



# **Shared Mobility integration**with MaaS

Shared Mobility Rocks – webinar series
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### South East of Scotland Transport Partnership (SEStran)

- Transport representative for 8 local authorities in South East Scotland
- Objective to make transport in region more sustainable
  - 1.5M Population
  - 72% live in urban areas
  - 14% in small towns
  - 14% in rural areas
  - 28% of Scotland's population
  - 10.5% of Scotland's land area





### **SEStran objective**

"A regional transport system that provides all citizens of South East Scotland with a genuine choice of transport which fulfils their needs and provides travel opportunities for work and leisure on a sustainable basis."

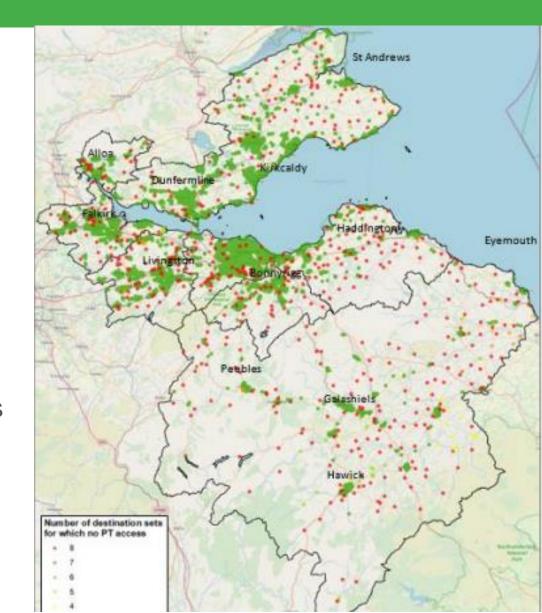


#### **Transport Challenges**

**Current trends and transport poverty across the region** 

March 2020 Demand Responsive Transport (DRT) study:

- Decade of falling patronage –100M less passenger journeys in Scotland
- Rural gaps in the PT network 5% with no public transport access to key destinations - 9% in Borders and East Lothian
- Increasing fares, longer journey time, discontinued rural services





#### The Mobility System beyond the private car

**Current gaps in the mobility system** 

Lack of physical integration of modes

 Lack of digital integration in terms of information and transactions

mobility intermediary transaction booking, payment, ticketing Information services pre-trip, en-route mobility services bus, tram, bike hire, taxi, hire car, coach, train infrastructure and vehicles policy and regulation

The mobility system beyond the private car [Rothnie, Lyons, Smith, Cassidy, 2020]



#### Impact of shared mobility and modal shift

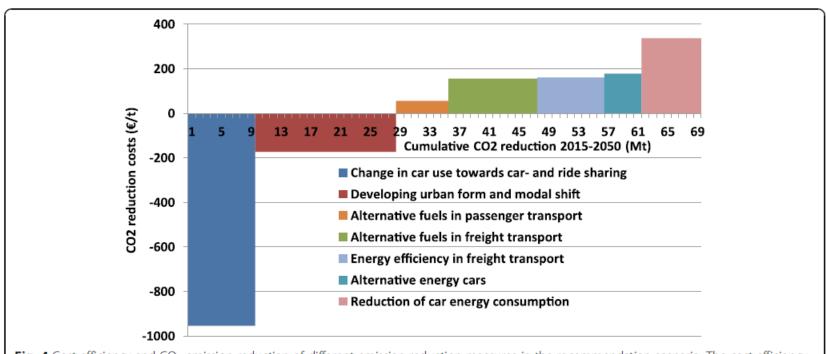


Fig. 4 Cost efficiency and  $CO_2$  emission reduction of different emission reduction measures in the recommendation scenario. The cost efficiency of seven  $CO_2$  emission reduction measures in terms of costs ( $\in$ ) per tonnes of reduced  $CO_2$  is presented in the y-axis. Negative values denote that the measure will generate net benefits as there are larger monetary benefits than costs. The cumulative  $CO_2$  reduction with each measure is presented in the x-axis. The figures are based on the measures implemented in 2015–2050 in the recommendation scenario





#### **SHARE-North**

# Shared mobility solutions for liveable and low-carbon North Sea Region

- Project partner since 2016
- Strategic Study on Mobility Hubs in Scotland
- Building on experience from partners in Bremen (Germany), Bergen (Norway) and Belgium & the Netherlands









## Musselburgh Journey Hub

E-bikes, EV car club, taxi rank, bus stops, transport info & signage















Musselburgh Journey Hub (SEStran, 2021)



#### Mobility-as-a-Service in South East of Scotland

#### **Transport Scotland MaaS Investment Fund**

- £2m competitive investment fund
- Public-private partnership preferred option
- SEStran submitted consortium bid for MaaS and DRT solution:
  - MaaS provider (Fuse Mobility)
  - DRT tech provider (Liftango)
  - East Lothian Council
  - Local bus operator (Prentice Coaches)
- Interreg Europe PriMaaS project







#### The proposed solution

**Integrating Mobility Hubs, MaaS and Demand Responsive Transport** 





#### **Demand Responsive Transport (DRT) tech**

#### **Enabling transport operators to become digital and dynamic**

- TfWales: Multi-operator on-demand services
- Demand Responsive Transport (DRT) vs fixed bus routes during Covid-19
- Back-end accessible to multiple operators





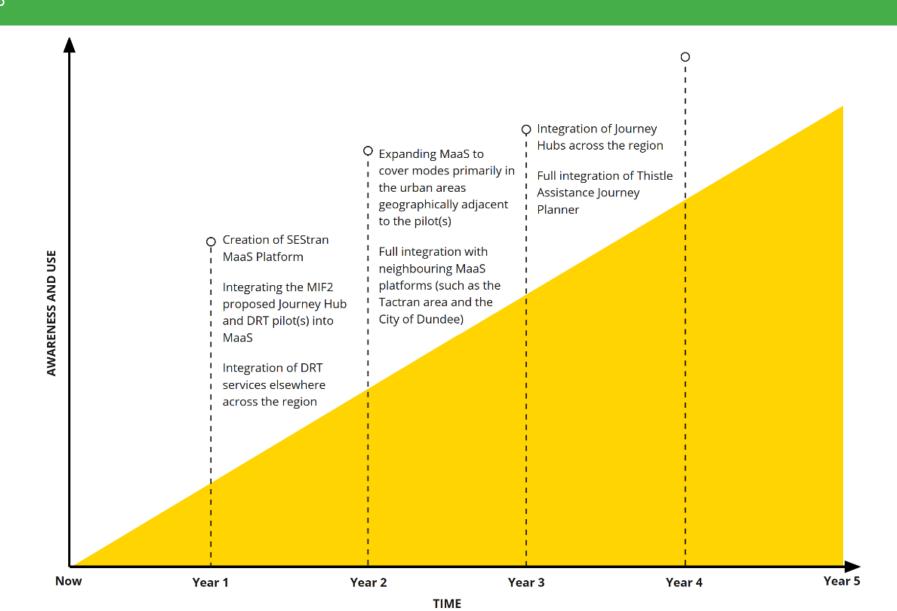


#### **Proposed DRT Zone**



- Flexible zone between Tranent and Humbie:
  - Increase public transport coverage in the area (orange zone)
  - Allow buses to respond to demand to carry a greater number of passengers.
- Shortening the fixed section of the route to Tranent –
   Haddington will free up a bus to operate flexibly for 3 2hour periods during the day.
- Potential for greatly increased patronage: current weekly passenger numbers could be carried in a single day.







#### Challenges ahead

#### **Optimising the MaaS and DRT solution**

- Business models
- Procurement approaches
- Governance models
- Sustainability and behaviour change
- MaaS bundles/ subscription models
- Policy development through new Regional Transport Strategy for the South East of Scotland





# Scottish regulatory framework around Open Data

- Access and availability Interoperability about local services

- Transport (Scotland) Act 2019:

  Bus Son (b) persons with all of a local service to provide prescribed information in relation to the service.

  Provide prescribed information in relation to local services that have the provide prescribed information in relation to local services. Bus Service Improvement Partnerships
- By regulation, operators may be required to provide service information (routes, stopping places, the information (routes, stopping places, timetables, fares and tickets, real-time info)



#### **Next Steps & timeline**

- Proposed project will launch early 2022
- PriMaaS study of best practice in MaaS governance and procurement
- DRT-only projects elsewhere in the region Borders; Fife; West Lothian?
- Open learning network







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# Thank you!

