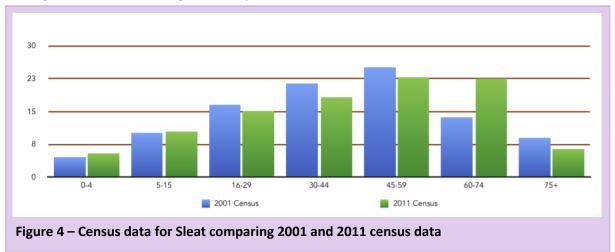
Figure 3 – Sabhal Mor Ostaig College and Tarskavaig, Sleat Peninsula, Isle of Skye





2.2 General statistics

Sleat has been one of the fastest growing rural areas of Scotland for over 30 years, currently having a population of around 900. Within its boundaries are two pioneering estates; Scotland's Gaelic College at Sabhal Mòr Ostaig, and a major visitor centre at Clan Donald in Armadale.



Sleat's approximately 900 population are split into demographics in the graph above, comparing 2001 and 2011 census data. There has been a 12% increase in population overall, but is mainly concentrated in the 60-74 age range. There are approximately 383 households in Sleat with a high prevalence of small households in the area, almost 5% greater than Highland Council as a whole which reflects the high percentage of older people in the area.

After Trotternish on Skye, the Sleat peninsula is the second largest Gaelic speaking area on the island and is home to Scotland's Gaelic college, Sabhal Mòr Ostaig. The college provides university level education with degrees such as Gaelic and Media Studies, Gaelic and Music as well as a range of other full-time, part-time and summer courses. Sabhal Mòr Ostaig is the largest employment provider in the area with around 120 full-time employees. Almost 60% of people in Sleat can speak Gaelic, compared to 1.1% of the Scottish population over the age of 3.

Food costs about 10% more in remote rural Scotland and considerably more in local stores. Longer commutes in rural areas typically add £30/40 per week to fuel costs and household fuel bills tend to be 50-90% higher, according to the Minimum Income Standard report by Highlands and Islands Enterprise (HIE).

2.3 Integration into the public transport network

Skye is connected to the mainland by a bridge, which opened in 1995, from Kyleakin on the island's east coast to Kyle of Lochalsh. A Caledonian MacBrayne ferry service runs from Armadale to Mallaig and Scotland's last hand-operated, turntable ferry boat provides a service to Kylerhea leaving from Glenelg. The Isle of Skye Ferry Community Interest Company owns and operates this ferry service. The island acts as a link to other isles too, Caledonian Macbrayne operate ferry services to Lochmaddy on North Uist and Tarbert on the Isle of Harris from Uig, north west of Portee. Citylink and Stagecoach run frequent bus services from Glasgow and Inverness to Skye. Over half of the households in Sleat have a car or van available to them.

The existing bus service operates only two times a day to coincide with school times though there are some additional services in the Summer months. In recognition of the lack of existing public transport the Sleat Community Trust run a subsidised taxi service with funding support from the Highland Council. The proposal would be that an electric 7 (Nissan NV Note) or 15 seater (Mellor Tucana II)





vehicle would replace the existing subsidised taxi service. The service would run on a combination of a fixed schedule element as well as a demand responsive basis. The service would work on a cocreative basis to facilitate appointments for the GP surgery, for the new Broadford Hospital, the over 60's lunch club, mobile bank, swimming lessons in Kyle and links to onward to Broadford and Portree and to connect into main spinal routes to larger towns and cities in the Highlands and the central belt. There is also potential to explore home grocery delivery for Armadale Stores and potential outreach postal office services. The innovation element of this project would be to offer over 60's free bus travel if they are in possession of the blue highlife card.

2.4 Political context

The Ross, Skye and Lochaber constituency was created in 2005 and is one of three Westminster constituencies covering the Highland council area. The constituency covers a central portion of the Highland council area, and at 12,000 square kilometres (4,600 sq mi), it covers the largest area of any House of Commons constituency in Britain. Until the 2015 general election, it was represented by former Liberal Democrat leader Charles Kennedy. Since then, it has been represented by Ian Blackford, the leader of the Scottish National Party in the House of Commons. With a majority vote for Ian Blackford the residents of Skye must have appreciated the views and policies he stands for, such as; determination to get to net-zero, transition away from fossil fuels and to support families and protect the environment, with sustainable transport by proposing a free bike to all children of school age who can't afford one, so every child in Scotland leaves school able to cycle safely.

3 Pilot description

3.1 Target groups

Initially, the pilot was designed to aid in a study with NHS to understand health demand and develop solutions to improve access to care and to create a framework that could be applied nationally. However, the outbreak of Covid 19 changed the focus of the pilot. Target users became those in need of home deliveries as a result of the lockdown, the vehicle was used to deliver groceries and prescriptions to community members who were isolating, shielding or couldn't get out for other reasons. Goods delivery became very popular, servicing 25 households per week at its peak.

3.2 Organisation

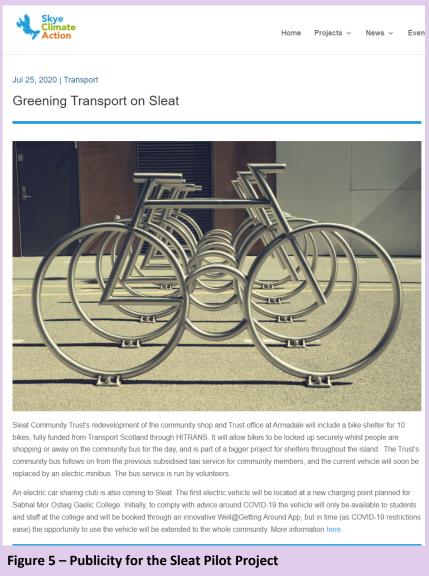
Several proposals for pilot projects were received from member local authorities one from Highland Council for a hybrid type service using scheduled and demand responsive to serve the remote community of Sleat in Skye that currently has no dedicated public transport available to all settlements. The service is being run by volunteers and the Sleat Community Trust.

3.3 Communication

This new service was advertised locally and gained a number of users through word of mouth in this small community. The pilot has proved valuable during the Covid pandemic from a social interaction point of view enabling the driver to be able speak to people and find out how they are whilst exchanging a few words whilst doing the shopping deliveries.







3.4 Service description

Service replacing existing contract operated by Sleat Development Trust on behalf of Local Authority. Combination of demand responsive and scheduled service. A diesel vehicle was used initially and then replaced with an ENV200 Combi Nissan EV with charge point. Pre-Covid we were running two weekly pilot runs, one to the local shop and one to Kyle of Lochalsh (which has more shops and services), and patronage was building momentum. A purpose built charge point has been installed at the Sleat Community Transport hub specifically for the MOVE vehicle (6 hours full charge for ENV200).

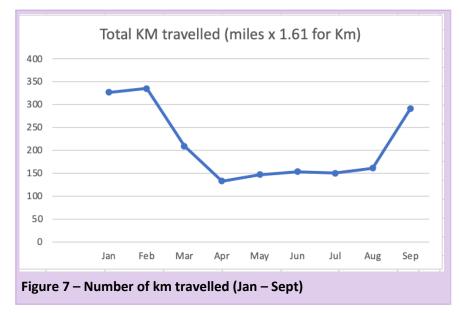
The bus needed repairs during February 2020 and so was in the garage twice for repairs to be carried out. However, outwith these dates the bus was fully operational until the pandemic hit the UK and lockdown began. From 18th March, the bus was being used for shopping deliveries to the vulnerable once a week throughout lockdown. The bus was not available for passengers during this time due to Covid-19 restrictions. This picked up again very slightly in the month of September when restrictions began to lift, and SMO (Gaelic college) borrowed it for students on 1st, 3rd and 5th. The bus was thoroughly sanitised before and after.





As can be seen in the graph below, the passenger numbers dropped to zero as the pandemic grew in the UK through February and March, but started to pick back up again slowly after restrictions were eased in August 2020. Similarly with the graph below, the bus was still in use for deliveries through lockdown, travelling around 150km a month to make food deliveries to the vulnerable in rural areas. This again picked up as restrictions were eased.





The Sleat pilot in Skye is fully implemented with an EV running a combination of a scheduled service and DRT and is a great example of the adaptability and flexibility during the Covid 19 pandemic where the vehicle is primarily being used for the movement of goods rather than people.







Figure 8 – Photographs of the Sleat bus and electric charging infrastructure

3.5 Financial aspects

Estimated Budget over 3 years is £25,000.

4 Ferintosh Pilot Project

4.1 Geographic context

Ferintosh is a small community council area, on the Black Isle near Inverness in the Highlands of Scotland. It is a rural area of agricultural land and woodland with scattered houses and small settlements such as Culbokie, Easter Kinkell, and Duncanston. Its name in English, Ferintosh, derives from the Gaelic: Fearann Tòisigheachd, literally 'estate of the thanedom'.





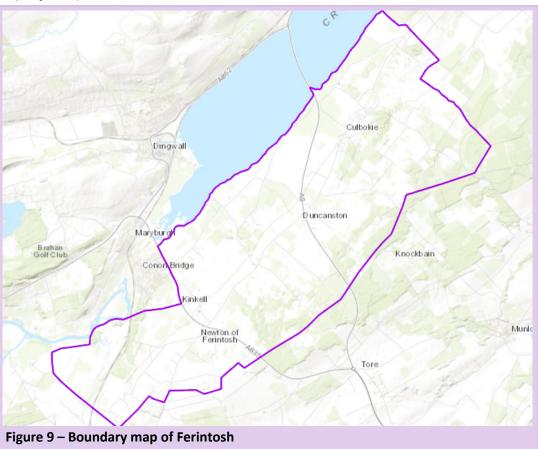




Figure 10 – Ferintosh Community Hall

4.2 General statistics

This community is located on the Black Isle with approximately 2000 residents in the area. It is a rural with productive agriculture. The majority of residents not working in agriculture work in the main nearby towns of Dingwall and the main regional centre, Inverness which has a population of around 60,000.





4.3 Integration into the public transport network

The aim of the pilot was to replace the current Service 22 – 3 return services each weekday to Inverness - Current Covid-19 Service 22 - 2x return services to Inverness (Monday – Friday) with a more flexible, innovative solution that is more economically efficient, reduces emissions and most importantly better meets the needs of the local community.

This would consist initially of a mixture of scheduled peak time services to Inverness along with a period of operation where the service will operate on a demand responsive basis with passengers able to book journeys to/from any point within the Ferintosh Community Council area or to Tore where they will be able to transfer onto any of the Stagecoach services operating through the Tore junction with connection to Inverness, Dingwall, Alness etc possible.

4.4 Political context

The main local operator Stagecoach diverts a couple of its scheduled services into the main settlement in Ferintosh (Culbokie) on a commercial basis. Beyond these services all other public transport in the area is supported by the Local Authority, with the services that are provided supported largely through its funding of school transport in the area. With rising costs and pressures on the local authority budgets increasing, there have been cuts to any non statutory support for public transport services in recent years and it is recognised that new models of public transport provision are required.

5 Pilot description

5.1 Target groups

The bus was to target all local residents and visitors of the area as a new flexible way to connect them to key services. The Ferintosh Community Bus is an example of a demand responsive form of public bus transport customised for the Ferintosh area that around the UK and beyond is proving to provide a more accessible, more frequent and more sustainable service for rural residents. Generally rural residents live considerable distances from fixed route bus services and the Ferintosh community bus can travel all the public roads as a flexible routing service. The frequency of bus journeys can therefore now be increased since the bus will only be travelling within a small, contained area and will link with the more frequent A9 bus services operated by Stagecoach. An 8 seat Electric Vehicle has been leased for the plot with The Local Authority committing to continuing to support the lease and operation of the service beyond the timeframe of the MOVE supported Pilot. The FCB is based in Culbokie where an EV Charging point has been installed to support the operation of the service.

5.2 Organisation

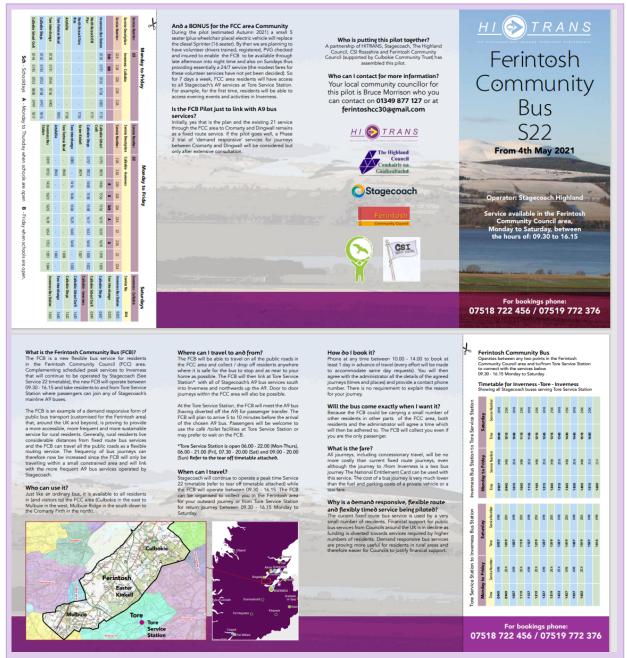
A partnership of HITRANS, Stagecoach, The Highland Council, CSI Rossshire and Ferintosh Community Council (supported by Culbokie Community Trust) has assembled this pilot. The new flexible bus service in the Ferintosh Community Council area of the Black Isle was introduced on Monday 28 June 2021, making it easier for local residents to use public transport. The demand responsive service operated between 9.30 am – 4.15 pm, Monday to Friday, and complement the scheduled peak services on Service 22 to Inverness that will continue to be operated by Stagecoach. In addition to the core service, local community members have been working to train volunteer drivers who they hope will be able to offer the service outwith the hours of the pilot including in the evenings and at weekend. In the evenings it is hoped that the bus can help local school children access after school activities at the High School in Fortrose on the Black Isle.

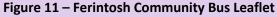




5.3 Communication

The new community bus was advertised on a number of the stakeholder websites, as well as being covered by the local press. Furthermore, leaflets were created and delivered to all homes in the Ferintosh area discussing the change in service and including the new bus timetable which could be torn off and kept for reference. The public can phone at any time between 10.00 - 14.00 Monday to Friday to book at least 1 day in advance of travel (every effort will be made to accommodate same day requests). They will then agree with the administrator all the details of the agreed journeys (times and places) and provide a contact phone number. There is no requirement to explain the reason for your journey.





5.4 Service description

Service replacing existing contract operated by Sleat Development Trust on behalf of Local Authority Combination of demand responsive and scheduled services. Initially a diesel vehicle was used then





replaced with an ENV200 Combi Nissan EV with charge point. Pre-Covid we were running two weekly pilot runs, one to the local shop and one to Kyle of Lochalsh (which has more shops and services), and patronage was building momentum.

Ferintosh Community Bus (FCB): A community consultation document went out to the email list and displayed in Culbokie Spar. The key question asked was whether the community would (or would not) support the FCB becoming a permanent service with the upcoming end of the pilot phase. The document contained the evidence of bus usage, the environmental impact, the views of passengers, the views of the project partners and the responses to residents' queries provided to FCC last month.

The results of the consultation were 38 saying 'yes', 3 saying 'no' and 1 'undecided'. Many comments were also received (FCC received a report of all unedited comments) which will be used as a rich source of ideas for the improvement and extension of the FCB service in the future.

FCC discussed the feedback and presented its own thoughts including preventing loss of precarious bus services / good for those not being able to get to a bus stop / house collection and especially delivery back very positive / link at Tore virtually seamless / continue and allow it time to expand / connectivity for an ageing population / reduced carbon footprint /residents seem to accept the difficulties of the pilot through covid and must be given time to work effectively /exciting new concept of bus from your own house / many special circumstances to be explored and satisfied.

FCC unanimously agreed that the FCB should become a permanent feature of the public bus service.

5.5 Financial aspects

The Ferintosh pilot is funded by the MOVE project, HITRANS and The Highland Council. Costs include an allowance for the electric vehicle, operation and management of the service. In addition, an EV charger has been required for the vehicle to support the efficient running of the service and some small improvements to establish a transport interchange where the service links up with existing Stagecoach services to promote onward sustainable travel for longer journeys. The aim of the service is to provide more sustainable mobility options to the community rather than travel by private cars.

6 E-Cargo Bike Pilot Context

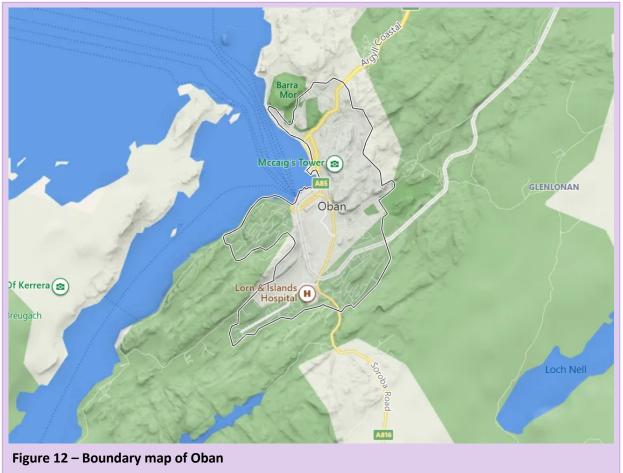
6.1 Geographic context

Our ecargo bike trials are taking place in 3 separate locations; Oban, Orkney and Inverness.

Oban (in Scottish Gaelic meaning The Little Bay) is a resort town within the Argyll and Bute council area of Scotland. Despite its small size, it is the largest town between Helensburgh and Fort William. During the tourist season, the town can have a temporary population of up to over 24,000 people. Oban occupies a setting in the Firth of Lorn. The bay forms a near perfect horseshoe, protected by the island of Kerrera; and beyond Kerrera, the Isle of Mull. To the north, is the long low island of Lismore and the mountains of Morvern and Ardgour.







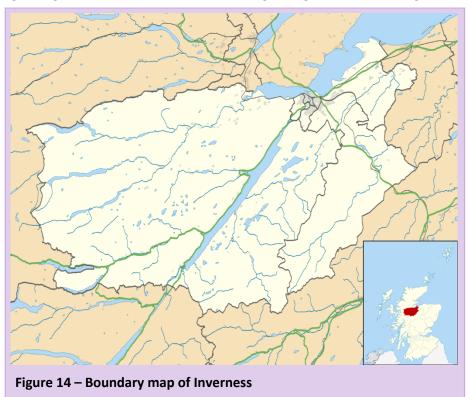
Orkney is separated from the Scottish mainland by the Pentland Firth, which is only 11km (7 miles) wide at its narrowest point. There are roughly 70 islands in Orkney, of which 20 are inhabited. The largest island is Mainland, where the administrative capital and major city of Kirkwall is located. Those islands north of Mainland are called the North Isles and those to the south are called the South Isles. Generally, islands with 'Holm' in the name are uninhabited. Islands with 'Papay' indicate that the island was associated with early Celtic Christian missionaries.







Inverness is located in the Scottish Highlands. This city is one of the fastest growing not just in Scotland, but in all of Europe. An exceptional quality of life and a ranking of "the happiest city in Scotland" has made this an ideal place to call home, which is why the population is growing so quickly and was at last count made up of 70,000 people. The population of Inverness is rapidly growing and is, in fact, the second fastest-growing in the United Kingdom.







6.2 General statistics

Oban's total population was 9,974 in 2011, an increase of 5.6 per cent from 2001. By industry of employment, there is a higher share of employment in wholesale and retail, transport and storage, and accommodation and food services than the Highlands and Islands and Scotland. By occupation, a higher share of employment in managers, directors and senior officials, and elementary occupations than the Highlands and Islands and Islands.

Orkney's total population was 22,190 in 2018, an increase of 3.6% from 2011. Population density (22 people per sq. km) is higher than that for the Highlands and Islands (12 people per sq. km) but lower than the Scottish average (70 people per sq. km). Orkney has an older age profile than both the Highlands and Islands and Scotland as a whole.

The Greater **Inverness** area, including Culloden and Westhill, had a population of 56,969 in 2012, growing to 70,000 in 2019 The primary languages spoken in Inverness are English and Scottish Gaelic. The city in recent years has had a booming economy, leading many to want to live in the area. Inverness is ranked fifth across British cities as having the highest quality of life. It has also been named the happiest place in Scotland, as well as one of the happiest places in the United Kingdom.

6.3 Integration into the public transport network

The pilot areas were each evaluated during the application stage for their existing bike infrastructure. In each of the 3 pilot locations there was sufficient active travel network to ensure the success of a trial.

6.4 Political context

Promotion of sustainable transport is at the heart of government transport agendas in Scotland. At present, there are a very limited number of eCargo bikes across the region, and introducing this as a new service brings its challenges in terms of encouraging people to try something new and being open to change. The uptake has been very promising with several businesses now planning to purchase their own eCargo bikes in the future.

7 Pilot description

7.1 Target groups

Demand for the project is multi-pronged, as we have gathered from prospective participants; on the one hand, many businesses are increasingly keen to minimise their carbon emissions, both for altruistic reasons, and as part of their sales pitch to existing and new customers. As you would expect therefore, consumers are increasingly looking for, and particularly during the Covid-19 pandemic, businesses that are local, smaller scale, and which do good through their businesses practices. The use of e-cargo bikes to undertake business and to fulfil local orders is an increasingly attractive business proposition that HITRANS would wish to support other businesses in adopting. HITRANS held discussions with partner councils and BIDs to assess demand, receiving positive responses from all. Other aspects identified as opportunities for added community benefit as part of the project include a prescription delivery service, as this is not offered by the NHS, and so the housebound have difficulty in gaining prescriptions as well as the many, particularly more elderly residents, that continue to shield at home.

7.2 Organisation

Initial discussion with Local Authorities, community organisations and Business Improvement District (BID) organisations identified an interest in exploring alternative delivery modes from which we





narrowed our focus to three trial areas. Local shops, restaurants, bars and cafes are increasingly offering delivery services to retain their customer base through the pandemic, and most businesses are using petrol or diesel vehicles to make deliveries. eCargo bikes will provide a superior service at a lower running cost, and refrigerated compartments and other modifications can be added, according to demand. Furthermore, delivery via eCargo bike means that those operating them need not have to have a driving licence - particularly suited to help young people jobless as a result of the pandemic.

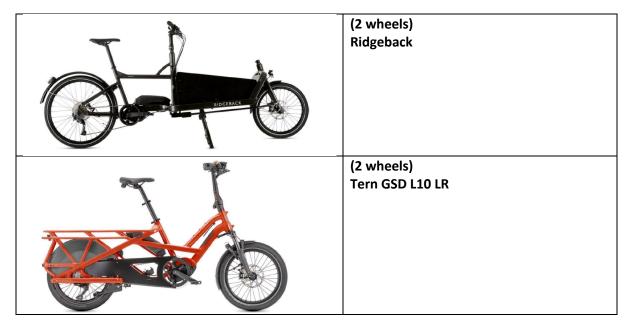
In order to supply and maintain the eCargo Bikes in each location HITRANS published an invitation to tender on Public Transport Scotland. The tender included the Pricing Schedule for the Work Package and was weighted 60:40 price:quality during the selection procedure. As much as possible we wanted to engage local bike shops to the trial location.

The trials were promoted through BID and other local authority organisations as well as social media platforms. An Inverness eCargo bike was also made available to the public and local businesses at a HITRANS hosted Low Carbon Transport Day.

Supply & Maintenance of E-Cargo Bikes.

Inverness	Highland Bikes	
Oban	Oban Cycles	
Orkney	Glasgow Bike Hive	

The Bikes







(3 wheels)

Ridgeback MK5 Trike

Bike type	Quantity	Load capacity (kg)
eBullitt e6100 XT	3	100
Tern GSD L10 LR	1	200
Ridgeback MK5 Trike	3	150
Ridgeback	5	150

We contacted local businesses, councils, and community groups in each area to establish different uses for the E-cargo bikes. The bikes are being offered to businesses and community groups until the pilot project ends in February 2022, with the bikes being available for up to 3 months per user to give an opportunity for other businesses to use the bikes following the first set of trials. All necessary lights, locks and safety equipment are provided as part of the trial. Training is also offered to ensure that users are confident in using the bikes before starting the trial.

If a business is interested in using an ecargo bike they are asked first to complete an online survey/questionnaire where they outline how the bike would benefit their business etc. HITRANS would then read and evaluate the businesses response before selecting the successful parties.

7.3 Communication

The new mobility options created by the ecargo bikes had to be communicated to the public to generate interest in the pilot. The ecargo bikes were promoted through BIDs and via local community anchor organisations. Furthermore, posters were created to advertise the pilot outlining the aims and providing contact information for those interested.







E-CARGO BIKE TRIALS

If you are based in Inverness, find out if an electric cargo bike could benefit your business or group and apply for one of our bike trials

From carrying equipment, parcels and mail, to deliveries of groceries, prescriptions or even flowers, businesses are saddling up and exploring the ways in which cargo bikes can complement their business model.

- Reduce carbon footprint
- Reduce pollution and improve air quality
 - Reduce fleet and fuel costs
 - Avoid congestion

WHY TRIAL?

Improve employee health and wellbeing

groups for 1-3 month hires.

before starting the trial.

FIND OUT MORE...

With a variety of e-cargo bike types to choose

might wish to trial a bike to see how it could

methods. HITRANS has secured four e-cargo

bikes for Inverness which we are pleased to be able to offer to businesses and community

The bikes and their load capacity available

include Ridgeback (150kg), Tern GSD L10 LR

(200kg) and the Ridgeback MK5 trike (150kg).

In addition, all necessary lights, locks and

safety equipment are provided as part of the

trial. Training will also be offered to ensure

If you are interested in trialling an e-cargo bike, or if

you have any further questions, please contact

that users are confident in using the bikes

from, it's understandable that businesses

complement and fit in with their existing

WHY E-CARGO?

At a time when customer demand for same-day service and delivery is increasing, alongside expectations of sustainability, light electric freight vehicles such as electric cargo bikes (otherwise known as e-cargo bikes) are an appealing option to many businesses.

E-cargo bikes fill the gap between traditional bicycles and delivery vans, and are a perfect option for transporting work equipment, light freight or completing 'last-mile' deliveries. With electric pedal assistance, they have the capability and power for transporting significant loads with the benefit of being able to move freely through congested areas, avoid parking tickets and truly achieve a door-to-door service.

E-cargo bikes are easy to charge, with removable batteries that can be plugged into any ordinary wall socket. Charging generally takes around 4 - 8 hours, depending on the size of the charger, and most bikes will be able to provide at least 20 miles from a single charge, although many can achieve much more than this. Exact mileage depends on a number of factors, including weight of load and the terrain, but even if the battery does run flat the bikes are still able to be used normally without the electric assistance.

E-cargo bikes are suitable for a wide range of users, whether you are a regular cyclist or have not ridden a bike in a while. They can be used both on and off road, and on rough or cobbled surfaces, and can make tackling that steep hill a breeze.

info@hitrans.org.uk
01463 719002

HITRANS:



Each eCargo bike user was sent a monthly survey to aid in tracking their progress and note any issues or queries. Moreover, at the conclusion of each business trial they are asked to complete an end of trial survey which contains more comprehensive questions. The first round of trials are coming to an end and although not all surveys have been completed yet we have gained 6 completed surveys. Of the 6 survey responses gathered so far the average usage by the businesses is 3-4 times per week. When asked, if applicable, why they used the bike less than expected poor weather and restrictive load capacity were common themes. Furthermore, the topography of the regions were a further factor with comments like: "the island's rural roads and pathways are not suitable for this type of transport" and "the bike is not really suitable for the rough tracks from the main road to the residents' homes on Rousay". The range cycled per month for the 6 businesses ranged from 26-232 miles with a load capacity from 7-45kg. We have had very positive survey responses with some stating the bikes were, "a convenient means of delivering goods to customers who reside a long way from the main road" and "it has massive potential as an alternative to a small car/van, this is ideal for





towns like Lochgilphead". Some responses suggested that the business would be keen to make a modal shift,

"Firstly - I wasn't sure if an e-bike was what I needed - The road I travel is very steep and I'm not an accomplished rider. But using the e-bike has made me 100% sure that it's the right thing. It has helped my confidence on the road . My business has been able to expand because I can take more product to the post office. I am definitely getting fitter and saving money. I feel great not using petrol".

Furthermore, at the end of their trial businesses were provided with a more in depth end of trial survey to gain a greater understanding of all the pros and cons of each participants trial.

7.4 Service description

At a time when customer demand for same-day service and delivery is increasing, alongside expectations of sustainability, light electric freight vehicles such as electric cargo bikes (otherwise known as e-cargo bikes) are an appealing option to many businesses.

E-cargo bikes fill the gap between traditional bicycles and delivery vans, and are a perfect option for transporting work equipment, light freight or completing 'last-mile' deliveries. With electric pedal assistance, they have the capability and power for transporting significant loads with the benefit of being able to move freely through congested areas, avoid parking tickets and truly achieve a door-to-door service and to promote a modal shift from van/car deliveries towards a low carbon environment.

In Inverness, working in partnership with Highland Bikes, the first set of E-Cargo bike trials include Laughing Tree Couriers, Velocity, High Life Highland and Prissy Queen of Desserts.

Laughing Tree Couriers want to replace the current manual bike and trailer they use to enable higher load capacity and allow them to cycle further with electric assistance, thereby increasing the viability of the cycle courier concept for potential customers. Velocity intends to replace travel by van and establish proof of concept, while High Life Highland will use the E-cargo bike for transporting supplies between four catering units in Inverness, including the Botanic Gardens, Canal Park Pavilion and Bellfield Park. Prissy Queen of Desserts will be delivering parcels to local customers, including post office deliveries, replacing daily journeys that would have been made by car.

Graham Cross, Commercial Manager for High Life Highland said: "The Cargo trike is a really useful piece of kit – carrying capacity is surprisingly large and it actually takes less time to travel between the Bught Park, IMAG and Bellfield Park than it does to drive, helping protect the environment and giving our staff some enjoyable exercise! We are very grateful to HITRANS for this opportunity, and we will be strongly considering purchasing our own E-Cargo Bike when the loan period is over."

Velocity will be using their e-cargo bike to collect supplies for their popular healthy eating café in Crown Avenue, and for transporting equipment for the community cycle skills training and bike checking events run in and around Inverness. Projects Coordinator, Helen Smith, said: "Encouraging sustainable living is at the heart of everything Velocity does, and we are delighted to have this opportunity to trial the use of an e-cargo bike in our daily activities."

Neil Young, Transport Planning Officer with The Highland Council said: "It is fantastic to see this project come to Inverness to promote modal shift for some very short business journeys that would otherwise be undertaken by car or van. I am confident that the 4 organisations who have signed up to the pilot will find success with this sustainable and enterprising alternative and I hope that in the





future many more organisations across the Highlands will have the opportunity to participate in similar ventures."

In Oban, working in partnership with Oban Cycles, The Hope Kitchen will be using the E-cargo bike to distribute local food parcel deliveries as well as food between their community garden and the community café two miles distant. Go Naked Veg will replace travel by van, delivering fresh organic fruit & veg to customers around the local area. Act Now (Mid Argyll), Argyll and the Isles Coast and Countryside Trust will be sharing a bike in the Lochgilphead area for the benefit of many local businesses, and MacQueen Bros will be replacing 3-4 daily van/car journeys for small deliveries around Oban.

In Orkney, working in partnership with Glasgow Bike Hive, E-cargo bikes will be going to Rousay, Egilsay and Wyre Community Council, Stronsay Development Trust, Sanday Community Council and Kirkwall Pier for a variety of uses around the islands.

Orkney Islands Council's Marine Services' cargo bike will be based at Kirkwall Pier and used by staff to transport smaller items such as parts and tools between Kirkwall, Hatston and Scapa piers. Jim Buck, Harbour Master and Head of Marine Services, said: "This project gives us the chance to test a zero-carbon alternative to using cars and vans, when a smaller carrying capacity would do. "We welcome this opportunity to try out an electric cargo bike as part of our pier operations."

Helen Castle, Rousay Egilsay Wyre Development Trust Company secretary and finance officer, said: "We're very pleased to be given this opportunity and would like to thank the funders of this innovative project for providing us with an E-cargo bike for this trial. One of our island businesses is going to be using the bike for deliveries to local homes and is very keen to see how well this works."

HITRANS would ultimately like to have a blue print which has been created by learning from the pilot projects within MOVE as well as the shared knowledge we have gained with our North Sea partners, and this blue print could be rolled out throughout the HITRANS area which would detail the entire process of implementing a pilot project. This blue print could also be used to share with other regional transport partnerships in Scotland as a framework for this type of activity and project implementation.



Figure 16 – Publicity photograph for the eCargo Bike Trials





7.5 Financial aspects

The project is part-funded by the Interreg North Sea Region project MOVE and Transport Scotland, administered by Energy Saving Trust. HITRANS has been awarded EST funding to introduce eCargo bikes to local businesses in key local centres. Staff time in managing the project will be absorbed by HITRANS. This approach has worked well with the previous eBike pilot in the Cairngorms National Park and Fort William, where HITRANS is working in partnership with local bike shops