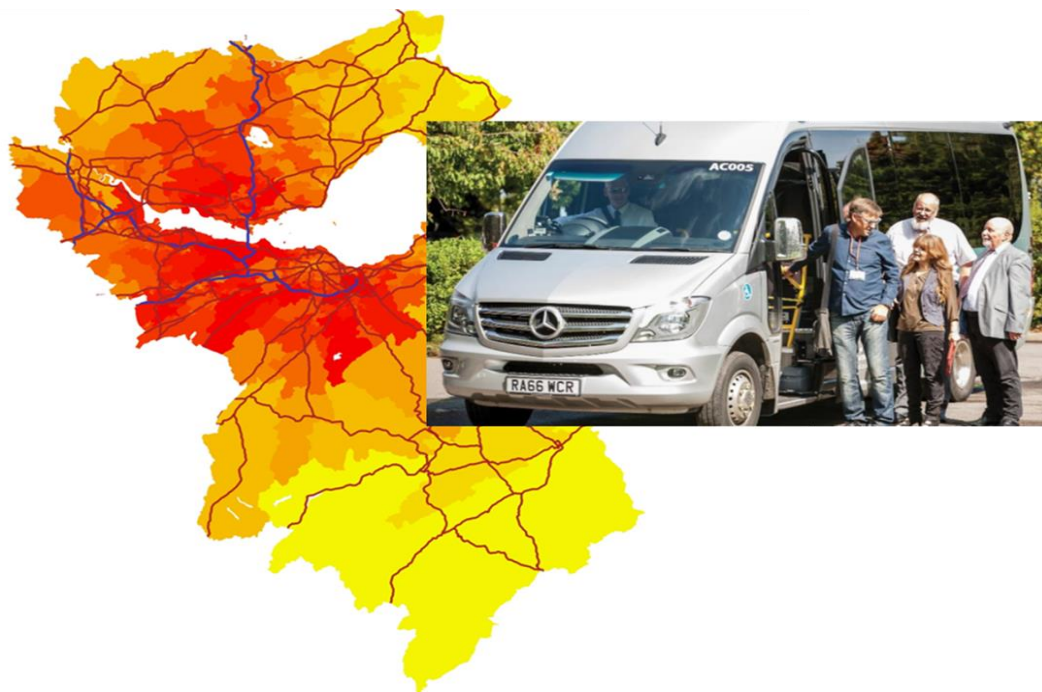


SEStran Strategic Demand Responsive Transport Study

Reference number GB01T19J78

31/03/2020

SYSTRA



IDENTIFICATION TABLE

Client/Project owner	South East of Scotland Transport Partnership (SEStran)
Project	SEStran Strategic Demand Responsive Transport Study
Type of document	Final Report
Date	31/03/2020
Reference number	GB01T19J78
Number of pages	78

APPROVAL

Version	Name		Position	Date	Modifications
1	Author	Jana Haspicova; Ralph Anderson; James Tomkinson; Neill Birch	Principal; Associate; Associate; Director	21/03/2020	Draft
	Checked by	Ralph Anderson	Associate	23/03/2020	
	Approved by	Ralph Anderson	Associate	23/03/2020	
2	Author	Ralph Anderson	Associate	31/03/2020	Final
	Checked by	Neill Birch	Director	31/03/2020	
	Approved by	Neill Birch	Director	31/03/2020	

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1. INTRODUCTION

1.1 The Study

- 1.1.1 SYSTRA has been commissioned by the South East Scotland Transport Partnership (SEStran) to undertake a Strategic Study of the opportunities to further develop Demand Responsive Transport (DRT) in the South East of Scotland.
- 1.1.2 There are several DRT services already operating in the SEStran area that are funded and fully operational. This Strategic Study has developed options to increase the resilience of DRT services and encourage innovation and service development.
- 1.1.3 The study will also inform the development of the new SEStran Regional Transport Strategy (RTS), production of which is commencing during 2020. The new RTS will align to the significant changes in transport related policy, legislation, climate challenges at a national level, new opportunities around person centred transport, and regional and local changes such as the introduction of a Low Emission Zone (LEZ) in Edinburgh, as well as nearby cities such as Dundee.

1.2 Background

- 1.2.1 DRT is a form of transport which places its customers at its centre, with "day-to-day operation determined by the requirements of its users"¹.

- 1.2.2 The form and organisation of existing DRT services in the SEStran area varies from place to place; however, typically, they provide a 'dial-a-ride' type service for individuals who have limited mobility opportunities (especially for disabled people). These services are largely operated by third sector organisations, some of which have been operating for 30 years or more, and fall into the category of 'community transport'.

Community transport is a form of DRT which "is about providing flexible and accessible community-led solutions in response to unmet local transport needs, and which is often aimed at the most vulnerable and isolated individuals in the community." – Community Transport Association²

- 1.2.3 Together, these organisations, their vehicles, experience, and expertise represent a significant asset to South East Scotland; however, they face significant ongoing challenges in the delivery of daily operation, as discussed later in this report.
- 1.2.4 Further to this, there is an increasing interest in DRT from a wider public transport perspective, including the very recent emergence of commercially operated DRT.
- 1.2.5 As the need to respond to the climate change emergency is increasingly recognised, transport has come under scrutiny. This has placed a focus on the potential positive role public transport can play in Scotland's efforts to reduce emissions to net zero by 2045. Scotland's Climate Change Plan³, sets out

¹ Demand-responsive Transport Policy Brief from the Policy Learning Platform on Low-carbon Economy, Interreg Europe, 2018

² Community Transport Association Website, accessed March 2020

³ Scottish Government, Climate Change Plan, Third Report on Proposals and Policies 2018-2032 Summary Document, accessed March 2020

an ambition to reduce emissions from transport across the lifetime of the Plan (2018 to 2032) by 37%. This includes being free from tailpipe emissions from land transport by 2050 in order to enjoy the social, economic and economic benefits of improved air quality.

- 1.2.6 Climate impacts sit alongside potential air quality benefits, as well as the long-recognised role of public transport in enhancing connectivity for a wide range of users, including facilitating access to healthcare, education, employment, and other services, as well as reducing issues such as social isolation.
- 1.2.7 As modern 'smart mobility' based forms of DRT, incorporated into the concept of (MaaS, see Section 3.3), continue to emerge, and existing forms evolve to meet new challenges, the potential opportunities around DRT within the SEStran region require investigation. This is particularly important as the bus industry faces its own challenges – local service bus use has seen a steady decline of around 2% per annum in Scotland as a whole.⁴
- 1.2.8 While the decline has been slower in the South East of Scotland area than some other areas of Scotland (a drop of 4% in the past 5 years, compared to between 10% and 18% for the other Regional Transport Partnership areas), falling bus patronage and the economic viability of services remains a problem. Falling patronage, in particular in rural areas, can result in services being removed or reduced, leaving communities unserved or underserved. It is key, therefore, that other forms of transport, such as DRT, are explored to

consider the role they can play in ensuring communities remain connected.

1.3 This Report

1.3.1 This report sets out the findings of the Strategic Study of DRT in the SEStran area, undertaken between January and March 2020. It presents the outcomes of the study as follows:

- Consideration of the policy context for DRT operations in the SEStran area (Section 2), including information on the rollout of LEZs;
- A review of the operational context of DRT in the SEStran area, including the key principles of typical DRT operation, an overview of the existing services in the area, and learnings from the operation of commercial DRT services elsewhere in the UK (Section 3);
- Analysis of existing public transport accessibility to key services (e.g. health and education), in order to highlight gaps, geographical differences, and opportunities in the network for DRT (Section 3.5);
- Stakeholder engagement with the operators and funders of DRT services, as well as potential customer representatives (Section 4);
- A strengths, weaknesses, opportunities and challenges (SWOC) analysis surrounding DRT in the SEStran area (Section 5); and
- Recommendations on the way forward for DRT in the SEStran area (Section 6); and
- A summary of outcomes and conclusions (Section 7).

⁴ Scottish Transport Statistics No.38 2019, Transport Scotland, accessed March 2020

2. POLICY CONTEXT

2.1 Introduction

2.1.1 National, regional and local policies set out the importance of providing fair access to all, for example in providing access to services which improve health and wellbeing and reduce inequalities. DRT plays an important role in providing equitable transport access and has the potential to support the aims set out in all levels of transport policy.

2.1.2 This section introduces these policies and identifies elements relevant to the DRT sector.

2.2 National Policy

National Transport Strategy

2.2.1 The National Transport Strategy (NTS) was published in 2020 and sets out how we currently travel and a vision for Scotland's transport system over the next 20 years. The vision is presented under four headings for the role of transport:

- Reduces inequalities:
 - Will provide fair access to services we need;
 - Will be easy to use for all; and
 - Will be affordable for all.
- Takes climate action:
 - Will help deliver our net zero target;
 - Will adapt to the effects of climate change; and
 - Will promote greener, cleaner choices.

- Helps deliver inclusive economic growth:
 - Will get people and goods where they need to get to;
 - Will be reliable, efficient and high quality; and
 - Will use beneficial innovation.
- Improves our health and well-being:
 - Will be safe and secure for all;
 - Will enable us to make healthy travel choices; and
 - Will help make our communities great places to live.

2.2.2 DRT can contribute to achieving each of these visions by providing a sustainable transport option which is specifically aimed at ensuring it can be used by those who most need it. This is to the benefit of the health and well-being of people and communities. In particular, the NTS identified the importance of transport in addressing issues related to social isolation and meeting the needs of Scotland's ageing population. The NTS does not specifically refer to community transport or DRT as tools contribute to achieving these visions; however, as shown later in this report, DRT can and does play a role. For example, DRT services have a particular and unique role in contributing to the "Reduces Inequalities" vision, providing access to essential services for many of the most vulnerable people in local communities, and those who are poorly serviced by other transport options.

Scotland's National Performance Framework

2.2.3 In addition to the NTS, Scotland's National Performance Framework also highlights the importance of the community, especially with respect to health and wellbeing. Scotland's National Performance Framework includes 81 National indicators to assess how the country is performing. These give an indication of how Scotland is performing across a range of areas, with many linked to community, health and well-being – these are all areas which can be targeted by DRT. Relevant indicators include:

- Loneliness;
- Places to interact;
- Social capital;
- Cultural indicators; and
- Health, including life expectancy and mental wellbeing.

National Environmental Targets

- 2.2.4 Spurred on by the need to address climate change, the Scottish Government has committed to cutting greenhouse gas emissions to net zero by 2045.
- 2.2.5 In order to meet these targets, the Scottish Government announced its ambition to phase out the need for new petrol and diesel cars and vans by 2032, in the Programme for Government (PfG) for Scotland 2017-18.⁵ In the 2019-20 PfG⁶, the Scottish Government outlined a further ambition to

decarbonise the public sector fleet, phasing out the need for new petrol and diesel cars from the public sector fleet by 2025, for all other vehicles in the public sector fleet by 2030.

- 2.2.6 This latter target will have a significant impact on the vehicle needs for fleet replacement in coming years, including those vehicles used on Council operated DRT services.

2.3 Regional Policy

SEStran Regional Transport Strategy (2015-2025 Refresh)

- 2.3.1 SEStran's RTS is currently being updated, and this report will feed into the Main Issues Report to inform that update. In advance of the new RTS being published, the objectives and plans for the 2015-25 Refresh have been considered below.
- 2.3.2 The RTS provides a framework to guide investment in transport over a 10-15 year period. It highlights the key transport related issues and trends, and is accompanied by a Strategy Delivery Plan which sets out steps to meet the RTS Objectives.
- 2.3.3 Of particular relevance to this study, is the theme of Initiatives for Specific Areas and Groups. This theme is focussed on improving accessibility for specific geographical areas and groups of people needing to travel.
- 2.3.4 The Strategy recognises the invaluable role the community transport sector plays in meeting the transport needs of many

⁵ The Scottish Government, *A Nation with Ambition: The Government's Programme for Scotland 2017-2018*, published September 2017

⁶ The Scottish Government, *Protecting Scotland's Future: The Government's Programme for Scotland 2019-20*, published September 2019

(both urban and rural, and including the increasing numbers of elderly) in the SEStran area including:

- those who cannot use conventional public transport and who need a fully accessible door-to-door service (in both urban and rural areas);
- those who are transported by particular agencies, such as social services or economic development agencies (transport to work);
- those, without access to a car, who live in areas of dispersed demand and rural areas in general; and
- group travel services provided by the community transport sector.

2.3.5 An action arising from the Strategy is a review of current community transport and DRT schemes operating in SEStran. This was classed as necessary, and a medium priority to establish a comprehensive baseline, including details of the type and scope of the scheme, cost, funding arrangements, customer satisfaction etc.

2.3.6 In addition to this action, a number of relevant policies were identified by the Strategy including the following:

- Policy 18 - SEStran will seek to support communities with poor access to employment by PT and low car ownership/high deprivation and areas of peripherality less well served by public transport.
- Policy 19 - Where improvements in accessibility are found to be required, the RTS will seek to support measures which enhance conditions for pedestrians, cyclists and public transport users (including community transport/DRT).

- Policy 26 - SEStran will seek to ensure that disabled people who have difficulties using transport will be the subject of targeted measures to address this.
- Policy 27 - SEStran and its constituent authorities will work in partnership with Health Boards and the Scottish Ambulance Service to improve access to health services and to reduce congestion caused by travel to these services.

2.3.7 The SEStran Strategy Delivery Plan recommends the development of DRT as a medium-term plan. This includes reviewing current operations and current best practice, existing operations and its links to community transport.

2.4 Local Policy

City of Edinburgh Local Transport Strategy, 2014-19

2.4.1 The Edinburgh Local Transport Strategy (LTS) states that the Council's approach to public transport seeks to maximise accessibility to conventional services, including buses, taxis and the Tram, as these provide the greatest choice of travel opportunities. However, it also acknowledges that conventional public transport is not suitable for all and that the Council actively must actively engage with partners in the public, private and voluntary sectors, seeking to ensure that viable and affordable alternatives are available.

2.4.2 These alternatives include community transport, and the Council undertook a comprehensive review of Community and Accessible Transport to understand how to provide for those who are unable to use standard public transport.

Recommendations from this have fed into the current operations in Edinburgh and are described later in this report.

East Lothian Council Local Transport Strategy, 2018-24

- 2.4.3 The East Lothian Council LTS includes aims to maximise accessibility for all, reduce social exclusion, and maintain the transport network to a suitable standard to ensure it meets the needs of all users.
- 2.4.4 Efforts to meet these aims include supporting community transport initiatives. The LTS committed to maintaining, as a minimum, current geographical and passenger coverage of community transport initiatives up to and including 2024.

Scottish Borders Council Local Access and Transport Strategy – Main Issues Report 2015

- 2.4.5 The Scottish Borders MIR highlights the significance of community transport in the area, and notes specific requirements related to the demographic of its population.
- 2.4.6 The LTS notes that services can be an important part of an integrated transport system especially where there is no access to a wider public transport network. This is particularly relevant in remote rural areas where the flexibility offered by DRT services can provide an effective form of public transport which feeds into the main bus and rail system.
- 2.4.7 The main community transport service providers in the Borders are the "Wheels" organisations, British Red Cross and Royal Voluntary Service. It is recognised in the LTS that the

sector needs to be further supported and developed in order to provide an enhanced and better co-ordinated service.

- 2.4.8 It further notes that DRT is essential in improving social transport locally and should aim to make the Borders better placed to meet the needs of remote communities, and thereby playing a fuller part in an integrated transport system.

Clackmannanshire Council Local Transport Strategy 2009-14

- 2.4.9 The Clackmannanshire LTS is currently being refreshed. In the meantime, the 2009-14 strategy is still valuable for consideration.
- 2.4.10 The vision for transport in Clackmannanshire is to facilitate the free and equitable movement of people and goods within Clackmannanshire by a choice of modes that are safe, accessible and well-integrated. The LTS states that through the development of the transport network in a sustainable manner to meet the needs of all, Clackmannanshire will become an attractive vibrant community encouraging economic prosperity whilst improving health and protecting the environment.
- 2.4.11 The vision identified above highlights the importance Clackmannanshire puts on equitable transport and access to community involvement. This outcome is the *raison d'être* of community transport; however, wider forms of DRT can also support this.

Midlothian LTS – 2007-10

- 2.4.12 The Midlothian Council LTS is now over 10 years old; however, the vision identified in the Strategy is still relevant to the study – to promote the economic growth and prosperity of Midlothian in a way that respects the environment and allows all members of the community to safely access the services they require, both within Midlothian and further afield.

Falkirk Council Local Transport Strategy 2014

- 2.4.13 Falkirk Council's overarching transport policy is to provide a transport network which allows people a reasonable choice of travel options as part of a safe, reliable, convenient, accessible, and sustainable transport system.
- 2.4.14 The LTS also includes a number of objectives, with the second objective being of particular relevance to this study – to promote social inclusion throughout the community. Actions proposed include an action to carry out a review of the Dial-a-Journey service.

Fife Council Local Transport Strategy 2006-2026

- 2.4.15 The Fife Council LTS highlights that there is a long term need to develop and fund greater user specific transport services, such as DRT because of forecast changes in demographics.

- 2.4.16 A number of key targets are identified which are significant for DRT, including the target to increase passengers using User Specific Transport Services (such as DRT) by 50,000 passengers (100%) within the Glenrothes and Dunfermline Areas by 2011, and to increase use of DRT services by registered disabled people by (50%) by 2011.
- 2.4.17 While the achievement of these targets so far is not known to the study team, this highlights the importance Fife Council places on the role of DRT and community transport within the transport system.

2.5 Low Emission Zones

- 2.5.1 Proposals have been set out for the introduction of Low Emission Zones (LEZs) in Scotland, including the cities of Edinburgh, Aberdeen, Dundee and Glasgow in the first instance.
- 2.5.2 LEZs are intended to improve air quality by tackling pollution from traffic. LEZs impose minimum emission standards on vehicles entering the 'zones', with those which do not conform facing a penalty.
- 2.5.3 For Edinburgh, minimum standards will apply to cars and light vehicles (Euro 4 for petrol/Euro 6 for diesel), as well as to heavy-duty vehicles, such as diesel buses (Euro VI).⁷ With diesel and petrol vehicles making up the vast majority of existing DRT fleets operating in the SEStran area, the introduction of a LEZ will have a profound effect on the viability of any non-conforming services entering the LEZ.

⁷ Note that European standards are designated by Arabic numerals for car and light-duty vehicles, and Roman numerals for heavy-duty diesel vehicles.

Such restrictions could result in the requirement to fast-track the replacement of fleet, placing financial burden on operators for new vehicles, as well as introducing the potential for non-confirming vehicles still operating within LEZ to incur a penalty.

2.5.4 Two zones are intended to be introduced:

- A 'city centre zone', to be enforced by the end of 2021 for buses/coaches and commercial vehicles, and for cars by the end of 2024 (with residents within the zone being exempt until 2025⁸); and
- a 'city wide zone', to be enforced by the end of 2023 for buses/coaches, and commercial vehicles.

2.5.5 While action is needed to address air quality issues, the impacts of LEZs on operators, including DRT operators, must be recognised.

2.6 Policy Summary

2.6.1 The national, regional and local policies considered here show a focus on a number of key points relevant for DRT, as follows:

- The need for an equitable transport service. This is both in relation to geographical access, such as in dispersed rural, or underserved areas, and in terms of access for specific groups of people, such as the elderly, disabled, and those without access to a car;
- Community transport and other suitable DRT services can provide inclusive access for those unable to use other forms of transport;

- However, for those who are able to use other forms of transport, DRT has the potential to integrate with other modes, such as the core public transport network, and provide enhanced travel options for users;
- DRT can actively fill gaps in the core transport network;
- DRT networks, in particular community transport, require appropriate funding streams to be available in order to operate, and particular challenges may be faced in the future for operators as a result of the implementation of LEZs; and
- Both environmental and operational sustainability are at the heart of the transport system, and this includes DRT services.

⁸ This exemption for residents is likely going to be removed following the consultation on the Edinburgh LEZ.

3. OPERATIONAL CONTEXT

3.1 Key Principles of DRT

- 3.1.1 Demand-responsive transport (DRT) is a user-oriented form of passenger transport, characterised by flexible routes and smaller vehicles operating in shared-ride mode between pick-up and drop-off locations according to passengers' needs.
- 3.1.2 Traditionally DRT has been seen as a transport solution for those people who cannot access mainstream transport services; passengers with mobility issues; and those living in remote rural areas where providing a traditional bus services would not be economically viable. Examples of these types of DRT vary from "non-emergency patient transport" which takes people to out-patient appointments, to "Dial-a-Journey" operations which provide door-to-door services for people who are unable to use public transport due to age or mobility issues, through demand responsive services for anyone living, working or visiting a particular area.
- 3.1.3 Today, DRT is also being considered as a mainstream way of providing more economically viable transport services in place of some traditional bus services. DRT services can be utilised either to connect users directly to their destination, or to transport interchanges such as bus corridors, rail and bus stations, and park and ride sites.

Both a Rural and Urban Solution

- 3.1.4 In interurban and rural areas, services are frequently provided where no conventional public transport service is available, often due to poor viability for a conventional service. DRT can

match supply to demand, provide flexibility for users who have non-standard journey patterns, or simply provided a more attractive solution than a low frequency and/or indirect bus service (as can often be the only option in rural areas).

- 3.1.5 While previously DRT was seen as a rural solution only, urban forms of DRT are now being delivered to both fill gaps in the urban network, and to enhance user choice alongside conventional public transport. Some examples of this situation are provided in Section 3.3.

Typical Types of Journey

- 3.1.6 DRT services can operate for a range of different purposes and can provide viable solutions to encouraging modal shift, reducing social isolation, supporting health care providers, and delivering essential journeys for education. Some typical uses include:
 - Commuting – DRT services work when it is not cost effective to provide a regular service to key employment destinations, such as to business parks or out of town retail sites. These types of services can help to assess initial demand and enable the planning of higher capacity bus networks at a future date.
 - Socialising – many traditional DRT services have operated to support socialising and leisure activities for passengers that struggle to use conventional public transport. For example, local community groups or charities may use them to bring people to community events. They may also be used to give people opportunity to visit nearby

urban areas where they can visit shops and attend other leisure activities.

- Health and Social Care – many traditional DRT services were developed to allow people to attend health and social care appointments. Services like Scottish Ambulance Service's core function is to take passengers to and from pre-arranged appointments.
- Education – free school transport is provided to pupils in a number of circumstances such as if:
 - their school isn't within 'walking distance';
 - a family has a low income;
 - they have certain 'additional support' needs - for example a disability;
 - they can't attend a school in their catchment area;
 - their walk or cycle to school isn't safe; or
 - they have a health issue that affects their mobility.

This transport will often be provided by fleets of small vehicles or taxi services.

Features of Services

- 3.1.7 The type of vehicle used on DRT services can vary; typically, vehicles include people carriers and small minibuses, larger high-specification and fully accessible minibuses, as well as smaller conventional buses. Vehicles can be used exclusively on one single DRT service or can be utilised to deliver a number of different services in order to optimise vehicle usage.

- 3.1.8 Drivers working on these services can be under paid employment, while others, particularly those involved in community transport schemes, may be volunteers. Drivers may need special training if they are providing services such as non-emergency patient transport or may be required to undertake a disclosure check if they are transporting children or vulnerable adults. Driver licensing may also be impacted by the type of vehicle driven, and whether the service is a registered bus service, carrying members of the public.

- 3.1.9 The way in which routes are scheduled and pick-up points arranged can also vary. For example, services can typically operate under the following routing models:

- Route deviation – where the vehicle operates along a core route which has fixed bus stops with set stopping times. The vehicle can then deviate to serve pre-booked passengers within a zone around a core route;
- Point deviation – where vehicles travel anywhere within a zone or a corridor, picking up or dropping off at a set of predefined points (stops) but in no pre-determined order. There is no core route, as such, and the points are connected as determined by demand. Typically, passengers pre-book to have the vehicle come to their home or a nearby collection point, as agreed through their booking. They are then taken to a pre-booked destination. There may or may not be a formal starting point or terminus for the service;
- Destination – where services are demand responsive at one end of the journey but take passengers to one destination such as a shopping centre, transit

interchange or a hospital. They are often phased to arrive and depart the destination at fixed times;

- Fully Demand Responsive – where services are pure demand responsive with fully flexible routes and timings; which can change each day to suit the needs of the passengers.

3.1.10 There are also different ways in which bookings of a DRT service can be made. Some require users to be registered scheme members, while others require users to meet certain eligibility criteria. Others are open to the general public.

3.1.11 Similarly, the windows within which a journey can be booked by a customer fluctuate. Some can be booked weeks in advance of a trip, whereas others, often involving smart phone applications (or 'apps'), can be booked minutes before a journey departs. This flexibility in booking has a knock-on effect in respect of how services are scheduled, and the way information is provided to a driver.

3.1.12 Drivers will generally either be given a fixed schedule for the day, only requiring communication to update on route progress or technical issues, or operate on a dynamic schedule which can be updated as required. The latter requires a more responsive and robust communication system between dispatch and the driver, and indeed in some instances (as with 'app' based DRT services) there may be a direct link between passengers and the driver to dynamically manage bookings.

3.1.13 Customers may be able to make bookings for journeys by telephone, via an app or by email, with many DRT schemes offering apps through which tickets can be bought and

vehicles tracked. The types of tickets available to DRT users vary from free or subsidised journeys for those who meet certain eligibility criteria, to commercial ticket offers.

3.1.14 Ever improving technology is being used by DRT operators to improve scheduling and dispatch of services, software that allows for eligibility certification, customer communication management, real-time vehicle location and mobile data communication. Historic data on journey patterns can also be used to predict future demand for certain journeys, as well as to provide feedback to users on their travel behaviours and metrics such as spend.

3.2 DRT Operations in South East Scotland

3.2.1 There are multiple DRT and CT providers and operators within the South East Scotland region, funded by relevant constituent local authorities. Some schemes are run by a contracted operator or a charity, whilst others are both funded and run by the Councils themselves. No truly commercial DRT services currently operate within the area.

The City of Edinburgh and the Lothians

3.2.2 The City of Edinburgh Council runs their own schemes which include those for home-to-school transport and for health and social care purposes. The schemes facilitate some 11,000 journeys per day, undertaken mainly between 7am and 5pm, but also during the evening. Their fleet includes approximately 80 vehicles, based at two depots in East Peffer Place and West Murrayburn.

3.2.3 The Council is planning a review of their health and social care services, with a hope to provide alternative options for the more vulnerable groups of population. A review of home to school transport for school pupils was carried out two years ago.

3.2.4 The schemes are subject to huge funding pressures due to demand, and there are challenges in making the most of the existing fleet in order to reduce down time. Scheduling of vehicles is paper-based and the use of digital technology (e.g. real-time information, apps etc.) is limited.

3.2.5 Taxi contracts are also used within Edinburgh and East Lothian to provide DRT services, as discussed further in Section 5.

3.2.6 In addition to the council services, there are six community transport groups operating across Edinburgh and the wider Lothian area. These include:

- Handicabs (Dial-a-Bus) Service;
- Handicabs (Dial-a-Ride) Service;
- Lothian Community Transport Services;
- Pilton Equalities Project;
- Dove Centre; and
- South Edinburgh Amenities Group.

3.2.7 The first three of these are described further below.

Handicabs – Dial-a-Bus and Dial-a-Ride Services

3.2.8 Handicabs (HcL Transport) is a registered charity, which provides door-through-door transport services for people in

Edinburgh and the Lothians. The services are for people of any age who have mobility challenges (e.g. people with disabilities and/or additional support needs; people with health issues) or who suffer from geographic remoteness.

3.2.9 The services include assistance at the start and end of a journey, which may include helping people with getting their coat on or locking their door for them. It may be providing an arm as they walk out from their home to the bus. It may also be ensuring that they are safely in their home after the journey.⁹

3.2.10 The Dial-a-Ride service is provided all year in the evening and weekends, subject to driver availability, and will take the user to any destination. Dial-a-bus operates between 9am and 5pm Monday to Friday, and operates on a home to pre-defined destination basis (e.g. to a supermarket or shopping centre) along a semi-flexible route (to facilitate home pickups and set downs). The Dial-A-Bus Scheme carries approximately 1,000 passengers per month with patronage remaining largely consistent across the year.

3.2.11 HcL currently receives annual grant funding of approximately £210,000 from West Lothian Council to facilitate the delivery of the Dial-A-Ride and Dial-A-Bus services. The model of operation has remained mainly static within West Lothian; however, there is recognition and a willingness from HcL to change the business model in order to ensure it is sustainable.

3.2.12 The Dial-A-Bus service provides an alternative service for those who cannot access traditional bus services however, due to the nature of service provided journey costs can be

⁹ [HcL Transport Website](#), accessed March 2020

more expensive. Additionally, as the current service model is provided under a section 19 permit passengers cannot access the service using the National Entitlement Card (NEC) concessionary bus pass which may affect the number of passengers opting to use the Dial-A-Bus scheme.

3.2.13 HcL is committed to developing new forms of service provision and capitalising on new technologies, which may include:

- An application to migrate the current Dial-A-Bus service to a 'community bus model' (WeLCom bus) which would open the service to other passengers who may value a door to door service, for example parents with young children;
- Seek to register the WeLCom bus as a local bus service and be subject to regulation by the Traffic Commissioner; and
- Seek to create a fare structure which is based on, and broadly in line with, existing registered local bus services however would allow passengers to use the NEC where eligible. This change in model would see the inclusion of agreed bus stops and timetabled operation in addition to the pre-booked home pick up service.

Lothian Community Transport Services

3.2.14 Lothian Community Transport Services (LCTS) is a charity that provides, promotes and supports passenger transport services, including minibus hire to almost 200 member organisations; high quality training for transport operators;

and advice and information.¹⁰ It is supported by the City of Edinburgh Council and Midlothian Council.

- 3.2.15 They have 14 minibuses – eight are based in their Edinburgh depot and six in Dalkeith. All vehicles are wheelchair accessible and diesel fuelled.
- 3.2.16 The vehicles can be hired for self-drive or with a driver, for a small charge. The operations vary day-by-day, with users ranging from uniform groups (e.g. scouts) to elderly and vulnerable groups.
- 3.2.17 Bookings are done using an electronic system, with vehicles being booked on a first-come first-served basis.

Falkirk

- 3.2.18 There are two DRT schemes operating in the Falkirk area, Dial-a-Journey and a Taxi Card Scheme. It also includes a community bus service, organised by local residents – this operates on a scheduled basis, but provides a 'community led service' model which could be transferable to DRT.

Dial-a-Journey

- 3.2.19 Dial-a-Journey is based in Stirling, but the service is delivered across Falkirk, Clackmannanshire and Stirling. The service is run as a charity and the three Councils have separate arrangements in place for the scheme with the operator. The scheme is aimed at people who have mobility difficulties and cannot use conventional public transport. Users can be given

¹⁰ [Lothian Community Transport Services Website](#), accessed March 2020

assistance from their door to the bus, and from the bus to their destination at the other end.¹¹

- 3.2.20 Dial-a-Journey has a fleet of minibuses, eight door-to-door vehicles, eight school service vehicles and one vehicle for passenger transport through Scottish Ambulance Service. The majority of the fleet is diesel fuelled and often procured second hand to save cost.
- 3.2.21 The service operates between 07:45 and 22:00 Monday to Friday, although services outside these times can be available by private arrangement. A journey can be booked by telephone a day in advance or on the day. Prior to using the door-to-door service, users need to apply directly to Dial-a-Journey and complete an online application form.
- 3.2.22 The service allows people to travel with or without an escort. Journeys are scheduled automatically by a computer system, but can be checked and amended by their coordinators, as required. No real-time information or apps are used as part of the service.
- 3.2.23 The majority of trips tend to be for socialising (e.g. going to lunches) and as access to day care.
- 3.2.24 The scheme costs Falkirk Council some £160k per year to operate. Dial-a-Journey currently operates on a 3-year contract, but this could be changed/reduced next time. Their vehicles have Order of Malta branding, as this is operated by this charity, which stakeholders have suggested could dissuade some users.

Bo'ness Community Bus

- 3.2.25 Bo'ness is a town with 15,000 residents, approximately 20 miles west of Edinburgh. Following the withdrawal of commercial bus service in 2016, local residents found themselves isolated. Members of the local community therefore came together and formed the Bo'ness and Area Community Bus Association (BACBA) to provide scheduled daily return trips between Bo'ness and Edinburgh under a Section 22 permit. The timetable was carefully designed in consultation with the community, to suit people who want to go to Edinburgh for many different reasons, including hospital appointments, social visits, education or employment. The service has been operational since May 2017.
- 3.2.26 As noted above, while this is not a DRT service, the model is such that there are transferable elements suitable to the development of a 'community-led' DRT service.
- 3.2.27 The objective of the service is to:¹²
 - facilitate social inclusion for those members of the community who find themselves isolated by the lack of public transport;
 - overcome barriers to employment for people living in the Bo'ness area; and
 - encourage visitors from Edinburgh to come to Bo'ness and the surrounding area (e.g. the service brings in walkers from Edinburgh, who use the service to access the John Muir Way at Blackness).

¹¹ [Order of Malta Dial-a-Journey Trust Website](#), accessed March 2020

¹² [CTA, Breathing new life into a community: Bo'ness Community Bus](#), Accessed March 2020

- 3.2.28 However, it is understood that the benefits extend beyond these objectives, both in terms of community pride and bringing local people together.
- 3.2.29 The project was kick started by funding received from Falkirk Council and First Port for social entrepreneurs. The Community Transport Association and a neighbouring community transport operator helped with guidance and advice in setting up the service.
- 3.2.30 Membership (which is free) is required in order to use the service. This is available to anyone over the age of 16 who lives in the Bo'ness / Blackness area.
- 3.2.31 At present, the scheme operates three 17-seater minibuses. The buses run on a scheduled service recognised by Transport Scotland and qualify for Bus Service Operators Grant (BSOG) and the Concessionary Fares scheme for Aged and Disability card holders. The fare structure is designed to be competitive. In addition, they run a Private Hire service which is open to anyone who wishes to organise bus services for any event.¹³
- 3.2.32 Since February 2018 the service delivered over 10,000 passenger journeys and makes 58 journeys a week to and from Edinburgh.¹⁴

Figure 1. Bo'Ness Community Bus



Clackmannanshire

- 3.2.33 As noted above, Dial-a-Journey also operates in Clackmannanshire where it is funded by Clackmannanshire Council. The majority of trips in the Clackmannanshire area tend to be social type trips (e.g. going to lunches etc).

Fife

- 3.2.34 The DRT operations in Fife include Dial-a-Ride, Ring and Ride and Go-Flexi.

¹³ [Bo'ness and Area Community Bus Association Website](#), Accessed March 2020

¹⁴ [Scottish Borders Council, Community Transport Solutions and Actions](#), Accessed March 2020

Dial-a-Ride

3.2.35 Dial-a-Ride is a free shopping service for people who have difficulty using conventional public transport. The service uses a minibus, picks up users at their home locations and takes them to a major shopping centre within their local area. All buses include very low steps or a lift, with the driver on-hand to assist people on and off the bus. Journeys can be booked up to 2 weeks in advance or a day before travel, between 9:00am and 14:30 Monday to Friday. The booking is done via a Trapeze Pass electronic system, and coordinated by a team of four dispatchers and two transport officers. The service is funded by Fife Council and operates from two bases in Halbeath and Bankhead.

Ring & Ride

3.2.36 Ring & Ride is a door-to-door service, that must be booked in advance by telephone. The scheme currently operates within Kirkcaldy, Levenmouth, Dunfermline and Glenrothes.

3.2.37 The scheme allows people who cannot use conventional buses (their difficulty may be permanent or temporary, physical, mental or sensory) to travel anywhere within their local area for any trip purpose. Whilst travel is not possible between different areas of Fife on one scheme, people can ask to be taken to an interchange point to allow onwards travel. All buses include very low steps or a lift, with the driver on hand to assist people.

3.2.38 Journeys can be undertaken between 8am or 8:40am (depending on the area) and 10pm. In order to book a journey, people have to register with Ring & Ride, by telephone, between 11am and 2pm. Once registered, the travel is free.¹⁵ Scheduling of journeys starts at 2:30pm using a Trapeze system, but journeys are then manipulated manually to fit better with the passengers' needs. Fife Council is keen to roll out the service further, but funding is a major issue.

3.2.39 Both Dial-a-Ride and Ring & Ride receive some 650 daily requests, with approximately 94% of these realised and a total of 174,000 passenger journeys made last year.

Go-Flexi

3.2.40 Go-Flexi comprises two parts:¹⁶

- A flexi-bus scheme – where a passenger phones the bus operator and the bus will divert off a semi-flexible route. This service only operates between Newburgh and St. Andrews; and
- The Go-Flexi scheme – which is a taxi-bus scheme.

3.2.41 Go-Flexi started initially as a taxi service in 2006 but the contract has been run by a bus company (Moffat & Williamson) for the past 5 years.¹⁷

3.2.42 The scheme covers the area of North and East Fife and can be used by anyone needing to travel within the area, for any trip purpose. The service can be booked by telephone between 1 week and up to 1 hour before travel. The booking is managed by the operator, Moffat & Williamson, and is currently paper

¹⁵ [Fife Council Dial-a-Ride and Ring & Ride Website](#), accessed March 2020

¹⁶ [Go-flexi Service Website](#), accessed March 2020

¹⁷ [Moffat & Williamson Website](#), accessed March 2020

based. The fare is similar to a bus fare and the Scottish National Entitlement Card (myFife) is valid on the service.

- 3.2.43 The scheme operates a fleet of five (10-seat) Peugeot minibuses with tailgate access included. All vehicles are diesel based. The use of electric vehicles (EVs) was considered, but the current range and battery storage/capacity for onboard equipment is perceived as an issue.
- 3.2.44 The principle of the scheme is to take passengers from rural areas and connect them to a bus or train for onward travel, using an 'Any Bus Company' ticket (achieved through 'Smarter Choices, Smarter Places' funding to cover North East Fife). The service runs up to 2,000 passenger journeys per month.
- 3.2.45 The scheme cost approximately £300k per year to operate, and is funded by the Council. At present, it is run on a 3-year contract, but the Council is hoping to move to a 4-year contract to enable more security, flexibility and better value for money service.

Yellow Taxibus (Discontinued Service)

- 3.2.46 In 2003, Stagecoach launched a DRT service between Fife and Edinburgh. It was operated using people carriers, booked on a phone-and-go basis. It was classed as a Local Bus Service and operated on a Public Service Vehicle Operators License. It served the town of Dunfermline in a demand responsive manner, and was particularly targeted at rapidly expanding areas such as the Eastern Expansion housing development.

From Dunfermline it then provided a fixed route link to Edinburgh at a high frequency (every 10-15 minutes).

- 3.2.47 The service did demonstrate relatively low operating costs, including compared to other DRT services¹⁸; however, it ultimately ended in 2005, largely due to lack of demand. Reasons for this were not fully evidenced, although it is likely that this was in part due to the high frequency of standard public transport options operating between Dunfermline and Edinburgh which would have competed heavily with the service. For example, bus and rail Park and Ride options available in Dunfermline and at Ferrytoll, to Edinburgh, may have offered notable competition for those with access to a car.
- 3.2.48 Fares may also have played some part, with the DRT service, initially costing £4 for a single trip (initial offerings of group discounts were removed within the first 3 months), compared to bus and rail costing £2.85 and £3.40 respectively. The price was increased to £5 in May 2004.

Scottish Borders

Borders DRT Services

- 3.2.49 Scottish Borders Council runs six DRT schemes, with each scheme prefixed by the number 9. They have some 20 vehicles, all 16-seater of which 10 are fully accessible.
- 3.2.50 Each service is run in conjunction with Social Work journeys in order to utilise vehicle's dead time and provide better service

¹⁸ Stagecoach, Yellow Taxi Bus: A new cost-effective model for demand responsive transport, Accessed March 2020

to communities. Previously the Council delivered people to day centres and then the bus would have significant periods of downtime. The advantage of using Social Work buses is that the vehicles are accessible and smaller, and thus enable better manoeuvrability into and out of places.

- 3.2.51 The services can take people to the nearest bus stop, hub, or interchange.
- 3.2.52 All services are monitored based on demand to allow changes, revisions or even cancellations to service to be made.

Bonchester Bridge DRT

Bonchester Bridge is a small town (200 population) near Hawick, with no commercial buses. The Ring & Ride service provides a service 2 times per day (after school and at lunch time), 5 days per week. The service carried four to five people most days, predominantly the elderly. It costs approximately £1,000 per month to operate; however, social value, fixed route cost avoidance, and wellbeing value can be placed on this.

Borders Community Transport Services

- 3.2.53 In addition to the DRT schemes, there are six community transport operators in the region. These include Gala Wheels, Teviot Wheels, Berwickshire Wheels, Tweed Wheels, British Red Cross and the Royal Voluntary Service.

- 3.2.54 Combined, they have fourteen accessible vehicles and minibuses together with a number of volunteers using their own cars.¹⁹ Vehicles are largely diesel or petrol powered, however, Berwickshire Wheels have an electric car.
- 3.2.55 The service can be used by anyone who is elderly and/or disabled and has no access to a family car and can't use public transport. It is necessary to register with the service before transport can be provided, either by completing an on-line form or by telephone.
- 3.2.56 Routes for the schemes are allocated each morning and a co-ordinated across the different providers in the region to ensure the most appropriate provider is found for the particular journey. The booking is coordinated by the Flow Centre and results in 32,000 individual journeys.
- 3.2.57 The charge for the service is based on the miles the vehicle travels, which is discussed at the time of booking the service.

Knowledge Sharing and Partnerships

- 3.2.58 The Council is currently seeking closer integration of the community transport service with the Council-run DRT model in order to deliver better services to communities.
- 3.2.59 The Council has partnership arrangements in place with Northumberland Council, Cumbria Council, and Dumfries & Galloway Council to share innovation and ideas. They have reciprocal arrangements with Northumberland Council, for example, in the Greater Kelso area, where DRT serves communities around the Pennine Way and in return Northumberland provides some school transport. This

¹⁹ [Borders Community Transport Website](#), accessed March 2020

provides an opportunity to save money and deliver a better service.

3.2.60 In addition, the Council is seeking further partnership opportunities with Northumberland Council (through Edinburgh City Deal – Northumberland has been encouraged to join); Borders Lands Deal (services cover all areas); and the South of Scotland Economic Partnership.

3.3 Commercial DRT Operations

3.3.1 The advent of Uber and other ride-hailing services has changed some passengers' expectations of what to expect when travelling. Many passengers enjoy being able to book a trip quickly and easily through an app on their phone, track the vehicle in real-time as it travels to pick them up, have a clear idea of the fare charged, and by able to pay directly through a single booking service or app.

3.3.2 In the UK, a number of operators have tried to explore the feasibility of applying the 'ride-hailing' concept to larger vehicles and develop commercial on-demand shared transport services. Some examples of such, include:

- PickMeUp – an urban, zone-based DRT pilot in Oxford, operated by Oxford Bus (part of the Go Ahead group);
- Arriva Click – an urban, zone-based DRT service operated by Arriva in Liverpool and Leicester, and launching in Watford;
- ViaVan – an urban, zone-based DRT trial operating in Milton Keynes in partnership with Milton Keynes Council;

- GoSutton – an urban, zone-based DRT trial in Sutton, London, funded by Transport for London (TfL) and operated by Go Ahead; and
- Slide Ealing – an urban, zone-based DRT trial in Ealing, London, funded by TfL and operated by RATP & MOIA.

3.3.3 Commercial DRT services have a strong focus on the technology and marketing and promotion of their services, areas which are sometimes lacking in non-commercial services. There is strong potential, therefore for traditional DRT and community transport to learn from emerging commercial operations, even where subsidy may still be required to support delivery, and for councils to explore the potential for DRT to replace or enhance conventional fixed route bus services they are funding (taking advantage of emerging technology). It is therefore useful to explore the concepts of commercial DRT, before considering how these might be transferred to a delivery model which still incorporates an element of subsidy.

Target Markets

- 3.3.4 Identifying strong target markets is key to the success of commercial DRT operations. While these are likely to vary depending on the location where the service is being rolled out and the exact details of the service being offered, commercial DRT is generally aimed at a wider customer base than traditional DRT services such as community transport.
- 3.3.5 While community transport is often targeted at providing access to those with mobility issues and the most vulnerable individuals in society (often with eligibility criteria related to

this) commercial DRT operations are usually open to all users. For example, marketing for existing commercial DRT services has been observed to target:

- Commuters – including shift workers whose working patterns might not suit conventional public transport. Indeed, some services are focused on connecting to key employment areas;
- Students and young adults;
- Taxi users;
- Uber-style ride-hailing service users; and
- Both car-owners and non-owners.

3.3.6 Notably, as most existing commercial services are in urban areas, geographically isolated individuals were not found to be targeted.

3.3.7 This universal service approach does mean that they are not all necessarily as well-tailored to the requirements of users with mobility issues as some specialist CT services. However, this does not mean that they could not be, given the right resources, knowledge, and experience, or that efforts are not being made to meet the needs of as many passengers as possible.

3.3.8 Measures introduced for PickMeUp Oxford, for example, and which are paralleled across other commercial services, include:

- A wheelchair accessible fleet, driver assistance, and designated accessible pickup points;
- Council approved Disability Awareness Training for all Drivers;

- Free provision of 'Journey Assistance Cards', in partnership with the Confederation of Passenger Transport. These help specify any requirements the user might have and any assistance the driver might offer; and
- Free concessionary travel, including companions, after 9am on weekdays and all day at weekends.

3.3.9 While these measures will not overcome the barriers for all users, they may help some access these services. Undoubtedly, the need for even further personalised services will be required for many, such as those delivered by many existing CT operators, like ensuring users are settled in their home.

Media Used in Marketing

3.3.10 Marketing is a key focus of commercial DRT services – understanding their markets and targeting them effectively is how they operate.

3.3.11 Marketing is coordinated by the operators sometimes utilising third party marketing specialists. They recognise the need to actively promote these services. Arriva, for example, actively promote their services as a better alternative to the car.

3.3.12 Operators target users on a variety of platforms including:

- Social media;
- In app push notifications;
- Radio;
- Outdoor posters;
- Print media;

- Street teams conducting leafleting;
- Giveaways at key employment locations; and
- Roadshows and presentations at key employers.

Technology, Booking, User Experience, and Payments

3.3.13 Arriva Click and Oxford PickMeUp commercial DRT services both use the booking platform provided by Via. They also have partnerships with other tech companies to combine operational experience with state-of-the-art platforms to create a customer centric product. The focus is on bookings from smart phones via their app. Personal data is fully secured and they use anti-fraud software.

3.3.14 The services work as follows:

- Once the customer has confirmed their journey requirements in a booking app, they will be presented with an estimated time of arrival (ETA) and fare. The fare will be set and will then not vary due to demand. This is to ensure the operation is fully transparent and in keeping with bus regulations that the price is fixed and will not vary once booked;
- If the customer accepts the ETA and fare, the app will guide them to a virtual bus stop to be collected from, no more than a couple of minutes' walk away from their location. The 'virtual bus stop' is a pre-programmed safe place for the vehicle to stop, usually near a street corner. The app will show walking directions from the customer's location to the virtual bus stop;
- If the customer has used the pre-booking option, they will be sent a message stating the exact time they will be

picked up within a 30-minute window. For on-demand bookings, the operator would expect a vehicle to arrive approximately 9 - 10 minutes from the point of booking;

- The user can then track their vehicle's location through the app. Information, such as vehicle registration and driver's name and telephone number can be sent, as required;
- If there are any issues on-route to the customer, service control can directly contact the passenger through the app to explain why the service is delayed;
- Users can also choose to receive SMS updates such as 'the vehicle is 2 minutes away'; and
- There are three ways users can pay – direct single ride payment, credit purchase, and season tickets.

Service Registration

3.3.15 Commercial DRT services in the UK, largely operating in England so far, are generally registered as a flexible bus service with the Traffic Commissioner, and operations are open for general use.

3.3.16 This registration requires operators to comply with the guidelines set out by the Traffic Commissioner on certain areas. For example, the guidelines state that buses must arrive to a customer not more than ten minutes earlier and not more than ten minutes later than the time specified in the booking.

3.3.17 Another obligation is that all passengers on board a vehicle must be subject to paying the same fare conditions. This may be viewed as a limitation by some DRT operators, as the

opportunity to charge 'surge fares' based on demand are restricted, as can happen on ride-hailing services, such as Uber.

Considerations for Commercial DRT

- 3.3.18 The commercial DRT sector isn't yet mature in the UK, and operators haven't made any long-term commitments to their services.
- 3.3.19 In order for the services to be commercially viable long-term they need to design a service area that is able to generate sufficient demand to keep the vehicles busy.
- 3.3.20 Areas with high population density and a range of different destinations have been targeted initially, although in most areas these will already be served by a commercial bus network. This would require an operator to be willing to potentially abstract commercial revenue from other services.
- 3.3.21 They require thorough marketing with engagement with local population. Services should be co-designed in partnership with the end users, helping to share the ownership of the resulting concept and increasing usage rates.
- 3.3.22 Strong branding helps passengers to understand what the service is, how it operates, and how it is different from conventional bus services and something more akin to the experience of ride-hailing.
- 3.3.23 Having a good customer service function, that can proactively deal with disruption, is important and an advantage over conventional bus services. All passengers need to book to

use the service, which allows services to easily push notifications related to operations, e.g. delays, to users.

- 3.3.24 'Technology' is crucial to successful operation, and passengers want to be able to rely on a service. If they want to use the service to commute and are unable to secure a booking, then they will consider another mode of transport. This needs to be balanced with having too much resource on standby, and there needs to be efficient management of drivers and vehicles such that it matches demand.
- 3.3.25 Congestion is a major challenge to commercial DRT services, passengers expect regular journey times for regular bookings such as commuting to work. Depending on how services are registered they may not be able to use bus lanes. If they cannot use bus lanes vehicles will have been subject to delays faced by general traffic on key routes into and out of the city centre during peak hours. This compares unfavourably with conventional public transport, which can use bus lanes and bus-friendly infrastructure.
- 3.3.26 A successful commercial DRT service requires partnerships. The nature of partnerships and the manner in which they are formed will again vary according to the specifics of each operation. There are two main types of partnership that should be explored:
 - Partnerships between a DRT provider and customer, or local council (i.e. a partnership to help conceive a service, define what it does and how it operates); and
 - Partnerships between a transport operator and a technology provider (i.e. a partnership that seek to underpin a key aspect of how a service is scheduled or monitored, or one which underpins the 'infrastructure')

customers use to access the service, such as apps, websites etc.).

- 3.3.27 A commercial DRT solution would be most effective in a more integrated transport network. If it operates in isolation of other modes it is not likely to be successful commercially or of benefit to the local authority and passengers. Without integrated ticketing, it is just another service that a passenger can use and has to purchase a different ticket for. Integrating technology platforms utilised by commercial DRT can also have significant benefits, which underlies the emerging concept of Mobility as a Service (MaaS).

Mobility as a Service

Mobility as a Service (MaaS) is the integration of various forms of transport services into a single mobility service accessible on demand (Source: MaaS Alliance). Commercial DRT could form part of a MaaS ecosystem of integrated public transport, and would link to conventional bus, train, tram and taxi services.

A successful MaaS service requires secure, dynamic, up-to-date information on travel schedules as well as updates on roadworks and travel flows. MaaS systems enable users to both access convenient transport options, but also to shape services, as transport providers adapt to their requirements. It combines public and private mobility providers in a single application, or web portal, which then plans journeys and manages the full trip, with a single payment, which the application will distribute amongst transport providers.

Such systems are also able to take account of different user preferences (for example, transport type), finding the fastest and cheapest travel options.

- 3.3.28 To ensure a service is commercially viable it requires vehicles to be busy continuously. Partnering with a local authority can have benefits in the following ways:
- Current local authority supported bus routes could be within a commercial DRT service area. Supported bus routes could be withdrawn and replaced by the commercial DRT. This is being trialled by Arriva Click in Liverpool;
 - Workers in the evening and night time economy pose a challenge as it is difficult to provide commercial conventional bus services, commercial DRT may provide an alternative cheaper way of providing services for workers in these positions;
 - The provision of appropriate developer contributions in order to discharge planning obligations (e.g. via a so-called Section 75²⁰ Agreement). This could potentially provide funding sources to develop cost-effective transport solutions, such as extending commercial DRT and integrating services with new developments.;
 - Local authority contracts that require a vehicle could potentially use spare capacity in the commercial DRT service; and

²⁰ Town and Country Planning (Scotland) Act 1997: Section 75, as Amended by the Planning (Scotland) Act 2019

- Charities and organisations who organise group trips could potentially use spare capacity in the commercial DRT service.

3.3.29 Even where a DRT service is not commercially viable, most of these concepts could be adopted to either:

- Enhance or expand the user experience on existing DRT services (e.g. utilising modern booking platforms, or better targeting of potential users); and/or
- Replace unattractive, infrequent fixed route services which are expensive to subsidise, with more flexible DRT services which in turn attract more passengers and reduce the subsidy per user.

3.4 The Role of Taxis in Delivering DRT

Conventional Taxi Services

- 3.4.1 Taxis provide a point-to-point (often door-to-door) service on demand, and do not operate to fixed routes or schedules. Passengers effectively hire the vehicle and driver for a self-defined journey, as opposed to purchasing a seat or space on a vehicle that is shared with other people.
- 3.4.2 In the UK, currently, a two-tier system operates, in that there are two forms of taxi: taxis (also known as 'black cabs'), and private hire vehicles (PHVs; also known as 'minicabs'). The main difference between the two is that while both modes can be pre-booked at a registered office or through the internet or by telephone, only taxis can be hailed in the street or hired from taxi ranks (called 'plying for hire').

3.4.3 Each taxi user is not required to pay an individual fare for their journey – they can share the costs of the trip. This is different to registered bus and Section 19 and Section 22 services, where separate fares are required. Separate fares mean an individual payment by each passenger to the driver or other representative of the permit holder for the journey undertaken.

3.4.4 Payment may be made on the vehicle or in advance. It may also be by indirect means, perhaps in respect of other services (e.g. tickets to an event where travel is included), or as part of a regular subscription to an organisation. Separate fares are not paid where the vehicle is hired for a set charge (which isn't influenced by the number of passengers carried) and passengers, to the knowledge of the driver or permit holder, make no individual contribution.

3.4.5 Taxis have an important role to play in a transport ecosystem, there are many trips that it would not be economically viable to provide a conventional bus service, such as journeys outside peak hours and to and from more remote areas.

3.4.6 There have been a number of local authority contract schemes that utilise taxis to fill a gap in the public transport network. Two examples of these are taxicard services and taxibus.

Taxicard Schemes

3.4.7 Taxicard services cater for passengers who have difficulty using public transport because of serious mobility impairment. The card lets you use taxis at a reduced cost. Passengers receive credit towards the cost of taxis each financial year.

There may be restrictions on the trip destinations that the vouchers can be used on.

Eligibility

3.4.8 The eligibility for the schemes can typically relate to some or all of those criteria below:

- Registered blind;
- Receive the higher rate mobility element of Disability Living Allowance;
- Receive the PIP Mobility Component Standard or Enhanced Rate;
- Receive a War Pensioners Mobility Supplement; and
- Over the age of 60 and have a severe restriction of mobility.

3.4.9 Passengers must generally provide some of their details in order to become eligible such as: Name, address and date of birth; Proof of address and eligibility; A passport-sized photograph; and an application fee.

Using the Taxicard

3.4.10 Passengers are issued with an annual voucher entitlement which they can use when they book with participating taxi firms. Once their annual entitlement is used, they are not entitled to claim any more vouchers.

Taxicard in the SEStran Area

3.4.11 Taxicards are currently in use in the Falkirk, East Lothian, City of Edinburgh, and Clackmannanshire Local Authority areas. Fife, Midlothian and West Lothian previously operated

taxicard schemes, but have now ceased operation due to a number of factors:

- The administration cost of the process for the local authority and the taxi firms;
- The cost of taxi trips is changing, evidence from some other taxicard schemes has shown that the discounted meter fare paid by the passenger using the scheme concession can often be no less than had they negotiated a pre-booked fare with the operator;
- The availability of alternative services provided by local authorities such as dial a ride;
- The numbers of users were falling in many areas, such as West Lothian; and
- Improved accessibility of the conventional bus network, as all buses must now be DDA compliant.

Falkirk Taxi Card Scheme

The scheme is run by Falkirk Council. It is eligible for people who cannot use ordinary buses, are registered blind, or have been signed-off by a GP due to mobility issues. Journeys can be booked a day in advance through Dial-a-Journey's booking system. The service is predominantly used by the elderly for social journeys. Passengers receive a discount on six journeys per week (half the average taxi fare). The scheme costs the Council around £36k per year to operate.

Taxibus Schemes

- 3.4.12 Several areas in Scotland operate Taxibuses. Taxibuses are taxis which are contracted to 'bus' passengers as part of the public transport network, rather than providing conventional commercial taxi operation.
- 3.4.13 They are typically operated using cars, minibuses, and other small vehicles. They usually carry passengers from a defined geographic area to a single local settlement or bus stop (for onward connection with a scheduled bus service); however some operate along fixed routes on a demand defined basis.

West Lothian Taxibus²¹

West Lothian Council procures taxibuses in areas where no scheduled bus services are available. These are demand-responsive services which commenced in 2011 (previously operated under the 'Carlink' brand). There are currently nine services available in West Lothian, having reduced down from sixteen originally. Cuts were partly due to low demand, with only nine of the services being used by any passengers in year 2013/14.²²

Existing services generally operate Monday to Saturday between 07.00 and 19.00. Journey times are fixed for each service, are generally available hourly, and must be booked at least one hour before intended travel. Passengers pay a

fare of £2.00 per adult and £1.00 per child for a single journey. Concessionary NEC holders travel free of charge.

West Lothian Council pays for the balance of the cost of the taxi journey (from base to the start of the passenger's journey, to the passenger's destination then back to base). As such, the amount payable by the Council is often significantly greater than the passenger would pay if booking directly.

- 3.4.14 The Public Service Vehicle Accessibility Regulations (PSVAR) stipulate that all buses and coaches running on a local or scheduled service must be low floor and fully accessible. This isn't the case with Private Hire taxis where there are no such regulations. Accessibility should be considered by Local Authorities when entering into contracts with operators to provide taxibus services.
- 3.4.15 Taxis play a role in providing flexible transport responses for areas with little or no public transport coverage. However, as described above many schemes have faced challenges and in all cases the alternative to book a taxi would exist anyway. It is anticipated that the taxi sector could make targeted contributions to DRT in the SEStran region, through:
- Continued targeted taxi-based schemes where these provide value-for-money and no other form of DRT would be viable (e.g. where demand levels are extremely low); and

²¹ [West Lothian Taxibus Website](#), accessed March 2020

²² JMP for West Lothian Council, West Lothian Council: Passenger Transport Strategy Review, November 2014

- DRT operations requiring only very small vehicles, where clearly a taxi would be cheaper to provide than a minibus.

3.5 Accessibility Analysis for Travel by Public Transport

- 3.5.1 Accessibility analysis was undertaken utilising TRACC software. Accessibility modelling provides a method by which to assess the performance of public transport in allowing people to access important locations from right across the SEStran area.
- 3.5.2 It allows the consideration of both the catchments of public transport service coverage, i.e. the ability to access a suitable public transport service from one's origin to one's destination, as well as the times taken to complete journeys to typical destinations.
- 3.5.3 This modelling provides a picture to be built of how different areas perform in terms of accessibility by public transport. By relating additional demographic data (such as population, car ownership, age, and level of deprivation) to this knowledge of accessibility, it allows the study team to gain useful insights into the types of people with access issues in the area.
- 3.5.4 For example, analysis can highlight those areas where people are less likely to own a car and then consider whether they typically have better or worse access than those who do own a car. If access is worse, and this is seen as a problem which should be addressed, then the most affected areas can be identified, and options around what can be done about this identified and appraised.
- 3.5.5 While this Strategic Study does not seek to set out detailed proposal for individual DRT schemes, the data gathered in this

analysis could be used to identify suitable areas for schemes to concentrate on going forward.

Journey Origins and Destinations Analysed

- 3.5.6 The TRACC analysis covers access within the SEStran areas, as defined by the constituent local authority boundaries. Journey potential, and journey times are calculated at a *Census Output Area* level of detail, with the point of origin defined as the population weighted centroid of the Output Area. There are approximately 13,300 Output Areas within the SEStran area, with each origin representing between 20 and 78 households.
- 3.5.7 The groups of destinations considered can be summarised as:
- Universities;
 - Colleges;
 - Hospitals;
 - GP Surgeries;
 - Job Centres;
 - Rail Stations;
 - Bus Stations; and
 - Park and Ride Sites.

Levels of Analysis

- 3.5.8 Accessibility results from each Output Area have been extracted and analysed at varying levels to understand how transport access varies for different population groups.

Results are presented with the following geographic breakdowns:

- The SEStran area as a whole;
- Each of the eight constituent local authorities; and
- Selected key localities.

Accessibility Analysis Results

3.5.9 The full results of the accessibility analysis are provided in Appendix A; however, an example has been provided of the destination-based analysis undertaken for hospitals offering accident and emergency, or minor injuries services (these tend to also represent centres for major in and outpatient activity), along with analysis showing areas facing repeated access issues.

Access to Hospitals – Destination Based Analysis Example

3.5.10 The 7:00am to 10:00am period on a Tuesday has been used to as a morning travel scenario.

3.5.11 The outputs show concentrations of good accessibility within 45 minutes across the SEStran area (Figure 2 overleaf). However, there are a number of areas which require a longer journey and 5.0% of the population currently has no public transport access at all. However, this reduces to 1.6% when focusing on the population aged 65+. At a local authority level, the Scottish Borders has the highest level of inaccessibility at 19.4% across the total population. The figures are also high in East Lothian at 9%.

3.5.12 Figure 3 shows the return direction of travel, i.e. from the hospital, within the evening period (after 7:00pm). This can

represent staff leaving work, or visitors and patients returning home. It can be seen that large areas previously served no longer have access by public transport at all, meaning this trip cannot be effectively undertaken by public transport for anyone needing to return in the evening, even if earlier inward services are available.

3.5.13 Table 1, below, shows access to hospitals by public transport for those in the most health deprived areas, according to the Scottish Index of Multiple Deprivation (SIMD). Generally, these have better access than for the wider SEStran population.

Table 1. Access to Hospitals by Public Transport, 400m catchment, by Health Deprivation

	<=15	<=30	<=60	>60	NO PT ACCESS
Most deprived 10%	22.2%	53.8%	99.4%	0.0%	0.6%
2 nd most deprived 10%	29.2%	58.8%	99.2%	0.1%	0.8%
3 rd most deprived 10%	19.5%	57.1%	99.0%	0.4%	0.6%
4 th most deprived 10%	19.0%	50.8%	96.2%	2.2%	1.6%

Figure 2. Hospital Access by Public Transport, 400m catchment, Weekday AM

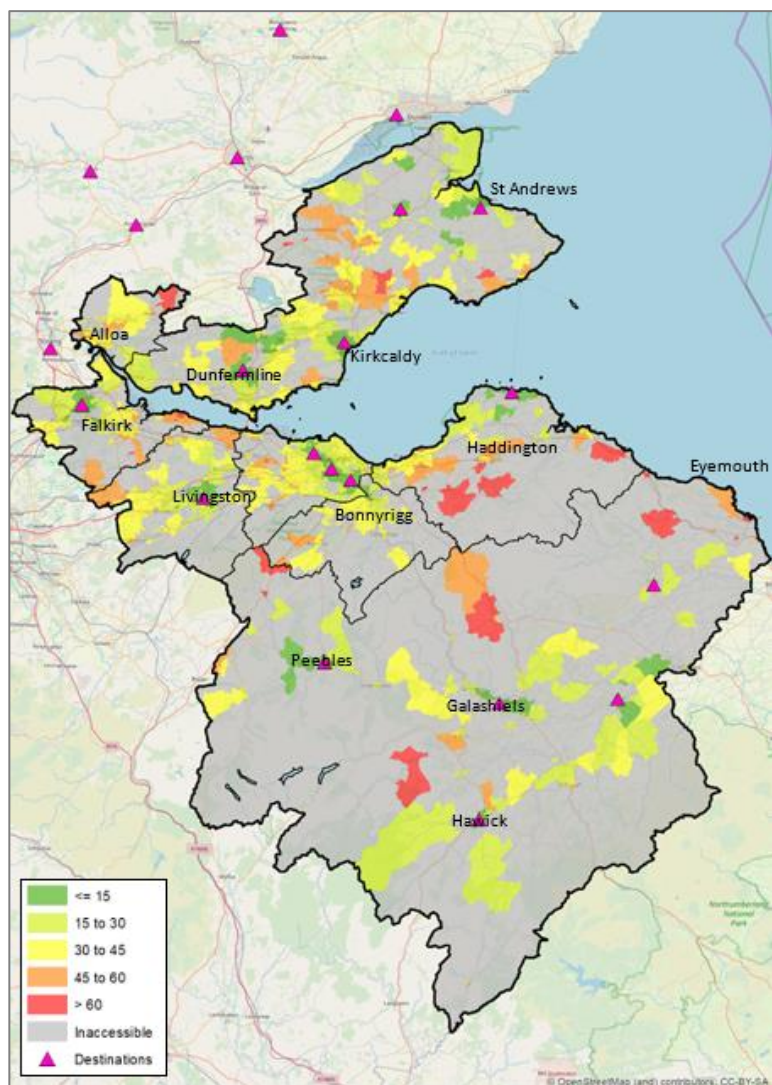
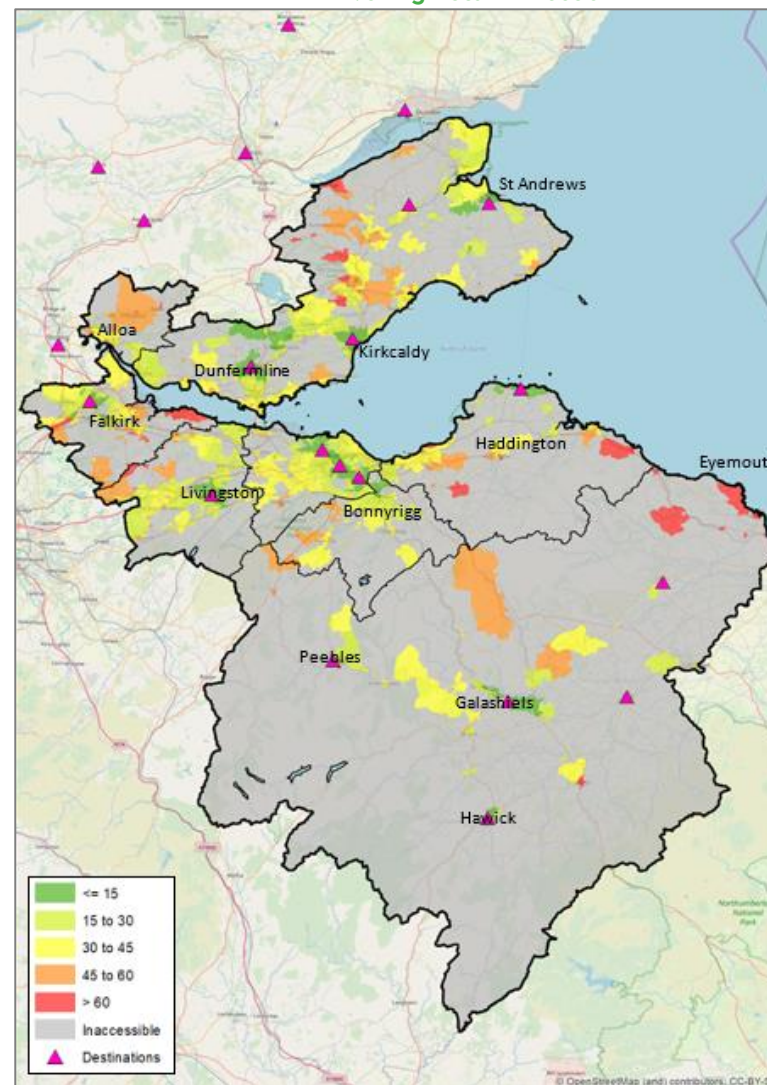


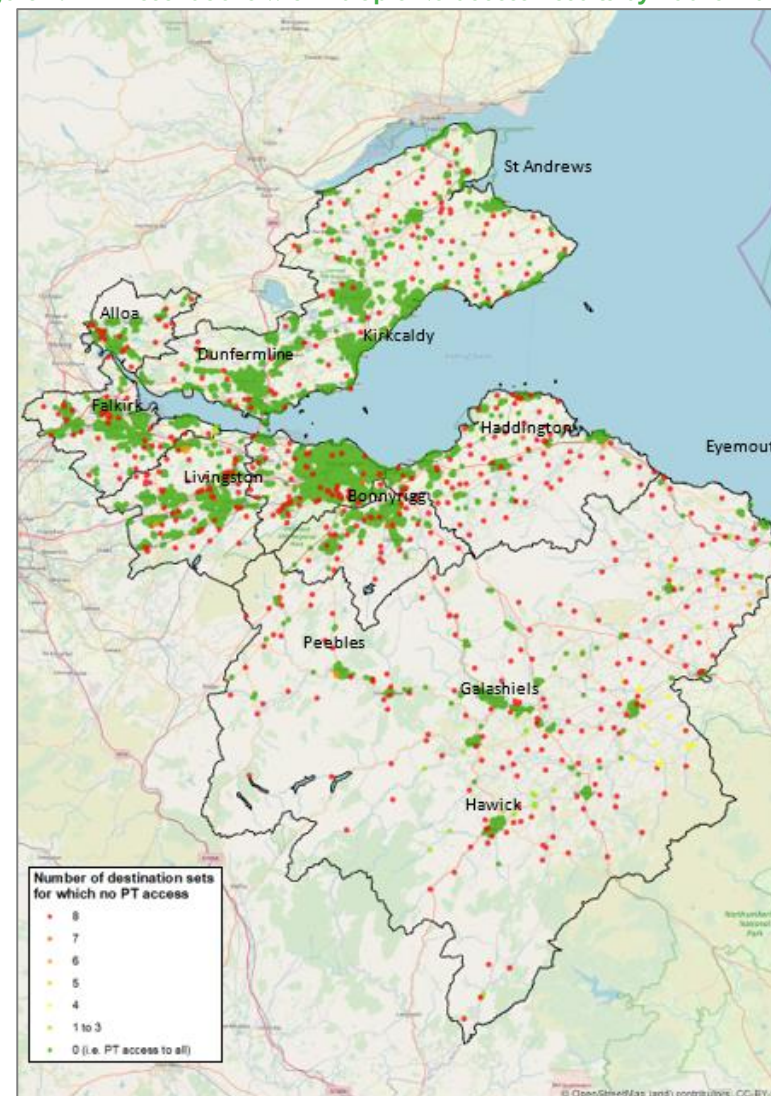
Figure 3. Hospital Access by Public Transport, 400m catchment, Weekday Evening Return Direction



Areas with Multiple Instances of No-Access

- 3.5.14 Areas were analysed to show where there were instances of areas with multiple 'no-access' outputs from the TRACC analysis, for example no access to GP surgeries, or university, or rail stations etc. The highest access level is 0, i.e. they have access to all modelled destinations, and those marked 8 have no access to any of the eight modelled destinations by public transport.
- 3.5.15 In Figure 4 the map highlights residential areas with no access to any destinations by public transport in red. The majority of these locations are based in the Borders and East Lothian; however, pockets can also be seen at the edges of urban areas right across the SEStran area. Appendix A provides more detailed mapping of this analysis.
- 3.5.16 Considering these types of areas for DRT schemes that allow access to all users, i.e. do not overly restrict eligibility, may be a way forward when coming to detailed scheme planning in the future. DRT can play a strong role in ensuring equitable access to key destinations and services, especially where gaps exist in the public transport network. Recommendations related to this are highlighted in Challenges 6-7, in Section 6.
- 3.5.17 Overall it was found that:
- There is a core group of between 4.9% and 5.4% of the population in the SEStran area, which do not have access to the majority of the destination sets; and
 - The worst affected areas are the Scottish Borders and East Lothian, with 18.9% to 24.4%, and around 9% of their populations showing incidences of inaccessibility respectively.

Figure 4. Destinations with Multiple No-access Results by Public Transport



4. STAKEHOLDER ENGAGEMENT

4.1 Approach to Engagement

- 4.1.1 A key component of the Strategic Study was to engage with key stakeholders related to the DRT industry.
- 4.1.2 This engagement had the main aim of ensuring the study team was informed about the strengths, weaknesses, opportunities and challenges (SWOC) related to DRT in the SEStran area. It also served to collect information regarding the function, scale, and funding of services, along with other key topics described throughout this section. This exercise was crucial to the development of recommendations for how DRT can be taken forward in the area.
- 4.1.3 Our stakeholder engagement strategy included relevant organisations that are currently delivering and/or supporting DRT services both within and outside the South East Scotland region.
- 4.1.4 Specific views were gathered from:
 - The operators of DRT services;
 - The funders of DRT services; and
 - The potential customer representatives of DRT services.
- 4.1.5 Engagement was undertaken between January and March 2020 by SYSTRA and WMG Consultancy, on behalf of SEStran.
- 4.1.6 Stakeholders were issued an email or letter from the SEStran team inviting them to participate in consultations. These were then followed up by scheduled telephone interviews for the operators and funders of DRT services, and via printed and

online questionnaires for potential customer representatives, with an option for a telephone interview as an alternative.

- 4.1.7 The questions and topics for discussion were agreed with SEStran before being issued to the consultees in advance of interviews. The full list of topics and questions is included in Appendix B.
- 4.1.8 The outputs of the consultation have been summarised in the sections which follow, and these feed into the SWOC analysis which is summarised in Section 5.

DRT Operators

- 4.1.9 The aim of the engagement with the DRT operators was to:
 - Gather general information about their service(s), including the eligibility criteria, coverage, times of operation, funding mechanisms, etc.;
 - Discuss operational considerations such as the operators' licencing mechanisms, partnership working, scheduling of journeys, etc.;
 - Help to understand their customer engagement, including: how journeys are booked, cancelled and paid for; as well as to gain insights into the typical journeys undertaken; and how the services are promoted;
 - Explore perceptions, experiences and views on the use of digital technology and low carbon initiatives; and
 - Collate views on the main issues, challenges and opportunities relevant to the operations of DRT services.
- 4.1.10 In addition to the DRT operators within the South East Scotland area, relevant organisations outside the region have

been consulted, such as Badenoch and Strathspey, and Stirling.

4.1.11 The following operators were invited to participate in the consultation:

- In the SEStran area:
 - Dial-a-journey – Order of Malta Dial-a-Journey Trust;
 - HcL (Handicabs);
 - Lothian Community Transport Services;
 - Berwickshire Wheels; and
 - Gala Wheels, Teviot Wheels and Tweed Wheels – Borders Community Transport.
- Outside the SEStran Area:
 - Badenoch and Strathspey Community Transport Company; and
 - Stirling Council.

4.1.12 A total of five operators were engaged with.²³

DRT Funders

4.1.13 The aim of the engagement with the DRT funders was to:

- Collate general information on the DRT schemes that are being provided or funded, including the eligibility criteria, area and times of operation, fleet size and type, fleet utilisation on other contracts, and whether the

groups of population that need the services are able to access them effectively, etc.;

- Help to understand the funding mechanisms and deployed business models, i.e. the service requirements under different contracts, duration of funding etc.; and
- Explore the challenges and opportunities associated with funding / providing the service, including cross border services, integrated public transport services, digital technology, and low emissions solutions.

4.1.14 The following DRT funders were invited to participate in the consultation, of which six Local Authorities and one national funder responded:

- In the SEStran area:
 - City of Edinburgh Council;
 - Clackmannanshire Council;
 - Falkirk Council;
 - Fife Council;
 - East Lothian Council;
 - West Lothian Council;
 - Midlothian Council; and
 - Scottish Borders Council.
- Outside the SEStran Area (National):
 - Transport Scotland;
 - The Robertson Trust; and
 - Energy Savings Trust.

²³ Conversations were undertaken with two further operators who were willing to take part; however, priorities related to managing these services during the outbreak of COVID-19 prevented a suitable interview slot to be scheduled.

DRT Customers

- 4.1.15 In order to help understand the needs of current and potential customers of DRT services, the following organisations were invited to provide their views on the provision of DRT services:
- The Community Transport Association (CTA);
 - Charities supporting people with disabilities: Leonard Cheshire; Capability Scotland; All Together Edinburgh; Inclusion Scotland; ENABLE Scotland; Royal National Institute of Blind People; Royal National Institute for Deaf People; Disability Equality Scotland; and Lothian Centre for Inclusive Living; and
 - Charities supporting the elderly: LifeCare Edinburgh and Age Scotland.
- 4.1.16 The engagement with this group of stakeholders aimed to:
- Explore how well the existing DRT schemes were working for the various group of users; both in terms of geographical coverage, hours of operation, the ways journeys are booked, cancelled and paid for etc;
 - Help understand the typical journeys and journey purposes; and
 - Discuss the key strengths, challenges and opportunities associated with DRT services.
- 4.1.17 A low response rate was achieved from the invited organisations. While the professional knowledge and experience of the study team have been drawn upon, along with the experiences of DRT operators and funders, this has limited the ability of the study to report on the views of users.

4.2 Consultation findings

- 4.2.1 Information and comments gathered during the consultation have been summarised into key themes and are presented below.

Supporting Mobility, Health and Social Wellbeing, and the Environment

- 4.2.2 Stakeholders noted that DRT and community transport services fill an obvious gap in the market where commercial services have either pulled out of routes or where they have never existed.
- 4.2.3 All stakeholders agreed that DRT and community transport play an important role, in particularly for the elderly and more vulnerable groups of population, as they help to increase people's mobility.
- 4.2.4 They noted that this can improve people's health and social wellbeing and tackle loneliness and isolation. For example, the discussion with stakeholders highlighted that the top reasons for travel by DRT and community transport services include shopping, followed by socialising (e.g. going to lunches) and attending medical appointments.
- 4.2.5 However, many stakeholders felt that there was a lack of recognition and monetised value of the positive role that DRT can have on health and wellbeing. It was stated that without DRT services, in particular community transport, many individuals would most likely need additional health and social care, at a considerable cost to the public purse. Stakeholders

raised that there is therefore a need to measure such value, so that it can be proved and justify further funding.

Quotes from HCL passengers: ²⁴

'This service has been of great value to me. I am now able to go shopping, which I have been unable to do for many years.'

'It's a wonderful service. I would not be able to get out and do my shopping. The drivers are so helpful. They do excellent work.'

'I have made new friends since DAB²⁵ and it's lovely. I look forward to seeing them. It stops loneliness and makes life easier for me. Thank you.'

'This service is a lifeline to me as it enables me to get out and about without worry. The drivers are fantastic and patient. I can't praise the service enough.'

'DAR²⁶ gives me independence, I don't need to wait until there is someone to take me where I want to go.'

- 4.2.6 Some stakeholders also noted that as the services only run when there is a need, this could have, in principle, a positive impact on the environment.

Partnership Working

- 4.2.7 Many stakeholders commented that working with partners to make use of their fleet is poor. There is a big opportunity to better coordinate the use of vehicles that can end up sitting in depots unutilised for several hours. Suggested improvements were better coordination between social work and education fleets (e.g. City of Edinburgh Council), but also between neighbouring local authorities (as per partnership working in parts of the Scottish Borders).
- 4.2.8 Some stakeholders noted, that there could also be an opportunity to involve other community planning partners in the partnership working, such as the Scottish Ambulance Service.
- 4.2.9 Moreover, stakeholders stated that better links and partnership working is needed between DRT and community transport providers themselves as it was felt that significant monies were being spent by Councils on community transport but that no conditions were placed on them in terms of integration with Council run DRT services.
- 4.2.10 It was also noted that better links are needed between DRT, community transport, and commercial public transport operators. Many stakeholders felt that there are opportunities to develop so called 'hub-and-spoke' models between these groups. The hub-and-spoke model considers DRT and community transport provision as connectors to accessible hubs, such as public transport interchanges or key public

²⁴ HcL Transport Website, accessed March 2020

²⁵ Dial-a-bus

²⁶ Dial-a-ride

transport corridors. It was felt that the model would allow better connectivity in a financially viable way, especially from more rural areas. However, other comments included that the system needs to ensure there is no negative impact on users with mobility issues which cannot use public transport. This point is crucial when considering how DRT can move forward in the SEStran area. For many of the existing services, the door-to-door aspect of the service, along with other personalised support for users, is critical in serving the needs of their passengers – this aspect needs to be protected for those who most need it, while also considering how wider user groups can be served by alternative models. Further research may be required to capture user views on this as part of any recommendations taken forward.

- 4.2.11 Many stakeholders felt that there is a need to better integrate transport with health care services, and that this is particularly important in the context of Scotland's aging population, which will likely require increasing access to health care. For example, the City of Edinburgh Council is planning a review of their Health and Social Care services, with a hope to provide alternative options for the more vulnerable.
- 4.2.12 It was mentioned that better links and integration of services were largely dependent on the availability of additional funding. Stakeholders highlighted that loading more pressure onto DRT schemes while cutting public transport routes and subsidies elsewhere was not a sustainable model of transport provision and should be avoided. It should be noted, however, that properly planned and resourced DRT services can provide a legitimate alternative to fixed route public transport services.

Fleet Vehicles

- 4.2.13 There was a real concern amongst most stakeholders about the impact of the forthcoming Edinburgh Low Emissions Zone (LEZ) and the Scottish Government's zero carbon targets on the operations of DRT / community transport services. Whilst there was a general consensus that the policies are the way forward, the preparedness of the fleet and its replacement cost were considered a major issue.
- 4.2.14 Moreover, it was raised that the closure of Day Centres around Edinburgh means that more people are travelling and needing to travel right across the city, and thus will be impacted by the LEZ.
- 4.2.15 Currently there is a prevalence of diesel run buses in DRT / community transport fleets (for example, the City of Edinburgh Council bought 12 new vehicles last year, but all diesel vehicles). The majority of fleet tends to comprise of older vehicles, which are often sourced second hand to save cost (e.g. Dial-a-Journey). A number of stakeholders felt that the cost of replacing the existing fleet would be significant and may even prove unaffordable for many DRT and community transport providers, causing services to stop. Many therefore felt that there was a need for at least a short-term government intervention or an exemption for DRT / community transport to ensure the services can continue to run, let alone expand.
- 4.2.16 Some stakeholders also noted concerns around the suitability of existing EVs on the market to meet the needs of DRT and community transport users, as often fully accessible vehicles are required. The concerns included:

- the duration of the charge / sufficient battery storage for on-board equipment;
- the significant cost associated with fully accessible EVs (for example, a recent procurement of a fully accessible minibus by the Badenoch & Strathspey Community Transport service cost £84k); and
- the availability of charging points to enable journeys to be carried out as required.

4.2.17 Whilst stakeholders were aware of the need to have EV charging points installed, the overriding concerns for doing so were the cost.

Fleet Scheduling and Booking Systems

- 4.2.18 Several stakeholders commented that their scheduling system is not satisfactory and felt there is an opportunity for the Government to help procure a better system for all providers across Scotland and save cost.
- 4.2.19 There were mixed views from the stakeholders with regard to the booking systems used for DRT / community transport services. Whilst some considered these existing systems as too paper-based, mostly requiring 24 hour booking notice, others did not raise this as an issue, and others already use computerised systems and have a shorter response time, as described in Section 3.1.14.
- 4.2.20 For example, the City of Edinburgh Council stated that their bookings are done via paper logs which are very labour intensive. This includes writing up schedules and emailing them out to providers, which is a huge daily planning exercise.

Whilst they did try a booking system, it was not considered appropriate for their DRT operations.

- 4.2.21 It was noted that Scottish Borders are seeking to link their DRT provision to a central hub run by community transport operators, and that booking of the Go-Flexi scheme in North East Fife was undertaken by a commercial operator (Moffat & Williamson).
- 4.2.22 While not operating in the SEStran area, Badenoch & Strathspey community transport also raised the difficulty of having timetabled routes. People can only be given approximate times and their pick up can be 15 minutes before or after the allocated time. As the majority of their customers have a disability or a mobility problem (e.g. visually impaired, dementia affected, wheelchair user, frail, learning difficulties etc.), there can be issues with getting the person ready in time for the pickup. For example, for someone with dementia, who may not understand the situation, this can be difficult. There are potentially lessons to be learned from customer communication in the commercial DRT sector in relation to this, as described in Section 3.3.

Funding

- 4.2.23 The key challenge to DRT and community transport services, as expressed by the majority of stakeholders, was funding.
- 4.2.24 Most DRT schemes are run and funded by the Local Authorities themselves, and as they are all under significant internal financial pressures, stakeholders felt that this may place DRT and community transport operations under threat. For example, Falkirk Council noted that they are currently facing a

£20m budget gap for next year which puts these transport schemes under increasing financial pressure.

- 4.2.25 There are also challenges associated with the short-term duration of the funding for many DRT and community transport operations. Stakeholders felt that the short-term funding makes running of DRT and community transport schemes challenging and some wondered if it could be extended to cover, for instance 5 years. The unreliability of funding can also impact on the ability of the providers to introduce digital technology to their operations, replace old fleet, invest in new EV vehicles etc. For example, whilst Dial-a-Journey currently operates on a 3-year contract it could be 1-year next time.
- 4.2.26 Whilst there are existing funding streams available that can be used, for instance to help fund equipment and technology of DRT and community transport services, there seems to be varying levels of awareness of these streams among stakeholders.
- 4.2.27 In relation to LEZs, Scottish Borders Council and Edinburgh City Council were seeking to use available LEZ funding to help with the replacement costs of some of their fleet and the installation of EV charging points. Funding has already been awarded to the Scottish Borders Council, and an application was pending for Edinburgh City Council at the time of consultation.
- 4.2.28 Stakeholders felt that there could be opportunities for other stakeholders to make use of the funding too, and stakeholder noted that wider EV funding is available. For example, Falkirk Council applied to the Switched on Towns and Cities Fund to be used on EVs and infrastructure. HcL has recently secured

funding from Transport Scotland to upgrade 17 vehicles to Euro 6 standard and is also exploring funding options through the Mobility as a Service fund. Other funding streams include, for instance National Lottery Community funding, Scottish Government's Investing in Communities Programme, Towns and Cities fund and Smarter Choices Smarter Places.

- 4.2.29 It was suggested that there could be a merit in providing operators with information about (and/or links to) the available funding sources, and guidance on good application practices. The information could be supplemented by ideas of what the monies could be used for and presented on a suitable website. Additionally, a training event and/or a conference could be set up to facilitate knowledge sharing.
- 4.2.30 Stakeholders also noted that applying for funding is time consuming, as different funding sources have different forms to fill and criteria to consider. Council stakeholders noted that there is a need for better value DRT and community transport providers, but equally that there is a need for them to be better tied into Service Level Agreements (SLAs) that target specific needs and fill specific gaps in transport provision. Enhanced funding linked to SLAs could be a way to both demonstrate and ensure the value of these services.
- 4.2.31 A key message from the stakeholders consulted with was that in order for more DRT schemes to operate, and to connect the most remote rural areas, a greater level of funding is required.

Technology

- 4.2.32 Stakeholders felt that there could be opportunities to better coordinate the use of technology, including the use of live trackers, real-time information, improved payment options, the use of apps etc. However, they noted that there can be challenges with the introduction of digital technology in remote rural areas, due to the lack of data signal coverage.
- 4.2.33 It was raised that there is scope to share knowledge and information regarding appropriate technology for DRT and community transport operations, and best practice learnings.

Integrated Ticketing

- 4.2.34 Stakeholders stated that there could be an opportunity to integrate tickets and/or smartcard systems, thus linking multimodal forms of transport (e.g. bus, tram, trains etc.).
- 4.2.35 It was noted, however, that a key barrier to true integration is the validity of the NEC on many DRT services. The NEC entitles people who are over 60 or have a disability to free bus travel around Scotland. As such, those that rely on DRT for all or part of their journeys are unable to make full use of this benefit, unless this is accepted on their service – this could act as a barrier to travel for some.
- 4.2.36 For example, 90% of Dial-a-Journey customers are concessionary fares users and the majority of taxicard scheme users are over 60 years old.

Linking New Developments

- 4.2.37 Stakeholders felt that more could be done to link DRT and community transport with new developments, especially housing and retail sites. Developers should think of connectivity at an early stage of their proposals.
- 4.2.38 It was suggested that this could be done through section 75 Agreements, with the money ringfenced for provision of transport. For example, Falkirk Council seeks contributions from developers for transport funding where there is currently no service.
- 4.2.39 While DRT may not be appropriate for all developments, its potential role in improving the connectivity of new developments could be considered. Better connecting new developments could have benefits such as easing congestion, helping with carbon neutral targets, and reducing social isolation.

5. SUMMARY OF STRENGTHS, WEAKNESSES, OPPORTUNITIES AND CHALLENGES (SWOC)

5.1.1 The table on the following page summarised the strengths, weaknesses, opportunities and challenges (SWOC) identified through the following elements of the study:

- Consideration of the policy context for DRT operations in the SEStran area (Section 2), including information on the rollout of LEZs;
- A review of the operational context of DRT in the SEStran area, including the key principles of typical DRT operation, an overview of the existing services in the area, and learnings from the operation of commercial DRT services elsewhere in the UK (Section 3);
- Analysis of existing public transport accessibility to key services, highlighting gaps, geographical differences, and opportunities in the network for DRT (Section 4); and
- Stakeholder engagement with the operators and funders of DRT services, as well as potential customer representatives (Section 4).

Figure 5. SWOC Summary Table

<p>Strengths</p> <ul style="list-style-type: none"> Community transport and DRT support elderly and more vulnerable in terms of mobility, improved wellbeing, tackling loneliness etc. The top reasons for travel include: <ul style="list-style-type: none"> - Shopping; - Socialising (e.g. going to lunches); and - Attending medical appointments. There is additional capacity for some community transport operations in the SEStran area. There are existing customer bases that are familiar with the services. DRT drivers are familiar with the area and operations, and some taxi firms are able to act as operators for Council funded services. DRT services can fill a gap in the market where commercial services have either pulled out of routes or where they have never served. DRT can be more flexible than conventional bus services and can cater to shifting demands and changeable working patterns. DRT can have a positive effect on the environment, and lower emissions. Stakeholders are willing to work with the requirements of the LEZ, given the right support. 	<p>Weaknesses</p> <ul style="list-style-type: none"> The value of DRT is not always recognised or properly reflected in planning, policy and appraisal. A particular issue is lack of quantification of value that community transport and DRT provision has on people's wellbeing, mobility etc. Part of this undervaluing of DRT is reinforced by the fact that provision is not a statutory requirement. This means that despite providing access to many essential services, and providing a vital link with health and social care funded services, these services are often viewed as a 'nice to have'. This is reflected in the level of funding received, in the context of transport, as discussed in the challenges below. The sector as a whole and operators appear to have variable capacity to adapt to rapidly changing transport environment/policy. In part, this is related to the funding available, and the day-to day challenges the services face. Partnership working between operators and across regions is minimal, although efforts have been made in some instances within the SEStran area. Fleet scheduling systems used are not satisfactory. Some booking processes are too paper based, most require 24hr booking notice. There is inconsistent acceptance of the NEC on DRT services, creating a confusing and inequitable landscape for those who rely on DRT for all or part of their journey. While DRT providers are not required to accept the NEC through the National Concessionary Travel Scheme, some do at their discretion, or where an agreement has been put in place with funders.
<p>Opportunities</p> <ul style="list-style-type: none"> DRT can benefit a wide range of user groups by providing them with enhanced connectivity. Given the right conditions, DRT can provide a cost effective and attractive alternative to conventional public transport. In particular, it could provide an alternative to unviable subsidised fixed-route bus services, and can be an effective way of providing services for atypical travel patterns. To improve coordination between community transport, council operated DRT and commercial PT on a range of operational aspects. For example DRT can act as a feeder service to conventional public transport, however users need to be considered and the importance of door-to-door service considered for those that are reliant on this aspect. To better coordinate the use of technology for operators across the SEStran area and Scotland. This should include elements such as live trackers, booking and dispatch systems, improved and integrated ticketing and payment options, and improved communications with customers. Sharing knowledge, in terms of what's available and what works best, will be key. To better coordinate underutilised vehicles (transport, education, social work, health fleets). Funding: <ul style="list-style-type: none"> - To use LEZ funding to help upgrade fleets; - To provide guidance, training and support for making the most of funding. More can be done to link DRT/community transport with new developments, such as housing and retail. Section 75 Agreements could ringfence funding for provision of transport. The benefits seen from this could include: easing congestion; making developers think of connectivity at an early stage; and helping with carbon neutral targets etc., assuming appropriate fleet use. 	<p>Challenges</p> <ul style="list-style-type: none"> Funding: <ul style="list-style-type: none"> - Is not reliable enough or adequate to enable DRT schemes to expand operation; - A lack of knowledge and co-ordination of the different funding streams available (e.g. LEZ, SCSP) is creating a challenge for the effective operation and management of DRT services; - Short funding periods make managing DRT schemes difficult, and limit the amount of forward planning and investment possible (e.g. in fleets and systems). - Better funding and service conditions are needed for provision in Council areas, i.e. significant monies are being spent by Councils on community transport, but no conditions are placed on them in terms of integration with Council run DRT provision. It is a challenge to adequately demonstrate the value of DRT services and prioritise support. The full potential of DRT is not being realised in the SEStran area, for example in terms of coverage, integration between services and with wider public transport, and in relation to the quality of user experience seen in modern forms elsewhere. Technology and equipment are inconsistent across operators; however, modern systems, e.g. for booking and scheduling, can be expensive to purchase. Limitations of technology, such as data signal coverage in remote rural areas, were also raised, and there are potential challenges for technology use by certain groups of users and individuals. There are concerns with the Edinburgh LEZ and Scottish Government's zero carbon targets: <ul style="list-style-type: none"> - Aging fleet will not meet legislation, and replacement costs/options appear restrictive; and - It is perceived that the current EV options do not meet the users'/operators' needs. As the study has progressed the COVID-19 pandemic has unfolded, with dramatic impacts on everyday life and transport. It is likely to have lasting effects that will need to be considered.

6. RECOMMENDATIONS ON THE WAY FORWARD FOR DRT

6.1 Approach

- 6.1.1 This section outlines a series of challenges and recommendations on the way forward for DRT, both in the SEStran area and across the sector in general. A number of these recommendations are for immediate action, with a short to medium terms implementation period, with others being for longer-term change.
- 6.1.2 These recommendations relate on from the findings of the SWOC (Strengths, Weaknesses, Opportunities, Challenges) analysis, which was based on consideration of the policy context and operational context for DRT, and discussions with key stakeholders.

6.2 The Roles of DRT

- 6.2.1 From the analysis, it is clear that there are two main streams of DRT which can be identified, each require specific consideration but also viewed within the overall transport ecosystem:
- Those services which arise from the need to provide necessary resources to individuals and communities. These tend to inherently also help meet important policy objectives, although more can be done to broaden the

benefits of these, as discussed later in this section. Traditionally these types of DRT services have been focussed around providing critical transport links for those that are not able to, or that genuinely feel that they are not able to²⁷, use conventional modes of transport. Reasons can include physical or mental health issues, but also the genuine lack of alternative transport, such as a lack of a bus service in an existing settlement, which can lead to problems around social isolation, health, economic activity, or environmental impact.

- The other stream of DRT comes from a place focussed around user choice, where the service is not simply provided out of necessity, but as an attractive and appropriate transport alternative. In terms of users, these services tend to be aimed at a relatively wide range of users.
- 6.2.2 The business models of operation, e.g. community-led, 3rd sector, council, commercial, or competitively-tendered can lend themselves more closely to one or the other of these DRT groupings, however, they are not mutually exclusive in terms of the outcomes achieved. Each will be most successful when focussed on providing a user-centric service.
- 6.2.3 Also identifying and referring to these binary roles of DRT, a paper by the Community Transport Association (CTA) and the Institution of Mechanical Engineers (IMechE) notes that there is a challenge to combine these, and to create a more integrated and collaborative network that meets both

²⁷ Mental barriers to using particular forms of transport, for example through fear or anxiety, are legitimate reasons for specialist needs.

mainstream needs and those of the most vulnerable. It states that:

"We should not write-off the benefits of building a level of interdependence between separate groups with differing needs into our future thinking". – IMechE and CTA²⁸

- 6.2.4 Moving forward, for both of these forms of DRT, there are some major changes within the transport industry which will have an impact on how services can be delivered. These have been outlined in the sections below, in terms of challenges and opportunities, along with recommendations for how these should be addressed.
- 6.2.5 These recommendations seek to ensure there is effective collaboration in order to provide benefits for all users, deliver important policy objectives, and support operators in providing viable and effective services.
- 6.2.6 These recommendations fall largely into the following categories:
- Those to address immediate funding and delivery challenges for the DRT sector;
 - Those which aim to realise the full potential of DRT services, including bringing it into the mainstream where appropriate; and
 - Those which aim to build better partnerships and integration across services.

²⁸ The IMechE and CTA, *The Future of Demand Responsive Transport*, published 2018, accessed March 2020

6.3 Challenge 1: The scale, delivery, and fragmentation of funding creates major issues for the operation and management of DRT services.

The Challenge

- 6.3.1 The most commonly raised issues in the stakeholder engagements undertaken with DRT operators and funders were those involving funding. Each of the challenges tackled in this section in some way relate to one of the following funding issues:
- Lack of overall funding availability, i.e. the scale of funding available specifically to DRT;
 - The ways in which funding is delivered are fragmented and difficult to negotiate;
 - High levels of uncertainty exist around the scale, time period, and guarantee of future of funding;
 - Changes to policy, legislation, and the funding of the wider transport network can have both direct and indirect, but often disproportionate effects on the viability of DRT services;
 - The value of DRT, and in particular community transport is hard to quantify and is therefore often underestimated.
- 6.3.2 The challenges surrounding funding are, consequently, worthy of individual consideration, as well as within those presented below.

What does this mean for transport operators?

6.3.3 For transport operators these issues mean the following:

- Short funding periods make managing DRT schemes challenging. Offering a consistent service is dependent on the certainty of future funding – this also underpins investment decision-making (e.g. in fleets and systems), because long-term financial commitments cannot be accepted in the absence of long-term income streams. Uncertainty is – in fact – likely to lead to retrenchment, lack of ambition, and ultimately even closure.
- This lack of resilience in funding, is further worsened by a rapidly changing transport context, such as environmental pressures.
- External issues include that of the only semi-established link with the wider public transport context. Funding cuts for public transport can have a knock on effect on the demand for DRT services without necessarily increasing their funding proportionately. For example, while bus service removals might increase total trip revenue through increased demand for DRT, additional costs – such as administration, peak vehicle requirements, and marginal operating costs related to additional/longer journeys (vehicle maintenance and wear and tear, etc.) – are not necessarily met.
- Schemes are generally run by very small management teams, some of which are volunteers. This means that they can often struggle to navigate the funding streams that are available, while trying to maintain a 'business-as-usual' situation in the running of the service.

- Expansion, therefore, is a low priority compared to day-to-day challenges. This can be true for both Council operated services as well those run by the 3rd Sector, despite the Council's greater overall responsibility for providing equitable transport services.

What does this mean for transport users?

6.3.4 For transport users, there are the following impacts:

- There is a patchwork coverage of services, with scheme coverage often being dictated by where their base of operations reside and where pockets of funding have arisen for these to be expanded. This pattern is embedded due to the funding challenge discussed here, preventing these from being expanded to cover other areas equitably;
- As noted for those impacted by the LEZ and other environmental legislation, there is a risk that services will end up being removed or reduced; and
- While feedback on services seems to be positive, and users value their services, there is the potential that improvements to these services are being constrained due to lack of coordinated investment. For example: integrated ticketing and some of the key elements from commercial DRT experience related to communication, payment and scheduling, could enhance efficiency, customer experience and add further value to the subsidised DRT services.

What does this mean for those interested in delivering policy objectives?

6.3.5 For those interested in delivering policy objectives, this means:

- As explored in section 2, DRT can have a strong role in delivering on policy objectives – funding and support for these services should reflect this;
- In the absence of community transport, it would likely be unaffordable for local authorities to provide these services; and
- The full potential of DRT is not being realised, with greater and more equitably spread benefits being possible given the right funding conditions.

The Way Forward

6.3.6 The funding issues identified within this study are long-standing and will require significant change to fully address. Based on the scale of this challenge, the following recommendations include an immediate stopgap response, as well as the need for more direct and detailed study to consider a longer-term strategic response.

Recommendations to Address the Challenge:

Immediate Action – Building on the findings of this review of the SEStran area, an information and listening exercise could be undertaken at the national level to determine the extent to which these issues are found in other areas. This

would inform any national level action on funding. This should:

- Highlight the range of funding that is available;
- Promote consistency of approach in ensuring the full range of appropriate funding is being accessed, for example ensuring that BSOG is being claimed where appropriate;
- Capture information on the barriers faced in accessing this funding;
- Consider what support (in terms of information, training, etc.) could aid the accessing of available funding; and
- Identify any shortfalls in the funding mosaic, i.e. gaps in the streams already available.

Short to Medium Term Action – Based on the outcomes of this study, and the national information and listening session, it should be considered what support should be provided to operators in accessing appropriate funding. This must include internal Council services, as the issue is not restricted to the 3rd Sector. These actions are likely to align closely to those considered in the low-emission transition package outline in the next challenge, such as coordinated information resources on funding, administrative support for applications, aid in preparing or reviewing business plans, but should also pick up specific barriers highlighted by the listening exercise.

Medium to Long Term Action – Initial feedback suggests that a more significant role is required at the national level

to ensure a consistent approach to funding in the sector. This should, at a minimum, address:

- How to move away from funding these services as a 'nice to have' to become a vital component of the transport system and wider sectors, such as health;
- Making it easier for both operators and local funders to access longer-term funding packages, which allow the ability to plan for the challenges faced by the sector;
- Consider the role of start-up funding, to unlock opportunities, and help provide more equitable coverage of services. Other options may include under-writing appropriate loans or providing capital funding for vehicles, infrastructure and systems. Some of this may be achievable through a more structured and directly focussed approach to directing existing funding opportunities toward the DRT sector;
- Funding of services is not just a 'transport' issue, but should consider the benefit provided to other areas. For example, benefits are provided across the health sector in relation to early detection and treatment of illnesses (as users can access their GP more readily), and reductions in missed health appointments and reduced domiciliary visits by healthcare professionals;
- Consider a structured approach to capturing development based funding to facilitate DRT service support, based on likely increases in demand; and
- This may require a more co-ordinated approach to demonstrating the value of DRT services, and a more clear link being established between policy outcomes

and the funding provided in SLAs. Recommendations related to this are provided in Challenge 5.

6.4 Challenge 2: Vehicle fleets face additional pressure from environmental targets and associated legislative changes.

The Challenge

- 6.4.1 Stakeholder engagement highlighted major concerns among both DRT operators and funders around being able to adapt to rapidly changing environmental policies and legislation, such as the forthcoming Edinburgh LEZ and the Scottish Government's zero carbon targets. For Council operated services, these will need to align with the national targets to remove the need for new petrol and diesel cars in the public sector fleet by 2025, and for all other vehicles in the public sector fleet by 2030.
- 6.4.2 Existing DRT fleets operating in the SEStran area are made up almost entirely of diesel and petrol vehicles, many of which are relatively old and have poor environmental performance. Retrofitting to improve emissions of smaller vehicles is not currently cost effective, and so acquiring alternative vehicles is the only option available to improve environmental performance to any notable extent.

What does this mean for transport operators?

- 6.4.3 Fleet purchase and maintenance is one of the biggest costs incurred by operators. Existing DRT services in the SEStran

area are operated on a non-commercial basis, with limited internal funding available to purchase and maintain a modern fleet. Key concerns, therefore, include that:

- The introduction of the Edinburgh LEZ will have a negative effect on the viability of any non-conforming services, with inability to pay penalties potentially resulting in the removal of services unless a suitable fleet can be sourced;
- Council operated services, including those outside of the LEZ, must act to deliver national targets for phasing out the need for new petrol and diesel vehicles;
- Any further measures which penalise older vehicles, would also have viability impacts on operations;
- Suitable, low emission vehicles, such as electric minibuses, are unlikely to be widely available on the second-hand market in the foreseeable future. Therefore, operators will need to look to the new vehicle market, potentially significantly increasing up-front vehicle purchase costs, or leading to the need to enter into expensive leasing arrangements;
- Operators also raised concerns about adequate access to EV charging facilities, particularly in more remote rural area, and the ability to ensure there is sufficient battery storage for distances travelled, and on-board equipment operation;
- There is also the potential for new DRT services or the expansion of existing services being suppressed from entering the network; and

- EVs can in fact offer significantly lower operational, maintenance, and vehicle tax costs than petrol/diesel equivalents, so one-off support for the transition could actually put the DRT sector on a more sustainable economic footing going forward once the investment in new vehicles has been completed.

What does this mean for users?

6.4.4 For users of DRT services, there are the following impacts:

- There is the potential for users to have their services reduced, restricted in terms of capacity or types of use, or indeed removed entirely. This would have profound effects on connectivity for the many users who rely on these services;
- The scale of the future network may be constricted by added barriers to expansion, preventing improved network coverage and equitable provision of services across the area; and
- Conversely, for those operators which are able to access new vehicles, users would look to benefit from improved vehicle quality, as the average age of fleets reduce.

What does this mean for those interested in delivering policy objectives?

6.4.5 For those interested in delivering policy objectives, this means:

- The potential loss of vital DRT services would represent a significant risk to the delivery of policy objectives related to connectivity, and have a negative impact on

transport's potential to reduce inequalities, help deliver inclusive economic growth, and improve health and wellbeing; and

- In relation to environmental objectives – facilitating a smooth transition to low-emission vehicles for DRT fleets would be of benefit by removing some of the most polluting vehicles in the transport sector from the road. However, the sector needs support to do this – unlike most car trips, which could be undertaken by other means, removal of DRT services can result in the loss of the only option for many users and cannot be viewed as of overall benefit.

The Way Forward

- 6.4.6 It is clear that operators face a notable challenge in negotiating the transition to low-emission vehicles, and that they are not necessarily all in a position to readily take this on alongside the day-to-day challenges of providing their services.
- 6.4.7 A comprehensive package of support is required to help avoid major disruption to the delivery of DRT services in the SEStran area, and likely beyond this.

Recommendations to Address the Challenge:

Immediate Action – A detailed 'state of readiness' review should be undertaken of DRT services across the SEStran area in relation to transitioning to low-emission fleets.

This should include Council owned fleets in order to ensure that they will be able to comply with Scottish Government targets to remove the need for new petrol and diesel vehicles in public sector fleets for cars by 2025, and by 2030 for all other vehicles.

A similar review would be of benefit nationally, as zero carbon target measures are brought forward, to ensure that these vital services are not hit with insurmountable obstacles in helping meet environmental policy objectives. The SEStran-wide review could provide a model for rollout in other areas.

Short to Medium Term Action – A support package should be considered for operators, based on the outcomes of the state of readiness review. At a minimum, we would expect the following assistance for operators to be considered for inclusion within this support package:

- The establishment of a regularly updated information resource, specifically targeted at DRT operators, in relation to transitioning to a low-emission fleet, and the funding packages and support that is available to do this;
- Administrative support in identifying and accessing existing and forthcoming funding streams for low

emission vehicles and associated supporting infrastructure;

- Additionally, this could include aid in preparing fleet renewal plans and outline business plans for such – as technologies change, the costs and benefits of vehicle choice may not be known to those operators that need to procure new vehicles, or internal expertise to produce these plans may not be available;
- Help for operators to explore partnering arrangements with key stakeholders, such as the NHS, where EV charger access is a barrier to fleet rollout; and
- The establishment of a fleet leasing scheme, through which low emission vehicles can be purchased by the public sector and leased to operators. This is a model used frequently by SPT, for example, and offers the following benefits:
 - Reduces up-front costs to operators;
 - Reduces the risk to the operator associated with owning their own fleet, with the potential for the vehicle to be returned to the leaser. Reducing risk is particularly important given the current short-term nature of funding for many DRT schemes;
 - The leaser can ensure that vehicles are appropriate to meet operator and low-emission requirements;

- The purchase of multiple vehicles, e.g. for a number of operators, can often facilitate discounting of the per-vehicle unit cost; and
- Typically, public sector funding is more readily available on a capital funding basis, such as for vehicle purchase, rather than revenue funding.

Immediate Action – Engagement should be carried out with stakeholders to present the case for derogations from legislation to allow continued operation of otherwise non-compliant vehicles from the not-for-profit DRT sector, within the Edinburgh LEZ zones.

It is recommended that suitable conditions for such a derogation are explored. Conditions could, for example, include that the operator must have undertaken a fleet readiness review, and can demonstrate a suitable fleet renewal plan for future compliance with the LEZ scheme within an agreed 'reasonable' period of time²⁹. This would allow operators time to ready themselves for the transition, while committing to a viable schedule of compliance.

Medium-Long Term Action – a strategic review of DRT funding, as discussed in Challenge 1 above.

²⁹ This is analogous to the Government's decision to allow rail companies derogations from accessibility regulations for persons with reduced mobility, provided the operator had plans in place to comply within a reasonable timescale.

6.5 Challenge 3: Despite a wealth of knowledge, expertise, and resources across operations, there is a lack of effective partnership working and integration of services.

The Challenge

6.5.1 The study has highlighted significant knowledge, expertise, and resources across existing DRT operators in the SEStran area, and outwith this. However, stakeholders also highlighted a number of weaknesses in the sector which are exacerbated by the lack of effective partnership working and the ability to provide more integration between DRT services, the wider public transport network, and other sectors which look to deliver similar objectives.

What does this mean for transport operators?

6.5.2 For transport operators, the lack of partnership working and integration means:

- That the sector as a whole has variable capacity to adapt to changes, with solutions often sought on an individual basis, rather than through co-ordinated effort. This means that much delivery has fossilised around long-established community demands without adjusting to emerging new requirements;
- Individual and variable booking and scheduling systems are used, many of which are highlighted as being inefficient and cumbersome. The combined purchasing power of operators is neglected, and integration of

operational potential often overlooked, such as making best use of underutilised vehicles;

- The lack of co-ordination and standardised reporting on scale and operational performance – in a way that demonstrates the unique benefits of these services – means that the sector appears smaller, more fragmented, and less critical than it is. This would be aided if the impact of their operations was easily identifiable as a whole;
- Efforts for partnership working and integration have been made in some areas, but the learnings from these have not been distributed across the sector;
- Lack of integration between public transport and DRT services means that the mutual benefits of each are not being captured. Simple gap filling without real strategic planning and integration is ineffective compared to the alternative. This places undue pressure on 3rd sector and Council operated services;
- Differing functions of DRT, e.g. as a service of necessity or a service of choice for users, can become blurred without suitable practices put in place to deal with this. This can lead to a substandard service for differing users. Therefore, how different user needs can be met by an integrated service needs to be considered carefully; and
- Many operators may have under-utilised vehicles and/or drivers at certain times or days, despite many of the vehicle specifications being similar. For example, social care transport and transport for school pupils with additional support needs may utilise similar vehicles, and

both may experience significant down-time during the day when transport is not required for their dedicated purpose. At present, integration to maximise use of these vehicles is limited.

What does this mean for transport users?

6.5.3 For transport users, there are the following impacts:

- From the user perspective, services seem fragmented in a number of ways. This is true for both those DRT schemes that provide specialist services for vulnerable users, and those used to supplement the conventional public transport network. Particular areas of difference include variations in the:
 - Geographical coverage of services;
 - Periods of operation and flexibility in when the journey can be undertaken;
 - Eligibility for use of services;
 - Fares, payment methods and acceptance of the NEC;
 - Membership and registration to services;
 - Booking procedures, including required lead-in times; and
 - Reserve capacity in the service in terms of demand, and the likelihood of refusal of use due to this.
- The above is in contrast to the trend observed in the wider public transport network, which is highly focused on integrating user experience, and providing a

consistent and legible service for multimodal and multilocational travel.

- The full potential of DRT is not being realised, and this ultimately impacts on users, both in relation to DRT as a necessary service and its ability to provide improved user choice within the wider transport system.

What does this mean for those interested in delivering policy objectives?

- Fragmentation means that it is not easy to readily identify the impacts of the services, and present a strong case for their delivery against policy objectives, despite most funders recognising their inherent value.
- The potential of DRT to meet policy objectives is being stifled, in particular the connectivity benefits of forming a part of an integrated transport network.
- It is hard for those planning transport to negotiate the differences between services, and to fully consider them in terms of an integrated network.

The Way Forward

- 6.5.4 This challenge is significant and multifaceted, however, a combination of immediate and longer term steps should be considered in response to this. These seek to build on both experience within the sector, such as of partnership building of the Borders Council area services with neighbouring Authorities, and externally with stakeholders such as public transport operators.

Recommendations to Address the Challenge:

Immediate Action – Information sharing on a SEStran-wide basis should be promoted:

- Firstly, via a knowledge sharing, networking, and partnership event; and
- Secondly, via follow-on knowledge transfer schemes – ideas for which should be explored at the initial event. One such scheme should include the trialling of mentoring and job-shadowing between key stakeholders in the sector, along with commercial operators in both DRT and wider public transport. The relative strengths of different services and operators should be considered. It is likely that mentoring can be put in place on a multidirectional basis – for example larger operators may have more advanced technological solutions, whereas smaller operators may have insight on delivering personalised services to customers. Each perspective will offer value.

This scheme would focus on areas such as:

- Providing funders with insights into day-to-day operations of services and the benefits they provide for users, e.g. via service ride-along sessions;
- Demonstrations of technological elements of services, such as scheduling and booking systems, dispatch and live vehicle tracking, ticketing and payment options, and communication tools with customers.

The outcome of the initial event, and subsequent follow on knowledge transfer schemes should be captured in a document outlining the lessons learnt from these. This should outline potential areas of partnership and integration which have been highlighted.

Medium-Long Term Action – Building on the initial efforts outlined above, actions should be sought related to delivery partnerships and integration. Where appropriate, support should be sought from the Scottish Government, and cross-boundary solutions should also be considered. This would be expected to include at a minimum the following elements:

- Implementing a standardised approach to recording and reporting information on the scale and performance of operations at a SEStran level. Some nominal reporting is already recorded at local authority level, but this is not consistent or comparable across the area, and doesn't fully capture the value provided by these services. The need to develop a framework to assess the value of DRT is considered in Challenge 5 below – such an approach may offer insights into this need for recording and reporting service impacts;
- The opportunity for sharing booking, scheduling and dispatch systems;
- Developing partnerships with operators of commercial bus networks (e.g. for appropriate DRT services to provide coordinated feeder services at selected key transport corridors or hubs. This should be planned as a

mutually advantageous arrangement, with the benefits shared);

- Shared information, marketing, and branding, where appropriate (e.g. commercial operators advertising complementary DRT services);
- Integrated ticketing (e.g. the ability to purchase one ticket to fulfil all travel requirements covering both the commercial network and any DRT elements). See Challenge 4 below for consideration of NEC acceptance on services;
- Establishing agreements related to ensuring the operational effectiveness of DRT services, such as permitted use of priority measures designed for bus operations to avoid congestion; and
- The potential for a brokerage system to make best use of underutilised vehicles. This type of system typically pools resources into a common fleet, and would be one way of addressing inefficient utilisation. However, genuine willingness amongst operators to partner on such a scheme would be required. More recent technological advancements in back office systems, may facilitate this type of arrangement more readily than in the past, but the scheme would still require significant effort to coordinate and agree it's working in practice.

One of the key aims of the above exercise should be to integrate services from the perspective of the user. This is crucial to maximising benefits of the services and helping provide a transport service suitable for all users.

Any actions arising from the above recommendation must ensure that any changes to the way DRT is provided do not disbenefit those who need the services the most. Partnership working with current community transport providers, who know these customers, should help with this requirement.

6.6 Challenge 4: There is inconsistent acceptance of the NEC on DRT services.

The Challenge

6.6.1 The National Concessionary Travel Scheme (NCTS) provides NEC-holders with the free use of bus services. However, this does not apply to bus services operated under Section 19 permits. While DRT providers are not required to accept the NEC through the National Concessionary Travel Scheme, some do at their discretion, or where an agreement has been put in place with funders.

What does this mean for transport operators?

6.6.2 For transport operators:

- This may inhibit DRT operators from fully being able to integrate their service into the transport system, forcing users to view it as an external element of the conventional network. This creates barriers between DRT and the bus network, similar to those observed between bus and rail.

What does this mean for transport users?

- From the user perspective, the reasoning for why some services do and some do not provide free travel using the NEC is not clear. This means that users must check the terms of individual services before use. While this may be acceptable for those using a single service regularly, those looking to use a service for the first time, or looking to travel cross-boundary for example, may face a confusing transport landscape. Legible fare structures,

and navigable terms of use from end-to-end on a journey are key to removing barriers to travel for users.

- Users may face paying for one leg of their journey, and not other legs. This goes against the principle of providing integration of payment and ticketing, evident across all levels of policy, which is important for making travel easier for the user.
- The need to pay a fare for part, or multiple parts of a journey, may act as a barrier to travel for some users. This is particularly true if the user has no other free viable alternative for their travel needs, and the choice is therefore to pay for travel or not to travel. Even the uncertainty related to whether they will need to pay or not, may be enough to put off some users, for fear of being 'caught out' on part of their journey.

What does this mean for those interested in delivering policy objectives?

- For those who have no choice but to use a DRT service as part of their journey, for example if there is no available or suitable service for the user's needs, this has the potential to undermine the following key objectives of the NCTS, namely:
 - To allow older and disabled people, improved access to services, facilities and social networks, promoting social inclusion;
 - Promoting a more active lifestyle for the elderly and disabled; and
 - Promote a modal shift from private cars to public transport.

- It is inequitable that transport users in some parts of the region have access to free travel whilst identical users in other areas have to pay, simply because of the delivery model. As such, if DRT is to be viewed as a genuine alternative to conventional bus, as described elsewhere in this section, there needs to be consistency in the eligibility for free travel using the NEC. Without this, DRT will always be a sub-optimal alternative for many users.

The Way Forward

- 6.6.3 A number of funder stakeholders have raised the above challenge – this shows recognition of the need to address this. Indeed, a number of DRT services across the SEStran area are funded in a way which allows the use of the NEC. The lessons from these services, could be more widely shared across the area.

Recommendations to Address the Challenge:

Immediate Action – The appetite amongst local authorities and DRT providers for a consistent approach to discretionary free transport for NEC users across the SEStran area should be investigated. The provision of equitable reimbursement for revenue forgone to operators for carrying NEC passengers for free could, for example, form one part of a wider Service Level Agreement on funding provision from local authorities in return for providers meeting certain service criteria which support policy objectives. See Challenge 5 below in relation to demonstrating this value.

Medium-Long Term Action – The appetite for legislative change should be sought for the inclusion of DRT services operating under Section 19 licenses within the NCTS.

Whilst not part of the NCTS, it would be equitable to include all DRT services in the proposed provision of free travel to young people across Scotland recently announced in the 2020 Scottish Budget.

6.7 Challenge 5: The value of DRT is not always recognised, partly due to the difficulty in quantifying this.

The Challenge

- 6.7.1 As highlighted by stakeholder engagement and a review of policy and literature, assessing the value of DRT services is challenging, and using purely economic factors can underplay the benefits that the services provide to individuals, communities, public sector agencies, many other stakeholders, and in meeting policy objectives.
- 6.7.2 Part of this undervaluing of DRT is reinforced by the fact that provision is not a statutory requirement. This means that despite providing access to many essential services, and providing a vital link with health and social care funded services, these services are often viewed as a 'nice to have'.

What does this mean for transport operators?

- 6.7.3 For transport operators:
- Qualitative information, testimonials from users, and basic operational data (such as journeys provided, km operated, and farebox revenues collected), are often the only means of reporting on the performance and benefit of the service; and
 - This makes it hard to demonstrate the value of services delivered, and to receive the funding needed to both operate the existing service and provide long-term planning, investment, and expansion.

What does this mean for transport users?

- 6.7.4 For users, this means that:
- Service provision is being constrained, and this ultimately impacts on users, both in relation to DRT as a necessary service and its ability to provide improved user choice within the wider transport system; and
 - Suitable metrics are not providing feedback to all operators and funders with which to inform how service improvements can be made.

What does this mean for those interested in delivering policy objectives?

- 6.7.5 For those interested in delivering policy objectives, this means:
- Despite often recognising the inherent value of services, these are not always demonstrable in order to justify appropriate allocation of resources. This is true for both Council operated services and the support provided to external providers, such as those in the 3rd Sector.
 - Funders are looking for improved means of:
 - Assessing the value of services;
 - Prioritising where services would be of most benefit, and
 - Developing SLAs which can create a clear link to meeting the needs of the transport system and which demonstrate contributions to delivering benefit to policy objectives.

The Way Forward

- 6.7.6 In order to give priority to the most beneficial and viable schemes, and to provide a long-term demonstration of the value of the sector – in order to leverage strategic improvements to funding and other areas of support – an attempt must be made to consistently capture information on services and assess their relative costs and benefits.

Recommendations to Address the Challenge:

Immediate Action – Engagement with local authorities and the Scottish Government, as appropriate, should be undertaken in order to develop a common framework for capturing key performance metrics on DRT services. These need to be tailored to demonstrating the costs and benefits of these types of services. Some of this data would need to be captured by the operators themselves, but other metrics could be calculated centrally by those seeking to demonstrate the impacts of delivery on policy objectives.

This framework could also be used as part of the means by which funding is prioritised for new services, improvements and expansions.

In developing a framework for the SEStran region, we think the following areas are important to consider:

- Accessibility levels of an area, appraisal of access to current services, and population levels;

- Socio-demographic levels such as Scottish Index of Multiple Deprivation (SIMD) indices;
- Funding and financing, identifying funding strategies for short term and long-term investments, including fleet replacement, concessions and booking facilities;
- Highlighting cross-boundary operations, that can be enhanced or will require collaborations;
- Partnership opportunities to collaborate fleets and complimenting services;
- Technology appraisal, potential to stimulate new business models such as MaaS, by exploring, ticketing, real-time information, online booking and scheduling and brokerage schemes;
- Environmental assessments, focussing on how services can help to reduce carbon footprints and fit within LEZs, clean air zones and Government targets; and
- Equalities and inclusion evaluations (as below) to ensure that services continue to provide support to vulnerable passengers who are unable to use or have difficulty in using local public transport. It should also factor in assessments of how services can be expanded, coordinated and enhanced.

The framework should feed into an appraisal process which has a clear scoring matrix which reflects policy and delivery priorities.

Some case studies have been provided below where frameworks have been developed for different reasons.

Immediate Action – Putting the needs of those who face the most disadvantage at the centre of the design and evaluation of any new service is key. As such, all proposals to change the delivery of local transport should be subject to Equalities Impact Assessment (EqIA). It was extremely clear from the consultation work undertaken that many – if not all – of the demand responsive transport services provided in the SEStran region were vital to a number of vulnerable groups. In the absence of these services there would be real hardship, including challenges accessing healthcare, education, and work opportunities. Social isolation could also be increased.

Not only should an EqIA be undertaken before any new options are introduced, proposals to adjust or reduce existing provision should also be subject to thorough consideration of the impact on vulnerable groups through a robust EqIA. Consistency of approach between member authorities on the role of EqIAs in these circumstances should be sought across the SEStran area.

Immediate Action – Funders, such as local authorities, should look to outline clear SLA's which demonstrate links to the benefits sought. Appropriate funding, however, should be made available to recognise these benefits.

Case Studies

- 6.7.7 Some operators have developed their own frameworks for community transport and DRT schemes to show the social value of their services.

Ealing Community Transport (ECT)

ECT provides safe, accessible and affordable community transport to people unable to use mainstream transport due to mobility or other difficulties, or because public transport is unavailable in their area. To help face the challenge of ever decreasing budgets, they wanted to be able to measure the value of the services they deliver in a quantifiable way. They started to examine how to show the benefits and realised that no tool existed that could accommodate the uniqueness of community transport. They found previous approaches had been undertaken by external auditors and had not produced findings that could be readily compared with other services due to lack of commonality of valuation metrics.

They have developed a toolkit to specifically to help community transport organisations measure their social value using information already collected on booking management systems and HR records (e.g. number of trips, volunteer time).

Measuring social value in this way enables community transport organisations to:

- Demonstrate the public benefit of community transport;
- Monitor and maximise the social value of their activities;
- Gain the confidence of funders; and

- Quantify their social impact to commissioners with reference to the Social Value Act (SVA).³⁰

The Toolkit has been adopted and used by over 35 community transport operators. Some commercial community transport software providers have been able to incorporate the SVT data protocols into booking and scheduling systems.

6.7.8 Local authorities have also developed frameworks for scoring and evaluating their current and new subsidised contracts.

Telford and Wrekin Council

Due to a number of cuts in council funding, and national funding reductions in Bus Services Operators Grant (BSOG) Telford and Wrekin Council created a Bus Subsidy Policy, based on a multi assessment criteria.

The multi assessment criteria allowed new and existing contracts to be tested both in terms of value for money and socio-economic factors. It established rules and processes whereby new requests for subsidy could be managed and ensured formal evaluation against agreed criteria

They developed a route evaluation model using available planning and census data to undertake a qualitative assessment of a route's effectiveness and impact against the set criteria. The TRACC accessibility analysis carried out in this study offers similar metrics.

Catchment

- Population within 400m of the service.

Deprivation

- Population in bottom 20% of Index of Multiple Deprivation (IMD) within 400m of the service;
- Population in bottom 20% of car ownership within 400m of the service;

Access to Services

- Number of education establishments served within 400m of the service (secondary and further education);
- Number of health establishments served within 400m of the service (GP surgeries, pharmacies and Hospital);
- Borough Centres and key employment areas served within 400m of the service; and
- Railway stations served within 400m of the service.

Future Development

- Number of committed housing developments served within 400m of the service; and
- Number of committed employment developments served within 400m of the service.

Frequency

- Frequency of service existing and deliverable.

³⁰ The relevant legislation in Scotland is the Procurement Reform (Scotland) Act 2014

6.8 Challenge 6: There is inequity in DRT service provision across the SEStran area. This is combined with opportunities being missed to better integrate DRT with the wider multimodal transport network.

The Challenge

6.8.1 Existing DRT provision across the SEStran area is not consistent, either in coverage or in the way it operates, in particular from a user perspective. This has been highlighted within the challenges above; however, there is a specific challenge to be addressed in relation to maximising the value of DRT as a true element of the wider transport network, where appropriate. This includes the role of services in providing a viable part of the public transport network, in particular where the operating models for conventional bus and rail services are not favourable for long-term commercial feasibility.

6.8.2 This section considers the potential roles of DRT within the existing network, while Challenge 7, below specifically considers the challenge of providing transport for new developments.

What does this mean for transport operators?

6.8.3 For operators of community transport:

- These services have often grown organically from a base of operations which was established as the need and opportunity for the provision of such a service has arisen;

As services become established these can expand; however, coverage is highly dependent on the availability of funding, and the operational constraints of the scheme in terms of location, drivers, vehicles, centres of demand, etc;

- This results in some areas within the region being served by community transport, and others not. This is not always based on priority of need, i.e. those areas without services do not necessarily lack the need for those services; and
- As discussed in the other parts of this report, operators face challenges in expanding operations, working in partnership, and providing integration.

6.8.4 For Council managed DRT services, whether served by an internal fleet or by external operators:

- Services have often arisen through necessity to fill gaps in the conventional public transport network, or where particular needs have been identified to provide transport to vulnerable users;
- As with community transport, services have been developed where particular needs have coincided with availability of funding and opportunities presenting themselves; and
- In some cases this has also led to lack of integration between DRT services, even within a single local authority area, with community transport services, and with public transport services. This can create a number of separate DRT services which share many of the same

goals as public transport, but which are kept on the fringes of real integration and comprehensive coverage.

6.8.5 For operators of public transport services:

- Opportunities are being missed to work with both community transport and Council operated DRT services, to create a true 'network' of services. It should be noted that there are barriers to use of conventional public transport for many users. Efforts should, however, be made to make public transport services as accessible as possible for as many users as possible, as discussed in Challenge 5 above; and
- Commercial DRT operations are already emerging in some areas in the UK and are being increasingly explored through trials in other locations. As the market evolves, commercial DRT services may become increasingly viable options for existing public transport operators as part of their mainstream operations. Alternatively, the building blocks of these emerging new approaches to DRT can provide a valuable toolkit for enhancing existing subsidised DRT operations, or for converting existing conventional fixed route bus services to a more flexible delivery model.

What does this mean for transport users?

- 6.8.6 As discussed under Challenge 3, users face fragmented and inequitable services in terms of coverage, type of operation, eligibility and fares, membership, booking, customer experience, etc.

What does this mean for those interested in delivering policy objectives?

6.8.7 This means that:

- The potential of DRT to meet policy objectives is being stifled, in particular the connectivity benefits of forming a part of an integrated transport network; and
- Efficiencies from integration with the public transport network are not being achieved, with the potential for users to be reliant door-to-door services due to lack of alternative rather than need. Avoiding this could improve capacity on existing DRT services for those who need it most, and add to viability of the wider public transport network.

The Way Forward

6.8.8 Many of the actions to respond to this challenge align with those suggested elsewhere in this section, including overlaps with:

- Addressing funding issues facing the sector, as per Challenges 1 and 2;
- Improving partnership and integration, as addressed in Challenges 3 and 4;
- Demonstrating the value of services, and providing a framework for prioritising investment, as considered in Challenge 5; and
- Considering DRT at new developments, as per Challenge 7 below.

6.8.9 Some further specific recommendations can be made about the types of places and types of journeys for which DRT can offer particular value.

Recommendations to Address the Challenge:

Immediate Action – There should be a review related to the areas of service of DRT and public transport which considers where significant gaps exist. This review should be top-down, i.e. identifying where true needs lie, rather than bottom-up, i.e. where services are currently provided or easily offered.

Where gaps exist, opportunities for service enhancement should be explored. Engagement with existing operators may result in both opportunities and barriers to delivery to be raised. An agnostic view on delivery models may aid the overcoming of these barriers, building on the strengths of different forms of DRT and public transport and the integration opportunities between these.

The framework outlined for demonstrating value and prioritising investment, as described under Challenge 5 above, would aid this process. Addressing the funding, partnership, and integration challenges identified in this section (1 to 4 above), would be vital.

Medium Term Action – Through partnership and consultation with local authorities and key stakeholders, a

SEStran-wide best practice guidance document should be produced in relation to community transport and DRT services in the area. For community transport, this should set out:

- How to identify the need for a scheme, and evidence gathering tools to do this, such as passenger needs surveys;
- Setting up and operating the scheme, including areas such as communication with stakeholders, legislation, funding (and reference the funding guidance outputs of Challenge 1 above), business planning, marketing and publicity, etc; and
- A particular focus on maximising the benefits of partnership and integration.

Similar documents are available in other areas in the UK.³¹

For council and commercial DRT services, the document should set out the common requirements and preferred elements to include within the design and delivery of services across the SEStran area. These should aim to provide better alignment between services, and provide a pathway to long-term service integration across the sector.

³¹ Kent County Council, [setting up a community transport scheme in Kent: a step by step toolkit from assessing local need to operation](#), Accessed March 2020

6.9 Challenge 7: New developments are often hard to serve viably with conventional public transport.

The Challenge

- 6.9.1 New developments require suitable sustainable transport links to be provided. Often, the provision of a conventional fixed-route bus service to a site is possible, either through the delivery of a new service, or by diverting another service.
- 6.9.2 The increased demand for travel created by the new development can often provide the critical mass needed to make the operation of a transport service, such as a bus link, viable. In this instance, the service may be provided on a commercial basis. If this is not the case, support will often be required to facilitate a transport solutions that enables the development to go ahead, either through developer funding and/or local authority subsidy. The most common mechanism for developer contributions in Scotland is via a Section 75 Agreement, put in place as a condition to discharge planning obligations.

What does this mean for transport operators?

- 6.9.3 Developer funding is often provided for a limited time period, to allow passenger demand to build up as the development is occupied. Once this funding has ended, operators may not be willing to run the service if:
- A critical mass of ridership cannot be achieved to sustain the service. This is especially relevant in the context of overall falling bus ridership in Scotland; and/or

- A diversion made to serve the development impacts on the overall viability of the wider route, e.g. by increased journey times being unattractive for passengers further along the route, resulting in a loss of ridership.

What does this mean for transport users?

- 6.9.4 For transport users, there are the following impacts:
- Services can end up being removed or reduced unless local authorities step in to ensure their continuance, e.g. by subsidising all or part of the route;
 - If funding is limited, this can lead to infrequent and restrictive services that, although existing in a 'skeleton' form, do little to facilitate connectivity and provide viable sustainable and affordable travel options; and
 - Poor connectivity can lead to a range of issues for users, such as limiting access to employment, education, healthcare, and other essential services. This can also lead to social isolation.

What does this mean for those interested in delivering policy objectives?

- 6.9.5 For those interested in delivering policy objectives, this means there is the potential that:
- Funders may be locked into expensive subsidy packages in order to ensure services are maintained, or risk inequitable public transport access for constituents;
 - Poor public transport access is highly likely to lead to higher incidences of car ownership and use; and

- Multiple policy objectives will not be delivered in those areas, e.g. those related to connectivity, as described above for 'users', as well as promoting sustainable transport and delivering on reducing environmental impacts.

The Way Forward

- 6.9.6 While the potential for this situation should be considered at the planning application stage, and rigorously avoided (to the extent of denying planning permission), there are inevitably going to be circumstances where the situation described above occurs.
- 6.9.7 To reduce the risk of this happening, the public transport solution that is put in place for the new development must be as commercially viable as possible in the long-term. The importance of long term viability was outlined at all levels of policy in Section 2.
- 6.9.8 To be viable, the solution must be:
 - Designed to a scale that is suitable to the volume of users; and
 - As attractive as possible in order to capture demand, but within the context of balancing with overall cost effectiveness.
- 6.9.9 Addressing these factors is where much of DRT's strength lies, i.e. as a lower-cost, but more user-focused, alternative to a traditional fixed-route service. For example, an employment site where the pattern of transport is dictated by shift-working and/or flexible working hours, could make the travel demand

profile for the development unattractive for operators to provide a full-scale fixed-route bus service. A more demand-responsive service, however, could provide both users and operators with a viable operational solution.

- 6.9.10 Stakeholders on both the operator and funder sides of DRT highlighted greater opportunities related to DRT at new developments. Best practice guidelines, would however, need to be set out on what constitutes a good service, e.g. providing integrated through-ticketing, and a community-focused approach to delivery which covers as many potential travel demands (commuting, shopping, education, health/social care, etc.) as possible.
- 6.9.11 As well as traditional DRT services, advances in technology (availability of smartphones, development of online booking apps, powerful back office booking and scheduling systems, etc.) has resulted in the introduction of modern commercial DRT services in other areas of the UK. Whilst, as would be expected by an emerging delivery model, results have been mixed, and some services have ceased, the large bus operating groups in the UK remain very interested in applying technological solutions to the challenge of making public transport more flexible and attractive.
- 6.9.12 Examples of commercial services have been provided in Section 3.3, and a number of development areas across the UK are known to be currently investigating or taking forward such opportunities.
- 6.9.13 Examples of local authority funded DRT services are also outlined in Section 3.1.14 although at present these are largely focused on filling gaps in the public transport network for

existing developments. Opportunities related to better coverage and integration of these services have been highlighted by stakeholders, however.

Recommendations to Address the Challenge:

Immediate Action – Engagement should be undertaken with:

- the authorities in the UK where DRT is being used to provide a transport solution for new developments;
- Existing local DRT providers which may offer the potential for co-ordinated expansion of their role; and
- Local commercial public transport operators.

The aim of this engagement should be to understand the operational potential for DRT being provided at new developments, highlighting the relevant risks involved, considering the appetite of local and external operators for implementing DRT as a viable alternative to conventional public transport, and exploring how developer contributions can be used to fund these operations – be it through commercial DRT operations or enhanced SLAs for non-commercial schemes.

By investigating and then monitoring the use of DRT in these circumstances, best practices should be identified, and discussed with each local authority in the SEStran area.

This should be undertaken alongside the other recommendations in this section which aim to allow DRT to operate as a mainstream service.

Medium-Long Term Action – Once best practice guidelines have been established and relevant key stakeholders identified, work should be undertaken to consider a suitable trial. This will require planning officers to understand the potential for DRT to service new developments, and to propose its high level consideration within suitable development applications.

As noted above, Section 75 Agreement funding is a potential avenue for implementing DRT services, although funding from commercial operators or other sector leaders that are looking to demonstrate the potential for modern DRT services could also be possible avenues for funding (as has been the case in some commercial service trials in the UK). National funding streams may also raise opportunities, and funding streams should be monitored in relation to this.

For example, the Transport Scotland MaaS Investment fund provided both HITRANS and Tactran with funding (£445k and £550k respectively) to implement MaaS trials which include some of the key elements of modern DRT. For example, DRT's user-focussed approach to shared-mobility in an integrated transport context is usually seen as central to the MaaS concept.

6.10 Challenge 8: The economic and societal effects of the Coronavirus (COVID-19) pandemic are likely to have a profound impact on transport.

The Challenge

- 6.10.1 The COVID-19 pandemic resulted in significant restrictions on the movement of people and goods across the world, and in the UK from March 2020 onwards. At the time of writing, restrictions on movement, and the enforcement of social distancing is ongoing within the UK. Despite the situation being ongoing, it is already clear that significant and lasting economic and social impacts will result from this crisis and the responses required to manage this. Like all areas of life, transport is expected to be heavily affected by both the short-term impacts and long-term trends.
- 6.10.2 Below, some of the potential impacts are considered, and a case put forward for the need to monitor and respond to these should they arise.

What does this mean for transport?

- 6.10.3 In relation to overall travel:
- The pandemic is likely to have a significant negative impact on the general economy, reducing the number of people in work and, therefore, the amount of commuting and business trips. The likely closure of many businesses within the retail and leisure industries will reduce travel for these trip purposes and affect hubs of these types of activities, such as high streets, most notably;

- Travel habits are likely to be impacted:
 - The need to work from home during the pandemic may increase workers ability and propensity to work from home and hold 'virtual' meetings etc., again reducing commuting and business trips;
 - Online shopping may also become more common, as more people have used the service across the pandemic period;
 - There may be a lasting 'mistrust' of shared transport modes; and
 - More positively, there may be a shift towards active modes, at least in the short-term. Early evidence from cycling counters in Scotland suggest a large increase in cycling trips during the 'lockdown' period of the crisis response. Habits formed during this period may continue, although it is not yet understood if these relate to purely increased 'exercise trips' (as one of the permitted reasons to leave home during the lockdown), or a shift in commuting etc.

6.10.4 For operators of public transport and DRT services:

- The pandemic will have put significant financial strain on the large number operators. Since the start of the outbreak, local bus networks have reduced frequency of service and, in some instances, network coverage in the short-term. Restrictions on travel have greatly reduced ridership on services;
- Medium-term reductions in demand for travel, by the general population as a whole, and a potential residual

health-related 'distrust' of shared transport would reduce the long-term viability of services which do survive post-pandemic;

- Therefore, as the Government imposed 'lockdown' eases, there is likely to be a lag in the reintroduction of services. Operators may also look to rationalise the frequency and coverage of services provided, in line with new baseline of demand and other financial and operational pressures. Ensuring delivery of equitable services across geographical areas and for certain groups of the population may require significant Government intervention and support; and,
- Staff and volunteers lost across this period, e.g. due to leaving the industry following redundancy, could mean the longer-term loss of valuable sources of knowledge and experience in the transport sector.

What does this mean for transport users?

6.10.5 For users this means that:

- Travel behaviours will likely change, as noted above;
- The resulting potential loss or reduction in services would disbenefit those users still looking to use public transport and DRT services;
- As services become less attractive, this could lead to a self-reinforcing relationship of decay between service offering and falling demand;
- The loss or reduction in services could cause connectivity issues for those groups affected, along with those factors

linked with connectivity, such as access to employment and social isolation; and

- Some positive short-term trends, such as increased walking and cycling, could continue given the right conditions.

What does this mean for those interested in delivering policy objectives?

6.10.6 For those interested in delivering policy objectives, this means that:

- The loss of vital services would represent a significant risk to the delivery of policy objectives related to connectivity and would, for example, have a negative impact on transport's potential to reduce inequalities, help deliver inclusive economic growth, and improve health and wellbeing;
- The need to identify loss or reduction of services, and the impacts of these losses, will be key in prioritising where action is needed;
- New patterns of demand will need to be investigated, in order to determine a new baseline level, while considering the level of latent demand that is not being realised due to transport network changes;
- There will need to be a close working relationship with operators in order to manage any decline; and
- Any positive impacts should also be harnessed, such as encouraging active travel.

The Way Forward

- 6.10.7 As the main impacts of the pandemic are not fully understood, the way forward will be one of close monitoring and engagement, in order to rapidly establish courses of action which seek to minimise negative impacts and capitalise on positives.
- 6.10.8 Given the scale of the problems faced, it is unlikely that it will be possible to fully mitigate the negative impacts on the DRT or wider transport sectors and their users; however, understanding the problems faced, and proactively facing these will help the transport industry weather these better and recover more rapidly.
- 6.10.9 Although DRT will undoubtedly be negatively impacted, early examples of DRT being used to safeguard public transport services in the face of reduced demand are already being seen. Pembrokeshire Council in Wales have switched a number of services to a DRT footing, for example with those serving hospitals now taking bookings for pick-up and routes being redesigned in response to daily changes in demand. Similar scenes can be observed across the UK, and although these measures are currently in place as short term response to the pandemic, they show the potential applications for DRT in managing decline in demand while maintaining connectivity where needed.

Recommendations to Address the Challenge:

Immediate Action – Work should be undertaken across the SEStran area to:

- Understand the likely impacts of the pandemic, in the short, medium, and long term;
- Identify, assess and prioritise the options available for supporting the DRT and wider transport industries in response to negative impacts; and
- Establish an assessment and monitoring framework with which to verify impacts and help continually monitor and re-assess interventions over the longer term.

The above action should include the consideration of the role of DRT in replacing or supporting existing fixed route services which are no longer sustainable.

7. SUMMARY AND CONCLUSIONS

7.1.1 This report has set out the findings of the Strategic Study of DRT in the SEStran area, as produced by the following process:

- A review of policy, including information on the rollout of LEZs (Section 2);
- A review of the operational context of DRT including an overview of the existing services, and learnings from the operation of commercial DRT services (Section 3); and
- Stakeholder engagement with the operators and funders of DRT services, as well as potential customer representatives (Section 4).

7.1.2 The key findings of the review, analysis, and engagement were summarised in a SWOC analysis in Section 5.

7.1.3 The topics raised within this analysis were then explored further and presented within Section 6 as a series of 'Challenges' needing to be tackled if the DRT sector is to play a fuller role in public transport networks across the SEStran region.

7.1.4 For each of the eight Challenges, the report has outlined the main factors involved from the operator, user, and policy delivery perspectives, before then presenting recommendations on the way forward. These ways forward draw upon the opportunities raised throughout the analysis and stakeholder engagement as inspiration.

7.1.5 The Challenges tackled include:

- Challenge 1: The scale, delivery, and fragmentation of funding creates major issues for the operation and management of DRT services.
- Challenge 2: Vehicle fleets face additional pressure from environmental targets and associated legislative changes.
- Challenge 3: Despite a wealth of knowledge, expertise, and resources across operations, there is a lack of effective partnership working and integration of services.
- Challenge 4: There is inconsistent acceptance of the NEC on DRT services.
- Challenge 5: The value of DRT is not always recognised, partly due to the difficulty in quantifying this.
- Challenge 6: There is inequity in DRT service provision across the SEStran area. This is combined with opportunities being missed to better integrate DRT with the wider multimodal transport network.
- Challenge 7: New developments are often hard to serve viably with conventional public transport.
- Challenge 8: The economic and societal effects of the Coronavirus (COVID-19) pandemic are likely to have a profound impact on transport.

Recommendations

7.1.6 The Challenges set out above, have led to the following recommendations to be made, as further discussed throughout Section 6.

7.1.7 Immediate actions include:

- A targeted information and listening exercise should be undertaken in relation to the funding of DRT services in the SEStran area. This should highlight the funding streams available, capture information on barriers to accessing these and what support is needed, and identify where funding gaps lie. A national level review should also be considered;
- A detailed 'state of readiness' review should be undertaken of DRT services across the SEStran area, in relation to transitioning to low-emission fleets. This must include Council owned fleets to ensure compliance with Scottish Government targets. A national review would be of benefit, as zero emission policy moves forward, to share learnings on the transition;
- Engagement with stakeholders should be undertaken in order to present the case for derogations from legislation to allow continued operation of otherwise non-compliant vehicles from the not-for-profit DRT sector, within the Edinburgh LEZ zones. It is recommended that suitable conditions for such a derogation are explored, in relation to establishing a plan for operator compliance at a future date;
- To aid partnership and integration, information sharing on a SEStran-wide basis should be promoted through:
 - a knowledge sharing, networking, and partnership event; and
 - follow-on knowledge transfer schemes – ideas for which should be explored at the initial event. One

such scheme should include the trialling of mentoring and job-shadowing between key stakeholders in the sector, along with commercial operators in both DRT and wider public transport.

- The outcomes of the above partnership and integration activities should be outlined in a lessons learnt document, and should include insights gained on day-to-day operations and information on technological elements of services such as booking, scheduling, ticketing and payment systems, for example. This should outline potential areas of partnership and integration which have been highlighted;
- The appetite amongst local authorities and DRT providers for a consistent approach to discretionary free transport for NEC users across the SEStran area should be investigated;
- Engagement with local authorities and the Scottish Government should be undertaken, as appropriate, in order to develop a common framework for capturing key performance metrics on DRT services. These need to be tailored to demonstrating the costs and benefits of these types of services, and also link to policy objectives. This framework could also be used as part of the means by which funding is championed and prioritised for new services, improvements and expansions;
- Funders, such as local authorities, should look to outline clear SLA's which demonstrate links to the benefits sought. Appropriate funding, however, should be made available to recognise these benefits. Reimbursement for

NEC use, for example, could form part of SLAs which support policy objectives;

- The needs of those who face the most disadvantage should be placed at the centre of the design and evaluation of any new service. As such, all proposals to change the delivery of local transport should be subject to Equalities Impact Assessment. Consistency of approach should be sought across member authorities of the SEStran area;
- A review of the areas of service of DRT and public transport should be undertaken and significant gaps considered for improvements. This review should be top-down, i.e. identifying where true needs lie, and where gaps exist, opportunities for service enhancement should be explored. An agnostic view on delivery models should be used to bring together the strengths of different forms of DRT;
- The potential for appropriate use of DRT at new development sites should be explored, taking lessons from modern DRT operations, existing DRT services, and the wider public transport sector. The potential capture of developer contributions should be considered alongside wider funding streams. Best practice on the rollout of DRT at new developments should be identified and discussed with local authorities; and
- In relation to the COVID-19 pandemic, work should be undertaken across the SEStran area to: understand the likely impacts; identify, assess and prioritise the options available for supporting the DRT and wider transport industries; and establish an assessment and monitoring

framework with which to verify impacts and help continually monitor and re-assess interventions over the longer term.

7.1.8 The following short to medium term recommendations were made:

- Based on the outcomes of this study, and the national information and listening session, it should be considered what support should be provided to operators in accessing appropriate funding. This must include internal Council services, as the issue is not restricted to the 3rd Sector. Actions should pick up outcomes from the listening exercise but may include providing coordinated information resources on funding, administrative support for applications, and aid in preparing or reviewing business plans;
- A support package should be provided to operators based on the outcomes of the state of readiness review for the transition to low-emission vehicles. Support considered should include:
 - The establishment of a regularly updated information resource on requirements, fleets and funding;
 - Administrative support in identifying and accessing existing and forthcoming funding streams for low emission vehicles and associated supporting infrastructure;
 - Aid in preparing fleet renewal plans and outline business plans;

- Help for operators to explore partnering arrangements with key stakeholders, such as the NHS, where EV charger access is a barrier to fleet rollout; and
- The establishment of a fleet leasing scheme, through which low emission vehicles can be purchased by the public sector and leased to operators.

7.1.9 The following medium to long term recommendations were made:

- A more significant role is required at the national level to ensure a consistent approach to funding in the DRT sector. A strategic review of funding is required which should, at a minimum, address:
 - Moving away from funding these services as a 'nice to have' to become a vital component of the transport system and wider sectors;
 - Making it easier for both operators and local funders to access longer-term funding packages, which allow the ability to plan for the challenges faced by the sector;
 - Consider the role of start-up funding, to unlock opportunities and help provide more equitable coverage of services. Existing funding should also be maximised; and
 - Consider a structured approach to capturing development based funding to facilitate DRT service support, based on likely increases in demand.

- Further actions should be undertaken to improve partnerships and integration, in particular providing seamless services from the perspective of the user. This must also ensure that any changes to the way DRT is provided do not disbenefit those who need the services the most.

At a minimum the following elements should be considered within a strategic review:

- Implementing a standardised approach to recording and reporting information on the scale and performance of operations at a SEStran/national level;
- The opportunity for sharing booking, scheduling and dispatch systems;
- Developing partnerships with operators of commercial bus networks, e.g. for appropriate DRT services to provide coordinated feeder services at selected key transport corridors or hubs;
- Shared information, marketing, branding, and integrated ticketing where appropriate (e.g. commercial operators advertising complementary DRT services and providing through tickets);
- Establishing agreements related to ensuring the operational effectiveness of DRT services, such as permitted use of priority measures designed for bus operations to avoid congestion; and
- The potential for a brokerage system to make best use of underutilised vehicles. The scheme could make use of technology advances, but would

require significant effort to coordinate and agree partnerships and day-to-day working. The feasibility of such would therefore need to be considered.

- Engagement with local authorities and DRT operators should be undertaken in order to agree on whether legislative change should be sought for the inclusion of DRT services operating under Section 19 licenses within the NCTS;
- Best practice guidance documents on community transport and DRT services should be produced for the SEStran area. For community transport this would focus on identifying need for a scheme alongside setting one up and delivering the service. For council and commercial DRT services, the document should set out the common requirements and preferred elements to include within the design and delivery of services across the SEStran area. Each of these documents should seek to better align services, and provide a pathway to long-term service integration across the sector; and
- Opportunities should be identified for a trial of DRT provision at a new development site. This should only be taken forward where appropriate to do so, and should build on the best practice guidance established through earlier actions, including capturing appropriate funding streams.

Conclusions

- 7.1.10 Throughout the consultation phase of this study, stakeholders identified a recurring series of concerns: inadequate and inconsistent funding; external pressures which took little account of their impact on the DRT sector; and a lack of integration both within the sector, and between the sector and other transport providers. This is compounded by a low profile with decision-makers, meaning the very real value DRT provides to its users in terms of enhanced mobility is rarely recognised, and inadequately quantified. Yet DRT already plays a vital role in providing access to jobs, education, health care, and social/leisure activities, and can reduce societal issues such as isolation.
- 7.1.11 As this study shows, DRT should play a much wider role than it does currently, by harnessing emerging booking and scheduling technology; by partnership and integration between existing DRT operators and with the wider public transport network; and viewed as a realistic alternative to unsuitable fixed-route bus services. To achieve this, it will require changes in funding priorities, as well as greater support for the community transport providers who face particular challenges of finance and human resources.
- 7.1.12 As has been witnessed during the COVID-19 pandemic, there is a compelling case for DRT to play a much wider role in our public transport system, catering cost-effectively to smaller passenger volumes, irregular and less predictable travel patterns, serving key destinations, for user-groups who would otherwise find travel difficult or even impossible.

- 7.1.13 Considering the actions recommended above, it is clear that a region-wide approach would be beneficial in both setting out and delivering many of the priorities needed to ensure that the DRT sector has the integration, consistency, resources, and support to be a forward thinking and resilient part of the transport system. In doing so, the DRT sector would better benefit wide ranging areas of policy. National-level leadership was also highlighted for a number of actions, in particular on funding.
- 7.1.14 A region-wide approach to DRT would suggest that SEStran, and potentially other Regional Transport Partnerships (RTPs), could have a strong role to play in realising the potential of the sector going forward. However, the existing governance structure and funding of DRT and the relative roles of local authorities, the Scottish Government, and RTPs, limits the extent to which this is possible at present.
- 7.1.15 SEStran should, however, seek to influence the delivery of this study's recommendations, by ensuring that they are considered throughout the development of the forthcoming Regional Transport Strategy. Furthermore, by working in partnership with other RTPs, they should ensure that the needs of the DRT sector, at a national level, are fed into the Delivery Plan for the National Transport Strategy (NTS2).

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