The Highland Council

LOCAL TRANSPORT STRATEGY:

DRAFT CASE FOR CHANGE

March 2023

The Highland Council
Comhairle na Gàidhealtachd

THE HIGHLAND COUNCIL LOCAL TRANSPORT STRATEGY: CASE FOR CHANGE

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PART 1: SUMMARY

Part 1 of the Case for Change provides the high-level summary of the research and conclusions of the process so far. It presents Key findings and proposed Transport Planning Objectives, which will inform the preparation of the Draft Local Transport Strategy. Part 2 provides the full reporting of the research undertaken.

INTRODUCTION

The Case for Change report is the first stage in the process of preparing the next Local Transport Strategy for Highland. It explains the current transport context in Highland and identifies the transport problems faced and current opportunities that exist; these are highlighted as Key Findings at the start of the report. Based on this analysis, the report proposes high-level outcomes for transport, Transport Planning Objectives[1].

The report sets the context for consulting and engaging on what options might be available to tackle problems and harness opportunities, which will then be appraised and drafted into a Draft Local Transport Strategy for consultation, before being finalised and adopted by the Council. Once adopted, the Local Transport Strategy will set the policy framework for how the Council maintains, improves, and manages the transport network. This will comprise both policy and delivery plans. The new Local Transport Strategy will cover a 5-year period from the date of adoption, but will look at a 20 year horizon of change and for delivering policies.

This review process will follow the Strategic Transport Appraisal Guidance (STAG) process:

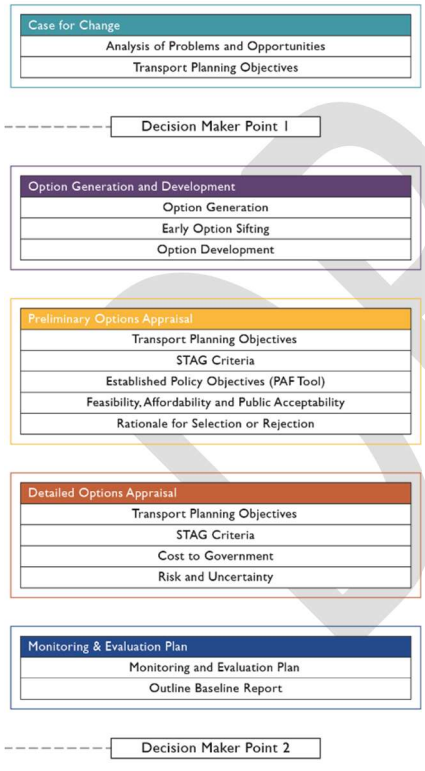

Figure 1: STAG Process for Transport Strategy Development

[1] Transport Planning Objectives describe the outcomes that are sought for the Transport Strategy.

WHERE DO WE WANT TO GET TO?

Everyone living in and visiting Highland should have fair access to affordable, healthy, and sustainable transport choices: this is taking a rights-based approach to delivering the transport network. This means that walking, wheeling[2], cycling and public transport should provide safe, affordable, efficient and reliable choices for moving around wherever possible, and that shared transport and zero and low emission vehicles support those journeys where a motorised vehicle is the only option. Opportunities to decarbonise the transport of people, as well as goods (freight) by zero and low carbon means should be harnessed.

This report is being prepared in the context of the National Transport Strategy 2 (NTS2), which includes the Sustainable Travel and Investment Hierarchies illustrated in Figure 2. The particular actions that may be necessary to deliver on these national policy aims will vary between places, reflecting the diversity of communities living in Highland, but the overarching principles are the same.

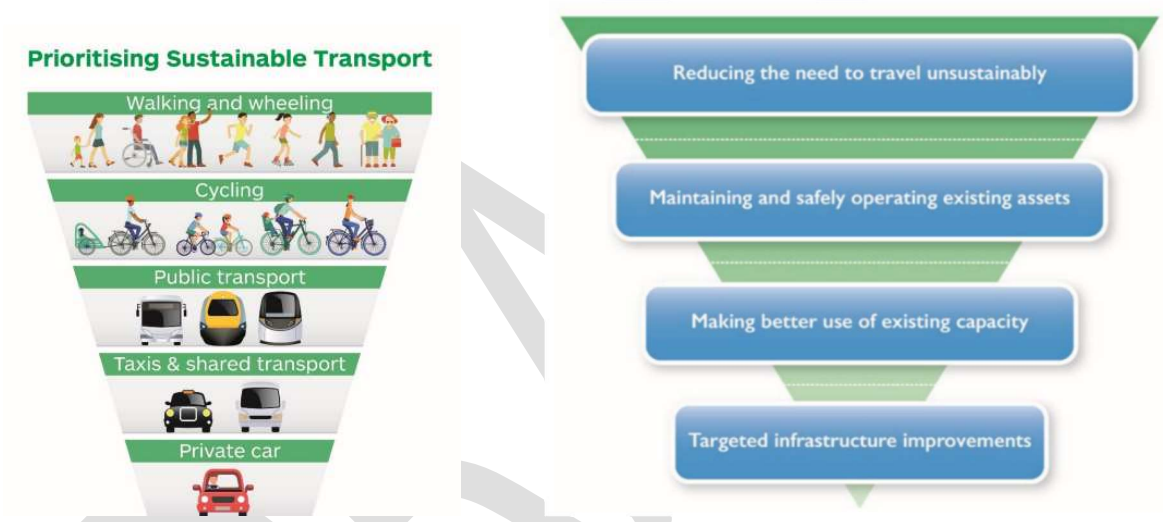

Figure 2: Travel and Investment Hierarchies, NTS

Delivering on these national policies will require a fundamental shift in how all transport providers, including THC, do their job. Recognising the way the current transport network operates, how it performs and serves those most vulnerable in our communities and how it impacts the climate, will provide the necessary evidence to help identify the local policy framework needed.

This Case for Change is also informed by a review of the Council's current Local Transport Strategy[3]; see Appendix 3.

[2] Sustainable transport is defined as walking, wheeling, cycling, public transport, shared transport and on-demand transport. Wheeling includes wheelchair and mobility scooter users, some of whom class their trips along with walking and some of whom prefer the term wheeling. Using both words together represents moving at a pedestrian's pace.

[3] highlandlocaltransportstrategydraftdoc.pdf

Even at this initial stage, it is evident that robust structures and processes are required to support THC to gather and analyse data to ensure an evidence-led approach to planning, maintaining and investing in the transport network is achieved. Such efforts will also set the region in a good position to demonstrate its commitment to delivering a modern, sustainable and fair transport network.

KEY FINDINGS AND DRAFT OBJECTIVES

The information gathered for this report has resulted in the following Key Findings ('Problems and Opportunities') that provide the baseline to identify the right policies and actions ('Options Generation & Development') in the new Local Transport Strategy.

Demographics, Travel Patterns and Climate Breakdown

Key finding: Highland's population has grown but is forecast to level out and become dominated by people of 65 years and over, who will inevitably become more dependent on alternatives to the car for everyday journeys. It also highlights the need forthe transport system to support active lifestyles throughout people's lives to support health and independence. The effects of Brexit and Covid-19 are still not fully understood; any assumptions will be checked at policy development stage.

Key finding: Our largely rural land mass masks the fact that most people (75%) live in some form of settlement. Population distribution data confirms there are discrete sub-regions for everyday travel; this illustrates that there is a continuing need to consider needs of rural communities (25%), but also to consider the untapped potential to support modal shift within the population (75%) living in these sub-regions. Evidence about travel patterns is out of date (2011 census); 2021 Census data will inform policy development.

Key finding: Healthcare, retail, tourism and education dominate Highland employment: industries typically located in larger population centres. Traditional land-based industries make up only a small proportion (2%) of employment. These factors highlight the need for the transport network to effectively serve both larger centres and tourism routes and networks.

Key finding: The Inverness Travel to Work Area is the dominant area of employment and population. Most people working in this area live in it and there is therefore strong potential for a high level of modal shift. Inverness is a major centre for communities across Highland for some services and facilities; this makes it different, and important that it is accessible to everyone in Highland.

Key finding: High-quality, up to date data and analysis will be key to understanding current travel patterns and the effects of changes in infrastructure and services. This will require planning and proper investment.

Key finding: Tackling the climate emergency presents key opportunities to combine efforts between different Council services. We will also work with local and regional partners to deliver coordinated communication, to ensure that our transport infrastructure is adapted to and protected against climate change impacts, and to ensure current and future infrastructure includes green and blue infrastructure to reduce flood risk and extreme weather impacts.

Key finding: Transport forms Scotland's single largest source of carbon emissions, 36%, and this has not fallen in a decade. Car, ferry and air travel are crucial both socially and economically for the region but can be in conflict with requirements to meet emissions reductions targets.

Key finding: Both new and brownfield developments offer opportunities to enhance the connectivity, quality and density of the active travel network and to normalise designs which are not car-centric and which support active everyday journeys and place-making. Such designs also reduce wear and tear on roads, free up public space, and potentially have a lower land take for transport infrastructure.

Key finding: Reducing the need to travel through home working and delivery of services such as some healthcare online is crucial and can support the vibrancy of rural areas, but need to be balanced with

supporting the vibrancy and vitality of town and city centres. The necessary measures, though, are outwith the scope of this document.

Equalities and Public Health

Key finding: Access to transport in most parts of Highland is poor, based on financial cost, time and inconvenience. Even in urban areas some neighbourhoods experience poor access. In more rural areas, a lack of alternatives can lead to 'forced' car ownership, putting low income households at risk of increased poverty.

Key finding: Residents of rural areas face particular transport challenges but to sustain these communities a range of affordable, reliable, attractive transport options must be available. The increase in working from home offers potential for repopulation of rural areas but for people to be able to choose to live rurally it must, conversely, be easy for them to leave.

Key finding: National policies are linked by a recognition of the need to shift people to active travel for everyday journeys. This is supported by an uplift in active travel funding; to secure a share of this funding and deliver the infrastructure, Highland will require long-term planning, cross-departmental working and multiple-year funding.

Key finding: Transport systems have significant potential to reduce inequalities, both from socioeconomic factors and amongst some of those who hold a protected characteristic. A shift from car dependency / forced car ownership could ease financial hardship and travel restrictions; improvements which benefit these groups will improve transport choices and experiences for all.

Key finding: Being more active for everyday journeys is a key route to increasing physical activity, supporting good mental and physical health. Reductions in traffic speed and volume reduce air pollution and accidents. This is particularly important in the context of our ageing population and and other rising pressures on the NHS.

Walking, Wheeling and Cycling

Key finding: There is significant potential for modal shift to walking and cycling for everyday journeys; measures to reduce traffic speed and volume and to separate different modes are fundamental to achieving this shift but may bring design and funding challenges in rural parts of Highland.

Key finding: Existing and planned walking and cycling routes also require regular planned and funded maintenance, in line with the Investment Hierarchy (Figure 2 above). Cycleways and footways alongside adopted roads, and remote cycle paths and footpaths which are not adopted, will need dedicated funding and systems for regular surveying and planning of seasonal and surfacing maintenance work.

Key finding: In the context of active travel infrastructure, population density is a more useful measure than rurality. Rural small towns can have high population density where urban designs are appropriate, whereas those designs are not appropriate for a low populated landscape such as agricultural or forested areas.

Key finding: The concept of a 20-minute neighbourhood has relevance for many Highland settlements and links to principles of placemaking, resilience and a strong local economy. For rural areas the concept can be expanded to longer distances and "clusters" of settlements. These aspects need to be considered alongside how to consistently assess and provide crossing facilities on the region's roads.

Public Transport

Key finding: All public transport journeys also involve walking, cycling or driving. Improvements in walking / wheeling / cycling infrastructure and integration between modes are key to increasing passenger numbers on bus and rail.

Key finding: Bus provides the widest coverage for public transport in Highland. Passenger numbers are falling, accelerated by Covid-19. Outwith urban areas bus service is limited in terms of frequency and duration of day

covered, meaning it often fails to offer a viable alternative to private car. A range of live initiatives are underway with Council-run services, under-22 free bus travel, capital investment and demand-responsive and community-led transport, which should inform policy development in the Transport Strategy to reverse negative trends. Further gap analysis work would help to build a more accurate picture of the coverage and performance of the bus network.

Key finding: Information on bus passenger satisfaction is out of date. There is no comprehensive record of what supporting infrastructure (shelters, bus times, bike parking) is needed for the region. These are gaps in our knowledge that require to be filled to understand how to deliver the best bus experience as possible. This should be informed by current work to deliver a Bus Service Improvement Partnership for Highland.

Key finding: The Implications of tourism on the transport network are broad. For buses, facilities to accommodate growth in demand for public services; for mode integration and improvement of facilities at stations; and meeting the specific-needs of the private coach market all require a coordinated understanding and policy framework.

Key finding: Most longer distance journeys by train do not offer a competitive journey time with private car, but the Inner Moray Firth offers strong rail potential with equivalent or quicker journey times by rail, compared with car. A working day in the central belt is possible, but only from Inverness. Current and potential for rail freight is strong in Highland, despite infrastructure constraints. These limit the potential for expansion, but investment and improvements present further opportunity for modal shift from car, including freight, opening new stations and provision of discounts through the Highland Railcard, but this requires ongoing coordination and investment by Scottish Government.

Ports, Harbours, Aviation, Industry and the Economy

Key Finding: The transport network is a fundamental and hugely important asset for the economy and industries of the Highlands. Following the transport hierarchy, sustainable, fair and affordable transport is key to building a resilient and sustainable economy. Following the investment hierarchy, investment in existing infrastructure is a priority.

Key finding: Marine industries are supported by a range of infrastructure in Highland. Renewable energy, both on and offshore, and emerging green hydrogen, present major opportunities. Opportunity Cromarty Firth Green Freeport illustrates this potential. It is essential that the region's ports and harbours are ready to support and harness the potential of the green energy transition.

Key finding: Inverness Airport is a major hub, principally serving the Highlands and Islands regions with access to domestic destinations, but with an increasingly important role for international connectivity. Wick Airport has a Public Service Obligation; flight times offer significant time reductions over other modes.

Key finding: Better integration of transport modes across the network is essential; this includes links to ferry and aviation services.

Cars and Roads

Key finding: The Council is responsible for an extensive and complex network of roads infrastructure, including footways and cycleways alongside, which requires careful planning, prioritisation and management. The Road Asset Management Plan,currently under review, will provide a core part of the Local Transport Strategy.

Key finding: In National Transport Strategy 2's Investment Hierarchy, maintaining and safely operating existing assets is firmly above targetted infrastructure improvements. Timely maintenance also reduces longer-term needs. With shrinking capital budgets and staff resource, we need to protect and increase commitment to roads maintenance.

Key finding: total car km travelled are increasing in Scotland and in Highland. Despite this, historic census data shows around a fifth of people have no access to cars or vans in Highland in both rural and urban areas. Even

where a household has access to a car some members may regularly be left without travel options, highlighting the need for alternatives..

Key finding: Car-based travel has built in inequity, with more affluent people driving more and owning more cars. Disabled people and people on lower incomes are less likely to own a car. This highlights the importance of ensuring fair access to non-car modes.

Key finding: Roads and road vehicles are and will continue to be an essential part of the transport network in Highland, particularly in rural and semi-rural areas. Rather than attempt to design a network without cars, consideration must be given to reducing private cars' dominance over transport choices and public spaces. Modal shift makes travel easier for essential car users by reducing congestion.

Key finding: Roads in most built-up areas in Highland serve a multi-functional role in creating places, far beyond their task of conveying traffic. Policy needs to recognise this, to strike the correct balance between place and movement functions.

Key finding: Innovative ways of investing in our rural transport network are being undertaken through the South Loch Ness Roads Improvements Strategy. This work offers insight into a potential model for other areas, but is dependent on financial and officer resources.

Key finding: Electric vehicles do not reduce congestion, community severance, and the negative health effects of sedentary lifestyles; they have significant environmental impacts both locally and from manufacture. However they play an important role in decarbonisation including in public transport, freight, and micromobility such as electric bikes and ecargo bikes. The Council's Climate team is currently planning the expansion of the region's EV charging network; this will inform the development of the Local Transport Strategy.

Key finding: The move from fossil fuels to a decarbonised transport system has significant implications for tax revenue. It is not yet clear what will replace fuel tax; emerging policy will inform development of the Local Transport Strategy.

Key finding: Road safety improvements are crucial. The Perth to Inverness A9 still has high numbers of collision casualties; dualling is an option to address this. However given the announced delay in dualling we welcome the interim measures under way such as improved signage at key locations. The Council's updated Speed Limit Policy and commitment to introduce 20mph limits within settlements by summer 2023 will also deliver safety improvements.

Key finding: Parking provision and policy are important to the accessibility and economy of Highland. Opportunities to support positive change will be identified in the Local Transport Strategy.

OBJECTIVES

HITRANS is the Regional Transport Partnership which works with Highland Council, Western Isles Council, Orkney Islands Council, Moray Council and Argyll and Bute. It is currently developing its Draft Case for Change Report for our *Regional* Transport Strategy. This document has been invaluable in developing the Local Transport Strategy Case for Change Report. The Objectives ('Transport Planning Objectives') which flow from the Key Findings above are adapted from the HITRANS's Objectives, fully aligning the two documents.

Objective 1 – To make a just transition to a post-carbon and more environmentally sustainable transport network

Scotland has a target to achieve net zero carbon emissions by 2045 and transport is a key sector in terms of carbon emissions. Our transport networks and services must adapt to fulfil this target in a fair and equitable way whilst also being developed in as environmentally sustainable a way as possible. The process must also recognise the needs of all groups through a 'Just Transition'. Electric vehicles have a limited but crucial part to

play, in shared and community transport, in public transport, in freight and in micromobility as well as for private cars.

Objective 2 – To transform, and provide safe and accessible connections between and within our city, towns and villages, to enable walking, wheeling and cycling for all

To allow everyone to walk, wheel and cycle more, leading to more local living patterns, greater inclusion, affordable transport, healthier lifestyles, and reduced car use – the latter leading to reduced pollution and congestion, reduced community severance, and improved road safety.

Objective 3 – To widen access to public and shared transport and improve connectivity within, to and from Highland

To give people new travel choices, allowing them to (i) use accessible and affordable public or shared transport options to make journeys they previously couldn't make, or (ii) to use public or shared transport instead of the car – reducing car-based pollution and congestion, as well as improving road safety. This objective is also important in encouraging inclusive economic growth by widening labour markets and providing improved accessibility to employment opportunities by public transport.

Objective 4 – To improve the quality and integration of public and shared transport within, to and from Highland

To make public and shared transport more attractive and competitive with car-based travel and to ensure the accessibility needs of all groups are accommodated. This will improve the travel experience for existing public transport users and encourage people to use public or shared transport instead of the car, leading to lower levels of car use and reduced pollution and congestion, and improved road safety.

Objective 5 - To ensure reliable, resilient, affordable and sustainable connectivity for our island, peninsular and remoter communities

Some of our remote communities have suffered from pronounced connectivity difficulties in recent years. This has wide-ranging impacts and this objective recognises the need to tackle it in tandem with Objective 4. Meeting this objective will provide support the long-term sustainability and success of these vulnerable communities, including through helping meet the needs of people with protected characteristics and by tackling socio-economic disadvantage.

Objective 6 – To improve the efficiency, safety and resilience of our transport networks for people and freight, and adapt to the impacts of climate change

Our transport systems must be safe and able to adapt to changing demands (tourism patterns, trade, investment (e.g. Offshore Wind)) and be resilient in the face of climate change. This objective is important in supporting Highland to prosper and to reduce inequalities of outcomes associated with socio-economic disadvantage.

PART 2: FULL CASE FOR CHANGE REPORT

This part of the Case for Change Report provides the full detail of the evidence gathered and analyses undertaken to develop the key findings and Transport Planning Objectives.

HIGHLAND CONTEXT

Highland is a diverse region because of its large size and varied physical geography, as well as its distribution of settlements and other land uses. It is home to many remote rural mainland and island communities and to denser urban populations, including the city of Inverness and the towns of Nairn and Fort William.

POPULATION

The average population density in Highland is relatively low in a Scottish context at 9 people per km^2 compared with, for example, Glasgow City's density of 3,640 people per km^2. However, this average figure distorts considerable regional variation within Highland. Three quarters of people in Highland live in a settlement[4], rather than living rurally, entirely remote from other dwellings or regularly occupied buildings. Most people live around the coasts of the region, and the Inner Moray Firth area is the most populous. Inverness, Nairn and Fort William are the largest settlements in Highland, by population.

Whilst the past four decades have seen Highland's population grow more than any other local authority in the HITRANS region, and more than the Scottish National Average (Figure 3), this is forecast to change. Figure 4 shows that, based on the NRS 2018-based population projection, Highland is predicted to have a relatively

[4] Settlements are defined as those places identified as 'Settlement Development Areas (SDA)' in the Council's adopted Area Local Development Plans. Population size was calculated by multiplying the count of non-discounted council tax-paying properties in each SDA by average Highland household estimate of 2.13 (derived from NRS 2020 population estimate divided by NRS 2020 household estimate, source: https://www.nrscotland.gov.uk/files//statistics/council-area-data-sheets/highland-council-profile.html#household_estimates)

stable population 2018 – 2028[5] with a modest 0.5% growth, lower that the Scottish total growth forecast of 1.8%.

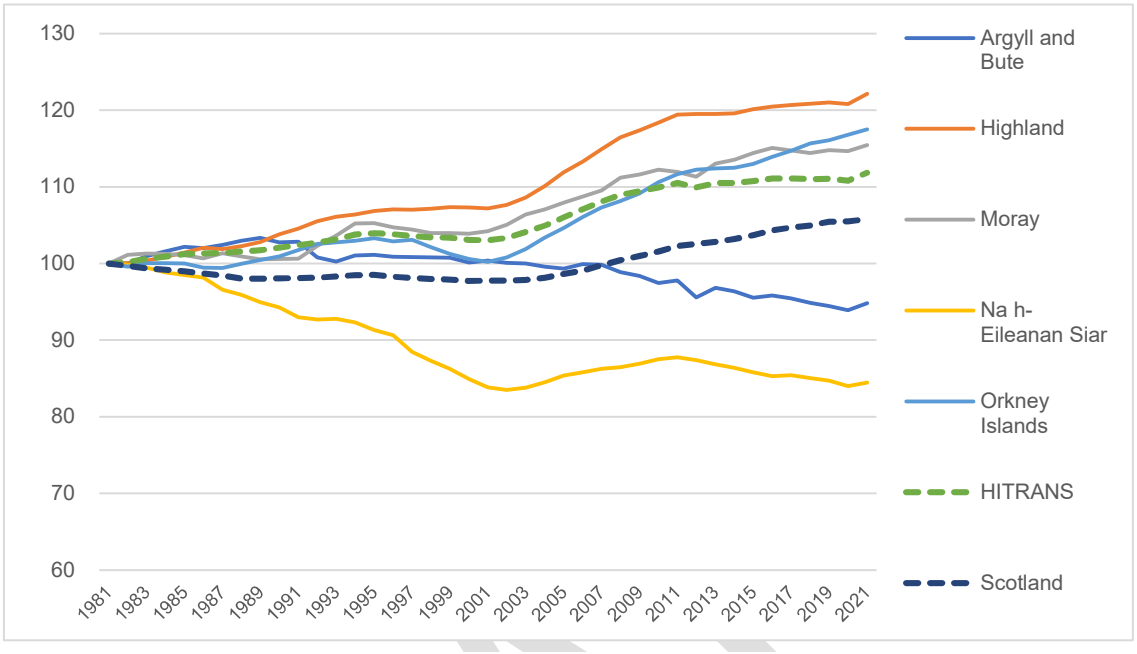

Figure 3: HITRANS region population trends (1981 - 2021) *NRS mid-year population estimates (adapted from HITRANS 2023 Case for Change report)

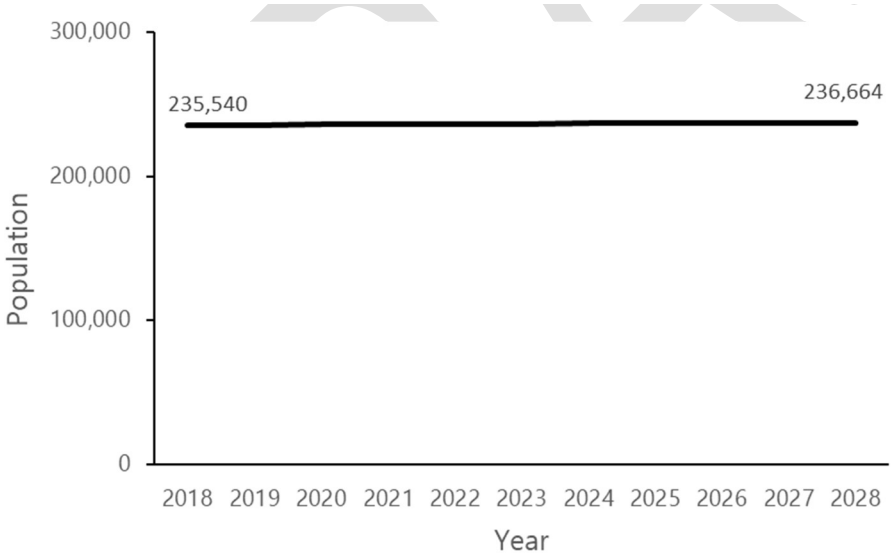

Figure 4: Highland population forecast to 2028

Whilst there is relative stability forecast for the region, external factors may alter this situation, including the unknown implications of the UK exit from the European Union (Brexit), which may influence inward migration to Highland, and the potential long-term changes to work and living choices arising from the Covid-19

[5] Source: https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/highland-council-profile.html#population_projections

pandemic. Figure 5[6] shows the components of forecast population change up to 2028. It illustrates that a predicted decline caused by natural change (more people dying than being born) is balanced out to a slightly positive overall situation because of in-migration to Highland.

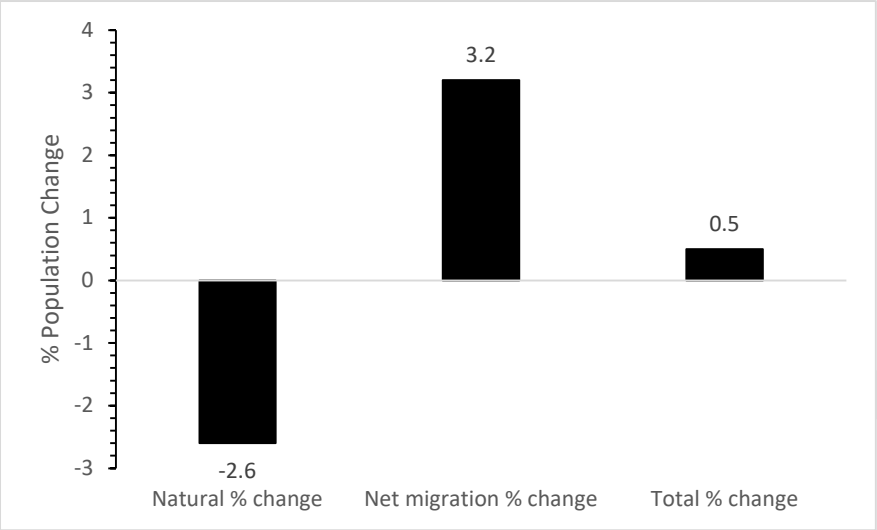

Figure 5: Components of forecast population change in Highland 2018-2028

Figure 6 shows the current age profile of Highland, which is dominated by working and older age groups. When compared with the forecast population change to 2043 in Figure 7, it is apparent that that there will be a greater share of older people in the population, with a notable decrease in young people and a slight decrease in the total working age population.

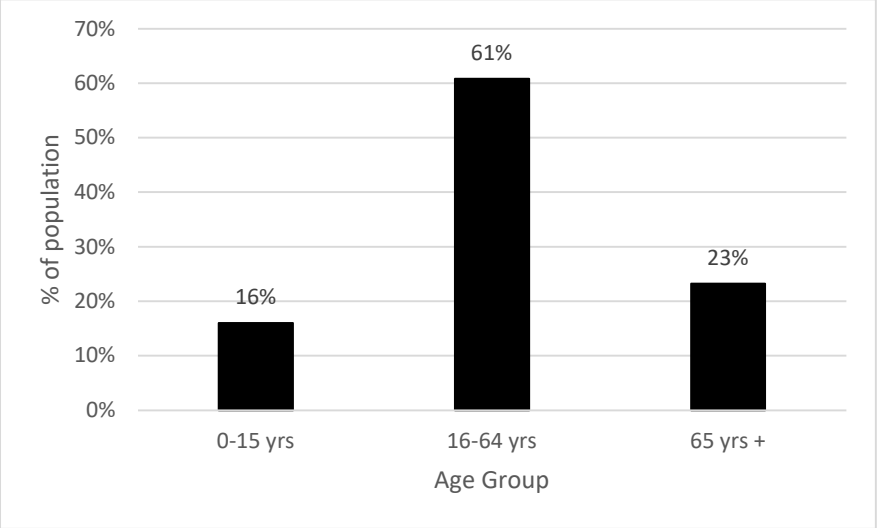

Figure 6: Highland population by age (2021)

[6] https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/highland-council-profile.html#table_pop_proj_nature

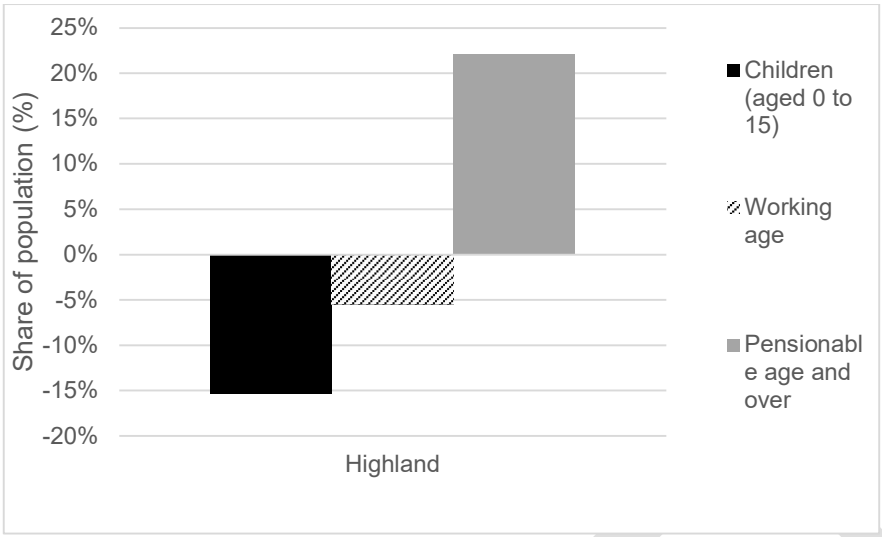

Figure 7: Highland forecast population change (2018-2043) (NRS Population estimates, adapted from HITRANS Case for Change, 2023)

For transport, this means that the needs of older people will be an increasingly important factor in planning the network, particularly public transport, and active travel interventions, as an increasing share of the population may require greater access to non-car modes. It will also be important in terms of active travel, so that the infrastructure available supports people to be and stay active and independent through all stages of their lives, supporting a healthier population and reducing pressures on the NHS and other services. Of particular note is that the number of wheelchair and mobility scooter users will rise as the population ages; providing good infrastructure for wheeling will help maintain transport independence for users, supporting good physical and mental health.

DEPRIVATION AND EQUALITY

The Scottish Index of Multiple Deprivation (SIMD)[7] provides an indication of the level of deprivation across Scotland, with 10 being those areas in the 10% least deprived and 1 being those areas in the 10% most deprived. Figure 8 illustrates the average SIMD score across each of the 2011 Census-defined Travel To Work Areas in Highland, which are illustrated in Map 1. It highlights that most travel to work areas are around the mid-point of deprivation, with Alness and Invergordon showing the greatest level of deprivation, and Aviemore and Grantown-on-Spey showing the least. However, at this scale, finer-grained spatial differences are not apparrent, for example, in the city of Inverness all deciles are represented in different parts of the city. Likewise, individual measures of deprivation perform differently in Highland.

[7] https://simd.scot

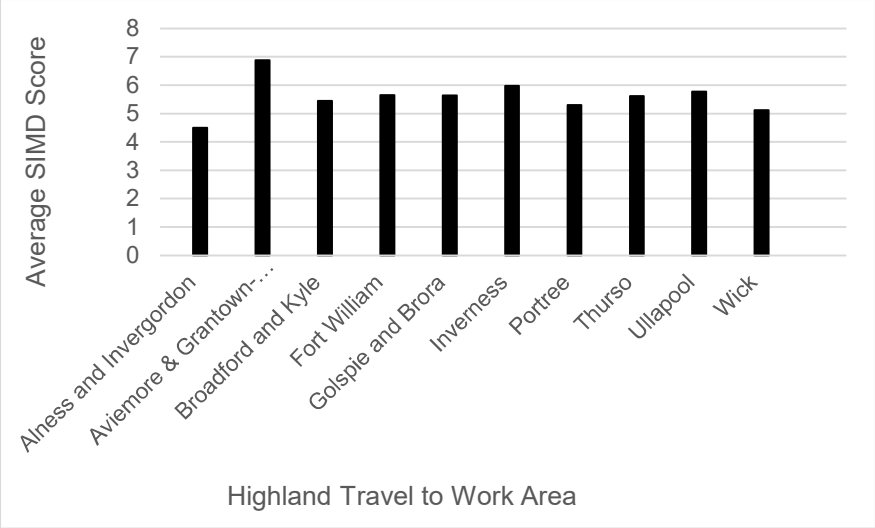

Figure 8: Average SIMD score by Travel to Work Area (Highland)

The Geographic Access Domain Rank is a factor in the SIMD that provides a relative measure of how convenient it is (based on financial cost, time and inconvenience) to travel to access basic services, measured by available public transport and drive times. In simple terms it provides a nationally standard measure of access to transport. Figure 9 illustrates the Geographic Access Domain Rank in Highland, with Inverness inset, where 1 represents the lowest level of access to transport, and 10 the greatest. This map illustrates that most of the Council area performs poorly against this measure in the SIMD. Relatively speaking, the more urban parts of the regions perform better, but even within urban areas, there are places that perform poorly, some of which host a significant share of the Highland population. Overall, 65% of the Highland population lives in an area where access to transport is scored 4 or less in the SIMD; in Inverness this figure remains high, with 53% of the population living in an area of 4 or less.

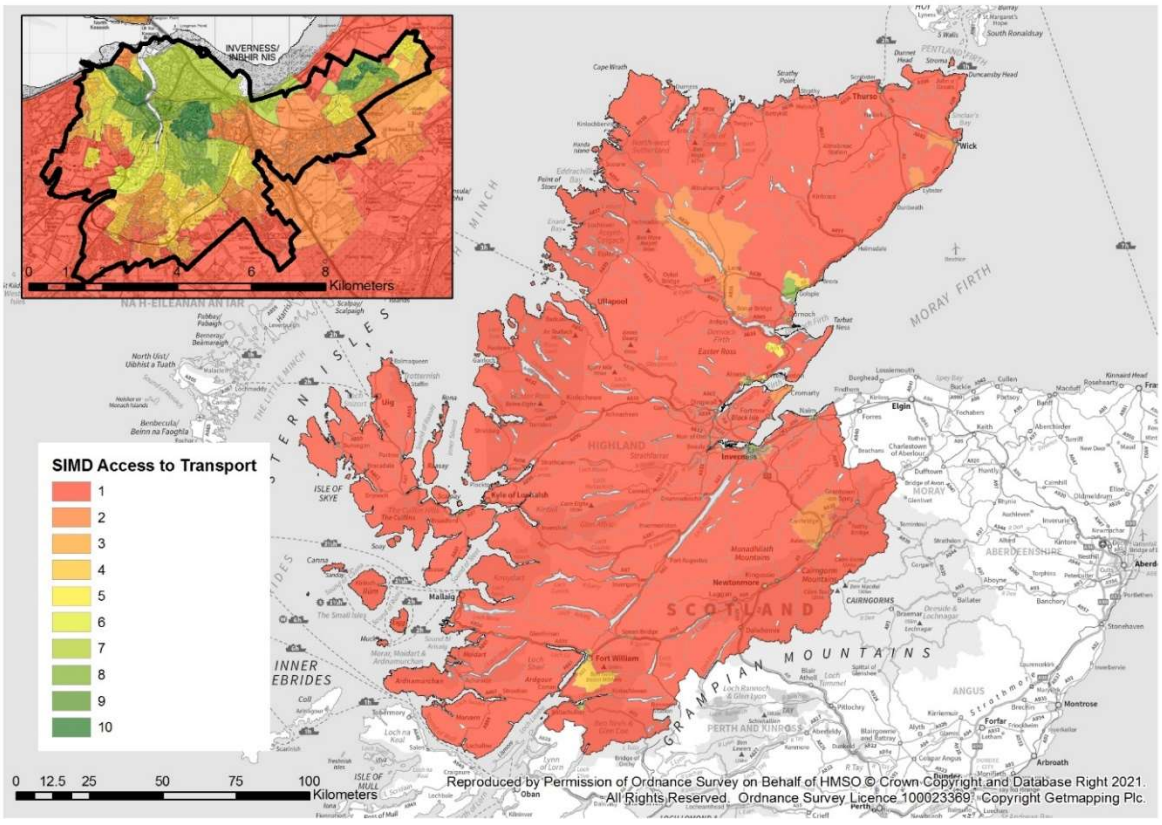

Figure 9: Access to Transport in Highland (Source: SIMD Access to Domain Rank)

The Poverty and Inequality Commission's 2019 Report on Transport and Poverty in Scotland[8] states that "action is needed on transport in order to help unlock people from poverty". It supports the four key principles of the NTS referenced above as helping to reduce hardship and health inequalities, recognising that transport costs impact income, household expenditure and poverty by putting pressure on household budgets. It recognises the dependence in Scotland of lower income households on bus for transport, and the greater likelihood that households on higher incomes will travel by private car or train. For people living in rural areas on low incomes the report recognises that a lack of public transport can lead to 'forced' car ownership and the additional burden that this places on household budgets. Highland geography is such that long distances are often required for public transport services meaning that their viable operation can be extremely challenging, even with public sector subsidy. Therefore, supporting efforts to provide non-car options and opportunities for on-demand services and shared journeys will be a increasingly important aspect of transport policy to support rural and island communities, particularly in the current context of rising pressures on household budgets.

It is important to note the relationship between income and travel behaviour: those on higher incomes travel more than those on lower incomes, because some spending on travel is descretionary such as for leisure activities and holidays. Poverty suppresses travel: those on lower incomes may have to restrict their activities because they cannot afford transport, limiting opportunities for work, education or leisure, and risking a damaging cycle of poverty, isolation and poor physical and mental health.

Campaign group Transport for All illustrate transport poverty as follows[9]:

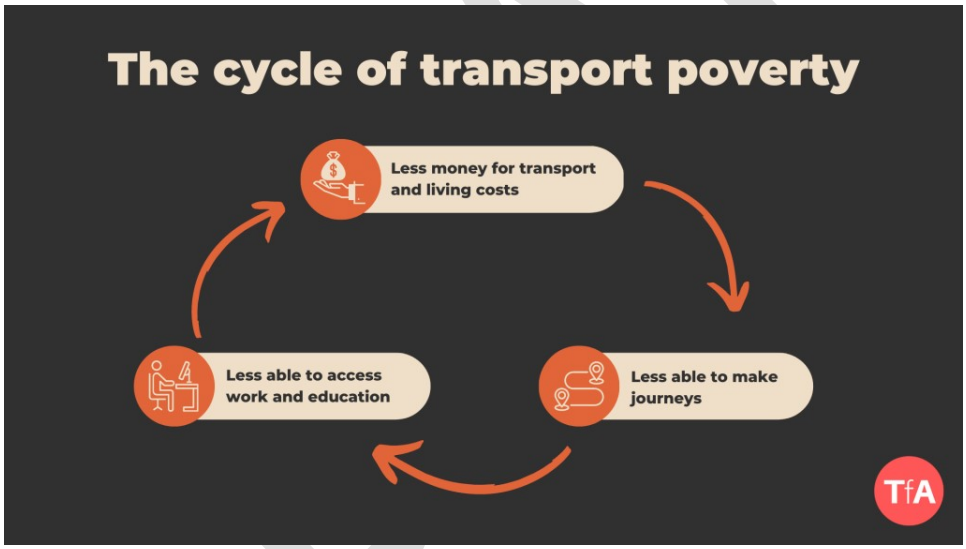

Figure 10 The Cycle of Transport Poverty (Source: Transport for All)

There are many complex and interacting issues around the travel choices of people holding certain protected characteristics. The consultation process for this Case for Change will include individuals, and representative groups for those individuals, holding Protected Characteristics. The new Transport Strategy following will be subject to a full Equalities Impact Assessment along with other Impact Assessments (see Appendix 4).

Looking at the particular charactieristic of Disability, as explained at the outset the term wheeling includes wheelchair and mobility scooter users. For some disabled people a bike or adapted bike is their mobility aid.

[8] Transport-and-Poverty-in-Scotland-Report-of-the-Poverty-and-Inequality-Commission.pdf (povertyinequality.scot)

[9] The cycle of transport poverty: how the cost-of-living crisis is locking disabled people indoors » Transport for All

There is not a clear urban-rural difference: across Scotland, again from the SHHS, the proportion of disabled and non-disabled people living in urban areas was equal at 83%. There are however clear socio-economic differences: in the most deprived areas in Scotland, 33% of adults live with a limiting condition, while just 15% of adults lived with a limiting condition in the least deprived areas[10].

The SHHS 2021 found modal share of journeys by whether an adult is disabled as follows[11]:

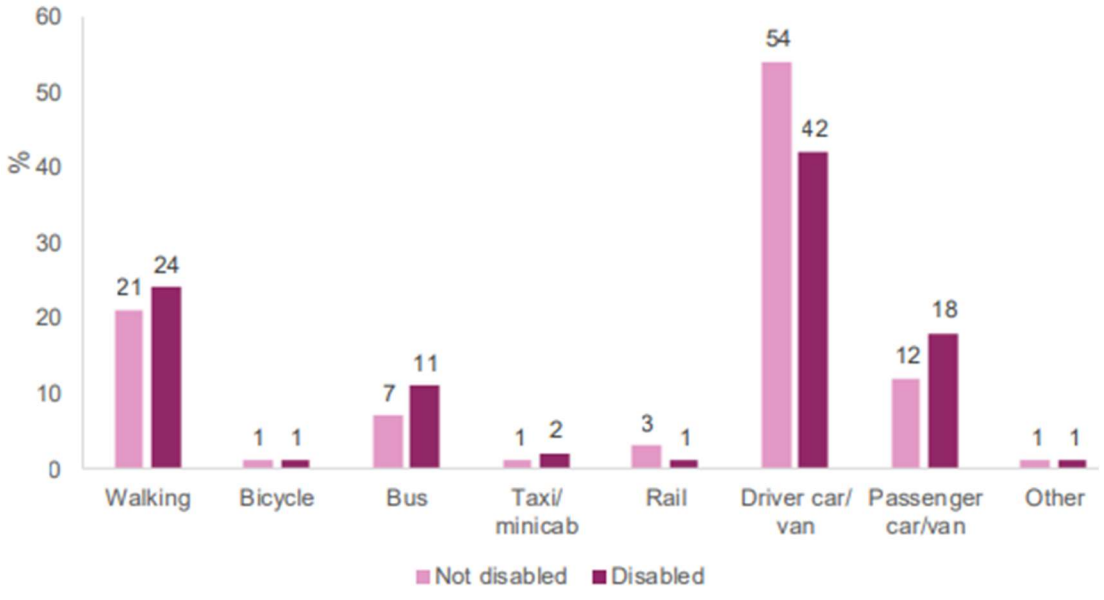

Figure 11 Modal share of journeys by whether an adult is disabled

That is to say, when disabled people are compared to those who are not disabled, they are less likely to drive (42% to 54%), and more likely to be a car or van passenger (18% to 12%), take the bus (11% to 7%), or walk (24% to 21%). When considering travel to work, fewer disabled people drove to work than non-disabled people (59% compared to 63%), and more were passengers in a car (8% to 5%). Note however that the economic inactivity rate for disabled people aged 16 to 64 was estimated at 46.5 per cent. In addition, disabled people travel less frequently than the non-disabled: - the "Disabled Transport Gap".

Figure 62 from that same source illustrates the mean number of journeys per day made by disabled adults:

[10] 2. Key issues and evidence | Transport Scotland

[11] www.transport.gov.scot/media/50099/disability-and-transport-findings-from-the-scottish-household-survey-july-2021.pdf

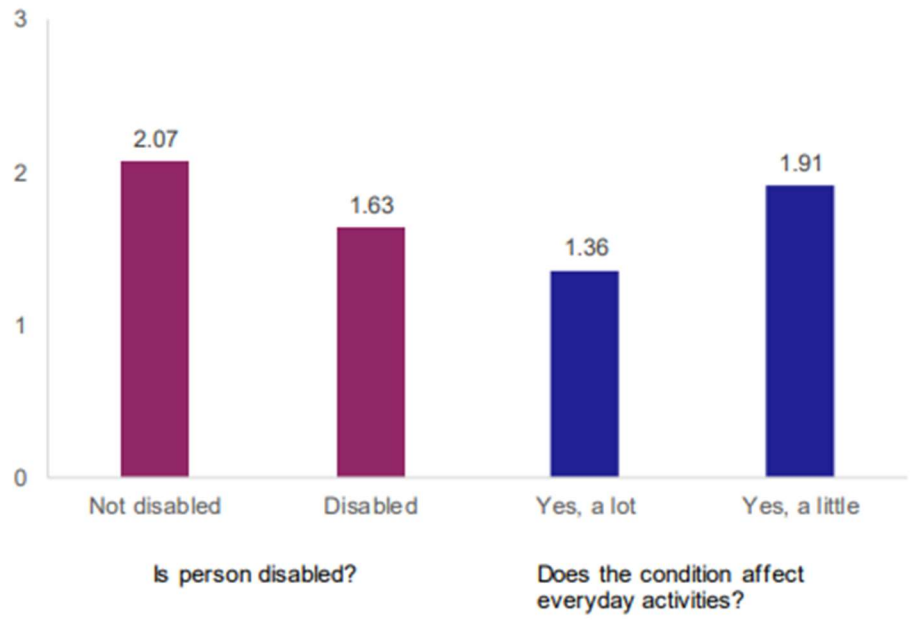

Figure 12 Mean number of journeys per day, by whether adult is disabled and whether their condition limits their ability to carry out day-to-day tasks, 2015-2019 (combined)

In Scotland around a million people define themselves as disabled; in 2021 there were 235,779 Blue Badge holders i.e. 24% of that group. In considering the implementation of active travel / traffic restriction schemes the needs of disabled drivers must of course be taken into consideration. Many disabled people who do not drive, such as those with a sight impairment as well as wheelchair and mobility scooter users who do not also drive, benefit from well designed active travel / traffic restriction measures.

Financial barriers (the cost of fares, mobility aids, fuel, and adapted vehicles) suppress the travel of disabled people. In terms of public transport, the fact that it is not accessible either in itself or in combination with walking / wheeling / cycling means that some disabled people who cannot drive and / or cannot afford a car have no choice but to use taxis and private hire vehicles. Wheeling is not always a cheap option, with wheelchairs and mobility scooters costing significant sums; adapted bikes are likewise expensive. Concerns about personal safety are also an issue when travelling.

Poor infrastructure for wheeling, adaptive bikes and mobility scooters limit those options further. For disabled people buildings, lifts and public transport may be accessible in themselves, but they cannot get to them.

Improving transport choices for disabled people will make things better for many people holding other protected characteristics e.g. social safety (almost everyone), physical accessibility (the elderly, parents with pushchairs or with young children).

For further consideration of the issues affecting those with other Protected Characteristics, particularly Age and Sex, see “Impact Assessments” in Appendix 4..

ACCESSIBILITY

The 2011 Census data provides a measure of how contained travel behaviour to access work is within sub-areas of Highland, Travel to Work Areas. Whilst now 12 years old, these data provide a consistent indication of people’s behaviour for travelling between home and work. Figure 13 shows the Highland Travel to Work Areas. It illustrates that there are discrete sub-areas of Highland for travel between home and work. An obvious consideration to these data, given their age, may be the shift to mass home-work that has emerged as a result of the Covid-19 pandemic, and how this may influence current and future work patterns. However, emerging analysis of data from the 2021 Census from England and Wales suggests that car ownership has actually

increased by 4% (2011-2021), and that this trend is most pronounced in cities, except in London where factors including population density and transport options are materially different. At the time of writing no data is available to indicate what impact Covid-19 and other external factors may have made since the last census, but this uncertainty must be a key consideration in the development of future local transport policy. In particular, further analysis will be required when the results of the 2022 Census are published.

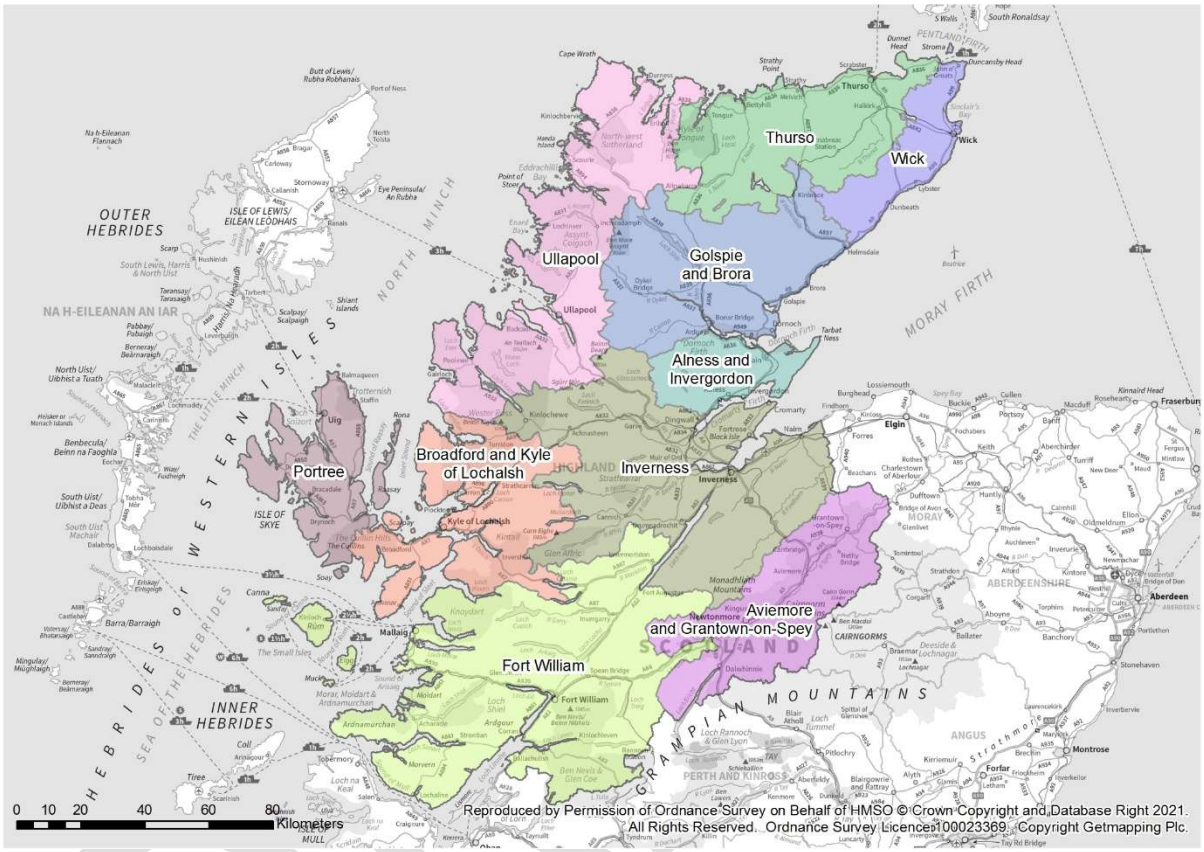

Figure 13: Travel to Work Areas in Highland (2011 Census)

Figure 14 illustrates the Scottish Government's 8-fold Urban Rural Classification[12] of Highland. This method groups the region into 'accessible' categories, based on settlements of 3,000 people or more being within 30 minutes' drive of a settlement with a population of 10,000 people or more, and 'remote' categories, based on this drive time being greater than 30 minutes. Figure 14 shows that the settlements of Tain, Thurso and Wick are categorised as Very Remote Small Towns, surrounded by Very Remote Rural Areas; Alness, Aviemore, Dingwall and Invergordon are classified as Remote Small Towns, surrounded by Remote Rural Areas; Conon Bridge and Maryburgh are classified as Accessible Small Towns, surrounded by a Remote Rural Area and Accessible Rural Area and, Inverness, Fort William and Nairn are classified as Other Urban Areas, all of which are surrounded by Accessible Rural Areas.

[12] https://www.gov.scot/publications/scottish-government-urban-rural-classification-2016/pages/2/

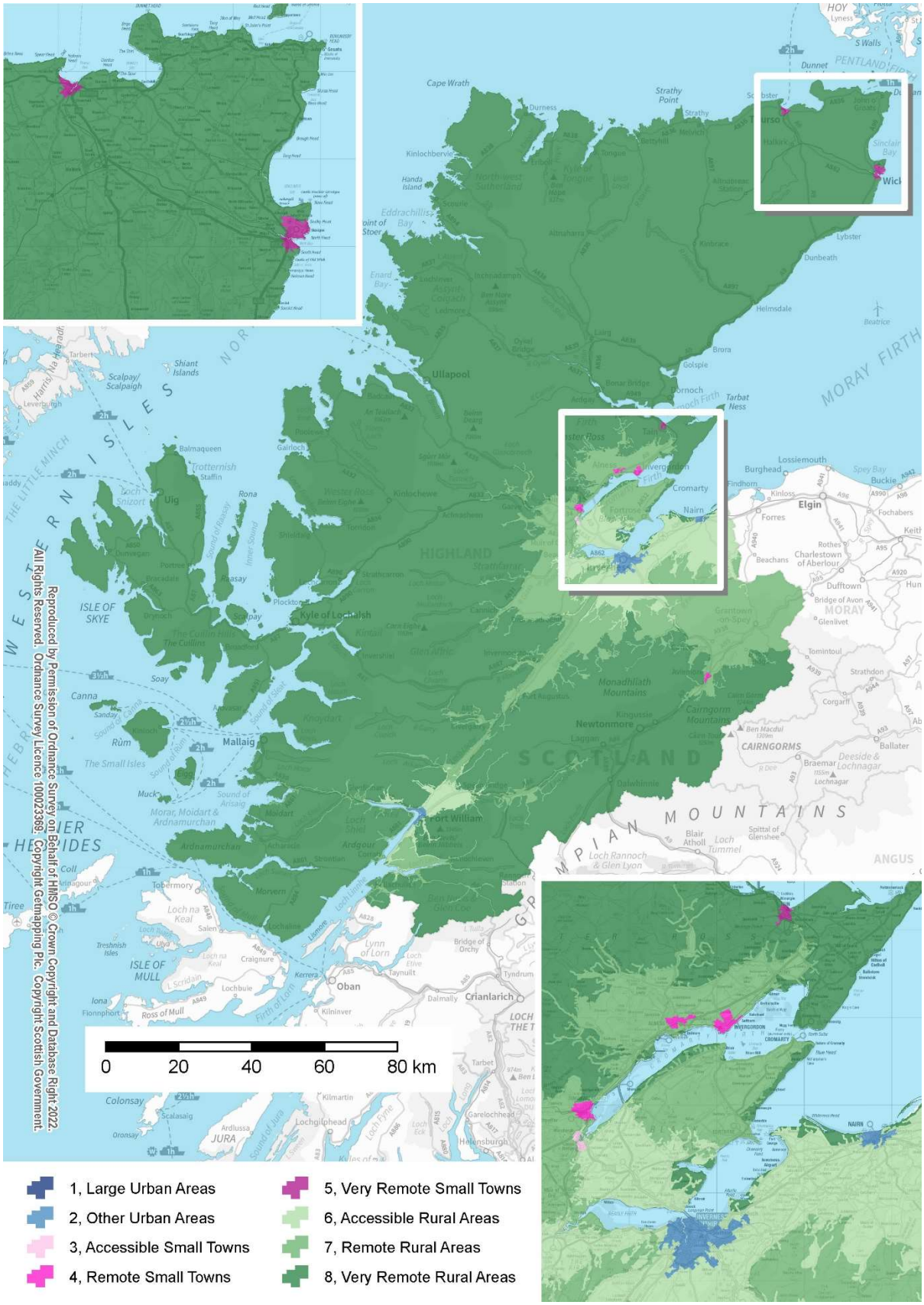

Figure 14: Urban Rural Classification of Highland

At first glance, the Highland region therefore appears to be largely rural, which is true when expressed in terms of land area, as shown in Figure 15, with 99.72% of the land defined as 'rural', and only 0.28% as urban or small town. It is worth noting, however, that in applying this nationally-defined methodology settlements that are considered relatively large in a Highland context, such as Dornoch, Golspie and Ullapool, are not identified.

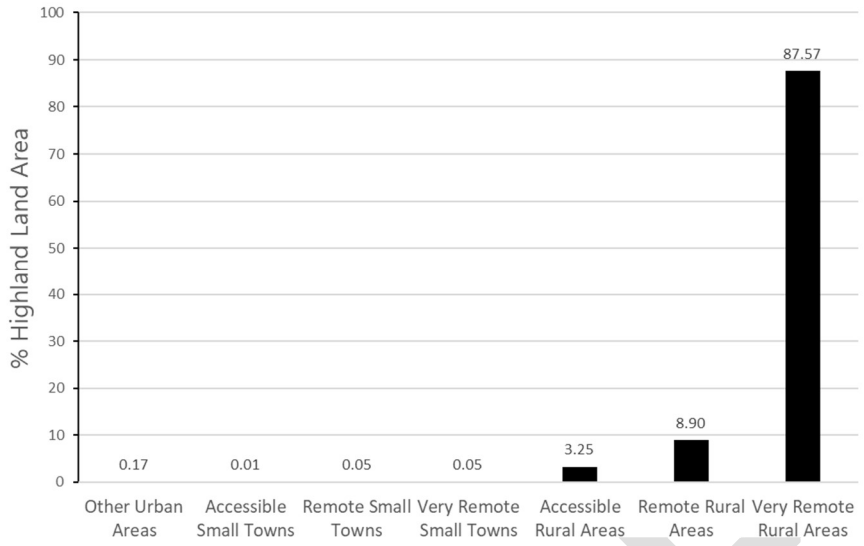

Figure 15: Highland Land Area by Urban Rural Classification

Figure 16 shows the proportion of Highland population living within each of the Urban Rural classes present in Highland. It shows that, whilst most of the Highland land area is classified as rural (Figure 15), around half of the people in Highland (51%) live within a city or town, and the rest (49%) in one of the rural classes. This suggests that Highland has an almost even split of its population being likely to have an urban or rural transport experience.

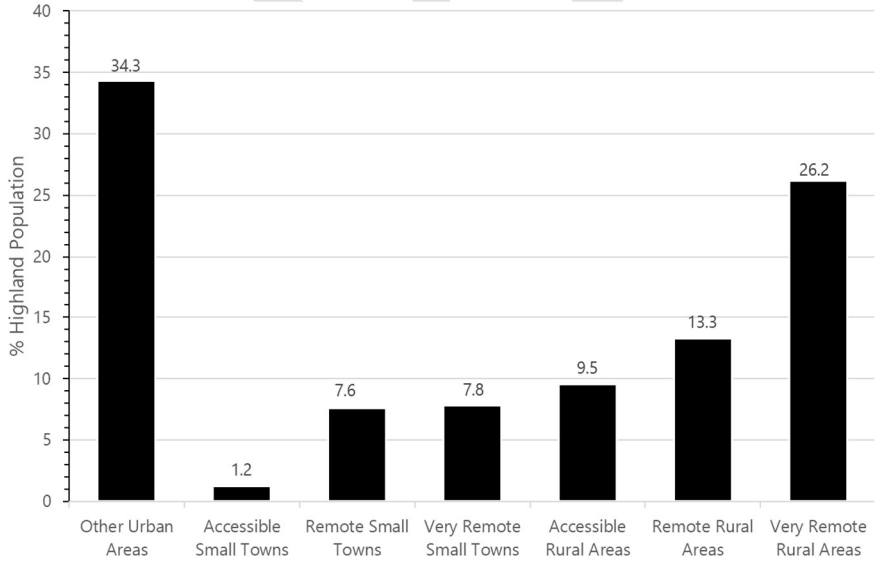

Figure 16: Highland Population by Urban Rural Classification

Whilst the 8-fold Urban Rural Classification is a useful measure in accessibility at a national scale, it is limited in reflecting differences at the regional scale, such as that experienced in Highland. Using Council Tax-paying residential properties as a proxy, Figure 17 shows the distribution of the population across Highland. It

illustrates that most people (75%) live in a settlement (as defined[13] at Local Authority level) or within 2 km of one[14].

[13] Settlements are defined as those places identified as 'Settlement Development Areas (SDA)' in the Council's adopted Area Local Development Plans.

[14] 2km is assumed to be a reasonable active travel distance for most people, however no assessment of quality of routes was included in this mapping exercise.

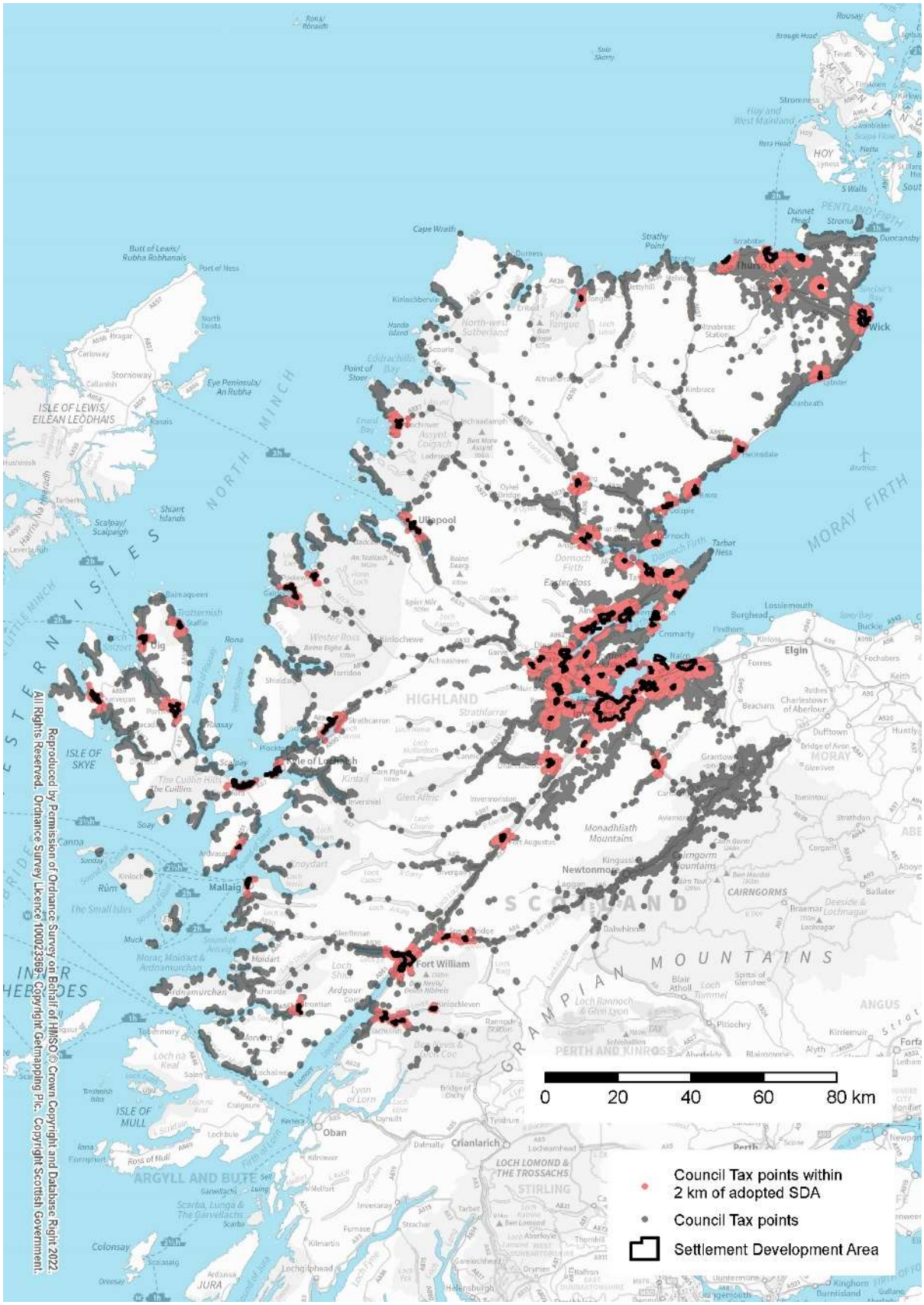

Figure 17: Highland population in proximity to settlements

igure 18 overlays this information about population distribution with the Urban Rural Classification. It highlights that there are concentrated clusters of people in and around settlements, or groups of settlement,

even in the most rural categories. This reflects data on travel to work illustrated in Figure 13, that people living in these areas are likely to access a range of services and facilities locally (i.e. without the daily need to travel to a settlement of 10,000 people). For example, in Caithness, despite the area being dominated by the Very Remote Rural category in the Urban Rural Classification, a significant range of services and facilities are accessible between the various settlements in the county, including primary, secondary, further and higher education, as well as leisure, retail, employment and healthcare facilities. This means it is likely that the Caithness sub-region of Highland functions discretely for everyday journeys, albeit with some requirement to access some specific services and facilities, not available locally, further afield in places such as Inverness. In contrast, the population clustered in the Inner Moray Firth Region, generally falling into classes Remote Rural; Accessible Rural, or some form of town, appears more likely to experience travel demand to larger (>10,000 people) settlements, such as Inverness, given its closer proximity, shorter journey times, and wider range of regularly available travel options (road, rail and for some places active travel). However, similar to Caithness, it is likely that, given the broad range of services and facilities available in the clusters of settlements within the wider Inner Moray Firth Area, outwith Inverness, that a lot more local, shorter trips are being made, or are possible, to serve everyday needs.

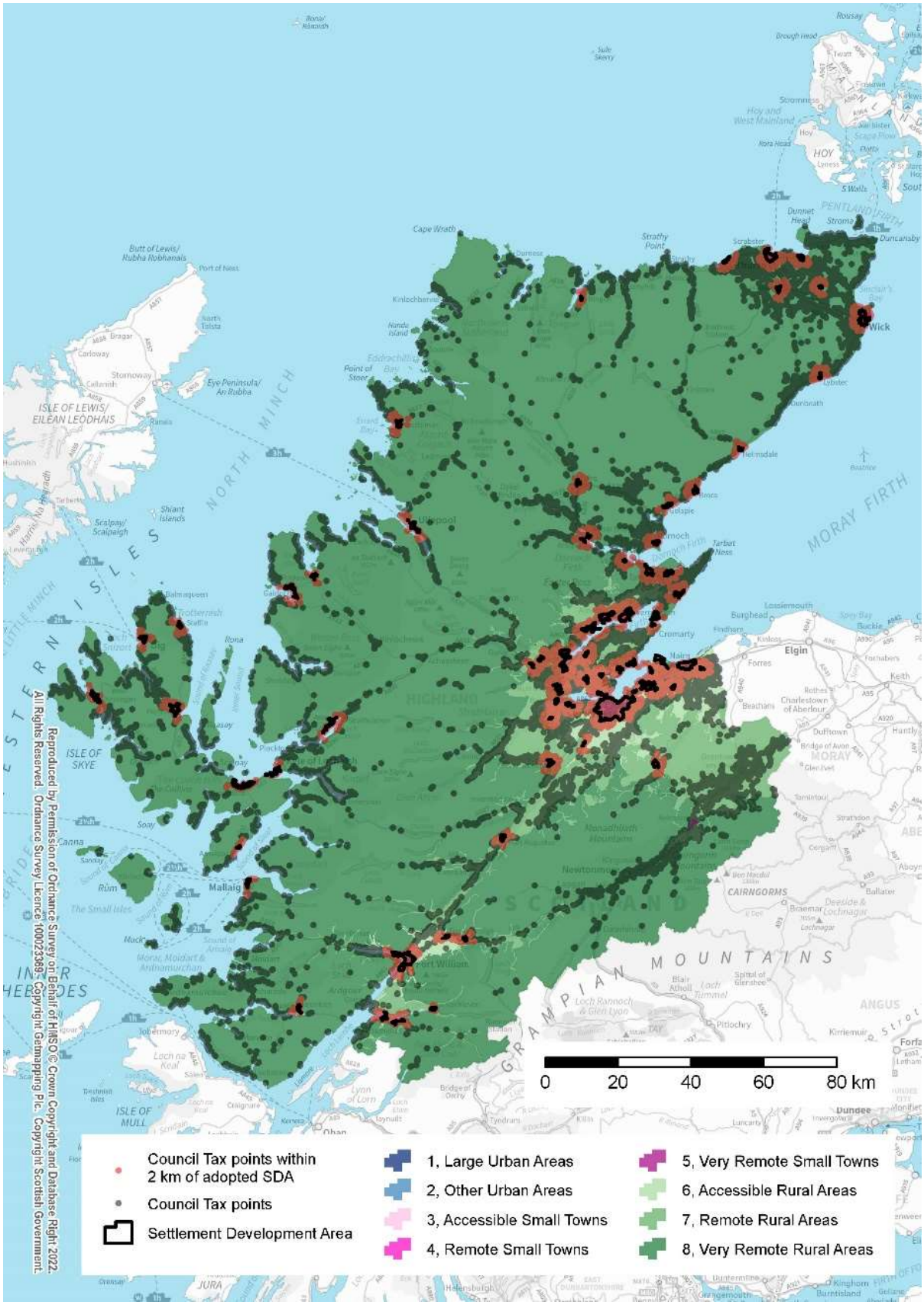

Figure 18: Highland population in proximity to settlement with Urban Rural Classification

TRANSPORT AND PLANNING

Land use and transport planning are closely linked. NPF4, which has just come in to force, points clearly to the opportunities for new developments to enhance the connectivity, quality and density of the active travel network and to normalise designs which are not car-centric and which support active everyday journeys and place-making. Such designs also reduce wear and tear on roads and potentially have a lower land take for transport infrastructure. This was recognised as an opportunity and a priority in the last Local Transport Strategy however as pointed out in its evaluation (Appendix 3) the last decade has seen rather the opposite: new developments have tended to induce demand for car travel rather than reduce it.

In particular our retail centres are facing significant challenges including the steady shift to online shopping, changes in working patterns post-covid and the economic downturn. The Scottish Government's response to the Town Centre Action Plan[15][16] recognises the need for:

> "[…] simple, encouraging and pro-active planning policy in support of town centres. This approach fits with our wider programme of modernisation around Scotland's planning system.Our intention is to ensure that planning policy is efficient, inclusive, fit for purpose and sustainable to enable action for our town centres."

Meeting our objectives as outlined above requires a significant shift to developments which in location, form, scale and density support the cultural, social and economic regeneration of the centres of our communities. What we require of developers will need to change to build and support this "new normal".

TRANSPORT IN HIGHLAND

The previous section discussed the idea that there are discrete sub-regions of Highland. This is reflected in the observed travel patterns across Highland, and also highlights the variations in types of transport available in different parts of this large area. This section discusses these concepts by travel mode. The 2011 Census results provide a measure of the main travel patterns occurring, Figure 19 provides a simple overview of the patterns observed, with higher numbers of people travelling shown in thick, bright coloured lines and lower numbers as dotted lines; detailed maps for each settlement are included at Appendix 1.

[15] Town Centre Action Plan: Scottish Government response - gov.scot (www.gov.scot)

[16] 20% reduction in car km by 2030 | Transport Scotland

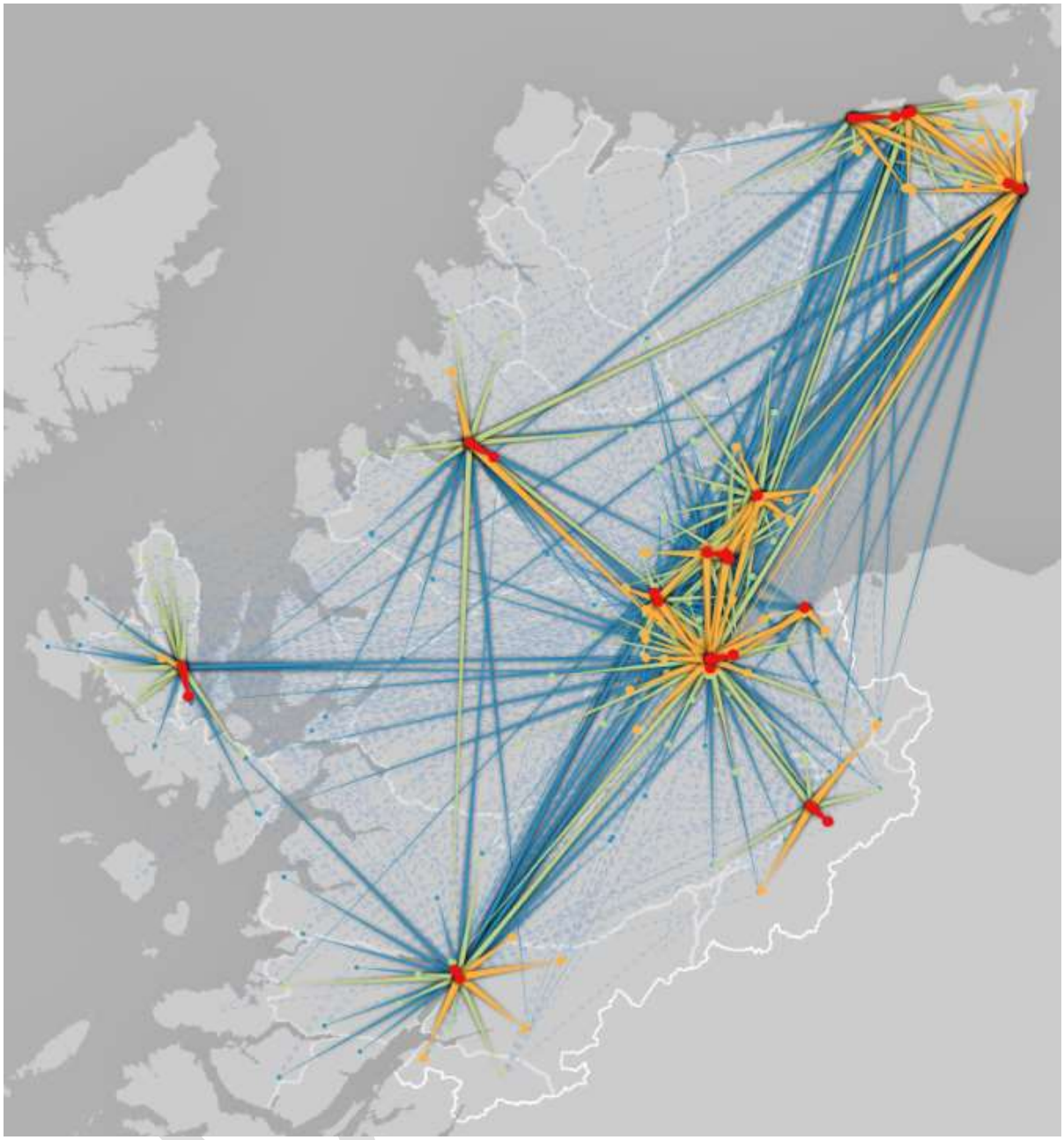

Figure 19: Composite illustration of travel patterns in Highland (2011 Census)

These data confirm both that, at the last Census, the majority of people in Highland tended to travel shorter distances from where they live to where they work, but also that there are people making trips to the larger settlements from all parts of Highland. It is important to highlight that these assumptions require to be checked when the 2022 Census results are made available.

The economy is a key driver of transport needs for the region for both workers and the movement of goods and materials. Business Register and Employment (BRES) data is presented in Figure 20 to illustrate the economy of Highland, based on employment. It shows the most dominant sectors are Healthcare (19,700 jobs), Retail (16,000), Tourism (Accommodation & food Services) (11,500), and Education (8,900). It is reasonable to therefore assume that most employment in Highland is situated within the main centres of population and services.

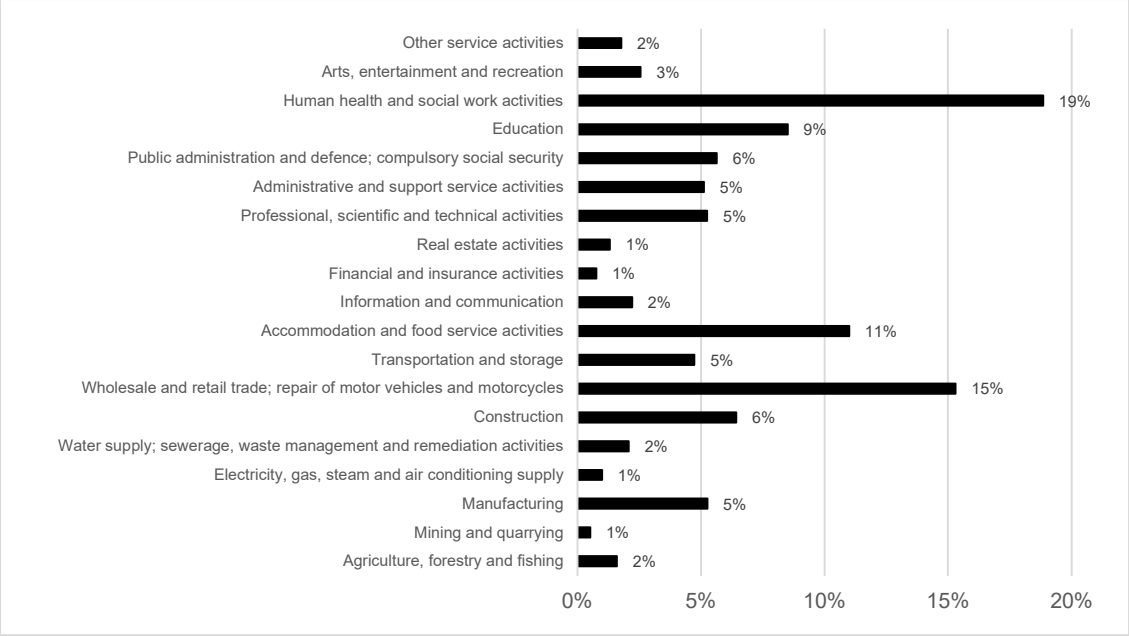

Figure 20: The economy of the Highland region (Source BRES, adapted from HITRANS RTS Case for Change 2023)

The Travel to Work Areas that contain the greatest share of jobs and population across the HITRANS region are shown in Figure 21, which highlights the dominance of Inverness. Other significant locations include Alness and Invergordon and Fort William, however, these areas represent only 13% and 15% of the jobs located in Inverness, respectively, and only 19% and 18% of the population, respectively. Research for the HITRANS RTS Case for Change Report 2023, based on the 2011 Census, showed that a minority of workers (24%) in the Inverness Travel to Work area commuted in from other areas, with the majority either living and working in the area, working from home, or working from no fixed location. This means that in the most populated part of Highland, where the greatest number of jobs are located, a majority of workers did not require to travel longer distances, or travelled no distance at all, highlighting the potential for this region in particular to have strong potential for modal shift.

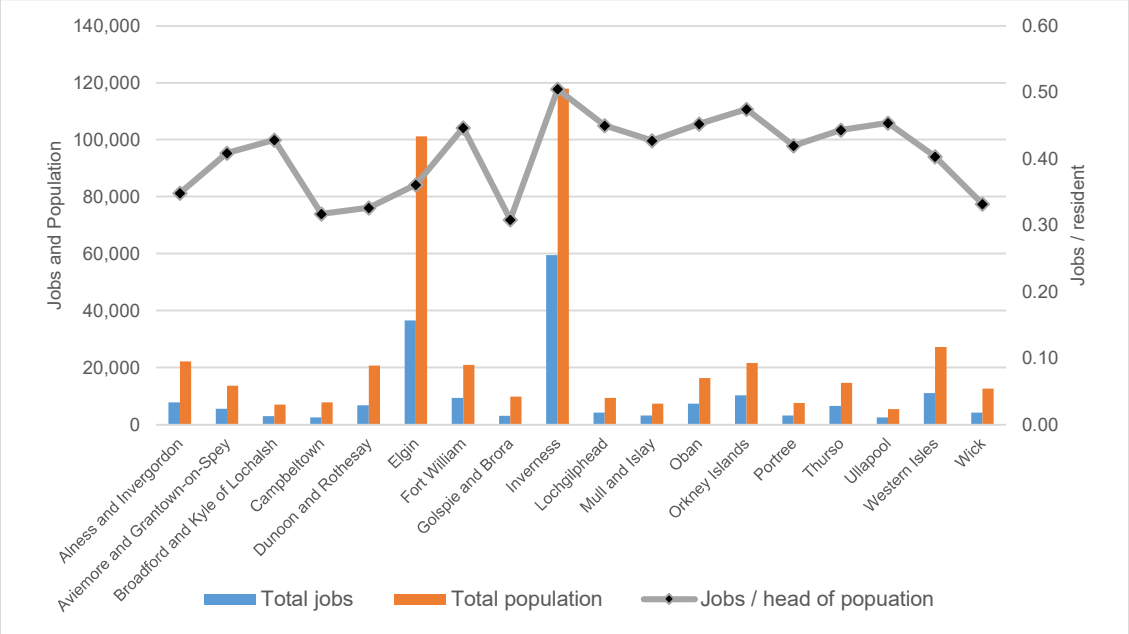

Figure 21: Jobs per capita by Travel to Work Areas in HITRANS region (Adapted from RTS Case for Change 2023)

Figure 22 shows the travel mode share for Highland, highlighting the dominance of car-based travel as well as a relatively high proportion of people walking, and working from home. As mentioned above, these patterns can now be considered historic and require to be tested, given the changes that have occurred in infrastructure and policy since the last Census.

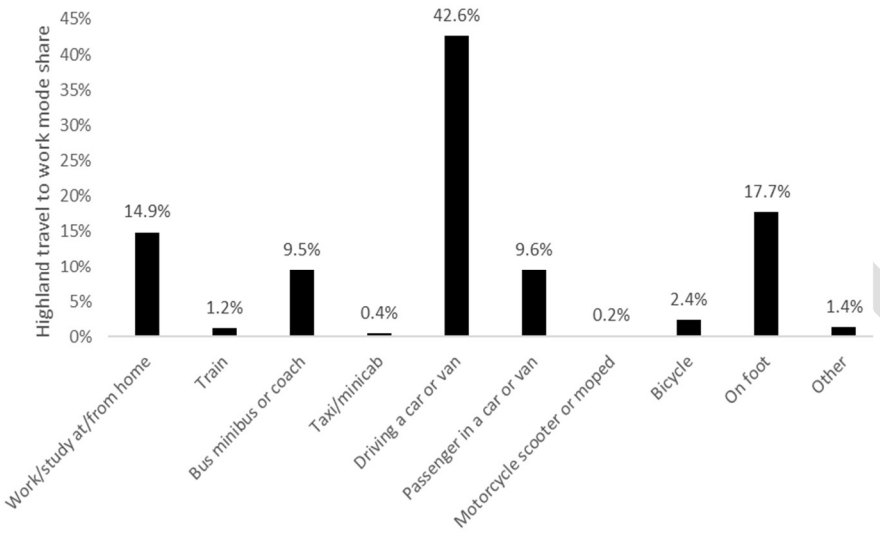

Figure 22: Travel to work mode share in Highland (2011 Census)

Across Scotland there is a growing trend towards working from home, as illustrated in Figure 23:

Figure 23: Percentage of employed or self-employed adults who are working from home 1999 - 2018[17]

From the Scottish Households Survey 2019[18], that is, pre-pandemic, this had increased to 25% and it is possible that this will have further increased post-pandemic. This may open up some opportunities for working people

[17] 4. Personal Travel | Transport Scotland

[18] Transport and Travel in Scotland 2019: Results from the Scottish Household Survey | Transport Scotland

to live in more rural areas of Highland, adding to community vibrancy and resilience. However despite this drop in commuting, both overall vehicle miles and vehicle ownership have increased[19], indicating significant shifts in travel behaviour. One interpretation is that people are driving more for leisure at the weekends, having been working from home all week, reflecting the high fixed costs of car ownership.

Travel to work mode share in Highland for those not working from home showed 16% walking, 67% car driver, 4% passenger in car or van, bike 8%, bus 3% and rail 2%.

For pupils travelling to school the SHHS 2019 for Highland gives the usual modes as 40% walking, 24% car or van, 0% bike, 33% bus and 3% other which will include some pupils who travel by taxi.

Trends identified in HITRANS' Draft Case for Change, from analysis of SHHS data between 2012 and 2019 for the HITRANS area, include:

- **Commuting to work:** an increase in car use and active travel, and a reduction in public transport usage
- **Place of work:** an increase in working from home
- **Travel to school:** a reduction in walking and bus use and an increase in car-based travel
- **Main mode of travel:** an increase in car use and a reduction across all other modes
- **Car availability:** an increase in the proportion of households with two or more cars and a reduction in zero-car households
- **Car use:** an increase in car use, vehicle ownership and driving licence holding
- **Bicycles:** a small increase in rates of bicycle ownership
- **Walking:** a reduction in walking as a means of transport but an increase in walking for leisure
- **Use of buses and trains:** a reduction in bus and train use
- **Satisfaction with public transport:** a reduction in levels of satisfaction with public transport
- **Concessionary fares:** an increase in the proportion of people with a concessionary fares pass but some reduction in usage amongst holders
- **Distance travelled:** an increase in the distance travelled per person

As the HITRANS' Case for Change points out, most of these trends are counter to the desired trends from national policy commitments and indeed indicate worsening inequalities and worsening travel independence.

The patterns of settlement and travel to work behaviour are reflected in the distribution of healthcare facilities in Highland, illustrated in Figure 24. Whilst a range of local health services are distributed across Highland, Inverness remains a significant centre for specialist services. This is likely to be increasingly the case, with development of additional NHS Highland facilities in the city, such as the National Treatment Centre at Inverness Campus, which will offer specialist Orthopaedic and Opthamology services for the whole country. Again, the city has a unique role serving everyone in Highland, making it more important to access and move within for all Highland communities, in contrast to other larger places in the region. Health and social care cannot be delivered without travel: for staff, for patients, for visitors. The Mobility and Access Committee Scotland (MACS) recommend that transport should be an integral part of the care pathway.

[19] Summary Transport Statistics | Transport Scotland

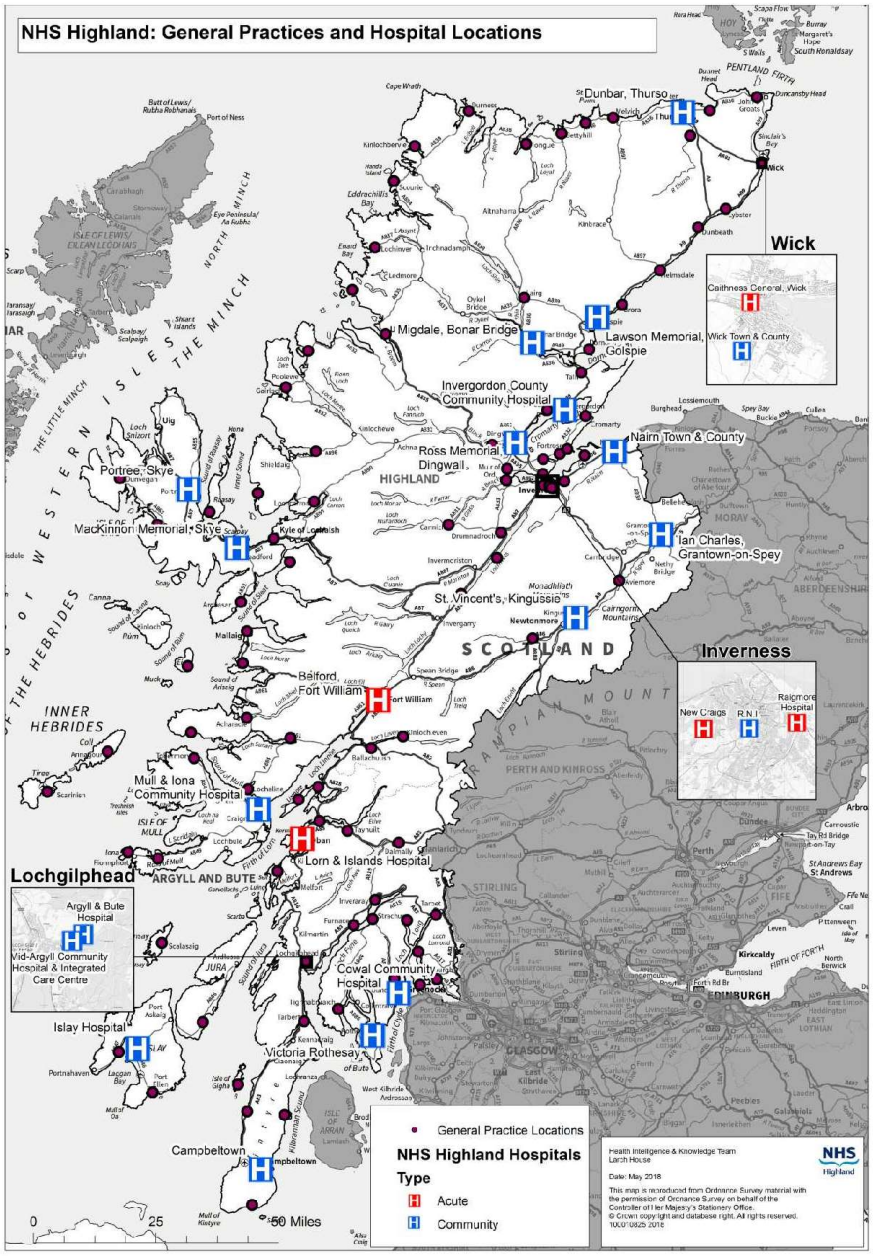

Figure 24: GP Practices and Hospitals in Highland (NHS Highland, from RTS Case for Change 2023)

The Scottish Government's Rural Scotland – Key Facts report 2021[20] looks at modal shift for adults travelling to work / education by 3-fold Urban – Rural Category (URC) (Figure 25). People in rural areas are more likely to drive and less likely to take public transport than in the rest of Scotland. Somewhat surprisingly the proportion of adults who walk to work / education is 14% in remote rural areas, around the same as in the rest of Scotland. In accessible rural areas only 6% of adults walk to work/education. This probably reflects the limitations of the categorisation at regional levels with locally-significant settlements such as Dornoch being classed as "Remote Rural".

[20] Services and Lifestyle - Rural Scotland Key Facts 2021 - gov.scot (www.gov.scot)

	Remote Rural	Accessible Rural	Rest of Scotland
Walking	14%	6%	13%
Driver of a car or van	75%	82%	60%
Passenger in a car or van	3%	4%	5%
Bicycle	1%	1%	3%
Bus (ordinary or works)	3%	2%	11%
Rail	1%	4%	6%
Other	2%	2%	2%
Total	100%	100%	100%
Base	350	410	3,290

Figure 25 How adults usually get to work / education by 3-Fold URC, 2019

WALKING, WHEELING AND CYCLING

Achieving modal shift from car-based travel to walking / wheeling / cycling and public transport is a fundamental of national and local policy (see Policy Review below), with current trends as outlined above showing that this shift is not happening in line with targets.

Walking, wheeling and cycling are essential components of public transport trips and as such can help unlock further modal shift, if the infrastructure is of good quality. These "mixed-mode" trips are a crucial part of the transport mix. This is particularly true of those who use wheelchairs, mobility scooters and other mobility aids whose numbers will increase with Highland's ageing population.

It is important to note re wheeling that improving walking, wheeling and cycling infrastructure will benefit many people holding other protected characteristics. For example, having more people walking and cycling in public spaces improves social safety which will benefit those who feel vulnerable due to their sex or their race; better physical accessibility will improve the transport independence of the young, the elderly, parents with pushchairs or with young children.

Defining a suitable distance for walking and cycling is complex. Within a settlement, just 200m can be too far if it is along a narrow pavement where there are no dropped kerbs, pavement parking, high traffic speeds / volumes and broken paving. In a rural area, 10km along a traffic-free well maintained cycle path on a bike or electric bike can be accessible to many.

Funding for active travel in Scotland is at record level; the Programme for Government commits to a further increase in spending on active travel to at least £320 million, or 10% of the transport budget, by 2024/5. To put that in context, the active travel budget in 2017/18 was £39 million.

Walking, cycling and wheeling development is an excellent financial investment. A 2019 evidence review by Sustrans[21] found that road projects produce returns of £3 to £5 for every £1 spent, whereas walking and cycling schemes produce returns of £4 to £19 for every £1 spent. In addition, many road schemes do not

[21] common-misconceptions-of-active-travel-investment.pdf (sustrans.org.uk)

complete on time and within budget, with value for money forecasts lower than expected and induced demand for driving cancelling out planned benefits.

The main economic benefits of active travel schemes come from improved travel efficiencies and physical / mental health benefits. Non monetisable benefits include reduced community severance, improved social connections and safety, and improved accessibility.

In terms of retail, research for the Department of Transport[22] found that:

- Cyclists visit local shops more regularly, spending more than users of most other modes of transport
- Per square metre, cycle parking delivers 5 times higher retail spend than the same area of car parking
- A compact town optimised for walking and cycling can have a "retail density" (spend per square metre) 2.5 times higher than a typical urban centre
- Public realm improvements, including those that cater for cycling, have been shown to result in increased trade at local businesses.

The concept of 20 minute neighbourhoods appears in the National Planning Framework 4 (see Policy Review below). As discussed above, most Highland residents live in a settlement where at least some goods and services could be reached within a 20 minute walk or cycle.

HITRANS' 2021 Living Well Locally tool calculates a percentage score for places are across the HITRANS area for how close they are to being 20 minute neighbourhoods, giving both 800m for 20 minutes' walking and 3km for 20 minutes' cycling along with a basic needs category. The accompanying Tool Manual and Methodology Booklet gives background information and recommendations for how it could be used.

Looking at Highland as a whole, the overall score is 50.5%. For Inverness the score rises to 72% and for the IMF area it is 61%. That is to say, outwith the IMF area our small communities and rural areas score significantly under 50% on the 20MN assessment.

A 2022 report for HITRANS / Sustrans, Living Well Locally[23], recommends that for rural areas the discussion needs a shift in understanding and communication to include public transport and ebikes rather than simply walking and cycling, and to involve communities closely in planning.

Being active for everyday journeys helps to combat obesity and supports good physical and mental health. According to the Scottish Health Survey (Scottish Government, 2018) in 2017, 26% of children aged 2-15 were at risk of being overweight, including 13% at risk of obesity. In addition the proportion of children in the healthy weight range decreased by age, from 73% of children aged 2-6 to 64% of children aged 12-15. This pattern was largely driven by girls, for whom prevalence of healthy weight decreased significantly from 77% for those aged 2-6, to 60% for those aged 12-15 (Scottish Government, 2019).[24]

It is generally the case that interventions to support active travel lead first to an increase in walking with modal shift to cycling taking longer to arise.

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[22] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509587/value-of-cycling.pdf

[23] 20 Minute Neighbourhoods in the Highlands and Islands - nick wright planning

[24] 2. Key issues and evidence | Transport Scotland

The Scottish Government's Equality Evidence Finder[25] 2020 explores the relationship between household income and walking / cycling for transport / leisure:

The relationship between walking for transport and household income is not clear, although those on the highest incomes were more likely to do so:

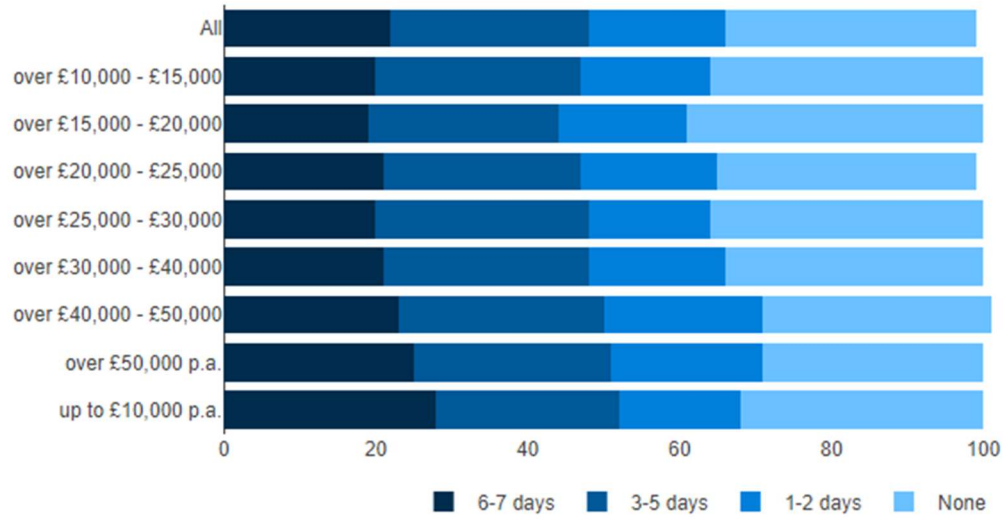

Figure 26 Walking for transport and household income

Walking for leisure is lowest amongst those on the three lowest income bands, perhaps reflecting the point above that poverty suppresses leisure activities and therefore travel:

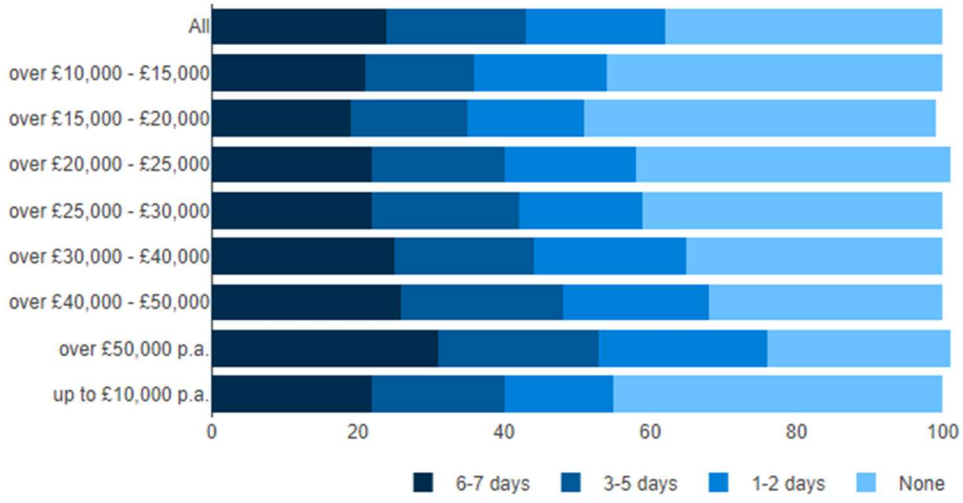

Figure 27 Walking for leisure and household income

[25] https://scotland.shinyapps.io/sg-equality-evidence-finder/

In terms of cycling it is clear that the higher the household income, the higher the frequency of cycling for transport, and that those on the lowest incomes cycle least. Again this could reflect suppression of travel:

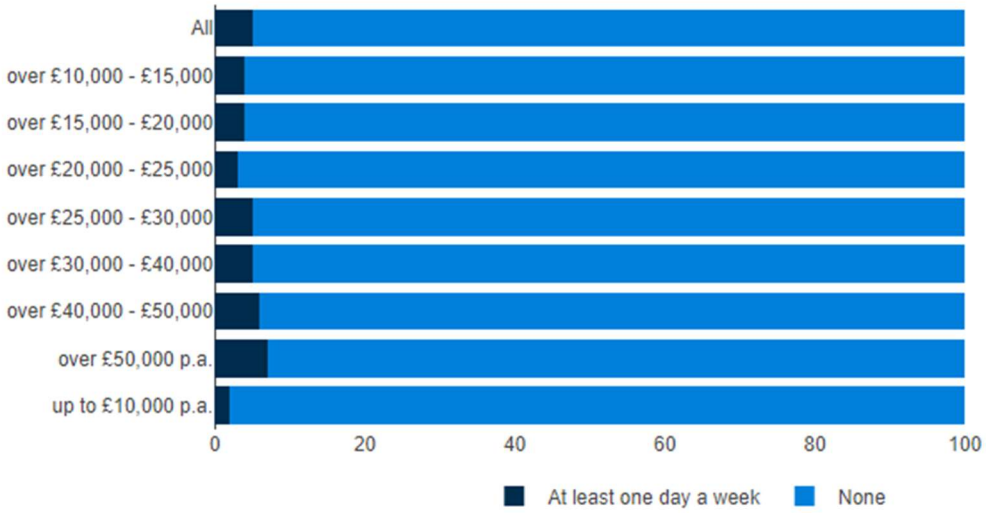

Figure 28 Cycling for transport and household income

For cycling for leisure the "cycling gap" between those on the highest and lowest incomes is even more pronounced:

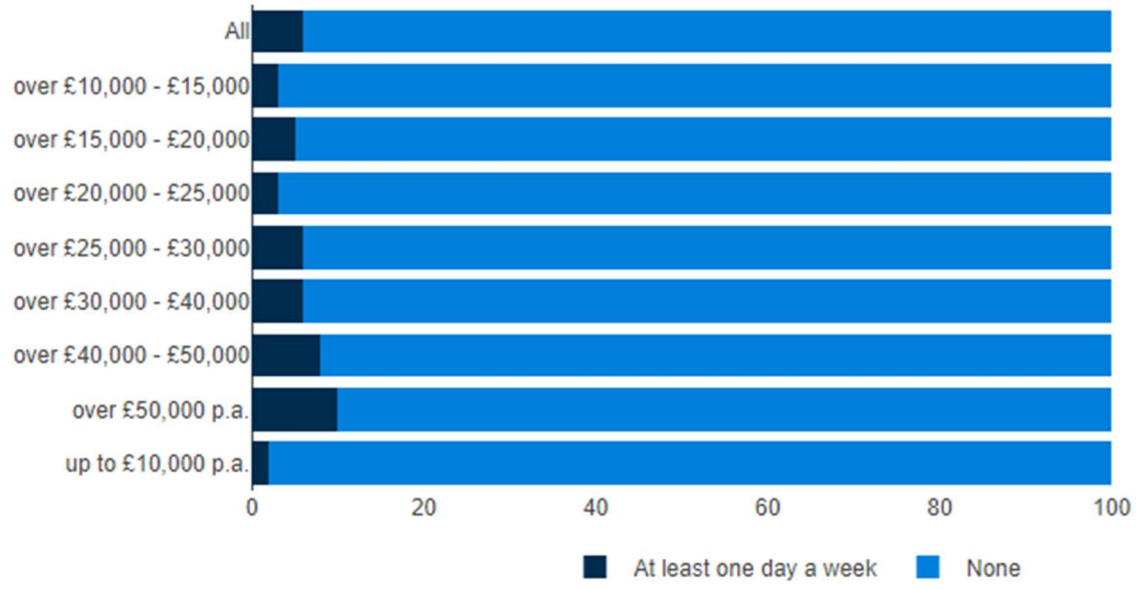

Figure 29 Cycling for leisure and household income

Linking this to "Deprivation" above, and looking ahead to challenging economic circumstances, modal shift to walking and cycling has the potential to reduce transport poverty and to improve wellbeing for those on the lowest incomes, with the expectation that modal share would also increase in other income groups.

Across Scotland, measures to reallocate public space towards walking, wheeling and cycling during the pandemic led to a surge in walking and cycling, supported by the large drop in motorised traffic making the streets more attractive and safer. This surge has not quite been maintained, while vehicle miles are back up to pre-pandemic levels despite many people still working from home, as noted above.

Electric bikes (ebikes) offer huge potential for replacement of vehicle trips including by taxi. They enable cycling over longer distances and hilly terrain and reduce the slowing effect of headwinds. Driven by a rapid increase in sales, ebikes are becoming cheaper, lighter and have a longer range. The Scottish Government has introduced various schemes to support uptake such as The Energy Saving Trust's interest-free loan, projects to support disabled cyclists, fleet decarbonisation in workplace settings, and ecargo bike projects. Ebikes can be of particular use in rural areas.

Ecargo bikes, designed to carry children / luggage, have the potential to replace car and van journeys for everyday journeys such as last-mile deliveries, the school run and routine work trips where not much equipment is needed to be carried. Note that some existing cycling infrastructure is not suitable for ecargo bikes because of barriers, tight corners and narrow paths; the necessary improvements also open routes to adapted bikes, tandems and wheelchairs.

Walking and cycling routes need to be designed to be safe, comfortable, direct, attractive and coherent (i.e. be part of a wider strategic network). Developments should follow Transport Scotland's Cycling by Design[26] standards. In areas of low population density however, urban design standards may not be appropriate or affordable and reasonable adjustments will be needed.

A key barrier to modal shift is a perception or experience of poor safety, both social and from sharing space with other modes particularly traffic. New infrastructure should meet Cycling by Design standards but again this can raise challenges in rural areas where distances are long and numbers are relatively low.

There are various workstreams feeding into Active Travel Network planning for the region, giving a picture of how the network will develop from its current extent over the next 20 years:

- An evidence-based list of interventions within 10 communities across Highland, based on their existing Active Travel Masterplans;
- An evidence-based list of interventions between communities in the IMF area (Figure 29);
- Improvement and expansion of the current National Cycle Network, working with Sustrans;
- The current Core Path Network;
- Quiet Routes, connecting rural communities on minor roads: working with HITRANS, five pilot routes are being developed between small but locally significant settlements;
- Implementation of 20mph limits within settlements across Highland (see Road Safety below);
- Current location of Hi-Bikes schemes (Fort William and Inverness);
- Cognisance of the potential of key developments to add to the active travel network;
- Integration of walking, cycling and wheeling with public transport and ferries.

There are Active Travel Masterplans for Alness and Invergordon, Dingwall, Fort William, Inverness, Nairn, Portree, Tain, Thurso and Wick. They are available to download from the Council's website.

The IMFLDP's Outcomes for Connectivity states:

> "It will be easy to move around and between settlements in the Inner Moray Firth area. Walking and cycling will be the logical choice for most day to day trips, with longer journeys made using an efficient, reliable public transport system and, in rural areas, shared transport and electric vehicles. Sustainable regional, national and global connections will be available from modern bus and rail stations, harbours and Inverness Airport."

Note that regular planned and funded maintenance of the existing network and of new interventions is a crucial part of this work, in line with the Investment Hierarchy as referenced above. Cycleways and footways

[26] https://www.transport.gov.scot/media/50323/cycling-by-design-update-2019-final-document-15-september-2021-1.pdf

alongside adopted roads and remote cycle paths and footpaths which are not adopted will need different systems. This work will need capacity for regular surveying and planning of seasonal work such as cutting back vegetation and winter maintenance as well as less frequent surface maintenance.

34% of Highland's population lives in the IMF area with settlements relatively closer together than in the rest of the region, with a higher level of between-settlement dependency for access to services, facilities and employment. Active and sustainable modes could therefore potentially provide a logical choice for many everyday journeys in the area.

The Inner Moray Firth Active Travel Network plan sets out how to deliver phased improvements in active travel connectivity, if funding can be secured, and following a robust process of engagement, consultation and political scrutiny:

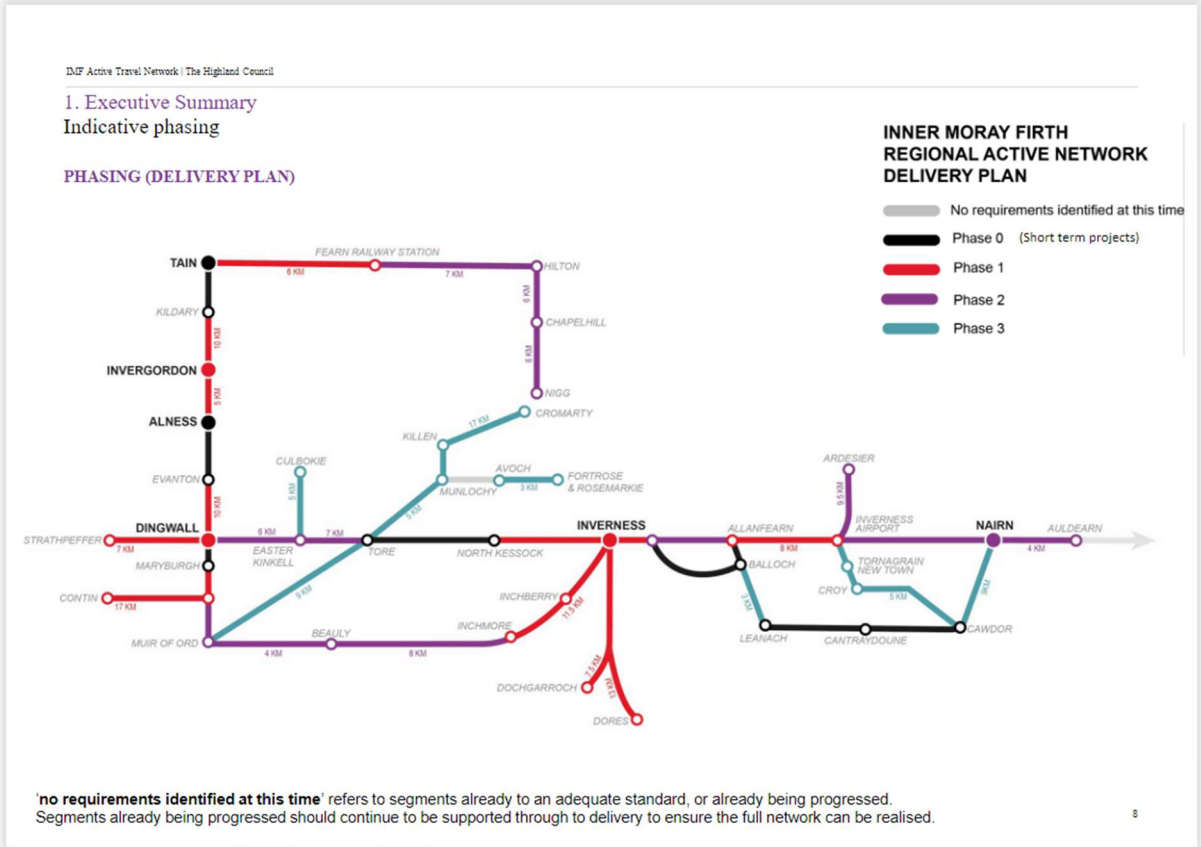

Figure 30 IMF Active Travel Network Phased Delivery Plan

Data from the Walking and Cycling Index Inverness 2021 illustrates the potential for modal shift: each year 13.7 million journeys of up to three miles are driven in the city with residents expressing strong support for further investment in walking, wheeling, cycling and public transport. This compares with findings from across Europe[27] that three-quarters of respondents expressed support for keeping traffic restrictions introduced during covid. Current levels of walking and wheeling save the NHS in Inverness the equivalent of 30,000 GP appointments per year. Walking and cycling frees up road space for essential drivers; in Inverness 13,000 return walking trips are made daily which reduces traffic to the equivalent of a traffic jam from Inverness to Elgin.

[27] Life after COVID: Europeans want to keep their cities car-free – POLITICO

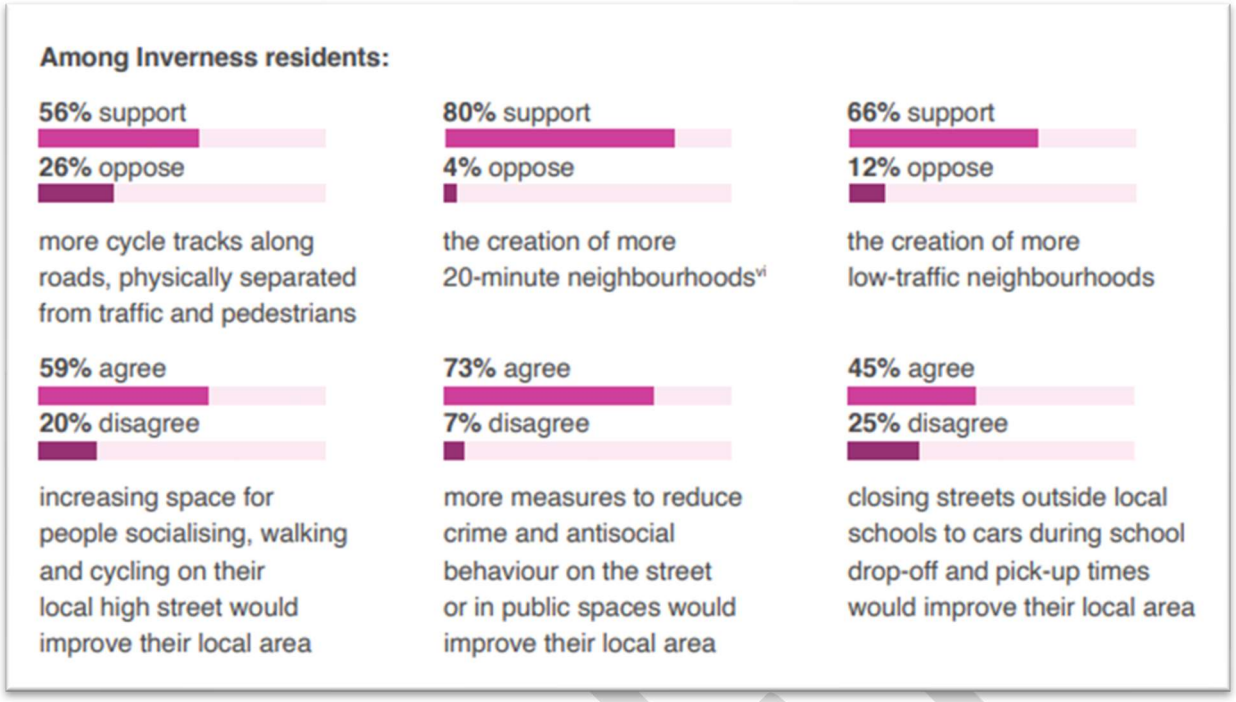

Figure 31 Support for walking and cycling measures, WACI Inverness 2021

Many Highland residents regularly travel to Inverness to access goods and services. Improved walking and cycling routes within the city, along with the provision of Hi-Bikes and public transport, could encourage people to travel to Inverness by public transport or to drive and then leave their car in the one place, reducing within-city vehicle trips.

With three quarters of the Highland population living in a settlement again walking and cycling could be practical for many everyday journeys within these communities.

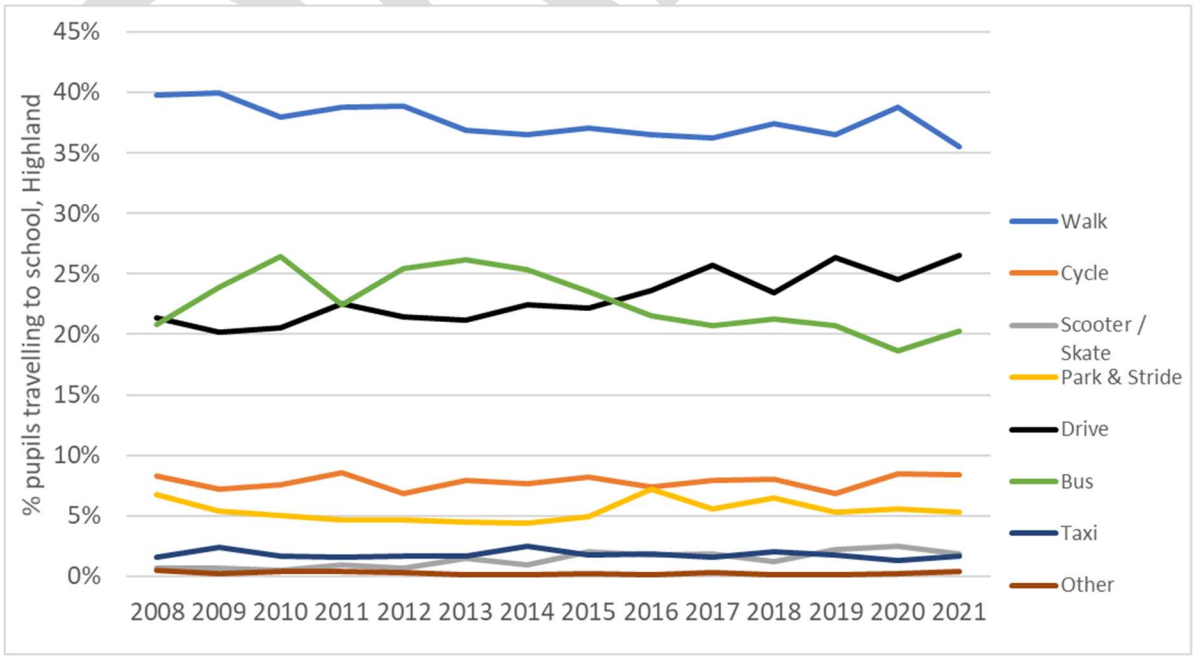

Figure 32 Hands Up Scotland Survey travel to school modal share

Travel to school mode as recorded by the annual Hands Up Scotland Survey, in Figure 21 above, shows a steady decline in walking and a steady rise in travel by car. Cycling has remained low but steady as have the other modes. See also Road Safety below.

The Hi-Bike electric bike-share scheme was launched in Inverness in January 2021 followed by Fort William in May 2022. Both communities have seen uptake exceed expectations and no significant problems arise. The Inverness scheme expanded in 2022 from the initial three charging stations / 30 ebikes to six stations / 50 ebikes. Summer 2023 should see a total of 102 ebikes in the city across 12 stations. Fort William's currrent eight stations / 60 ebikes is expanding with another two stations in progress. Expansion plans include the addition of ecargo bikes to the fleet; these can carry three small children or a load of shopping.

Data indicates that single-use trips are most popular in the summer; this is likely due to visitors making use of the scheme. Shared ebike schemes are common in cities around the world and it is increasingly likely that visitors expect to find such a scheme in Inverness and are confident in the process of signing up and in using a shared ebike.

The busiest Inverness hub is at the Railway Station followed by the Campus and then the new facility in Hilton, which saw over 200 trips made in its first month of opening in November 2022, despite the winter weather. A comprehensive user survey is under way and will report back by the end of February 2023; this will aid understanding of the usage patterns of residents and visitors. For example it will be of interest to know the extent to which residents from elsewhere in Highland are using the Hi-Bikes to make cross-city trips for goods and services when visiting the city either by car or by public transport, and the potential this has to displace car journeys.

Currently the minimum age for accessing a Hi-Bike is 16 as it is for most bike-share schemes; consideration could be given to reducing this to 14 to improve transport independence for young people, supporting physical and mental wellbeing. This is particularly the case for young carers in families which do not have a car. Within Inverness car ownership is lower than elsewhere in the Highlands and although bus provision is better in the city than elsewhere it is by no means reliable or comprehensive.

Further expansion of the Hi-Bikes within Inverness and Fort William, and to other communities across Highland, should be considered. In particular there is potential to support the travel independence of non-drivers and to reduce pressure on household budgets from travel costs. Introducing Hi-Bike links between neighbouring communities where there are significan numbers of trips, for example Thurso and Wick, or Muir of Ord and Dingwall, could support significant modal shift but depends on the connecting infrastructure being safe and attractive. Further provision of Hi-Bikes at railway stations is likely to prove popular.

PUBLIC TRANSPORT

As highlighted above, travel, even within sub-regions, in Highland can involve distances greater than possible by active travel, on routes where factors such as weather and topography further decrease the attractiveness of active travel. The challenges of serving such a context mean that, in terms of addressing transport poverty and decarbonisation, public transport using buses remain an essential travel mode.

Every public transport journey involves another mode: walking, cycling ,wheeling, driving, liftsharing. Therefore, as noted above, improvements to walking and cycling infrastructure are key to increasing uptake of public transport.

The relative cost of public transport to the user has increased more quickly than the costs of car transport, and above the rate of inflation. Disabled people and those on lower incomes are further disadvantaged by this. Figure 32 below is from Transform Scotland's Fair Fares report[28]:

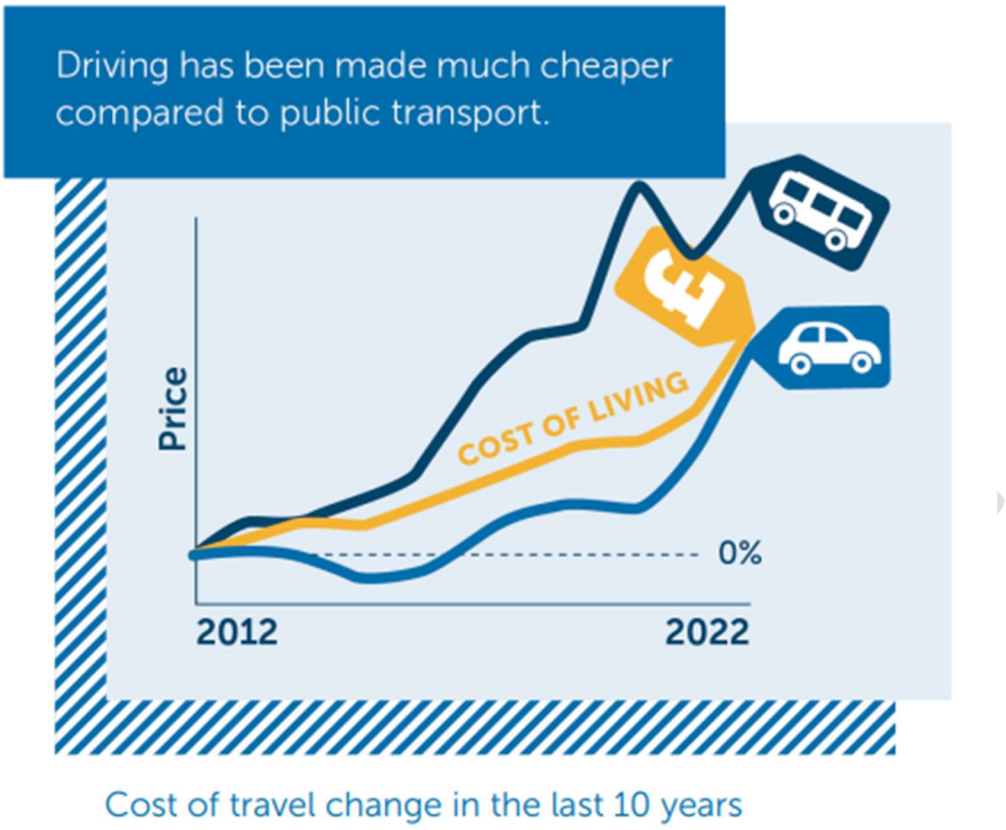

Figure 33: Transform Scotland Fair Fares report

As the Fair Fares report points out:

> "Prior to the pandemic, Scottish public transport was already struggling. The increased costs of running services were leading to higher passenger fares, with bus services in particular seeing a decline in patronage. The pandemic exacerbated these problems. Even as car travel recovered to at or above pre-pandemic levels, public transport patronage did not, leaving public transport operators much more dependant on public funding.
>
> Public transport operators are also faced with changing travel patterns and a cost-of-living crisis. Fewer people are travelling during peak hours. Operating costs for public transport are also rising, but raising ticket prices would put unacceptable strain on many people who already struggling to afford it."

Electrification has a key part to play in the decarbonisation of both bus and rail provision. Electrification can also improve reliability and reduce noise, which improves the passenger experience – key to increaseing uptake.

[28] https://transform.scot/wp-content/uploads/2022/12/Fair-Fares-report-Transform-Scotland-December-2022.pdf

BUS

National Transport Strategy recognises that bus patronage is declining and trends show that this pattern of decline is also true for the extent of services available. Figure 35 shows the general trend of decline in patronage since 2004/5. It illustrates that even before the negative impacts of Covid-19 on public transport were experienced, decline was being experienced. This is particularly problematic for Highland because lower patronage results in a negative pattern of further decline, illustrated in Figure 36.

Bus km served have fluctuated but, over this longer term, they remained stable until the Covid-19 pandemic occurred. Similar to other aspects of the transport context there is uncertainty over future trends. Changes include increased fuel costs, impacts and recovery from Covid-19, and public sector interventions being implemented to promote public transport, including: the Bus Partnership Fund with potential of up to £50M investment in bus priority for Highland; the expansion of concessionary travel to under-22s being introduced in 2022, and the Ministerial Bus Taskforce being established in August 2022 to support patronage recovery, address workforce issues and promote proactive communication and engagement with bus users. Likewise, investment in improvements to the bus fleet in certain areas, such as the electrification of the Inverness fleet, offer more attractive, higher quality experiences for the travelling public, as well as significantly reducing associated pollution.

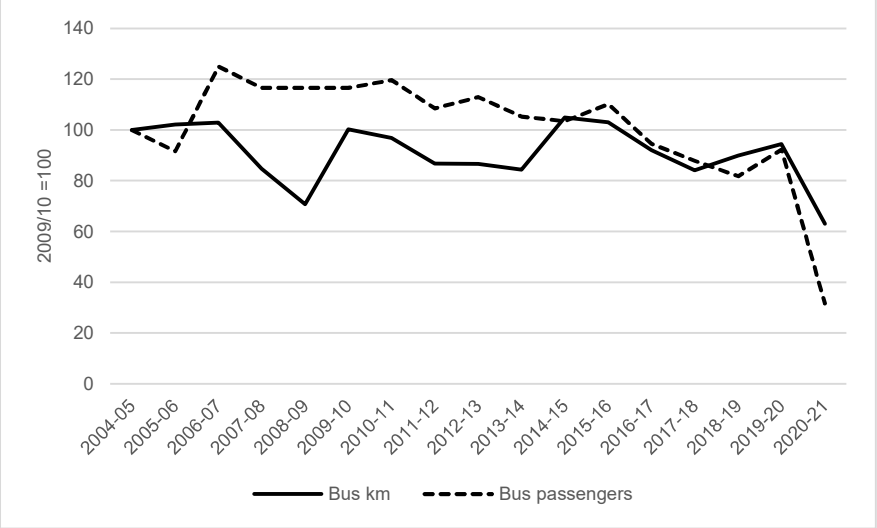

Figure 34: Bus kilometers and patronage in HITRANS area (adapted from HITRANS RTS Case for Change 2023)

Bus priority schemes are an important tool in improving reliability. This is because buses are delayed by congestion, particularly at peak traffic times. Over the last 50 years, bus journey times have increased by almost 50% in the more congested urban areas; there is a direct correlation between operating speeds and patronage whereby a 10% decrease in speeds reduces patronage by at least 10%[29]. In response to congestion, operators either have to provide more buses to maintain the desired service frequency, thereby increasing costs, or to reduce service frequency, thereby leading to fewer passengers. Congestion puts pressure on punctuality and reliability which can increase waiting time at bus stops; as well as being potentially uncomfortable this has particular implications for personal safety, because many people feel more vulnerable waiting at a bus stop than when actually travelling.

Figure 36 illustrates this Bus Circle of Decline:

[29] ttbusreport_digital-single-30aug.pdf (transporttimes.co.uk)

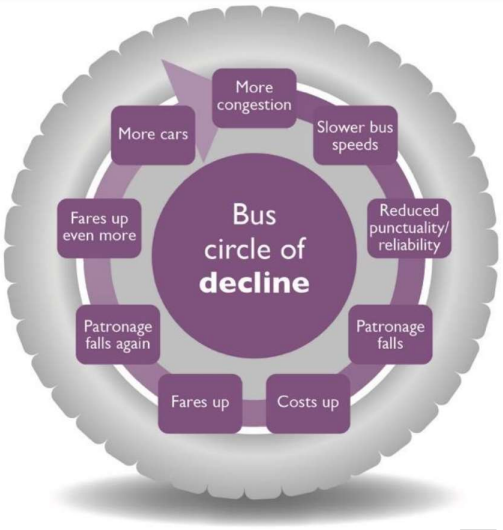

Figure 35: Bus Circle of Decline (Source: National Transport Strategy, Scottish Government)

According to research[30] carried out by KPMG for Greener Journeys in 2015, bus priority schemes can deliver up to £7 net economic benefit for every £1 invested. Bus use is more common amongst those on lower incomes (51% of those earning less than £10,000 p.a. and 50% of those earning between £10,000 p.a. and £15,000 p.a.) and those in the most deprived areas (49%)[31].

A well as being convenient for passengers, card payment and etickets reduce dwell times at bus stops, leading to reduced journey times and therefore to reduced costs. The introduction of this across the network is very welcome.

Bus Accessibility

The Scottish Access to Bus Indicator (SABI) scores the accessibility of bus services in each census data zone[32], providing a measure of bus accessibility. It is based on Traveline data of bus stop locations and bus frequency, ranking each data zone from least (score of 1) to most (score of 10) accessible. Figures 37, 38 and 39 show the weekday[33] SABI results for Highland [34]. Highland has been divided into three sub-areas for legibility purposes: Caithness and Sutherland, West Highland and Islands, and the Inner Moray Firth, including the Cairngorm National Park. The maps illustrate that 85% of the Highland population live in data zones with a SABI score of less than 5, meaning most people experience poor accessibility to bus in both urban and rural areas. Only 11% of the population benefit from a SABI score of 5 or more, and this is all concentrated within the Inverness area.

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[30] http://www.greenerjourneys.com/publication/an-economic-evaluation-of-local-bus-infrastructure-schemes/

[31] www.transport.gov.scot/publication/monitoring-and-evaluation-2019-baseline-report-may-2022-national-transport-strategy-nts2/reduces-inequalities/

[32] Data zones are small geographical areas that contain 500 to 1,000 people. They are smaller in urban areas and larger in rural areas due to population density. Further information on the SABI methodology is available from: https://statistics.gov.scot/data/bus-accessibilityFurther information on the SABI methodology is available from: https://statistics.gov.scot/data/bus-accessibility

[33] A comparison of Weekday and Weekend SABI scores showed minimal differences between scores.

[34] SABI Score is shown as a point location on Figures 37, 38 and 39 using the population-weighted centroid of each datazone as a proxy of where most people live.

Generally, the more urbanised parts of Highland display better bus accessibility, but this is still relative to poor accessibility across the region.

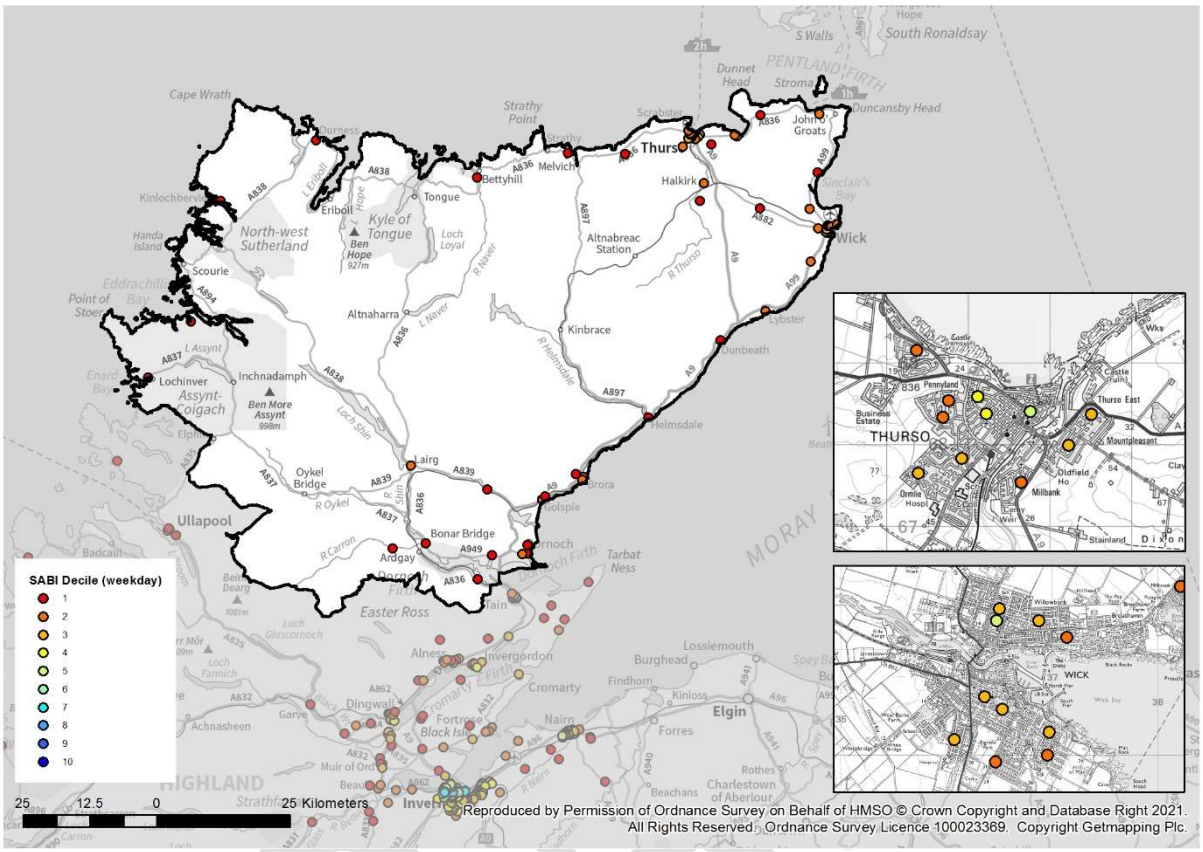

Figure 36: Scottish Access to Bus Indicator, Caithness and Sutherland

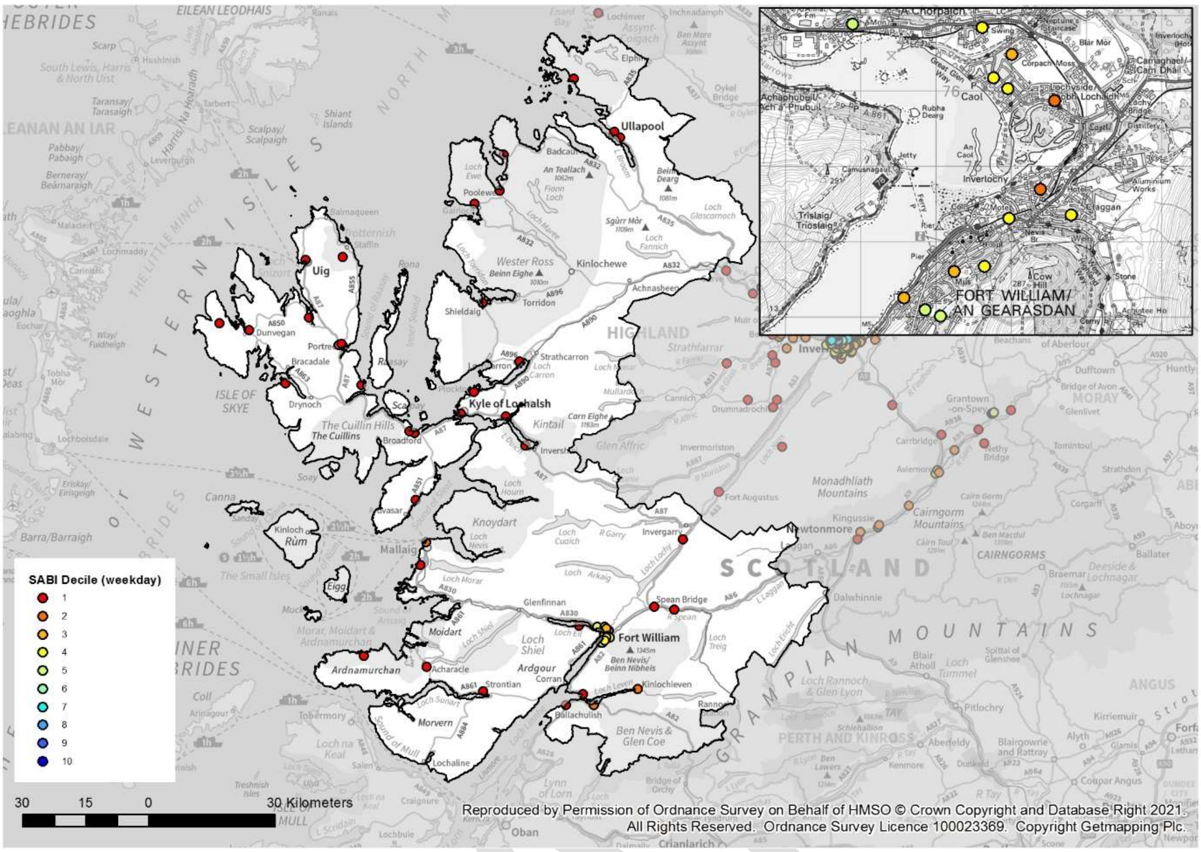

Figure 37: Scottish Access to Bus Indicator, West Highland and Islands

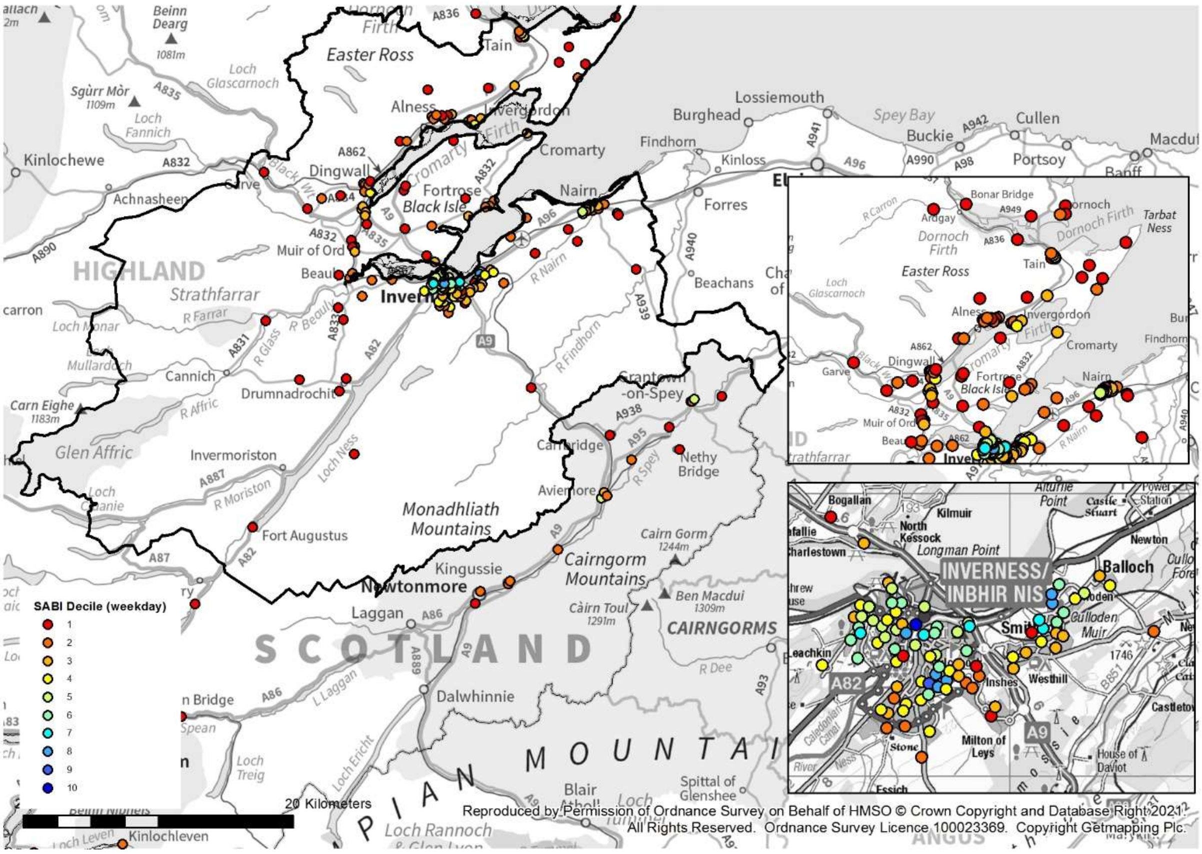

Figure 38: Scottish Access to Bus Indicator, Inner Moray Firth

These findings are reflected in work undertaken for the HITRANS Regional Transport Strategy, shown in Appendix 1, which highlight that outwith the Inner Moray Firth sub-region bus frequencies are generally low, and the last bus is relatively early. This means that public transport services do not operate over a long enough duration, or at a high enough frequency, to offer a practical alternative to travelling by private car. The section below discusses recent innovations in service delivery that help to address some of the shortcomings in public transport. Given the scale of the Highland region, there may be benefit in undertaking a more comprehensive approach to the network, with a first step being exploring the gaps in the network, and what opportunities may be available to fill them.

Bus Passenger Experience

Bus Passenger satisfaction is a useful indicator of how existing service users find the experience of travelling by bus. Data for the HITRANS region from 2016, Figure 40[35], illustrates generally a high level of satisfaction with bus services, with value for money being the least well performing. Since these data were captured services have changed, Covid-19 has impacted services, and new innovations have emerged. Therefore, it is important that more up to date evidence for Highland is collected to inform policy development.

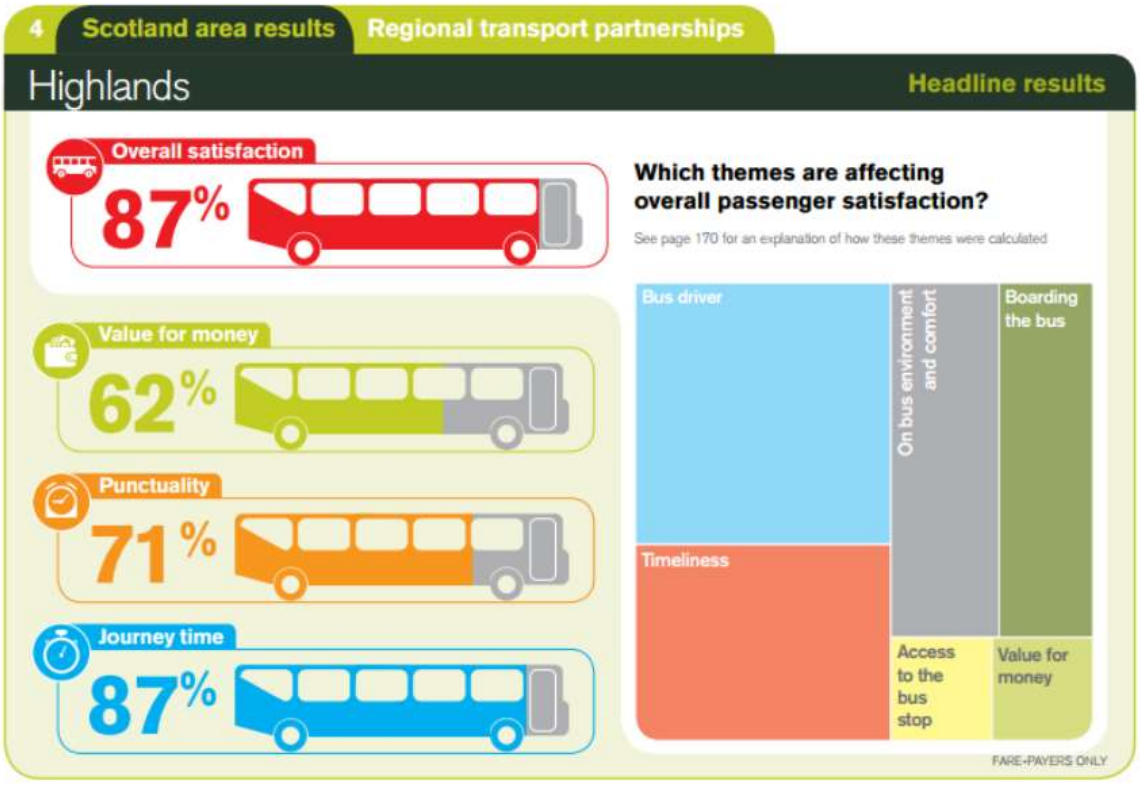

Figure 39: Bus passenger satisfaction in HITRANS area, 2016

[35] Source: https://hitrans.org.uk/Documents/Item_14_-_Bus_Passenger_Survey_Highlands_and_Islands_Results.pdf/m=1 Source: https://HITrans.org.uk/Documents/Item_14_-_Bus_Passenger_Survey_Highlands_and_Islands_Results.pdf/m=1 Source: https://hitrans.org.uk/Documents/Item_14_-_Bus_Passenger_Survey_Highlands_and_Islands_Results.pdf/m=1 Source: https://HITRANS.org.uk/Documents/Item_14_-_Bus_Passenger_Survey_Highlands_and_Islands_Results.pdf/m=1

Bus journeys are mostly multi-modal, with some form of walking, wheeling, cycling or driving also involved. This means bus provision has the opportunity to support integration in the transport network, and that Highland can benefit from supporting infrastructure, including rail and active travel integration and facilities. Beyond the actual vehicles used to travel, and their reliability and journey time, a range of other supporting infrastructure is necessary to support people to travel by bus, including shelters, accurate and available bus information and, in some contexts, bike parking. The Highland network of bus stops is varied in the provison offered, with some areas served by request stop systems with no physical infrastructure, to some areas served by modern shelters with seating, lighting and real-time bus information. In some areas paper timetables are required but this information is sometimes not displayed, or is outdated. Whilst the innovation of mobile phone technology means some people will not require paper timetables or electronic equivalents at stops, with live bus tracking being particularly welcomed by passengers, there will remain a need for such information and, together with quality of provision of supporting infrastructure, these crucial aspects of bus as a transport mode require to be considered together to ensure the right infrastructure is available where needed.

THC's Public Transport Team deliver improvements to shelters and other supporting infrastructure. Whilst a partial record of need is held, in the form of a record of requests made for improvements, this is not a comprehensive appraisal, and the team is limited by the staff resource and funding available to deliver improvements. Early work is underway to develop a Bus Service Improvement Partnership (BSIP), which should be used to inform further policy development and gap analysis.

Bus Service Innovations

Nine thousand children in Highland are entitled to be transported for education by THC due to the distance (>2 miles) they live from their school. This means there are a significant number of bus routes that operate on contract to meet this statutory duty, alongside 50% of the public bus services that receive financial support from the Council: the two are closely integrated. This is particularly important in a rural context where there is potential for co-benefits and innovation. A pilot project is underway within THC to review the school transport arrangements and test the viability of in-house transport operations. Vehicles have been purchased or hired, drivers recruited and pilot routes are now operating for:

- Nairn Town Service and Cawdor to Nairn school services.
- Whitebridge to Inverness – 2 vehicles
- Foyers to Inverness
- Cromarty/Culbokie to Dingwall Academy
- Invermoriston to Glenurquhart HS and Struy area services

This is an innovation where the benefits of necessary expenditure by THC to meet statutory duties for school transport can be maximised by simultaneously addressing gaps in public bus service. Such innovations should be used to inform the development of policy in the Transport Strategy.

Beyond school transport, the introduction of under 22 free bus travel in 2022[36] transforms the accessibility of bus travel, in terms of affordability, of young people in Highland. Coupled with the National Entitlement Card for disabled people and people aged 60 and over, this means a significant share of the population of Highland can travel for free by bus, which may influence future levels of patronage, once the scheme has an established uptake.

Demand responsive transport and community transport will continue to play an important role in public transport services for the more rural parts of Highland. They are usually free or low cost and are typically used by those who do not have access to a car or to public transport, for various reasons. Taxis are a traditional form of on-demand transport and provide a cheap and convenient option for many people. They can be a

36 https://www.highland.gov.uk/download/meetings/id/81054/item_11_free_bus_travel_for_persons_aged_under_22

lifeline for some people with an impairment, a good option for school transport in rural areas and can help households not to run a car or a second car. Some traffic restriction measures in built up areas, such as bus lanes, can also allow access by taxi, maintaining their competitiveness with car.

There are examples of community-led initiatives as well as HITRANS pilot projects that provide insight into the potential for this form of public transport, which should be used to inform the development of policy. THC is currently delivering three Demand Responsive Transport projects in partnership with local communities, where smaller (7-seat) electric vehicles have been purchased by the Council for operating School Transport services; the remainder of the time the vehicle is free to serve the local community on demand. This initative is currently operating in Sleat, Nairn and Ferintosh and offers a template for further growth and expansion. Likewise, Gairloch school transport is a community-operated scheme that enables services to operate in a rural area.

Demand for tourist facilities remains high, and for bus transport the issue is the same. The combination of the buoyant tourism industry and investment to further grow this key part of the Highland economy requires careful consideration. The impacts, positive and negative, of the growth of the North Coast 500 route are experienced across Highland and the Council is responding with focused action through Visitor Management Planning in local areas. In combination, the opening of Inverness Castle as a major visitor destination, and the sustained increase in passenger numbers arriving by cruise ship to Invergordon, generates specific needs for both the local area and the popular attractions that passengers visit, including Inverness and Loch Ness. It is therefore essential that the transport strategy has cognisance of these needs, such as local public bus services for visitors and local people and for Coach Parking. The latter has strategic impacts in places such as Inverness, where the NC500 route start / end point intersects with Inverness Castle (a future major trip attractor) and with the STPR2-supported Inverness Station Masterplan, where bus and rail integration is identified, and where tourist pressures exist from private operators at Inverness Bus Station and Ardross Terrace. For Inverness drop-off facilities, capacity of existing locations to accommodate growth, and secure overnight coach parking facilities, all require further consideration. Initial work to address some of these issues has commenced, and should be used to inform the development of policy in the transport strategy.

Sustrans' National Cycle Network connects, and brings people to the centres of, some Highland communities including some of those lying on the NC500 route, and there is potential for NCN development to support everyday journeys as well as cycle tourism.

RAIL

The Highland rail network is important for the movement of goods and people. The HITRANS Regional Transport Strategy Case for Change report (2023) addresses the strategic role of rail in detail, it is also discussed here given its importance to the local area context.

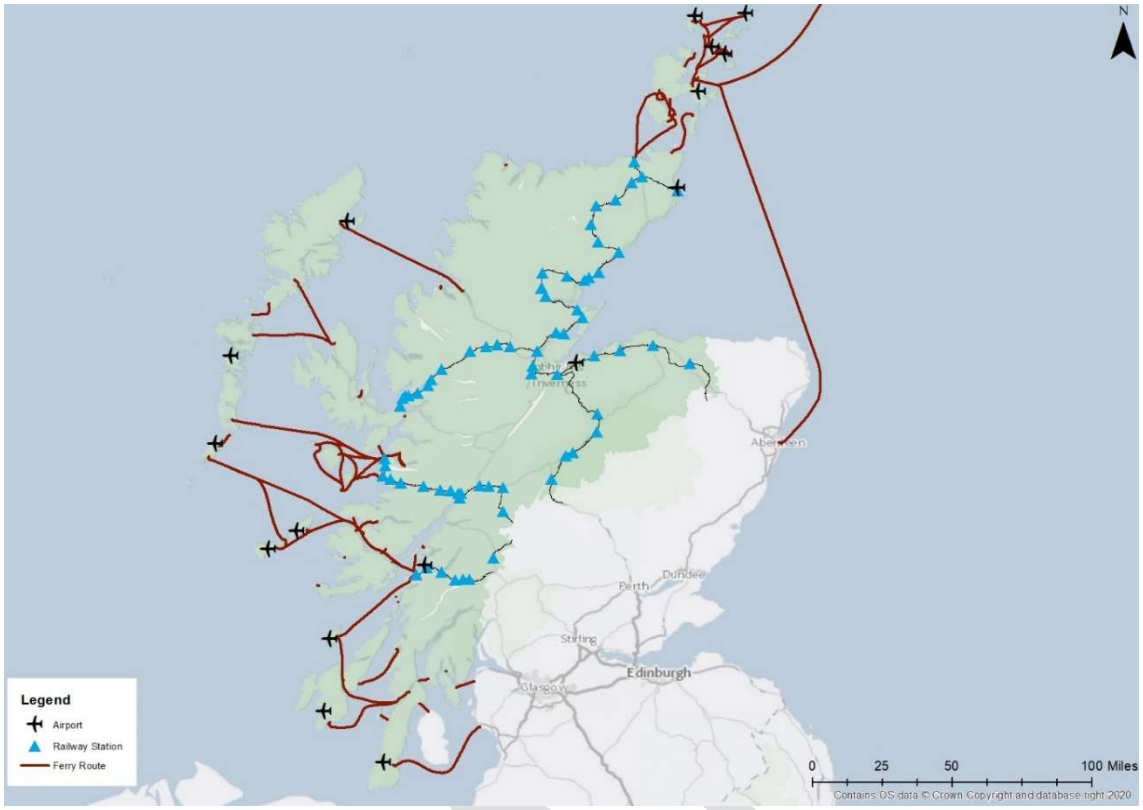

Figure 40 HITRANS area rail network, ferry connections and airports / airfields (from Hitrans RTS Case for Change 2023)

Rail for moving people

Highland is served by five railway lines, illustrated in a HITRANS context in Figure 42, along with station usage. Inverness is the busiest station in Highland, followed approximately in order of scale of settlements that stations serve. The rail network moves goods and people for both long-distances with ScotRail, LNER and Caledonian Sleeper Services providing UK-wide connectivity from the Highlands as far as London, as well as shorter-distance commuter services such as the links between Inverness and settlements to the north by ScotRail-operated services. It is possible, with an early start (before 6am), to undertake a working day in the Central Belt, starting from Inverness, by rail. However, it requires an even earlier start from the rest of Highland, and typically will require a private vehicle to reach Inverness due to the early departure times of services to the central belt.

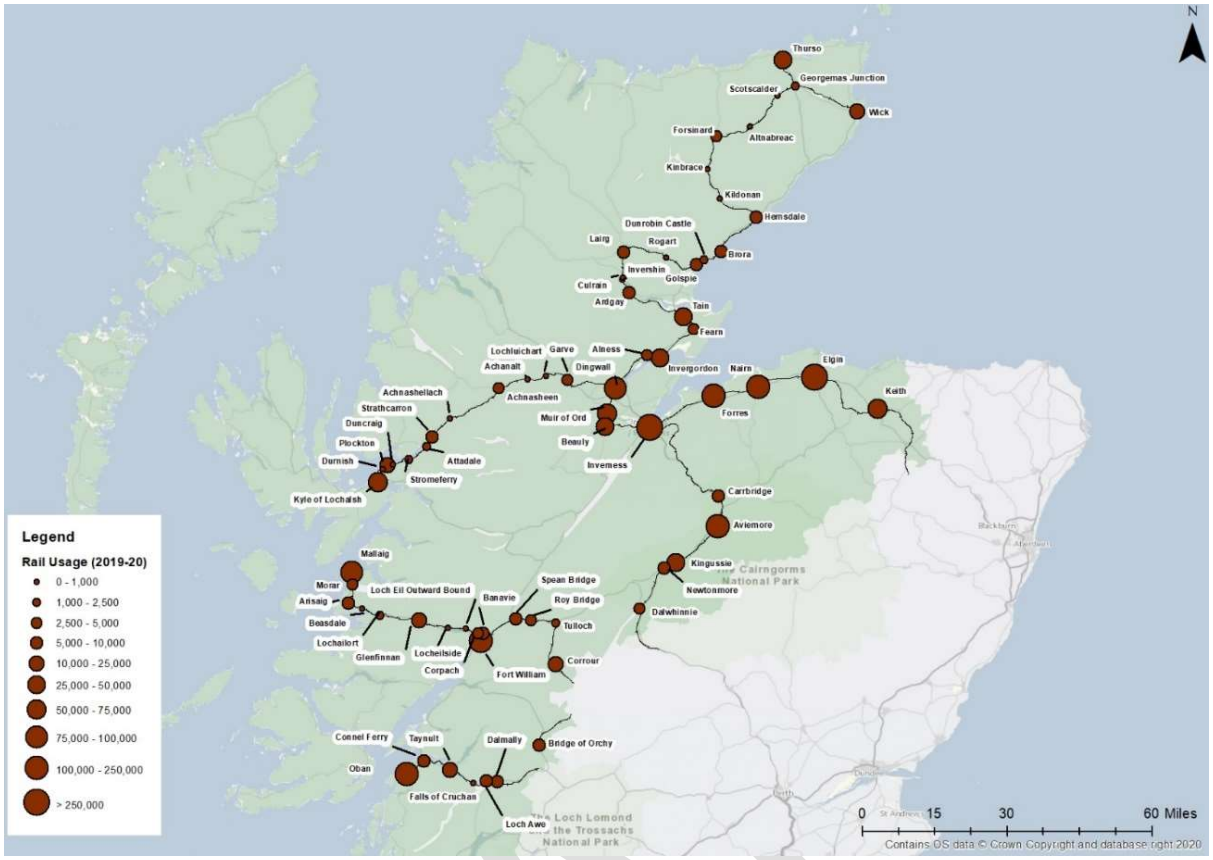

Figure 41: HITRANS rail network and station usage (Data from Office of Rail and Road, from HITRANS RTS Case for Change 2023)

Journey times outwith sub-regions in Highland tend to be longer than the equivalent time required to travel by private car as illustrated by Figure 43, which compares fastest rail and car journey times for select stations with higher passenger numbers:

Origin Station	Rail Journey Time	Car Journey Time
Inverness- Beauly	15	24
Inverness-Muir of Ord	21	21
Inverness-Dingwall	37	24
Inverness-Alness	47	37
Inverness-Nairn	16	26
Inverness-Aviemore	44	41
Inverness-Thurso	3 hours 40 mins	2 hours 28 mins
Inverness-Wick	3 hours 4 mins	2 hours 22 mins
Fort William-Mallaig	1 hour 24 mins	1 hour 1 min
Dingwall-Kyle of Lochalsh	2 hours 2 mins	1 hour 32 mins
Tain-Invergordon	19 mins	19 mins
Thurso-Wick	29 mins	26 mins
Kingussie-Aviemore	12 mins	23 mins

Figure 42: Train and Car journey times for select routes (source: Google Journey Planner)

This demonstrates that in 8 of the 13 routes considered it is faster to travel by private car than by train. In some cases this is by a significant margin, such as Inverness to Thurso destinations, where car provides a journey time saving of over an hour. In contrast, settlements where the car is faster, but where origins and

destinations are closer, journey time differences are less. For Inverness to Beauly and Nairn, train is faster than car, as it is from Kingussie to Aviemore, with two routes being the same for car and train. However, these times do not factor in time to travel from house / work to station at each end of the journey, or comparative journey costs. Investment over the past decade has improved the commuter potential of the rail network, with the Far North Line displaying the greatest increase in passenger traffic (Figure 44), benefitting from the opening of a new Rail Halt at Conon Bridge, as well as an incentivised discount on services north of Inverness. Conversely the Kyle of Lochalsh line has experienced the most pronounced drop in passenger numbers, with the other routes in the region generally following a relatively stable pattern of patronage to 2020.

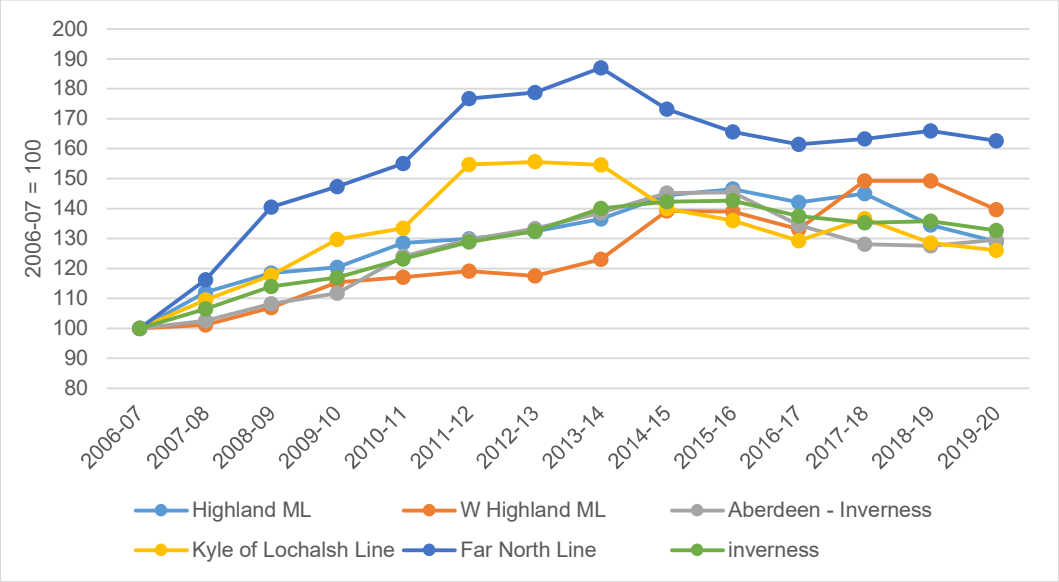

Figure 43: Station entry and exit trends in Highland (from HITRANS RTS Case for Change 2023

The rail infrastructure serving Highland is dominated by single track routes, the only exception being limited sections on the Highland Mainline. Static loop systems are used to enable trains travelling in opposite directions to pass, one waiting for the other to do so. This means there is an inherent lack of capacity of the rail network to offer improved journey time or frequency, as well as lack of resilience of the network. Transport Scotland is responsible for investment in the rail network. Improvements have been made and more are committed, including the Conon Bridge rail halt, Inverness Airport Railway Station, Far North Line Review Group improvement works, and Aberdeen to Inverness Improvements Project. Construction of some passing loops and dualling could enable a more frequent service between Perth and Inverness. It is therefore important to continue to explore the multiple opportunities from rail that can address transport transition for both goods and freight.

As stated in STPR2, there are plans for Inverness Station "[…] related to improving the station's operational functionality as well as integrating the station better with its locality (including the city centre and nearby bus station) so as to ensure the station can operate as part of an effective integrated transport interchange." This major development, with a timeframe of 5 – 10 years, will greatly enhance passenger experience and the city centre.

The Highland Railcard, offering 50% discount to those living along the Wick and Kyle lines, supports commuting and leisure trips and could perhaps encourage more rail commuting, if extended to other commuting stations such as the new Airport station, Nairn, Carrbridge and Aviemore.

Capacity for carriage of bikes on trains north of Inverness is greater that that on trains east and south, which limits uptake for commuting and leisure. This capacity is being steadily expanded by refitting of existing rolling stock, which is welcome. The expansion of the "Adventure Carriage" initiative from the Glasgow – Oban line to the north and west lines would further support cycle tourism.

Rail also serves a wider public transport integration function in the network, where multi-modal journeys begin and end at rail stations. This means Highland could further benefit from supporting infrastructure to integrate rail more with other modes, including active travel, bus, demand-responsive transport, ferries at Kyle, Mallaig and Thurso, and private car, where appropriate. Work on such aspects is identified in various workstreams, including in the Council's Active Travel Masterplans, and in STPR2, where Inverness Rail Station redevelopment is identified as a project, which offer major strategic potential to maximise rail for moving people and goods.

Rail for moving goods

Rail is a successful mode of transport for freight for the Highland region, despite limitations in the existing rail network. Figure 45 illustrates the extent and type of rail freight existing and emerging across Highland. Rail freight is an important aspect of decarbonising the network, particularly in light of the Scottish Government's Rail Services Decarbonisation Plan. It also offers the opportunity to reduce the impacts of road-based freight for maintenance and congestion, which are particularly important, given the length of roads that require to be maintained in Highland and the extent that do not facilitate save over-taking slower vehicles such as HGVs.

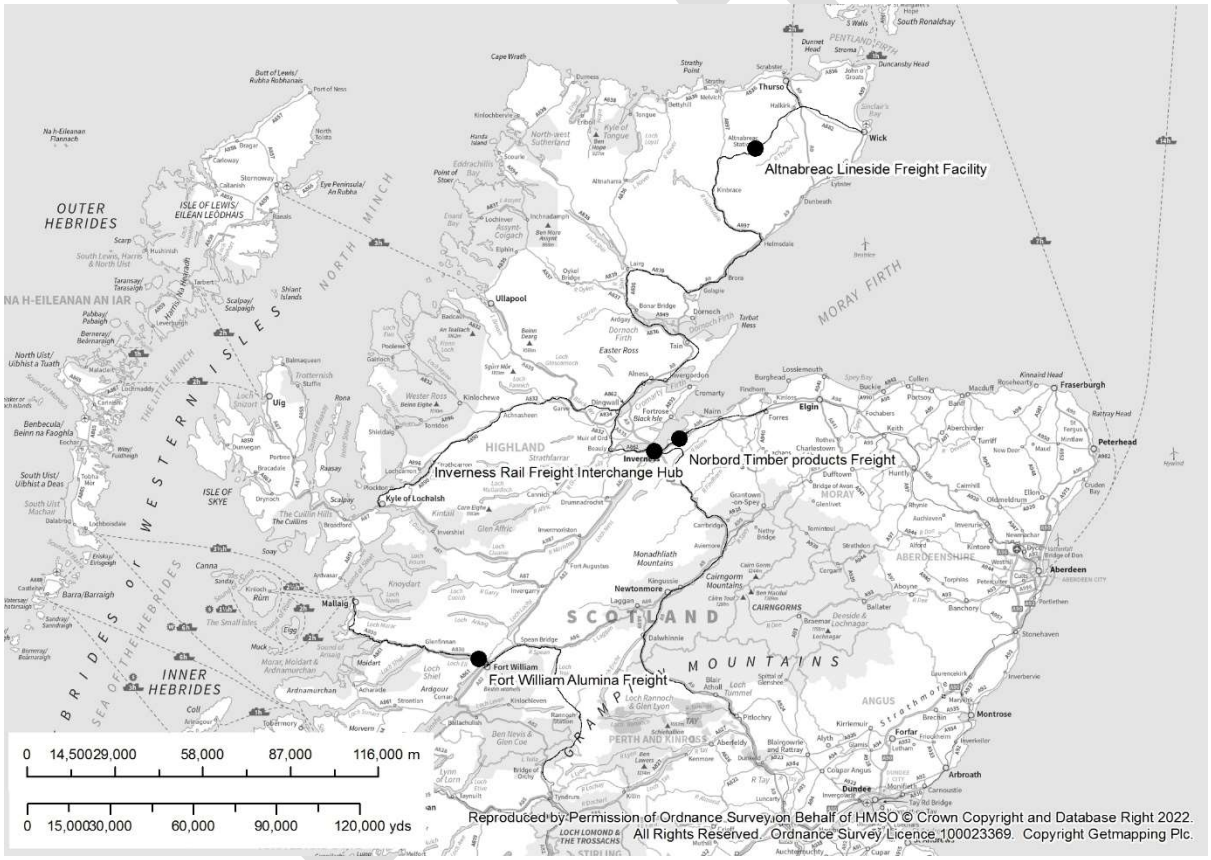

Figure 44: Rail Freight in Highland

As noted in the Programme for Government, electrification of the rail network is key to decarbonisation and to improving reliability.

PORTS AND HARBOURS

As well as rail and road, sea and air are strategic assets for the movement of goods to, from and within Highland, as well as people. The HITRANS Regional Transport Strategy addresses the regional-scale significance of ports and harours, including aviation, aspects are discussed here due to their importance to a Highland local context.

Marine activities

Highland is responsible for 21% of Scotland's coastline, which equates to 4,905 km. It benefits from a large network of marine infrastructure, from small-scale boat accesses such as slipways, to major strategic ports. The Highland Council is responsible for a significant number of these facilities, which are mostly of a smaller scale, whilst a range of private and trust organisations operate larger-scale facilities such as Glensanda (marine-access only superquarry freight); The Cromarty Firth and the Port of Ardesier. Figure 46 illustrates the extent of coastline and range of infrastructure provided in the Council area.

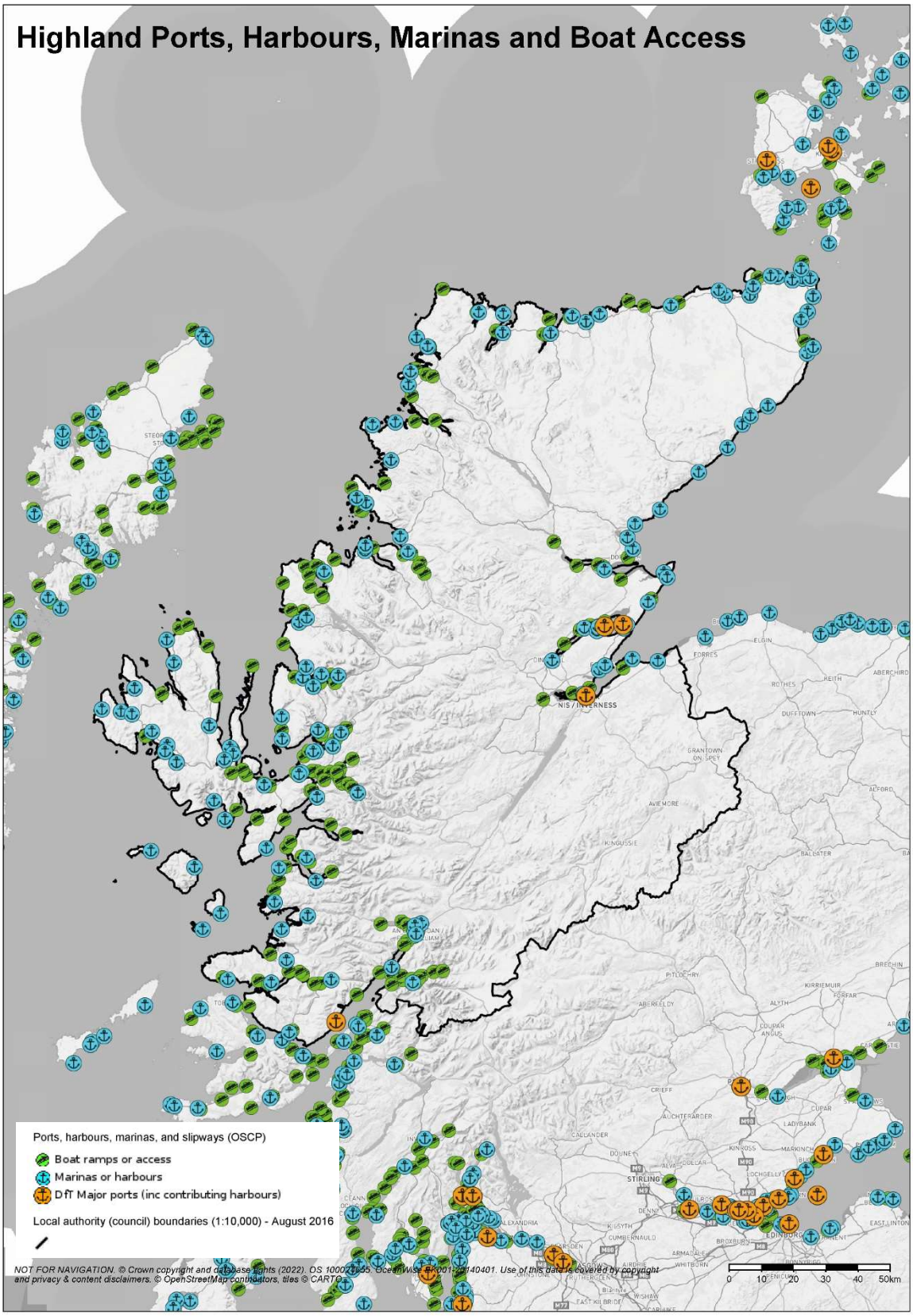

Figure 45: Maritime infrastructure in Highland (Source: Marine Scotland)

In January 2023 a joint Scottish/UK Government announcement was made for national investment in the delivery of a Green Freeport for the Cromarty Firth (Opportunity Cromarty Firth), Figure 47. This presents potential to create up to 25,000 jobs, and a potential £4.8bn of investment. For the Highlands and Islands region this presents a major opportunity to harness the potential of the on and offshore renewables sectors. For transport it will require careful planning and consideration, and the announcement comes with funding to support delivery. This means work to maximise the benefits for moving people and goods between these potentially major new developments will start soon, and the Transport Strategy will require to consider the right policies and actions to support them.

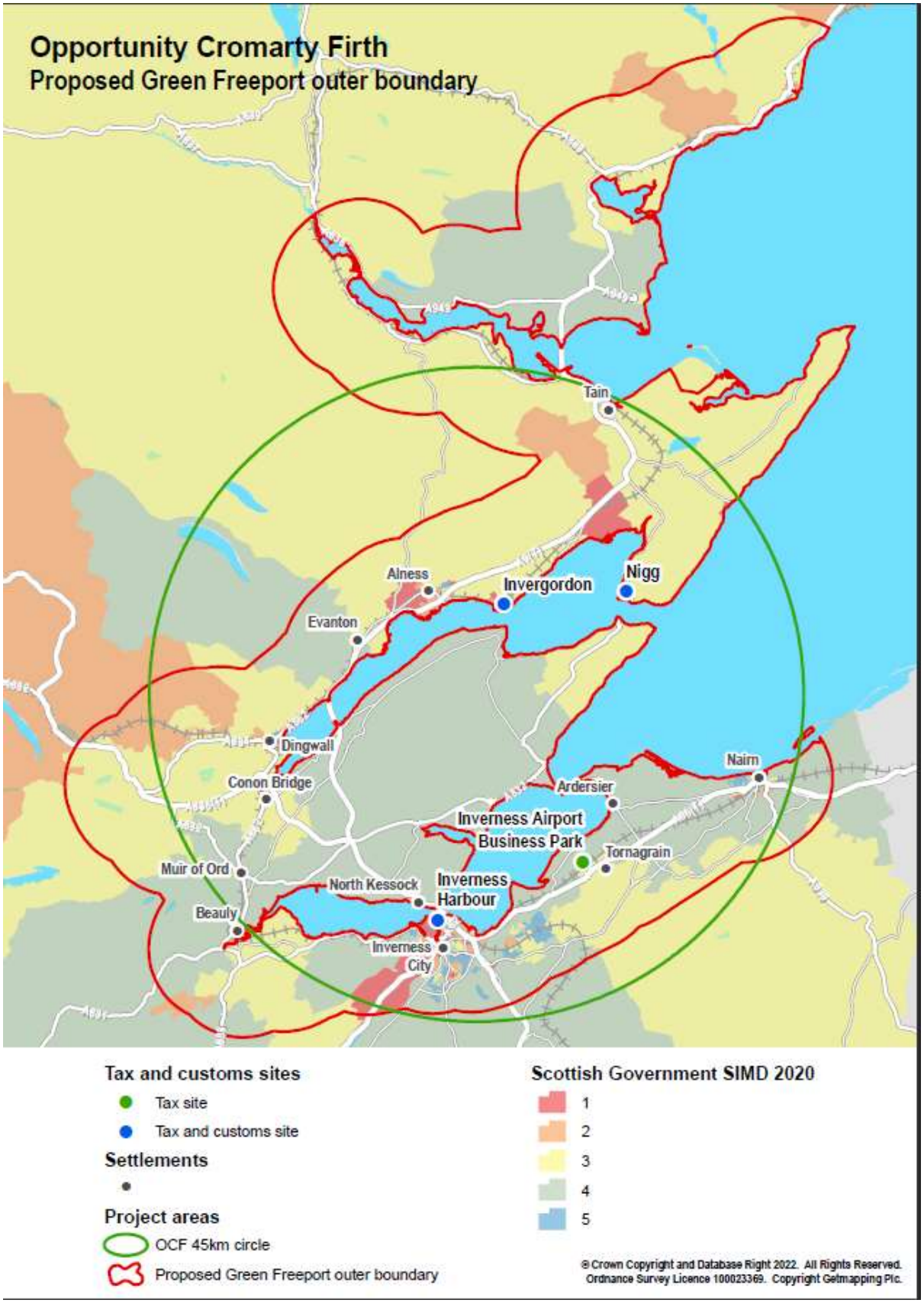

Figure 46 Opportunity Cromarty Firth

As well as this major industrial potential, the current and future demands for marine infrastructure to support the wind energy industry in the Cromarty Firth and rest of Highland is considerable. Sea ports already serve a

key role in facilitating the transport of onshore wind turbine components, that are then transported by road to their final destination. This is a large industry that Highland regularly receives proposals for and, coupled with the potential of repowering of existing onshore wind enegy installations, means Highland ports and harbours will continue to serve and important role. Figure 48 illustrates the extent of onshore wind and its potential pipeline. Likewise the offshore wind industry, which will place major demands on port infrastructure across Highland, with larger facilities particularly important during the construction phase, and other facilities able to offer long-term opportunities for the operations and maintenance phases.

The potential for emerging industries is also key, including the role of green hydrogen to balance intermittency in the wind energy generation network, as well as a fuel for transport and domestic needs, all of which have potential synergies with the regions ports and harbours. It is therefore important that the region is ready to accommodate and maximise the benefits of these regions, particularly in supporting the transport needs of the sectors.

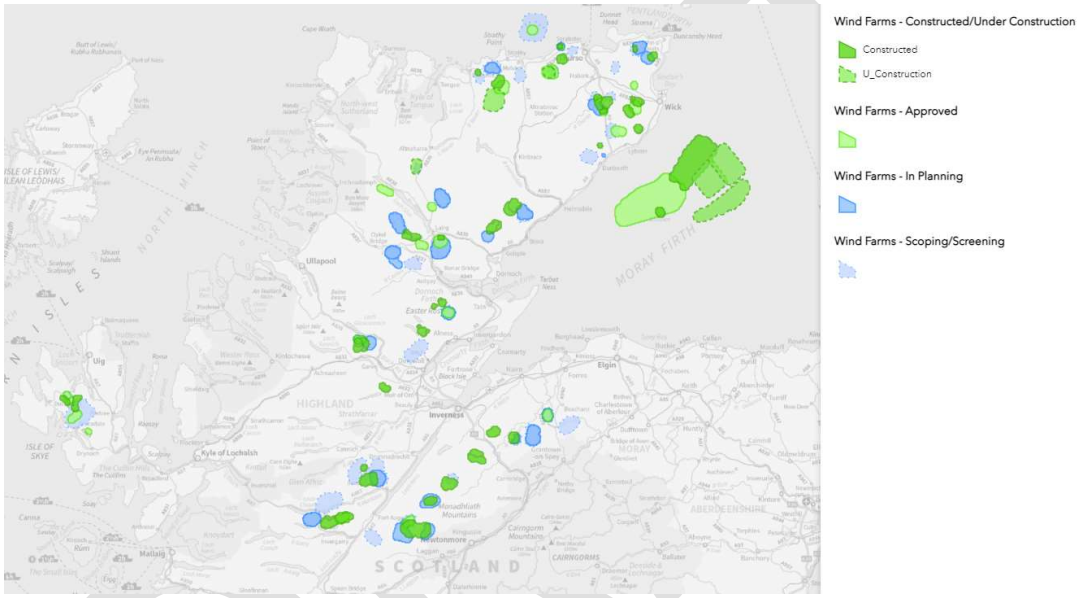

Figure 47 Wind Energy Development in Highland

Capital works are planned and committed to support the ongoing role of ferries in the Highland Transport Network. Caledonian Maritime Assets Limited (CMAL) are constructing a new 102 metre dual fuel vessel to serve the 'Skye Triangle' route. As a result, infrastructure improvements are needed at the 3 ports which serve the Skye Triangle route to optimise operations, including at Uig[37]. Figure 49 illustrates the masterplan for the wider area, highlighting the wider potential that such infrastructure can have in supporting local economies.

[37] https://www.highland.gov.uk/info/1523/transport_and_streets/832/uig_harbour_redevelopment

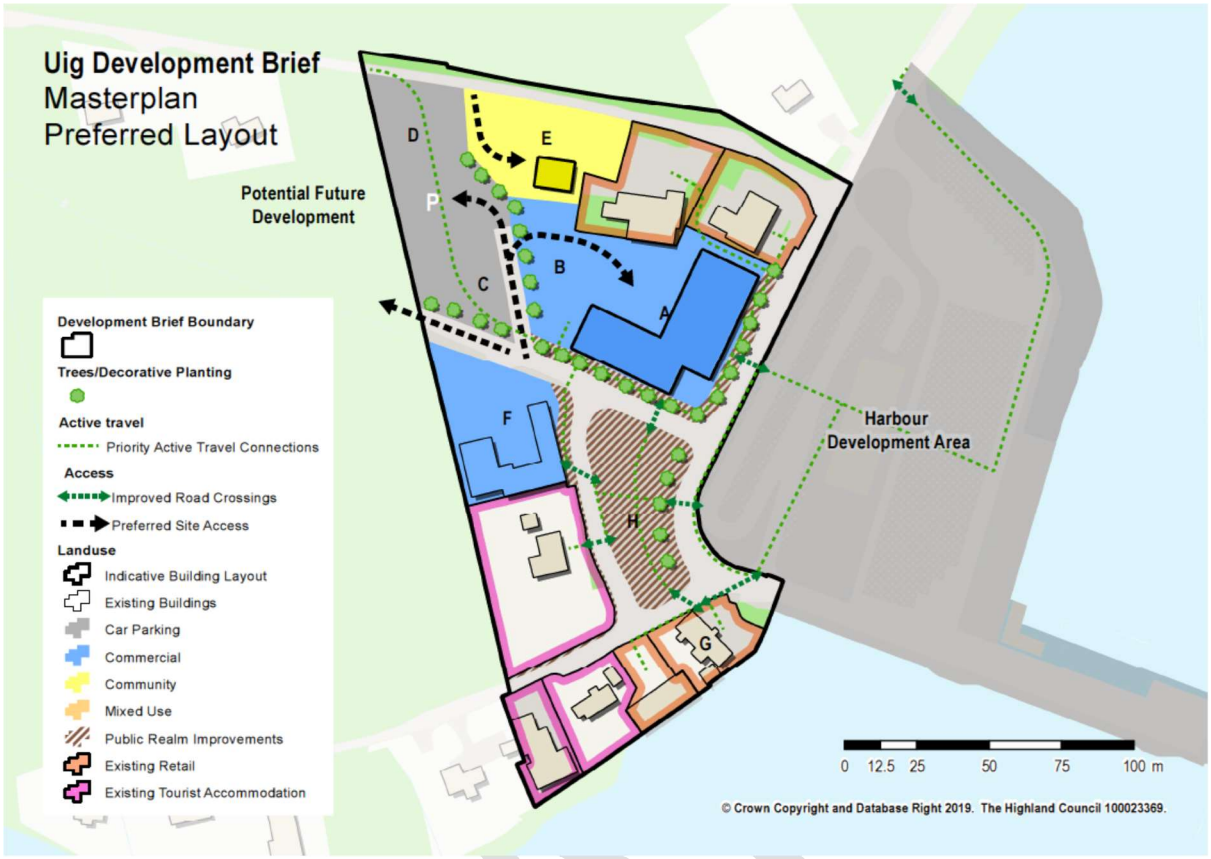

Figure 48 Uig Masterplan

As noted in HITRANS' draft RTS Case for Change, there are fully electric ferries operating in Norway and other countries, and this is likely to become a viable option for future Scottish vessel replacements, at least on the shorter routes, including the Corran Ferry.

AVIATION

Aviation in Highland provides both international connectivity to the region, principally through Inverness Airport, and regional connectivity to more remote and rural parts of Highland and the rest of Scotland.

Inverness airport is a national and international gateway to the Highlands, Figure 50 illustrates the 10-year trend in passenger numbers to 2021 and shows that there has been a sustained increase in passenger numbers over the period, except during the Covid-19 Pandemic. The airport has experienced a 61% increase in passenger numbers between 2009 and 2019, with 89% of passengers travelling domestically, and the remaining 11% internationally (2018 statistics), highlighting the airport's particularly important role as a hub for the Highlands and Islands region.

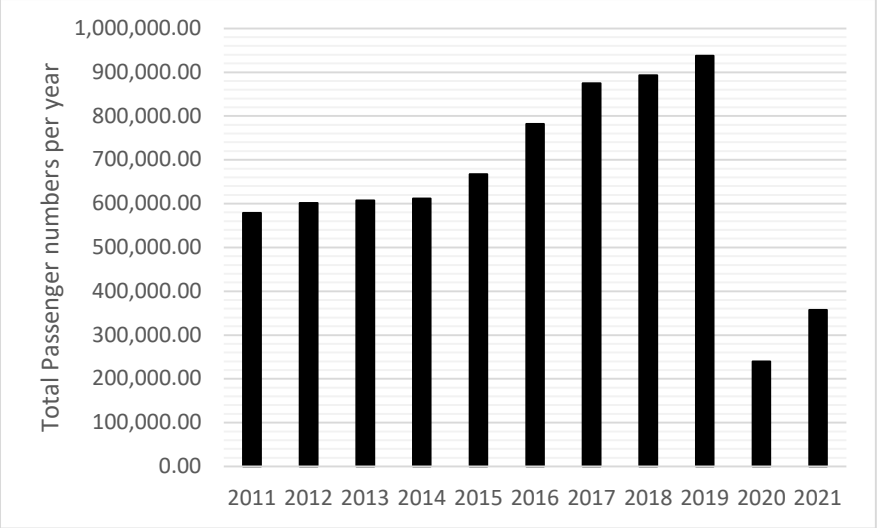

Figure 49 Inverness Airport Passenger numbers (CAA)

Wick Airport is supported by a Public Service Obligation, similar to those in place for island communities; this provides necessary support for rural communities to make longer distances by air, where they would otherwise be disadvantaged. For example, to travel from Wick Airport to Aberdeen, journey time savings by air are unparalleled with alternative modes (flight is 40 minutes, train or bus are more than 7 hours, private car is 4 hours 50 minutes). Whilst emissions are a crucial factor in the sustainability of travel, for some parts of Highland, such services represent broader benefits to rural communities.

A passenger survey carried out at Wick Airport in 2022 found that most trips are made for social reasons, with business also a significant proportion:

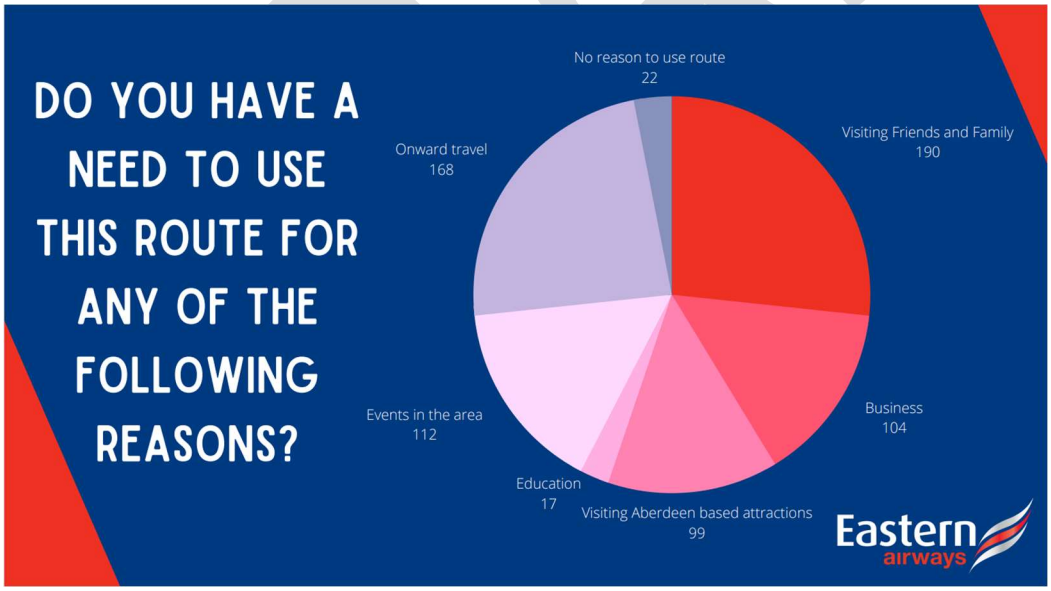

Figure 50 2022 Survey of passengers at Wick Airport

The Wick survey also found that even though the travel time to Aberdeen is a fraction of the train time, passengers are unwilling to pay more than the train fare equivalent.

ROADS, CARS AND PUBLIC SPACE

The Highland Council manages almost seven thousand kilometers of roads, 1,700 km of footways, 2,180 bridges and culverts, 1,000 retaining walls, 48,8000 lighting columns and 100 car parks. This extensive network of transport infrastructure also hosts traffic management systems, various signage, footways and cycleways alongside adopted roads, drainage, road markings, road restraint systems and a range of street furniture. Managing this network is a major and complex task, which is informed by a plan of the Council's road network, the 'Road Network Hierarchy', and a related inspections policy document, which set out how the network is managed, alongside the Council's Road Asset Management Plan[38] (RAMP). The RAMP details how the Council plans and implements road maintenance and future investment; winter maintenance; community works (e.g. verge cutting, drainage); bridge maintenance and investment, and road safety (promotion of active travel, including safer routes to school and 20mph limit expansion). This suite of documents is currently under review and will form core policy in the next Local Transport Strategy.

As illustrated in Fig 2, the NTS sets out an Investment Hierarchy which prioritises maintaining and safely operating existing assets firmly above targetted infrastructure improvements.

NTS2 states:

> "We are clear that we will not build road infrastructure to cater for forecast unconstrained increases in traffic volumes and that new roads projects will normally only be taken forward where they reduce the maintenance backlog; address road safety concerns or adapt the network to deal with the impacts of climate change or benefit communities"

and:

> "We are progressing a range of infrastructure improvement projects related to the City Deals. This includes the detailed development and assessment work of the preferred option for the A9/A82 Longman junction scheme. We also continue to progress the A9/A96 Inshes to Smithton […]
>
> Dualling the A9 Between Perth and Inverness - We will continue to progress the procurement of the construction contract for the Tomatin to Moy section Scottish Government National Transport Strategy Delivery Plan 2022-2023 Transport Scotland 26 […]. We will continue to progress design work and the statutory processes for the remaining eight schemes, as well as assessing procurement options. […]
>
> We will continue to progress the preparation of A96 Dualling Inverness to Nairn (including Nairn Bypass) scheme with a view to completing the statutory process. This work is separate from the wider A96 Corridor Review which is currently being undertaken - a transparent, evidence-based review of the programme which will report by the end of 2022."

Transport Scotland reports that "motorway emissions have increased substantially since 1990, with the 2018 level 81% above that of the 1990 baseline. This increase in motorway emissions since 1990 has coincided with a substantial increase in the length of Scotland's motorway network. Between 1990 and 2017, Scotland's motorway network increased in length from 312km to 645km. Motorway vehicle kilometres rose from 3242 million in 1990 to 8518 million in 2018."[39, 40]

That is to say that on the one hand we are aware that reducing road traffic emissions is a crucial part of meeting carbon targets, and that new roads lead to an increase in vehicle miles, but on the other hand there is

[38] https://www.highland.gov.uk/downloads/file/502/road_asset_management_plan

[39] Infrastructure Investment Plan 2011 - Updated Programme Pipeline (January 2015) - gov.scot (www.gov.scot)

[40] Infrastructure Investment Plan 2015 (webarchive.org.uk)

a substantial investment planned in new road building, making it more difficult to reach carbon reduction targets and to invest in maintenance, but recognise the need for action to improve road safety.

As background to this discussion for Highland, in February 2023 the Welsh Government published their response[41] to the Roads Review report which they had commissioned. The Report takes into account shrinking capital budgets and the wider policy context as well as the Wales Transport Strategy. The Welsh Government's response concludes:

> "Our transport system is one of the most important national assets we have. It connects people to one another, binds communities together and enables businesses to grow and expand for provision of a vibrant economy. It's one of the most powerful and dynamic tools for community cohesion, social justice and inclusive economic growth that we possess. Of course, we will still invest in roads: we will still need to provide connections to support sustainable social and economic development, but this must be consistent with Welsh Government policy to prioritise public transport and active travel as well as support decarbonisation, modal shift and improve safety, recognising that needs vary across different parts of Wales.
>
> Reducing and re-prioritising our investment on new road schemes and increasing our investment in sustainable modes will assist modal shift, but it will also deliver wider benefits. These include less air pollution, more successful town and neighbourhood centres and a transport system that is accessible and fair for all."

The sustained pressure on capital budgets in Highland may indicate the need to consider a similar reprioritisation of resources towards maintenance of the existing road network, in line with the Investment Hierarchy.

Improvements across the network are paid for through a combination of Council Capital funds and a range of external funds. The extent of the network means it is always a challenge to maintain, as well as invest in improvements to it. Innovativemeans of doing this are underway in Highland. The South Loch Ness Road Improvement Strategy is an example of such an approach, where a combination of developer funds from a major infrastructure project (secured through Section 96 of Roads (Scotland) Act 1984) were combined with funds from other industrial activities (wind farm road improvements and Strategic Timber Transport Routes funding) and other Scottish Government grant funding (Cycling, Walking and Safer Routes) to develop a strategy for a range of improvements for all users. This project has been planned and delivered over a number of years, making smaller rural villages in the area safer for walking, wheeling and cycling, as well as improving rural roads to a standard more appropriate for modern use. The success of this example is a combination of available funding and committed Officer resources to plan and coordinate funding and delivery, including land owner negotiation. It offers an insight into a potentially innovative way to address investment, particularly in rural areas; however it is dependent on development activities in the area being present to provide part or all of the funding, a clear understanding of the deficiencies on the network and the simple design solutions required to address them, and direct officer resources to take forward the work. At present other potential areas that could be considered in further detail include Lairg and Central Sutherland and Caithness Quarry Routes.

Figure 51 shows the key road network across the HITRANS area:

[41] Welsh Government response to the Roads Review [HTML] | GOV.WALES

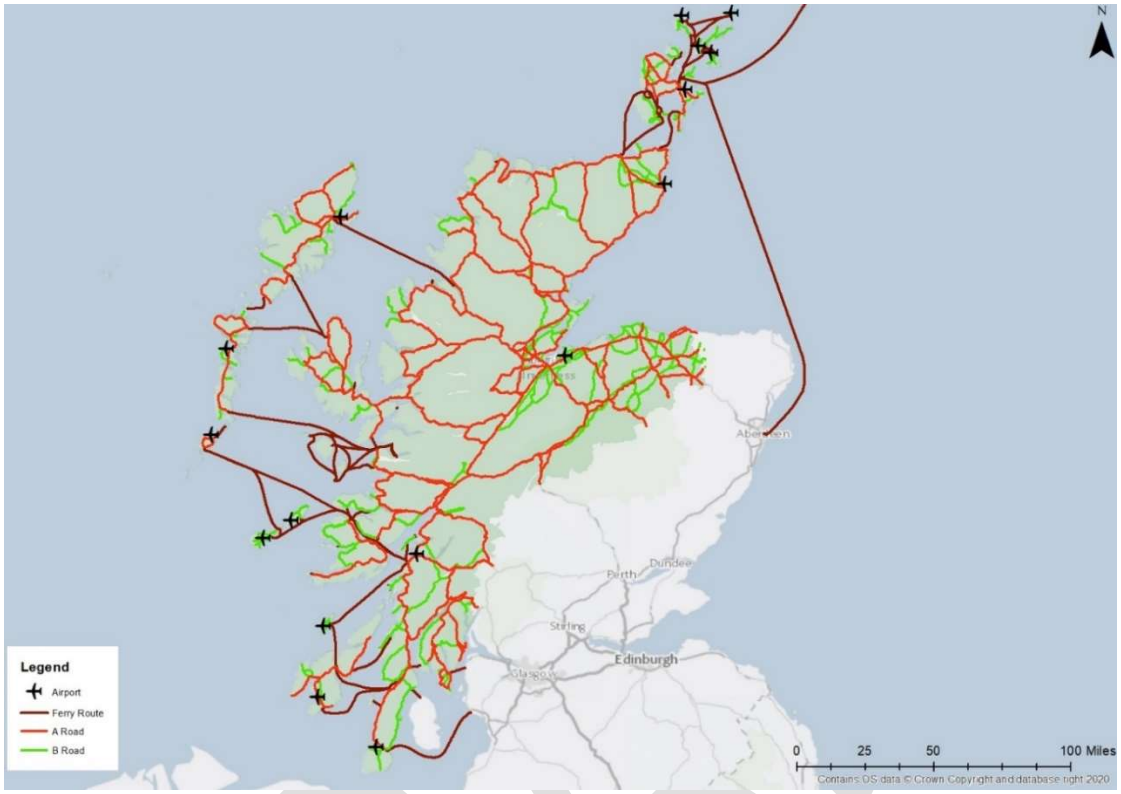

Figure 51: HITRANS strategic transport network (from HITRANS RTS Case for Change 2023)

Scottish Transport Statistics show that the distance travelled on Scotland's roads in 2020 [42] was at the highest level ever recorded. In 2019, 48.7 billion vehicle kilometres were travelled, 10% more than in 2009. Long-term, the volume of car traffic on major roads (Motorways and A roads) has roughly tripled, from an estimated 9,300 million vehicle kilometres in 1975 to between 28,000 and 32,000 million vehicle kilometres for the last ten years. Figure 52 shows that 1.67 billion vehicle miles were travelled on roads in Highland in 2021[43], mirroring the steady upward trend in Scotland, notwithstanding the effects of the pandemic:

[42] Microsoft Word - Contents and miscellaneous text - comms version (transport.gov.scot)

[43] Road traffic statistics - Local authority: Highland (dft.gov.uk)

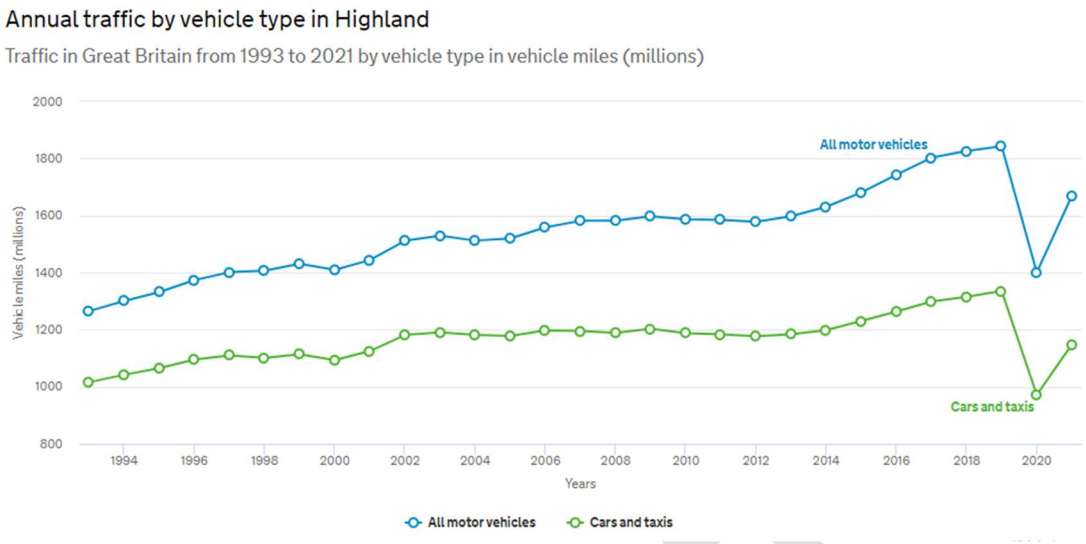

Figure 52 Road traffic statistics - Local authority: Highland (dft.gov.uk)

As illustrated in Figure 53, household car availability in Highland is above the Scottish average, with fewer households having no access to a car at 15%, compared with the Scottish average of 28%. 2021 Census data will bring a valuable update to these data. As noted above, early indications from the England and Wales Census suggest that car ownership and availability may be rising, particularly in most urban areas.

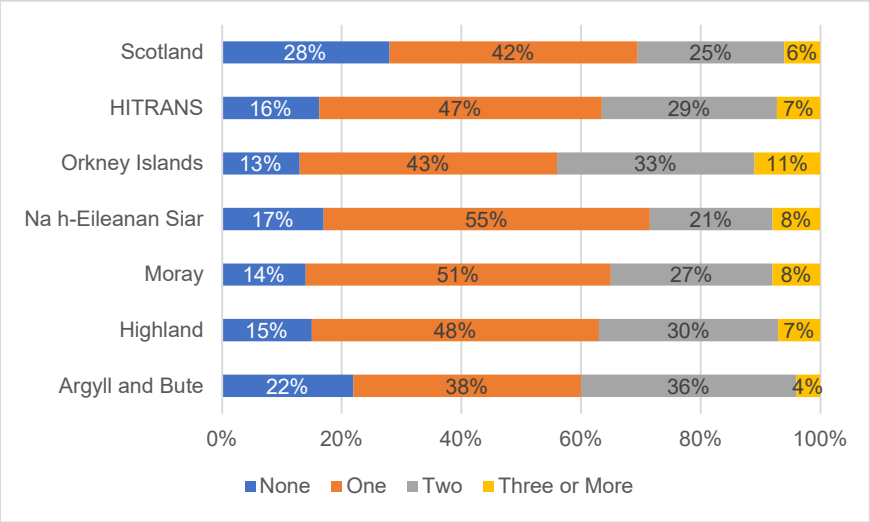

Figure 53: Car availability by local authority (2011 Census, taken from HITRANS RTS Case for Change 2023)

Figure 54 shows access to cars across the travel to work areas in the HITRANS region. It illustrates that the more urban parts of Highland, including Inverness, Fort William and Alness and Invergordon have the greatest share of communities without access to private vehicles. Even in more rural parts of Highland these figures remain a high share of the population, such as Golspie and Brora at 19%. In urban areas, this emphasises the need to ensure communities are supported with regular, reliable public transport and active travel options, and in rural areas, that public transport, including community and on-demand transport, can support communities' mobility needs beyond active travel distance.

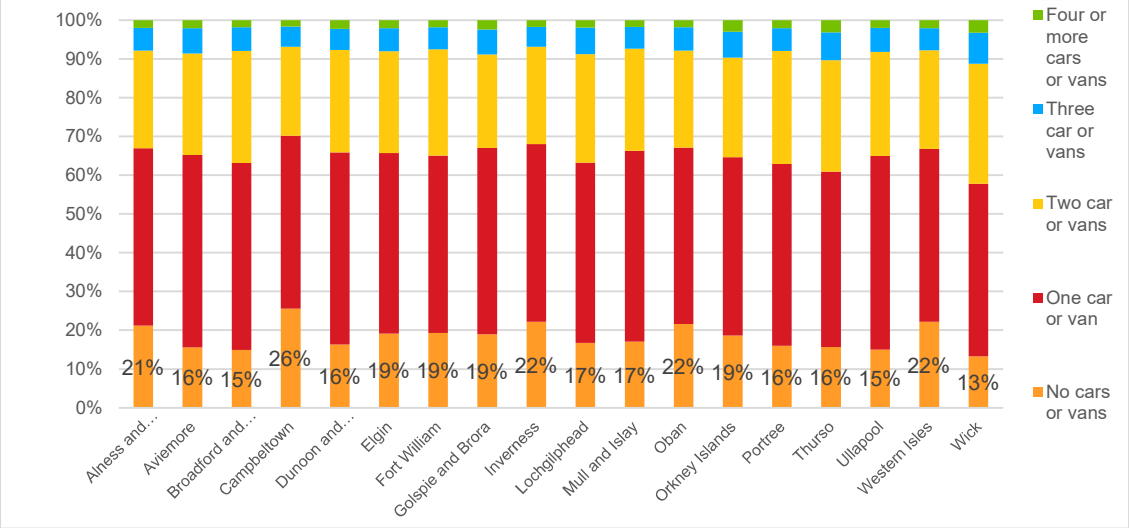

Figure 54: Car ownership by HITRANS Travel to Work Area (adapted from HITRANS RTS Case for Change 2023)

Figure 55 highlights the relationship between access to private vehicles and income in Scotland [44], showing that people earning more travel by car more. In 2019, 62% of household with incomes over £50,000 pa. drove everyday, compared to only 19% of households with incomes of up to £10,000 pa.

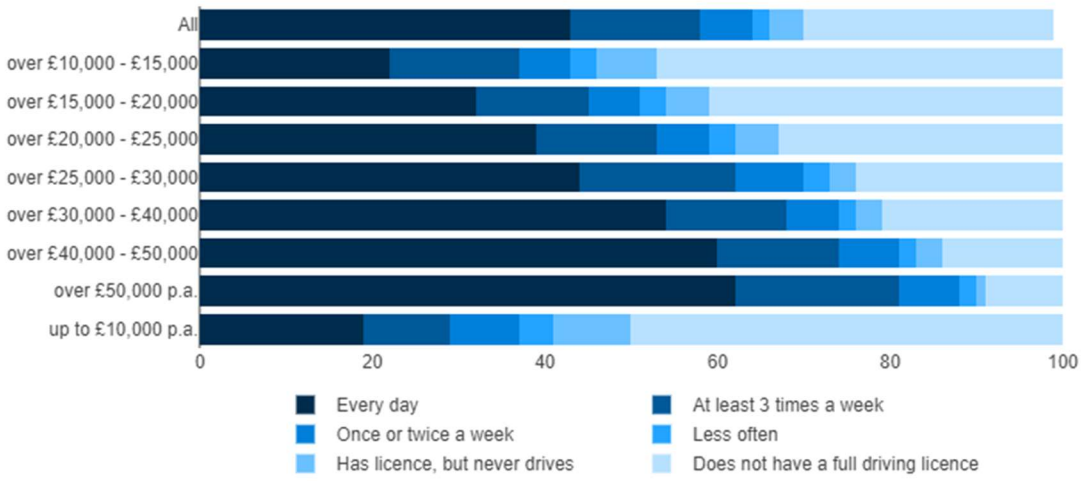

Figure 55 Frequency of driving related to income

Recent research[45] by campaign group Bike is Best found that those who own a car spend on average 13% of their gross income on it, while for those with car finance the figure rises to 19%. A threshold of is 10% generally seen as the indicator of transport poverty. However, 71% of research respondents stated that they expect to always be car owners, despite the rising costs associated with owning a car and the cost of living crisis.

[44] (Source: Scottish Government's Equality Evidence Finder)

[45] #BikeIsBest Press Release: The UK Car Lock-In Continues

Although the car is a crucial option for many disabled people, Transport Scotland's Disability and Transport analysis[46] of Scottish Household Survey data for the period 2015 – 2019 shows that disabled people are less likely to have access to a car than non-disabled people as illustrated in Figure 56. This can be for various reasons, including being less able to afford a car.

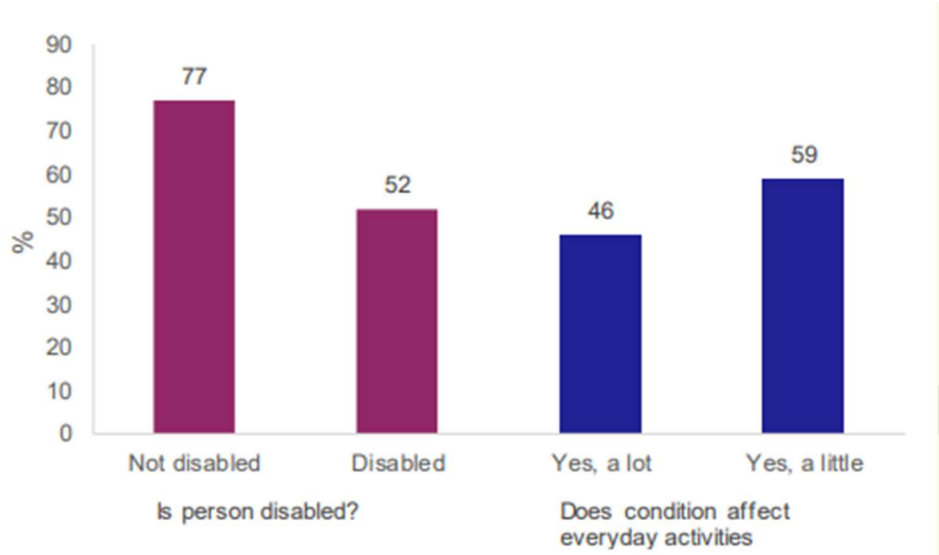

Figure 56: Percentage of households with access to a car, whether occupant is disabled and whether condition limits everyday activities

Again from the same report, comparing people in a household on a low income (in the lowest 30 per cent of incomes) and aged under 60, disabled people are again significantly less likely to have access to a car (35%) than those not disabled (52%). This all indicates that non-car modes are crucial for the transport independence of many disabled people, along with car-based options such taxis and the provision of Blue Badges and disabled parking spaces. In addition these active options can help maintain the mental and physical health of disabled people: as with everyone, being more active for more of the time brings benefits.

HITRANS' RTS Draft Case for Change 2023 reports that:

Whilst road traffic dropped by 22% during the pandemic, public transport (affected by both lockdowns and social distancing) saw bus travel dropping by 66% and train by 93%. Ferry travel was less affected than bus and rail reflecting the lifeline nature of this travel.

However at the GB level, by July 2022, bus and rail passenger numbers were around 80% of pre-pandemic levels, with road traffic having fully recovered (although car traffic is down somewhat with commercial vehicle traffic now above pre-pandemic levels). The impact of the pandemic on public transport is therefore still being keenly felt.

In Scotland the average car occupancy was 1.5 people in 2016; the rate has remained similar in recent years with the proportion of single occupancy journeys being two thirds (66%) of all car journeys in 2017[47] . The pandemic's restrictions on liftsharing may have reduced rates of this more sustainable option, but it is not yet clear how occupancy may have changed post-pandemic. Increasing car occupancy through liftsharing offers significant potential to improve transport options, reduce households costs and reduce carbon emissions.

[46] www.transport.gov.scot/media/50099/disability-and-transport-findings-from-the-scottish-household-survey-july-2021.pdf

[47] 5. Motor Vehicles, Traffic And Driving | Transport Scotland

Significant amounts of public space within settlements are taken up by roads and parking, where the former often plays a multi-functional role of socialising, play, exercise, providing a neutral space, access to the outdoors and so on far beyond simply conveying motorised vehicles, as illustrated by Figure 57.

Figure 57: Place and Movement relationship (Designing Streets[48])

The Inner Moray Firth Proposed Local Development Plan 2 (para 104) states

> "Creating a more varied transport network where walking, wheeling, cycling and public transport are genuinely competitive with driving will make more efficient use of available space in a fairer way for all road users. It will reduce the amount of vehicles on the road, and therefore create more space for those that do need to travel by car."

Public Health Scotland's briefing Living Well Locally – Road Space Reallocation Contributes to Improved Health[49] states:

> "[…] road space reallocation can make a difference. By reducing overall traffic volume, the adverse health impacts of motor traffic such as air and noise pollution and greenhouse gas emissions are likely to be reduced. Other health benefits may be realised but are dependent on using the space differently, such as improving the walking, wheeling, and cycling infrastructure, providing additional space for people to shop or socialise, or for children to play.
>
> The impact on health inequalities is also clear. Those living in low income communities, or who live with chronic health conditions, are more likely to suffer adverse effects of traffic, like air pollution and road traffic collisions. These groups are also less likely to have access to a car. This work highlights the need for realistic and better alternatives to car travel.
>
> Changing how road space is used should be designed by working with local communities to make sure it meets the needs of everyone and maximises the benefits for all. The findings suggest footfall for local businesses is likely to increase and it may take 2-3 years from implementation until communities experience the full benefits."

[48] https://www.gov.scot/publications/designing-streets-policy-statement-scotland/pages/5/

[49] Living Well Locally – Road Space Reallocation Contributes to Improved Health - News - Public Health Scotland

and

> "It is our recommendation that road space reallocation continues to be supported in Scotland, that greater investment in public and community transport is required and that reallocated space becomes a community resource".

The advent of satnavs has made it much easier for drivers to “rat run” off main routes through quieter side streets, risking congestion, air and noise pollution and community severance. Department for Transport (DfT) data shows that traffic on residential streets increased by 72.2% between 2009 and 2019. There is some early indication that satnav providers may update their algorithms to keep traffic on main roads[50].

Scotland’s Road Safety Framework to 2030[51] commits to the following outcomes:

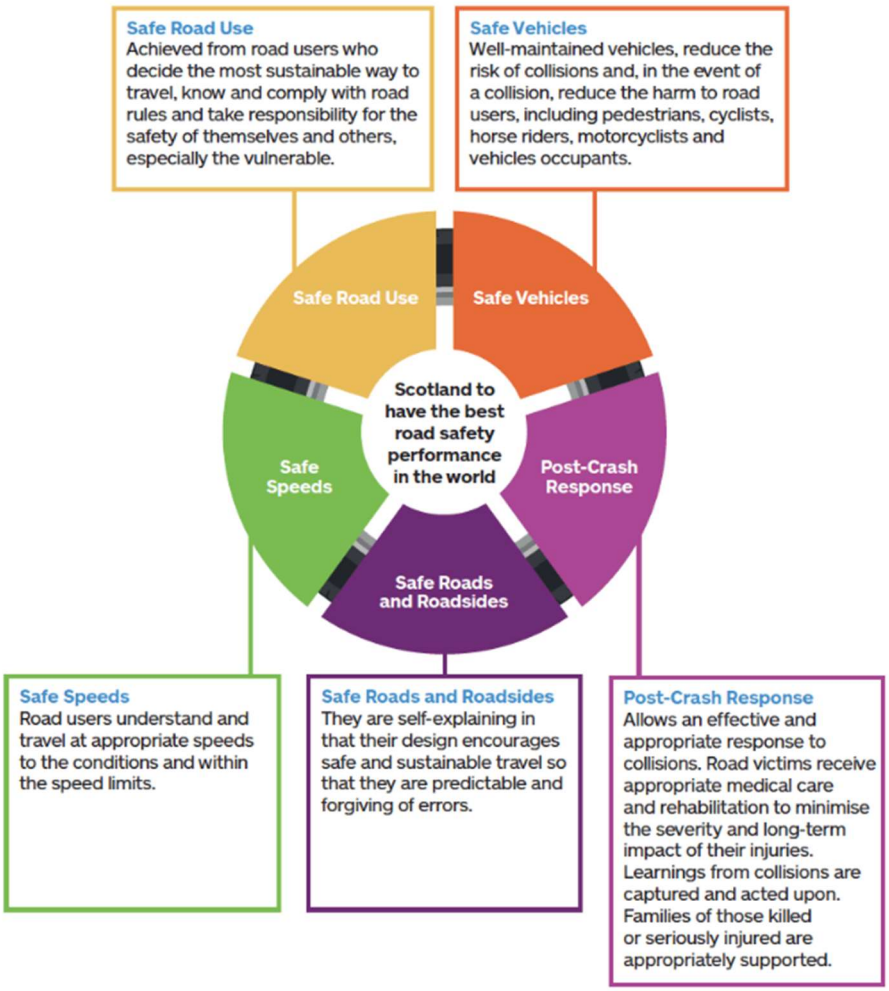

Figure 58 Scotland's Road Safety Framework to 2030

[50] Sat navs set to have algorithms updated to move traffic away from shortcuts and back to main roads | RAC Drive

[51] Framework at a glance | Transport Scotland

The intermediate targets in the Framework include, targets from the Highland Road Safety Group Action Plan (2016-2018) set similar targets:

- 40% reduction in pedestrians killed or seriously injured
- 20% reduction in cyclists killed or seriously injured
- 30% reduction in motorcyclists killed or seriously injured
- 20% reduction in road users aged 70 and over killed or seriously injured
- 70% reduction in road users aged between 17 to 25 killed or seriously injured
- Percentage of motorists driving/riding within the posted speed limit
- The casualty rate for the most deprived 10% SIMD areas is reduced to equal to the least deprived 10% SIMD areas.

Within the scope of this document, meeting this ambitious target of having "the best road safety performance in the world" requires consideration of speed limits, safe road use by all, and safe roads and roadsides.

Transport Scotland reports[52] that: "In 2021, non built-up roads accounted for over two-fifths of the total number of reported casualties (44%: 2,204 out of 5,023). However, they accounted for over two-thirds of those killed (69%: 96 out of 139) and over two fifths of the total number of seriously injured (46%: 739 out of 1,596). This will be at least in part due to the higher average speed on non built-up roads, and also because these roads make up two-thirds of Scotland's road network. Compared with the 2014-18 average, total casualties on non built-up roads have reduced by 46% and built-up roads by 54%. However, the reduction in fatalities on non built-up roads was greater (at 22%) than for built-up roads (at 15%)."

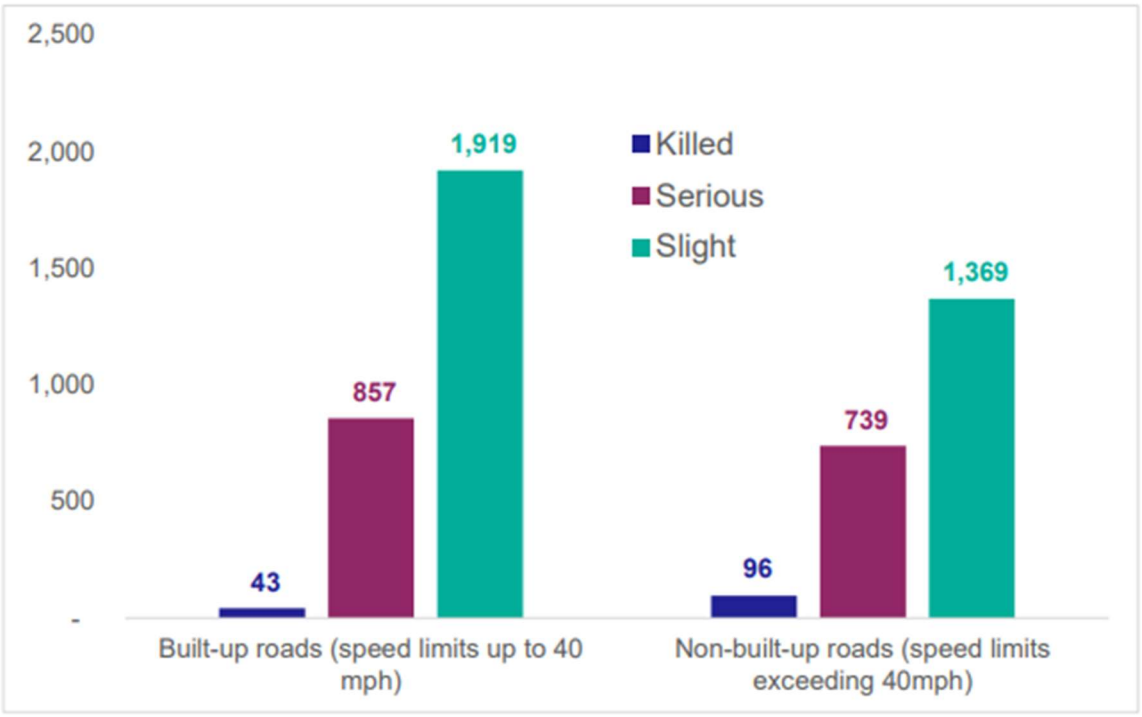

Figure 59 Number of casualties by road type, Scotland, 2021

HITRANS' RTS Case for Change report 2023 states that "In absolute terms, the routes with the greatest number of accidents [on the strategic road network] are the A9 Perth-Inverness, the A83 Tarbert-Campbeltown-and the A96 Inverness-Keith, the A9 and A96 being two of the higher volume routes." and "… it is important to

[52] Key Reported Road Casualties Scotland 2021 (transport.gov.scot)

note that much of the road network across the HITRANS area is low quality and thus there is a higher risk of accidents on the local road network…"

Dualling projects on the A9 and A96 will address some of these concerns and deliver improved active travel infrastructure alongside. In particular, dualling between Inverness and Nairn will create the opportunity for the existing A96 to become a key corridor for cycling and public transport, improving bus reliability.

Looking at child casualties, the trend is clearly downwards. However in Scotland in 2021 there were still:

- 241 child pedestrian casualties. 94 were seriously injured and 1 died;
- 167 child casualties in cars. 24 were seriously injured and 2 died;
- 58 child pedal cycle casualties. 16 were seriously injured and 1 died.

Transport Scotland's Social and Equalitiy Impact Asssessment for the NTS[53] reports that with regard to SIMD classification:

> "Those in the 10% most deprived areas are also more likely to walk or catch the bus to travel to work or school (Transport Scotland, 2020). However, people living in deprived areas tend to live in more hazardous environments, with greater proximity to high volumes of fast-moving traffic and high levels of on-street parking and, as such, they have higher levels of exposure to road traffic risk. […]
>
> "…children from deprived areas and certain ethnic groups are more at risk. A key aspect to consider is school transport casualty risk. A recent report shows that for children, the journey home from school in the afternoon has more risks than the journey to school in the morning, especially when walking or cycling.
>
> Furthermore, children killed or injured when walking after leaving a bus or a car are often classed as pedestrian casualties.[…]
>
> There is a significant causal relationship between increased motorised transport and increased road casualties and deaths: people from deprived neighbourhoods are more likely to be injured or killed as road users and people in the highest socio-economic groups (SEGs 1 & 2) were found to be substantially less at risk of death as car occupants than people in the lower groups (SEGs 4 & 5) (UK Government Office for Science, 2019)."

As referenced in the Introduction, the Travel Hierarchy prioritises people walking, wheeling and cycling over vehicles; this reflected in the emphasis on place-making in other key policies. Lower speed limits and mode segregation help enforce this hierarchy and are key to preventing and reducing fatalities and accidents involving motor vehicles, also delivering significant savings to NHS expenditure[54].

In February 2023 Highland Council adopted an updated Speed Limit Policy brought forward by the Road Safety team. This new policy is based on the Scottish Government's National Strategy for 20mph speed limits which aims to expand 20mph speed limits across Scotland and ensure all appropriate roads in built-up areas have a safer speed limit of 20mph by 2025.

It will provide consistency for 20mph speed limits across the country, simplifying speed limits for drivers. This consistency will build confidence amongst drivers and others alike.

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[53] www.transport.gov.scot/publication/social-and-equality-impact-assessment-seqia-nts-delivery-plan/2-key-issues-and-evidence/#content

[54] TRI-Technical-Paper-101.The-value-of-Prevention.AD_.pdf (napier.ac.uk)

It also recognises the importance of the behaviour change effects and placemaking potential of such works:

> "[it] seeks to reduce perceptions of road danger, encourage people to walk and wheel, and create more pleasant streets and neighbourhoods by providing a more equitable balance between different road users and will contribute to the implementation of the safe system."

This work sits alongside the Council's commitment to expand the existing number of 20mph zones across the area, introducing 20mph limits to a further 114 settlements, equating to 590km of road network, by summer 2023, as part of a Scottish Government pilot as an early adopter of the national 20 mph expansion policy. This offers rich opportunities for engagement with local communities including on making placemaking measures key to designs, thereby improving the attractiveness of public spaces as well as making them safer.

Reduced speeds also reduce pressure on the NHS. Napier University's Transport Research Institute has researched the potential to lower the baseline of avoidable injuries related to driving in decreasing the pressure on the NHS[55]. They found "UK studies evaluating the impacts [on the NHS] on speed driven include Portsmouth, Bristol, Edinburgh and the Scottish Borders, with […] each reporting significant casualty reductions."

In parallel with these reduced speed limits, new crossings could be necessary in many settlements to further support active travel. A presumption in favour of new pedestrian crossings and a simplifying of processes could be be necessary to achieve the scale of modal shift required by national targets. Local Transport Note 1/95 sets out a methodology for assessing at-grade pedestrian crossings and was reviewed by Scottish Government in 2018. This review highlighted an inconsistency in application, that guidance was open to interpretation, that roads authorities also use other methods (PV^2), and that factors to consider, such as latent demand for crossings, were not equally or consistently considered. This suggests that there may be a need for further consideration over what THC's policy approach to the consideration and implementation of such facilities is.

ELECTRIC VEHICLES

Whilst new technologies like low-emissions and electric vehicles have potential to reduce the carbon footprint of transport, electric cars will not solve the issue of the multiple impacts of sedentary lifestyles, community severance, the need for parking, and congestion. Additionally, although they have low tailpipe emmissions they have significant other impacts: their heavier weight adds to wear and tear on roads, their manufacture brings environmental and humanitarian costs, and they add to particulates through brake pad and tyre wear. Their capital cost also puts them beyond many people's budget although they are cheap to run – an example of the "poverty premium" where those on lower incomes cannot capitalise improvements which would save them money.

The Scottish Government's 20% reduction in car km by 2030 pocity states:

> "Research commissioned by Transport Scotland and undertaken by Element Energy, looked at options available to meet Scotland's statutory climate targets. The report concludes that technology alone will be insufficient to meet out net zero target by 2045 and that we need to reduce the use of private vehicles as well as supporting a transition to lower emission vehicles, for those journeys where private car is still required."

However, it is important to recognise the potential for such technologies to decarbonise road transport, especially in rural areas whether that be through private electric cars or through electric public transport, shared transport and community transport provision. Zero emission technology also has potential in freight,

[55] Essential-Evidence-4-Scotland-No-53-Lowering-the-baseline-of-avoidable-injuries-in-increasing-NHS-capacity.pdf (napier.ac.uk)

especially in last-mile deliveries in built-up areas and commercial centres. That is to say, EV technology has the potential to benefit many, not just those who can afford an electric car. However it is important to note that EVs will have to be included in any replacement schemes for revenues from fuel duty.

Combined with a range of active travel and public transport interventions in the more urban places, electric vehicles and, in future, other alternative fuel technologies such as hydrogen, can contribute to tackling carbon emissions associated with transport, in combination with active travel and public transport interventions.

Infrastructure needs for most electric vehicle charging can be met at home, where vehicles are parked in driveways for most of the time and where access to private chargers is easier. For people without off street parking, and where there will be need to charge in public places, including tourists to the region, further investment will be required. The Highland Council's Climate Change Team is progressing work in this area, following a study into demand and feasibility of public charging infrastructure in 2020. The Council owns and operates over 85 chargepoints across the region, and 23 more will be added to the network by Autumn 2023. The network is not at a stage, in terms of size and potential cost to the Council, that it requires commercial investment. Members of The Highland Council Climate Change Committee agreed to progress a Pathfinder Project to explore the potential of the Council working with Aberdeen City and Shire Councils and the private sector to transform the network. This project will look at the mechanisms to expand the network to meet the demands of the growing EV market, and will involve testing the market to identify choices for how the Council and its partners expand the network. The outcome of this should inform the development of appropriate EV policy for the Transport Strategy.

TRAFFIC & PARKING

The benefits of car use are generally experienced at the individual level while the problems are generally externalised and borne by society, communities and the environment. Napier University's Transport Research Institute published[56] a review of road traffic reduction measures such as Low Emission Zones, the Workplace Parking Levy, Congestion Charging, Road User Charging / Fuel Duty and rural tourism measures at tourist hotspots. The review notes that many of these measures are appropriate for larger cities but may not be appropriate or have the desired effects in smaller cities and towns. Nevertheless, some evidence has demonstrated that people walking, wheeling, cycling and using public transport generally spend more per head in the High Street, and that businesses generally benefit from pedestrianisation of town centres. The charity Living Streets' 2018 report "The Pedestrian Pound"[57] evaluated the impact of such schemes on existing business performance (footfall and retail), urban regeneration (new business, rental income, employment, social exclusion), improved consumer and business perceptions, and available evidence surrounding the future of the high street and the place economy. The report outlines that place-based improvements that encourage walking will increase dwell time and improve the economic vibrancy of town centres. Similarly themed research by Transform Scotland [58] highlighted the experiences of traders in Oslo, which has Europe's largest car-free city centre, identifying the need to deliver some visible improvements as early as possible, and having a comprehensive communication and enagement plan so that business traders are included and heard from the very outset. As summarised in the Scottish Retail Consortium's report Getting the Right Change: A Retail Strategy for Scotland[59],

[56] TRI-Technical-Paper-102.Assessment-of-demand-management-measures-to-reduce-road-traffic.RL_.pdf (napier.ac.uk)

[57] pedestrian-pound-2018.pdf (livingstreets.org.uk)

[58] Open-for-Business-report-Transform-Scotland-June-2021.pdf

[59] Getting the Right Change – A Retail Strategy for Scotland (nen.press)

> "The last two years have been challenging for retailers and their employees …The retail sector is diverse and dynamic, and undergoing a significant transformation, with changes in consumer behaviour, technological advances and accelerated growth in online shopping. […] the sector [must embrace] business development opportunities that foster sustainable growth; protect the environment; cultivate entrepreneurship; strengthen supply chains; support wellbeing; and ensure that retail offers secure, well-paid and rewarding employment."

Transport is part of this transformation, which offers the potential to positively transform economically important places, such as town and city centres.

Parking resource and management is a key tool in managing vehicle movements within communities. Cruising for parking adds to congestion. From a summary of twenty-one studies of cruising behavior in the central business districts of 13 cities on four continents, the average time it took to find a kerbside parking space was 7.5 minutes, and on average 34 percent of the cars in the traffic flow were cruising for parking[60]. 15 minute free parking schemes could exacerbate this problem. This strengthens the case for a shift from provision of on-street parking to car parks: where people park once and then make multiple stops on foot.

Pavement parking is common in Highland but causes significant problems such as damage to kerbing, blocking of pavements to wheelchair users and those with pushchairs, and risks to people with a sight impairment. Being forced into the road to get past puts people into danger, especially because in most circumstances there will not be a dropped kerb. The 2019 Transport (Scotland) Act outlaws vehicles from pavements, beside dropped kerbs used by wheelchairs and pushchairs, and from double parking. However the enforcement and appeals measures will not be finalised till December 2023.The Local Transport Strategy

Nevertheless, provision of appropriate and well-managed parking is crucial to the transport network. Since 2016 Highland Council has been responsible for enforcing all on-street and off-street parking controls throughout the authority, instead of Police Scotland. Highland Council's Parking Policy 2018 - 2023 aims to "Ensure that parking revenue contributes to local infrastructure improvement, (including expansion of the parking estate and sustainable travel) and other local priorities as agreed by the local committee" and to "ensure that pricing strategies are adopted which differentiate the market (e.g. residents, visitors and shoppers) and support behavioural change."

This Case for Change does not seek to change parking policy but to ensure that it is used to help build a fair, affordable, accessible, sustainable, healthy transport system in line with national and local policies and priorities, and to identify opportunities to better understand the relationships between parking provision, demand, charging and their influences of the rest of the transport network.

Continuing Strategic Timber Transport funding assists in removing timber from fragile rural roads or enables their strengthening and improvement. This reduces future risk associated with damage to the road, helps to protect the rural road network whilst maintaining accessibility and improves road safety for rural communities. Such works can support walking and cycling as well as vehicle use, for example by including good links to the existing paths network.

Work continues on the Stromeferry Bypass with eight options currently undergoing detailed appraisal and Phase 12 works continuing including maintenance works to the rock slopes above the A890 on the south shore of Loch Carron in autumn 2021.

The rapid popularity of the North Coast 500 has brought pressures to the transport network – roads in particular - and other infrastructure such as public facilities and litter management. In particular there are issues of poor driving on single track roads, nuisance parking, increased community severance, increased wear and tear on roads, and localised congestion. An increase in vehicle traffic also works against an increase in

[60] Parking Today | Articles - Is 30 Percent of Traffic Cruising for Parking?

cycle tourism. Maintenance of the existing network along with targetted improvements in infrastructure at key spots, in line with the investment hierarchy, are an important part of the strategic planning for the NC500.

POLICY REVIEW

CLIMATE CHANGE IN HIGHLAND

In May 2019 Highland Council members declared a Climate and Ecological Emergency, which led to the establishment of a Climate Change Panel. This Panel agreed:

> "… that the Council's aspiration should be to reposition Highland as a low CO2 region and develop a framework around this vision – making best use of our natural resources, offering opportunities for carbon friendly investment/offsetting, identifying critical projects and leading on more carbon efficient public services. It was also recognised there is a need to examine Highland assets, for example, our renewables, forestry, land base, what we can potentially offer the rest of the country and become an exemplar in respect of how a region can address the climate and ecological emergency."

October 2022 saw a significant expansion of the Climate Change Team. Travel policy has a significant part to play in this work.

Climate change is already impacting the Highlands with more frequent extreme weather events, sea level rise and changes to our rainfall patterns and temperatures, Figure 60. Since 1997, Scotland has recorded its 10 warmest years with 2022 noted as the warmest on record. Additionally, annual average rainfall has increased by 9% from the 1961-1990 average, and winters 19% wetter – Adaptation Scotland.

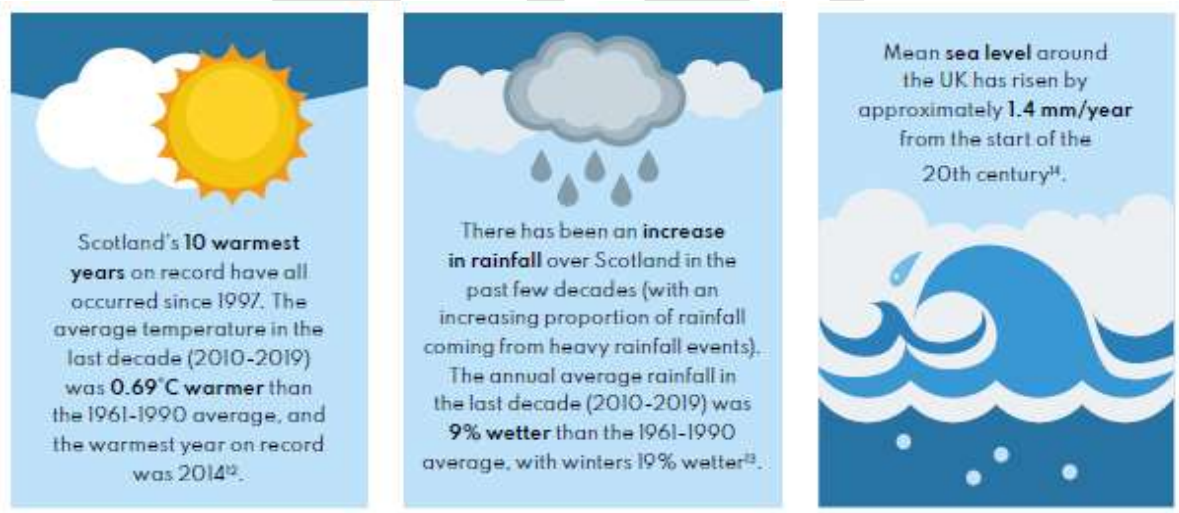


Figure 60: Adaptation Scotland, 2022

Highland is projected to experience hotter, drier summers, with greater extremes; warmer and wetter winters with more intense rainfall events; a decrease in summer rainfall and an increase in winter rainfall; and sea levels will continue to rise, increasing flooding and coastal erosion. These changes are impacting our transport network and will continue to intensify in the future. Highland has already experienced road closures due to landslips, fallen trees and flooding after adverse weather. Such closures can severly disrupt access to goods and services and put communities at risk.

CLIMATE CHANGE ADAPTATION AND BUILDING RESILIENCE

We need to adapt to these changes to become more resilient as a region to the impacts of climate change. Adaptation is defined as, 'adjusting to the impacts of climate change to reduce the negative impacts and exploit any opportunities' – Adaptation Scotland. Moreover, building resilience into our transport network is essential to ensure the region is better prepared for weather extremes. We need to safeguard our connectivity and the continuation of critical services. The development of the Highland-wide Transport Strategy provides an opportunity to work in partnership to ensure a just transition to net zero as well as delivering co-benefits to mitigate and adapt to climate change.

Part of the Council's work on climate includes through the 'Highland Adapts' initiative that brings our communities, businesses, land managers and the public sector together to facilitate action towards a prosperous, climate-ready Highland. It takes a place-based, collaborative, evidence-based approach. Highland Council is a key partner. The aims of this Case for Change align with the Highland Adapt's bigger picture of adaptation and resilience.

POTENTIAL ACTIONS THE COUNCIL AND OTHER PARTNERS COULD AIM TO DELIVER AS PART OF THE LOCAL TRANSPORT STRATEGY

1. Communication & engagement - continue to work with local and regional transport partners to deliver coordinated communication of transport information to keep residents and visitors informed of disruptions and alterative services.

2. Resilience of transport infrastructure networks - work with transport providers and partners to ensure that our transport infrastructure is adapted to and protected against future climate change impacts. Ensure current and future transport and active travel infrastructure includes green and blue infrastructure to reduce flood risk and extreme weather impacts e.g. heatwaves.

3. Risks and opportunities - work with Highland Adapts to identify risks and opportunities in the Highlands transport network.

Highland Council's Climate Adaptation and Buidling Resilience Policy states that "We are already seeing the effects of climate change in Highland through extreme weather events such as storms, period of high temperatures, and intense rainfall which is causing more frequent flooding, wildfires, and landslips. These impacts are predicted to continue and intensify over the coming years."

Landslips pose a particular threat to the road and rail network, and therefore to communities, with long diversions and risks to supply chains a very significant consequence of closure.

NATIONAL POLICY AND TARGETS

There are a number of current Scottish Government policy documents relevant to the development of the Local Transport Strategy; the table below gives an overview of implications for the Local Transport Strategy:

Policy	Key extracts	Implications for the Local Transport Strategy
A Fairer, Greener Scotland: Programme for Government 2021 – 22	• Removing the majority of diesel buses from public transport by the end of 2023 • Reducing car kilometres by 20% by 2030 • Decarbonising Scotland's railways by 2035	The commitment to a steady increase in funding for active travel to 10% of the transport budget by 2024/5 opens real opportunities for Highland Council to make a step change in active travel infrastructure

Securing a Green Recovery on a Path to Net Zero: Climate Change Plan 2018 – 2032 Scottish Government's Update to the Climate Change Plan 2018 – 2032 Second Climate Change Adaptation Programme 2019 - 2024	• Phasing out the sale of new petrol and diesel cars by 2030 • Nationwide free bus travel for young people under the age of 22 • Spending at least £320 million or 10% of the total transport budget on active travel (beginning in 2024-2025) Recognises the role of transport in decarbonisation with various measures introduced e.g. phasing out new petrol and diesel cars and vans by 2030, investment in electric buses and a £50million investment in Active Freeways. SCCAP Outcome 4 outlines the resilience of Scotland's transport system: • "Our society's supporting systems are resilient to climate change." • Reference to the National Transport Strategy.	and public transport provision between and within communities across the region. There is consensus that existing active travel delivery models will not be scalable, nor in many cases suitable to meet the ambition of this new budget. Electrification of the railways leads to a more reliable service as well as decarbonisation. Rail and bus improvements will help decrease congestion and improve connectivity to outwith the Highland area. Decarbonisation of cars and buses will improve air quality and therefore health – particularly important for our older and youngest residents, who are more vulnerable. Electric vehicle charging infrastructure must increase rapidly to meet the coming rise in demand. Active Freeways could be significant in a rural context, providing that the particular pressures are recognised.
National Transport Strategy 2020 (NTS2). Outlines a vision for Scotland's transport system over the next 20 years to 2040.	Based on four key principles: reduces inequality, takes climate action, helps deliver inclusive economic growth and improves our health and wellbeing (Fig 21). The Sustainable Travel Hierarchy (Fig 22) focuses on how to reduce unsustainable travel. The Sustainable Investment Hierarchy (Fig 23) establishes priorities in planning transport investment. The Sustainable Investment Hierarchy (Fig.23) dictates that investment in new infrastructure should only be considered *after* exploring and investing in a wider package of options aimed at: • Reducing the need to travel unsustainably, then • Maintaining and safely operating existing assets, then • Making better use of existing capacity, and finally	Need to prioritise walking, wheeling and cycling along with accessible public transport interconnections. Single occupancy car use should be discouraged. Need evidence-led approach to direct resources for greatest impact. Need to likewise cover to 2040 or beyond to be sure of meeting aims. To achieve this, it is crucial that new developments must be designed according to the most up-to-date national guidance re active and sustainable travel. This is "Designing Streets" and "Cycling by Design" at the time of writing. NB where guidance is not yet statutory it should be followed anyway otherwise we will be creating a legacy of retrofitting needs. We cannot afford to keep building more barriers to modal shift and a retrofitting burden. Planned roads / infrastructure works offer an almost-free opportunity to create new

	• Targeted infrastructure improvements. It recognises the regional differences experienced in the transport system across Scotland, including between urban and remote and rural communities. Contributes to Scottish Government target of reaching zero carbon by 2045: transport is currently the largest contributor to Scottish emissions.	active travel infrastructure at the same time: more cost-effective than retrofitting. Will require changes to other policies e.g. Planning, Roads, Road Safety.
STPR2 (2022). Provides an overview of transport investment, mainly infrastructure and behavioural change recommendations, that are required to deliver NTS2.	Adds a fifth key principle to the above: Improving safety and resilience. Considers Scotland as 11 regions of which Highlands & Islands is one. There are 45 strategic project recommendations, grouped under six themes (see Appendix 1): • Improving active travel infrastructure (Recommendations 1-5) • Influencing travel choices and behaviours (6-10) • Enhancing access to affordable public transport (14, 15 and 18-23) • Decarbonising transport • Increasing safety and resilience on the strategic transport network (37) • Enhancing strategic connections (43) New road building projects??	The TS must prioritise modal shift away from single use car occupancy towards active and sustainable modes in all our settlements, between settlements, and in rural areas / islands. Active travel infrastructure work must be complemented by behaviour change work. Affordability, and journey integration between modes, are crucial. NB SPTR2 policies to reduce freight on roads will support modal shift to walking and cycling. Will need more and better data to monitor and evaluate initiatives to build evidence of best practice and to achieve maximum impact from investment.
NPF4	The four overarching principles are: • Sustainable places – where we can reduce emissions and restore and better connect biodiversity • Liveable places – where we can live better, healthier lives • Productive places – where we have greener, fairer and a more inclusive wellbeing economy • Distinctive places – where we recognise and work with our assets NPF4 includes the concept of 20-minute neighbourhoods as a place-based approach to reduce inequality, improve wellbeing and	There are implications for Highland are through the Northern Revitalisation Action Area. Policy objectives are to strengthen networks of resilient communities, to stimulate green prosperity, to nurture nature-based solutions and to strengthen resilience and decarbonise connectivity. Again the new TS must prioritise modal shift from the private car towards active and sustainable modes. This will potentially contribute to all the policy objectives.

	meet net zero carbon emission targets. It states: "Create carbon neutral coastal and island communities: Future-proofing local liveability will benefit people as well as the planet. Island and coastal communities will need a bespoke and flexible approach to the concept of 20 minute neighbourhoods, for example by identifying service hubs in key locations with good public transport links. This can build long-term resilience and self-reliance whilst sustaining dispersed communities and rural patterns of development.'"	
Infrastructure Commission for Scotland	Key recommendations include: Aligning strategic investment decisions to address fully the requirement for demand management, a substantial increase in the proportion of journeys made by active travel, and opportunities for shared mobility as well as a much greater role for public Transport; For such road investment that is made as part of the above, a presumption in favour of investment to future-proof existing road infrastructure and to make it safer, resilient, and more reliable, rather than to increase road capacity; To enable a managed transition to an inclusive net-zero carbon road infrastructure, the Scottish and UK governments should immediately commit to establishing a charging / payment regime alternative to the existing fuel and road taxation-based structure. The Scottish Government should also consider additional options to provide a more stable long term investment regime for the management and maintenance of roads.	In line with the principles and recommendations of other key policies.
Vision for Active Travel in Scotland Draft Cycling Framework for Active Travel	Vision: "That Scotland's communities are shaped around people, with walking and cycling the most popular choice for everyday short journeys." "The top priority for the achievement of our vision is for the delivery of more dedicated, high quality, safe cycling infrastructure,	Cycling is key to achieving the vision. Emphasis here is on everyday journeys not on leisure and tourism. Gives clarity "that high quality safe segregated cycling infrastructure is the key measure that must be implemented if

	effectively resourced, where fair access is ensured and uptake is supported with training and education." The Draft Cycling Framework builds on announcements in the Programme for Government. From the Background: The overall recommendation was that the next version of CAPS should be a strategic level plan that placed emphasis on the delivery of key actions that international evidence shows are required to increase levels of everyday cycling. The review noted that the main problematic area was the relatively slow progress in implementing high quality safe cycling infrastructure at the local level, and in improving road safety for vulnerable users. It acknowledged that these are local authority responsibilities primarily and that there are multiple barriers to progress at local level, including funding and staffing. And it noted that a key barrier is the political challenges of implementing new cycling infrastructure where this involves allocating road space away from parked or moving private motor vehicles. It also noted that the relatively slow progress may also be because CAPS was not completely clear that high quality safe segregated cycling infrastructure is the key measure that must be implemented if Scotland's cycling mode share is to increase. These points are addressed in the Framework.	Scotland's cycling mode share is to increase." Welcome the central recognition that LAs are key but that there are multiple and significant barriers within LAs. We need to be ready to benefit from these opportunities. Provision of multi-year funding is a key opportunity. Cycle Storage Fund also an opportunity to support modal shift amongst householders who currently have no cycle storage. Across Scotland, 40% of residents have no access to cycle storage, leaving cycles vulnerable to theft and vandalism and creating a barrier to modal shift. No Highland data available but it is likely that in every one of our communities there will be residents without cycle storage.
20% reduction in Car Kilometers by 2030: Route Map	• Longer journeys account for a disproportionate amount of total car kilometres, with 4% of trips (those over 55 kilometres) accounting for nearly 30% of the total kilometres driven in 2019 • 45% of trips were recorded to be under 8 kilometres and accounted for 12% of total car kilometres driven in 2019 • Rural areas see more car usage, with 70% of rural residents over the age of 17 driving at least three times per week, compared to only 46% of people in large urban areas The four key desired behaviours identified are Reducing the need to travel, Living well	It is a challenge for Highland to play its part in meeting this target; it is likely that this area contributes a disproportionate number of those longer car trips. Car ownership and usage here is higher than the Scottish average and there is more of an attitude that driving is the norm. However, we have an unavoidable responsibility to adopt policies and funding priorities which will contribute to that target. With 75% of Highland's population living within a settlement, 30% in Inverness, there is significant potential for modal shift for those shorter trips and for trips made within the city by residents who visit

	locally, Switching modes and Combining or sharing car trips. There is an acknowledgement that urban and rural approaches may vary. Key interventions with implications for this area are: • Intervention 1c – Mapping digital connectivity alongside transport connectivity • Intervention 3a – Publishing the Cycling Framework and Delivery Plan for Active Travel in Scotland in 2022 • Intervention 3b – Increasing Investment in active travel • Intervention 3i – Providing nationwide free bus travel for Scotland's young people aged under 22 from January 2022 • Intervention 3k – Introducing a Community Bus Fund • Intervention 3n – Supporting integrated journeys at ferry terminals • Intervention 4a – Testing the viability of Mobility as a Service (MaaS) in Scotland • Intervention 4b – Re-promoting the benefits of car-sharing and car-clubs post-pandemic	Inverness for goods and services, for example by using a Hi-bike. Liftsharing and car clubs are other opportunities which could work well in a rural context.
Scotland's Road Safety Framework to 2030	Scotland's road safety vision is for Scotland to have the best road safety performance in the world. The Long-Term Goal is of zero fatalities and serious injuries in road transport by 2050. Based on principles of Safe Road Use, Safe Vehicles, Safe Speeds, Safe Roads and Roadsides and Post-Crash Response.	5-year average number of reported road casualties (slight, serious or killed) 2017 – 2021 by Local authority has Highland 3rd equal with 415pa, behind Glasgow and Edinburgh[61]. Not an enviable position to be in. The data is complex. However, the trend since the 70s is steadily downward.
Scotland's Energy Strategy	I had a look through this and couldn't see a mention of transport, it's about generation and support for a just transition to low carbon. But maybe needs a mention for context?	

[61] Key Reported Road Casualties Scotland 2021 (transport.gov.scot)

Fairer Scotland Duty	The Fairer Scotland Duty places a legal responsibility on particular public bodies in Scotland to actively consider how they can reduce inequalities of outcome caused by socioeconomic disadvantage. The Poverty Commission's Report on Transport and Poverty (2019) (ref) states "Why does transport matter in relation to poverty? Transport matters in relation to poverty because of its potential impact on income, household expenditure and mitigating the impact of poverty […] The cost of transport can put significant pressures on household budgets. […] Transport costs can also prevent people from travelling entirely. […] Access to transport can also reinforce or lessen the impact of poverty. Being unable to access or afford transport can prevent people accessing services, reduce quality of life and lead to social isolation. This can increase inequalities linked to income, such as health inequalities." The report notes particular issues for rural areas. There is potential for a modal shift towards active and sustainable travel to reduce inequalities, including health inequalities, suffered by those in economic hardship.	As noted above, those on lower incomes typically have fewer transport choices. This can lead to restrictions on daily life and loss of opportunity for employment, leisure and education. Forced car ownership and transport poverty is a particular problem in rural areas.
Equality Act 2010	The Public Sector Equality Duty requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations between different people when carrying out their activities. There is significant potential for a modal shift towards active and sustainable travel to reduce inequalities and the discrimination suffered by people holding certain protected characteristics. Infrastructure improvements, more affordable public transport, better integration between modes etc. will lead to modal shift. This will increase natural surveillance, which will increase safety and perceptions for safety in those groups who feel at risk walking / wheeling / cycling / on public transport.	See Appendix 2 for the draft EqIA for the Case for Change. As well as ensuring that each individual initiative is fully accessible, we need to consider the overall picture: what does an equitable transport system look like, what are its characteristics? Transport systems have a particular impact on the lives of people holding the protected characteristics of Age, Disability and Sex but other protected characteristics also come in to play. Re infrastructure, there is an opportunity here to build a fully accessible network which will reduce inequalities and help to future-proof the area for the needs of our ageing population. The alternative, of building infrastructure which is not fully accessible to all, is clearly unacceptable.

		This principle also applies to planning strategy; in line with NPF4, new developments should be based on the travel hierarchy and not be car-centric. Everyone in society will benefit from an increase in the range of affordable, attractive, safe transport options.
Going Further: Scotland's Accessible Travel Framework (2016)	Going Further's vision is that "All disabled people can travel with the same freedom, choice, dignity and opportunity as other citizens." It establishes the following key outcomes: • That more disabled people make more successful day-to-day journeys, more often, • That disabled people are more involved in the design, development and improvement of transport policies, services and infrastructure; • That everyone involved in delivering transport information, services and infrastructure will help to enable disabled people to travel; • That disabled people feel comfortable and safe using public transport – this includes being free from hate crime, bullying and harassment when travelling.	As above, with particular reference to the Protected Characteristic of Disability.
Cleaner Air For Scotland 2 (2021) & Delivery Plan	The Transport section of this Plan covers: the introduction of Low Emission Zones (LEZ) in the four biggest Scottish cities; avoiding unnecessary travel, active travel, buses, taxis, rail, zero tailpipe emissions, lower carbon fuels, freight, trunk road network and demand management, workplace parking charges and vehicle disposal schemes.	LEZ not required in Inverness; some of these measures do not apply yet. Re avoiding unnecessary travel, public bodies are expected to be exemplars in homeworking and report on its contribution to carbon reduction targets. Opportunities for Highland Council: Transport Scotland (TS) will work with LAs to: ensure that temporary infrastructure introduced during covid under Space for People is made permanent. This offers opportunities for Highland communities where such infrastructure was introduced: Inverness, Aviemore, Dingwall, Fort William, Nairn, Portree, Thurso and Wick. TS will work with LAs to provide funding for infrastructure and behaviour change

		programmes aligned with the National Transport Strategy and the Sustainable Investment Hierarchy. TS will work with LAs to provide funding for bus priority measures and the purchase of low emissions buses TS will work with partners to establish innovative ways to invest in zero carbon emissions vehicles at scale across the public sector and to incentivise hydrogen and battery powered vehicles. TS looking to support "first / last mile" delivery options e.g. cargo bikes. Trunk roads will have to comply with European air quality limit values (working with SEPA). TS will work with LAs to explore road space reallocation to cycling and pedestrians. Workplace Parking Levy is politically challenging, a consultation is on its way.
Green Freeports	The Scottish Government has defined a Green Freeport as a type of Special Economic Zone, with Opportunity Inverness and Cromarty Firth Green Freeport named as one of two in Scotland. In addition to various customs and tax measures, operators and businesses located within the zone must show they contribute to a just transition to net zero emissions by 2045 and support the creation of high-quality employment.	Opportunities for Highland Council: investment in active and sustainable travel. This would link to improvements to the visitor experience for those arriving from cruise ships, in line with the aspirations of Invergordon and Alness as Climate Action Towns.
Infrastructure Commission for Scotland – Key Findings Report	The infrastructure commission was established in 2019 to assess and rethink the usage of current infrastructure to allow Scotland to reach the target of net zero by 2045 and to increase resilience to climate change. Transport is one of the many topics of review. Key recommendations: • Strategic investment decisions must support demand management, modal shift to active travel, shared mobility and public transport;	Key recommendations align clearly with other policy documents. May need to revisit demand analysis for e.g. Longman roundabout, some A9 dualling etc. in the light of changes to travel patterns post-pandemic and in terms of the risk of induced demand for more vehicle movements.

	• A presumption against increasing road capacity, instead investing in maintenance of the existing resource; • Investigate new charging / payment regimes and structures for long term maintenance of roads infrastructure.	
Scotland's Public Health Priorities	The covid pandemic highlighted for many the importance of the role of Public Health planning, and the impacts of health inequalities. Being physically active can help to prevent and treat many physical and mental health conditions. Scotland's Public Health Priorities are: • A Scotland where we live in vibrant, healthy and safe places and communities; • A Scotland where we flourish in our early years; • A Scotland where we have good mental wellbeing; • A Scotland where we reduce the use of and harm from alcohol, tobacco and other drugs; • A Scotland where we have a sustainable, inclusive economy with equality of outcomes for all; • A Scotland where we eat well, have a healthy weight and are physically active.	The vision of this Case for Change supports Public Health Priorities 1,2,3, 5 and 6. Explicit linking of active everyday journeys to a range of health benefits for individuals and communities may support modal shift. Local concerns about pressures on the NHS and about rising inequalities could support this.

REGIONAL AND LOCAL POLICY

DRAFT CORPORATE PLAN 2022 - 2027

This Policy supports the delivery of the Draft Corporate Plan as follows:

Strategic Outcome Statement	**People / Place / Economy**	**Priority Actions**
1. A Fair and Caring Highlands	People	1.5 Encourage a diverse range of traditional and emerging sporting activities and active lifestyles.
	People	1.6 Promote fair access through co-located services across the Highlands.
2. Resilient and Sustainable Communities	People	2.1 Develop affordable and reliable public transport.
	Place	2.3 Continue our expanded programme for improving road condition and maintenance.
	Place	2.4 Develop place-based plans that focus on quality neighbourhoods and direct local funding opportunities towards local priorities.
	Economy	2.9 Work with the Scottish Government on the delivery of improved transport infrastructure throughout the Highlands.
3. Accessible and Sustainable Homes	Economy	3.9 Future housing developments are integrated into the public transport networks for access to work.
4. A Sustainable Highland Environment and Global Centre for Renewable Energy	People	4.1 Promote active travel infrastructure across Highland. Actions & Measures: • Deliver the following Active Travel Infrastructure projects: o Culbokie by December 2024; o Kingussie by December 2024; o Academy Street – design by December 2023 and delivery by December 2025; o Wick – design by March 2023; o Inverness Active Travel Network schemes by March 2024 (Raigmore Interchange and Riverside Way)
	People	4.2 Promote greener transport including low carbon public transport and the development of hydrogen hubs throughout the area.
	Place	4.3 Work with communities to find local solutions and lever funding.
	Place	4.7 Achieve our Net Zero targets.

5. A Resilient and Sustainable Council	Place	5.5 Work together with communities and partners to produce local plans which meet communities' needs.
	Place	5.6 Develop place-based partnership strategies to coordinate investment and rural repopulation.
	Place	5.7 Continue the Council's success in attracting rural tourism infrastructure funding to provide improvements to local infrastructure.
	Economy	5.11 Implement the tourism levy as an enabler to a vibrant attractive visitor experience. (by 2025/26)

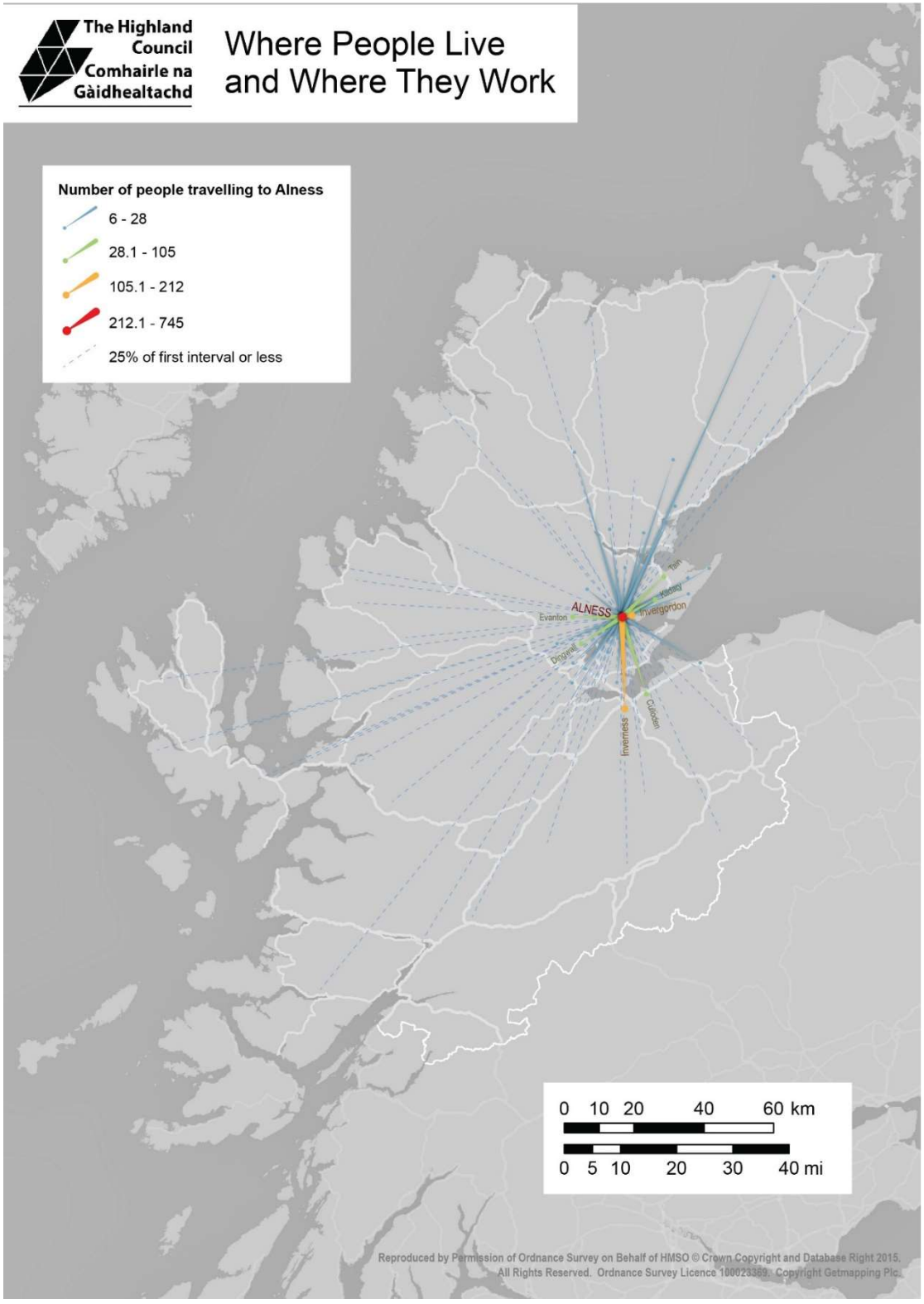
Further policy commitments relevant to this document include:

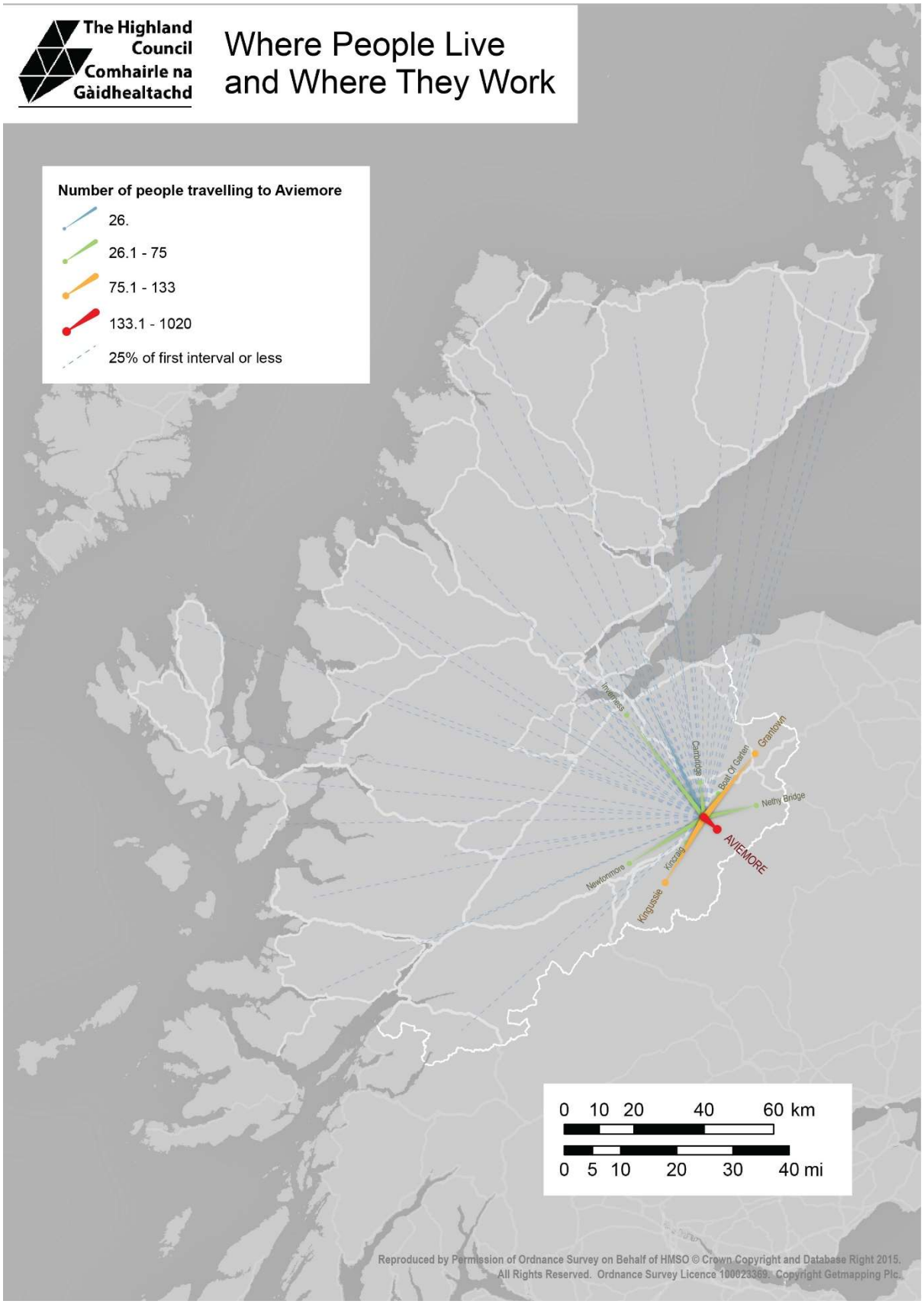
- **The City-Region Deal**, which will deliver some footways / cycleways alongside routes which are being developed – the A9 / A96 Smithton Link Road, the works on the Longman Roundabout, and the West Link as the final section of the Southern Distributor Road. Lower speed limits on the A9 between the Longman Roundabout and the Raigmore Interchange will make the footway / cycleway alongside less unattractive. The new dual carriageway between Inverness and Nairn will leave the existing road available for public transport – buses will not be delayed on this stretch by vehicle congestion - and for cycling by this flat and direct route into the city. However there is a risk that new roads will lead to further increases in traffic;

- **The Highland Strategic Tourism Infrastructure Development Plan**, which states that "Sustainable tourism is one of Scotland's key growth sectors identified in the Scottish Government's Economic Strategy and is the Highlands' most important industry generating significant economic benefits for all areas of Highland."

APPENDICES:

APPENDIX 1: TRAVEL PATTERNS, 2011 CENSUS




The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Aviemore
26.
26.1 - 75
75.1 - 133
133.1 - 1020
25% of first interval or less
Inverness
Cairngorm
Boat Of Garten
Grantown
Nethy Bridge
AVIEMORE
Kincraig
Newtonmore
Kingussie
0 10 20 40 60 km
0 5 10 20 30 40 mi
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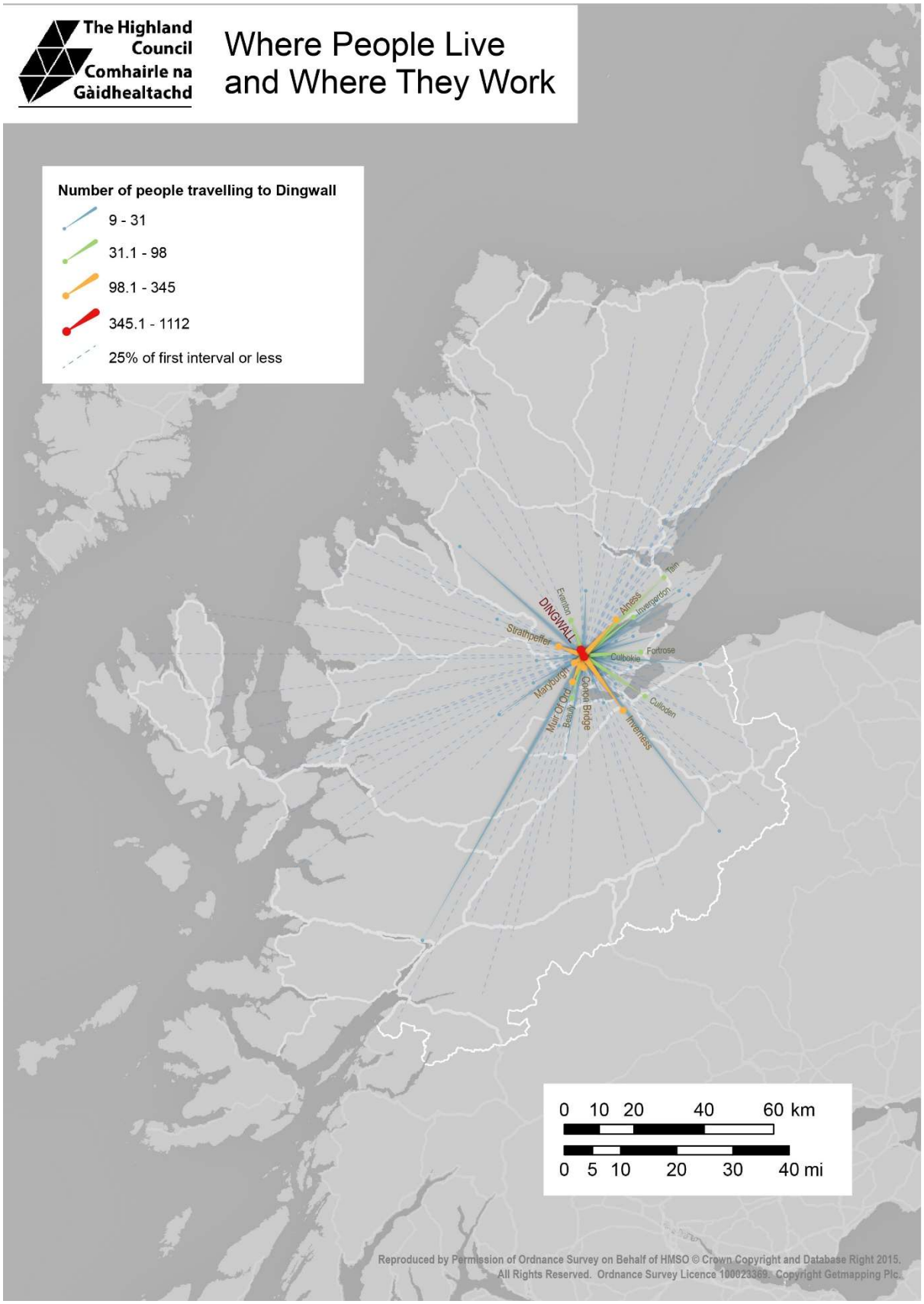
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Dingwall
9 - 31
31.1 - 98
98.1 - 345
345.1 - 1112
25% of first interval or less
DINGWALL
Evanton
Strathpeffer
Alness
Invergordon
Tain
Fortrose
Culbokie
Marybrugh
Muir Of Ord
Beauly
Conon Bridge
Culloden
Inverness
0 10 20 40 60 km
0 5 10 20 30 40 mi
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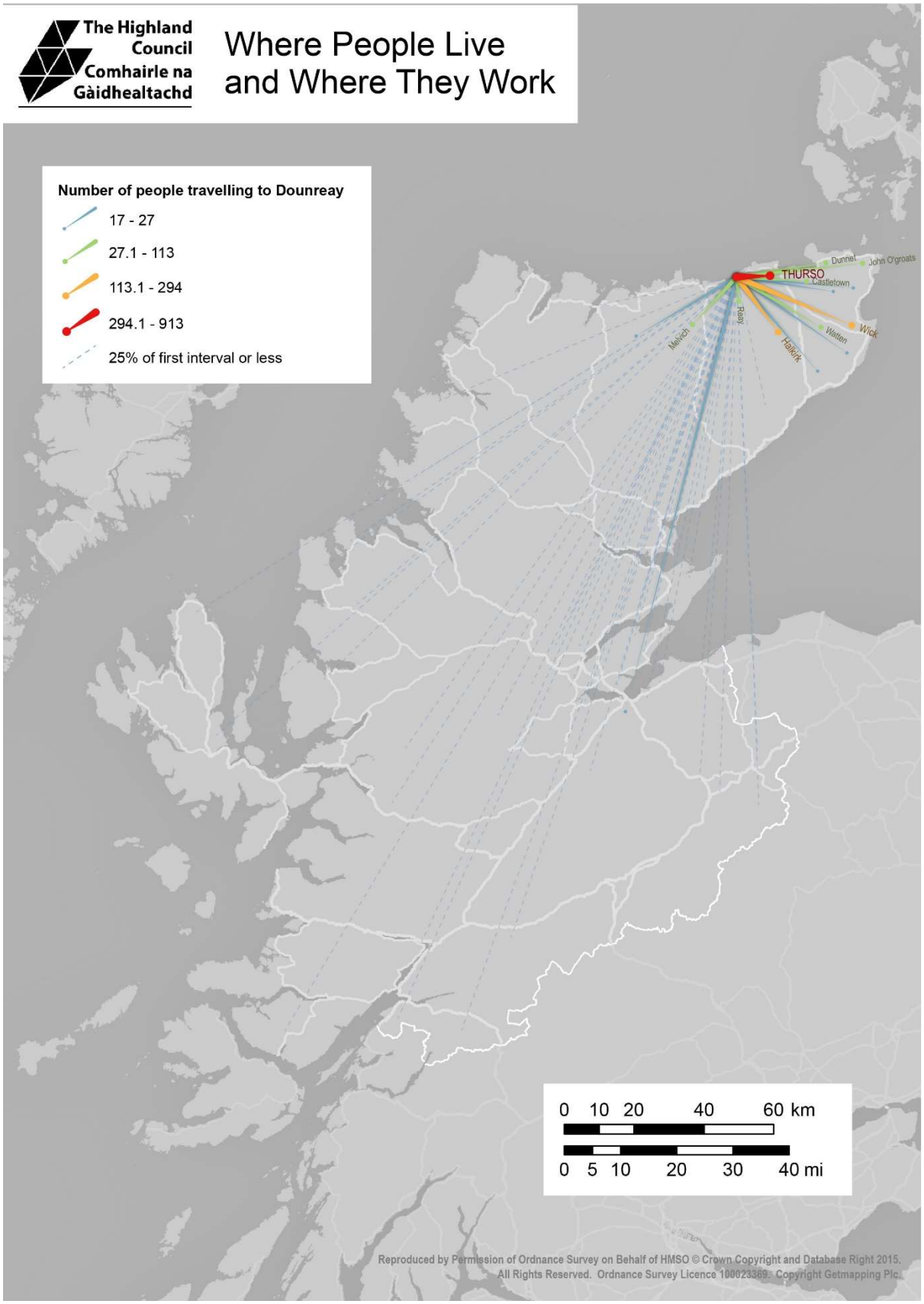
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Dounreay
17 - 27
27.1 - 113
113.1 - 294
294.1 - 913
25% of first interval or less
THURSO
Dunnet
John O'groats
Castletown
Reay
Melvich
Halkirk
Watten
Wick
0 10 20 40 60 km
0 5 10 20 30 40 mi
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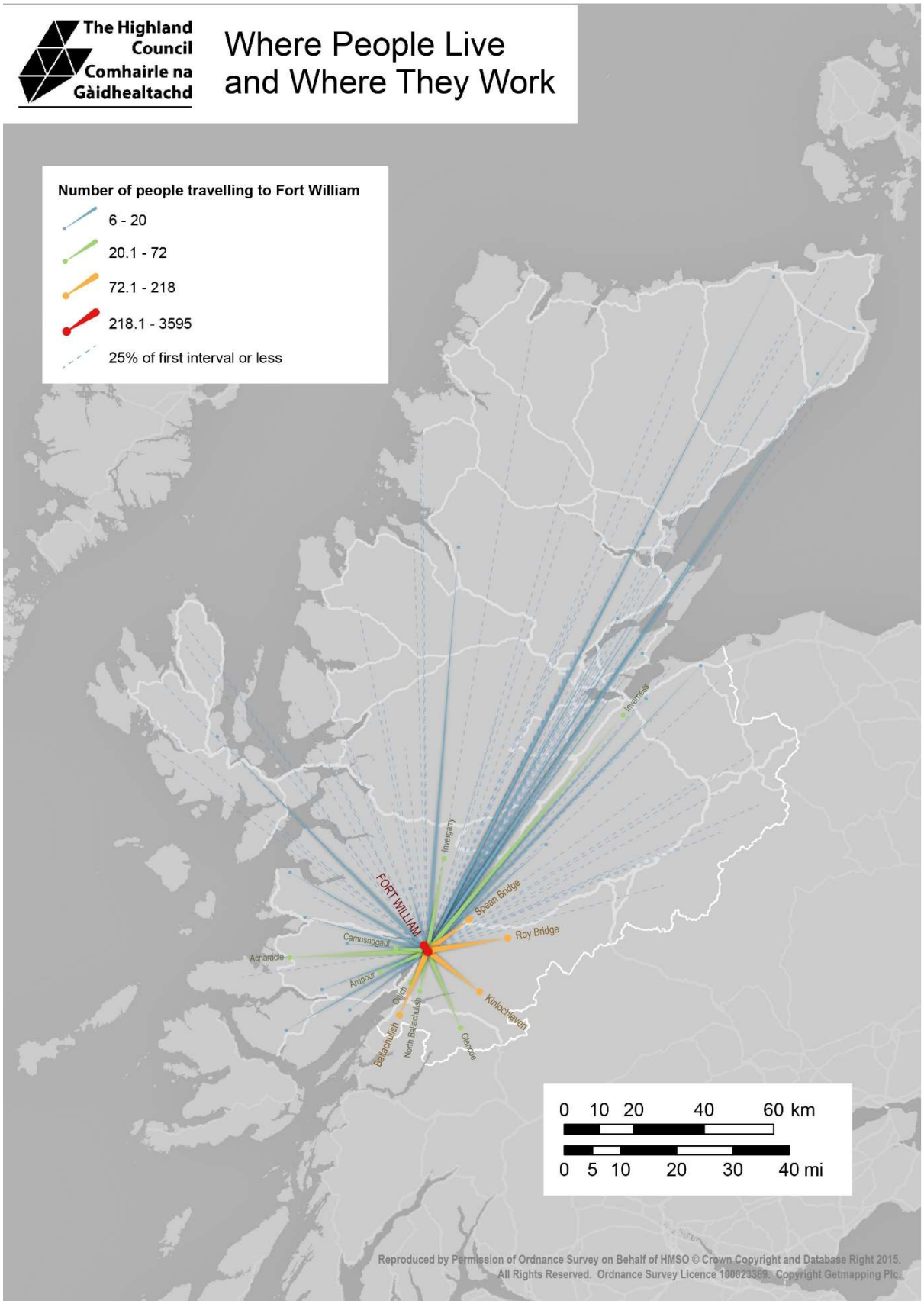
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Fort William
6 - 20
20.1 - 72
72.1 - 218
218.1 - 3595
25% of first interval or less
FORT WILLIAM
Inverness
Invergarry
Spean Bridge
Roy Bridge
Kinlochleven
Glencoe
North Ballachulish
Ballachulish
Onich
Ardgour
Acharacle
Camusnagaul
0 10 20 40 60 km
0 5 10 20 30 40 mi
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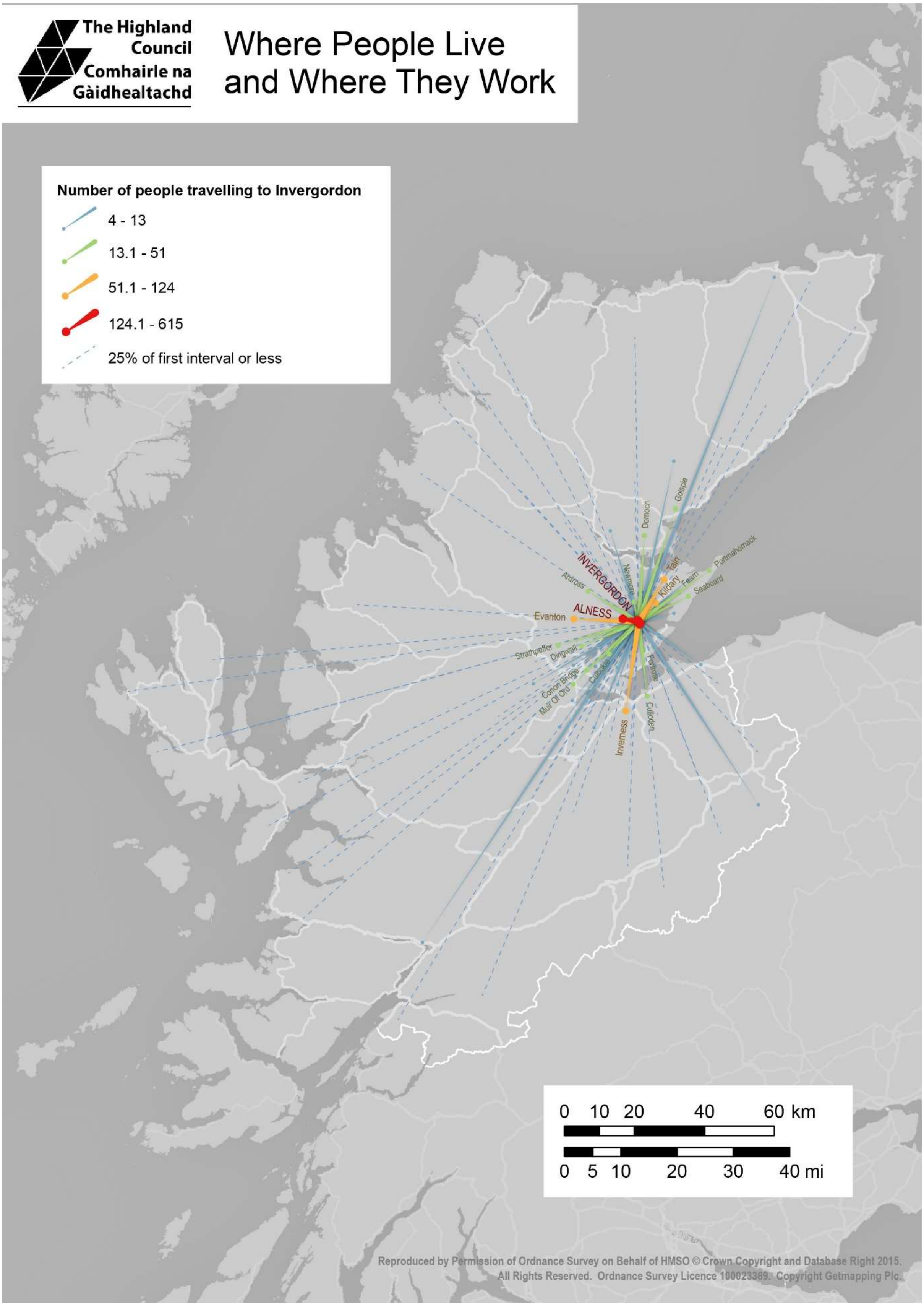

The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Invergordon
4 - 13
13.1 - 51
51.1 - 124
124.1 - 615
25% of first interval or less
INVERGORDON
ALNESS
Evanton
Tain
Inverness
0 10 20 40 60 km
0 5 10 20 30 40 mi
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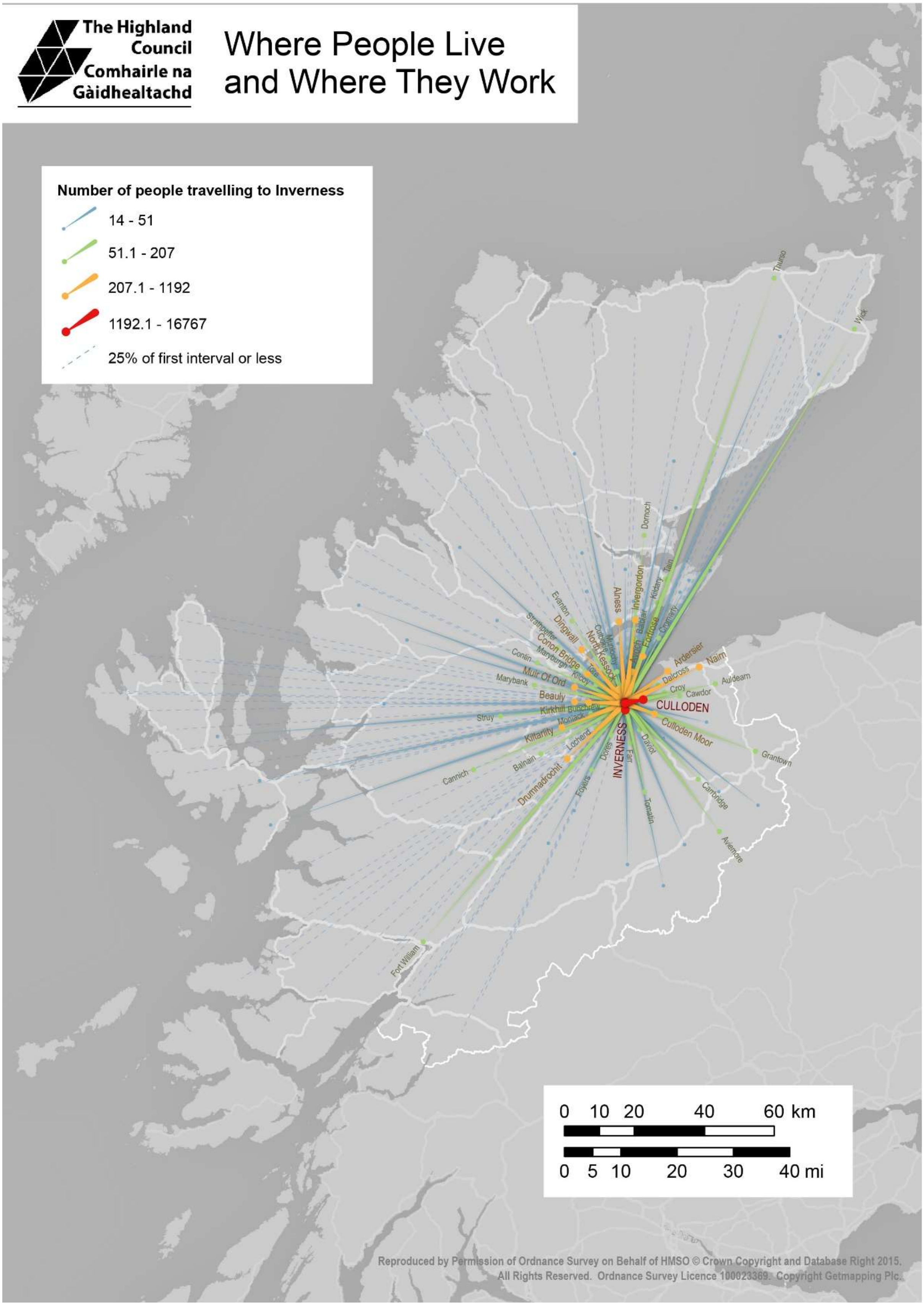
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Inverness
14 - 51
51.1 - 207
207.1 - 1192
1192.1 - 16767
25% of first interval or less
Thurso
Wick
Dornoch
Tain
Invergordon
Alness
Evanton
Dingwall
Strathpeffer
Conon Bridge
North Kessock
Fortrose
Contin
Maryburgh
Marybank
Muir Of Ord
Beauly
Kirkhill
Ardersier
Nairn
Auldearn
Dalcross
Croy
Cawdor
CULLODEN
Culloden Moor
INVERNESS
Struy
Kiltarlity
Lochend
Balnain
Cannich
Drumnadrochit
Foyers
Daviot
Grantown
Carrbridge
Tomatin
Aviemore
Fort William
0 10 20 40 60 km
0 5 10 20 30 40 mi
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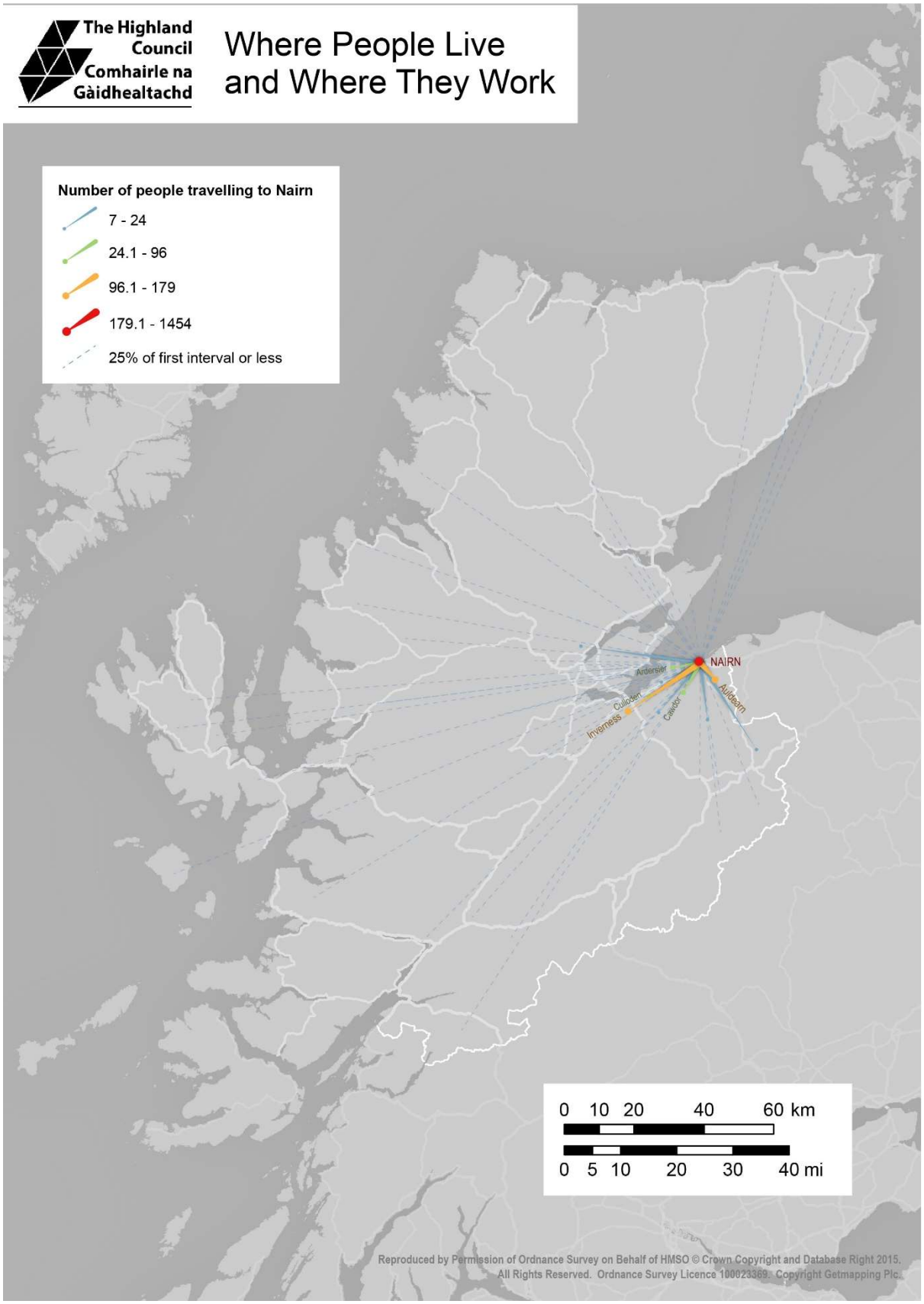
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Nairn
7 - 24
24.1 - 96
96.1 - 179
179.1 - 1454
25% of first interval or less
NAIRN
Ardersier
Culloden
Inverness
Cawdor
Auldearn
0 10 20 40 60 km
0 5 10 20 30 40 mi
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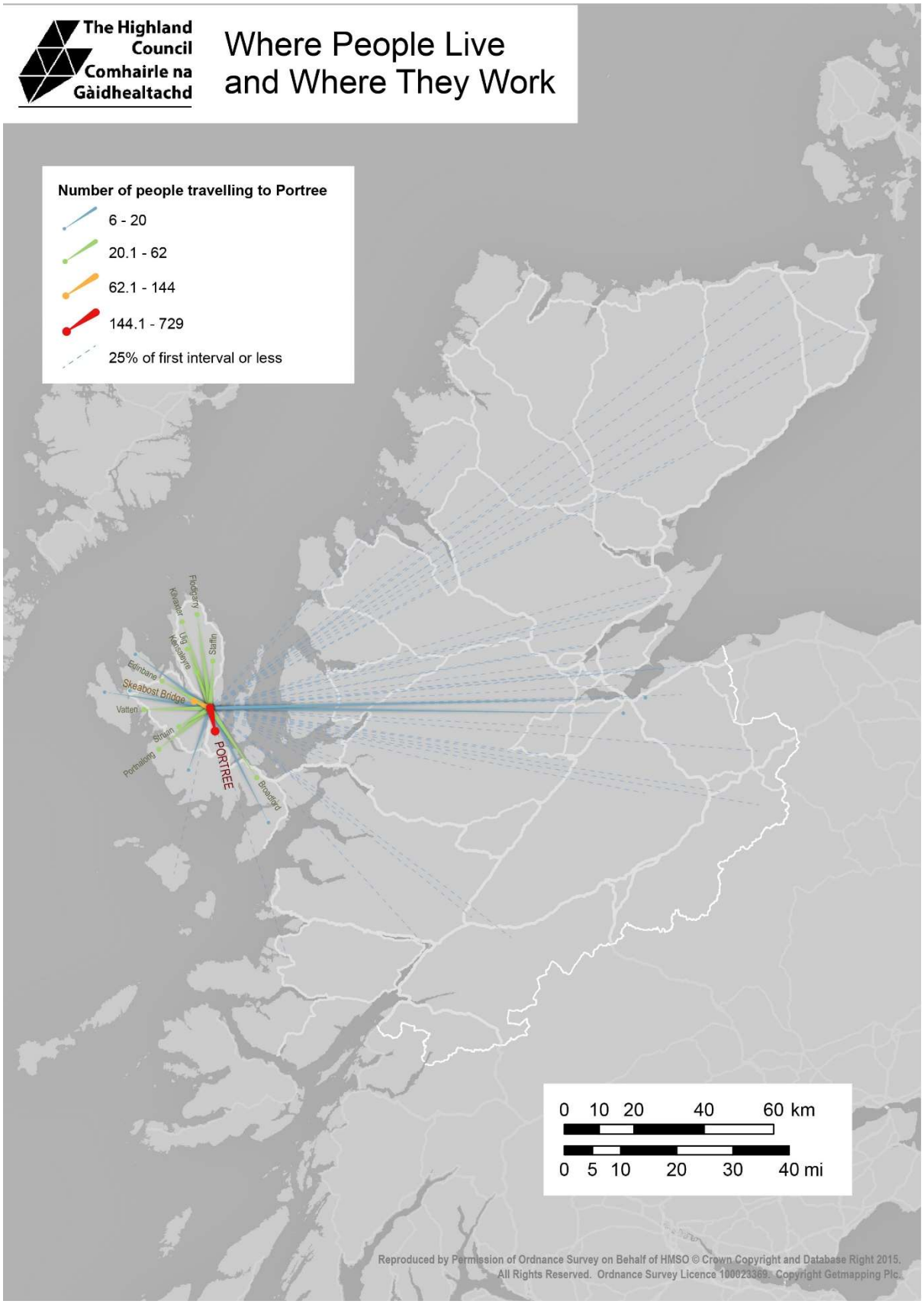
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Portree
6 - 20
20.1 - 62
62.1 - 144
144.1 - 729
25% of first interval or less
Flodigarry
Kilmaluag
Uig
Kensaleyre
Staffin
Edinbane
Skeabost Bridge
Vatten
Struan
Portnalong
PORTREE
Broadford
0 10 20 40 60 km
0 5 10 20 30 40 mi
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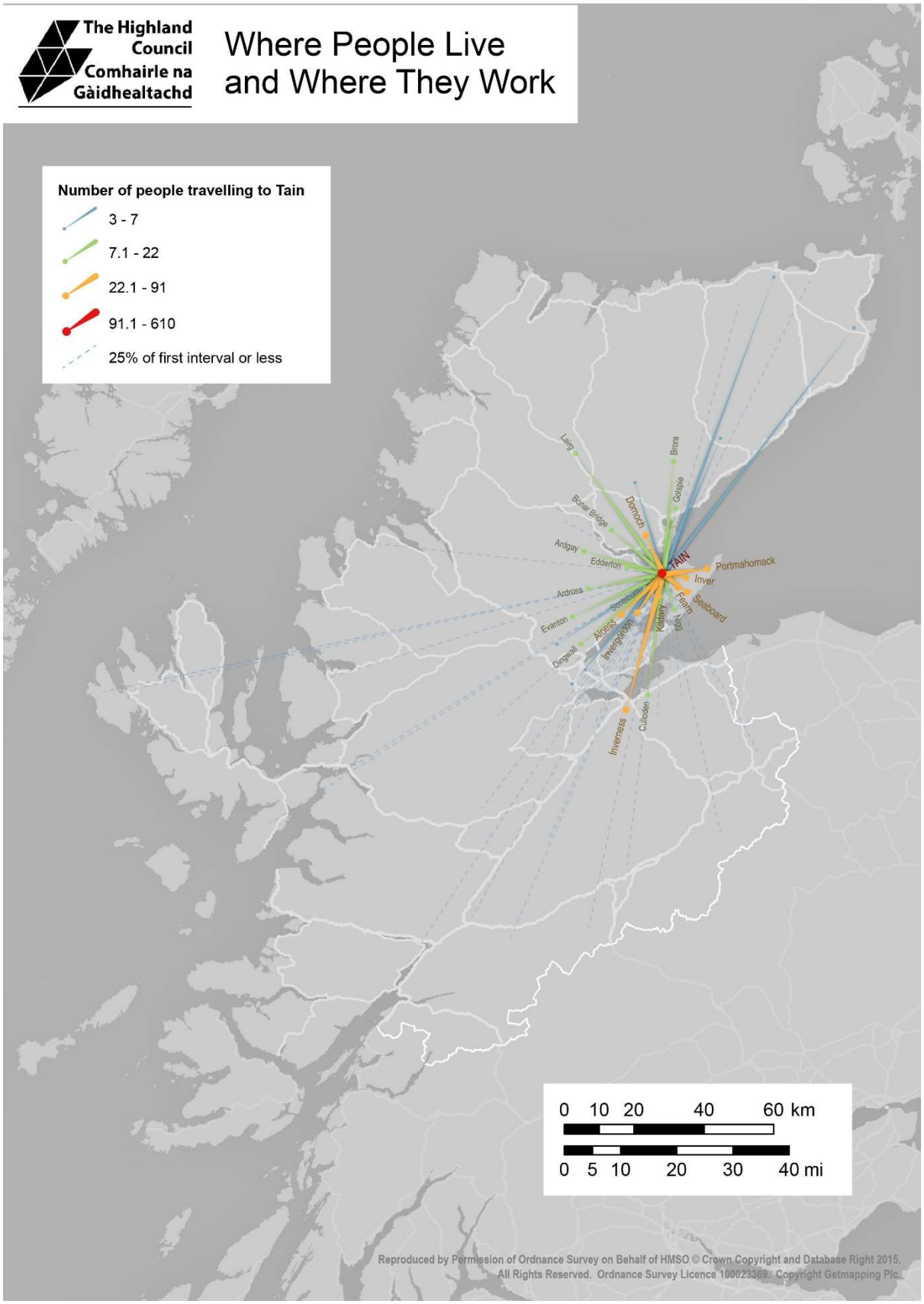
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Tain
3 - 7
7.1 - 22
22.1 - 91
91.1 - 610
25% of first interval or less
Lairg
Brora
Golspie
Bonar Bridge
Dornoch
Ardgay
Edderton
TAIN
Portmahomack
Inver
Ardross
Seaboard
Evanton
Alness
Kildary
Fearn
Dingwall
Invergordon
Inverness
Culloden
0 10 20 40 60 km
0 5 10 20 30 40 mi
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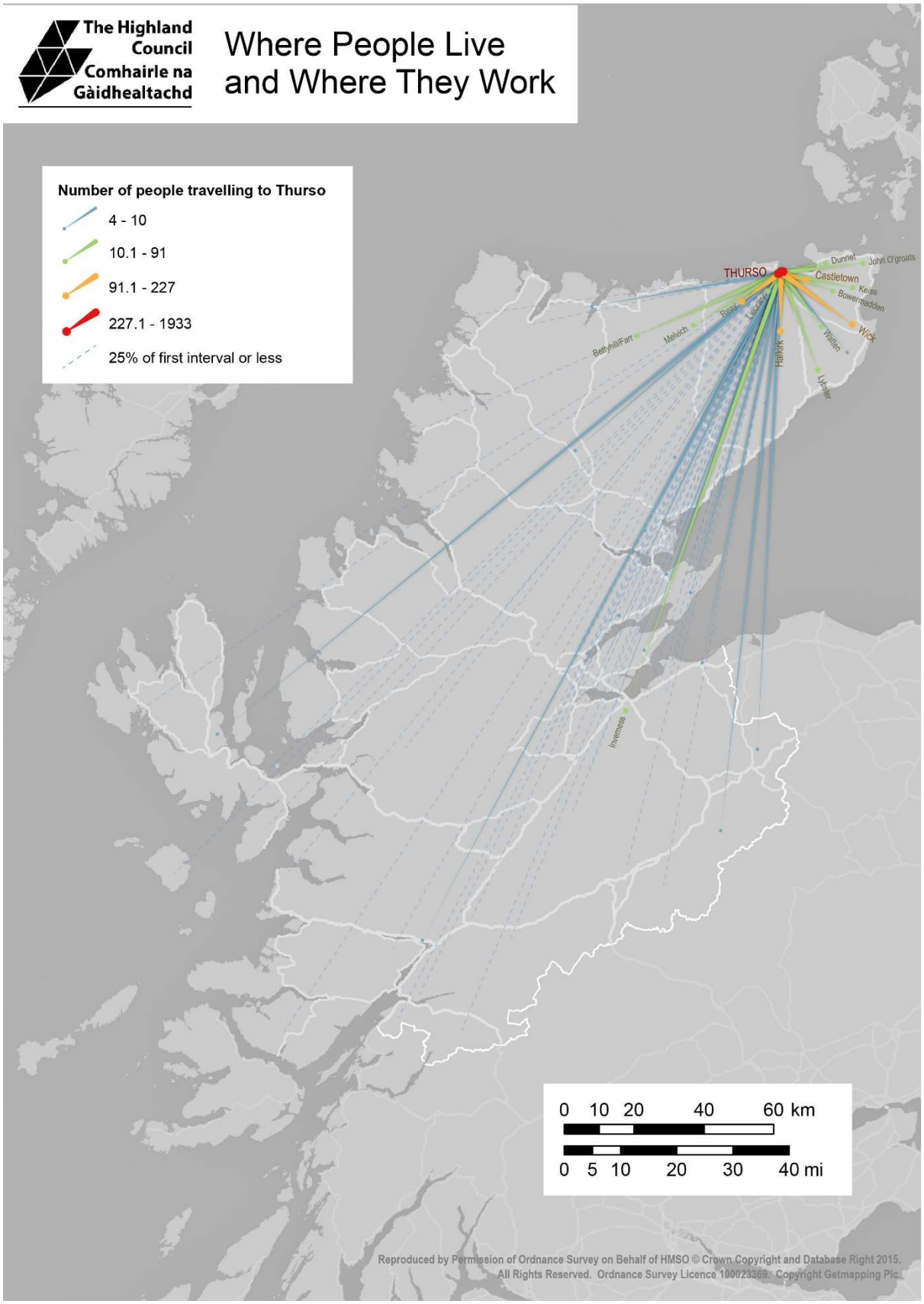
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Thurso
4 - 10
10.1 - 91
91.1 - 227
227.1 - 1933
25% of first interval or less
THURSO
Dunnet
John O'groats
Castletown
Keiss
Bowermadden
Wick
Watten
Lybster
Halkirk
Latheron
Reay
Melvich
Bettyhill/Farr
Inverness
0 10 20 40 60 km
0 5 10 20 30 40 mi
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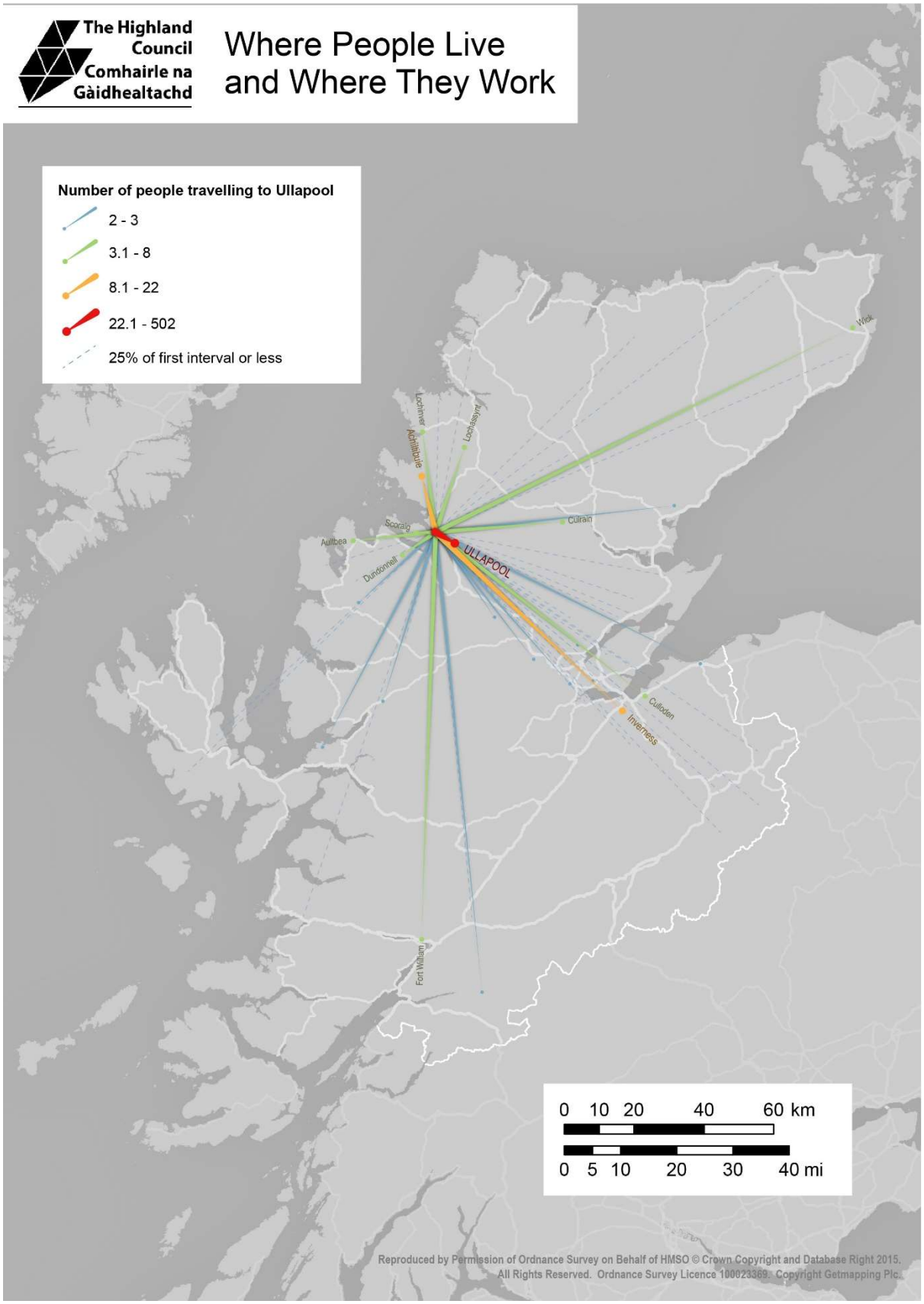
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Ullapool
2 - 3
3.1 - 8
8.1 - 22
22.1 - 502
25% of first interval or less
Lochinver
Lochassynt
Achiltibuie
Scoraig
Aultbea
Dundonnell
ULLAPOOL
Cúlrain
Wick
Culloden
Inverness
Fort William
0 10 20 40 60 km
0 5 10 20 30 40 mi
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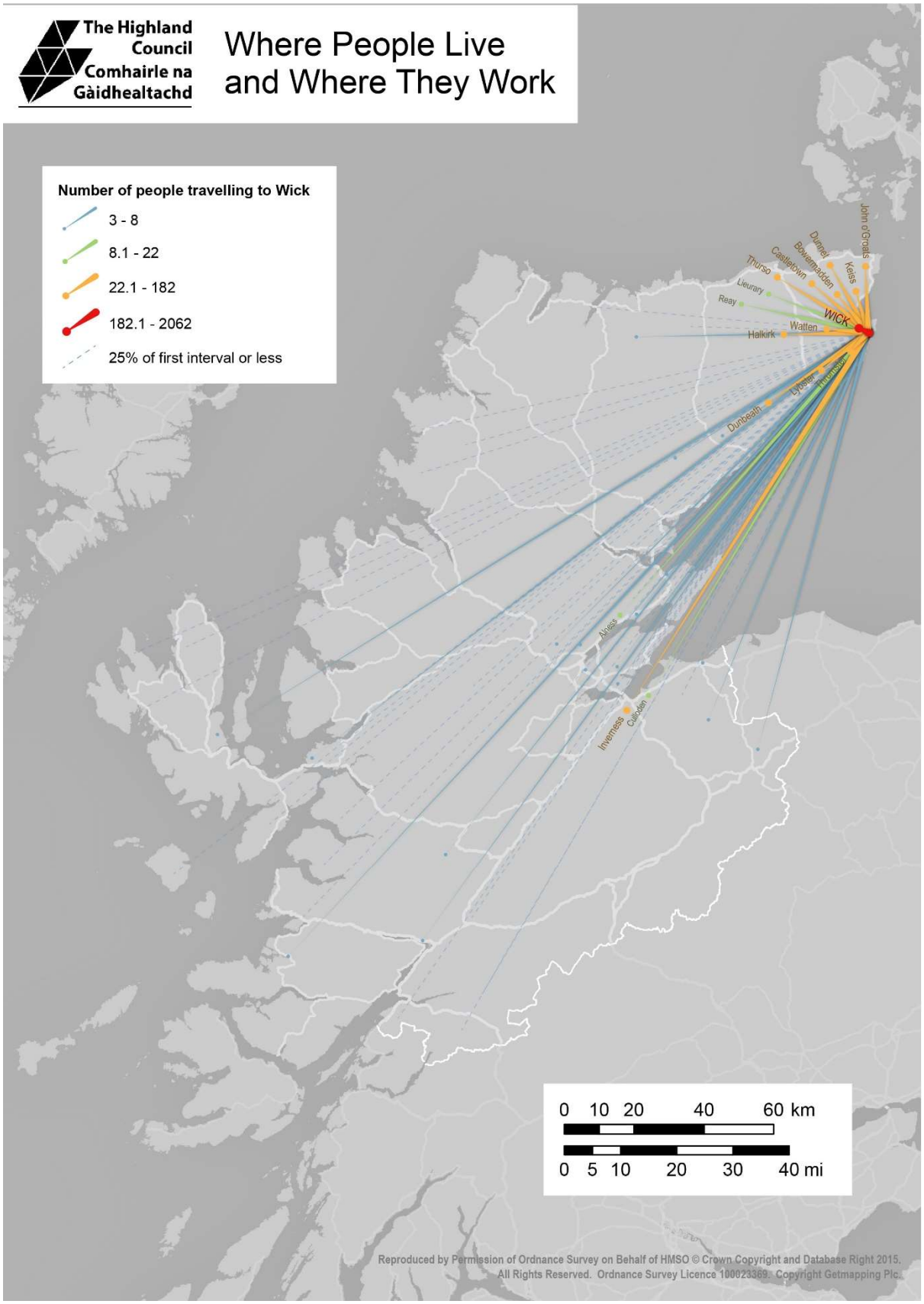
The Highland Council
Comhairle na Gàidhealtachd
Where People Live and Where They Work
Number of people travelling to Wick
3 - 8
8.1 - 22
22.1 - 182
182.1 - 2062
25% of first interval or less
John o'Groats
Dunnet
Bower
Castletown
Thurso
Kess
Lieurary
Reay
WICK
Watten
Halkirk
Lybster
Dunbeath
Alness
Inverness
Culloden
0 10 20 40 60 km
0 5 10 20 30 40 mi
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APPENDIX 2: BUS SERVICE DATA FROM NATIONAL PUBLIC TRANSPORT ASSESSMENT NODES

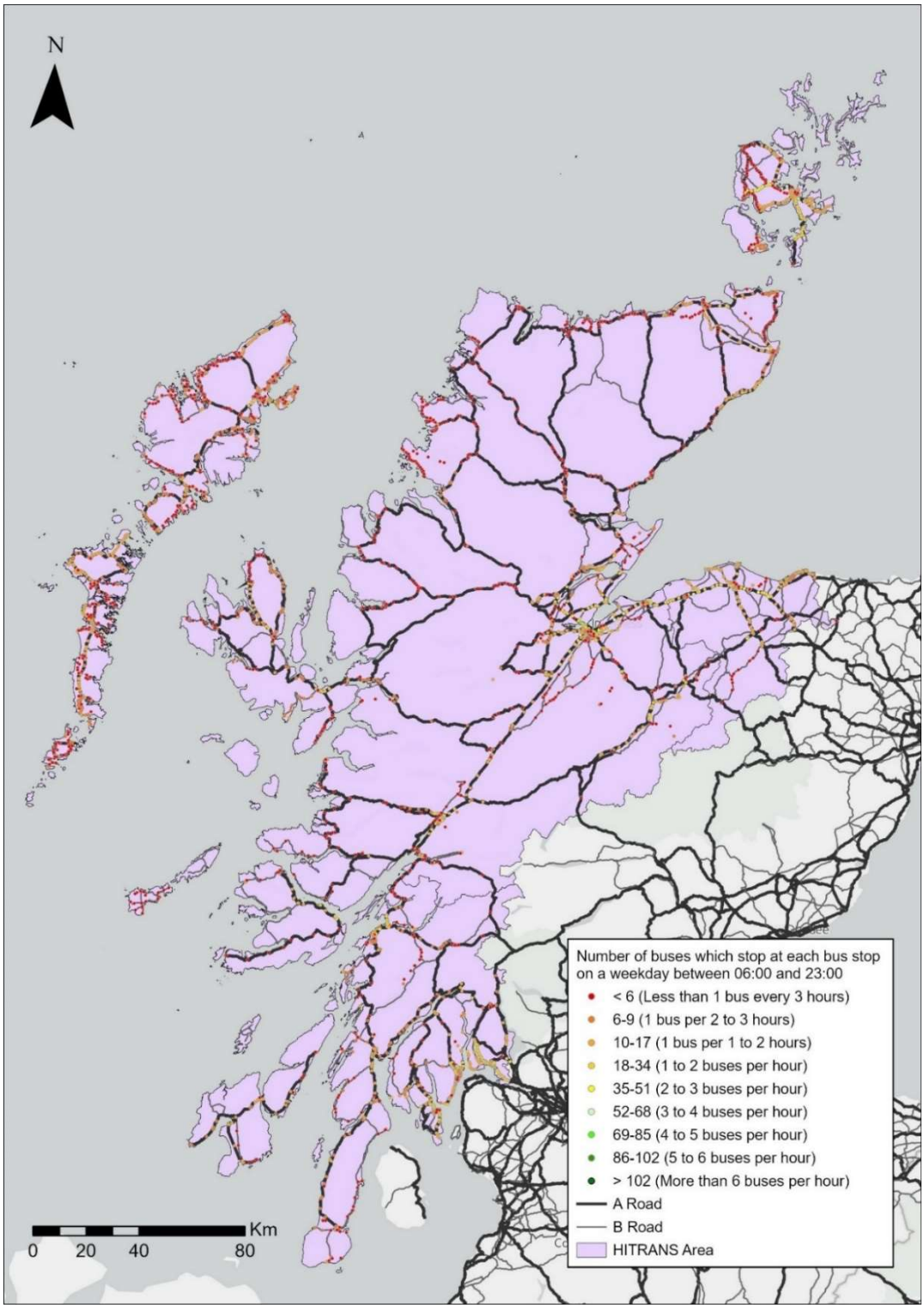

Figure 61: NaPTAN data on Bus Service Frequencies (taken from HITRANS RTS Case for Change 2023)

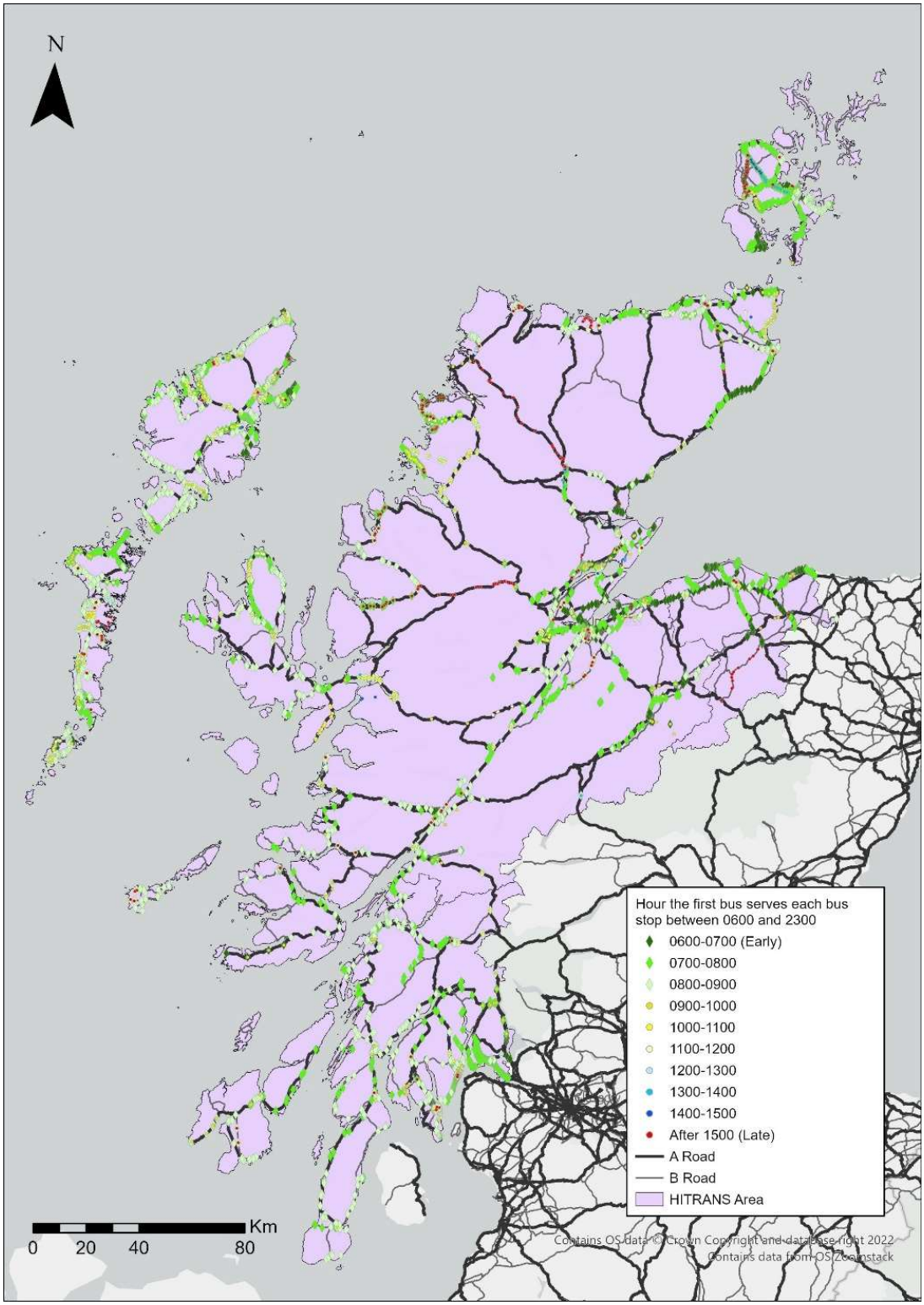

Figure 62: NaPTAN data on first bus departing from each stop (taken from HITRANS RTS Case for Change 2023)

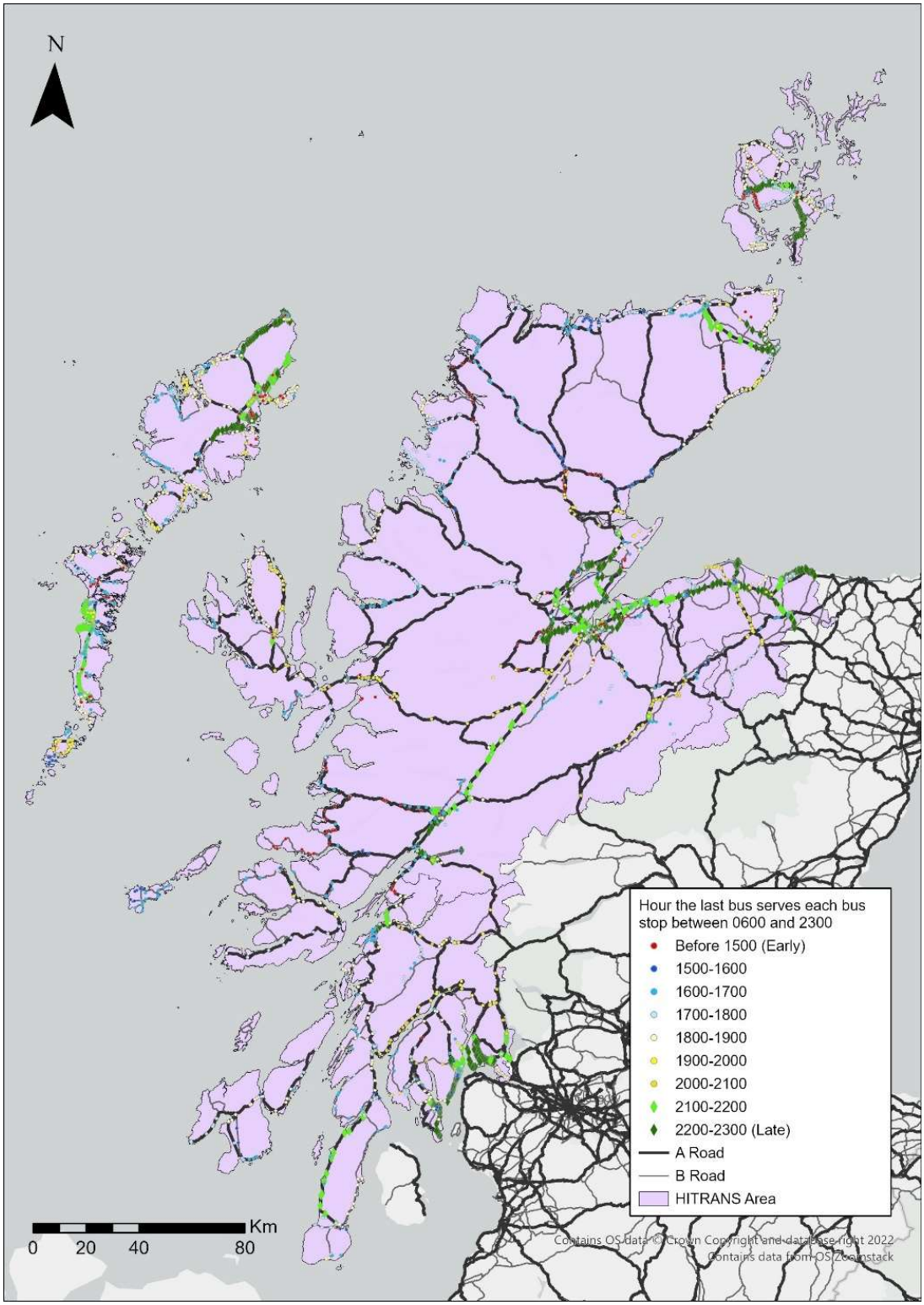

Figure 63: NaPTAN data on last bus departing from each stop (taken from HITRANS RTS Case for Change 20

APPENDIX 3: REVIEW OF HIGHLAND COUNCIL'S CURRENT LOCAL TRANSPORT STRATEGY

The table below is taken from the Monitoring and Evaluation Plan of the Local Transport Strategy 2010/11 – 2013/14[62]; the final column summarises progress. The key themes of that LTS were safety, sustainability, economic development and integration; a key concern was the retention of the quality of the existing roads asset. This Case for Change recognises that the policy framework is now significantly different and in line with NTS2 is based on the key principles of reducing inequality, taking climate action, helping deliver inclusive economic growth, improving our health and wellbeing and improving the safety and resilience of the transport network. However, maintenance of the existing roads network continues to be a concern.

Core Policy No	Core Policy	Objective	Key Strategic Target/s	Indicator Measure/ Monitor	EVALUATION March 2023
1	Development Management	Policy and Investment integration	Reducing travel generation from new development	Developer investment in network Traffic data Scottish Household Survey	Data as reported in various sections above. There is still significant scope for better integration of transport and planning: many communities have seen peripheral development for housing, retail, services and business / industry, which risks inducing demand for car travel and a weakening of the centres of communities.
2	Road Improvement	Tackling pinch points on Locally significant Roads	Locally Significant Road and Trunk Road capital investment	Journey time comparison Safety Indicators	Data as reported in various sections above.
3	Road Maintenance	Improve and maintain Road Conditions	Highland Road Condition Survey	SCRMS and Staff inspections	Road Asset Management Plan (RAMP) as reported in Roads, Cars & Public Space above. Securing funding for maintenance of the existing roads network remains a significant challenge.
4	Active Travel	Removing barriers to active travel	Increase length of cycle tracks Walking and cycling mode share	Asset register Census data Scottish Household Survey	As reported in Walking, Wheeling & Cycling and in Transport in Highland above. There has been some increase in infrastructure; there has been an increase in car travel and a reduction in all other modes.

[62] Local transport strategy | Highland local transport strategy draft document

5	Bus	To improve accessibility to non-car modes. Improve quality of bus services and encourage their use	Service availability (frequency and routes) Journey times Passenger Numbers	Timetable comparison, Real-time information and passenger survey data	As reported above in Public Transport / Bus and in Transport in Highland: there has been an increase in car travel and a reduction in all other modes. Bus passenger numbers have been hit particularly hard by changes in travel patterns due to covid.
6	Community Transport	To improve the quality of community transport and encourage its use	Service availability (frequency and routes) Passenger Numbers	Service comparison and passenger survey data	As reported above in Bus Service Innovations. The introduction of electric vehicles is simplifying such schemes however recruitment of volunteer drivers remains an issue.
7	Council Transport	Investment Integration: Identify benefits and opportunities of combined transport procurement for all Council Services	Service integration and efficiency	Evidence of improved service efficiency and quality	Lack of integration of services continues to suppress demand for non-car transport modes. In particular there has not yet been the anticipated improvements in Inverness Bus Station and Railway Station. Technological innovation combined with improved network coverage for smartphones can support integration.
8	Rail	To improve the quality of rail travel and encourage its use	Rail journey time reductions Service Frequency Number of rail passengers	Timetable comparison and passenger survey data	As reported above in Rail and in Transport in Highland: there has been an increase in car travel and a reduction in all other modes. Rail passenger numbers have almost recovered to pre-pandemic levels but patterns of usage are changing.
9	Air	To improve the availability of air links and frequency	Frequency and destinations of air services	Timetable comparison and passenger survey data	As reported above in Aviation.
10	Ferry	To improve the quality of ferry services and encourage their use	Service availability (frequency and routes) Passenger Numbers	Timetable comparison and passenger survey data	As reported above in Marine Activities.

11	Parking	Ensure spaces are available for shoppers, visitors and business within urban centres	Supply to meet LTS parking objectives	Survey car park usage at peak times	As reported above in Traffic & Parking. There has been a steady increase in car ownership and use and an increase in average car size, leading to pressure on parking.
12	Travel Plans	Policy Integration Traffic Reduction: where appropriate consider targets for reducing traffic	Reduced Travel through travel planning	Monitoring of Highland Council Travel Plan, School travel plans & other travel plans	See above in various sections; there has been an increase in car travel and a reduction in all other modes. The acceleration in a shift to home working and remote learning due to covid, and the continuing expansion of the University of the Highlands and Islands in the region, is supporting a reduction in the need to travel. Existing and planned introduction of 20mph limits and forthcoming School Street pilots will support modal shift.
13	Freight	To promote efficient movement of freight by encouraging transfer of goods from road to rail and sea.	Additional freight transfer facilities and reduce the number of bridges with weight restrictions.	No of facilities. Bridge asset register.	See above under Roads, Cars & Public Space. Advances in electric vehicle technology offer some opportunities for decarbonisation of freight particularly for last-mile deliveries.
14	Design Guidelines	Ensure developments provide for sustainable travel and achieve no net detriment on the transport network	Ensure no capacity issues arise from new development. Ensure all developments are linked to existing public transport, cycle networks and footpath networks	Developer investment in the transport network	See above. There is still significant scope for better integration of transport and planning: many communities have seen peripheral development for housing, retail, services and business / industry, which risks inducing demand for car travel and a weakening of the centres of communities. Some developer contribution remains unspent due to capacity issues.
15	Safety	To improve safety on the transport network	Achieve national casualty reduction targets. Reduce fatalities by 5% per year Perceived safety	Data on Road Accidents Scottish Transport Statistics	See above under Road Safety.
16	ITS & Traffic Mgmt	To improve management of network and	Traffic flows Journey times Information provision	UTMC database Real-time information Online travel information	There has been significant progress on this due to technological advances, reductions in smartphone costs, and improvements in mobile phone coverage. However it should

		information available to users			be noted that the advent of satnavs has facilitated traffic moving from main routes onto quieter streets, risking congestion, pollution and community severance.

APPENDIX 4: IMPACT ASSESSMENTS

As the Introduction states, this report is the first stage in the process of preparing the next Transport Strategy for Highland. […] the report proposes high-level outcomes for transport, Transport Planning Objectives[63]. The report sets the context for consulting and engaging on what options might be available to tackle problems and harness opportunities, which will then be appraised and drafted into a Draft Transport Strategy for consultation, before being finalised and adopted … ".

At that next stage, because of its complexity and reach, the Transport Strategy will require a full Equalities Impact Assessment (EqIA), a Climate Impact Assessment, an Island Communities Impact Assessment, a Rural Impact Assessment, a Strategic Environmental Assessment and an assessment of how it meets the requirements of the Fairer Scotland Duty.

The consultation process for the Case for Change will proactively seek responses from a wide range of individuals and groups to inform the development of the Transport Strategy and its associated Impact Assessments. Initial comment on each IA follows, based on the Case for Change document and on the Impact Assessments of the Strategic Transport Projects Review 2[64]:

Equalities Impact Assessment

We do not at this stage envisage any negative impacts of the Transport Planning Objectives in the Case for Change on people who hold Protected Characteristics, and we would expect to see multiple positive impacts.

At the design and delivery stages for individual interventions, EqIAs will be carried out as part of the process to ensure that interventions help to reduce inequalities.

Island/ Rural Communities Impact Assessment

We do not at this stage envisage any negative impacts of the Transport Planning Objectives on island and rural communities, and we would expect to see some positive impacts.

Climate Impact Assessment

The local and national policy context for transport from which this Case for Change arises is based on decarbonisation and on the reduction of inequalities, as referenced above. As such we do not at this stage envisage any negative impacts of the Transport Planning Objectives on the climate or on biodiversity, and would expect to see positive impacts.

Fairer Scotland Duty

As in the section on Deprivation above, investment in active and sustainable travel modes helps to increase transport independence, reduce transport poverty and reduce health inequalities. As such we do not at this stage envisage any negative impacts of the Transport Planning Objectives on those individuals, households and communities experiencing deprivation and would certainly expect to see positive impacts.

[63] Transport Planning Objectives describe the outcomes that are sought for the Transport Strategy.

[64] SPR2 Report Template for Accessibility (transport.gov.scot)

Strategic Environmental Assessment

We do not at this stage envisage any negative impacts of the Transport Planning Objectives and we would expect to see some positive impacts.