
WheelNess – Widening access to cycling in Inverness

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1 Introduction

WheelNess is an innovative pilot project led by Cycling UK, funded by Transport Scotland, which gives free access to bikes and a tailored programme of support, to disadvantaged and vulnerable individuals in and around Inverness. It works closely with local GP practices; Highland Council; the University of the Highlands and Islands; local independent bike shops; and the third sector.

The pilot has had a strong evaluative focus, helping us to explore the barriers people face to cycling for everyday transport, when the rhetoric is that cycling is ‘free’ and ‘easy’.

To date, the programme has focussed on increasing health and mobility; addressing transport poverty and reducing social isolation. As such it supports a range of Scottish Government priorities including: the vision that by 2020, 10% of everyday journeys will be by bike (Transport Scotland, 2017); and the overarching pledge to reduce inequalities (The Scottish Government, 2016).

This paper will present an overview of the pilot, the lessons learned, and the results obtained – both outcomes (including those pertaining to health, wellbeing, isolation and risk-taking behaviour) and outputs (bikes distributed; returned; and lost/stolen).

2 Background – Why Inverness?

The decision to pilot the project in Inverness was based on a range of factors as outlined below.

2.1 Geography, demography and ethos

Inverness is the largest population centre in the Highlands, with a population of c.63,780 (National Records for Scotland (NRS), 2018) dispersed over 20.7 km². It serves as the main retail, commercial, industrial and social hub for the largest local authority area in the country. Located where the River Ness meets the Moray Firth, Inverness city is one of the fastest growing in Europe and is considered to provide its residents with an unrivalled quality of life (Savills, 2018).



Figure 1: Map showing location of Inverness

Inverness has a reputation as a ‘cycle city’. Its size is convenient for even novice cyclists to traverse and the 2011 Census indicated that 5.6% of residents cycled to work – the highest proportion of any city in Scotland (Scotland's Census, 2013). Similarly, across the Highlands, the level of people cycling as their main mode of transport was 1.9%, higher than the Scottish average of 1.1% according to the 2013 Scottish Household Survey (Scottish Government, 2014).

Furthermore, in 2017, Highland Council was awarded Sustrans Scotland's Community Links PLUS (CLPLUS) funding for an ambitious project to strengthen existing infrastructure and improve connections between the city's communities. The proposal focussed on developing seamless and segregated cycle and pedestrian friendly routes and on reducing congestion. This indicates there is both a political will and financial commitment in Inverness to foster active travel.¹

This political will coexists with a progressive approach to physical and mental wellbeing amongst many local decision makers and people in positions of power – including those within primary care settings. Anecdotally it is suggested this is because many of these individuals are 'incomers', who chose to move to Inverness, "for the wilderness on your doorstep, the mountains and sea and rivers and woods, for the fact that you can live in a city with all the pros of restaurants, cafs [sic] and a cinema, and yet be out of town on your bike in 10 minutes into remote countryside" (Walter, 2013). For instance, a partner at Cairn Medical Practice – Dr Katie Walter – has been a long-time (and vocal!) advocate for 'getting Inverness active'. In August 2017, working with a patient volunteer from her practice, she created Green CHIPS (Cycle to Health in Inverness – Patients and Staff). This in turn led her to campaign for the installation of bike storage in every primary care practice within the city and to encourage patients with inactive lifestyles to become active with the help of trained ride and walk leaders. She has also acquired a pool bike for her surgery, which can be used by staff for journeys during the workday such as for home visits, and she has become part of Cycling Without Age Scotland – a SCIO committed to rolling out trike-rides for the elderly across Scotland.

2.2 Societal inequality

Extensive research has shown that people who are most affected by societal inequalities related to factors such as low income, gender, social position, ethnic origin, geography, age and disability are more likely to have poorer physical and mental health than the general population (ScotPHO - Public Health Information for Scotland, 2018). Particularly relevant:

People living in the most deprived areas have lower than average life expectancy (Equality and Human Rights Commission, 2018, p. 60). Data from the Scottish Index of Multiple Deprivation (SIMD) in 2012 indicates that the Highlands had 17 (1.7%) of the 15% most deprived datazones in Scotland (many in Inverness city) (SIMD: Scottish Index of Multiple Deprivation, 2012, p. 2):

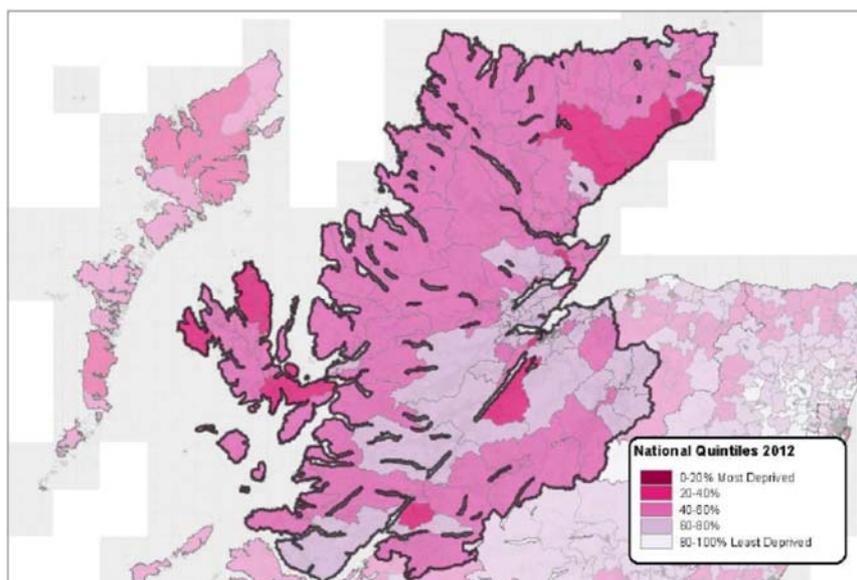


Figure 2: Map: Levels of deprivation in Highland in SIMD 2012 by quintiles (SIMD: Scottish Index of Multiple Deprivation, 2012, p. 1)

Recent research shows that serious and persistent mental illness can result in patients losing up to four years of life compared to individuals without mental illness. In a 2010 study, researchers found an increase in premature mortality in the mentally ill patients, not only from suicide, but also cancer, accidents, liver disease and septicaemia. Patients with psychiatric illness may be more likely to engage in risky behaviours that result in accidents, or to smoke, or be less compliant with physical health programmes, healthy eating plans or medication regimes (Piatt, et al., 2010). Many with physical impairments/conditions also die earlier than expected – partly as a result of sedentary lifestyles (Cassileth, et al., 2016). As an area, the Highlands consistently has a higher than average proportion of residents claiming disability benefits. As of November 2016 (the latest date figures are available), this figure stood at 1.0% compared to a Scottish average of 0.9% (NOMIS - Official Labour Market Statistics, 2018).

Also relevant is the demography of the Highlands. As an area, the Highlands consistently has a higher than average proportion of retired residents, and, as noted above, age is linked with poorer physical and mental wellbeing outcomes. As of December 2018, this figure stood at 17.2%, compared to a Scottish average of 15% (NOMIS - Official Labour Market Statistics, 2018).

Table 1: Highland Council area statistics to mid-year 2016

	% of Highland Population	% of Scottish Population
45-64	29.7	27.6
64-75	12.2	10.3
75 and over	9.2	8.2

(The Highland Council, 2017)

2.3 Transport poverty

Although there is no formal definition of transport poverty, the importance of transport availability in relation to accessing jobs, education and essential services is referenced in many publications (Equality and Human Rights Commission, 2018, p. 102) (Cope, 2017). Highland Council area encompasses the highest proportion of data zones classified as ‘high risk’ for transport poverty – 11% (Sustrans Scotland, 2016, p. 10):

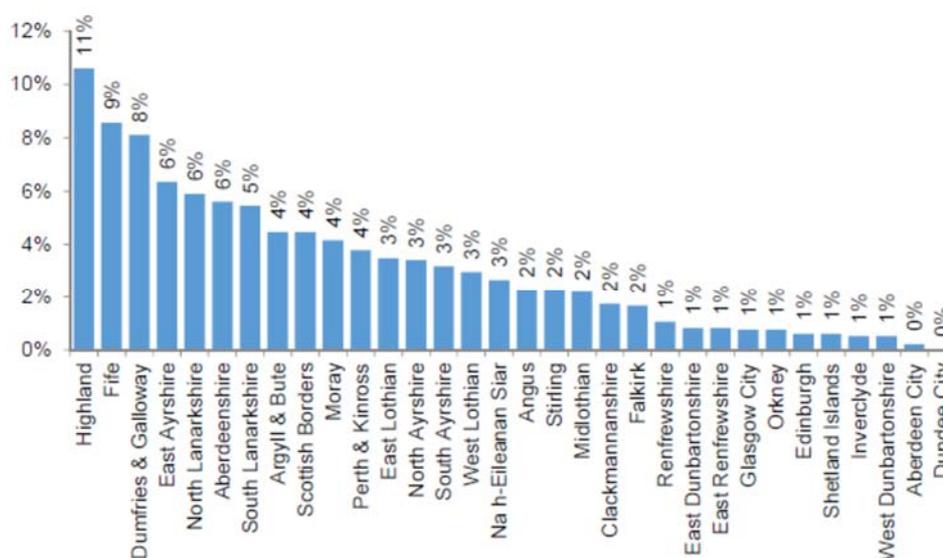


Figure 3: Percentage of high-risk data zones located in each council area

Recent Sustrans research found that amongst the 1,321 high risk data zones, 810 (61%) are areas where essential services can be accessed by cycle within 10 minutes. They argue that by combining potential accessibility to services by cycle with existing levels of cycling, around 25% of all high-risk areas (337 data zones) are areas where potential access to services by cycle and current cycling levels are, relatively speaking, high. The map below shows some of these areas are in Inverness:

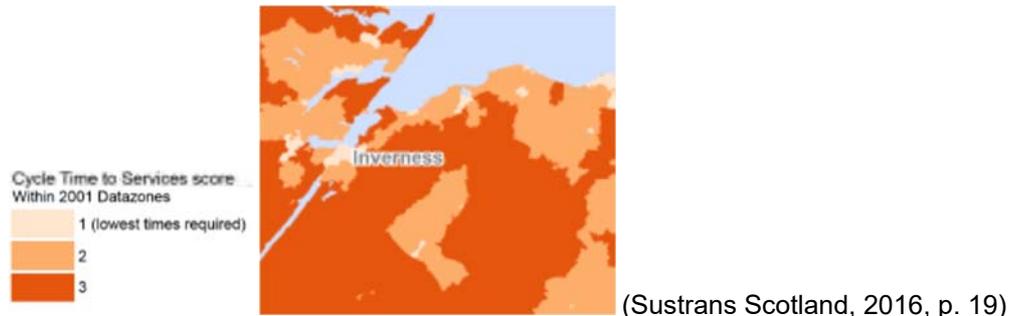


Figure 4: Transport poverty Scotland – cycle time to services score

3 WheelNess pilot – project overview

3.1 Project launch and the early days

Due to funding and recruitment delays, the project was not launched until the end of June 2018. By this time:

- Two development officers had been appointed: Fiona Johnston and Brendan Dougan started on 28th May 2018;
- A project Steering Group had been established to provide guidance and support to the development officers and to help with project planning. Organisations represented include: Cycling UK; primary and secondary care; local cycling social enterprise – Velocity Café and Bicycle Workshop; HiTrans; Sustrans; local government; the University of Highlands and Islands (UHI); and relevant third sector organisations;
- Strong partnerships had been forged in Inverness with NHS Highland, HiTrans, New Start, UHI, Highland Council, Sustrans and Home Energy Scotland all supporting the programme;
- Considerable work had been done to develop relationships with three independent bike shops in Inverness – Highland Bikes, Bikes of Inverness and Monster Bikes – from whom we could purchase suitable bicycles for participants;
- An agreement had been negotiated with Velocity Café and Bicycle Workshop to deliver 1:1 support-sessions to participants as required, and to lead group/social rides on a regular basis.

Referral criteria and pathways were established. Retaining cognisance of the project's aim to minimise barriers, as few limitations and conditions were imposed as possible. That withstanding, it was also important to develop a robust risk assessment and set of standard operating procedures to ensure the protection and safety of staff and participants.

Referrals were therefore accepted from health, social care, community groups, education and from individuals themselves, but were appropriately classified for risk and proportionate mitigating measures were put in place e.g. joint visits where necessary etc.

To be eligible for the project, participants had to reside in Inverness or surrounding area and identify as living with one or more of the following challenges:

- Transport poverty / inability to afford a bicycle
- Inability to ride a bicycle / lack of confidence to ride a bicycle
- Physical health condition
- Mental health condition

The development officers conducted outreach work to advertise the project, attending events such as local community group Big Bike Revival events; events facilitated by NHS Active Travel Engagement Officers at Raigmore Hospital; team meetings with local charities, community groups and housing associations etc.

Finally, an appropriate monitoring and evaluation framework was co-designed with participants that enables their engagement with the process, captures both quantitative and qualitative outputs and outcomes, and allows the effective demonstration of development over time. The evaluation framework is multi-modal and includes online/paper surveys at various points throughout participant engagement with the project; qualitative interviews via telephone or in person, observation and third-party reflection.

3.2 WheelNess participants

One of the aims of this pilot was to gather information on the barriers 'real' people perceive to cycling. It was therefore important to engage with a wide range of different individuals. WheelNess participants to date are very varied in background; circumstance; lifestyle and presenting issues and goals as this section will illustrate.

3.2.1 Age and sex

The pilot engaged with **157** participants up to 31st March 2019:

- 64% of participants (n=100) were women
- The age range of participant was 19 – 81 years; with the mean age being 38 years

3.2.2 Source of referral

Referral to the WheelNess project has been via self-referral most frequently:

Table 2: WheelNess referral data – source

Referring agency	Frequency	As % of total
Self	46	29.3
University/college	38	24.2
Existing participants	27	17.2
Third sector organisations	24	15.3
GP	7	4.5
Housing Association	5	3.2
Misc.	10	6.4

Please note, the number of referrals directly from GPs may appear low given the close relationship WheelNess has with primary care in Inverness. Discussion with several GPs in the area revealed their opinion that direct referral to behaviour change programmes e.g. smoking cessation and weight-loss is less effective than self-referral. This anecdotal opinion is not necessarily supported by academic research (Aveyard, et al., 2016), but there is, currently, a paucity of rigorous evidence on the efficacy of 'green' or 'social' prescription (Bickerdike, et al., 2017).

3.2.3 Income/deprivation data

Over a third of participants (36%; n=57) live in the 20% most disadvantaged areas of Scotland (Scottish Index of Multiple Deprivation 2016, 2016) and the majority are on a low income, with over 50% receiving benefits of some type:

Table 3: WheelNess participant occupation / employment status

Occupation / employment status	Frequency	As % of total (NB. Some participants had more than one occupation thus total exceeds 100%)
Receiving out of work benefits e.g. Universal credit; ESA; PiP/DLA; carer's allowance	82	52.2
Care for children under 16	74 (4 with Additional Support Needs)	47.1
In employment (either F/T or P/T)	55	35.0
Students (either F/T or P/T)	54	34.4
Carers for elderly relatives / unwell partners etc.	15	9.6
Retired	10	6.4

3.2.4 Health status

Over half of all participants to date have reported having a health condition of some sort:

- 25.5% of participants report having a physical health condition (n=40)
- 24.8% of participants report having a mental health condition (n=39)
- 12.7% of participants report having both a physical and mental health condition (n=20)

3.2.5 Ethnicity data

Participants to 31st March 2019 were ethnically diverse – more so than regional and national averages (Scotland's Census: Shaping Our Future, 2019):

Table 4: WheelNess participants – ethnic diversity

Ethnicity	% of WheelNess participants so identifying	% Highland Council area 2011	% Scotland 2011
White British / Scottish	85	95.2	92.9
'Mixed' or 'other' ethnicity	5.7	2.6	3.3
Black or Black Scottish / British	3.2		
Arab or Arab Scottish / British	2.5		
Indian or Indian Scottish/ British	1.9		

This can be explained by the fact that the development officers have cultivated relationships with organisations supporting new migrants to the area; and the reality that the nursing students come from all over the world.

3.2.6 Goals

On commencing the project, many participants wished to improve their physical health (n=110); fostering positive social, family and recreational activity and mental wellbeing were also very important as can be seen in the table below:

Table 5: WheelNess participants – goals

Goal	Frequency of response	Example comment
Physical health improvement	110	<p>“Health reasons, improve being active.”</p> <p>“To keep myself fit and health”</p> <p>“I have been recently diagnosed with asthma and the doctor suggested more exercise and fresh air would help.”</p> <p>“Recommended by consultant at Raigmore for COPD.”</p> <p>“Help with angina...”</p>
Recreation / Family Activity / Social	45	<p>“To be involved with my husband and son when they cycle”</p> <p>“...to make friends.”</p> <p>“I would like to take up cycling as my daughter of 6 is just learning to ride & I think it would be great to learn with her”</p>
Improve mental health / wellbeing	39	<p>“Improve low mood.”</p> <p>“To feel better about myself.”</p>
Freedom / Independence / Getting out in fresh air	24	<p>“allow me independence in travel”</p> <p>“More independence than waiting for a bus”</p> <p>“...spend more time outdoors...”</p>
Convenience / time saving	17	<p>“Get to places faster than walking.”</p> <p>“...ease of access to long distances...”</p> <p>“...be more productive and cut journey times...”</p>
Commuting	15	<p>“The bus route from my house to my work (UHI) has been reduced to a morning and evening service, as I work in the afternoons, this leaves me with walking (approx. 45 mins) or 2 bus journeys (1hr approx.)”</p>
Financial	13	<p>“To save time and money getting to and from college.”</p> <p>“...saves me money on buses.”</p>
Weight loss	10	<p>“tackle weight gain...”</p>
Improve mobility	9	<p>“Strengthen my back and legs”</p> <p>“Would like to improve mobility with electric trike”</p>
Emotional regulation	6	<p>“I am currently dealing with traumatic bereavement as well as depression so looking for a positive distraction”</p> <p>“cycling as stress management”</p>
Increase confidence	6	<p>“confidence boost”</p>
Environmental concerns	4	<p>“Save the planet.”</p> <p>“...reducing my carbon footprint.”</p>
Respite	2	<p>“...time out from caring for my mum.”</p> <p>“...quality time for me to explore, destress, refocus...”</p>

3.3 Project development

As a pilot, the WheelNess project developed in response to participant feedback; development officer reflection; and Steering Group advice.

During the first quarters, until around December 2018, the development officers' focus was on identifying suitable participants and matching them with appropriate bicycles. They spent a significant amount of time administering the project and at the bicycle shops with participants. Accompanying participants when they are choosing their bikes is a very important component of the project because the environment of a bicycle shop can be very intimidating if you have little experience of the setting and no confidence in what you are asking for. Many participants explicitly said so – although they were all pleasantly surprised after their first visit:

“I was so nervous [going into the bicycle shop] ...I'm like, 'Argh.' I was so scared that it was like, 'Right, this is the bike, you must have it.' They didn't go, 'Stupid woman.' You know, that kind of thing that they were just like, totally the opposite.”

“I couldn't go into the bike shop on my own. I had to wait outside for Fiona to arrive. I was really scared, but they were so nice, and really patient.”

The fear and nervousness expressed by WheelNess participants appears to be a common phenomenon and one widely reported on in the media (Gardener & Stewart, 2011) (Burke, 2015), but in concentrating on these elements, many individual support plans for participants relied on referral to the social rides/led-rides facilitated by Velocity staff. Whilst for some this was appropriate and sufficient, upon further reflection and discussion with participants, for others a more bespoke and individualised plan was required. For instance, some of the more vulnerable participants – those living with anxiety and depression or limited cognitive ability for example – required interventions such as:

- One to one route planning and individual led rides taking them from their home to places of use to them e.g. the local shops; college etc. because they were unable to read maps;
- Collection from their home and accompaniment on social rides because they had social anxiety;
- Regular telephone/text/WhatsApp reminders for events etc. because they had very poor short-term memory due to acquired brain injury (ABI) and medication.

The development officers are now recruiting sessional staff through Velocity to deliver additional 1:1 support in response to the specific needs they identify through initial and ongoing discussion with participants.

4 Preliminary results from the WheelNess pilot

Baseline data was captured from all participants via a paper survey which enquired into areas such as their current mode(s) of travel; their attitudes towards cycling as an option and their confidence riding on the roads; their perceived level of fitness, mental wellbeing and social circumstance. The development officers then intended to measure progress or regression six months and twelve months post intervention start date. However, for a variety of logistical and work-load reasons, it proved very difficult for staff to meet participants face to face to complete the mid-point survey and an online option was introduced as an alternative. Unfortunately, this has proved to be inaccessible to some of the most vulnerable participants. Further, due to the time-lag at the start of the project, we have yet to reach the 12-month point with any of the participants.

The conscious decision was made NOT to ask participants to record (via STRAVA or any other tool) the distance they travelled on their bike because it was felt that this may be a barrier to engaging with the project for the demographic WheelNess hoped to work with – i.e. those who may not be keen cyclists and for whom such monitoring might be intimidating. Some participants were keen to track their journeys and their development in such a way, but, anecdotal evidence collected from many suggests this was not the majority view. As one put it:

“I didn’t want to use STRAVA. I wanted cycling to be fun; to be about me. Not to be another thing to worry I’d failed at; that I’d not gone far enough or fast enough.”

4.1 Data comparison – baseline vs. mid-point

Baseline data was gathered from all 157 participants, although many of the tables and graphs below are based on information drawn from 154-155 individuals as some misunderstood the questions posed or chose not to answer specific enquiries.

Mid-point data was received from 72 participants, although many of the tables and graphs below are based on information drawn from 54-55 individuals as some chose not to answer several of the questions posed.

4.1.1 Mode of transport

The figures below appear to indicate that during the course of the intervention, participant’s main mode(s) of transport have altered, with journeys by foot and bus being replaced by journeys by bicycle:

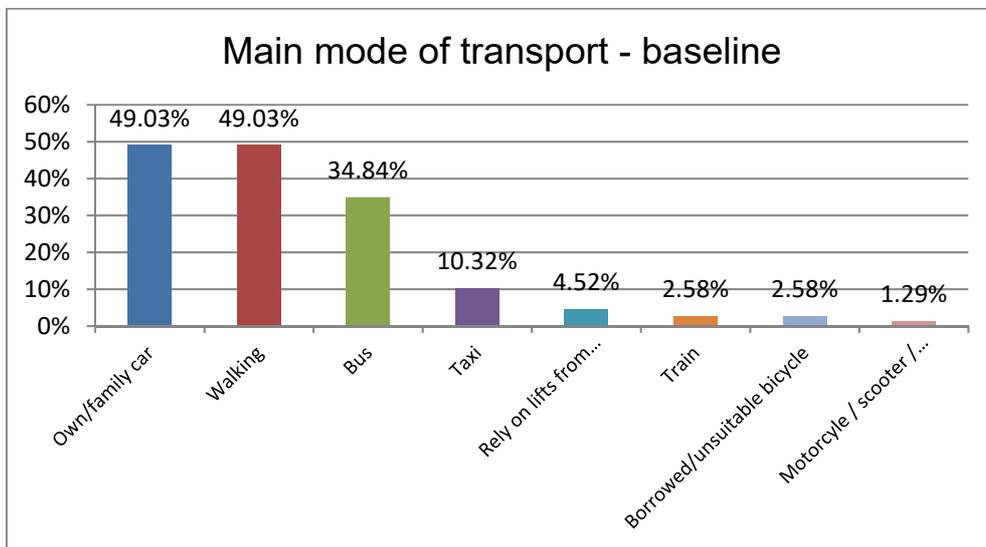


Figure 5: Main mode of transport for participants – baseline (n=155)

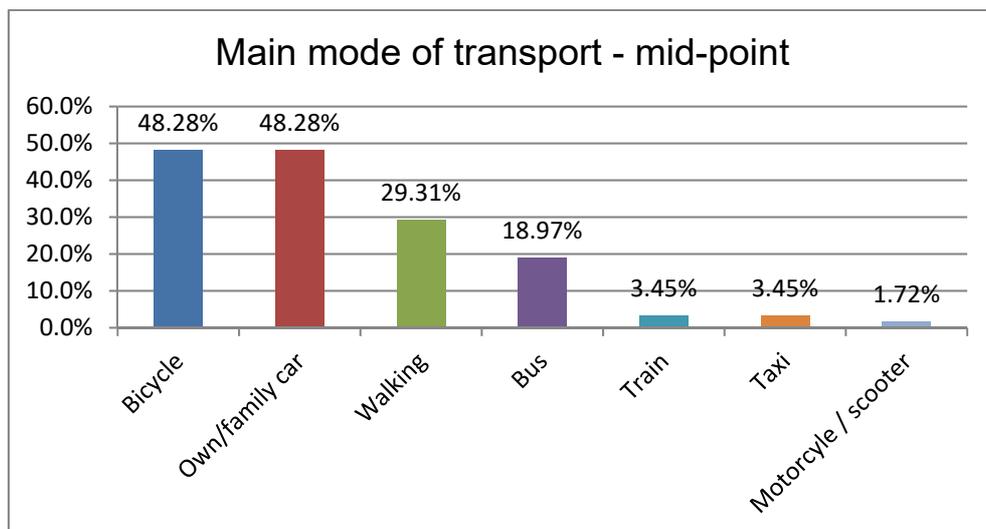


Figure 6: Main mode of transport for participant – mid-point (n=58)

4.1.2 Cycling and bike maintenance skills

In order to ascertain how comfortable participants felt dealing with simple bike maintenance, they were asked whether they felt they could: alter the saddle height; fix a puncture; and use brakes and gears. During the course of the project, it appears that participants have developed confidence in all three areas – most specifically in ‘using brakes and gears’:

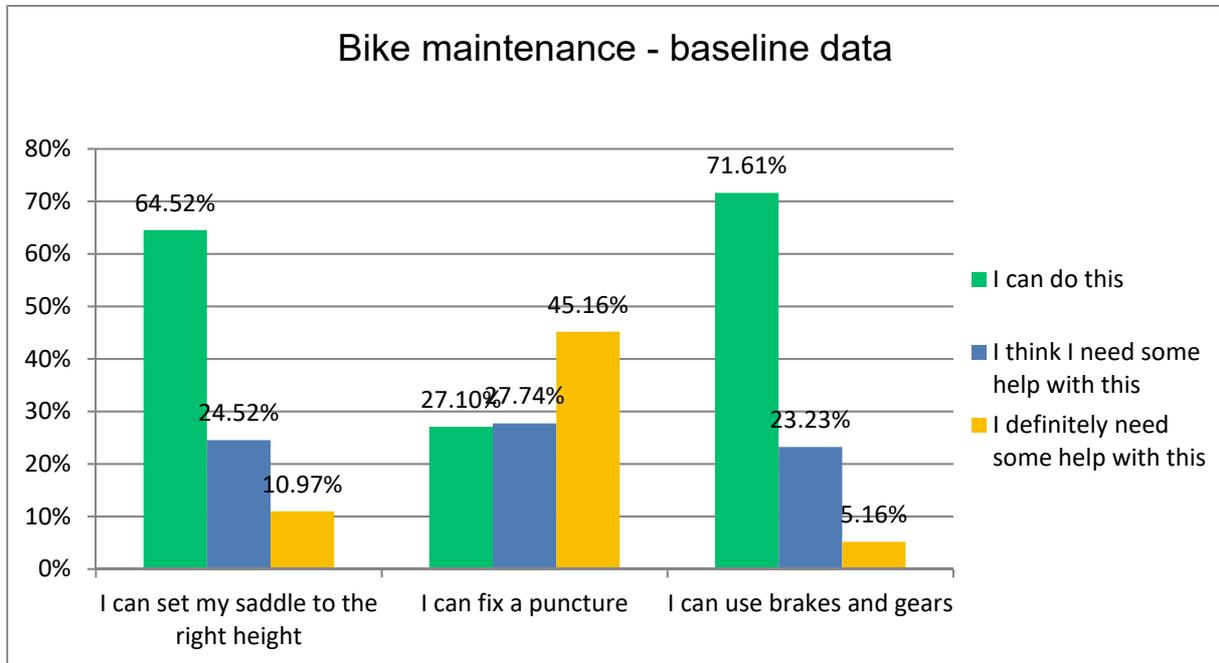


Figure 7: Bike maintenance skills – baseline (n=155)

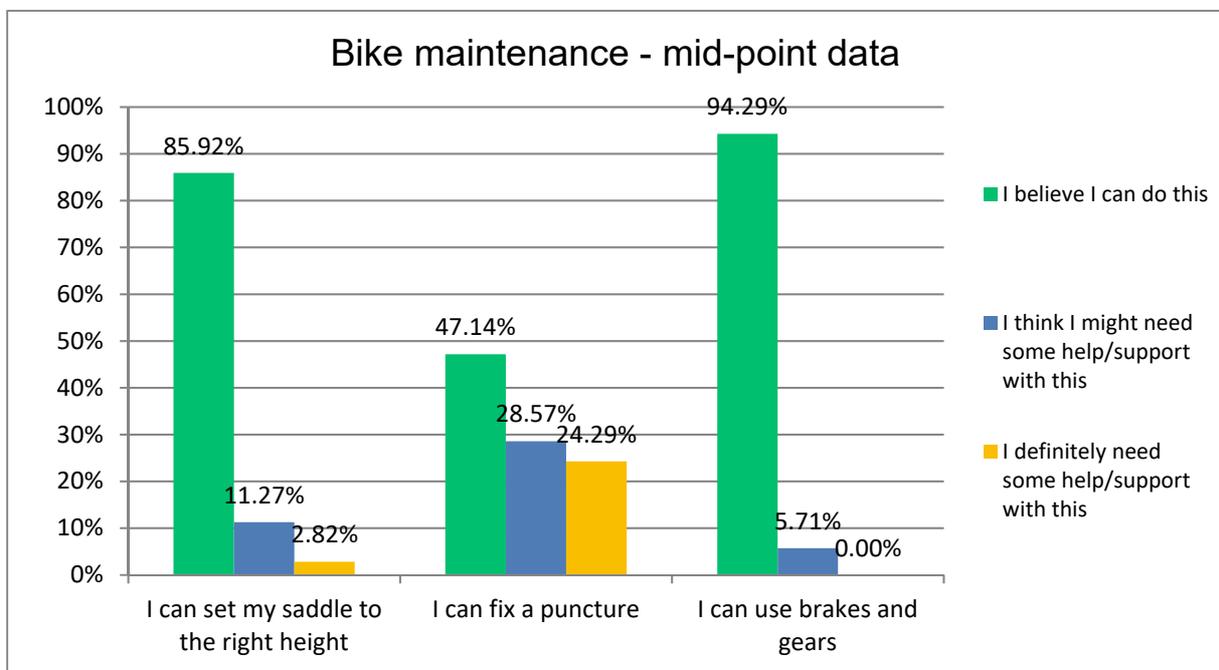


Figure 8: Bike maintenance skills – mid-point (n=71)

4.1.3 Attitude and wellbeing

In order to capture any differences in attitude towards cycling; the outdoors and road users; and participant physical and mental wellbeing; a series of scaling questions were posed. Participants were

asked to indicate, on a scale of 0-10, where 0='Not a clue; definitely not!' and 10='100% sure; yes definitely!', how they felt about a series of statements. The results are presented in the table below:

Table 6: Participant attitude and wellbeing score baseline and mid-point

Statement	Baseline average (n=157)	Mid-point average (n=71)
I feel comfortable cycling in town traffic	4.35	5.78
I am happy to cycle in all weather conditions	6.28	6.16
I know how to access safe cycling routes	4.77	6.75
I think other road users are considerate to cyclists	3.86	4.62
I am fit	5.05	5.22
I feel isolated / cut off from my community	4.42	3.06
I have a good social circle / social life	6.26	6.69
I can afford to get to the places I want to	5.24	6.75
I enjoy being outside	8.67	8.68

It appears that, over the course of the intervention, confidence cycling through town traffic has increased, as have levels of knowledge about accessing safe cycling routes and feelings towards motorists have also improved. Isolation appears to have reduced as does transport poverty. Perhaps not surprisingly though, having tried 'cycling in all weather conditions', participants were less happy to do this at the mid-point!

4.2 Qualitative data

To augment the data captured via surveys, a series of qualitative interviews and focus groups were also undertaken:

- Five focus groups with 30 participants (including first year nursing students; refugee women; those living in supported / refuge accommodation) were facilitated;
- 50+ in-depth participant interviews were conducted;
- Key partners/stakeholders from Velocity and local NHS services were interviewed;
- Informal discussions with five stakeholders from two partner bike shops were conducted.

A thematic analysis was undertaken using QDA Miner, and the key points will be highlighted below.

4.2.1 Bike use

On both the mid-point survey and in interview, participants were asked what, if anything, they were using their WheelNess bike for. Whilst socialising and to foster family time were important, by far the most frequent response was 'to get out on my own'. That sense of freedom and independence is one that will be returned to later.

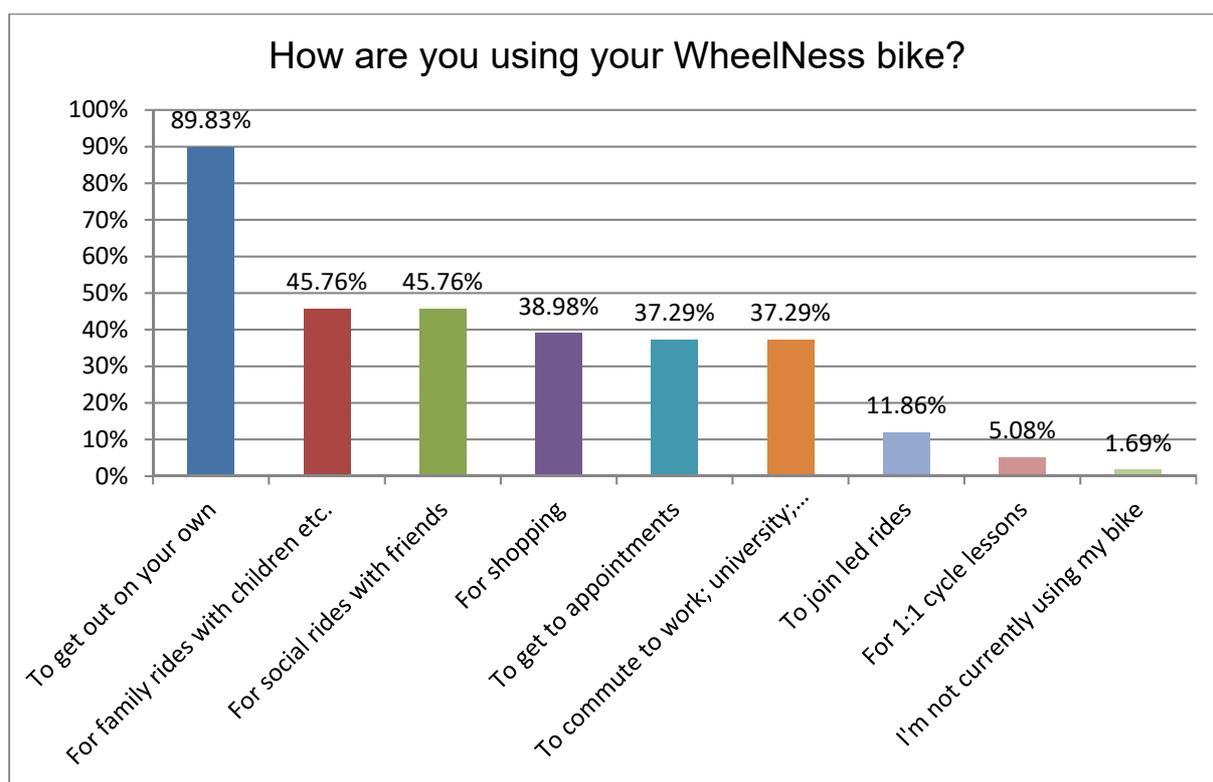


Figure 9: How participants are using their WheelNess bike (n=58)

4.2.2 Major benefits of the project

Analysis of interview and focus groups transcripts from participants, support staff and key stakeholders using QDA miner has allowed the researcher to objectively code the text in a systematic way and thereby draw out points of similarity and difference across the cohort.

Seventeen discrete and recurring benefits of the WheelNess programme were identified by both participants and support staff as tabulated below:

Table 7: Major benefits of WheelNess – participant and support staff perspective

Benefit noted	Frequency of response
Fitness / physical health improvement	35
Improved mental wellbeing	33
Shared family / partner experiences	25
Independence / freedom / choice	21
Increased confidence / self esteem	19
Financial	10
Convenience – getting further, faster	8
Mobility aid	8
Commuting / everyday travel	8
Fun	7
Managing emotions	6

Respite / 'me time'	5
Environmental	4
Meeting people	4
Safety / harm reduction	4
Skills development	4
Weight loss	3

Whilst many of these benefits could be predicted, several were not anticipated.

Giving people living with physical health conditions, 'trapped' in their bodies, the opportunity to share a social activity with their partner on a more equal footing was a significant benefit noted by several participants. One stated:

"I absolutely love it. It's fantastic. And hopefully, me and xxx will get it together because it's something then, it makes me kind of more able, although I'm not, it kind of makes me equal to him a bit. On a good day, it means then, if we go out cycling together, he's obviously working harder because he's got a normal bike, but it does allow us to do something. Because if we go out a wee bit of a walk together...It's not pushing him, but it pushes me, just a stroll. So, at least for that, it gives us both the physical exercise, on a kind of equal level."

The use of bikes as mobility aids was also unexpected. Several participants have found cycling easier than either walking or driving, and they relish the 'normality' of using a bike:

"My bike, the batteries' on the back so it doesn't really look like an electric bike because I've got the paniers over the back. So, it's very much, you don't feel, like I've got a wheelchair. So, I feel normal rather than looking like I have a disability. Which has its good points and its bad points but sometimes, it's nice just to be a person rather than your disability."

Using the bike as a form of respite for full-time carers was another unexpected outcome:

"I'm a full-time carer for my mum so when I can get out and just not think for a couple of hours (concentrate hard on the cycling and of course your mind is on your route, safety and enjoying the outdoors) it's absolute bliss."

As was cycling as a form of harm reduction:

"And what I wanted to point out, so if you were going into town by bus or taxi, so you were probably meeting up or bumping into people and then getting...side-tracked [into trouble]" – support worker

4.2.3 Challenges/areas of development pertaining to the project

The challenges / areas for development noted most frequently by participants pertained to three main issues:

- Clarity of communication – several participants noted that the communication and the messages/project aim expressed, particularly at the beginning of the project, were confused.
- The timing of the project – many participants received their bikes in October, November and December and therefore did not feel confident about using them straight away.
- Several less physically able participants noted that their limited range of movement made it difficult for them to see behind them, which reduced their confidence when cycling. They purchased small 'wing mirrors' for their bikes to solve the problem, but physical constraints have been noted by several potential participants as barriers to the current WheelNess programme.

Indeed, one participant had to return her e-trike as she was unable to use it and other individuals interested in the project have not been able to participate as they have been unable to use conventional or electric bikes/trikes and would require an adapted cycle.

Stakeholders and referring organisations have similarly reported confusion over the project's aims and objectives and have reiterated the opinion that the project's timing was unfortunate.

4.2.4 Best thing about the project

Finally, all participants and key stakeholders were asked what the 'best thing' about the project was from their point of view.

Participants were very clear – the WheelNess staff:

“Because of his personality. Because he's very approachable and you can talk to him like a friend. And you feel like you can contact him if there are any issues... And he keeps in contact with me to see how I'm getting on. And he asks about the kids...He cares. He gives attention.”

“Brendan and Fiona have been great”

“And I think having a non-judgemental person dealing with you, not making you feel bad; making you feel acceptable. It's so important.”

Other things that participants really value include: the social rides; the Velocity workshops where they learn how to care for their bikes, and one participant noted, “Bikes of Inverness are super helpful and kind.”

Stakeholders and referring agencies also commended the WheelNess staff and the speed with which applications are dealt with; the open referral criteria and the ease of referring. They also value the fact the project provides those in transport poverty access to a bike:

“Transport costs can really add up, and buying a bike is also out of many people's budget. WheelNess is a brilliant community initiative which will help give people vital new local travel options.” (Dan Jenkins, Improvement Specialist for NHS Highland) (MacLennan, 2018).

5 Conclusions and lessons learned

This paper has provided an overview of the WheelNess pilot project; explaining the rationale behind its inception; location; and development over time.

Project data gathered to date and presented in this paper both explicitly and implicitly provides evidence of barriers 'real people' face to cycling for everyday transport. These include:

- Lack of finances – to buy a bicycle and the appropriate attire
- Lack of confidence – to go into a bike shop in the first place; to cycle on roads; to route plan; to maintain the bike etc.
- Lack of self-efficacy – fear; 'I can't do this'
- Lack of awareness of cycle routes / the knowledge that they can get from A to B safely
- Poor cycle infrastructure
- Distances involved – sometimes cycling just is not practical
- Family circumstance – “I don't know how I'm going to manage it [cycling] with two kids...”

Overall, the data available at this point suggests that the WheelNess pilot has had a positive impact on many of the participants who have engaged. Despite initial fears expressed in some quarters, only four bicycles have been lost/stolen – three of which have been found. This reinforces the notion that trusting

people who have, traditionally, not experienced this privilege, often has encouraging results. As a support worker expressed:

“I did wonder, would this be a waste of a bike? I was a bit cynical. But my God, it certainly has not been at all. Because you’ve [participant] taken the responsibility of having that bike, and actually making sure that you don’t lose it; that it doesn’t get damaged”

Positive outcomes in terms of physical health and mental wellbeing have been widely reported, and the value of empowering participants to ‘get out on their own’ cannot be underestimated, even if it is difficult to quantify.

However, the project has not been as successful for some as might have been hoped. Those living with more severe and enduring mental health conditions, learning disabilities, or in chaotic circumstances (through substance misuse for instance) have not been able to access the project in its current iteration. They would require a higher level of support on a constant basis than is currently available. Another group who have been unable to access the project to date are those who require adapted bikes/trikes. Those with physical limitations – including due to age/frailty, visual impairments, or learning disabilities are not served by WheelNess yet.

Several important lessons have been learned and this paper will conclude by briefly noting them down:

- Going forwards, it is important participants are clear what the project is about and what their responsibilities are;
- The monitoring and evaluation process will be honed to meet the needs of the participants more accurately;
- The referral criteria will be refined. The project cannot provide the level of support required by those with severe conditions or who are not currently stable;
- The development officers will ensure that each participant is engaged with more consistently, in a manner that is mutually appropriate, throughout the course of the intervention. This will ensure each participant will have a tailored support plan that will maximise the benefits everyone attains;
- In response to an identified need, Cycling UK are developing the idea of a ‘WheelNess All Ability Bike Centre’ to support more people with additional needs (i.e. people with disabilities, older people, people with learning disabilities) to try cycling, without the commitment of taking a WheelNess loan bicycle. This idea is being developed with partners at UHI, the WheelNess steering group and others.

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ⁱ This 'positive political will' is further exemplified in areas such as higher education. For instance, the Active Health Exercise Lab (AHXL) was formed in 2018 as a result of funding from Highlands and Islands Enterprise and the Inverness and Highland City Region Deal. It is located within the University of the Highlands and Islands, Centre for Health Science, Inverness, and its primary aim is to combine expertise within the areas of physical activity, nutrition and biochemistry to help prevent and manage disease.