SWestrans.org.uk
South West of Scotland Transport Partnership

Regional Transport Strategy | 2023-42

Dumfries and Galloway Council

NHS Dumfries & Galloway

South of Scotland Enterprise

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INTRODUCTION

1.1 Background

The South West of Scotland Regional Transport Partnership (SWestrans) is established under the Transport (Scotland) Act 2005 and is required to provide a statutory Regional Transport Strategy (RTS). The RTS aims to provide a strategic framework for transport management and investment for the Partnership area up to 2042. The Partnership area has a boundary contiguous with Dumfries and Galloway Council as shown in Figure 1.1 and it should seek to perform its transport functions in line with the RTS.

Figure 1.1 Map of SWestrans Region

This RTS has been prepared to replace the RTS which was published in April 2008. It has been developed in accordance with the RTS Guidance (2006) and Scottish Transport Appraisal Guidance (STAG).

The key purpose of the RTS is to identify the transport challenges in Dumfries and Galloway and to set out a long-term approach to address them up to 2042. This has been informed by an extensive review of policy documentation, data analysis and consultation and subsequently evidenced in the STAG Case for Change and Options Appraisal Reports.

The preparation of the new SWestrans RTS has also been informed by Strategic Environmental Assessment (SEA) and Equalities Impact Assessment (EqIA) processes, each of which has identified key environmental and equalities issues which need to be addressed in the new RTS. This RTS is accompanied by proportionate SEA and Equalities Duties Assessment Reports which consider how relevant equalities and environmental issues have been taken account of to date and provides recommendations to inform the finalisation of the RTS.

1.2 Policy Context

The RTS is being developed within a policy hierarchy that includes national, regional, and local strategies. These are illustrated in Figure 1.2 which also shows the position of the SWestrans RTS within the hierarchy.

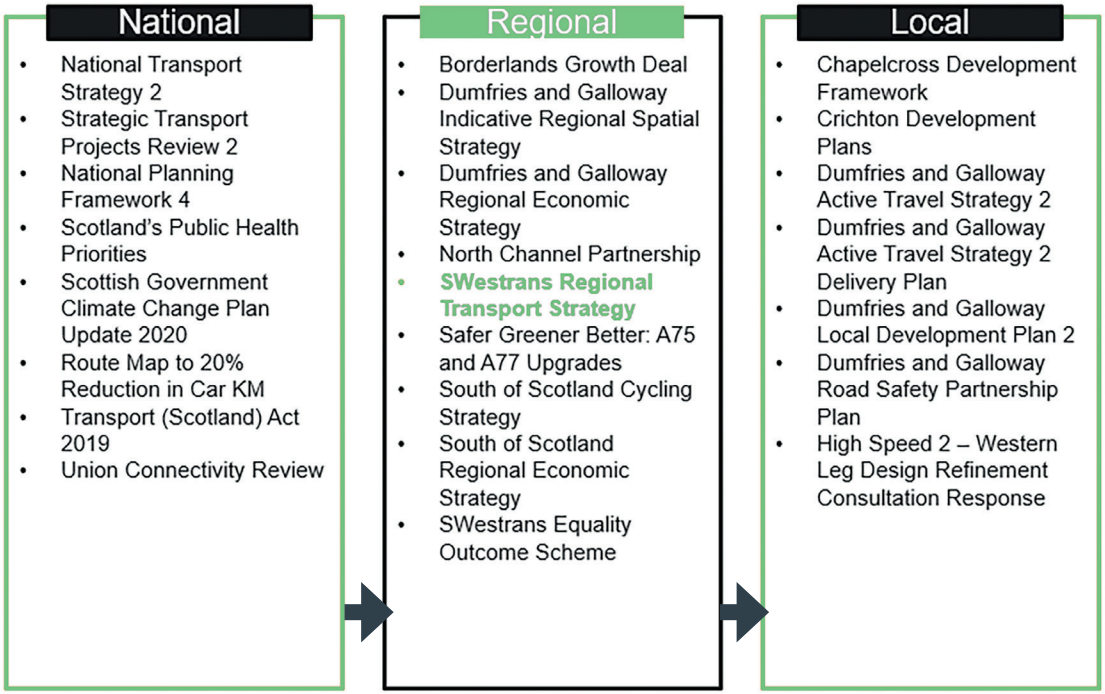

Figure 1.2 Policy Hierarchy

At the national level, the RTS has been developed within the policy framework set out by National Transport Strategy 2 (NTS2). This established four strategic priorities and defined a Sustainable Travel Hierarchy aimed at prioritising the most sustainable modes of transport. Both of these are illustrated in Figure 1.3.

The Scottish Government has set out, in 2024, that it will bring forward proposed legislation to introduce a target approach based on five-yearly carbon budgets, and will retain the legal commitment to Net Zero by 2045, alongside annual reporting on climate progress. The next Climate Change Plan will set out Scottish Governments approach to delivering on these targets.

The Scottish Government has also committed to publish, by Autumn 2024, an updated route map for reducing car use by 20%. This will include a timeline for implementing demand management.

The **Scottish Government's National Planning Framework 4 (NPF4) identifies spatial principles at the national level as well as** regional spatial priorities for the South of Scotland[1]. These include improving local liveability, creating a low carbon network of towns, and supporting sustainable rural development. The document also sets out a series of nationally important developments which include the regeneration of Stranraer and the development of a national walking, cycling, and wheeling network.

[1] broadly includes Dumfries and Galloway and the Scottish Borders, South and East Ayrshires, South Lanarkshire in the west, with links to the Lothians towards the east

At the regional level, the **Regional Economic Strategy** (RES) recognises that the region needs to enhance sustainable transport connectivity within key locations, establish new and innovative models of public transport delivery and build on road, rail, and active travel investments to improve connections within and outwith the South of Scotland.

This wider policy context has been used to inform the development of this RTS and will contribute to its ultimate delivery.

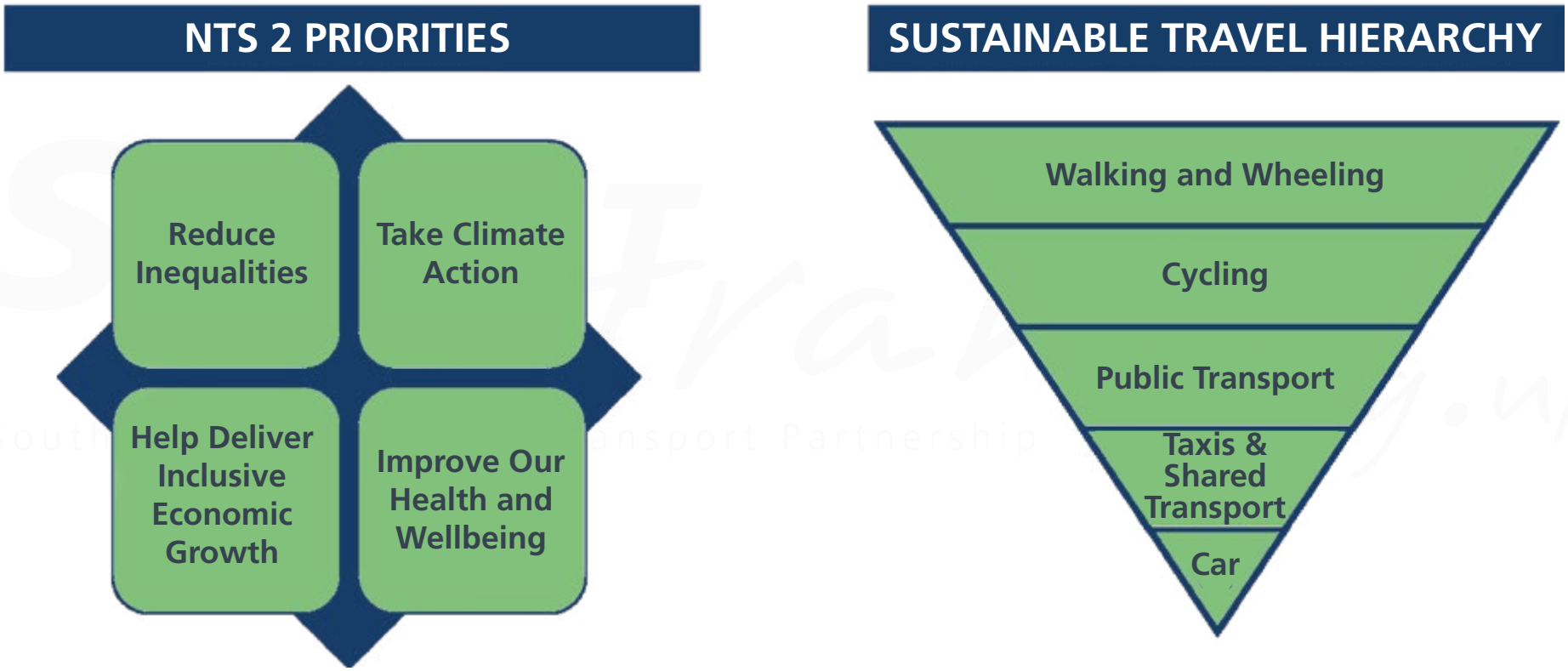

Figure 1.3 National Transport Strategy 2 Policy Framework

2

THE SWESTRANS REGION

2.1 Policy Context

An estimated 148,290 people resided in the SWestrans area in 2020 according to Scottish Government Statistics. This equates to 2.7% of the total population of Scotland which was 5,466,000 in 2020. The Partnership area covers 6,426 square kilometres which is 8.1% of the total 78,789 square kilometres land mass of Scotland. The population density of the region is just 23 people per square kilometre compared to the national average of 69 people per square kilometre. Dumfries is the major centre of population accounting for nearly 30% of the total population of Dumfries and Galloway as of 2021[2].

This low population density has implications for the provision of effective and efficient transport. In particular, it is difficult to provide commercially viable public transport services in areas with dispersed populations and modes like walking and cycling are generally suited to shorter, local trips in more densely urbanised areas. This is further illustrated by the Scottish Government's Urban – Rural Classification shown here which classifies much of the region as either 'Accessible Rural' or 'Remote Rural'[3].

The population of the SWestrans area is also projected to decline by 4% between 2018 and 2032. This could have further implications for the viability of public transport and other essential services, with resultant potential implications for people with disabilities, although recent National Records of Scotland (NRS) data suggests a small increase in population between 2020 and 2021 potentially linked to out migration from urban areas driven by the COVID-19 pandemic. Furthermore, there is a higher elderly population and lower working age population compared to Scotland as a whole, which could place additional demands on health and social care and the need for access to it. This is likely to be further exacerbated by the fact that the proportion of residents in bad health or very bad health is higher than the Scottish average.

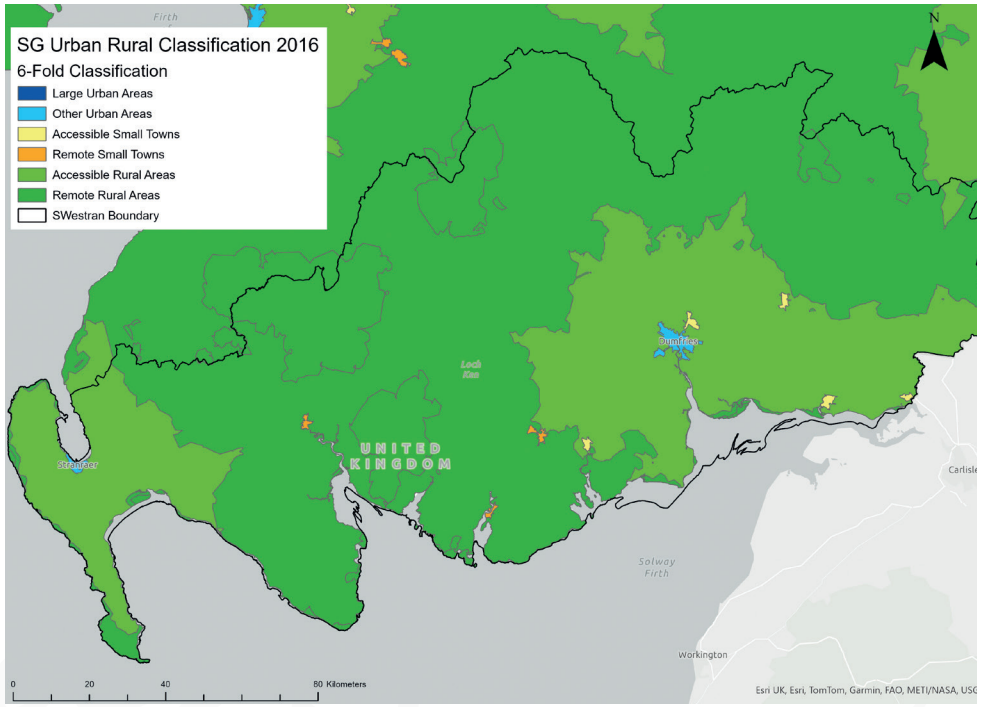

Figure 2.1 Scottish Government Urban – Rural Classification of SWestrans Region

[2] NRS Small Population Estimates, 2021

[3] Accessible Rural: Areas with a population of less than 3,000 people, and within a 30 minute drive time of a Settlement of 10,000 or more. Remote Rural: Areas with a population of less than 3,000 people, and with a drive time of over 30 minutes to a Settlement of 10,000 or more.

2.2 Policy Context

ACTIVE TRAVEL

The active travel network in the region incorporates several sections of the National Cycle Network (NCN), including:

- **NCN Route 73 (South)** which runs from Stranraer to Newton Stewart. The 41-mile stretch is predominantly on-road
- **NCN Route 7 which** connects Sunderland and Inverness. The Glasgow to Carlisle section runs through Maybole, Newton Stewart, Castle Douglas, Dumfries and Gretna Green. This route is mainly on-road with occasional off-road sections

NCN Route 74 previously connected Gretna to Glasgow following a predominantly on-road route. However, this route was recently declassified on safety grounds following a review undertaken by Sustrans.

Whilst the majority of the Route 73 and 7 are long-distance, analysis of Strava Metro data has shown that functional active travel journeys, as opposed to leisure trips, tend to be undertaken locally within towns. There was limited evidence of inter-town active travel taking place in Dumfries and Galloway which can likely be attributed to its rural nature with dispersed centres of population and the absence of traffic-free routes.

BUS

SWestrans is responsible for providing subsidies to support socially necessary bus services in Dumfries and Galloway with just under half of services being provided by commercial bus operators and the remainder being subsidised. Furthermore, the Council operates Dumfries and Galloway Council (DGC) Buses under S.46 of the Public Passenger Vehicle Act 1981. It determines the routes, times and vehicles which are also considered as part of the supported bus network. Table 2.1 shows the subsidy spent on supported bus services along with bus vehicle kilometres. There has been a 7% cash decrease in subsidy between 2015/16 to 2020/21, while total bus kilometres have reduced by 16.8%. SWestrans has not had a budget increase during this period. Supported services have seen a larger reduction in bus kilometres (-18.6%) when compared to commercial service (-13.9%). The decline has also been affected by the COVID-19 pandemic.

However, although not shown in the table, there was still a decline in bus usage pre-pandemic, albeit at a slower pace. For commercially run services, their viability is only achievable if passenger numbers are maintained. As such, the bus network across the region is very fragile and even minor changes which have the potential to impact on costs, available funding or affect patronage, can have major consequences for the viability of services.

Declining services also have potentially significant equalities implications for people with protected characteristics and groups with socio-economic disadvantage.

Table 2.1 Subsidy Spent on Supported Bus Services and Bus Vehicle Kilometres Per Annum

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Subsidy spent (£'000)[4]	£3,736	£3,531	£3,400	£3,395	£3,400	£3,472
Change in subsidy spent compared to previous year		*-5.5%*	*-3.7%*	*-0.1%*	*+0.1%*	*+2.1%*
Commercial Vehicle KM	3,709,195	3,668,843	3,762,063	3,757,383	3,619,269	3,192,425
Change in commercial vehicle km compared to previous year		*-1.1%*	*+2.5%*	*-0.1%*	*-3.7%*	*-11.8%*
Supported Vehicle KM	All	4,855,325	5,167,167	5,004,795	5,091,427	4,371,526
Change in supported vehicle km compared to previous year		*-9.6%*	*6.4%*	*-3.1%*	*1.7%*	*-14.1%*
Total Vehicle KM	9,091,535	8,524,168	8,929,230	8,762,178	8,710,696	7,563,951
Change in total vehicle km compared to previous year		*-6.2%*	*4.7%*	*-1.9%*	*-0.6%*	*-13.1%*

[4] Note that figures are nominal values so not adjusted for inflation

RAIL

The railway lines and stations serving South West Scotland, as shown in Figure 2.2, are:

Glasgow and South West Line (G&SW)

- Glasgow to Stranraer
- Glasgow to Carlisle / Newcastle via Dumfries

West Coast Mainline (WCML)

- London / Birmingham to Glasgow / Edinburgh

The services from the majority of the stations are better to Carlisle than to Glasgow, Edinburgh and the rest of Scotland. Lockerbie is the exception, with a two hourly service to both Edinburgh and Glasgow. This has made it an important hub for northwards travel and the station therefore has a large catchment area.

Stranraer is not well connected by rail, with only one train per day travelling directly to Glasgow, with the remaining three terminating at Kilmarnock. On Sundays, there are more services but only to Ayr.

Most smaller stations see high levels of access by walking, suggesting mainly local catchments. However, Dumfries and Lockerbie have high levels of driving to the station suggesting they serve wider catchment areas.

Demand at all stations has been adversely affected by the COVID-19 pandemic with the largest declines between 2019/20 and 2020/21 being 94% at Kirkconnel and 93% at Sanquhar.

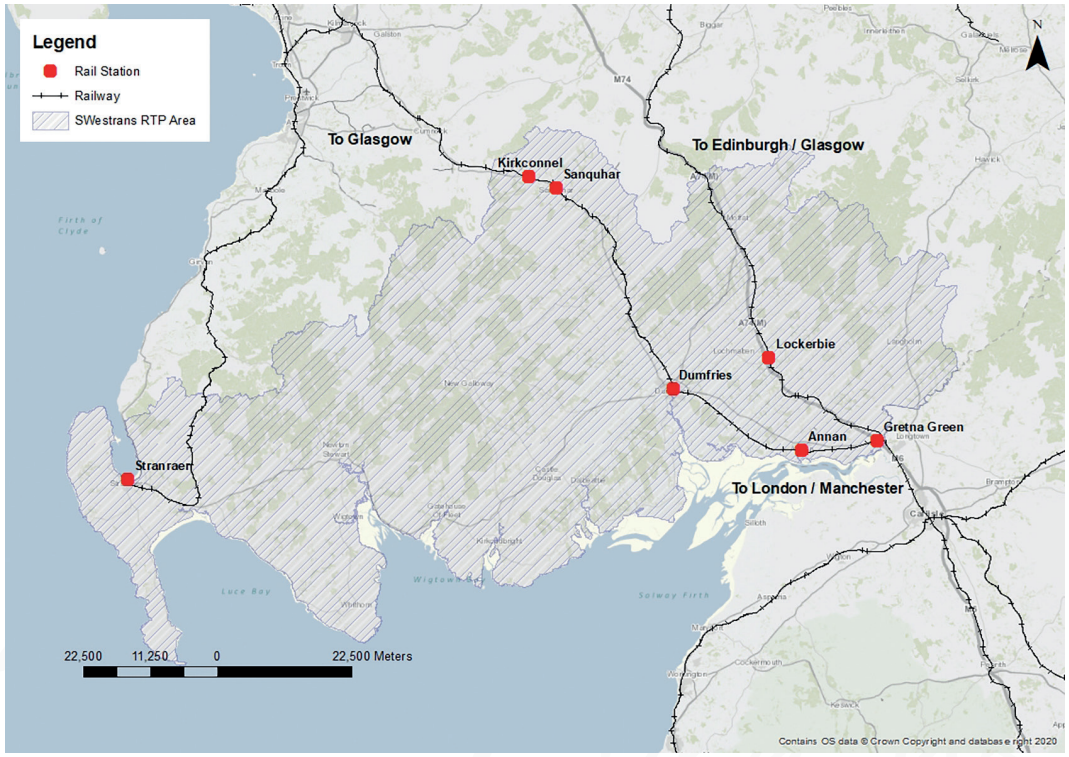

Figure 2.2 Rail Network in SWestrans Region

FERRY

The region is also home to Scotland's only Irish Sea Ro-Ro (Roll-on Roll-off) ferry routes which operate out of the ports of Loch Ryan and Cairnryan.

P&O Ferries operates between Cairnryan Port and Larne (around 20 miles north of Belfast) with a crossing time of around two hours. There are six departures from Cairnryan per weekday with five on a Saturday, and four departures on a Sunday.

Stena Line operates between Loch Ryan Port and Belfast with a crossing time of around 2 hours 15 minutes. There are six departures from Loch Ryan with five departures on a Sunday and Monday. In 2011, Stena Line moved from Stranraer to a new site on Loch Ryan, roughly 1.5 miles north of the Cairnryan Port where P&O ferry services are based. The site of the previous terminal in Stranraer remains derelict and this is also the site of Stranraer railway station.

These services provided by P&O and Stena Line are wholly commercial and generate a significant amount of traffic to and from the ports[5]. Approximately £26 million worth of goods per day is estimated to use the A75 East of Dumfries, £20 million on the A75 West of Dumfries with approximately £10 million moving on the A77 south of Ayr much of which is linked to the ports. As well as a source of local employment, the future viability and success of these ferry routes is of key importance to Scotland as a society and an economy. The transport links to the ports have a key role to play in supporting the competitive position of South West Scotland's ferry ports in relation to other ports offering Irish Sea services. As such, the area around the ports is subject to proposals to create an enterprise area which would involve streamlining planning processes, non-domestic rates relief and support from Skills Development Scotland in order to encourage more economic development.

[5] Transporting Scotland's Trade, Transport Scotland (2018)

STRATEGIC ROAD NETWORK

The strategic road network in the study area consists of the trunk roads, namely the A74(M), A75, A77, A76, A7 and A701. In addition, the A709 is a key route which, while not a trunk road, is one of the busiest routes in the network as it is the primary link between Dumfries and Lockerbie whilst also providing access to the A74(M).

The A75 and A77 are predominantly single carriageway roads linking to the ports at Cairnryan and Loch Ryan. There is significant car and HGV demand and as a result both have relatively low average speeds with long and unreliable journey times due in part to the reduced speed and platooning of HGVs (the latter a particular factor when ferries dock). In addition, the A75 passes through the two communities of Crocketford and Springholm negatively impacting on them and extending journey times.

The A76 is a single carriageway road running between Dumfries and Kilmarnock. It is mainly rural in nature and passes through numerous settlements including Closeburn, Thornhill, Carronbridge, Mennock, Sanquhar and Kirkconnel.

The A7 is a single carriageway road as well which runs between Carlisle and Edinburgh. It is also mainly rural in nature and passes through Langholm.

These all have implications for transport emissions as shown in Figure 2.3. Road transport is responsible for the majority of transport emissions in the region. Whilst there has been no definitive trend between 2005 and 2019 it is noticeable that emissions declined in 2020 as a result of the pandemic.

A shift to Electric Vehicles (EV) will be critical to reducing road related emissions which will depend on provision of adequate

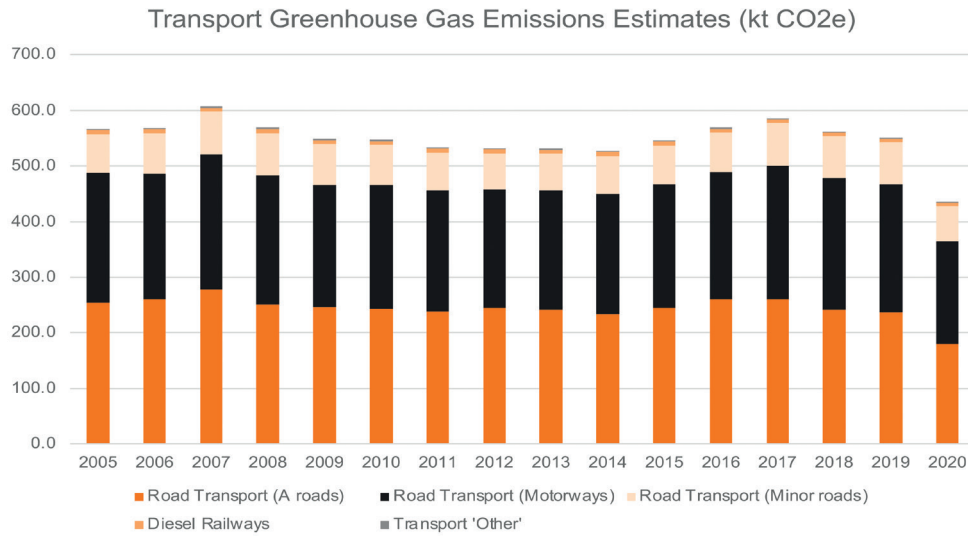

Figure 2.3 Transport Greenhouse Gas Emissions Estimates in Dumfries and Galloway (kt CO2e)

charging infrastructure. In Dumfries and Galloway there are currently 76.2 EV charging devices per 100,000 people according to the DfT. The number of chargers ultimately required is very uncertain at this stage. However, the DfT expects there to be around 300,000 public charge points as a minimum by 2030[6], which would equate to around 450 per 100,000 population. The DfT suggests that this number could more than double though. This implies an almost sixfold increase in provision in the region over the next eight years. The Scottish Government published a Vision for Scotland's Public Electric Vehicle Charging Network in June 2023[7]. This document notes that attracting private sector investment will be key to growing the EV charging network. The Scottish Government's Electric Vehicle Infrastructure Fund (EVIF) supports the Vision and aims to expand the EV charging network with £30 million of funding from the Scottish Government and the intention of a further £30m drawn from the private sector. The initial phase of EVIF is providing local authorities with funding to support the development of public electric vehicle charging

[6] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1065576/taking-charge-the-electric-vehicle-infrastructure-strategy.pdf
[7] Vision for world class public electric vehicle charging network | Transport Scotland

strategies and Infrastructure Expansion Plans. The strategies and plans will help local authorities to identify future public charging needs, investment requirements and approaches to delivery and will be used to determine the level of public capital funding provided from the EVIF fund.

CAR OWNERSHIP

Car ownership in the SWestrans region is towards the higher end when compared against the six other Regional Transport Partnerships in Scotland as illustrated in Figure 2.4. In particular, the area has the joint highest level of three or more car households. Nonetheless, there are still just under a quarter of households (24%) in South West Scotland without access to a car at all highlighting the importance that active travel and public transport play in the region and the equalities issues associated with a lack of rural accessibility for many.

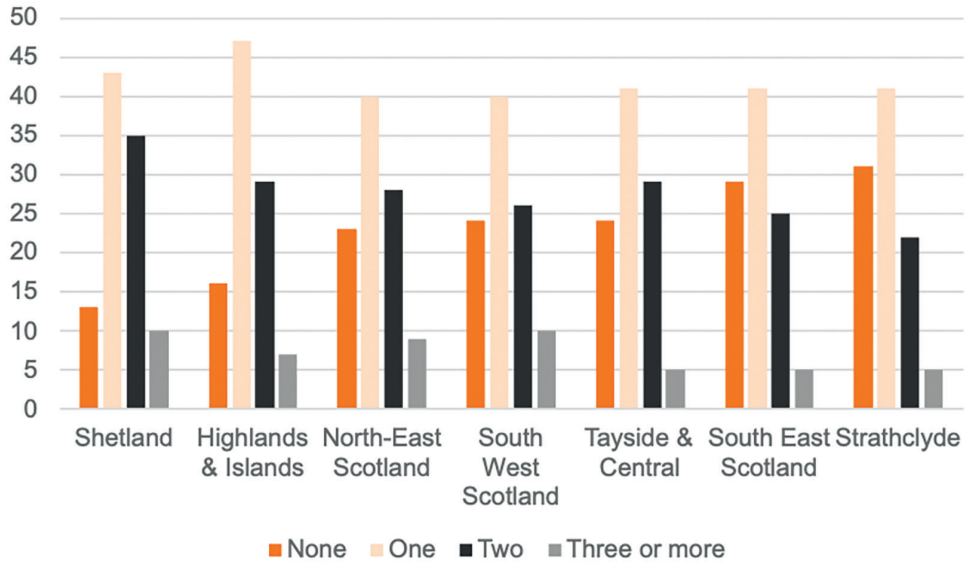

Figure 2.4 Car Ownership by Regional Transport Partnership 2019

2.3 Land-use

The land-use planning context in the region is influenced by national, regional and local policy. The Scottish Government published National Planning Framework 4 (NPF4), the national spatial strategy for Scotland, in February 2023.This identified a number of 'National Developments' which included the Chapelcross Power Station Redevelopment and Stranraer Gateway. The Chapelcross Power Station Redevelopment involves the redevelopment of the former nuclear power station site and aims to create new job opportunities and high value employment, as well as supporting the just transition to net ero. NPF4 states '*sustainable access to the site for workers and commercial vehicles will be required*'[8]. At Stranraer, NPF4 seeks to support its regeneration and role as a gateway town, noting "*high quality place-based regeneration will help address socio-economic inequalities…and support the wider population of south west Scotland by acting as a hub and providing a platform for future investment*"[9].

[8] National Planning Framework 4 (www.gov.scot), p119
[9] National Planning Framework 4 (www.gov.scot), p111

At the regional level, planning authorities are subject to a new duty to produce a Regional Spatial Strategy which overarches the local authority specific Local Development Plans. The Indicative Regional Spatial Strategies (iRSS) have been used to inform the development of the NPF4. Through the development of both the RTS and iRSS, it is imperative that there is closer integration between land-use and transport planning in the region. It is important to understand where growth opportunities will be created and how these can be delivered in a manner that ensures sustainability and inclusivity through equitable access. In addition, there is a need to join up the delivery plans and priorities for transport to support ongoing development. A finalised Indicative Regional Spatial Strategy has been prepared for South of Scotland region, which covers the Scottish Borders and Dumfries and Galloway. An overview of the strategy is displayed in Figure 2.5.

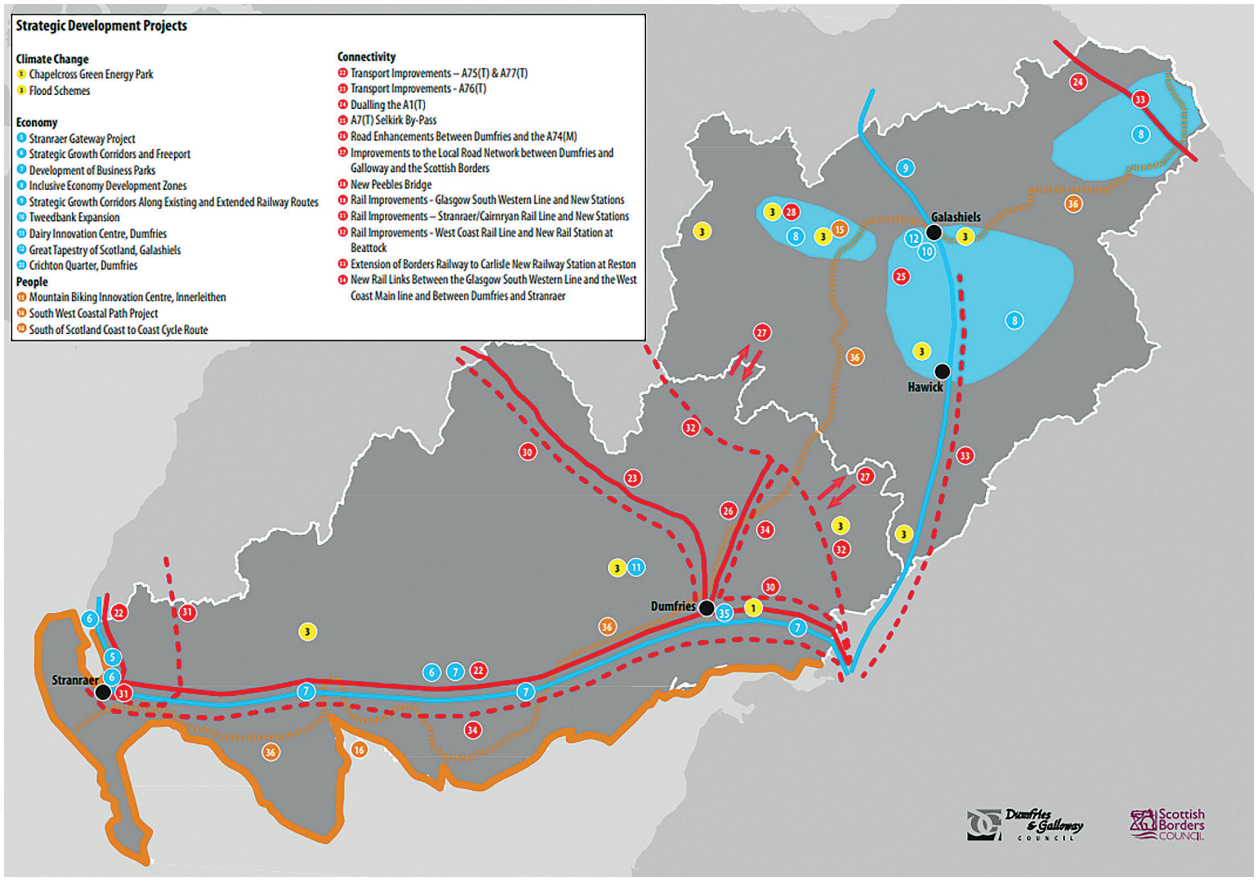

Figure 2.5 South of Scotland Indicative Regional Spatial Strategy

The iRSS includes a broad range of interventions to tackle high car usage and to capitalise on the connectivity opportunities rail improvements will bring to the region in the longer term. Firstly, to improve connectivity there are planned improvements to the internal and external road, rail, bus and active travel network. These improvements include the creation of sustainable transport hubs on strategic routes (at Dumfries, Lockerbie, Castle Douglas, Newton Stewart and Stranraer) and improved railway infrastructure (i.e., new stations and improved rail access to Carlisle and future rail links).

South West Scotland was also the focus of a number of proposed interventions identified through the draft Strategic Transport Projects Review 2 (STPR2) which sets out priorities for transport investment by Scottish Ministers to 2042. Key interventions for the region include:

18. Supporting integrated journeys at ferry terminals: improving the connections at ferry terminals to other types of public transport

23. Smart, integrated public transport ticketing: simplifying how people book and pay for tickets with different providers

40. Access to Stranraer and the ports at Cairnryan: safety, resilience and reliability improvements on the A75 and A77 strategic road corridors. Consideration would also be given to upgrading or relocating the railway station in Stranraer

44. Rail freight terminals and facilities: provision of rail freight terminals which is critical to achieving a significant shift of freight from road to rail

45. High speed and cross border rail enhancements: infrastructure upgrades to permit higher speeds on cross-border routes

The RTS has been developed during a period of significant change in national and regional policy. Nationally, proposals emerging from STPR2 and NPF4 will fundamentally impact upon land-use and transport with particular implications for South West Scotland. At the regional level, the iRSS will redefine the spatial landscape of the SWestrans area. This strategy has been developed within this context and has sought to ensure consistency with the wider land-use framework whilst taking cognisance of the unique socio-economic and transport characteristics of the area.

3

TRANSPORT PROBLEMS

3.1 Overview

The RTS has been developed based on a set of transport problems and issues which have been identified from a range of sources including evidence and analysis from Transport Scotland's South West Study Report published in January 2020, a review of policy documentation, stakeholder and public engagement, Strategic Environmental Assessment and Equalities Impact Assessment. It primarily focuses on a definition of a transport problem as being *a problem experienced by a user, or potential user of the transport network (although problems caused by the transport system are also considered). These transport problems can be thought of as one or more of:*

- Something that **negatively affects a journey which is still made** (people and freight) by that mode of travel – in the main this makes a journey less efficient, more expensive or less comfortable
- Something that **stops people or goods travelling by more sustainable modes** – this primarily leads to more car use
- Something that **stops people making the journeys they'd like to make, or goods being moved** – impacting on peoples' life chances and wellbeing and business opportunities

From a user perspective, these transport problems will impact on individuals and groups, including those with protected characteristics, but are likely to be related to a relatively small number of parameters which define any travel such as:

- Cost of travel (especially relative to disposable income)
- Lack of public transport connectivity
- Personal security / safety
- Physical accessibility of services for those less mobile or with a disability
- Punctuality of travel (public transport punctuality / congestion making road-based journey times unreliable)
- Quality and comfort of journey
- Reliability of travel (cancellation of public transport services)
- Requirement for excessive interchange
- Travel time (relative to other modes)

As shown in the Problems Framework illustrated in Figure 3.1 these transport problems as experienced by the user:

- Can usually be traced back to a root cause, associated with the transport supply-side which in turn informs the identification of Transport Planning Objectives and options
- Can have a travel choice consequence, e.g., use of less sustainable modes, journeys not being made
- Have a wider societal consequence arising from these travel choices, e.g., economic (e.g., wasted time), environmental (e.g., emissions), health & wellbeing (e.g., reduced levels of walking and cycling), social (e.g., exclusion from employment, education and social opportunities)

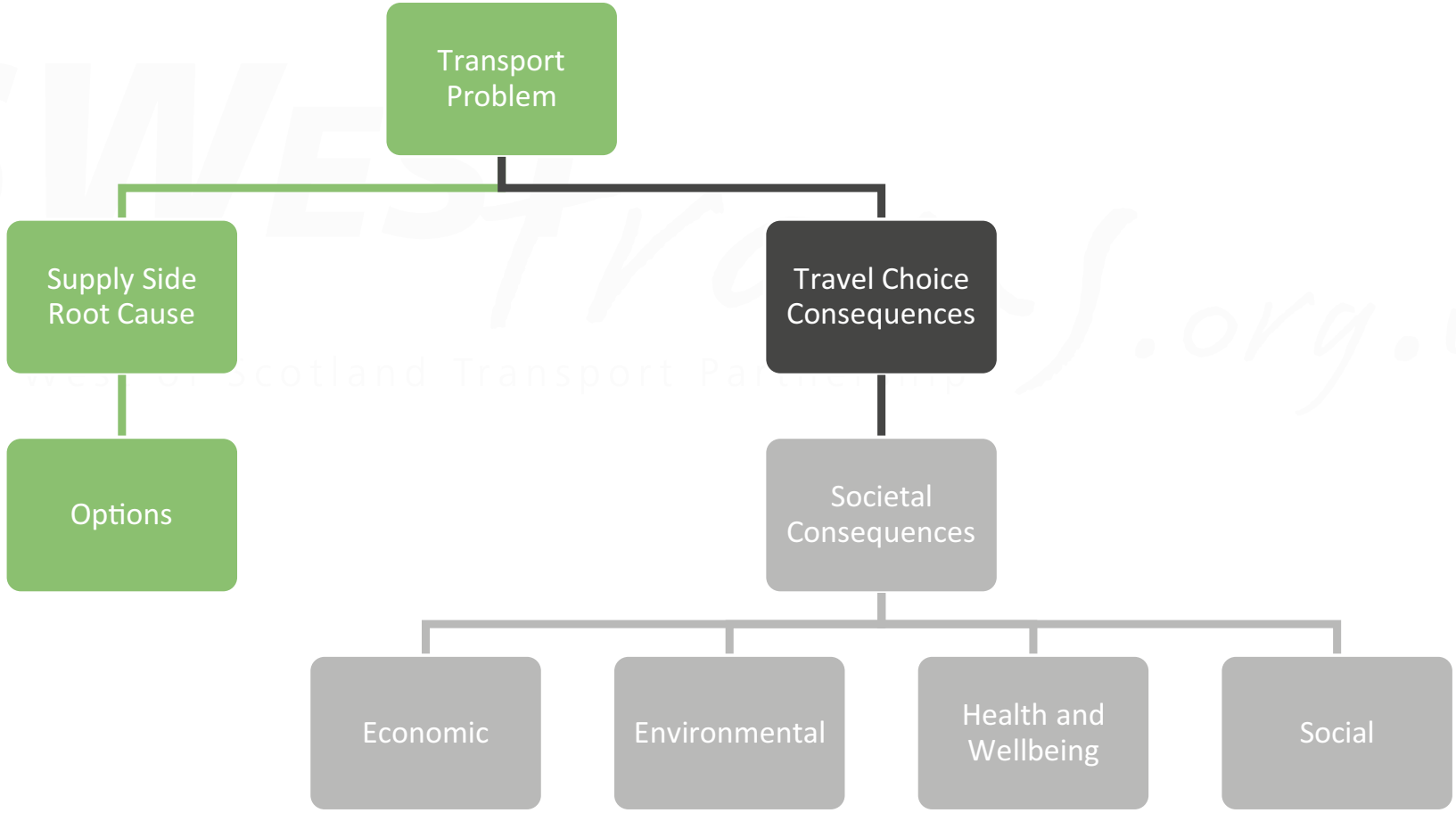

Figure 3.1 Problems Framework

3.2 Identifying Transport Problems

This framework was subsequently used as the basis for setting out the transport problems in the SWestrans region. The transport problems were broken down into categories which broadly align with the NTS2's Sustainable Travel Hierarchy and are outlined in Table 3.1. These transport problems were then used as the foundation for the development of Strategy Objectives and for a series of RTS Themes that provide the structure of the strategy. These RTS Themes were also used for the purposes of option development and appraisal to ensure that these processes were closely related to the strategy itself.

Table 3.1 Transport Problems

Problem Theme	Transport Problem
Walking And Wheeling	
Integration	Walking and wheeling links to my local bus stops / railway stations are poor
Journey quality	I don't think my local environment is suitable for walking and wheeling
Journey times	Walking takes too long
Lack of awareness of travel options	I do not know where walking routes are / do not feel confident using them
Personal accessibility	Walking is not a realistic option for me because of a disability
Personal security	I sometimes don't think it's secure enough for me to walk
Travel safety	I sometimes don't think it's safe enough for me to walk
Cycling	
Cost of travel and affordability	I can't afford to own / maintain / use a bike
Integration of travel	Cycling links to my local railway station are poor
	I can't use my bike to take the bus
	I can't always take my bike on the train
	Cycle parking options at the stations I use are poor
Journey quality	I don't think my local environment is suitable for cycling
	There is nowhere for me to park a bicycle, keeping it dry and secure
	I don't like cycling up hills
	There is nowhere for me to shower and change at work
Journey times	Journey times by bike are too long
Lack of awareness of travel options	I am not aware of cycling opportunities in Dumfries and Galloway
Personal Accessibility	I cannot use a standard bicycle due to disability
Personal security	I don't think it's secure enough for me to travel by bike
Travel safety	I don't think it's safe enough for me to travel by bike
E-Bike	I'm unable to charge my e-bike

Problem Theme	Transport Problem
Bus	
Concern over environmental impact of travel	I am concerned about the environmental impact of travelling by bus
Cost of travel and affordability	I can't afford to travel regularly by bus
	Travelling by bus uses a high proportion of my disposable income
Integration of travel between modes	I cannot realistically take a bus to catch the train
	I have to buy two tickets to travel by bus and rail
	Integration between my local bus and train services is poor
	Integration between buses and ferries at Cairnryan is poor
	Switching between modes is difficult for me due to disability
Journey information	I do not know if my bus is going to be on time
Journey quality	I am exposed to weather at bus stops
	Travelling by bus does not feel like a high-quality experience
Journey times	It takes a long time to travel by bus, particularly compared to travel by car
	I have to change buses or between bus and train which makes my journey long
Journey time reliability	Journey times by bus are not reliable
	The bus is sometimes late to arrive, and I have a longer wait at the stop
Lack of awareness of travel options	I am not aware of the bus services available
Personal Accessibility	I find it difficult to, or am unable to travel on the bus due to a disability
Personal security	I do not feel secure travelling on the bus
	I do not feel secure waiting at bus stops
Travel safety	The walking route to my bus stop does not feel safe
Comfort	I do not find bus travel comfortable
Connectivity and network coverage	There are no bus services where I live
	There are bus services but they do not go where I want to go
Integration between services	I have to change buses to get where I want to go
	I have to buy two tickets to travel by different bus operators
	Integration between my local and long-distance bus is poor
Service reliability	The bus sometimes does not show up
	The school bus sometimes doesn't show up

Problem Theme	Transport Problem
Timetables	The bus service is not frequent enough
	There is no bus at the time I want to travel
	I can't travel by bus for a regular working day
	I can't get to early morning appointments / shift work or attend late night social events / shift work by bus
	I cannot travel by bus on a Sunday
Train	
Concern over environmental impact of travel	I am concerned about environmental impacts when I travel by train
Cost of travel and affordability	I can't afford to travel regularly by train
	Travelling by train uses a high proportion of my disposable income
Journey quality	Travelling by train does not feel like a high-quality experience
	My local station has poor facilities
Journey times	I find journey times by train across the region to be too long with the exception of services from Lockerbie
	I have to change trains or between train and bus which makes my journey long
Journey time reliability	Journey times by train are not reliable
	The train sometimes leaves and arrives late
Personal Accessibility	I find it difficult to, or am unable to travel by train due to a disability
Personal security	I do not feel secure travelling by train
	I do not feel secure at railway stations
Comfort	I don't find train travel comfortable
Connectivity and network coverage	There are no railway stations near where I live
	There are train services, but they do not go where I want to go
Service reliability	The train is sometimes cancelled
Timetables	The train service is not frequent enough
	I can't travel by train for a regular working day
	I can't get to early morning appointments / shift work or attend late night social events / shift work by train
	I cannot travel by train on a Sunday

Problem Theme	Transport Problem
Other Road-Based Travel	
Concern over environmental impact of travel	I am concerned about the environmental impact when I travel by car or taxi
	I am concerned about environmental impacts when I move freight by road
Cost of travel and affordability	The cost of driving is too high for me
	I can't afford an electric vehicle
	The cost of using a taxi is too high for me
Fuel / power issues	I can't charge an electric vehicle
	I have no alternative but to use petrol / diesel vehicles
Integration of travel between modes	I cannot park easily and regularly at the stations I want to use
	It is not convenient to switch freight between road and rail
Journey information	I do not know if there are incidents on the road when I set off
Journey quality	I can't park where I want to park
	I find the quality of the road surfaces poor
	I do not think there are enough rest areas on the roads I use
Journey times	Journey times by road are long across the region with low average speeds
Journey time reliability	Journey times by road are variable even when there are no incidents
	Journey times by road can be longer when there is an incident / road works that require a diversion
Personal accessibility	I am unable to access taxi services due to disability
Personal security	I don't feel secure travelling by taxi
Travel safety	I am concerned about the risk of road accidents
	I find driving on the region's roads intimidating
Connectivity and network coverage	There is a lack of taxis where I live / want to travel
Non-User Problems	
-	The operation and development of the region's transport networks impacts or may impact on biodiversity, geodiversity, flora and fauna, soil, water, cultural heritage, and landscape
-	Traffic is a blight on my home / work / local community
-	Development patterns can lead to car dependency
-	People may feel they cannot rely on my local bus service in the long term

4

VISION & STRATEGY OBJECTIVES

4.1 Vision

The RTS vision outlines what type of region we want Dumfries and Galloway to be along with how transport can help to facilitate that. It draws upon national, regional and local policy aspirations. It also provides an overarching context for the strategy objectives.

The South-West of Scotland will be an inclusive, prosperous, and attractive place to live, work and visit, supported by an integrated and sustainable transport system that:

- reflects the needs of communities and expectations of people living, working and consuming in the region
- is safe, affordable and accessible to all
- allows healthier lifestyles
- is resilient to climate change, supporting a contribution to net zero emission targets reflecting the regional circumstances

4.2 Strategy Objectives

STRATEGY OBJECTIVE 1 – TO FACILITATE AND ENCOURAGE SAFE ACTIVE TRAVEL FOR ALL BY CONNECTING COMMUNITIES AND TRAVEL HUBS[10]

This strategy objective encompasses the following elements:

- Improvements to the physical environment for active travel for all groups
- New connections, improved, safer and better maintained routes between settlements and linking transport hubs and communities
- Promotion of walking, wheeling and cycling for travel and leisure
- Wider access to bicycles and potentially micro-mobility

Meeting this Strategy Objective would lead to the following main **societal impacts:**

- Improved public health due to increased levels of physical activity
- People taking advantage of new employment, education, training and social / leisure opportunities provided by improved connectivity, supporting the region's economic opportunities
- Reductions in car travel as people switch from car to active travel, with resultant reductions in emissions (carbon and pollutants) and noise etc.
- Additional walking and cycle-based tourism
- Supporting 'local living / liveability'[11] principles, including where practical communities which reflect the principles of the '20-minute neighbourhood[12]' concept within our settlements.

[10] Travel hubs are centres of travel such as rail stations and bus stations

[11] The basic principle of 'local living' is providing people with the opportunity to meet the majority of their daily needs within a reasonable distance of their home. The concept is broader than the '20-minute neighbourhood' concept and reflects the need for a more flexible approach, particularly in more rural locations.

[12] The basic principle of the '20-minute neighbourhood' concept can be summarised as people having all of their daily needs (employment, education, shopping, etc) available within 20 minutes of their home, by using sustainable forms of transport: walking, cycling or public transport. The concept is a useful tool in community planning. However, there is a recognition that the delivery of '20-minute neighbourhoods' which adhere strictly to this definition may not be achievable or indeed appropriate in rural settings and this is reflected in NPF4 through a wider emphasis on 'local liveability'.

STRATEGY OBJECTIVE 2 – TO IMPROVE THE QUALITY AND SUSTAINABILITY OF PUBLIC TRANSPORT WITHIN, AND TO / FROM THE REGION

This strategy objective encompasses the following elements:

- Quality (actual and perceived), accessibility and comfort of vehicles
- Travel information provided to passengers
- Punctuality and reliability of services
- Facilities at halts and stations and passenger access for all groups
- The sustainability of the services in terms of human resources and financial support

Meeting this Strategy Objective would lead to the following main societal impacts:

- Improved equality of access resulting in higher rates of uptake of employment, education, training and social / leisure opportunities amongst disadvantaged and minority groups
- Reductions in car travel as people switch from car to public transport, with resultant reductions in emissions (carbon and pollutants) and noise etc.
- Improved health and well-being, particularly for disadvantaged and minoirty groups

STRATEGY OBJECTIVE 3 – TO WIDEN ACCESS TO, AND IMPROVE CONNECTIVITY BY PUBLIC TRANSPORT WITHIN AND TO / FROM THE REGION

This strategy objective encompasses the following elements:

- Barriers to the use of public transport such as cost, physical access, personal security fears, safe access etc.
- Coverage of bus and rail services and infrastructure across the area
- Times of first and last services / days of the week operated
- Service frequencies
- Shorter, more reliable journey times
- Inclusive growth, access to education and employment as well as facilitating economic development

Meeting this Strategy Objective would lead to the following main **societal impacts:**

- New travel opportunities for those without access to a car, those who would prefer not to use a car, and those that have been affected by barriers which have prevented them using public transport in full or in part
- People taking advantage of new employment, educational, training and social / leisure opportunities provided by improved connectivity, supporting the region's economic opportunities
- Reductions in car travel as people switch from car to public transport with resultant reductions in emissions (carbon and pollutants) and noise etc.
- Improved health and wellbeing
- Increased tourism

STRATEGY OBJECTIVE 4 – TO IMPROVE INTEGRATION BETWEEN ALL MODES OF TRAVEL AND FREIGHT WITHIN AND TO / FROM THE REGION

This strategy objective encompasses the following elements:

- Timetable integration between buses, and between buses and trains
- Travel planning and real time information provided to the public
- Ticketing arrangements and cost implications
- Bike / bus and bike / train travel
- Accessibility for all users to both transport infrastructure and vehicles
- Intermodal freight

Meeting this Strategy Objective would lead to the following main **societal impacts:**

- New and improved travel opportunities for those without access to a car, those who would prefer not to use a car, or those that have been affected by barriers which have prevented them using public transport in full or in part
- People taking advantage of new employment / training, educational and social / leisure opportunities provided by improved connectivity, supporting the region's economic opportunities
- Reductions in car travel as people switch from car to public transport in full or in part, with resultant reductions in emissions (carbon and pollutants) and noise etc.
- Increased tourism

STRATEGY OBJECTIVE 5 – TO PROVIDE IMPROVED, RELIABLE, RESILIENT, AND SAFE ROAD-BASED CONNECTIVITY FOR THE MOVEMENT OF PEOPLE AND GOODS WITHIN THE REGION, AND TO KEY LOCATIONS INCLUDING GLASGOW, EDINBURGH, CARLISLE AND CAIRNRYAN

This strategy objective encompasses the following elements:

- Journey times
- Journey time reliability
- Network resilience to extreme weather / climate change adaptation and diversionary routes
- Road safety and perceptions of safety for all users
- Rest areas and secure parking for freight

Meeting this Strategy Objective would lead to the following main **societal impacts:**

- Facilitating inclusive growth and economic development (including Cairnryan, Chapelcross etc.)
- Labour market efficiencies boosting economic growth
- Supply chain efficiencies – Cairnryan and other traffic
- Addressing perceptions of peripherality which will boost tourism, business investment and in-migration
- Increased active travel uptake where road safety and perceptions of road safety are improved for all users
- Reduced personal injury collisions (number and severity)
- Supporting the region's economic opportunities

STRATEGY OBJECTIVE 6 – TO REDUCE THE NEGATIVE IMPACT OF TRANSPORT ON THE PEOPLE AND ENVIRONMENT OF THE REGION

This strategy objective encompasses the following elements:

- Decarbonisation of the transport system
- Traffic reduction, particularly in communities affected by through traffic
- Road safety and perceptions of safety for all users
- The delivery of transport projects in a more sustainable way in terms of the physical environment
- Protect and enhance biodiversity and ecosystem services

Meeting this Strategy Objective would lead to the following main **societal impacts:**

- Reduced carbon emissions and other atmospheric and non-atmospheric pollutants
- Reduced noise and vibration in affected communities
- Improved human health and wellbeing for all groups and ages
- Reduced personal injury collisions (number and severity)
- A sustainable transport system interconnected with a resilient and diverse natural environment
- Reductions in car travel as people switch from a car to active travel with resultant reductions in emissions (carbon and pollutants) and noise etc.

4.3 Links to National Policy

It is essential that the Strategy Objectives are aligned with the national policy context. Table 4.1 below maps the Strategy Objectives to the four NTS2 'Priorities' and highlights a close correlation between them.

Table 4.1 Mapping of Strategy Objectives to National Transport Strategy 2 Priorities

RTS Objective	NTS2 Priorities			
	Reduces inequalities	Takes climate action	Helps deliver inclusive economic growth	Improves our health and wellbeing
To facilitate and encourage safe active travel for all by connecting communities and transport hubs	✓	✓	✓	✓
To improve the quality and sustainability of public transport across the region	✓	✓	✓	✓
To widen access to, and improve connectivity by public transport across the area	✓	✓	✓	✓
To improve integration between all modes of travel and transport in the region	✓	✓	✓	
To provide improved, reliable, resilient, and safe road-based connectivity within the region, and to Glasgow, Edinburgh, Carlisle and Cairnryan			✓	✓
To reduce the negative impact of transport on the people and environment of the region	✓	✓		✓

4.4 RTS Themes

Drawing upon the Strategy Objectives, a series of RTS Themes have been identified and are set out below. These Themes are closely related to the problems identified in Chapter 3 and provide the structure of the remaining sections of this RTS, with a separate chapter covering each identified Theme and relevant Priorities set out therein. The Priorities set out the 'direction of travel' of the RTS across a broad range of transport issues. To guide the implementation of the RTS, an accompanying RTS Delivery Plan will be developed which will set out a series of actions associated with each of these Priorities. This is discussed further in Chapter 15.

1 – **Enabling More Sustainable Development:** integrating land-use and transport planning, enabling access to developments for all groups by sustainable modes of transport, reducing the need to travel and facilitating an 'infrastructure first' approach to development

2 – **Connecting Our Communities:** facilitating walking, wheeling and cycling within villages and towns as well as providing active travel connections between them and to regional centres

3 – **Transforming Travel in Our Towns:** improving the public realm by reducing car dominance and delivering roadspace reallocation to prioritise buses and active travel

4 – **Reducing the Negative Impact of Transport on Our Communities:** eliminating the negative impacts of through traffic on local settlements and supporting decarbonisation

5 – **Enhancing Access to Transport Services:** providing safe and equal access to transport for all including vulnerable and minority groups by removing physical and non-physical barriers

6 – **Sustainable and Extended Local and Regional Public Transport Connectivity:** extending the number of services and stops / stations on the public transport network

7 – **Improving the Quality and Affordability of Our Public Transport Offer:** delivering affordable public transport solutions, enhancing the public transport infrastructure including accessible vehicles and stops as well as improving integration between services, information and ticketing provision

8 – **Supporting Safe, Effective and Resilient Connections to Loch Ryan and Other Key Regional, National and International Locations:** enhancements to the strategic transport network that provides links to key economic destinations, gateways and development locations to increase efficiency and competitiveness

9 – **Managing Our Car Traffic:** reducing car dependency and contributing to the Scottish Government's target to reduce car km by 20% by 2030 where possible and practical

10 – **Making the Most of New Opportunities:** capitalising on innovations and new technology to enhance access to more sustainable modes of transport and the efficiency of the transport system

The key linkages between each of the RTS Themes and the Strategy Objectives are illustrated in Table 4.2 below.

Table 4.2 Mapping of RTS Themes to Strategy Objectives

RTS Theme	To facilitate and encourage safe active travel for all by connecting communities and travel hubs	To improve the quality and sustainability of public transport within, and to / from the region	To widen access to, and improve connectivity by public transport within and to / from the region	To improve integration between all modes of travel and freight within and to / from the region	To provide improved, reliable, resilient, and safe road-based connectivity for the movement of people and goods within the region, and to key locations including Glasgow, Edinburgh, Carlisle and Cairnryan	To reduce the negative impact of transport on the people and environment of the region
1 Enabling More Sustainable Development	✓			✓		✓
2 Connecting Our Communities	✓			✓		
3 Transforming Travel in Our Towns	✓	✓			✓	
4 Reducing the Negative Impact of Transport on Our Communities	✓				✓	✓
5 Enhancing Access to Transport Services	✓		✓	✓		
6 Sustainable and Extended Local and Regional Public Transport Connectivity		✓	✓			
7 Improving the Quality and Affordability of Our Public Transport Offer		✓	✓			
8 Supporting Safe, Effective and Resilient Connections to Loch Ryan and Other Key Regional, National and International Locations				✓	✓	
9 Managing Our Car Traffic	✓	✓	✓			✓
10 Making the Most of New Opportunities		✓	✓	✓		✓

5

ENABLING MORE SUSTAINABLE DEVELOPMENT

5.1 Context

Integrating land-use and transport planning is essential to ensure that people can access employment, education, healthcare and other essential services in a sustainable manner. In addition to considering sustainable access to, and the provision of, ancillary on-site facilities (e.g., showers, changing areas etc) in new developments, it is also important to consider how improvements in access to and facilities in existing developments can help encourage sustainable travel. However, in an area like Dumfries and Galloway, with a dispersed population and service centres, facilitating sustainable access to developments can be challenging.

The focus should be on ensuring that development is located near to existing services to reduce the need to travel. All new developments should then be constructed in a manner that enables that development to be served by more sustainable transport and prevents car dependency from becoming entrenched. This can be achieved by situating developments close to existing or proposed active travel and public transport networks. In addition, the planning process can be used to deliver sustainable transport measures to support new developments through mechanisms such as Section 75 agreements. These might not just be limited to transport infrastructure and could include contributions to supporting new bus services or ancillary on-site facilities such as showers and changing areas to enable people to get ready for work after walking, wheeling or cycling to the development.

Reflecting the specific geography and rurality of Dumfries and Galloway, it will be important to support 'local living / liveability' principles within our local planning policies and guidance, including where practical the delivery of communities which reflect the principles of '20-minute neighbourhoods' within our settlements. By designing with these principles in mind, planning focuses on walking, cycling and wheeling rather than car-travel, helping to align spatial planning and transport planning at a local scale. This approach to land-use and transport planning also helps to reduce the need to travel by enabling people to fulfil their needs locally which contributes to reductions in emissions. Finally, this approach seeks to mitigate and, if possible, eliminate the environmental impacts of any infrastructure projects (e.g., embodied carbon) to reduce environmental impacts of both transport and development.

The above principles should be applied to the major developments proposed for the region as outlined in the Dumfries and Galloway Local Development Plan 2 (LDP2) and the IRSS prepared for the South of Scotland region, which covers the Scottish Borders and Dumfries and Galloway. This is illustrated in Figure 2.5. A key consideration will be the National Development sites at the former Chapelcross Power Station and Stranraer Gateway as identified in National Planning Framework 4, including the potential to develop an Investment Zone as part of the latter. It will be essential that these are taken forward in tandem with sustainable transport solutions. These and other major development sites should apply an 'infrastructure first[13]' approach that considers the infrastructure needs of development at the outset, makes better use of existing assets first and foremost as well as prioritising low-carbon infrastructure required to support the transition to net zero.

In terms of existing sites, in the past, some developments have been taken forward without giving suitable consideration to how best they can accommodate access by sustainable modes of transport. On this basis, they are often highly dependent on access by car. In these locations it may be necessary to seek to provide new services and infrastructure that make travel by active travel and public transport more viable. This may include working with existing employers to introduce facilities and measures through workplace Travel Plans. These could be as simple as the provision of on-site changing facilities or may involve measures like secure bike storage.

[13] Infrastructure First is defined in NPF4 as "putting infrastructure considerations at the heart of placemaking" where infrastructure includes existing and planned transport infrastructure and services, water management, communications, energy supplies / energy generation, health and social care services, education, green and blue infrastructure, and spaces for play and recreation.

CASE STUDY: DUMFRIES AND GALLOWAY ROYAL INFIRMARY RELOCATION

In 2018 the new Dumfries and Galloway Royal Infirmary (DGRI) opened on the A75 close to Garroch roundabout in the west of Dumfries. This was following its relocation from Bankend Road in the south of Dumfries. This location was difficult to access due to the nature of the road network in the town and the limited number of crossings over the River Nith which led to traffic being funnelled through the town centre. The relocation has consequently led to reduced congestion in Dumfries town centre as well as improving access to DGRI by both public transport and active travel as well as enhancing access from the west of the region.

5.2 Priorities

1. Sustainably locate new developments to reduce the need to travel first and foremost[14]
2. Locate new development where it can be easily served by existing active travel and public transport links or, if not possible, by new active travel and public transport links which are accessible to all
3. Sustainable transport measures and supporting ancillary infrastructure for new developments will be delivered through developer contributions as appropriate
4. The concept of 'local living' and '20-minute neighbourhoods' will be incorporated into all future development and land-use planning processes
5. Transport interventions should be carefully sited and designed to prevent and minimise negative environmental impacts
6. New major developments, including those proposed at Chapelcross Power Station and Stranraer Gateway, should apply an 'infrastructure first' approach
7. At existing developments sustainable transport and ancillary infrastructure measures should be introduced to encourage the uptake of more sustainable transport by coordinated engagement with employers and other large organisations

[14] Photograph source: File:Dumfries and Galloway Royal Infirmary.jpg - Wikimedia Commons

6

CONNECTING OUR COMMUNITIES

6.1 Context

Achieving increased walking, wheeling, and cycling depends upon ensuring that we have high quality infrastructure that provides safe and attractive routes within our villages and towns, along with low-traffic or traffic free active travel connections between them and to regional centres. High quality routes are continuous and provide attractive, safe and direct connections between multiple locations and which can be accessed by all groups. In addition, they should be physically separated from traffic, with smooth surfacing and appropriate lighting. To facilitate this requires a two-pronged approach which includes:

- Physical incremental improvements to existing active travel routes (including crossings, lighting, surfacing, obstructions, etc.)
- New bespoke routes for walkers, wheelers and cyclists

Enhancing existing active travel networks would predominantly involve improvements to make them safer, more attractive, and fully accessible for people to walk, wheel and cycle. These would seek to maximise the quality of existing networks through measures such as:

- Road, cycleway and footway resurfacing
- Introduction of new pedestrian and cyclist crossings
- Upgraded pathways to reflect current accessibility guidance
- Removal of unnecessary street furniture
- Improved CCTV and lighting
- Installation of new or enhanced signs on active travel routes
- Accessibility audits of active travel routes to identify the need for the above measures

Alongside this, in some instances there will be a requirement for the creation of new active travel routes both within towns and villages and between them as part of the development of a strategic active travel network for the region. This could entail creating new segregated active travel routes for walking, wheeling and cycling through measures such as converting disused railways for active travel. These would be high quality routes intended to be accessible to all for the purposes of functional active travel journeys as well as recreational and health purposes. Where appropriate they should be consistent with Cycling by Design, Designing Streets and other relevant technical guidance. They would link the key settlements within Dumfries and Galloway along with providing routes within them as well, including filling gaps in existing networks. The initial network would draw upon the Spatial Strategy articulated in the Dumfries and Galloway Active Travel Strategy

2 (see Figure 6.1). This will be kept under review along with the Active Travel Strategy 2 itself. Furthermore, the South of Scotland Cycling Strategy, has set out a vision for Dumfries and Galloway and the Scottish Borders to make bike the most popular choice for short everyday journeys over the next 10 years.

Active travel also plays an important role in shaping the public realm by improving the streetscape, contributing to placemaking and making it an attractive place to spend time. This is closely tied into the sustainable development concepts set out in Chapter 5. The application of best practices in street design will help to reduce car dominance and ensure that street furniture is designed taking into consideration the needs of all users including the mobility impaired, blind, deaf, parents with pushchairs, young and elderly, people in wheelchairs and other vulnerable users.

Dumfries and Galloway Council is predominantly responsible for the implementation and maintenance of walking and cycling infrastructure. However, SWestrans has committed to spending at least 50% of its capital budget on active travel and has also agreed to align both strategy and delivery with Dumfries and Galloway Council. A dedicated Active Travel Team will work on prioritising, designing, and delivering schemes and projects, as well as coordinating with all Dumfries and Galloway Council Services to respond to requests and align efforts towards neighbourhoods that provide the necessary features to support active travel's wider aims in terms of the quality of places, sustainability, and net-zero. This coordination will also help to make the case for joint plans, projects, and respective funding opportunities to deliver broader strategic projects.

In addition to infrastructure measures, there is also a need to raise awareness of existing routes and the benefits of active travel by partnering with schools and other civic groups to encourage participation and facilitate behaviour change. This will require close community engagement as well as campaigns that encourage the use of active travel.

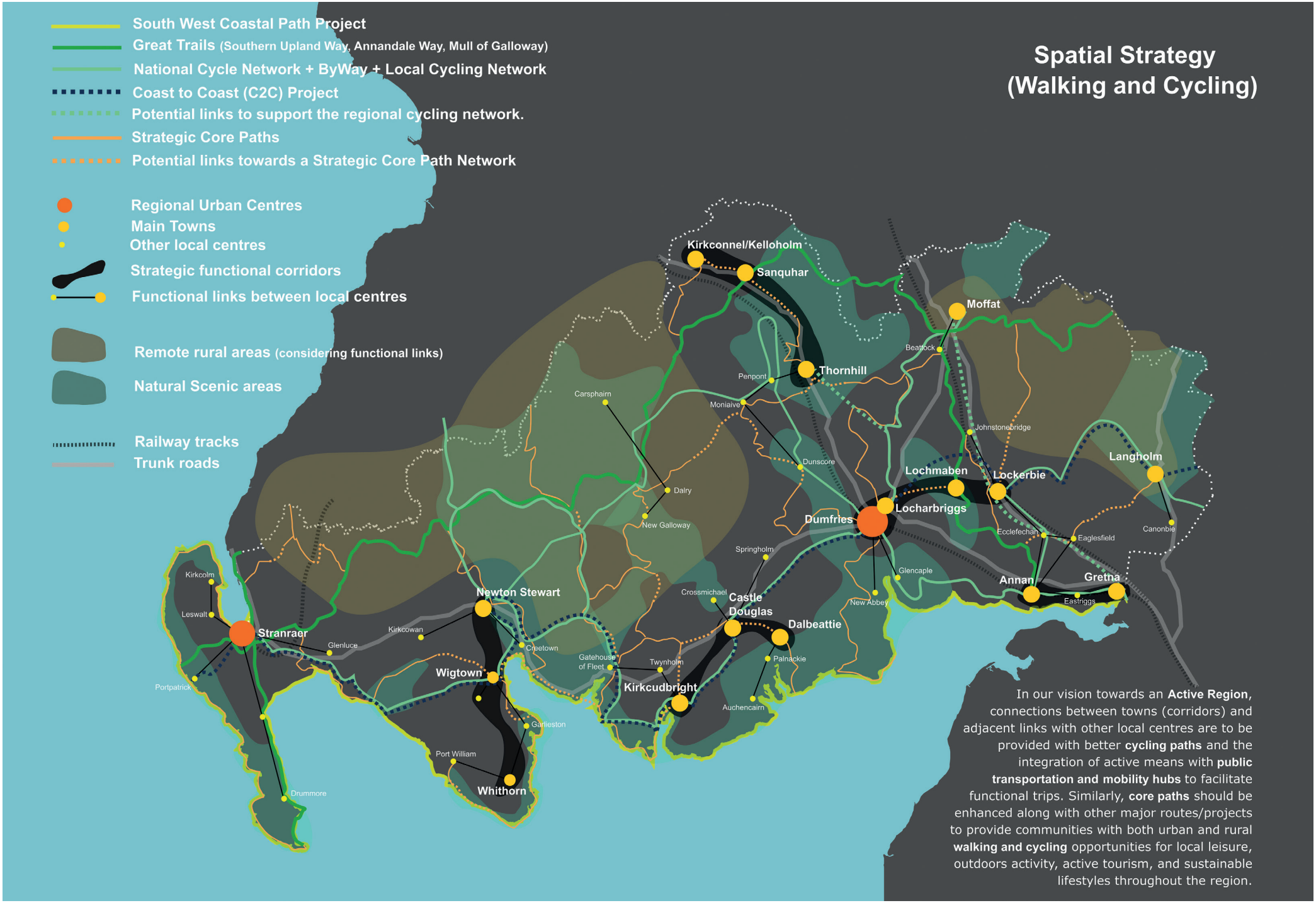

Figure 6.1 Active Travel Spatial Strategy (Source: Dumfries and Galloway Active Travel Strategy 2 2022-2032)

6.2 Priorities

8. Improvements to the active travel network will be delivered through a combination of incremental improvements to existing routes and new bespoke routes where appropriate
9. The active travel network will be developed in accordance with Cycling by Design, Designing Streets and other relevant technical guidance
10. An integrated active travel network linking both within and between our settlements will be developed in line with the Spatial Strategy articulated in the Dumfries and Galloway Active Travel Strategy 2
11. The Dumfries and Galloway Active Travel Strategy 2 will be kept under review and updated on a regular basis to ensure it is being effectively implemented
12. A dedicated Active Travel Team will work on prioritising, designing, and delivering schemes and projects in collaboration with funding partners
13. Awareness raising to facilitate behaviour change will be delivered through close community engagement and campaigns to encourage the use of active travel
14. SWestrans will spend at least 50% of its capital budget on active travel

7

TRANSFORMING TRAVEL IN OUR TOWNS

7.1 Context

Improving the public realm in our towns by reducing car dominance will require some reallocation of road space to prioritise active travel and buses. This will require the reprioritisation of existing road carriageway. In the case of active travel this could entail a range of complementary measures closely linked to those set out in Chapter 6 such as:

- Widening footways
- Creation of segregated active travel routes alongside the carriageway within urban areas
- Improved bike lane provision
- Conversion of advisory bike lanes to statutory bike lanes
- Provision of advanced stop lines, protected right turns and cycle priority at junctions and traffic signals
- Reviewing junction geometries to slow turning traffic

Furthermore, in some urban areas bus journey times can often be long, resulting in people choosing to travel by car instead. However, bus priority can speed up these journey times and make them competitive with travelling by car, particularly for shorter journeys. Roadspace reallocation can therefore also be used to deliver faster bus journey times within our towns.

Bus priority measures include priority signalling, dedicated bus only routes, bus advance areas, bus lanes and gates, and bus only corridors. These enhancements would be introduced along existing routes that experience particularly slow journey times including at junctions to increase the efficiency of bus services across the region as well as on new corridors where high quality bus services are required (e.g., as part of a new land-use development).

The principal objective of these interventions would be to reduce car dominance in towns and villages across Dumfries and Galloway and to transform the public realm to make it more people focussed. Opportunities for roadspace reallocation in urban areas should therefore be sought and taken forward in accordance with NTS2's Sustainable Travel Hierarchy. This will require detailed analysis of the performance of the transport network in settlements across Dumfries and Galloway and testing to identify the optimum interventions.

7.2 Priorities

15. Roadspace should be reallocated to prioritise walking, wheeling, cycling and public transport particularly within our towns and settlements in order to create a more attractive public realm across Dumfries and Galloway
16. The National Transport Strategy 2's Sustainable Travel Hierarchy should be applied to reprioritise the road network wherever possible
17. Detailed analysis should be undertaken to identify suitable locations and interventions for the reallocation of roadspace away from general traffic to active travel and public transport

8

REDUCING THE NEGATIVE IMPACT OF TRANSPORT ON OUR COMMUNITIES

8.1 Context

Transport has a range of negative impacts which can blight our local communities by generating noise and vibration, bring severance, impacting on air quality as well as affecting safety and the attractiveness of the public realm as a place to spend time. Several of our settlements are located on the strategic road network and suffer from high levels of through traffic as a result. This includes Crocketford and Springholm on the A75, where there are high volumes of HGVs 24 hours per day to / from the ports at Cairnryan, and Kirkconnel, Sanquhar and Thornhill on the A76, Langholm on the A7 and Lochmaben on the A709. Timber haulage also contributes to high HGVs volumes in the area, with the location of forests resulting in HGVs using B and unclassified roads.

The communities referenced above would benefit from bypasses which would enable the reallocation of roadspace to more sustainable modes such as walking, cycling and public transport. In addition, bypasses could also benefit other communities on the A75, A76 and A77 including Dumfries. These would be particularly appropriate where high traffic flows and congestion from through-traffic leads to negative impacts. Transport Scotland is responsible for maintaining and implementing enhancements to the Trunk Road network and therefore Transport Scotland would have primary responsibility for delivering upgrades to this network. While it is recognised that these improvements were not specifically included in STPR2 (which covers the period to 2032), they have been retained in this strategy as a longer term proposition.

Whilst the above interventions would help to tackle specific problems in the above locations, wider measures are necessary to facilitate the decarbonisation of the car, taxi and commercial vehicle fleet in order to mitigate negative environmental impacts across the region. The transport sector, particularly road transport, is a key contributor to carbon emissions and there is a need to reduce these impacts through measures to encourage the transition to Ultra Low Emission Vehicles (ULEVs) and to reduce the need for car ownership. These could include:

- Additional publicly accessible Electric Vehicle (EV) charging points, including for commercial vehicles
- Regional EV carsharing scheme
- Grants / loans to support uptake of EV and Hybrid vehicles
- Supporting the development of renewable fuels at existing service stations
- Introduction of Low Emission Zones (LEZs)
- Rollout of shared mobility options (see Section 14.1.4)

Furthermore, commercial vehicles comprise up to 35% of vehicles on strategic roads within Dumfries and Galloway[15]. This represents a significant proportion of road traffic leading to emissions, noise and vibration, and other negative impacts on local communities. Mitigation of these impacts can be achieved by the introduction of measures to encourage modal shift from road freight to more sustainable modes of freight transport and, where this isn't possible, to decarbonise the commercial vehicle fleet. In addition to the measures above these could include:

- New freight hubs on the railway to promote movement of freight by rail
- Implementation of LGV / HGV EV charging points
- Introduction of timber haulage routes
- Alternatively, decarbonisation of commercial vehicles may require alternative fuels such as green hydrogen

8.2 Priorities

18. Investigate the feasibility of bypasses for Crocketford and Springholm on the A75 as well as other communities on the A7, A75, A76, A77 and A709 including Dumfries
19. Support the decarbonisation of the car, taxi and commercial vehicle fleet through investigation and delivery, as appropriate, of measures such as:
    a. Electric Vehicle charging points, including for commercial vehicles
    b. Regional Electric Vehicle carsharing
    c. Grants / loans for Electric / Hybrid vehicles
    d. Low Emission Zones (LEZs)
    e. New rail freight hubs
    f. Alternative fuels e.g., green hydrogen, including for commercial vehicles

[15] Vehicle composition at Roadside Interview Sites, October 2017

ENHANCING ACCESS TO TRANSPORT SERVICE

9.1 Context

Providing equal access to transport for all, including vulnerable and minority groups, requires removing both the physical and non-physical barriers to travel. These barriers can create disadvantage, social exclusion, deprivation and are a major contributor towards transport poverty. Removing these barriers is necessary to enable our residents to access essential services like employment, education, healthcare and retail. These barriers are often most acutely felt by our most vulnerable citizens in particular those with protected characteristics including women, elderly and younger people, ethnic minorities, people with mobility impairments or disabilities as well as those on low incomes.

In some instances, accessing public transport services can be challenging because of physical barriers, such as a lack of or poorly designed step-free access, shelters, and seating. In addition, the tasks, and experiences inherent in undertaking independent public transport travel can pose challenges for particular groups in society, such as those with autism and cognitive impairments. This results in people either choosing to travel by car or not making journeys at all which in turn can limit their access to employment, education, social opportunities and other key services. Improving the customer experience for such users through enhanced staff training and the provision of a chaperoning service could enable them to make journeys / more journeys and in doing so help improve both economic and social participation, with resultant health, wellbeing and economic benefits.

When information on transport options is unavailable or is of poor quality, it can also lead to people choosing to take their car or not making journeys. Improving journey planning information therefore needs to be a priority to ensure people are aware of the alternatives available to them. Journey planning information should be available in various formats to meet the needs of different users. These include online and traditional paper as well as braille, large print, and audio for those with sight difficulties. This needs to be supported by high quality wayfinding information on the network itself, so people do not become lost or confused during their journey. Furthermore, travel information can be improved through measures such as extending staffing hours at stations and staffing stations that are currently unstaffed.

It is also important to ensure that timetable information is up-to-date and, where possible, that real-time information is provided and accessible. This is particularly beneficial for irregular users of public transport as it can be difficult to ascertain when a bus or train is coming or where an interchange can best be made. The provision of real time information both at stops and stations as well as on services themselves can help users to understand the timings of services and to allow for seamless interchanges between them.

It will be particularly important to remove barriers to the use of **active travel within our towns and settlements to help facilitate a modal shift away from car use. To achieve this will require a range of soft measures in addition to the infrastructure investment outlined in Chapter 6. These include:**

- Providing additional active travel information online
- Installation of maps and signs along active travel corridors and within towns
- Public awareness campaigns
- Promoting the economic, health and environmental benefits of active travel
- Publication of maps that display accessible routes

Furthermore, widening the availability of bicycles, particularly e-bikes which make cycling longer distances feasible for more people, will be essential if we are to deliver a step change in sustainable transport usage in Dumfries and Galloway. The cost of purchasing a bicycle can price out those who are socio-economically disadvantaged. Additionally, users who may have an impairment could be priced out of specially adapted bicycles. The provision of grants and loans to support those who wish to purchase a bicycle (including e-bikes) along with the introduction of a regional cycle hire scheme in town centres to provide access to bikes for those that only require them for occasional use could help to reduce the barriers to cycle usage in the region.

Improving access to, from and within our **railway stations is also a key requirement. Many of the stations within Dumfries and Galloway are not fully accessible, with 66% of the stations only achieving Accessibility Level B, where both platforms may be accessible but the distance or type of access (i.e., stairs) could limit access for some disabled users. The following stations have been classified as Accessibility Level B:**

- **Annan:** Level to both platforms and connecting footbridge with stairs between platforms causing access difficulties for people in wheelchairs and parents with pushchairs
- **Dumfries:** Level to both platforms and connecting footbridge with stairs between platforms causing access difficulties for people in wheelchairs and parents with pushchairs
- **Kirkconnel:** Level to platform 1 and connecting footbridge with stairs to platform 2 (see adjacent)
- **Sanquhar:** Ramps to both platforms

This can cause users who are unable to access the platforms to travel by car instead. As shown in Figure 9.1, some stations, particularly Dumfries and Lockerbie, have a wide catchment area. In addition, the location of Lockerbie station on the WCML encourages car use due to lower fares and a wide level of connectivity to other cities within the UK.

It is therefore important to encourage increased access to our stations in line with the Scottish Government's sustainable travel hierarchy. There is a need to ensure that access to, from and within all stations is accessible for all users using a combination of the following:

- Provision of high-quality active travel links to stations
- Bus / rail timetable improvements to promote connections and seamless journeys
- Increased bus frequencies on routes that serve stations
- Introducing new bus services to link to stations from high catchment areas
- Installation of ramps and lifts at stations
- Removal of unnecessary street furniture within and on approaches to stations
- Increasing the promotion of integrated ticketing schemes

Finally, the security of taxi users could be improved by undertaking additional background checks on taxi drivers prior to granting their licences.

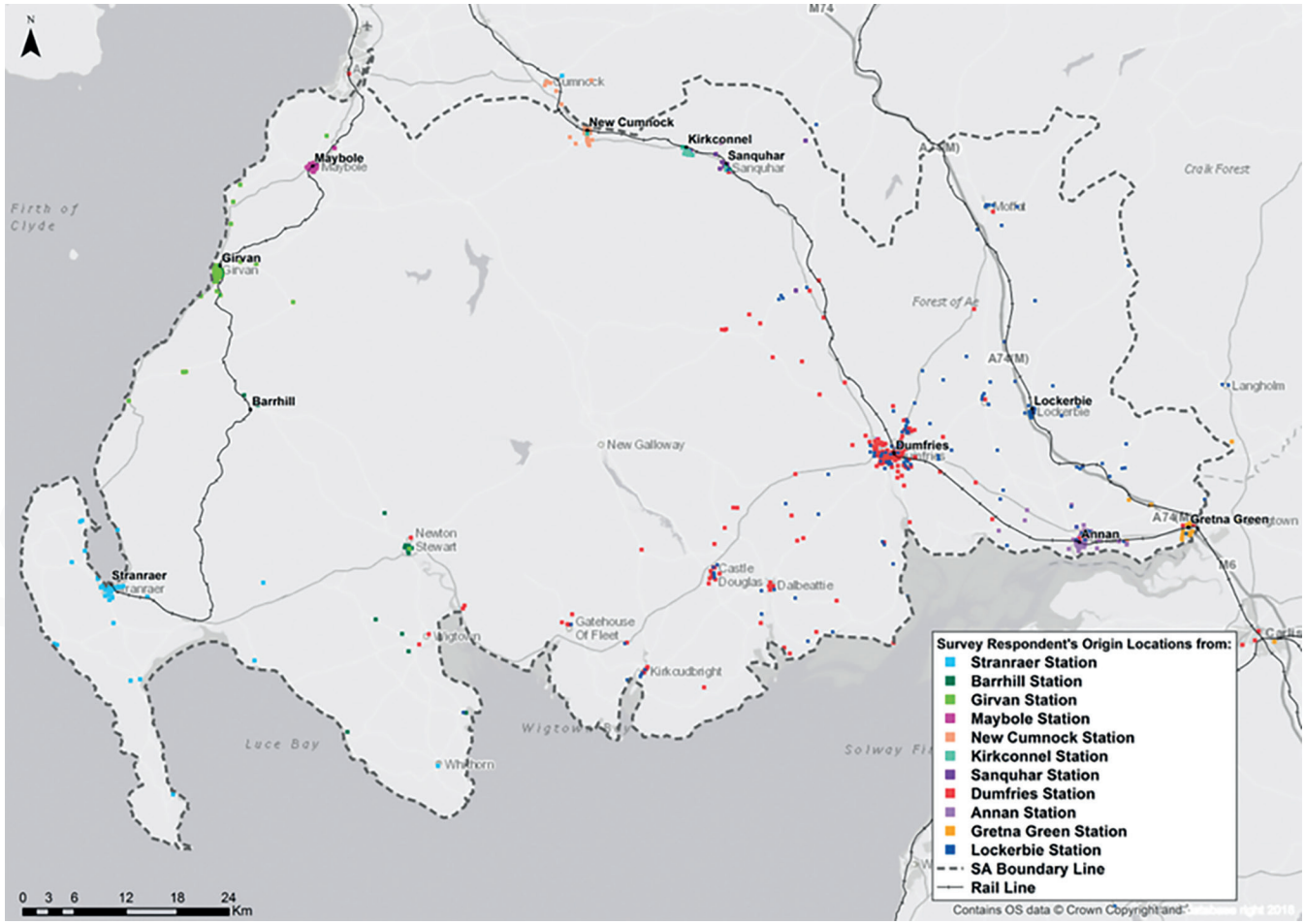

Figure 9.1 Rail Station Catchments in South West Scotland

9.2 Priorities

20. Opportunities to enhance the customer experience when using public transport should be explored, particularly for vulnerable users who may require additional assistance or chaperoning in order to make their journey
21. The public and active travel networks should provide equal access for all including vulnerable groups such as women, elderly and younger people, ethnic minorities, people with mobility impairments or disabilities as well as those on low incomes
22. Journey planning information should be available in various formats to meet the needs of differing users including online, traditional paper copies, braille, large print, and audio
23. Real Time Passenger Information should be made available for all public transport modes at stations, stops and on-board services wherever possible and practical
24. Soft measures should be implemented to encourage the use of active travel through measures such as additional information online and in the form of maps and signs within towns accompanied by public awareness campaigns
25. Access to bicycles, including e-bikes, should be facilitated through a combination of grants / loans for those that wish to purchase their own and provision of a regional cycle hire scheme for people that only require occasional access to a bike
26. Improving accessibility to railway stations should be prioritised in Annan, Dumfries, Kirkconnel and Sanquhar where access arrangements could be limited for some disabled users
27. Measures to encourage access to railway stations in line with the Scottish Government's Sustainable Travel Hierarchy should be taken forward
28. The security of taxi users should be improved by undertaking additional background checks prior to granting taxi licences

10

SUSTAINABLE AND EXTENDED LOCAL AND REGIONAL PUBLIC TRANSPORT CONNECTIVITY

10.1 Context

Extending the geographical coverage of services and stops / stations on the public transport network offers the potential to allow people to make new journeys and encourage modal shift to reduce car dependency across the region.
Bus services are provided by a mix of commercial routes and supported routes with a significant proportion of bus services being subsidised by SWestrans. On this basis SWestrans has the ability to influence which services operate in the region along with changes to the bus network although these must be delivered through a combination of commercial operators and SWestrans.

Bus Network

The current bus routes and timetables are constrained by the dispersed population and the associated challenges of providing an attractive service that is also deliverable and cost effective. Currently 55% of bus services in Dumfries and Galloway require public subsidy with the remaining being provided commercially (i.e., SWestrans has no control over these services)
As shown in Figure 10.1, all services west of Castle Douglas are supported. As such, there may be opportunities to reconfigure routes and timings of services in some instances to increase usage or deliver better value for the

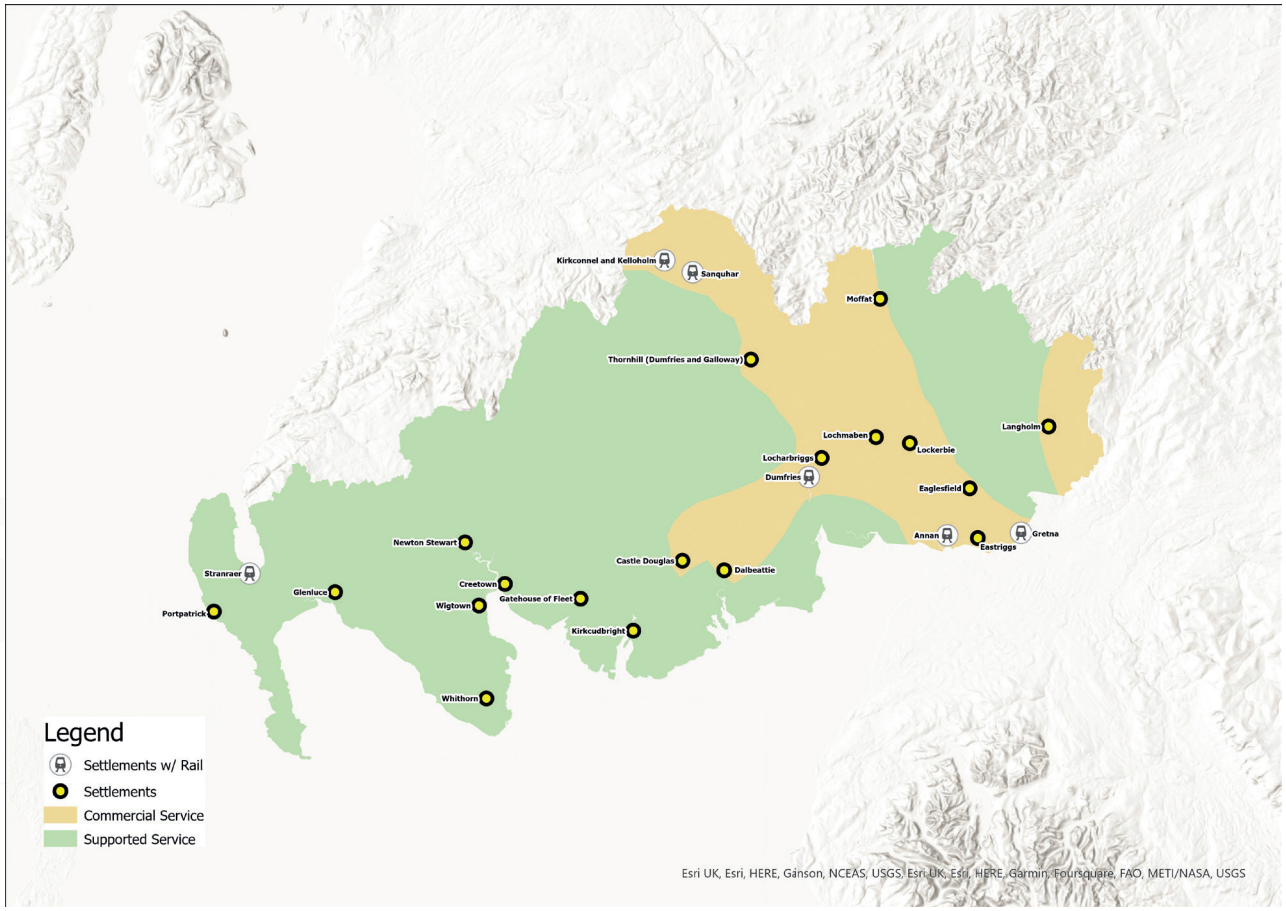

Figure 10.1 Subsidised Bus Network in Dumfries and Galloway

same level of public investment. This could be achieved by reviewing, amending, and rationalising local and express services with the aim of increasing connectivity across the region in a cost-effective manner whilst still ensuring people can access essential services such as healthcare, employment and education. Measures to deliver more efficient and effective subsidised bus services include:

- Rationalised bus services in key corridors
- Amended bus routes to incorporate underserved locations
- Splitting or consolidation of bus routes
- Creating bus route variants
- Increasing Sunday bus route coverage
- Increasing evening bus route coverage

Closely linked to this is the need for enhanced bus services that link locations with poor connectivity to essential services focusing on the most connectivity deprived areas as illustrated in Figure 10.2. In addition, at present some areas do not have timetables suitable for daytime commuters or evening leisure passengers, with some services commencing after 9am or terminating before 7pm. This limits opportunities for public transport usage, and residents are required to drive to

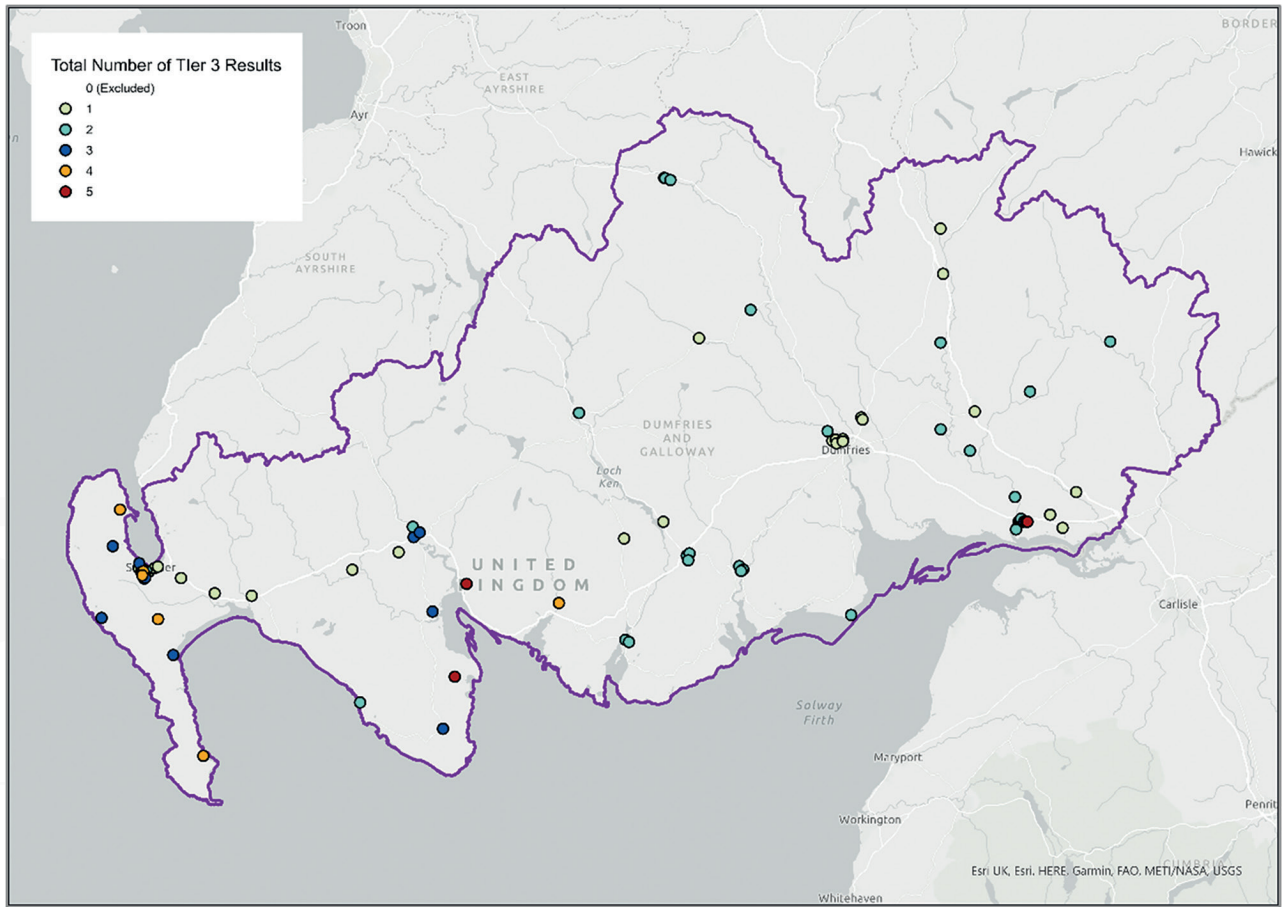

Figure 10.2 Locations with Highest Levels of Connectivity Deprivation to Services (1 = good connectivity, 5 = poor connectivity)

access the workplace or essential services. Furthermore, some bus stops have low service frequencies limiting opportunities for public transport usage. Reconfiguring the current timetable to offer a longer operating window offers the potential for services better timed for commuters and for accessing leisure opportunities in areas where service provision is currently poor. This would require more late evening and early morning bus services and better-timed connections between express and feeder routes.

Furthermore, some bus journey speeds across the region are slow, with journey times often not competitive with the car. One reason for this is indirect service routing and frequent stops, particularly in rural areas. Reconfiguring the existing bus services therefore also offers potential to decrease journey times by bus.

The delivery of an enhanced bus network will however be challenging given declining bus passenger numbers, increasing costs and greater pressures on bus subsidies as well as wider staffing issues in the bus industry. The increase in costs is illustrated in Figure 10.3 which highlights the impact of the COVID-19 pandemic compared to the broadly stable costs prior to that. Any improvements to the network will consequently be dependent upon maximising the efficiency of the existing operations.

On this basis, there is a need for a new public transport model. This is required to ensure the network continues to be sustainable in the future by mitigating the consequences of potentially fewer commercial bus services across the region and to address the challenges of providing high-quality services across dispersed rural communities to an ageing population. Any future model must also fully consider and address the current and potential future challenges faced by the bus industry in Dumfries and Galloway. A sustainable delivery model is being developed

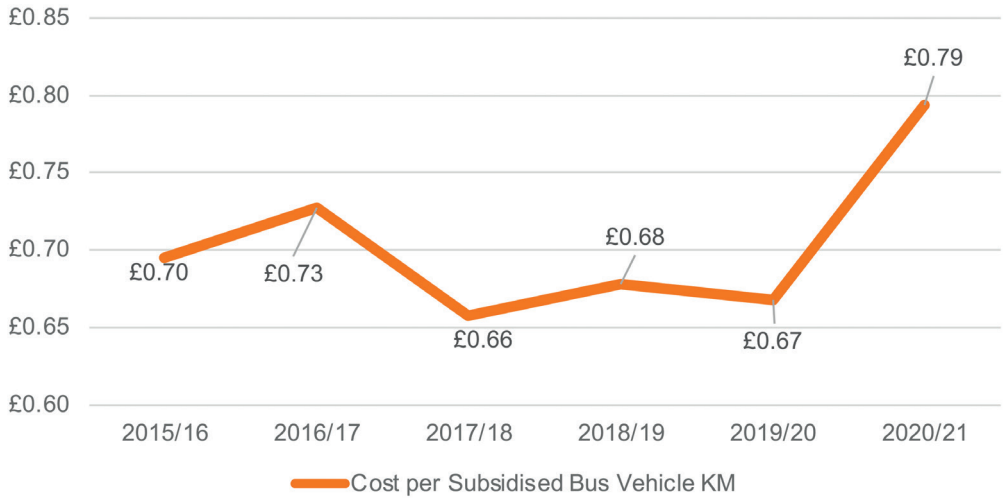

Figure 10.3 Cost per Subsidised Bus Vehicle KM in Dumfries and Galloway

utilising the opportunities available to provide our residents with a needs-based, coordinated, affordable and integrated public transport network that allows easy transitions across modes. This model applies a three-tier framework for delivering a public transport network for the region which incorporates all journey needs including:

- **Tier 1 – Community Level Provision:** made up of a number of tailored and flexible services providing travel opportunities at community level linking directly to amenities / services or to a more structured / timetabled public transport option. This tier will take the learning and structures developed through the Community Transport Public Social Partnership (PSP) and expand across the region. This 'mainstreaming' of the PSP learnings will be a critical building block for the delivery of needs-based transport.
- **Tier 2 – Supported Local Bus and Community Transport Services:** made up of supported bus services provided by bus operators, DGC Buses and Community Transport. This would include fixed or semi-fixed bus routes along with Demand Responsive Transport (DRT) services that would either complement the current supported routes or be an alternative to these routes. One of the major aims of Tier 2 services would be to increase patronage of Tier 3 services through the development of Hub and Spoke feeder services to assist with the overall sustainability of commercial routes.
- **Tier 3 – Commercial Local Bus and Rail Services:** made up of commercial bus routes and ScotRail services. They would operate on the main corridors where there is high passenger demand for these services. Tier 3 services would be operated, in the main, by the commercial bus sector and Train Operating Companies.

This will be achieved through utilisation analysis of current public transport, mapping of demand 'drivers' (e.g., work, health and education locations) and development of area-based solutions, including options for a bus station in Dumfries. At present, Dumfries does not have a dedicated bus station and services terminate at various locations across the town. A dedicated bus station within Dumfries would improve connections between services and enhance the overall journey experience making public transport more competitive with car. The new model will also provide opportunities to investigate the increased integration of bus and bike by providing services with the capability to carry bikes onboard.

Alongside this, a network of mobility hubs will be developed across Dumfries and Galloway. Introducing new or improved intermodal facilities allows people to seamlessly move across the region using a variety of transport modes. Mobility hubs bring together public transport stops for buses and trains with a range of other modes and facilities, such as bike sharing, car clubs, e-scooters, EV charging points, bike racks / lockers and taxi stances as well as non-transport facilities like parcel storage lockers, drinking fountains and phone charging points. Mobility hubs have been identified as a strategic priority of the Scottish Government.

It is intended that the new public transport model will also bring together the learning from the pilot schemes operated under the Social and Community Transport PSP which has been developed locally in partnership with Third Sector Dumfries and Galloway, community transport operators and NHS Dumfries and Galloway. Achieving a fully integrated, co-ordinated and sustainable public transport network will require the development of a partnership between Dumfries and Galloway Council, SWestrans, the commercial bus sector, community transport, local communities and the NHS.

The Council's bus fleet (DGC Buses) is a key element of future public transport delivery. A series of options for the future role of DGC Buses have been considered with it being identified that a partnership approach is the most effective one. The Transport (Scotland) Act 2019 enabled the establishment of Bus Service Improvement Partnerships (BSIPs). These involve local transport authorities formulating a plan with the bus operators in their area and then deciding on how best to implement it through supporting schemes. The creation of a BSIP in Dumfries and Galloway will entail DGC Buses working in partnership with the commercial sector, community transport and NHS Dumfries and Galloway to develop and deliver transport solutions. It will ensure that where the private sector bus industry does things best, and in the most cost-effective way, this will continue. However, where other bus assets (DGC Buses or operators) are being underutilised, a coordinated partnership approach to service delivery will be developed to maximise usage whilst working alongside commercial services to deliver a more sustainable network. Where no service exists, DRT solutions will be developed and operated by third sector community transport operators, DGC Buses and the community.

CASE STUDY: PUBLIC SOCIAL PARTNERSHIP – DESIGN AND OPERATION OF THE 517 SERVICE

The main aim of the Public Social Partnership is to design / re-design services, through user engagement, with community transport piloting the service.

The 517 Kirkcudbright – Brighouse Bay – Borgue bus service was identified as a service that should be looked at. The service is very rural and there were very low passenger numbers. There were a number of steps in the re-design of the service:

- **Consultation:** The local community of Borgue was consulted in relation to the re-design of the service to establish what the local community required. The engagement with the local community was a mixture of questionnaires and focus groups, which were facilitated by the Community Council and Galloway Community Transport.
- **Option Design:** From the feedback from the consultation options on the delivery of a new service were presented to the local community. It was agreed that the service required to start an hour earlier, align the timetable with connections to other services and a later finishing time.
- **Operation of Service:** The new designed service is currently being piloted by Galloway Community Transport and has seen a growth in the service pre and post COVID. It also enabled 3 people who were unemployed and went through the PSP D1 training programme to be employed on this service.

The PSP model of designing services through service user engagement and piloting them through Community Transport has been hugely successful. It serves the local community better, provides community transport with the opportunity to operate services of this type and provides the commissioner of the services with the confidence that community transport is able to provide this type of service.

DRT can be beneficial in areas where there is a lack of public transport provision at times of the day or days of the week, or where public transport services are not catering for people with specific requirements, such as those that require additional assistance (e.g., disabled or elderly people). For example, the provision of DRT services in the evenings or other off-peak times may be possible where fixed route services may not be feasible. Furthermore, DRT and community transport can help transport suppliers that are operating with spare capacity to maximise the utilisation of their services. In some instances, they may replace fixed route public transport whereas in others it may augment it, but this would be determined in line with the needs-based approach outlined above and as part of the overall three tier hierarchy to ensure an integrated network.

Furthermore, work will continue to be undertaken to develop a business case for DGC Buses to become a Passenger Service Vehicle (PSV) Operator as a prudent step should an operator of last resort be needed. This would then enable DGC Buses, in whatever entity it takes, to provide local bus services on behalf of SWestrans if commercial bus services cease to operate.

Rail Network

A number of organisations are responsible for managing and enhancing the rail network and services in the region. Network Rail is responsible for maintaining and upgrading the railway network whilst ScotRail provide the majority of services in Scotland, although long-distance services on the WCML are provided by other operators. Transport Scotland specify the ScotRail franchise and fund infrastructure enhancements which are delivered by Network Rail. These varying organisations, collectively known as Scotland's Railway, would consequently have primary responsibility for delivering amendments to the rail network or services in the region.

There are several stations within Dumfries and Galloway which have a poor rail service for various reasons. These include late starting first services, limited evening services and poor frequency throughout the day. Furthermore, the problems can be more acute at weekends. Key issues include:

- Stranraer is poorly served throughout the week with a limited number of services each day
- Services on the G&SW between Glasgow and Dumfries have gaps of up to two hours during the day
- There are limited services between Glasgow and Carlisle and from Carlisle beyond Dumfries
- Sunday frequencies are poor at Lockerbie and on the G&SW between Glasgow and Carlisle
- The journey time to Glasgow is far faster from Lockerbie (1 hour) than from Dumfries (1 hour 50 minutes)
- However, Lockerbie is well served by rail which leads to people driving from across the region to access the station

Improving the rail connectivity from the stations that have a poor service at these times would improve connections to economic, leisure and some health and community facilities by rail services. However, increasing the frequency of existing services will require close coordination with key stakeholders including ScotRail and Transport Scotland. In addition, a local stopping service serving new stations on the WCML between Carlisle and Edinburgh / Glasgow should be pursued.

Consideration should also be given to railway network upgrades. The line between Stranraer and Ayr is mainly singletrack with limited passing loops and poor resilience to adverse weather conditions. While outside of the study area, the single-track sections north of Kilmarnock also act as a constraint on services in the region[16]. Capacity and line speeds could be enhanced in certain locations by the implementation of measures such as signal improvements, upgrades to track geometry and additional passing loops. Improvements would benefit both passenger and freight services creating more efficiency and enabling more services to operate.

There are also issues with adequate train crew staffing, leading to service cancelations in some instances. An increase in locally situated train crews could therefore provide additional resilience to staffing related service issues.

Analysis has identified the potential impacts of reopening stations at Beattock on the WCML, and Eastriggs and Thornhill on the G&SW. Stations at these locations would provide direct rail connectivity for local residents and would reduce overall travel times. While it is recognised that the necessary socio-economic case to justify progression of these stations has not been evidenced their reopening remains an ambition of SWestrans. SWestrans will continue to support the delivery of these stations in addition to any other stations that demonstrate a strong business case and will pursue their delivery with industry partners.

In addition, there is a strong case for relocating the rail station at Stranraer from its current location to within the town itself. The station is currently located on the pier from which ferries to Northern Ireland departed prior to the terminal being relocated to Loch Ryan. As the station is located on the pier, users must walk from the town onto the derelict and unused pier to access train services and there is poor connectivity with the town itself. There is therefore a strong case for relocating the station into the town to provide easier and less intimidating access for train users, and better integrate it with the rest of the town centre.

Consideration should also be given to reinstating the Castle Douglas and Dumfries Railway which ran between Dumfries and Stranraer, allowing residents along the line to access connecting services at Carlisle on the WCML. While it is recognised that reinstating this railway was not specifically included in STPR2 (which covers the period to 2032), it has been retained in this strategy as a longer term proposition. The line was closed during the 1965 Beeching closures, with the tracks and supporting infrastructure removed. At present, the only public transport option along the route is by bus. Reopening the railway line between Dumfries and Stranraer along a similar route to the previous one would provide a sustainable alternative to the A75 enabling modal shift.

Opportunities could also be explored to increase the number of services at Lockerbie and enhance the WCML to allow the operation of long-distance and new local services on the line. There is also an aspiration as referenced in the South of Scotland Indicative Spatial Strategy[17] to provide new links between the G&SW and the WCML.

In addition, there is also scope to deliver an extension to the Borders Railway from Tweedbank serving Langholm and terminating at Carlisle which could provide wider connectivity across the region. Each of the above opportunities are dependent upon business case development which would also determine the most appropriate locations for new stations. The development of new rail lines like these provides an opportunity to move both people and freight from road to rail leading to less emissions and a reduction in the other negative impacts associated with high traffic flows.

[16] Improvements on this section were identified as an intervention in STPR2 – See j10194c-31 | Transport Scotland
[17] South of Scotland Indicative Regional Spatial Strategy, (2021) https://www.dumgal.gov.uk/media/24530/iRSS/pdf/iRSS_document_FINAL_FINAL.pdf

Where heavy rail is not feasible there may be potential to provide lighter forms of rail which require less rigorous technical design standards and can therefore be more affordable and deliverable in some instances. These should be investigated as appropriate as a potential means of providing fixed public transport links in Dumfries and Galloway if heavy rail is deemed impractical or unaffordable.

10.2 Priorities

29. SWestrans and its partners will work to deliver a new public transport model based around an engagement-led needs-based approach applying a three tier framework as follows:
    a. Tier 1 – Community Level Provision
    b. Tier 2 – Supported Local Bus and Community Transport Services
    c. Tier 3 – Commercial Local Bus and Rail Services
30. Bus service improvements should be focused in areas identified as at greatest risk of both transport poverty and deprivation. This should be informed by further analysis to develop options to improve bus service connectivity such as increased service frequencies, new services, more direct services and / or more express services
31. Where no bus service exists, DRT solutions will be developed and operated by third sector community transport operators, DGC Buses and the community
32. Dumfries and Galloway Council will undertake work to develop a business case for DGC Buses to become a Passenger Service Vehicle (PSV) Operator as a prudent step should a bus operator of last resort be needed in Dumfries and Galloway
33. Further analysis should be undertaken to assess the potential to provide a bus station in Dumfries and, if found to be feasible and beneficial, partners should work together to facilitate its delivery
34. Opportunities to increase the carriage of bikes on buses will be explored
35. A network of mobility hubs should be developed and implemented across Dumfries and Galloway
36. A Bus Service Improvement Partnership (BSIP) should be created in Dumfries and Galloway using the powers set out in the Transport (Scotland) Act 2019 and will entail SWestrans working in partnership with the commercial sector, DGC Buses, community transport and NHS Dumfries and Galloway along with other partners as appropriate
37. The development of business cases for improvements to rail services at stations where provision is poor should be taken forward in close coordination with key stakeholders including ScotRail and Transport Scotland
38. Opportunities should be investigated to run a local service on the West Coast Main Line between Carlisle and Edinburgh / Glasgow through the development of a business case

39. Consideration should be given to rail network upgrades to decrease journey times and increase capacity, including the replacement of semaphore signalling, passing loops and upgrades to track geometry at key locations
40. Opportunities should be explored to improve the capacity on the West Coast Main Line through Lockerbie and at other appropriate locations
41. The potential for more locally situated train crews should be investigated to provide additional resilience to staffing related service issues
42. While it is recognised that the necessary socio-economic case to justify progression of the reopening of stations at Beattock on the West Coast Mainline, and Eastriggs and Thornhill on the Glasgow and South West Line has not been evidenced, their reopening is supported and remains an ambition of SWestrans.
43. The potential to relocate the station at Stranraer should be explored to provide easier access for rail users and better integrate it with the rest of the town centre
44. Consideration should be given to reinstating the Castle Douglas and Dumfries Railway between Dumfries and Stranraer along with delivering an extension to the Borders Railway from Tweedbank serving Langholm and terminating at Carlisle with appropriate business case development being taken forward for each
45. Lighter rail solutions should be explored as an alternative to heavy rail where it may provide a more practical or affordable solution for fixed public transport links

IMPROVING THE QUALITY AND AFFORDABILITY OF OUR PUBLIC TRANSPORT OFFER

11.1 Context

In addition to enhancing our public transport services and expanding network coverage, it is also essential that our public transport provision is affordable for all and that existing infrastructure, including vehicles and stops, is of a high standard. Furthermore, there is a need to improve integration between services and modes along with the quality of ticketing provision.

Affordability for All

In order to provide a viable alternative to car, the public transport system should be affordable for all. Bus fares are set by operators whilst ScotRail fares are set by Transport Scotland. Journeys that involve multiple modes or operators can also lead to several different fares. There is consequently a need to deliver solutions to make fares more affordable wherever possible.

There are currently multiple bus concessionary schemes in place within the region, including the national under 22 bus pass and over 60 / disabled concessionary pass which entitles each group to free bus travel through the National Entitlement Card. One option to make public transport more affordable would be to expand the eligibility of these current schemes or to create new concessionary schemes to allow more users access to reduced / no fare journeys. This could include increasing the number of people entitled to a companion or expanding the existing Dumfries and Galloway Council Taxicard Scheme. However, any changes to national schemes could require the agreement of the Scottish Government to be delivered. In addition, further promotion of the existing schemes could help to ensure that all those that are eligible for free bus travel are aware of and able to take advantage of these options.

Furthermore, these concessionary travel schemes (other than the national Blind Scheme) don't include rail which means it is often not an affordable option for young and elderly travellers and those with socio-economic disadvantage who are often amongst the most vulnerable groups who can least afford to pay. Expansion of the concessionary travel schemes to cover rail would help enable more users to access affordable rail travel. Alternatively, new concessionary travel schemes could be established at a national or regional level targeted at low-income users, although this would require ongoing funding and the support of partners for delivery.

There are also inequalities in the rail fare regime across the region as illustrated by the fare disparities between Dumfries and Lockerbie as well as Kirkconnel and New Cumnock (see Table 11.1). The introduction of new rail fare structures could remove inequalities like these and ensure that journeys to similar destinations incur similar costs which are affordable for all users. This could potentially be achieved through extension of the Strathclyde Partnership for Transport (SPT) fare zone, which provides discounted rail travel within the SPT area, to include Dumfries and Galloway or by the creation of a new fare zone specifically for the region. The impact of the SPT fare zone can be seen on the Kirkconnel and New Cumnock ticket prices with the two towns located near to each other but the former being in Dumfries and Galloway and the latter in the SPT area. Delivery of changes to fare zones will require close working with rail industry partners.

Table 11.1 Peak time single rail fares [18]

	Glasgow	Edinburgh
Dumfries	£19.10	£84.2019
Lockerbie	£14.20	£21.50

	Glasgow
Kirkconnel	£15.60
New Cumnock	£9.80

Enhancing Ticketing & Seamless Journeys

Closely related to affordability is the need for integrated ticketing to make journeys as seamless as possible, and to provide discounts / capping on multi-modal travel. This needs to build upon and better **promote existing schemes such as PlusBus and Rail and Sail which already provide integrated ticketing between bus, rail and ferry within the region. There is a need to enable the purchasing of integrated tickets on buses. In addition, there are more opportunities to explore integrated ticketing between bus or rail and services to Northern Ireland from Loch Ryan.**

The majority of public transport within Dumfries and Galloway is provided by bus. Creating a new, or enhancing existing, bus tickets could help enable seamless transfers between services and improve the ease with which it is possible to travel around Dumfries and Galloway by bus without purchasing multiple different, expensive tickets. Any enhanced bus season ticket solution should allow users to purchase travel for a set number of days or journeys across multiple operators as part of a wider integrated ticketing solution for the region. In particular, they should enable travel on services provided by smaller operators who currently do not offer season tickets.

Furthermore, there is also scope to improve **multi-modal connections between bus, train and ferry. Currently, transfers between bus, train and** ferry services range from full integration, where a bus arrives at a railway, to difficult such as connecting between rail and ferry in Stranraer. Improving connections between different modes of transport by reducing the distance between connecting modes and coordinating the timing of connecting services offers the potential to provide enhanced integration which, when combined with integrated ticketing, enables seamless transfers. This could be achieved through new, relocated or retimed bus services that tie in with train and ferry links.

Infrastructure Enhancements

Upgrading the existing public transport infrastructure is also critical to ensuring that the region provides a high quality and attractive network for users. A range of infrastructure improvements can be made at bus stops which are often currently of a poor standard. These include accessibility and other improvements, including facilitating step-free access, installation of real time bus information, new shelters / bus stop flags where none previously existed, new CCTV / lighting to enhance security, improved active travel links to stops, secure cycle parking and relocation of stops to more suitable locations. These interventions would improve the bus journey experience as well as the security and accessibility for all users.

[18] Fares sourced from ScotRail website on 06/09/2022. Tickets searched were singles from origin to destination stations during the morning peak. Note in some instances considerable variance in ticket prices does exist but the fare for the first service was taken in each instance
[19] Via Carlisle

Currently, the railway lines to Dumfries and Stranraer are not electrified requiring diesel rolling stock for operation. Figure 11.1 shows Transport Scotland's plan for decarbonising the rail network as articulated in the Rail Services Decarbonisation Action Plan[20]. This document sets out the plan to electrify the line between Carlisle and Kilmarnock and notes that alternative traction will be used as a transition on the line from Ayr to Girvan until full electrification while alternative traction will run permanently from Girvan to Stranraer.

This could constrain the number of services that operate to Stranraer as they will be dependent on the use of dedicated rolling stock. Another solution therefore would be to fully electrify all lines in Dumfries and Galloway to allow for electric traction on all routes. This would enable electrified services from north of Ayr to continue on to Stranraer which otherwise would need to be provided by specialist rolling stock, limiting opportunities for service enhancements.

As such, consideration should be given to opportunities to electrify the rail network south of Girvan, particularly given the additional demand that could be generated by a relocated station at Stranraer as discussed in Chapter 10.

At other stations across the region improvements to make them safer and more accessible for railway users will be required. These are closely related to the access improvements outlined in Chapter 9.

Improving the Fleet

Buses in Dumfries and Galloway will be replaced with low emission buses (such as Electric Vehicles, Plug-in Hybrid Electric Vehicles, Hydrogen or Natural Gas). This will substantially reduce CO_2 emissions as well as improving the quality and comfort onboard. Newer vehicles will also offer enhanced accessibility for all users, including deployable ramps and kneeling capabilities. The upgrade of the fleet will be taken forward though partnership working as outlined in Chapter 10.

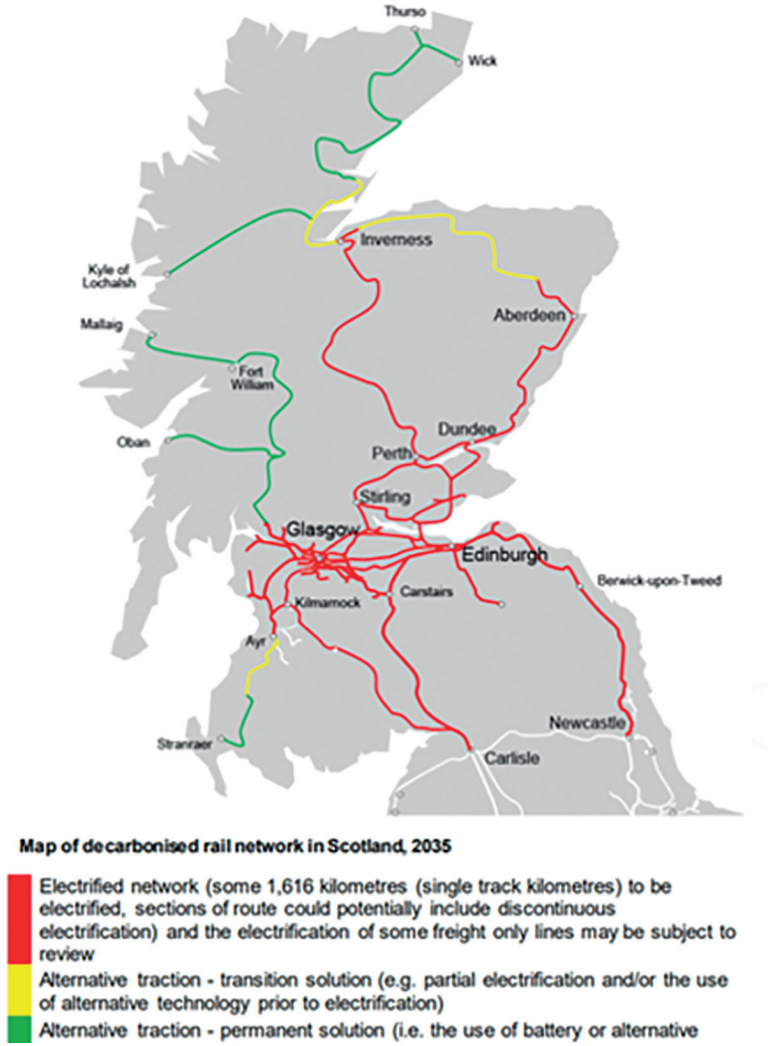

Figure 11.1 Decarbonised Rail Network in Scotland, 2035 (Transport Scotland)

[20] Rail Service Decarbonisation Action Plan, Transport Scotland, July 2020, p8

Most of the ScotRail rail services within Dumfries and Galloway are operated by the Class 156 Diesel Multiple Unit (DMU) fleet of rolling stock. The majority were built in the late 1980s to 1990s. The fleet has undergone upgrades to improve the interior, but it is near the end of its service life. The current trains were not constructed to current accessibility standards or have spaces for bikes, which in some cases has required retrofitting. The replacement of the current rolling stock with alternative traction such as hydrogen or battery power would not only provide a reduction in emissions but also enable a step change in the quality of customer experience. In particular, access for disabled and vulnerable users would be greatly enhanced. Alternatively, if the G&SW to Stranraer is electrified, then the rolling stock would be replaced by Electric Multiple Units (EMU). New rolling stock should also be provided with areas onboard to facilitate the carriage of bikes allowing for multi-modal journeys.

11.2 Priorities

46. Opportunities to expand the eligibility of existing concessionary travel schemes or to create new schemes to allow more users access to reduced / no fare journeys should be explored with key partners including Transport Scotland
47. Expansion of existing concessionary travel schemes to cover rail should be considered to enable more users to access affordable rail travel
48. The introduction of new rail fare structures should be explored to remove inequalities and to ensure that journeys to similar destinations incur similar costs which are affordable for all users
49. Integrated ticketing solutions should build upon and better promote existing schemes such as PlusBus and Rail and Sail as well as seeking new opportunities to deliver integrated and multi-journey ticketing measures for bus, rail and ferry in the region
50. Improving links between different modes of transport by reducing the distance between connecting modes and coordinating the timing of services should be taken forward as a priority wherever possible
51. Enhancements to existing bus stops will be implemented where practical to improve security, accessibility and the attractiveness of bus services for all users
52. Support the decarbonisation of the rail network in Dumfries and Galloway and explore along with rail industry partners opportunities to electrify the line south of Ayr to provide greater scope for through services and to accommodate increased demand from a relocated Stranraer Station
53. The replacement of the bus fleet with low emission vehicles will be taken forward in conjunction with partners
54. Replacement of rail rolling stock should be taken forward considering proposals for electrification of parts of the network in the region with the appropriate traction being based upon this and giving due consideration for the need to enhance the quality, accessibility and standard of rolling stock serving Dumfries and Galloway
55. Opportunities for the carriage of bikes on board trains should be explored as new rolling stock is procured, recognising that all new ScotRail trains will have spaces for bikes onboard.

12

SUPPORTING SAFE, EFFECTIVE AND RESILIENT CONNECTIONS TO LOCH RYAN AND OTHER KEY LOCATIONS

12.1 Context

Delivering enhancements to the strategic transport network that provide links to key economic destinations, gateways and development locations will be essential to increase efficiency and the economic competitiveness of the region with links to the strategic ports at Loch Ryan of particular significance.

In addition, Lockerbie acts as a regional access point to the national rail network due to the long-distance services that serve the station, and the cheaper fares available from it to Edinburgh and Glasgow (see Table 11.1). Increasing the connectivity to Lockerbie Station by a variety of modes of transport is consequently of strategic importance to the region. This could be achieved through offerings such as improved bus services (including more direct bus / rail integration), enhanced active travel links, and increased parking capacity.

Several key routes throughout the region, including the A74(M), A7, A75, A76, A77 and A709 all see significant traffic flows and HGV usage due in part to the location of ports at Loch Ryan, and the large timber industry within the region. This can cause significant delays for road users due to the single carriageway status of these roads and the reduced speed of HGVs. Whilst there is a need to reduce reliance on roads-based transport, the importance of these strategic linkages and rural nature of the region mean that it will still be essential to deliver enhancements to the existing strategic road network to make it safer and decrease journey times. This could involve measures such as:

- Dualling of all or parts of the A7, A75, A76, A77, A701 and A709
- Partial dualling of other key routes to allow for passing areas
- Road safety and geometry improvements on single carriageway roads
- Improved overtaking opportunities and route standard, particularly on the A75
- Enhanced signage, including variable message signs
- Increased speed limits for HGVs on some or all strategic routes across the region drawing on experience from the A9 pilot of a 50mph speed limit undertaken by Transport Scotland[21]

Linked to this, diversionary routes for the A7, A75, A76, A77 and A709 routes are inadequate. Identifying, formalising and upgrading these routes to enable them to cope better with additional traffic and offering more direct diversionary routes where possible is therefore of critical importance.

Opportunities should also be sought wherever possible to shift goods onto the rail network through the creation of new freight hubs on the railway to enable the movement of freight, particularly timber, by rail. The potential for creation of an intermodal freight hub at Cairnryan / Stranraer should also be explored which could potentially link with wider rail network proposals discussed in Chapter 10.

Furthermore, some roads across the region have poor sightlines at junctions, leading to collisions and safety issues. This is especially relevant on rural roads due to the higher speed limits, sub-optimal geometry and overhanging vegetation. In locations like these it will be necessary to deliver junction improvements and other safety improvements through measures like:

- Improvements to the line of sight
- Enhanced geometry and junction layout
- Banning right turns at inappropriate locations
- Removal of vegetation
- Installation of warning signs
- Grade separation where appropriate

[21] Results from the A9 50mph Trial suggest that increasing the speed from 40mph to on single carriageway routes resulted in an increase in journey times of 5% to 7% on average, a reduction in platooning, and a reduction in driver frustration.

Road safety can be further improved by the implementation of interventions, including average speed cameras on strategic routes where excessive speeds have been identified as a problem, the creation of 20mph zones in towns and villages as well as the installation of appropriate traffic calming and management measures.

Ensuring road safety and access to strategic locations also includes maintaining the network to a high standard. In total, 12% of the road network in Dumfries and Galloway[22] was classified as condition 'red' and 35% as condition 'amber' by the Scottish Road Maintenance Condition Survey in 2020/21. These are amongst the highest figures of any local authority in Scotland. As such, there is a need to improve the quality of the road network through an enhanced programme of resurfacing in Dumfries and Galloway, initially prioritising sections with poor surfacing on major routes. Alongside this there is a need to enhance surfaces on cycleways and footways to encourage people to use active travel where practical.

At present, there are a limited amount of dedicated HGV and motorhome parking areas on the strategic road network. This causes HGVs and motorhomes to park in laybys when drivers are required to rest, blocking parking spaces for other users, and creating hazards by removing safe stopping points. In addition, the limited number of dedicated HGV parking can cause people to drive for longer than they should without a break which also creates safety concerns. The creation of additional dedicated rest areas and motorhome park-ups across the region would enable HGV drivers to get sufficient rest and potential opportunities for new locations should be explored and implemented as appropriate.

12.2 Priorities

56. Increasing the connectivity to Lockerbie station by a variety of modes should be explored given its strategic importance to the region
57. Enhancements to the strategic road network including the A7, A75, A76, A77, A701 and A709 should be taken forward to improve safety, journey times, diversionary routes and improve access to key locations across the region
58. Opportunities should be sought to shift goods from HGVs onto the rail network by the creation of new rail freight hubs including the potential for the creation of an intermodal freight hub at Cairnryan / Stranraer
59. Junction improvements should be taken forward at locations of collision clusters
60. Appropriate road safety, traffic calming and management measures should be used to provide a safe environment for all road users
61. Improvements to the quality of the road network should be prioritised through an enhanced programme of resurfacing in Dumfries and Galloway initially focused on segments of road that have poor surfacing on major routes
62. Opportunities for additional dedicated rest areas and motorhome park-ups across the region should be explored and implemented as appropriate

[22] Including council and trunk roads

13

MANAGING OUR CAR TRAFFIC

13.1 Context

Whilst there will always be a degree of car dependency within Dumfries and Galloway given its rural nature. It is still essential that we make our contribution to the Scottish Government's target to reduce car km by 20% by 2030 whilst also reflecting the specific regional circumstances and rurality of the Partnership area. Whilst a rural area like Dumfries and Galloway may not make as significant a contribution to the national target as more urban locations, measures will still be required to reduce our car dependency. One way to achieve this will be to cut down on the number of single occupancy car journeys. This can be facilitated through the use of shared mobility as outlined in Chapter 14 along with the new three tier public transport model outlined in Chapter 10. In 2018, 41% of employed adults from Dumfries and Galloway over 16 who had travelled to work by car or van stated that they could use public transport instead highlighting the potential for modal shift[23]. Furthermore, for local journeys active travel will play a prominent role in reducing car use. Digital connectivity can also play a prominent role in reducing the need to travel by enabling home working for some, home shopping, etc. although this requires the roll out of suitable broadband infrastructure to enable it.

These measures are consistent with the approach set out in Transport Scotland's Route Map Reducing Car Use for a Healthier, Fairer and Greener Scotland. This sets out a series of behaviour changes and interventions intended to deliver the target of a 20% reduction in car kilometres by 2030. It also states that a range of demand management measures are likely to be required that sit alongside the positive incentives provided through enhancing alternative modes and reducing the need for people to travel by car, although no specific measures are proposed at this stage. A combination of these measures will be required in Dumfries and Galloway if a meaningful contribution is going to be made towards the national target.

Measures to reduce traffic and the impacts of traffic can have beneficial impacts for other transport users including people walking, wheeling and cycling. High volumes of fast-moving vehicles can increase the actual and perceived danger when crossing roads which discourages residents from walking, wheeling and cycling to local destinations. This increases car usage and perpetuates car dependency and inequalities. Reducing traffic to make towns and urban areas more attractive environments for active travel therefore makes these modes even more attractive and can be achieved through measures such as the introduction of Low Traffic Neighbourhoods[24].

[23] Scottish Household Survey Transport and Travel in Scotland 2019 Local Authority Tables – Table 2
[24] a scheme where motor vehicle traffic in residential streets is greatly reduced.

The management and enforcement of parking restrictions can also be an important mechanism to reduce car dependency in urban areas. This can entail a wide range of potential interventions including:

- Increasing or reducing parking supply
- Increasing the number of blue badge spaces
- Amending parking regulation
- Introducing parking charges to encourage turnover of parking spaces
- Enforcement of pavement parking ban introduced in the Transport (Scotland) 2019 Bill
- Adopting Decriminalised Parking Enforcement (DPE[25]) in Dumfries and Galloway to improve enforcement of parking regulations
- Introduction of Workplace Parking Licensing
- Reviewing waiting restrictions in town centres
- Charging for parking at stations where there are high levels of demand and many short car trips are made

Any demand management and parking measures implemented will be applied proportionately, taking into account the rural nature of the region and will be subject to statutory impact assessments to ensure a 'just transition' and the needs of key equalities groups. This will reflect the needs of local communities alongside the wider aspirations of the RTS to reduce emissions and the region's contribution to climate change and the wider adverse impacts of road traffic on health and the liveability of neighbourhoods.

13.2 Priorities

63. Dumfries and Galloway will make its contribution to delivering the Scottish Government's target to reduce car kilometres by 20% by 2030 reflecting the regional circumstances and rurality of our area
64. A combination of enhanced active travel, public transport, shared mobility and digital infrastructure will be used to provide an effective alternative to car travel with a particular focus on reducing single occupancy car journeys
65. Proportionate behaviour change, demand management and parking measures will be taken forward to support modal shift to more sustainable modes of transport and reduce car dependency across the region

[25] DPE is a regime which enables a local authority to administer its own parking penalties, including the issuing of Penalty Charge Notices (PCNs) to vehicles. In areas with DPE, stationary traffic offences cease to be criminal offences enforced by the police and instead become civil penalties enforced by the local authority.

MAKING THE MOST OF NEW OPPORTUNITIES

14.1 Context

Transport is currently undergoing a period of significant technical innovation and change as automation and digital technology begin to present significant opportunities to change how we travel in the future. Capitalising on these opportunities will depend upon making the most of beneficial new technologies.

In particular, technological innovation presents an opportunity to travel smarter and to offer a personalised travel service based on user preferences. Many of these innovations can be collectively drawn together under the umbrella of Mobility as a Service (MaaS) which, through integration, offers potential to enable faster, more efficient, more sustainable, and less expensive travel. MaaS enables users to plan, book, and pay for multiple types of mobility services through one digital platform. It envisages users buying transport services (including public transport, car usage, access to active travel, taxi, demand responsive transport, etc.) as packages based on their needs instead of buying the means of transport itself. This enables seamless journeys and for the traditional ownership model to be broken.

The implementation of a MaaS system within Dumfries and Galloway offers potential to reduce disparities of access and could be closely integrated with the provision of the new public transport model described in Chapter 10. However, given its early stage of development there is still uncertainty around how MaaS will be implemented with an associated requirement for public sector bodies like MaaS Scotland to guide and shape its roll out to ensure effective delivery and equality of access.

Case Study: Hannover Mobility as a Service

Hannover's MaaS app, Hannovermobil, developed by the public transport operator ÜSTRA and the Greater Hannover Transport Association, provides access to its mobility shop and automatically develops an integrated bill for all mobility services used at the end of the month. When launched in 2016 this multi-modal app completely replaced its 'public transport only' predecessor. Currently the service provides access to bus, rail, car-sharing, bike-sharing and taxis with taxis and car-sharing prices reduced about 10 percent on average from what is available to the public.

Closely related to MaaS is the provision of shared mobility which removes the need for people to own the mode of transport whereas instead they can share a journey or vehicle. This can help decrease the number of single occupancy vehicles being used and offers a potential transport solution for people who do not own or have access to a car. Shared mobility can help move towards an 'on demand' system of transport provision where people only pay for access to transport when they require it rather than buying a vehicle that may only be used occasionally. The implementation of shared mobility solutions across Dumfries and Galloway could entail measures such as:

- Regional bike hire scheme in town centres and at transport hubs
- Regional car sharing scheme with a potential focus on EVs
- Regional trip sharing scheme building on DG Tripshare
- Peer to peer car lending
- More widespread provision of taxicards for those with no alternative form of transport
- Increase the number of taxi licenses granted and percentage of accessible taxis

Due to the population characteristics of the region, different implementation approaches will be required. For example, a cycle hire scheme may be feasible in Dumfries and other larger settlements, but not viable in more rural settlements. Introduction of new digital based transport and accessibility schemes will also require careful consideration of the needs of people with protected characteristics to engage with the technology.

Case Study: DG Tripshare

Liftshare is an online platform which facilitates ridesharing between strangers via an online app. DG Tripshare utilises this platform to provide ridesharing within the region with over 450 individuals making use of the scheme.

Users looking to ride share register online and add their journey to the Liftshare matching database. They can then filter their search to find the most suitable ride share option for them and use the messaging system to arrange their potential Liftshare before confirming their request.

Payment between driver and passenger(s) is up to each member, with Liftshare recommending the cost per mile as a suggested contribution.

Alongside shared mobility there are also opportunities to capitalise upon the growth of micro mobility. This refers to the usage of small vehicles operating at a speed below 15 mph and driven by users. These can include bicycles, electric bikes and scooters. Micro mobility may involve users travelling from their homes to a hub, where they can store their bike or scooter before travelling onwards to a final destination via another mode (e.g., public transport). As such, there is a close relationship with the mobility hubs discussed in Chapter 10. Whilst this is another emerging field, and its application will require further analysis, potential means in which it could be implemented across the region include:

- Cargo bikes for the last mile logistics movement of freight in towns and urban areas
- Electric bikes for long distance cycle journeys (e.g., town to town) – electric bikes provide a step-change in terms of the distance which it is possible to travel by bike and therefore may open up opportunities for longer distance journeys

Sometimes the information provided while travelling by road can be poor with limited signage and not enough up-to-date information. Intelligent Transport Systems (ITS) could significantly improve information provision along key routes by offering real-time information on travel conditions, warnings about incidents and roadworks as well as signing drivers on to appropriate diversionary routes in the case of a road closure. Furthermore, ITS are being actively introduced into traffic control systems, vehicle designs and interactive systems for informing transport network users. To counteract or limit the intensification of congestion or disruption, ITS can manipulate the transport network by:

- Predicting traffic conditions via data from the surrounding environment and infrastructure
- Providing information to network users to best inform travel choice
- Car communication via signal controllers in the road infrastructure relaying information to individual vehicles to modify speed / act accordingly
- Smart intersections which collect data and relay information
- Redirecting road traffic
- Altering signal timings

The implementation of ITS in the region should be part of a wider programme of enhancements to improve the safety and efficiency of the strategic road network as outlined in Chapter 12.

14.2 Priorities

66. The implementation of Mobility of a Service (MaaS) in Dumfries and Galloway will be taken forward in close coordination with the delivery of the new public transport model
67. A range of shared mobility measures should be taken forward across the region taking into account its varying characteristics and dispersed population to provide access to a variety of transport options without requiring ownership
68. Opportunities to capitalise upon the growth of micro mobility should be explored alongside the development of mobility hubs
69. Intelligent Transport Systems (ITS) should be implemented alongside other enhancements to the strategic road network to improve the safety and efficiency of its operation

15

DELIVERY

15.1 Overview

This strategy has set out the long-term policy context for transport in Dumfries and Galloway up to 2042. Its delivery will be dependent on a combination of actions by SWestrans, Dumfries and Galloway Council and close partnership working with other key industry bodies. To guide the implementation of the RTS and the priorities it has identified, a separate **Delivery Plan will be prepared which will sit alongside this strategy. This will set out a series of actions associated with each of the priorities identified in this RTS as well as the mitigation commitments identified within the SEA and EqIA reports which accompany this document. It will include actions which can be delivered by SWestrans and those where SWestrans would look to partners to lead on delivery. The actions will include physical and non-physical interventions as well as analysis and appraisal work to identify new interventions to support the delivery of the RTS Vision, Objectives, and Priorities.**

The Delivery Plan will be reviewed and updated on a regular basis throughout the lifetime of the strategy (2023-2042) as part of the ongoing Monitoring process set out Chapter 16. The actions it contains will include interventions at a range of different stages in the project lifecycle from concept to construction and the regular review will enable their status to be updated accordingly. An overview of risks to implementation will also be provided taking account of the delivery stage of the intervention.

15.2 Priorities

70. SWestrans will develop a Delivery Plan which sets out a series of actions associated with each of the Priorities identified in this RTS and which contribute towards achieving the RTS Vision and Strategy Objectives.
71. The delivery of the RTS Priorities will have a focus on providing opportunities for home grown businesses, skills and employment for the region's population
72. The Delivery Plan will be regularly reviewed and updated throughout the lifetime of the RTS (2023-2042)

16

MONITORING

16.1 Overview

Monitoring the RTS is important to assess the extent to which the Strategy Objectives and Vision set out in Chapter 4 are being achieved. To facilitate this, a series of Key Performance Indicators (KPIs) have been identified. These are each linked to the Strategy Objectives and are closely linked to those defined for the monitoring of the NTS2. They will be used to measure how the transport system performs over the lifetime of the RTS (2023-2042) against an established baseline prior to its implementation.

Throughout the lifetime of the strategy (2023-2042) high-level monitoring reports will be prepared on an annual basis with a more substantive report (which may involve primary research) completed every two years.

16.2 Key Performance Indicators

There are four types of indicators that will be used to monitor and evaluate progress in meeting the Strategy Objectives against an established baseline:

- Published data, such as that found in Scottish Transport Statistics
- Published primary research
- Indicators developed through bespoke analysis
- Primary research

The Scottish Household Survey Travel Diary (SHSTD) publishes a range of local authority and regional transport partnership statistics annually, usually two years in arrears, i.e., results from 2021 were published in 2023. This is one source of monitoring data, but sample sizes are typically small and some results are aggregated over a number of years. This will therefore be supplemented by a new SWestrans Travel and Transport Survey which will be undertaken every two years which will monitor the main trends in travel across the region, views on different transport modes and the causal mechanisms which may drive changes in behaviour in line with the Strategy Objectives.

The sections below set out a range of indicators which are specific to each Strategy Objective. In addition to these, a range of published aggregate transport statistics will be used to track and report trends at the macro level, such as overall road traffic levels etc.

STRATEGY OBJECTIVE 1: TO FACILITATE AND ENCOURAGE SAFE ACTIVE TRAVEL FOR ALL BY CONNECTING COMMUNITIES AND TRAVEL HUBS

KPIs for Monitoring and Evaluation

- Walking and cycling count data
- The level of, barriers to, and attitude to walking, wheeling and cycling will be monitored in the biennial SWestrans Travel and Transport Survey
- Hands Up Scotland Survey (Sustrans)
- SHSTD
  - Adults (16+) – frequency of walking in previous seven days
  - Main mode of travel – Walking
  - Main mode of travel – Bicycle
  - Frequency of walking in previous 7 days

STRATEGY OBJECTIVE 2: TO IMPROVE THE QUALITY AND SUSTAINABILITY OF PUBLIC TRANSPORT WITHIN, AND TO / FROM THE REGION

KPIs for Monitoring and Evaluation

Residents' and businesses' experience and perception of the quality of public transport will be monitored in a biennial SWestrans Travel and Transport Survey

- Level of bus services provided across the region
- SHSTD
  - Adults' views on satisfaction with public transport in the previous month
  - Adults (16+) – who used a local bus service in the past month – percentages who agreed with each statement
  - Adults (16+) – who used rail service in the past month – percentages who agreed with each statement

STRATEGY OBJECTIVE 3: TO WIDEN ACCESS TO, AND IMPROVE CONNECTIVITY BY PUBLIC TRANSPORT WITHIN AND TO / FROM THE REGION

KPIs for Monitoring and Evaluation

- Bespoke public transport connectivity analysis to key settlements and for key healthcare, education, and employment destinations
- Public transport labour market catchments of largest employment sites
- Bespoke bus stop service frequency and time of first / last bus and train analysis
- Bespoke affordability measures – cost of bus and rail travel between key origins and destinations
- Bespoke analysis of transport connectivity and deprivation across the region
- Residents' experience and perception of the accessibility of public transport (including barriers to travel) for all groups in society will be monitored in a biennial SWestrans Travel and Transport Survey
- SHSTD
  - Use of local bus services in previous month
  - Use of local train services in previous month
  - Main mode of travel – bus
  - Main mode of travel – rail

STRATEGY OBJECTIVE 4: TO IMPROVE INTEGRATION BETWEEN ALL MODES OF TRAVEL AND FREIGHT WITHIN AND TO / FROM THE REGION

KPIs for Monitoring and Evaluation

- Bespoke analysis of the typical number of interchanges when travelling by public transport between major settlements
- Bespoke sample analysis of typical interchange times at key regional interchanges / travel hubs
- Residents' and businesses' frequency of travelling using more than one mode of transport, and the perception of the integration between all modes of transport will be monitored in a biennial SWestrans Travel and Transport Survey

STRATEGY OBJECTIVE 5: TO PROVIDE IMPROVED, RELIABLE, RESILIENT, AND SAFE ROAD-BASED CONNECTIVITY FOR THE MOVEMENT OF PEOPLE AND GOODS WITHIN THE REGION, AND TO KEY LOCATIONS INCLUDING GLASGOW, EDINBURGH, CARLISLE AND CAIRNRYAN

KPIs for Monitoring and Evaluation

- Bespoke road journey times and journey time variability analysis between a range of key origins and destinations based on data derived from mobile devices / satnavs in vehicles
- Bespoke analysis of road traffic accidents across Dumfries and Galloway
- Residents' and businesses' satisfaction with the reliability, resilience and safety of road-based travel will be monitored in a biennial SWestrans Travel and Transport Survey
- Congestion delays experienced by drivers and car occupants (SHSTD)

STRATEGY OBJECTIVE 6: TO REDUCE THE NEGATIVE IMPACT OF TRANSPORT ON THE PEOPLE AND ENVIRONMENT OF THE REGION

KPIs for Monitoring and Evaluation

- Local authority transport related CO^2 emissions (Department for Business, Energy & Industrial Strategy)
- Average Annual Daily Traffic through Settlements (Transport Scotland / Department for Transport ATCs)
- Residents' views on how transport affects their local and the global environment will be monitored in a biennial SWestrans Travel and Transport Survey

RTS PRIORITIES

17.1 Overview

This section provides a summary of all the RTS Priorities set out in the preceding chapters for ease of reference.

Enabling More Sustainable Development

1. Sustainable locate new developments to reduce the need to travel first and foremost
2 Locate new development where it can be easily served by existing active travel and public transport links or, if not possible, by new active travel and public transport links which are accessible to all
3. Sustainable transport measures and supporting ancillary infrastructure for new developments will be delivered through developer contributions as appropriate
4. The concept 'local living' and of '20-minute neighbourhoods' will be incorporated into all future development and land-use planning processes
5. Transport interventions should be carefully sited and designed to prevent and minimise negative environmental impacts
6. New major developments, including those proposed at Chapelcross Power Station and Stranraer Gateway, should apply an 'infrastructure first' approach
7. At existing developments sustainable transport and ancillary infrastructure measures should be introduced to encourage the uptake of more sustainable transport by coordinated engagement with employers and other large organisations

Connecting Our Communities

8. Improvements to the active travel network will be delivered through a combination of incremental improvements to existing routes and new bespoke routes where appropriate
9. The active travel network will be developed in accordance with Cycling by Design, Designing Streets and other relevant technical guidance
10. An integrated active travel network linking both within and between our settlements will be developed in line with the Spatial Strategy articulated in the Dumfries and Galloway Active Travel Strategy 2
11. The Dumfries and Galloway Active Travel Strategy 2 will be kept under review and updated on a regular basis to ensure it is being effectively implemented
12. A dedicated Active Travel Team will work on prioritising, designing, and delivering schemes and projects in collaboration with funding partners
13. Awareness raising to facilitate behaviour change will be delivered through close community engagement and campaigns to encourage the use of active travel
14. SWestrans will spend at least 50% of its capital budget on active travel

Transforming Travel in Our Towns

15. Roadspace should be reallocated to prioritise walking, wheeling, cycling and public transport particularly within our towns and settlements in order to create a more attractive public realm across Dumfries and Galloway
16. The National Transport Strategy 2's Sustainable Travel Hierarchy should be applied to reprioritise the road network wherever possible
17. Detailed analysis should be undertaken to identify suitable locations and interventions for the reallocation of roadspace away from general traffic to active travel and public transport

Reducing the Negative Impact of Transport on Our Communities

18. Investigate the feasibility of bypasses for Crocketford and Springholm on the A75 as well as other communities on the A7, A75, A76, A77 and A709 including Dumfries
19. Support the decarbonisation of the car, taxi and commercial vehicle fleet through investigation and delivery, as appropriate, of measures such as:

    a. Electric Vehicle charging points, including for commercial vehicles
    b. Regional Electric Vehicle carsharing
    c. Grants / loans for Electric / Hybrid vehicles
    d. Low Emission Zones (LEZs)
    e. New rail freight hubs
    f. Alternative fuels e.g., green hydrogen, including for commercial vehicles

Enhancing Access to Transport Services

20. Opportunities to enhance the customer experience when using public transport should be explored, particularly for vulnerable users who may require additional assistance or chaperoning in order to make their journey
21. The public and active travel networks should provide equal access for all including vulnerable groups such as women, elderly and younger people, ethnic minorities, people with mobility impairments or disabilities as well as those on low incomes
22. Journey planning information should be available in various formats to meet the needs of differing users including online, traditional paper copies, braille, large print, and audio
23. Real Time Passenger Information should be made available for all public transport modes at stations, stops and on-board services wherever possible and practical
24. Soft measures should be implemented to encourage the use of active travel through measures such as additional information online and in the form of maps and signs within towns accompanied by public awareness campaigns
25. Access to bicycles, including e-bikes, should be facilitated through a combination of grants / loans for those that wish to purchase their own and provision of a regional cycle hire scheme for people that only require occasional access to a bike
26. Improving accessibility to railway stations should be prioritised in Annan, Dumfries, Kirkconnel and Sanquhar where access arrangements could be limited for some disabled users
27. Measures to encourage access to railway stations in line with the Scottish Government's Sustainable Travel Hierarchy should be taken forward
28. The security of taxi users should be improved by undertaking additional background checks prior to granting taxi licences

Sustainable and Extended Local and Regional Public Transport Connectivity

29. SWestrans and its partners will work to deliver a new public transport model based around a needs-based approach applying a three tier framework as follows:

    Tier 1 – Community Level Provision
    Tier 2 – Supported Local Bus and Community Transport Services
    Tier 3 – Commercial Local Bus and Rail Services

30. Bus service improvements should be focused in areas identified as at greatest risk of both transport poverty and deprivation. This should be informed by further analysis to develop options to improve bus service connectivity such as increased service frequencies, new services, more direct services and / or more express services
31. Where no bus service exists, demand responsive transport (DRT) solutions will be developed and operated by third sector community transport operators, DGC Buses and the community
32. Dumfries and Galloway council will undertake work to develop a business case for DGC Buses to become a Passenger Service Vehicle (PSV) Operator as a prudent step should a bus operator of last resort be needed in Dumfries and Galloway
33. Further analysis should be undertaken to assess the potential to provide a bus station in Dumfries and, if found to be feasible and beneficial, partners should work together to facilitate its delivery
34. Opportunities to increase the carriage of bikes on buses will be explored
35. A network of mobility hubs should be developed and implemented across Dumfries and Galloway
36. A Bus Service Improvement Partnership (BSIP) should be created in Dumfries and Galloway using the powers set out in the Transport (Scotland) Act 2019 and will entail SWestrans working in partnership with the commercial sector, DGC Buses, community transport and NHS Dumfries and Galloway along with other partners as appropriate
37. The development of business cases for improvements to rail services at stations where provision is poor should be taken forward in close coordination with key stakeholders including ScotRail and Transport Scotland
38. Opportunities should be investigated to run a local service on the WCML between Carlisle and Edinburgh / Glasgow through the development of a business case
39. Consideration should be given to rail network upgrades to decrease journey times and increase capacity including the replacement of semaphore signalling, passing loops and upgrades to track geometry at key locations
40. Opportunities should be explored to improve the capacity on the West Coast Main Line (WCML) through Lockerbie and at other appropriate locations
41. The potential for more locally situated train crews should be investigated to provide additional resilience to staffing related service issues

42. While it is recognised that the necessary socio-economic case to justify progression of the reopening of stations at Beattock on the West Coast Mainline, and Eastriggs and Thornhill on the Glasgow and South West Line has not been evidenced, their reopening is supported and remains an ambition of SWestrans
43. The potential to relocate the station at Stranraer should be explored to provide easier access for rail users and better integrate it with the rest of the town centre
44. Consideration should be given to reinstating the Castle Douglas and Dumfries railway between Dumfries and Stranraer along with delivering an extension to the Borders Railway from Tweedbank serving Langholm and terminating at Carlisle with appropriate business case development being taken forward for each
45. Lighter rail solutions should be explored as an alternative to heavy rail where it may provide a more practical or affordable solution for fixed public transport links

Improving the Quality and Affordability of Our Public Transport Offer

46. Opportunities to expand the eligibility of existing concessionary travel schemes or to create new schemes to allow more users access to reduced / no fare journeys should be explored with key partners including Transport Scotland
47. Expansion of existing concessionary travel schemes to cover rail should be considered to enable more users to access affordable rail travel
48. The introduction of new rail fare structures should be explored to remove inequalities and to ensure that journeys to similar destinations incur similar costs which are affordable for all users
49. Integrated ticketing solutions should build upon and better promote existing schemes such as PlusBus and Rail and Sail as well as seeking new opportunities to deliver integrated ticketing measures for bus, rail and ferry in the region
50. Improving links between different modes of transport by reducing the distance between connecting modes and coordinating the timing of services should be taken forward as a priority wherever possible
51. Enhancements to existing bus stops will be implemented where practical to improve security, accessibility and the attractiveness of bus services for all users
52. Support the decarbonisation of the rail network in Dumfries and Galloway and explore along with rail industry partners opportunities to electrify the line south of Ayr to provide greater scope for through services and to accommodate increased demand from a relocated Stranraer Station
53. The replacement of the bus fleet with low emission vehicles will be taken forward in conjunction with partners
54. Replacement of rail rolling stock should be taken forward considering proposals for electrification of parts of the network in the region with the appropriate traction being based upon this and giving due consideration for the need to enhance the quality, accessibility and standard of rolling stock serving Dumfries and Galloway

55. Opportunities for the carriage of bikes on board trains should be explored as new rolling stock is procured, recognising that all new ScotRail trains will have spaces for bikes onboard.

Supporting Safe, Effective and Resilient Connections to Loch Ryan and Other Key Regional, National, and International Locations

56. Increasing the connectivity to Lockerbie station by a variety of modes should be explored given its strategic importance to the region
57. Enhancements to the strategic road network including the A7, A75, A76, A77, A701 and A709 should be taken forward to improve safety, journey times, diversionary routes and improve access to key locations across the region
58. Opportunities should be sought to shift goods from HGVs onto the rail network by the creation of new rail freight hubs including the potential for the creation of an intermodal freight hub at Cairnryan / Stranraer
59. Junction improvements should be taken forward at locations of collision clusters
60. Appropriate road safety, traffic calming and management measures should be used to provide a safe environment for all road users
61. Improvements to the quality of the road network should be prioritised through an enhanced programme of resurfacing in Dumfries and Galloway initially focused on segments of road that have poor surfacing on major routes
62. Opportunities for additional dedicated rest areas and motorhome park-ups across the region should be explored and implemented as appropriate.

Managing Our Car Traffic

63. Dumfries and Galloway will make its contribution to delivering the Scottish Government's target to reduce car dependency and contributing to Scottish Government's target to reduce car km use by 20% by 2030 (measured in car km against a 2019 baseline) where possible and practical and subject to the updated route map to be published in Autumn 2024, reflecting the regional circumstances and rurality of our area
64. A combination of enhanced active travel, public transport, shared mobility and digital infrastructure will be used to provide an effective alternative to car travel with a particular focus on reducing single occupancy car journeys
65. Proportionate behaviour change, demand management and parking measures will be taken forward to support modal shift to more sustainable modes of transport and reduce car dependency across the region

Making the Most of New Opportunities

66. The implementation of Mobility of a Service (MaaS) in Dumfries and Galloway will be taken forward in close coordination with the delivery of the new public transport model
67. A range of shared mobility measures should be taken forward across the region taking into account its varying characteristics and dispersed population to provide access to a variety of transport options without requiring ownership
68. Opportunities to capitalise upon the growth of micro mobility should be explored alongside the development of mobility hubs
69. Intelligent Transport Systems (ITS) should be implemented alongside other enhancements to the strategic road network to improve the safety and efficiency of its operation

Delivery

70. SWestrans will develop a Delivery Plan which sets out a series of actions associated with each of the Priorities identified in this RTS and which contribute towards achieving the RTS Vision and Strategy Objectives.
71. The delivery of the RTS Priorities will have a focus on providing opportunities for home grown businesses, skills and employment for the region's population.
72. The Delivery Plan will be regularly reviewed and updated throughout the lifetime of the RTS (2023-2042).

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South West of Scotland Transport Partnership

Dumfries and Galloway Council

NHS Dumfries & Galloway

South of Scotland Enterprise