

7. Edinburgh



7.1 Local context

7.1.1 City size and context

Edinburgh is one of the fastest growing cities in the U.K. and by 2040, will have a population of almost 600,000. Throughout its history, Edinburgh has been a city of innovation, heritage and change. The last 30 years have been no different.

With this growth come challenges. The way people travel, shop, socialize, work and play are changing, reflecting global trends and new technologies – and most importantly the vision for a better quality of life for all.

City growth will provide new jobs, homes and amenities but it must be carefully balanced to provide a high quality of life, access to services and opportunities for all residents, particularly communities living with inequality. Congestion and associated air pollution and health conditions, exacerbated by inactive lifestyles, are directly related to the kinds of places we create and inhabit.

KEY FIGURES

Population: 600 000 inhabitants

Area: 264 km²

Density: 1,830 inhab/km²

NUTS level: NUTS 3

TEN-T corridor(s): North Sea-Mediterranean

ULaaDS role: satellite city

Edinburgh has successful bus and tram networks. The bus network has been in place for over 100 years, the tramway existed prior but was removed. In 2014 the current line was opened and in 2019 it was agreed that this line should be extended with work commencing in 2020. Both bus and tram are publicly owned by City of Edinburgh Council form part of the Transport for Edinburgh Group, along with Edinburgh Cycle Hire Scheme which was launched in 2018 with much success. Edinburgh is served with two major train stations and an international airport.

7.1.2 Geography

NUTS level 3	NUTS level	Country order	Region order
Edinburgh, City of	3	28	1814

Edinburgh is part of the North Sea-Mediterranean TEN-T corridor. The North Sea-Mediterranean Corridor stretches from Edinburgh in the north, to the French ports of Marseille and Fos-sur-Mer in the south; passing through Ireland, England, the Low Countries and the French capital, before skirting the French/German boarder en-route south. As part of this Edinburgh and Glasgow are improving their rail connectivity.

7.1.3 Population

Edinburgh has a rather young population with around 60% aged below 44. This is also due to Edinburgh's University which counted 62,100 enrolled students in 2018.

Age group	Male	Female	All people	% of population	Scotland % of population
All people	256,303	268,627	524,930	100.0	100.0
0 to 15	40,588	38,479	79,067	15.1	16.9
16 to 24	31,106	33,858	64,964	12.4	10.5
25 to 44	89,355	91,124	180,479	34.4	26.1
45 to 64	60,343	60,722	121,065	23.1	27.5
65 to 74	20,364	22,518	42,882	8.2	10.6
75 and over	14,547	21,926	36,473	6.9	8.5

Source: Population Estimates Time Series Data

Figure 40 Edinburgh population by age and sex in 2019

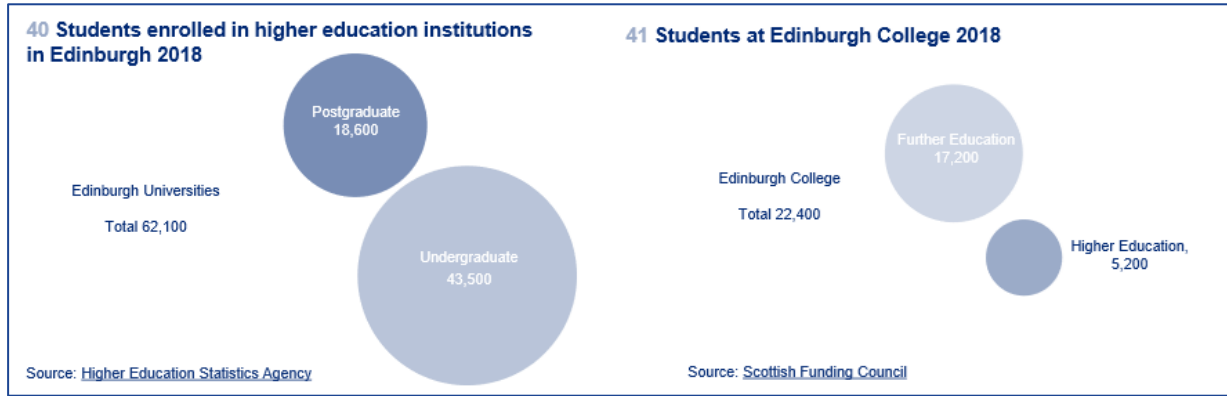


Figure 41 Students enrolled in higher education in Edinburgh in 2018

7.1.4 Area (km²)

Edinburgh has a population density of 1,830 people per square kilometre (4,730 per square mile) in the city proper. The larger urban population is estimated at 820,000. The total surface area in Edinburgh is 264 square kilometres (102 square miles).

Edinburgh remains a relatively compact city, where redundant inner-city land has been effectively ‘recycled’ for residential use and more people are living in and close to the city centre. In fact, 55% of the city’s population now live within 4 km. of the centre of Edinburgh, compared with just 48% in 1981.

Local changes in the concentration of population have important implications for service planning in the public, private and voluntary sectors. Large numbers of people living in close proximity may help to sustain both public and commercial services and provide a conducive setting for enterprise and growth. Although high densities may exert pressure on urban infrastructure, the potential economies of scale may also justify investment in innovative, sustainable solutions such as high-capacity public transport systems which would not be viable elsewhere.

In common with many other cities, population densities in Edinburgh are highest in inner suburban areas surrounding the commercial core of the city centre, notably in the Leith Walk, Fountainbridge and South Side areas. The location with the highest population density in Edinburgh is the Leith Walk area, with a peak of nearly 26,000 people residents within an 800 metre radius (equivalent to a density of 12,900 persons per sq.km.). This is a higher local population density than anywhere else in Scotland, including Glasgow.

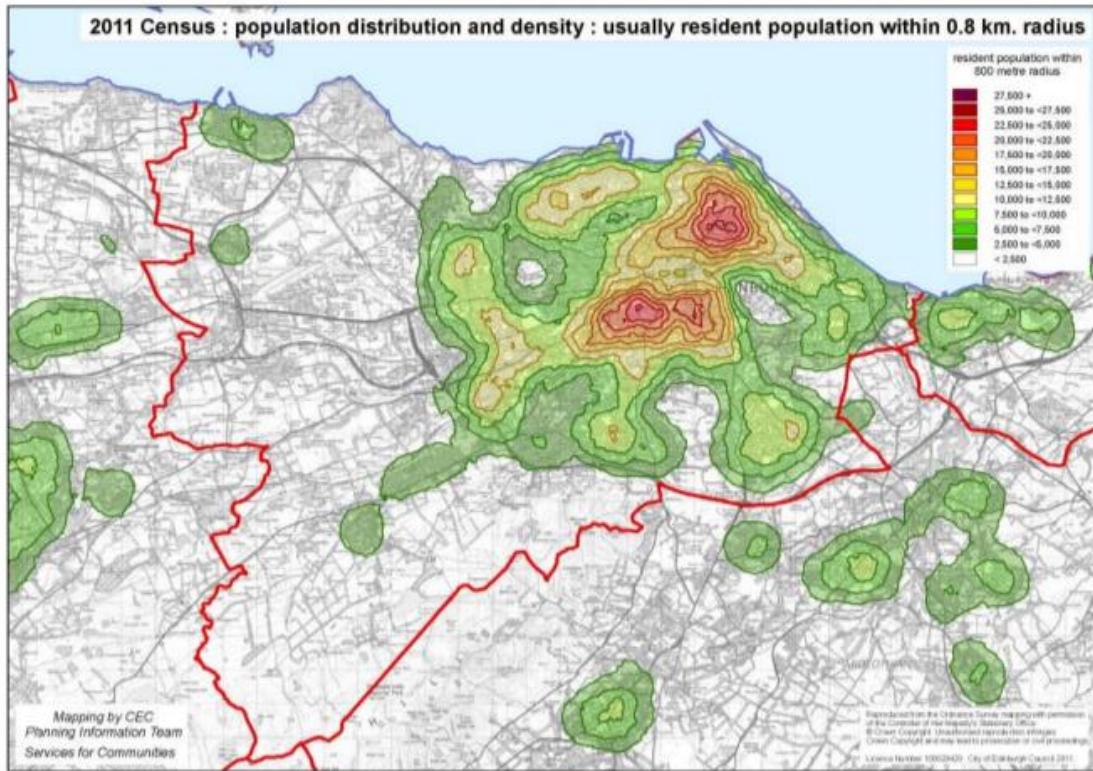


Figure 42 Edinburgh resident population within 0.08 km radius in 2011

Source: <https://www.edinburgh.gov.uk/downloads/file/24263/population-distribution-and-density>

7.1.5 Modal split

Edinburgh’s modal split shows the importance of public transportation as 72% of the population goes around in bus and active modes of transport with 52% declaring to go by foot. Yet, 41% of the modal split is still allocated to car use.

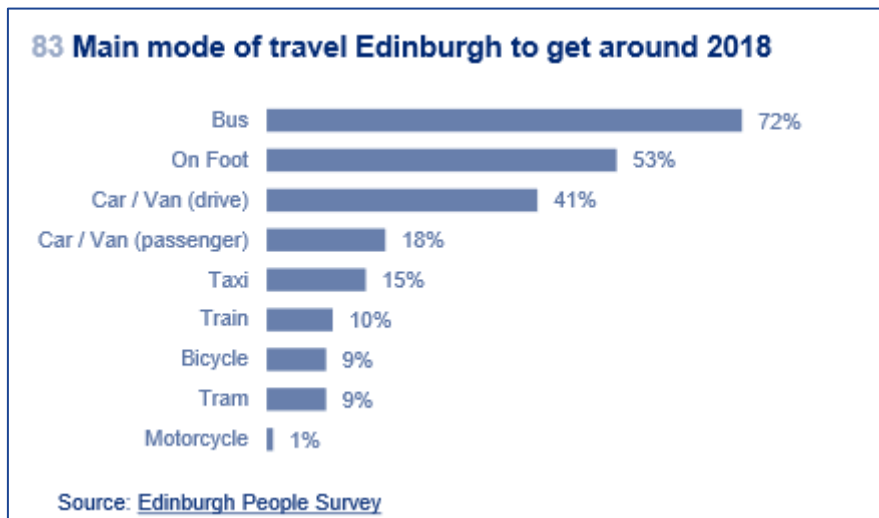


Figure 43 Edinburgh modal split in 2018

7.2 Sustainable Urban Logistics Strategies and Initiatives

7.2.1 Decentralised warehouse(s) / distribution centre(s) description

At present this is not available in Edinburgh but there are aspirations for this to be created within the City Mobility Plan.

7.2.2 Existing urban logistics solutions

Table 15: Existing urban logistics solutions in Edinburgh.

	Total	Description
Cargo bike schemes	2	Sustrans E - Cargo Bike Library – Fleet of 20 bikes loaned for free (Short and long term) to businesses organisations and community groups to foster cargo bike use in Edinburgh. Trams to Newhaven – the use of cargo bike (4 trikes and 5 trailers) and logistics hubs to support and maintain businesses trading while road access is limited.
Electric cargo bikes	Under 200	Including Sustrans Cargo Bike Library
Mobility Hubs	0	Aspiration to set up mobility hubs within City Mobility Plan
Bicycle couriers	Unknown	Private courier services available within the city
E-vans	Unknown	Used by City of Edinburgh Council, Lothian Buses and some of the higher education institutions.
Smart Lockers	Unknown	Smart lockers available through Amazon
Others	Unknown	UberEATS, Just Eat and Deliveroo (food delivery) Farrou Deliveries - Cargo bike delivery service Edinburgh Courier Network - Cargo bike delivery service Zedify - Cargo bike delivery service City Couriers - Cycle and electric van

Source: Edinburgh

7.2.3 Supporting Local Policies for Sustainable Urban Logistics

Edinburgh is part of a European network of cities dedicated to cleaner, better transport in Europe through the Sustainable Urban Mobility Plan programme.

City of Edinburgh Council has recently created the City Mobility Plan which has replaced the previous local transport strategy. The City Mobility Plan is a 10-year strategy covering four strategic priorities:

- Enhancing public transport
- People friendly streets
- Planning new developments
- Managing demand Delivery

As additional strategic priority relevant for the ULaaDS project, we can also mention the objective (28) to rationalise, coordinate and integrate freight and goods vehicles and deliveries in the city, including edge of town goods consolidation centres, micro distribution centres in the city, click and collect hubs in communities to support walking and cycling deliveries and access restrictions and emissions standards to control vehicle types.¹⁸

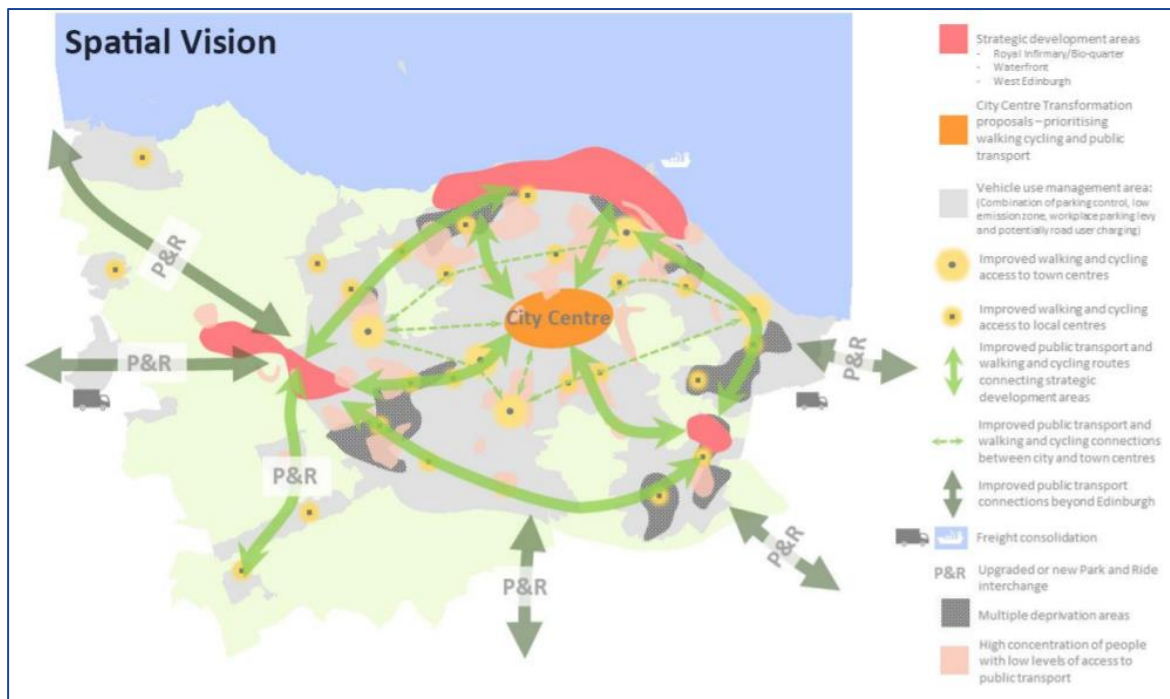


Figure 44 Edinburgh spatial vision of the Mobility Plan

City Mobility Plan Strategic Environmental Assessment also interestingly points out consideration for landscape and cultural heritage which demonstrate the comprehensive way of analysing potential impacts of logistics hubs:

¹⁸ Edinburgh City Mobility Plan, 2020.

<https://democracy.edinburgh.gov.uk/documents/s12642/City%20Mobility%20Plan.pdf>

- ‘the location of any new freight consolidation centres, regional park and rides, logistics zones or hubs needs to be sympathetic to landscape considerations’
- ‘Dense developments could potentially affect townscape if taller buildings are part of the development. Heritage assets could also be affected by the construction of new freight consolidation centres, logistics zones or hubs and expansion of both bus and tram routes.’

Besides that, Edinburgh counts a series of policies that support the deployment of sustainable urban logistics:

Edinburgh Low Emission Zones (LEZ)

Edinburgh has made good progress in reducing levels of air pollution. There are still streets where nitrogen dioxide is at levels that exceed the legal standards, so more action needs to be taken. Road traffic is the main source of nitrogen dioxide. Only the cleanest vehicles can travel in a LEZ. Penalty charges will apply to vehicles entering a LEZ that do not meet these standards. The Scottish Government is working with Edinburgh, Glasgow, Dundee, Aberdeen to put LEZs in place.¹⁹

Edinburgh’s Low Emission Zone Proposal

The Scottish Environmental Protection Agency (SEPA) produced a report on the air quality evidence for Edinburgh (PDF).²⁰ Working with the Scottish Environment Protection Agency (SEPA) and Transport Scotland, we developed LEZ proposals for Edinburgh. We sought views on these proposals and presented [feedback to the Transport and Environment Committee \(PDF\)](#) in October 2019. This feedback, alongside further technical work and information from groups who may be affected by the changes are being considered in order to finalise a Low emission zone for Edinburgh.

7.2.4 SUMP and SULP at a glance

Table 16: Edinburgh SUMP and SULP at a glance

City	EDINBURGH
Type of strategy	City Mobility Plan (draft for consultation 2020, in line with SUMP)
Goals	<ul style="list-style-type: none"> • Be carbon neutral by 2030 • People objectives to improve health, wellbeing, equality and inclusion: improve travel choices for all travelling into, out of and across the city; improve the safety for all travelling within the city; increase the proportion of trips people make by healthy and sustainable travel modes. • Place objectives to protect and enhance our environment and respond to climate change: reduce emissions from road transport; reduce the need to travel and distances travelled; reduce vehicular dominance and improve the quality of our streets.

¹⁹ Scottish LEZs plans including vehicle emission standards. <https://www.lowemissionzones.scot/>

²⁰ Report on the air quality evidence for Edinburgh, Scottish Environmental Protection Agency (SEPA), 2018. <https://www.edinburgh.gov.uk/downloads/file/27886/cleaner-air-for-scotland-national-modelling-framework>

	<ul style="list-style-type: none"> • Movement objectives to support inclusive and sustainable economic growth: maximise the efficiency of our streets to better move people and goods
Transport measures (with potential impacts on logistics) Authority level specified in brackets (L = local, R = regional, N = national)	<ul style="list-style-type: none"> • Create a simplified and integrated payment system to cover multiple journeys across the public transport operators (including city car club) and ensure smart, flexible tickets can be purchased via contactless payment (L) • Expand the tram/mass rapid transport network to the north and south of the city as well as to Newhaven, and explore the potential to develop or extend mass rapid transit routes into Fife, West, Mid and East Lothian (L, R) • Develop public transport interchanges at key locations in the city to enable better connections between services and modes. Support the integration of taxi ranks with interchanges (L) • Invest in technology to ease traffic congestion and improve safety (L, R, N) • Invest in electric vehicle charging infrastructure (a combination of rapid, fast and slow on-street charging points by 2023) (L, R, N) • Expand the park and ride network (L, R) • Manage the amount of general traffic in the city centre and town centres (largely car free city centre by 2030) (L) • Charge a levy on businesses in the city providing free parking spaces for employees (following consultation) (L) • Restrict access for the most polluting vehicles to the city centre and the wider city – implement low emission zone by 2022 (L) • Improve the quality of routes and spaces for active travel. Design fully accessible paths and route for all abilities. Further develop bike hire offer and continue integrating the cycle hire scheme with other modes of public transport (L, R, N)
Logistics measures Authority level specified in brackets (L = local, R = regional, N = national)	<ul style="list-style-type: none"> • Seek to rationalise, coordinate and integrate freight and goods vehicles and deliveries in the city, including edge of town goods consolidation centres, micro distribution centres in the city, click and collect hubs in communities to support walking and cycling deliveries and access restrictions and emissions standards to control vehicle types. (L, R) <ul style="list-style-type: none"> ○ Invest in freight depots around (city logistics hubs by 2025) and within the city (neighbourhood delivery hubs by 2030) ○ Support delivery within the city by smaller, cleaner vehicles by 2030 ○ Introduce and enforce controls to manage access for large delivery vehicles by size, weight and time • Apply and enforce parking, waiting and loading restrictions whilst allowing effective access for businesses and people with mobility difficulties (L)

7.2.5 Regional or National Frameworks/ Partnerships

The South East of Scotland Transport Partnership (SEStran) is the statutory Regional Transport Partnership for the South East of Scotland. SEStran encompasses eight local authorities: City of Edinburgh, Clackmannanshire, East Lothian, Falkirk, Fife, Midlothian, Scottish Borders and West Lothian. Within the partnership area there is a huge diversity of transportation issues, from urban congestion to rural public transport and from ferry ports to airports. SEStran aims to address these issues and work towards a more sustainable and efficient transport network. SEStran is involved in PriMaaS, an EU project that aims to promote Mobility as a Service (MaaS) through policy development. The South East of Scotland Transport Partnership is also launching a regional e-bike

program; GO e-Bike with the aim of increasing usage and awareness of power-assisted cycling across the South East of Scotland and beyond.

7.3 Relevant Projects

Edinburgh's **City Centre Transformation (ECCT)**²¹ will contribute to the wider aim of this Council for Edinburgh to become carbon neutral by 2030. The Council's approach to transport and mobility will be at the heart of delivering this challenging target. The city must be easier and more attractive for those who can incorporate healthy and pollution free walking and cycling into their daily routine. Alongside the proposed Low Emission Zone (LEZ), ECCT must help to tackle some of the highest concentrations of NO₂ in Edinburgh, improving air quality and increasing the associated environmental and health benefits. Crucially, it will also ensure that the city is well placed to respond to the future challenges of demographic and other growth indicators.

Through the South East of Scotland Transport Partnership (SEStran), Edinburgh is also part of the **Surflogh Project**. The focus of the project is the optimization of the interaction between the hub and the urban logistics system, promoting both efficient and sustainable logistics in urban areas in smaller and medium-sized cities, city regions and networks. SEStran wants to make progress in developing and promoting more sustainable freight transport logistics through the development of logistics hubs to facilitate the introduction of more sustainable urban modes. SEStran are leading on the work package Mapping of Freight Flows. Together with Napier Transport Research Institute (TRI) they will develop business models for urban freight hubs.

Additionally, to the above-mentioned projects, Edinburgh also launched a series of initiatives and projects which impact on sustainable urban logistics.

Edinburgh Cycle Hire Scheme was launched in 2018 and in their second-year recorded growth of 119% and over 221,000 trips. There are just under 100 hire points across the city centre and outlying areas and the scheme is comprised of a mixture of traditional bikes and e-bikes to encourage users of all abilities to hire a bike instead of making shorter journeys by car. In year 2 new users to Edinburgh Cycle Hire totalled more than 34,000 bringing the overall to 57,000 customers cycling in and around the city. In 2020, the popular scheme was extended into South Queensferry with start/end journeys totally nearly 4,500 in the first six months and 1,500 new customers joining the scheme. Proving that cycle hire can function as a public transport service, as well as improving inner city connectivity.

Edinburgh was the first city in Scotland to implement a **20mph network**, which aims to create calmer, more welcoming and people-friendly streets, encouraging healthy, active travel. It saw a 20mph speed limit implemented across residential roads, shopping streets and the city centre, with many other cities in the UK and Europe following suit. Calmer speeds help to reduce the risk and severity of collisions, encourage people to walk and cycle and to spend more time in an area. The reduced

²¹ Edinburgh's City Centre Transformation Plan, 2019.
<https://democracy.edinburgh.gov.uk/documents/s6001/Item%207.1%20-%20ECCT%20Final%20Strategy%20with%20all%20appendices.pdf>

speed also makes it easier to crossroads, particularly for children, older people and those with mobility issues.

Edinburgh has committed a continued drive toward **segregated cycle lanes**. When the city took the decision to extend the tramline there was a consultation to ensure suitable provision for cycling within the construction designs. Throughout construction the project team has been working with local cycle interest groups to develop alternative routes to keep cyclists moving around the area safely and conveniently. As a result of this further funding has been secured from the **Sustrans Community Links programme** to help progress design work to improve cycling options from the foot of Leith Walk. We will continue to work closely with the cycling community and active travel partners in the coming months to develop a solution that provides safe and convenient onward cycling options for the north of the city.

The **City Centre West to East Link project** will develop a new cycle route linking the Roseburn path to Leith Walk via the city centre. The route will form part of the National Cycle Network (NCN) route 1. The route will be part of Edinburgh's quiet routes network. The aim is to provide a cycle route which is designed for less confident cyclists and those who may be concerned about cycling in busy traffic. The route will be separate from traffic and will link planned cycle facilities on Leith Walk with the off-road path network at Roseburn.

In response to the COVID pandemic the City of Edinburgh Council has created temporary segregated cycle lanes in the routes towards the city's two hospitals in order that key NHS workers can travel by bike to their place of work. There are also temporary segregated cycle lanes within the city centre to support travel flow and improve cycle safety.

During the COVID pandemic City of Edinburgh Council was also granted £5M of funding from Sustrans to create more spaces for people to travel safely on the streets until the restrictions have been lifted. These are changes to pavements, pathways and roads to allow for more space for exercise and for key workers to travel safely.²²

7.4 Success Factors and Enabling Conditions

- Working with organisations with similar aspirations e.g. Sustrans, SEStran
- Ensuring that when working with contractors these aspirations are communicated at an early stage and bought into
- Consultation with the public and regular updated communications to reassure of any concerns and promote progress
- Understanding other ongoing successful initiatives:
 - Sustrans Cargo Bike Library – established in 2017 enabling organisations and business to trial the use of cargo bike logistics in their business model. In the

²² Edinburgh Space for People – COVID19 Response measures, 2020-2021.
<https://www.edinburgh.gov.uk/spaces-people-1>

2018-2019 report, 75% of users were either buying or adopting cargo bikes within their business model with 1 in 5 buying. (monitoring and evaluation report, Sustrans Scotland)

7.5 Challenges and Barriers

Behavioural Change – people will change and adapt their behaviour to their surroundings. To encourage a change in behaviour the city must make their changes ‘doable’ to the public, a better option than what is currently available and create an awareness of the change.

Political Appetite – A change in leadership at both a local and government level can impact the priorities of a city and policy going forward.