# Operational Plan: Inverness

## DELIVERABLE T1.4.1

Date 14/07/22
Kelly Martin (HITRANS)

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Chris Finlay

# Summary sheet

| | |
|---|---|
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| **Reviewed by** | |
| **Submission date** | |
| **Starting date** | |
| **Number of months** | |

## Project partners

| Organisation | Abbreviation | Country |
| --- | --- | --- |
| Gemeente Amsterdam | AMS | The Netherlands |
| Promotion of Operation Links with Integrated Services aisbl (POLIS) | POLIS | Belgium |
| Taxistop asbl | Taxi | Belgium |
| Autodelen.net | Auton | Belgium |
| Bayern Innovativ GMbH | BI | Germany |
| Cargoroo | CA | The Netherlands |
| URBEE (E-bike network Amsterdam BV) | URBEE | The Netherlands |
| Gemeente Nijmegen | NIJ | The Netherlands |
| Transport for the Greater Manchester | TfGM | Great Britain |
| Stad Leuven | LEU | Belgium |
| TU Delft | TUD | The Netherlands |
| University of Newcastle upon Tyne | UN | Great Britain |
| Ville de Dreux | DR | France |
| Stadt Kempten (Allgäu) | Kemp | Germany |
| Universiteit Antwerpen | UAntwerp | Belgium |
| Mpact vzw | Taxi2 | Belgium |
| Mobipunt vzw | Mobipunt | Belgium |
| Electricity Supply Board | ESB | Ireland |
| The Highlands and Islands Transport Partnership | HITRANS | Great Britain |
| Service Public de Wallonie Mobilité et Infrastructures, Autorité Organisatrice du Transport | SPW MI, AOT | Belgium |

## Document history

| Version | Date | Organisation | Main area of changes | Comments |
|---------|------|--------------|----------------------|----------|
| **0.1** | 11/12/22 | HITRANS | Update of eHUB locations. | New locations have been added to the project since the operational plan was delivered. |
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# 1. Introduction

HITRANS are a project partner in the Interreg North-West Europe funded eHUBS project. The pilot aims to accelerate the transition to shared and electric mobility services and, as a consequence, reduce carbon emissions. The eHUBS project has a City focus meaning HITRANS initial work will focus on the Inverness City Region. This will allow us to import the European eMobility Hub concept to the Highlands and learn from the experience of delivering through this project to inform how we might pioneer Mobility Hubs in other parts of the Region including the application of the concept in rural areas.

A Mobility Hub is a recognisable and easily accessible place which integrates different transport modes and supplements them with enhanced facilities, services and information aimed at encouraging more sustainable travel, creating sense of place and improving journeys and travel choices.
eHUBS are being developed at the following locations by HITRANS:

- Inverness Railway Station / Falcon Square
- Inverness University Campus
- Nature Scot, Great Glen House, Leachkin
- Loch Ness Hub, Drumnadrochit
- Culloden Academy library
- Elgin Railway Station
- Charleston Community Centre
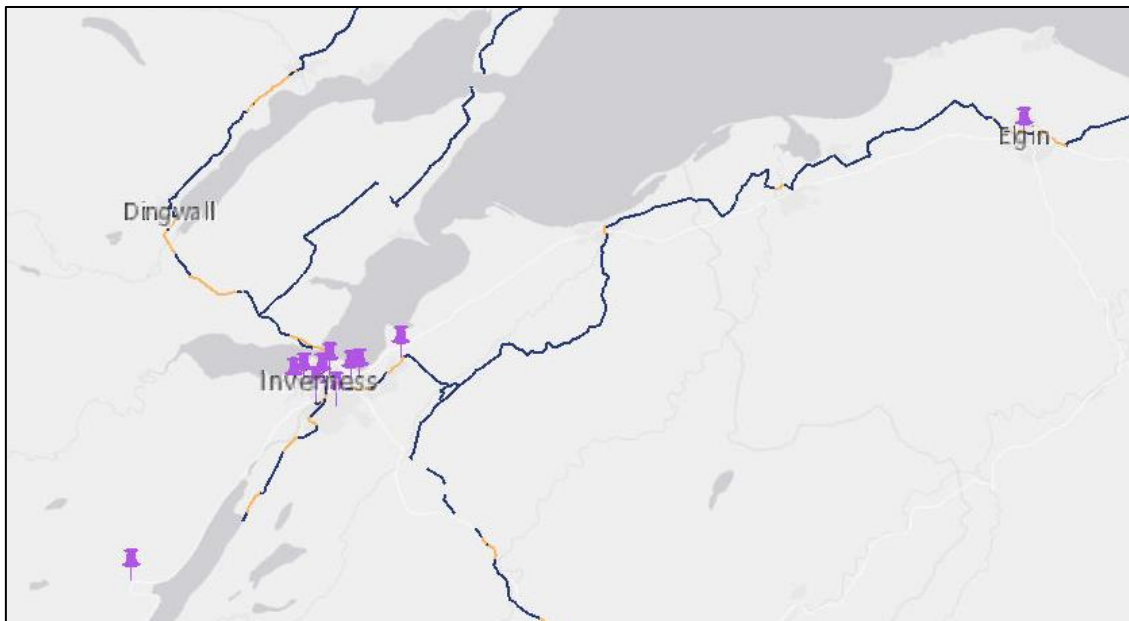- Hilton Community Centre/Shopping Village



Figure 1:  Inverness 11 eHUBs locations
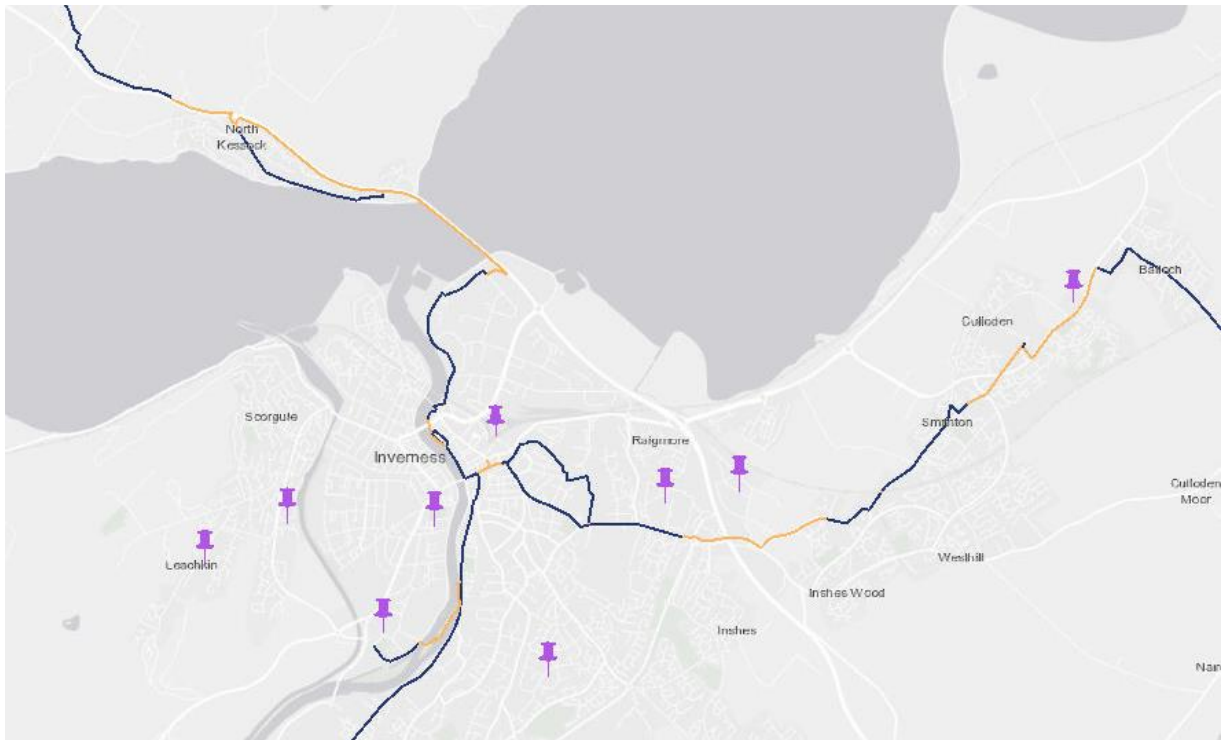
*Figure 2: Inverness 9 City Centre eHUBs locations*

In addition to these eHubs, three virtual docks have been created for the Hi-Bike scheme to allow users to dock their eBike and end their session allowing longer usage and greater variety in locations.

- Inverness Leisure Centre
- Raigmore Hospital
- Eden Court Theatre

The locations are being developed by The Highland Council under the Low Carbon Travel and Transport (LCTT) supported programme. HITRANS has assisted the council throughout the project but due to staffing issues at the council the project had stalled for several months.

## 2. Location and Services Determination

The location and services provided at each eHUB were partially predetermined to expand upon HITRANS' existing HI-Bike scheme infrastructure, operated by Bewegen. The HI-Bike scheme had existing docks at the Nature Scotland headquarters at Great Glen House, Inverness Railway Station and the University Campus



*Figure 3: HI-Bike ( Bewegen) electric assist bikes at University Campus*

University Campus and Inverness Railway Station, shown in figure 4 below. In selecting these three locations the Active Travel Officer prioritised the critical mass/density of people, this was particularly the case with the Railway station and University locations. Nature Scot at Great Glen house was selected in part due to it being a large employer in the area but also as a strategic choice to ensure both ends of Inverness are covered Furthermore, geomorphology was a contributing factor to the selection of Great Glen House, located at the top of a fairly steep hill.
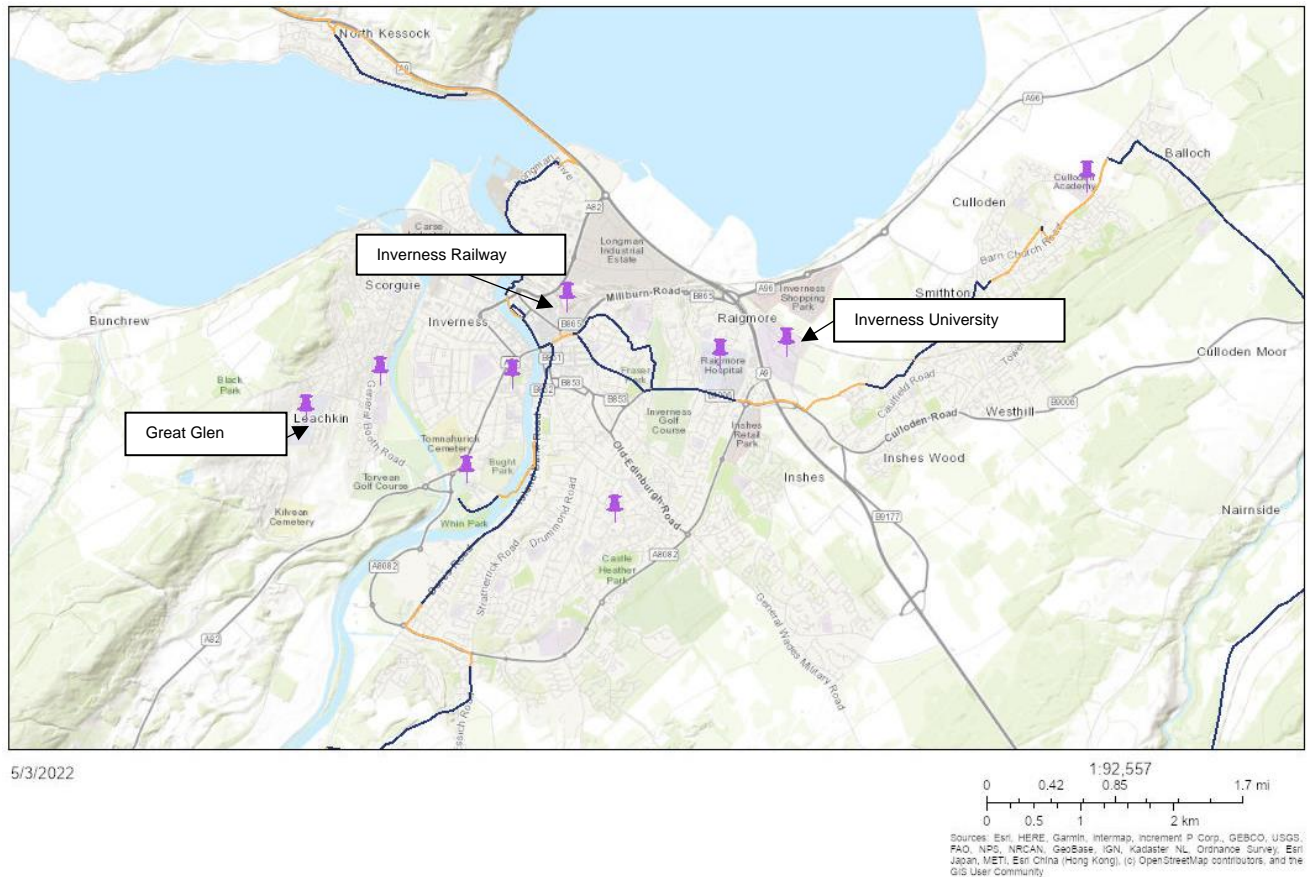
*Figure 4: Inverness City HI-Bike locations; Great Glen House, Inverness Railway Station and Inverness University Campus*

At each of these three locations electric-assist bikes (Pedelec) are available to be booked and used 24/7. It was important to build upon and enhance the physical mobility choices through the introduction of new modes / services from the creation of eHUBs.

Following this, in determining the other locations consideration was made to the availability of charging infrastructure, the potential to expand in the future and expanding any relevant existing mobility options. A mixture of commercial and residential areas was also desired.

Finally, by using data available from Transport Scotland a map was created showing the varying levels of Transport Poverty in the Inverness area. In this case, transport poverty refers to households and individuals who struggle or are unable to make the journeys that they need, tending to comprise of low income, poor availability of public transport and needing a long time to access essential services. With the exception of the Railway Station eHUB, all other eHUB locations are within areas of High or Medium Transport Poverty as shown below.
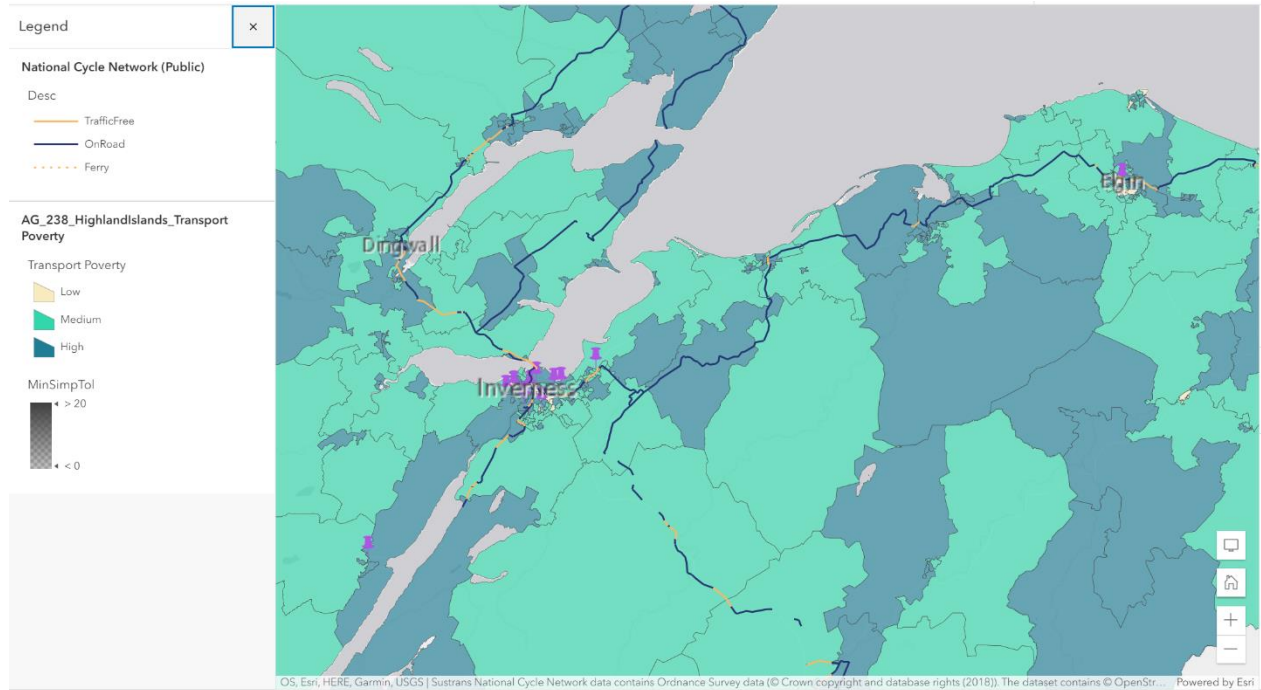
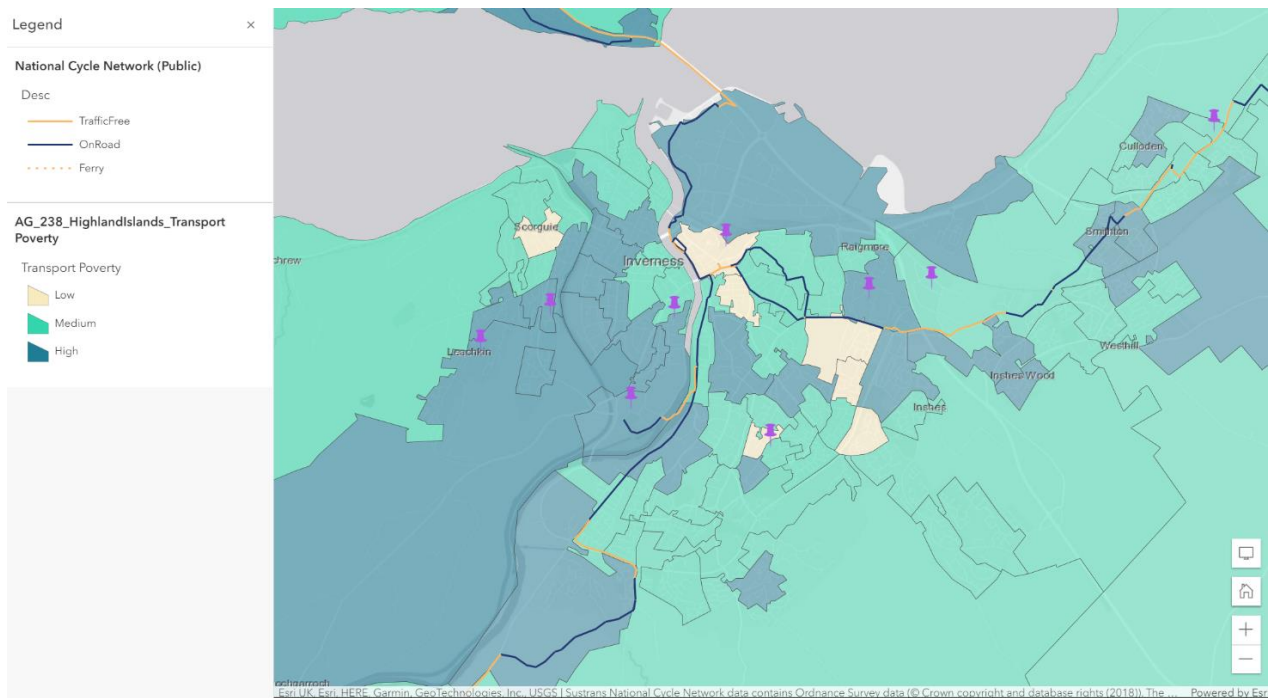*Figure 5: Inverness city centre eHUB locations against Transport Poverty Index*



*Figure 6: All Inverness eHUB  locations against Transport Poverty Index*

# 3. Infrastructure

Infrastructure will differ from location to location but each eHUB will have some kind of bicycle provision, whether electric bike, eCargo bike and/or Brompton bikes. Each location will be fitted with appropriate bike charging infrastructure and eHUBs signage.

Locations will also be strengthened by offering the booking of all services through the GO-HI mobility as a service app.  The GO-HI app will digitally present the range of travel choices available at each mobility hub and the app will be developed to include a new resource to allow users to find nearby mobility hubs. The other elements of the eHUBs could include eCargo bikes, folding bikes and EV Car Club.

*Table 1: eHUBs locations and shared mobility options available*

| Location | Ebike dock | Electric bike | Car clubs EV | Brompton dock | EV fast charger | eCargo bike |
|---|---|---|---|---|---|---|
| Great Glen House | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Inverness Railway Station | ✓ | ✓ | ✓ | ✓ | | |
| Inverness University Campus | ✓ | ✓ | ✓ | | ✓ | |
| Charleston Community Centre | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Aquadome leisure centre** | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Eden Court Theatre** | ✓ | ✓ | ✓ | | | ✓ |
| Hilton Community centre | ✓ | ✓ | ✓ | | | ✓ |
| Raigmore Hospital** | ✓ | ✓ | | | | |
| Culloden Academy Library | ✓ | ✓ | ✓ | | | ✓ |
| Loch Ness Hub | | | | | | ✓ |
| Elgin Railway Station | | | ✓ | ✓ | | |

**Location being developed by the Highland Council under LCCT project.

In addition to these location, HITRANS is further expanding the eHubs project with 3 new Hi-Bike docks in residential areas of the city.

- Smithton
- Merkinch
- Milton of Leys

These locations are also positioned within areas of the city deemed to have a high transport poverty index.
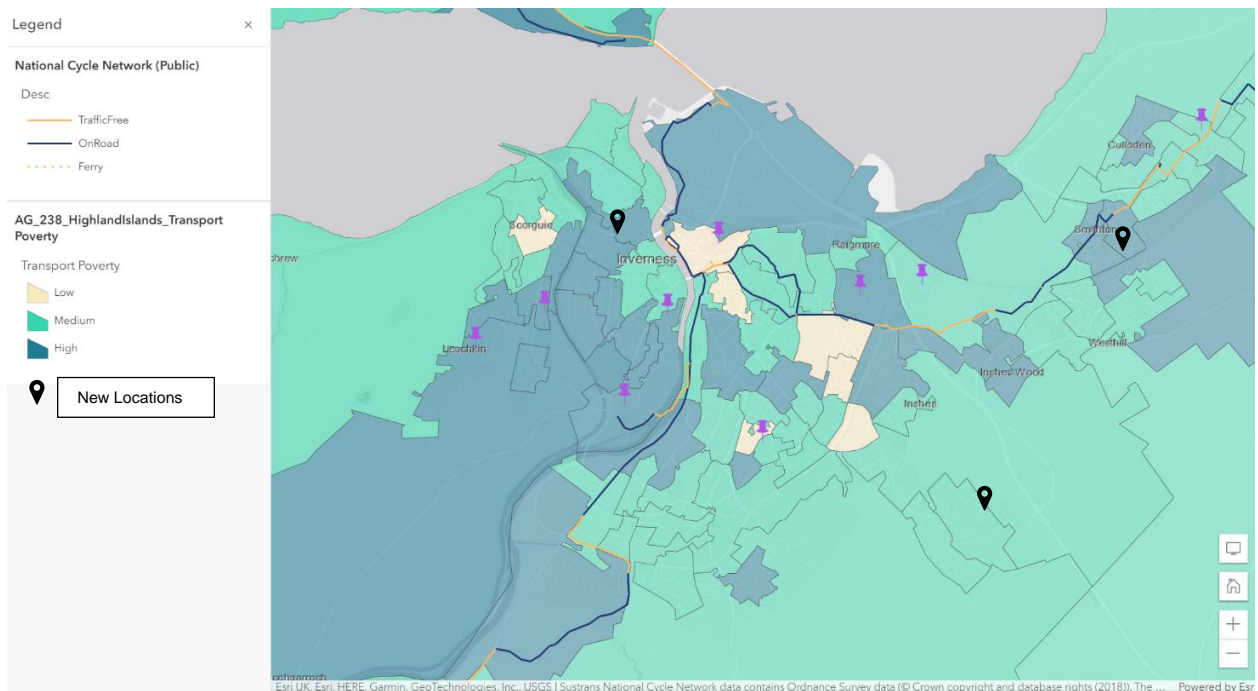
*Figure 7: New eBike dock locations against Transport Poverty Index*

The HI-Bike docks were publicly launched at an event on 1st October 2021 by MP Drew Hendry at the Inverness University Campus. From this deployment 30 electric assist bikes were available for use at 3 charging stations; The Inverness University Campus, Nature Scot at Great Glen House and Inverness Railway Station.



*Figure 8: Drew Hendry MP alongside the team at the HI-Bike launch at Inverness University Campus*

So far, data from Bewegen shows that the Inverness Railway Station is the most popular check out and return location of the three.

*Table 2: station usage data from Bewegen*

| ID | STATION NAME | CUMULATIVE (YEARLY) | |
| | | ORIGIN | DESTINATION |
|---|---|---|---|
| UK03 | Inverness Campus | 482 | 453 |
| UK02 | Inverness Railway Station | 618 | 624 |
| UK04 | NatureScot Great Glen House | 91 | 83 |
| | | | |
| | | | |
| | **VIRTUAL & TEMPORARY STATION** | | |
| VS03 | Eden Court Theatre | 50 | 65 |
| VS01 | Inverness Leisure | 35 | 42 |
| VS02 | Raigmore Hospital | 153 | 159 |

The deployment aim is to develop on these locations and add the others as infrastructure is available. In the meantime, temporary/virtual stations have been established at locations Eden Court Theatre, Inverness Leisure and Raigmore Hospital, with Raigmore Hospital in particular being popular.

Delays to the deployment of the other sites are due to long lead times and other related issues on site such as the establishment of an electrical power supply and last minute changes in location due to disputes with the local authority. Problems arose at one site having to alter the location of groundworks and establish a new agreement. In terms of installation we hope to complete all hubs by early September.

### *Update 11/12/22*

Additional eBike docks have been installed in Hilton, Charleston and Culloden. The top three most popular stations can be seen in the figure below, in which Hilton Community Centre has taken 3rd place with 225 rides, approximately half as many rides as from the Campus / Railway Station (419 from each).
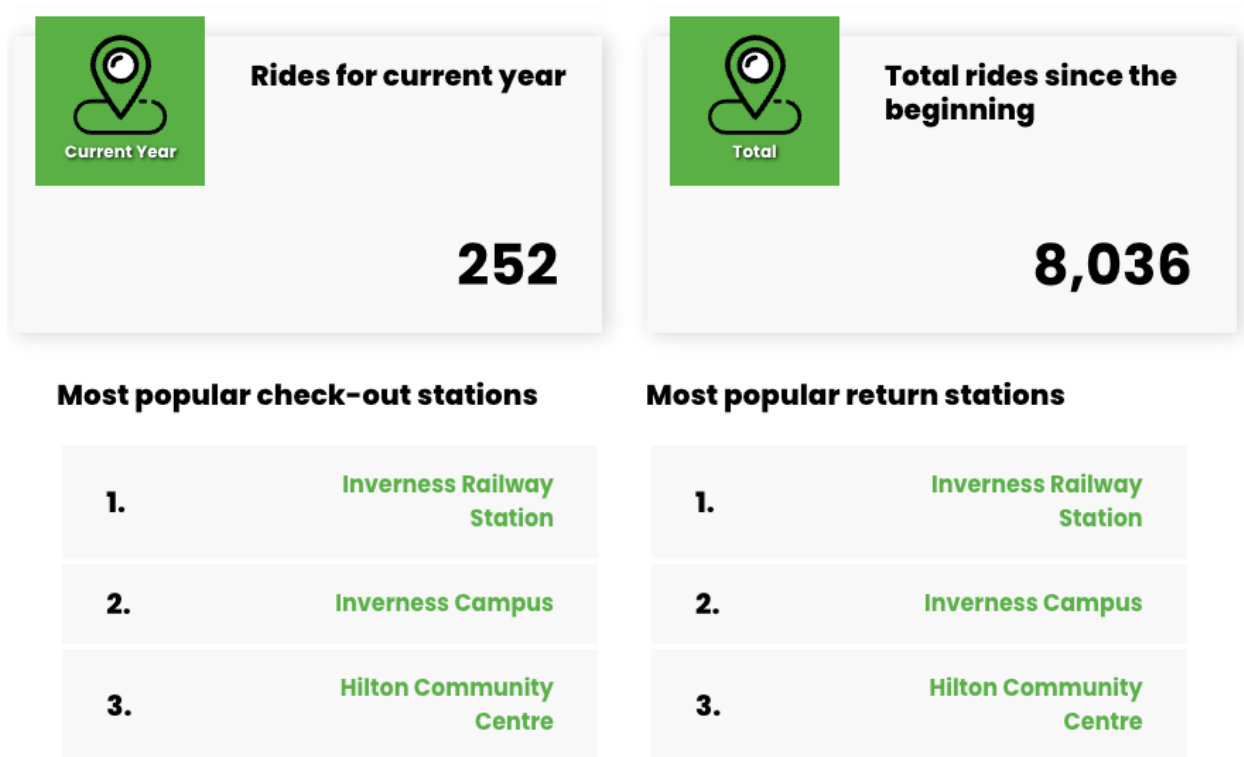
| | Rides for current year | | Total rides since the beginning |
|---|---|---|---|
| Current Year | | Total | |
| | **252** | | **8,036** |

**Most popular check-out stations**

| | |
|---|---|
| 1. | Inverness Railway Station |
| 2. | Inverness Campus |
| 3. | Hilton Community Centre |

**Most popular return stations**

| | |
|---|---|
| 1. | Inverness Railway Station |
| 2. | Inverness Campus |
| 3. | Hilton Community Centre |

*Figure 9: Data from Bewegen on most popular Hi-Bike stations*

## 4. Implementation

An important aspect of this is the consumer behaviour of end-users, through the dissemination and analysis of surveys created by Newcastle university results can be gathered at each stage of the eHUBS project to determine behavioural change.

## 5. Communication

Communication will play a very central role as we progress and expand upon existing infrastructure. Via use of eHUBS branding shared mobility options in Inverness will appear more centralised and simple under a single streamlined heading. As more stations become active

HITRANS will launch further promotional events, produce marketing materials e.g posters, spread the word through email lists, social media engagement and local news coverage.
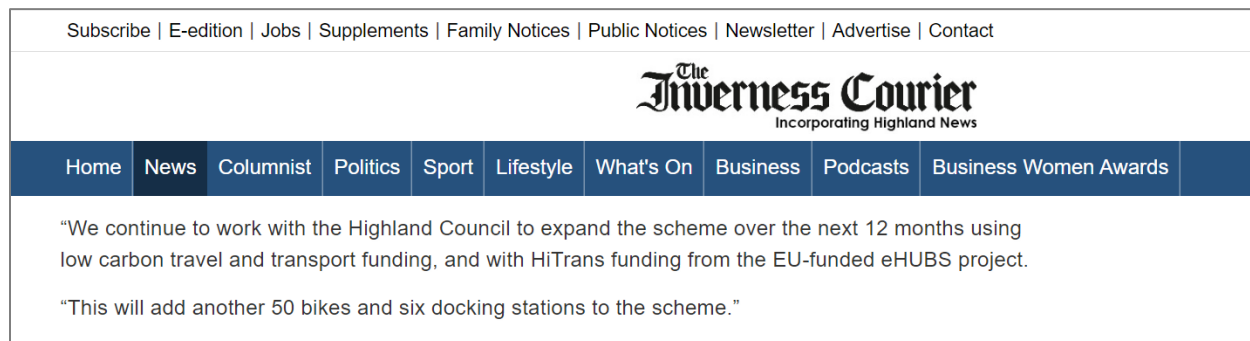
The Inverness Courier
Incorporating Highland News

Home | News | Columnist | Politics | Sport | Lifestyle | What's On | Business | Podcasts | Business Women Awards

"We continue to work with the Highland Council to expand the scheme over the next 12 months using low carbon travel and transport funding, and with HiTrans funding from the EU-funded eHUBS project.

"This will add another 50 bikes and six docking stations to the scheme."

*Figure 10: eHUBs coverage in local newspaper 'The Inverness Courier'*

# The eHUBS Consortium

The consortium of eHUBS consists of 15 partners with multidisciplinary and complementary competencies. This includes European cities, leading universities, networks and electric and shared mobility providers.

For further information please visit http://www.nweurope.eu/ehubs