

OFFICIAL

Final for submission to SEA Gateway

SEA Scoping - Cover Note

Part 1	
To:	SEA.gateway@scotland.gsi.gov.uk SEA Gateway, Scottish Government, Victoria Quay, Edinburgh, EH6 6QQ
Part 2	
An SEA Scoping Report is attached for the plan, programme or strategy (PPS) entitled:	Glasgow Transport Strategy
The responsible authority is:	Glasgow City Council
Part 3:	
The PPS falls under the scope of Section 5(3) of the Act and requires an SEA under the Environmental Assessment (Scotland) Act 2005	X
Part 4:	
Contact name:	Deborah Paton
Contact job title:	Connecting Plan Group Manager
Contact details:	Deborah.Paton@glasgow.gov.uk Glasgow City Council Neighbourhoods and Sustainability 231 George Street Glasgow G1 1RX 0141 287 6862
Part 5:	
Signature (electronic is acceptable)	Deborah Paton
Date:	1 st March 2021

OFFICIAL

OFFICIAL

Final for submission to SEA Gateway

Glasgow Transport Strategy (2021- 2030/1)

Strategic Environmental Assessment Scoping Report

March 2021

OFFICIAL

Contents

1	Introduction	1
1.1	Background	1
1.2	Purpose of Scoping	1
1.3	Key Facts about Glasgow’s Local Transport Strategy	2
1.4	Geographical coverage.....	3
1.5	Overview and Purpose of the Glasgow Transport Strategy.....	3
1.6	Draft Objectives and Outcomes of the GTS	4
2	Context of the Glasgow Transport Strategy	5
2.1	Relationship with Other Plans, Policies and Strategies (PPS).....	5
2.2	Baseline Environmental Data and Environmental Issues	6
2.3	Environmental Issues	7
2.4	Glasgow’s Environment in the Absence of the GTS	22
3	Scope and Level of Detail Proposed for Strategic Environmental Assessment	23
3.1	Identification of Alternatives	23
3.2	Scoping In/Out of SEA issues.....	23
3.3	Methodology for Assessing Environmental Effects	25
4	Next Steps.....	28
4.1	Proposed Consultation and Engagement Timescales and Methods.....	28
4.2	Anticipated Milestones	28
	APPENDIX 1	30
	Other Relevant Plans, Policies and Strategies	30

1 Introduction

1.1 Background

1.1.1 Strategic Environmental Assessment (SEA) is the process of assessing the likely impacts of Plans, Policies and Strategies (PPS) on the environment and the means of seeking to minimise or mitigate those effects if they are likely to be significant.

1.1.2 The SEA process consists of 5 key stages:

1. Screening
2. Scoping
3. Environmental Report
4. Adoption
5. Monitoring

1.1.3 Glasgow City Council is developing a new local transport strategy for the City – entitled the Glasgow Transport Strategy – to update the existing Local Transport Strategy (2007-09) and provide an overarching framework for transport decision making and investment in the City over the next 10 years.

1.2 Purpose of Scoping

1.2.1 The purpose of this SEA Scoping Report is to set out sufficient information on Glasgow's new transport strategy to enable the Consultation Authorities to form a view on the scope and level of detail that will be appropriate for the associated Environmental Report and on the type, level and period of consultation that is proposed to be undertaken.

1.2.2 This Scoping Report has been prepared in accordance with the Environmental Assessment (Scotland) Act 2005.

1.2.3 The scoping process has helped to identify:

- broad themes being proposed in the new Glasgow Transport Strategy;
- the geographical area of the Plan coverage;
- existing transport-related environmental conditions and constraints in the City;
- the methods that will be used to analyse the environmental impact of Glasgow's new Transport Strategy and associated policies; and
- who will be consulted during the environmental assessment and at what stage.

1.2.4 A copy of all SEA documentation, including this Scoping Report, will be sent to the Scottish Government, the SEA Gateway and any other key agencies with relevant interests.

1.2.5 An SEA Screening assessment for the Glasgow Transport Strategy has previously been submitted to the SEA Gateway, and is published at <https://www.strategiceenvironmentalassessment.gov.scot/Details.aspx?id=SEA\01568&sid=2>. The Post-Adoption statement is published at <https://www.strategiceenvironmentalassessment.gov.scot/Details.aspx?id=SEA\00063&sid=2>. This material is also published at <https://www.glasgow.gov.uk/transportstrategy>.

OFFICIAL

- 1.2.6 The SEA process is being applied to the Glasgow Transport Strategy as the overarching transport strategy for the city, from which individual projects and sub-strategies may develop which will be subject to more detailed environmental assessment as and when required.

1.3 Key Facts about Glasgow's Local Transport Strategy

- 1.3.1 The key facts relating to Glasgow's new Local Transport Strategy, hereafter referred to as the **Glasgow Transport Strategy (GTS)** are set out below:

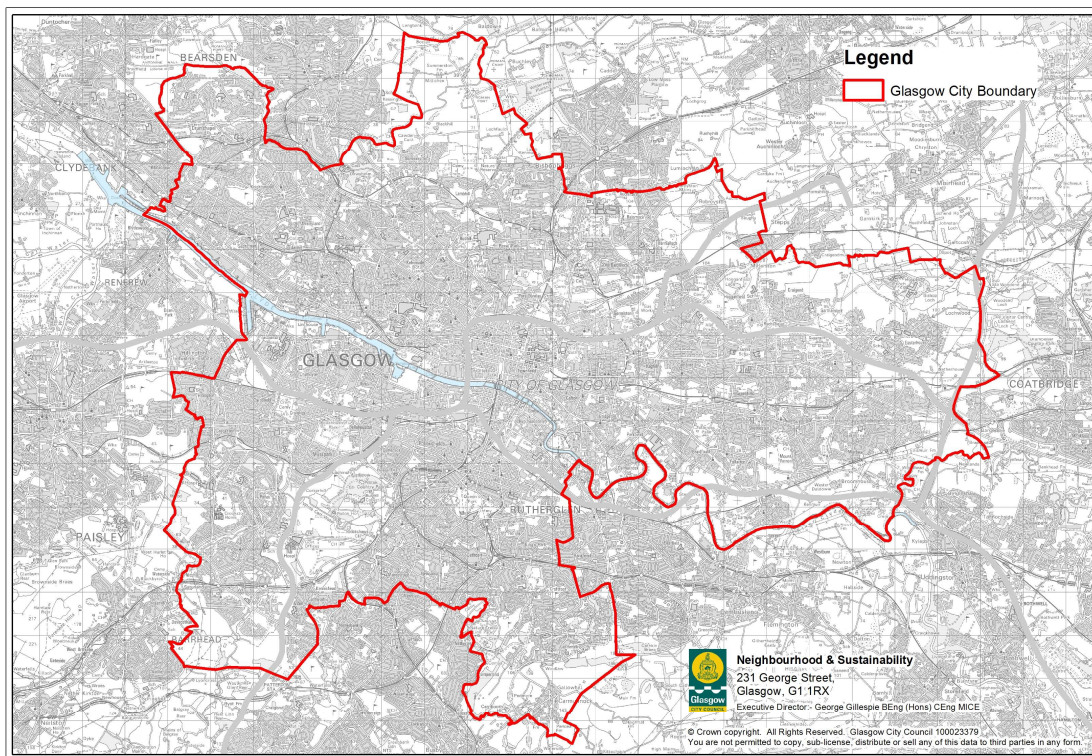
Responsible Authority:	Glasgow City Council
Title of the Plan:	Glasgow Transport Strategy
What prompted the Plan?	Transport Scotland guidance recommends local authorities prepare a Local Transport Strategy (LTS) every 3 years, plus certain measures enshrined in legislation e.g. workplace parking levy also have to be justified within an LTS. Glasgow City Council's LTS is out of date (2007-09) and requires updating in this context. It is also important for the city to respond to the report from the Connectivity Commission for Glasgow, which made a number of recommendations. Further to this the city declared a Climate Emergency and outlined 61 actions to achieve carbon neutrality by 2030, some of which relate to transport.
Plan subject:	Transport
Period covered by the Plan:	2021 – 2030/31
Frequency of updates:	To be confirmed – most likely a review & refresh every 5 years.
Plan Coverage:	Glasgow City Council local authority area
Plan Purpose and/or Objectives:	Glasgow Transport Strategy will form the overarching framework for transport decision-making and investment in the city, whilst more detailed plans will sit underneath – a new Liveable Neighbourhoods Plan, a City Centre Transformation Plan to update the City Centre Transport Strategy, and a new Active Travel Strategy to build on the existing Strategic Plan for Cycling.
Contact Point:	Deborah Paton Neighbourhoods & Sustainability Glasgow City Council 231 George Street G1 1RX Telephone: 0141 287 6862 Email: deborah.paton@glasgow.gov.uk

OFFICIAL

1.4 Geographical coverage

1.4.1 The GTS covers the City of Glasgow as per the local authority boundary, though the analysis of issues will be cognisant of the city region. The geographical area is shown in the following map:

Figure 1 GTS (the Plan) boundary



1.5 Overview and Purpose of the Glasgow Transport Strategy

1.5.1 Glasgow City Council is working on a new ten-year transport strategy for the City in 2020/21, which will update and replace the existing Local Transport Strategy for the City (2007-09). The GTS will be city-wide and will form the overarching framework for transport decision-making and investment in the city for the next 10 years, sitting alongside the Local Development Plan. Underneath the overarching GTS (and Development Plan) will be three further transport-related plans, created simultaneously, to tackle specific areas and topics:

- **A Liveable Neighbourhoods Plan** – this will respond to the need to put people and place at the heart of how people experience the City, and focus on developing a series of Liveable Neighbourhood plans within an overarching policy framework;
- **A City Centre (Transport) Transformation Plan** – this will aim to provide a coherent framework for all transport related policies and projects in the city centre, with a primary goal of putting people and place at the heart of the city and reducing the impact of vehicular traffic, and will update the existing City Centre Transport Strategy; and
- **An Active Travel Strategy** – this will update the existing Strategic Plan for Cycling and cover walking, wheeling and cycling policies and projects in the city.

OFFICIAL

- 1.5.2 These inter-related, complementary plans will significantly shape our future transport network, our active travel choices, the liveability of our neighbourhoods and the cultural vibrancy, sustainability and inclusive economic growth of our city centre.
- 1.5.3 The development of the overarching GTS is broadly following a STAG-based (Scottish Transport Appraisal Guidance) approach by:
- using an evidence-led approach throughout the development of the Plan;
 - identifying problems and gaining consensus on which of these problems the Plan should tackle, and which opportunities can be built upon;
 - developing clear and relevant objectives in order that transport decisions and investments are made to directly tackle these problems; and
 - identifying alternative solutions to tackling problems and meeting objectives and fully appraising these solutions against common criteria to ensure the best ones are selected.
- 1.5.4 The key components of the GTS will be transport policy and a framework for transport projects for the City, across all modes, and for people and for goods.
- 1.5.5 Work on the GTS to date includes:
- Assembly of evidence of problems to tackle and opportunities to build on, as well as formulation of draft outcomes and a set of draft policy focus statements, all informed by data analysis, policy review and early stakeholder engagement – this is all presented in the published Draft Case for Change report for the GTS, at www.glasgow.gov.uk/transportstrategy.
 - Equality Impact Assessment screening, which informed the Public Conversation (see next) and will be used to assess the impacts of the GTS in the next stages of the work. Available at www.glasgow.gov.uk/transportstrategy.
 - A major public and stakeholder engagement exercise on the elements above in September and October 2020 for six weeks, referred to as the Public Conversation on Glasgow's Transport Future. Findings are published at www.glasgow.gov.uk/connectingcommunities. The above Draft Case for Change report is now being updated and finalised as informed by the Public Conversation, and it is hoped it will be re-published in Spring 2021.

1.6 Draft Objectives and Outcomes of the GTS

- 1.6.1 At this stage the content of the GTS is still being established. Early engagement through workshops and discussions, as well as policy reviews, have resulted in four draft overarching outcomes being identified, as shown in Figure 1 below. These were subject to consultation in the city's Public Conversation on Glasgow's Transport Future in September and October 2020 and received broad support.

Figure 2 Proposed outcomes for the Glasgow Transport Strategy

1. Transport contributes to a successful and just transition to a carbon neutral, clean and sustainable city
2. Transport has a positive role to play in tackling poverty, improving health and reducing inequalities
3. Transport responds and contributes to continued and inclusive economic success and a dynamic, world class city
4. Places are created where we can all thrive, regardless of mobility or income, through liveable neighbourhoods and an inclusive City Centre

OFFICIAL

1.6.2 A set of sub-objectives has been initially proposed to support these outcomes, presented in the Council's published Draft Case for Change report which supported the Public Conversation. These 'transport planning objectives' are being refined following input from the Public Conversation and will be finalised in Spring 2021. As presented in the Draft Case for Change, these draft objectives were:

- to support low carbon/ zero carbon ways of movement across the city, for people and for goods;
- to promote clean air through transport investment and decision-making;
- to support affordable, sustainable and inclusive transport for all, with a particular focus on parts of the city who suffer most from unequal access to transport;
- to support physical activity and health improvement through travel;
- to promote an integrated, affordable transport system within the city-region to support employment opportunities and inclusive economic success;
- to contribute to a resilient transport system that can adapt sustainably in the future;
- to deliver the sustainable travel hierarchy in the city centre and neighbourhoods in the city; and
- to support accessible, safe and high quality public spaces in the city centre and neighbourhoods in the city.

1.6.3 Each of these outcomes will result in a series of proposed policies, which will make up the core of the GTS. These in turn will result in specific projects and initiatives and the formation of an overarching Delivery Plan.

1.6.4 To support discussion and encourage feedback during the Connecting Communities public engagement in September and October, an initial set of policy foci was set out to show what delivering on the proposed four outcomes might look like. These draft policy focus areas are listed in the published Public Conversation document at www.glasgow.gov.uk/connectingcommunities, and received broad support. These will continue to be reviewed and refined and added to as the GTS develops.

2 Context of the Glasgow Transport Strategy

2.1 Relationship with Other Plans, Policies and Strategies (PPS)

2.1.1 A specific requirement of the SEA legislation is to identify at the scoping report stage, the relationship of the Plan or Strategy with other PPS, including international, national, regional and local plans, policies and strategies. A list of the plans, policies and strategies that will be taken into account in relation to Glasgow's new Transport Strategy is provided in Appendix 1. Any further PPS can be incorporated into the Environmental Report once comments are received back from the Consultation Authorities.

2.1.2 The new GTS will align with the Vision, Priorities and Outcomes set out in the new Scottish National Transport Strategy, which was published in February 2020. This document is now the basis upon which the Scottish Government takes decisions and evaluates the success of Scotland's transport policies going forward.

2.1.3 It should be noted that at this time there are a number of transport appraisal processes ongoing in the City Region with the updating of the Regional Transport Strategy (SPT), and the Strategic Transport Projects Review 2 process (Transport Scotland), which are also subject to SEA. There are also specific workstreams

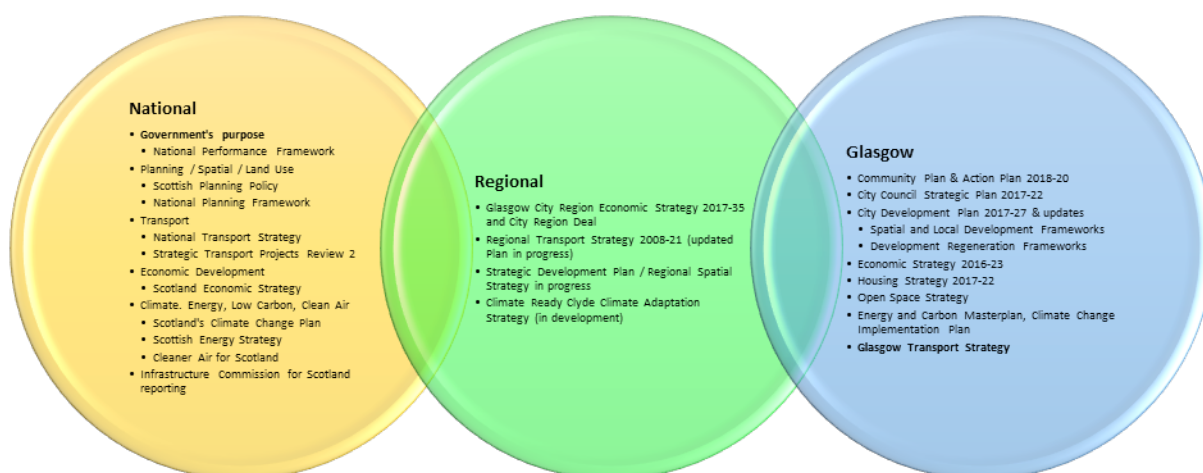
ongoing on specific transport projects e.g. the Glasgow Metro feasibility workstream. There is also substantial ongoing work on recovery from Covid-19. GCC is working with these processes to ensure knowledge sharing and consistency in relation to the GTS.

2.1.4 The GTS will also link to and be cognisant of a number of other key plans and policies within Glasgow, including:

- The existing City Development Plan and the fresh work currently underway to prepare its next iteration.
- Other plans and policies on transport, e.g. EV Policy, Strategic Plan for Cycling and new active travel strategy.
- Economic development strategies and the Community Planning focus on inclusive growth.
- Carbon management and sustainable energy growth, and Glasgow City Council's response to the climate and ecological emergencies, and related 2030 carbon neutral goal.

2.1.5 Overall, it should be noted the GTS is firmly embedded in a connected hierarchy and suite of plans and will help to deliver regional and national objectives and outcomes. The diagram below gives an overview of some of the most relevant plans (noting there are more plans at the Glasgow level not shown below).

Figure 3 Connected hierarchy of Plans related to the new Glasgow Transport Strategy



2.2 Baseline Environmental Data and Environmental Issues

2.2.1 The baseline data, which includes environmental and sustainability information, is essential to the SEA process. It provides the basis for gaining a comprehensive understanding of the current state of Glasgow's environment in order to determine the likely significant effects on it from the implementation of the GTS.

2.2.2 The baseline data also helps identify existing environmental problems or issues, which may be related to transport, and which should be considered and addressed as part of the environmental assessment process, and may be used to help inform a monitoring plan. Reviewing the baseline data also helps identify any possible cumulative or synergistic effects to the environment through implementation of the GTS.

- 2.2.3 For this Scoping report a broad initial list of relevant baseline environmental data which will be recorded and used in the Environmental Report has been collated and is identified in *Table 1* below. It should be noted that a significant amount of data was assembled in order to inform the GTS *Draft Case for Change* report and associated Equality Impact Assessment Screening. This background research and the results of early consultations with stakeholders for the new GTS is described in the *Draft Case for Change* report. That report has itself informed this SEA Scoping report.
- 2.2.4 The Council's Environment Strategy and Action Plan 2006-2010 and the most recent State of the Environment Report informed the SEA process for the City Development Plan (CDP) (adopted 2017), and for which a Main Issues Report (MIR) was published. Providing useful background analysis of the main environmental issues in Glasgow, the State of the Environment Report is currently undergoing an update as part of the refresh of the CDP. Again, however, some key points from the existing report have helped inform the identification of the main environmental issues for this SEA scoping report and are reflected in the table further below.
- 2.2.5 In addition, GCC is continually reviewing and updating its environmental monitoring and reporting. This data is generally presented spatially through GIS mapping, and a number of such relevant maps follow the table below. Other environmental reporting is through formal written reports.

2.3 Environmental Issues

- 2.3.1 The main environmental issues and problems related to Transport, which Glasgow is facing and which have emerged from the initial consultations with stakeholders and a review of the baseline environmental data, are outlined in the below table. Many of these issues interact and overlap and it is anticipated that the Plan and associated Environmental Report will help to draw out important linkages.
- 2.3.2 Table 1 below provides, by SEA theme, a summary of the environmental baseline with supporting data sources, as well as an outline of the key environmental issues and the likely challenges for the GTS. Data and information presented comes from a range of sources including from within GCC, GCC publications, the GTS *Draft Case for Change* report and associated Equality Impact Assessment screening, and external sources. Baseline information will be reviewed, updated & further documented for the Environmental Report.

OFFICIAL

Table 1 Environmental Issues, Baseline, Data Sources and challenges for the GTS

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
Biodiversity, Flora & Fauna	<p>Glasgow was the first Scottish City to declare an ecological emergency in May 2019.</p> <p>The Council acknowledged the significance of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report 2019 which indicated biodiversity loss was increasing due to land-use change, the impact of climate change, pollution, invasive alien species and the exploitation of natural resources.</p> <p>Glasgow's open spaces, wild plants and native animal species contribute to the health and wellbeing of its citizens. Open spaces and trees are particularly important for climate change mitigation through absorbing pollutants, providing oxygen and contributing to flooding prevention through the absorption of rainfall.</p> <p>Glasgow has more than 3,500ha of Greenspace and over 90 parks. Biodiversity is considered carefully in the management of all Glasgow Parks and where appropriate, habitats and species are protected and enhanced as part of overall park management.</p> <p>Through a major audit and subsequent monitoring of species of animals, plants and fungi, Glasgow is recorded to have at least 6,000 species.</p> <p>Protecting this biodiversity is a key consideration within Glasgow's Energy and Carbon Masterplan, the City Development Plan, Open Space Strategy and Local Biodiversity Action Plan, with a view to reversing biodiversity loss. Biodiversity benefits are integrated into the Metropolitan Glasgow Strategic Drainage Plan through the delivery of Sustainable Urban Drainage Systems (SUDS),</p>	<p>Glasgow and Clyde Valley Green Network/Bug Life</p> <p>Glasgow City Council Biodiversity Action Plan and Duty Report, Our Dear Green Place (2019)</p> <p>NatureScot</p> <p>SEPA</p> <p>Connecting Nature EU</p> <p>National Biodiversity Atlas Scotland</p> <p>GCC's GIS Mapping & dashboards</p>	<ul style="list-style-type: none"> Climate change and light, noise and pollution from transport negatively impacting biodiversity. Need to retain habitats connectivity; consider greenspace, open space and biodiversity when planning transport and place making projects. Uneven distribution of greenspace network across this city. 	<ul style="list-style-type: none"> Achieving the vision of a cleaner, greener, sustainable Glasgow which is protective of its natural environment and natural heritage. Considering greenspace, open space and biodiversity when we plan transport and placemaking projects, to maximise the benefits of our investment."

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>green infrastructure and blue-green networks.</p> <p>Additionally Glasgow has:</p> <ul style="list-style-type: none"> • 5 nationally important 'Sites of Special Scientific Interest' (SSSIs) designated by NatureScot; • 12 Local Nature Reserves; four of them are within the Seven Lochs Wetland Park creating an important chain of close proximity to link habitats. • over 90 SINC's (Sites of Importance for Nature Conservation) in the city. • 14 Habitat Action Plans and 23 Species Action Plans <p>The majority of Glasgow's ancient, long established and semi-natural woodland are broad leaved/mixed woodland and wet woodland habitats.</p>			
Population & Human Health	<p>Glasgow is the largest urban local authority in Scotland, covering 17,630 hectares, and the most populous urban area in Scotland with 633,120 residents in 2019. The wider city region is home to over 1m people. Glasgow's population has been rising over the past 12 years following decades of decline, with stabilised birth rates and an increase in net inward migration contributing to the overall growth.</p> <p>Although Glasgow has a relatively young population, it is set to age, with the population over 50 years of age predicted to rise to 241,000 by 2043 – an increase of 22% from 2018 levels.</p> <p>Together with Edinburgh, Glasgow has the highest % population at working age, which at 70% has implications for travel demand in relation to employment and economic activity.</p>	<p>Scotland's Census</p> <p>Scottish Government Statistics and SIMD-Scottish Index of Multiple Deprivation</p> <p>Scottish Household Survey and Glasgow Household Survey</p> <p>National Records of Scotland</p> <p>NOMIS Official Labour Market Statistics</p> <p>Understanding Glasgow: Glasgow Indicators project/Glasgow Centre for Population Health</p>	<ul style="list-style-type: none"> • Areas of deprivation and disconnected communities with longer journey times to opportunities across Glasgow due to historical development. • Links between pollution and noise from transport to health inequalities. • Disconnected active travel network and unequal participation in cycling spatially and by segments of population. • Unequal access to transport networks and services limiting choices and opportunities and 	<ul style="list-style-type: none"> • Ensuring that equalities, social renewal, human rights, sustainability and climate change inform the development of the Plans at each stage. • Being proactive in ensuring transport's role reduces poverty and improves access to life opportunities. • Facilitating and promoting active travel and providing a network that people feel safe to use. Improving the

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>The number of households and the number of single households in Glasgow are both set to rise – by 16% and 5% respectively by 2041, with implications for travel demand as people are more dispersed, though the type of housing stock (flats vs houses) may mitigate this. The compact city resulting from Glasgow having the highest population density in Scotland – at 3,586 persons per km² - will impact service provision, perhaps reducing the need for travel. Covid-19 may also have long-lasting impacts on the demand to travel.</p> <p>Over 40% of the population in Glasgow City are in the most deprived SIMD quintile (worst 20% data zones) in Scotland, although for some areas of Glasgow this rises to 78%. In 2017, over 34% of children were classed as being in poverty after housing costs. This was the highest of all local authority areas in Scotland.</p> <p>Glasgow and the West of Scotland have a poor human health record, the root causes of which are numerous and interlinked, with transport contributing to the complexity.</p> <p>From 2015 to 2017, Glasgow City was ranked 389th (the lowest in the UK) for life expectancy at birth for both males and females, with life expectancy at 73.3 years for males and 78.7 years for females.</p> <p>Glaswegians have the lowest healthy life expectancy in Scotland with the predicted period of life spent 'not in good health' at 16.7 years for men and 20 years for women (in the period 2009-13). Just under a quarter of adults in Glasgow are obese, with obesity rates rising for the past 10 years. This presents a challenge to uptake of active travel in particular, as well as being an imperative to move towards more active lives given the role physical activity can play in mortality rates.</p>	<p>NHSGG</p> <p>Office for National Statistics</p> <p>GCC's GIS Mapping</p>	<p>restricting access to health care, jobs and other opportunities, exacerbated by lack of access to a car which is a particular issue in Glasgow. Correlation between deprivation and lack of access to a car in Glasgow.</p> <ul style="list-style-type: none"> Affordability of transport impacting on those on low incomes or in poverty the most. <p>g</p>	<p>public transport network, particularly for those who rely upon it.</p> <ul style="list-style-type: none"> Working towards eliminating serious or fatal accidents on our road network. Embedding equalities and Fairer Duty Scotland into decision-making, and prioritising people over vehicles. Acknowledge the uncertainties caused by the Covid-19 pandemic.
Soil &	Glasgow has consistently had the highest concentration of	Understanding Glasgow/Glasgow	<ul style="list-style-type: none"> Many post-industrial brownfield 	<ul style="list-style-type: none"> Managing the

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
Geology	<p>vacant and derelict land of any Scottish city, and it is recognised that this has arisen as a result of fragmented ownership, poor ground conditions, and inadequate infrastructure on many sites.</p> <p>Between 2017 and 2018, Glasgow saw a reduction in vacant and derelict land of 64 hectares, a 6.4% fall from 1069 to 1005 hectares. There was also a reduction in the number of vacant and derelict sites, from 761 to 721.</p> <p>Most of the land brought back to use was developed for residential purposes (66.4%), with other uses including transport, recreation and leisure.</p> <p>Of the remaining vacant and derelict land, most of this can be found in the north and east of the city, and over 300 of the sites are owned by the council.</p> <p>A geodiversity audit of the City was made by the British Geological Survey in 2013, highlighting geological extrusions important for their educational, cultural or biodiversity value. Other data sets are available via nature.scot on where peatland and other important carbon soils lie in the city.</p>	<p>Centre for Population Health</p> <p>Scottish Vacant and Derelict Land Survey (SVDLS).</p> <p>SEPA</p> <p>NatureScot</p> <p>Scotland's Environment: Scotland's Soils</p> <p>GCC's GIS Mapping, GCC Geodiversity information</p> <p>British Geological Survey</p>	<p>sites with likely soil contamination. These sites cause disconnect in transport networks, impacting on communities.</p> <ul style="list-style-type: none"> Potential for reduction in soil quality through the effects of climate change such as flooding and absorption of pollutants from transport, with further impacts on wildlife and flora. Loss of soil to watercourses through flooding or excessive water run-off. Damage/removal of soil resulting in loss of carbon storage. 	<p>conservation of/improvement of soil quality in any place making / infrastructure schemes.</p> <ul style="list-style-type: none"> Connecting communities through making use of vacant land. Including consideration to manage carbon storage and drainage (SUDS) to alleviate flooding.
Water	<p>Several watercourses pass through Glasgow City on their journey from the Scottish central uplands to the Firth of Clyde. The main bodies of water and watercourses in the City are: the River Clyde (which is tidal up to the weir at Glasgow Green), the Forth and Clyde Canal, the White Cart Water and the River Kelvin. Smaller tributaries include the Molendinar Burn, the Brock Burn, the Levern Water and the Auldhouse Burn.</p> <p>Rainfall management, flood risk management and ensuring water course quality are key activity drivers.</p> <p>Surface water run-off may be contaminated through</p>	<p>SEPA</p> <p>Scottish Water</p> <p>Clyde and Loch Lomond Local Plan District</p> <p>The Metropolitan Glasgow Strategic Drainage Partnership – reporting</p> <p>Glasgow City Council Flood risk management strategy- reporting</p>	<ul style="list-style-type: none"> Potential for the pollution of the City's watercourses through surface-water run-off from the City's older road surfaces. Poor maintenance of roads can lead to longer term sedimentation. Climate change potentially resulting in increased frequency of storms and resultant flooding which may affect transport 	<ul style="list-style-type: none"> Ensuring the protection and improvement in quality of the city's watercourses. Ensuring adequate drainage is included in infrastructure schemes. With the need for multifunctional green infrastructure, ensuring provision for flood

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>exposure to traffic and may have a further impact on the water environment. New transport infrastructure may contribute to increased surface run off, potentially impacting on flooding.</p> <p>A comprehensive approach to flood management across the City is vital to mitigate against the impact of extreme weather events caused by climate change, and will contribute more generally towards enhancing the City's natural environment and biodiversity.</p> <p>Glasgow City is the lead authority within the Clyde and Loch Lomond Local Plan District (LPD), which includes 10 local authorities along with SEPA and Scottish Water. Together they implement the Local Flood Risk Strategy and Management Plan and hold responsibility for reducing flood risk to the 20 Potentially Vulnerable Areas (PVA) contained within the LPD boundary. There are three PVAs within Glasgow (city centre, city north and city east).</p> <p>Work is underway through Surface Water Management Plans (SWMPs) - which assess the flood risk from multiple sources and provide options for measures to slow, treat and store surface water above ground and at source - and the Metropolitan Glasgow Strategic Drainage Partnership (MGSDP).</p> <p>There is a large investment to improve Glasgow's waste water treatment works and sewer network. This will benefit the River Clyde and its tributaries as well as reducing the risk of flooding in urban communities.</p> <p>SEPA's River Basin Management Plans review the ecological status of surface and ground water bodies. In 2008, just under half of water bodies in the Clyde advisory group area (44% surface water bodies and 57% groundwaters) were classified as being at good or high</p>	<p>GCC's GIS Mapping</p> <p>GCC Geotechnical Team</p> <p>GCC Local habitat action plan</p>	<p>infrastructure.</p> <ul style="list-style-type: none"> Flooding may affect sewerage systems, potentially impacting communities and properties as well as biodiversity and health. Risk of flooding along Clyde corridor from rising sea levels. Consideration of active travel projects along the Clyde from committed projects/ further development of the Clyde Waterfront. Role of watercourses in active travel and outdoor access including Clyde and Canal & towpath network. Also consider use of 'blue' spaces for people and water transport potential. 	<p>management, sustainable drainage, access and biodiversity.</p> <ul style="list-style-type: none"> Balancing transport related projects that relate to water-based transport and access to water/adjacent areas for leisure, health and wellbeing with protecting water quality and flood risk management.

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>ecological status. The 2009-15 plan aimed to maintain the good status and to secure continuous improvement in those with less than good status.</p> <p>The expected conditions of surface waters in 2021: River Clyde – Poor and Good River Kelvin – Poor/ Moderate and Good White Cart Water – Poor and Good</p>			
Air	<p>Air Quality: GCC operates a range of automatic and non-automatic air monitoring equipment in various parts of the city. The council owns and operates eight automatic monitoring stations, which monitor a variety of pollutants including nitrogen dioxides, particulates, carbon monoxide and ozone. Further, the Glasgow city area also serves as the location for four automatic monitoring stations operated on behalf of DEFRA.</p> <p>Glasgow currently has Air Quality Management Areas (AQMAs) in the City Centre and Byres Rd /Dumbarton Rd for the pollutant nitrogen dioxide (NO2).</p> <p>In 2018 GCC was the first local authority to establish a LEZ (low emission zone) across the city centre, initially focussing on buses but due to roll out to all vehicles during 2023.</p> <p>Although overall CO2 emissions have reduced in Glasgow since 2005, levels of transport-related CO2 have fluctuated since 2011.</p> <p>Traffic: Glasgow traffic data is collected via SCOOT traffic signals, Bluetooth detectors and a cordon of automatic traffic counters. Total vehicle kilometres within the City Council area has been rising since 2005, with the biggest increase on the trunk roads network, with some increase in the local roads network seen again after a period of relative stasis.</p>	<p>Air Quality in Scotland (Ricardo Energy & Environment)</p> <p>IQ Air</p> <p>The Royal Environmental Health Institute of Scotland</p> <p>Scottish Government Environment Statistics Online Index (for Air Quality, Climate Change and Ozone Layer, Noise Pollution)</p> <p>Scotland's Environment: Scotland's noise mapping</p> <p>Noise Action Plan (END European Noise Directive)</p> <p>Monitoring sites data from across Glasgow, managed by GCC</p> <p>GCC LEZ & Air Quality information</p> <p>GCC's GIS Mapping</p> <p>Transport Scotland, SEPA and Department for Transport</p>	<ul style="list-style-type: none"> Current transport behaviour patterns and choice of vehicles resulting in traffic congestion hot spots and subsequent air pollution and damage to the environment. Air Quality Management Areas (AQMAs) and development within them. Ongoing work on city centre Low Emission Zone. 	<ul style="list-style-type: none"> Reducing traffic volumes across the city, and imposing stricter conditions on vehicle movements through the city centre in particular whilst minimising equality impacts. Managing the 'last mile' of goods delivery. Supporting active travel and public transport and the switch to more sustainable, cleaner and low carbon transport. Ensuring links between transport projects and policies on low carbon and air quality to maximise co-benefits. Reducing traffic impacts, particularly in residential areas.

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	Noise: The road and rail networks, along with industry and the airport, are likely to be significant sources of noise in Glasgow, impacting on the wider environment and quality of life for residents. Scottish Government submission to the Environmental Noise Directive 2002/49/EC (END) in December 2012 estimated 86,000 people are exposed to noise levels greater than 65 decibels during the day, generated by Glasgow's roads network.			
Climatic Factors	<p>A climate (and ecological) emergency was declared Glasgow City Council in May 2019. An action plan has subsequently been developed, covering key issues such as transport, to increase the rate of action towards reducing Glasgow's carbon emissions to achieve neutrality by 2030.</p> <p>Transport is a significant contributor of emissions directly linked to climate change, as well as those harming human health through local air pollution. Although CO2 emissions from transport have slightly reduced in Glasgow since 2005, the share from transport as a proportion of all CO2 emissions within the local authority area have increased.</p> <p>CO2 emissions on Glasgow's motorway network and diesel railways have increased since 2005 (though overall, rail is a relatively low carbon form of travel).</p> <p>In Glasgow only 45% of residents travel to work by car compared with 63% Scotland as a whole. Rail based commuting in Glasgow at 15% is the second highest level in Scotland and a higher than average proportion of commuting trips area made by bike, at 5% compared with the Scotland average of 2.8%. However, only 13% walk to work compared to 15% for Scotland's large urban areas. The bus share of the journey to work at 17%, is second only to Edinburgh. The main modes of travel to school are walking, followed by car then bus.</p>	<p>Air Quality in Scotland (Ricardo Energy & Environment)</p> <p>GCC Air Quality Management team / Energy & Carbon Management & Sustainability team & publications</p> <p>SEPA</p> <p>Understanding Glasgow/Glasgow Centre for Population Health</p> <p>Urban Big Data Centre</p> <p>The Royal Environmental Health Institute of Scotland</p> <p>Scottish Government environment statistics</p> <p>Scottish Household Survey</p> <p>UK Govt Dept for BEIS data</p> <p>Greenspace Scotland</p> <p>UK Gov Carbon Reduction Commitment (CRC) Energy Efficiency Scheme</p>	<ul style="list-style-type: none"> Glasgow declaration of climate and ecological emergencies in 2019. The contribution of transport emissions towards greenhouse gases, directly linked to climate change, and the impact of road transport and private vehicles in particular as well as growing numbers of delivery vehicles (light goods vans). Energy consumption by the transport sector overall, and reliance on fossil fuels. 	<ul style="list-style-type: none"> Contribution towards Glasgow's 61 Climate Emergency action commitments which places strong emphasis on role of transport in the city's move towards carbon neutrality. Reducing the need to travel and reducing journey lengths through integrated land use & transport planning, while also improving connectivity and accessibility of opportunity for disconnected communities. Reducing use of fossil fuel based energy for transport. Managing the last mile of deliveries to tackle

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>Personal access to licensed vehicles is lowest of any local authority in Scotland at 382 per 1000 population.</p> <p>Flooding: is a growing risk and major investment is needed in Glasgow's drainage networks over the next 50 years to deal with it. (see Water) Heat and longer spells of dry weather may also pose a risk to transport - road and rail infrastructure in particular.</p>	Sustainable Glasgow		<p>rising emissions from LGV sector.</p> <ul style="list-style-type: none"> Ensuring links between transport projects and policies on low carbon and air quality to maximise co-benefits.
Material Assets	<p>Glasgow City Council area is supplied by extensive networks of transport infrastructure: trunk and local roads, well-developed suburban rail, underground, bus and active travel.</p> <p>Roads - Glasgow's motorway system consists of the M8, M73, M74, M77 and M80.</p> <p>Subway - Glasgow's Subway Network consists of 15 subway stations serving the City Centre, West End and the inner South Side of the City. Usage patterns have been mixed in recent years, with peak usage 2007-8, though 2018-9 showed an increase on the previous five years.</p> <p>Rail networks: in Scotland rail passenger journeys have grown over the past decade generally with Glasgow emulating this with strong growth, with those stations in the city centre showing the highest patronage in 2018-19. There is an extensive bus route network across which several providers operate.</p> <p>The cycle network has recently been enhanced by the addition of Pop-up Cycle routes as part of the Council's Covid-19 response via Spaces for People funding. The overall cycle network also includes sections of the NCN. Glasgow has an extensive pedestrian network, as well as core paths on which there is publicly available information and mapping.</p>	<p>GCC's GIS Mapping</p> <p>GCC City Development Plan information and Core Paths Plan</p> <p>Transport Scotland and SPT</p> <p>DfT Road Traffic Statistics</p> <p>ORR rail station usage estimates</p>	<ul style="list-style-type: none"> Damage caused to transport infrastructure and other transport-related assets through climate change effects, air pollution and impacts from heavy traffic. Carbon impact from construction of new transport projects through use of materials. Importance of electricity supply for electric-based vehicles, and production of emerging alternative fuels such as hydrogen. 	<ul style="list-style-type: none"> Continuing maintenance of our footways, paths and cycle infrastructure to ensure longevity and ease of use. Careful choice of materials utilised in transport infrastructure to ensure robustness and longevity against wear and tear, minimising carbon emissions in construction and enhancing climate resilience of infrastructure. Use of sustainable and / or recycled materials for infrastructure projects. Developing a suitable EV charging network for the city.

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	Sites for housing and other development are defined by the CDP.			
Cultural Heritage	<p>Glasgow has one UNESCO World Heritage Site: the Antonine Wall. The Wall site is managed and cared for in partnership with several local authorities and Historic Scotland. GCC has the smallest holding of the partners, with responsibility for 0.07 km/0.16 ha at Cleddans Burn, but also holds other management responsibilities including planning and roads.</p> <p>One battlefield site: Langside (13 May 1568)</p> <p>Five Historic Gardens & Designed Landscapes including Kelvingrove Park.</p> <p>25 conservation areas varying in character from the city centre and Victorian residential suburbs to a rural village and a former country estate.</p> <p>Over 1800 items in Glasgow have been listed by the Scottish Ministers as being Buildings of Special Architectural or Historic Interest. Glasgow includes a huge range of building types, engineering structures and smaller items like statues, monuments, police telephone boxes and letter boxes which are listed. Listed items are categorised according to their merits: Category A which covers buildings of national and international importance accounts for 15% of all listed buildings in Glasgow.</p>	<p>GCC's GIS Mapping</p> <p>Historic Scotland</p> <p>Historic Environment Scotland</p>	<ul style="list-style-type: none"> Glasgow is rich in listed buildings, conservation areas, scheduled monuments and archaeological sites, giving a sense of place, wellbeing and cultural identity to the city. Need to be protected from climate change, pollution, new development and growth in transport. Derelict / unused buildings detracting from the city character and neighbourhoods appearance. Development pressure on urban open spaces. Unsympathetic works in Conservation areas. Climate change potentially leading to increased rain and wind and heat, as well as air pollutants direct from traffic or energy for transport may damage building structures. 	<ul style="list-style-type: none"> Requirement to protect and enhance cultural heritage sites through reducing traffic levels to minimise damage from air pollutants and vibration. Achieving a high quality sustainable built environment and maintaining the sense of character in any place making. Consideration of the visual intrusion of schemes, including choice of materials to be relevant for the location.
Landscape & Natural Heritage	<p>The City Development Plan defines policies, proposals, opportunities and constraints with regards to land use designation.</p> <p>Of Glasgow's total land area approximately 80% is defined</p>	<p>Glasgow City Council Open Space Strategy team</p> <p>GCC's GIS Mapping</p>	<ul style="list-style-type: none"> Balancing any large infrastructure schemes with landuse classifications and aspirations for use. 	<ul style="list-style-type: none"> Preserving and enhancing any unique landscape characteristics. Ensuring new development is

OFFICIAL

OFFICIAL

SEA TOPIC	Summary of Baseline Environmental Data	Supporting data sources	Relevant Environmental Issues	Challenges for the GTS
	<p>as urban area; of this urban area 36% is defined as open space (excluding open water and private gardens).</p> <p>Approximately 7.3% of total land area as 'vacant and derelict'. 60% of Glasgow residents live within 500m of derelict land, double the Scottish average – compared to 20% in East Dunbartonshire.</p> <p>Glasgow Open Space Strategy (OSS) was adopted at the City Administration Committee in February 2020.</p> <p>Glasgow has over 3500 hectares of greenspace, and the importance of this to the health and attractiveness of the city has long been recognised by the Council.</p> <p>In catering for a growing population, new demands are being made on the City's open spaces, for example, helping adapt to climate change, (e.g. rainfall) habitats, contributing to active travel networks, sport and recreation, mitigating climate change, and contributing to wellbeing by fostering a sense of place.</p>	<p>NatureScot / 1999 Landscape Assessment (LUC) – Glasgow & Clyde Valley</p> <p>Glasgow and Clyde Valley Green Network/Bug Life</p>	<ul style="list-style-type: none"> Threat to landscape character and its biodiversity from traffic flows and management in existing networks, as well as from development of new schemes. 	<p>informed by landscape character assessment as different landscapes have different capacities to absorb new development.</p>

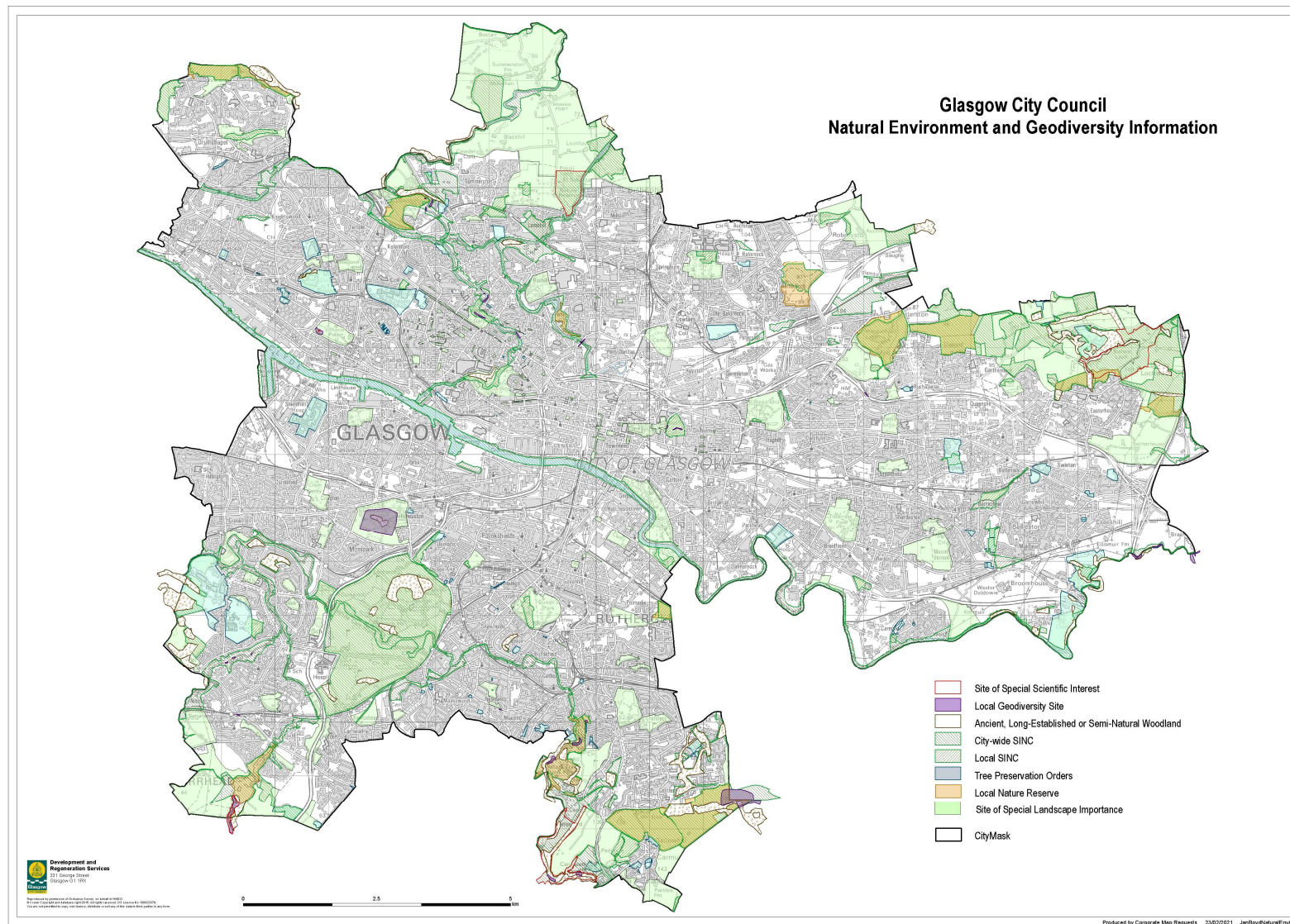
2.3.3 The figures below display selected spatial detail of the environmental baseline and constraints. All related GCC development plan and environmental mapping is publicly viewable at:

<https://glasgowgis.maps.arcgis.com/apps/MinimalGallery/index.html?appid=d37af2d80977490f85484c9de55b6d33>.

OFFICIAL

OFFICIAL

Figure 4 Map of natural environment and geodiversity information in Glasgow



OFFICIAL

Figure 5 Map of Green Belt and Green Network information in Glasgow

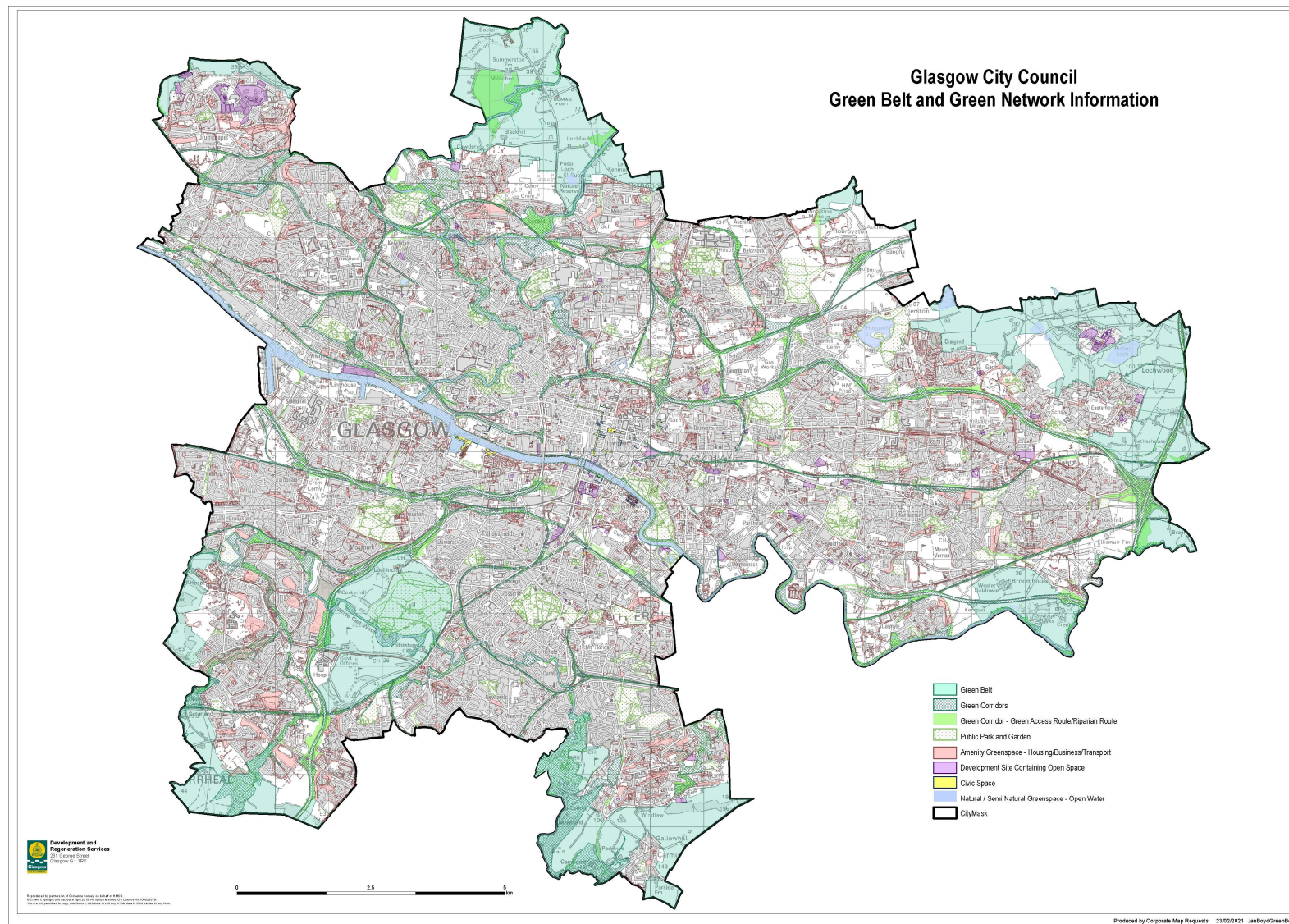


Figure 6 Map of historic environment information in Glasgow

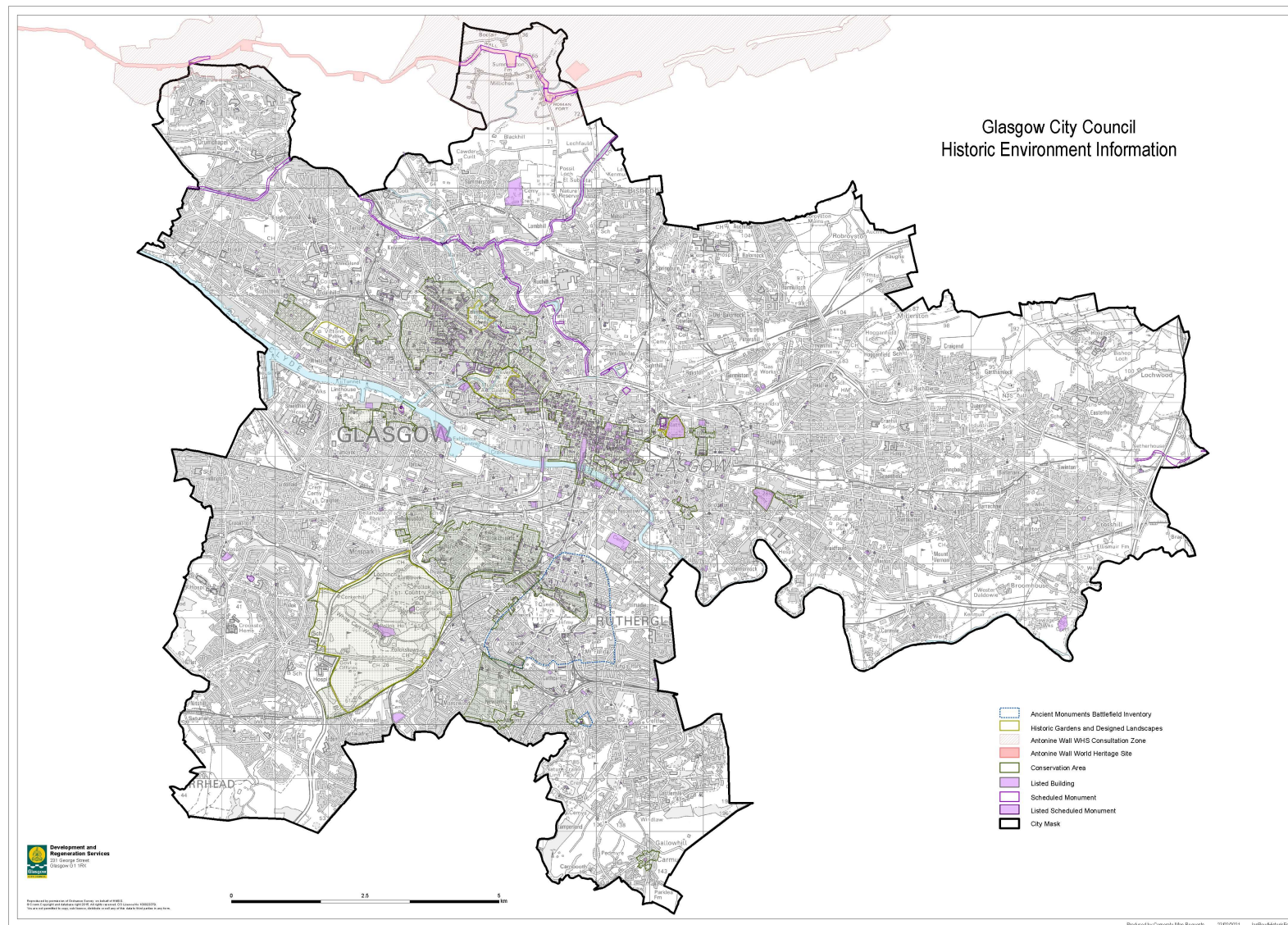
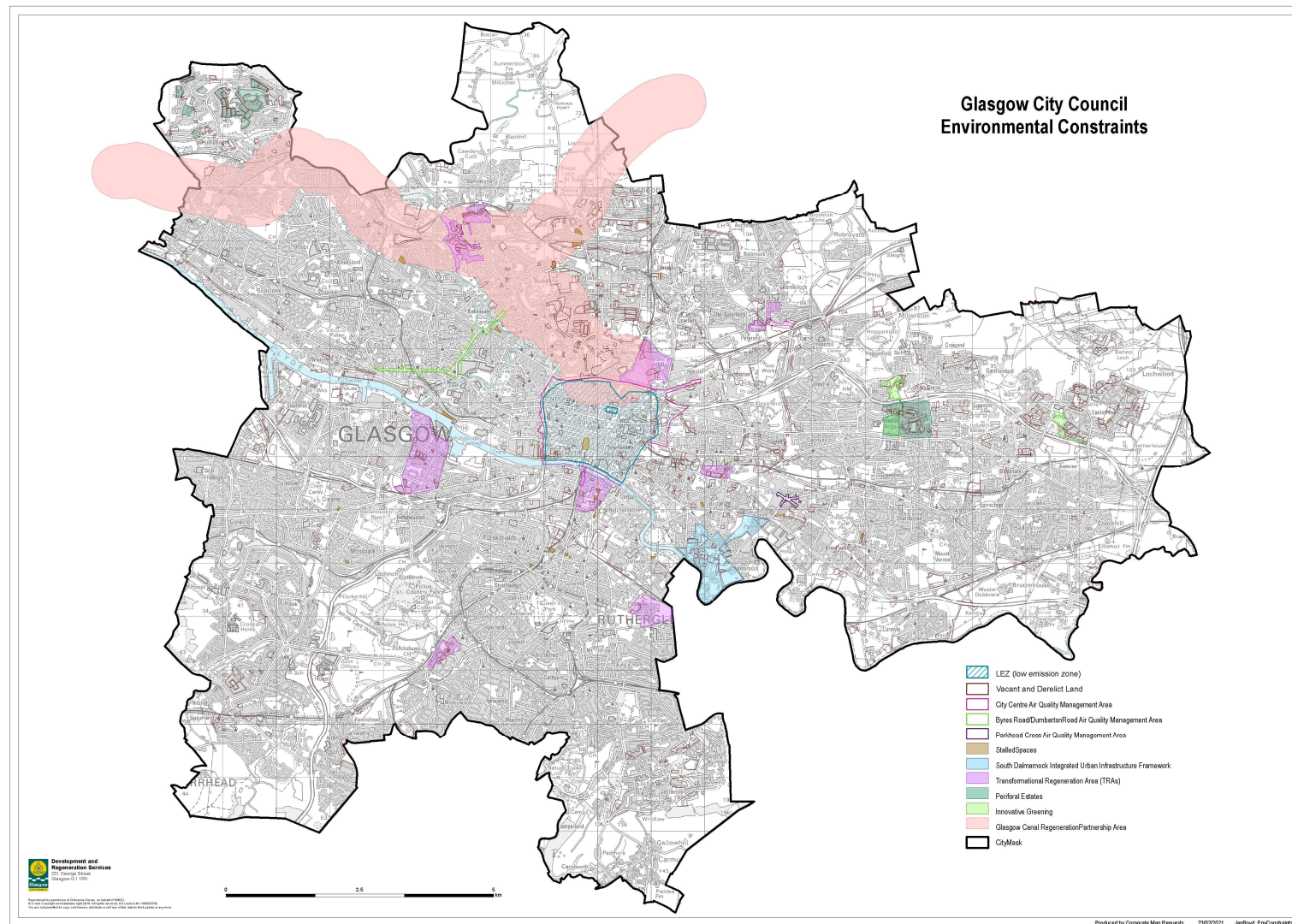


Figure 7 Map of environmental constraints in Glasgow



2.4 Glasgow's Environment in the Absence of the GTS

2.4.1 The SEA process requires that the likely impact on the environment is considered should the GTS not be implemented or the existing LTS updated.

2.4.2 In the unlikely event that Glasgow fails to implement the Glasgow Transport Strategy and related Plans (Active Travel Strategy, City Centre Transformation Plan and Liveable Neighbourhoods Plan), there are a number of projects and plans to which GCC and partners (e.g. City Deal) are already committed which would result in some improvements to the environment. Funding is already in place for many of these projects and in some cases the public have already been consulted. These projects include, amongst others: the roll out of The Avenues and projects to improve cycleways in the city; the LEZ in phases; 20mph speed limit roll out.

2.4.3 However, the GTS is set within the framework of the national and regional transport strategies and itself will provide the overarching framework for transport investment in Glasgow for the next decade, providing the means of communicating the City's vision and priorities for transport to Glasgow's stakeholders and communities. It is also intrinsically linked to a number of other emerging strategies and policies from GCC, with shared agendas and outcomes relating to the climate emergency, tackling health inequalities and promoting inclusive economic growth.

2.4.4 Absence of the strategy will likely result in:

- Glasgow failing to articulate a comprehensive, evidence-based response to tackling the role of transport in climate change, which is required to support Scotland meeting its climate change targets, Scotland's wider sustainable transport ambitions; and Glasgow's own transition to carbon neutrality by 2030 and meeting its 61 Climate Emergency action commitments.
- A lack of a joined-up and strategic approach to implementing a modern, safe, integrated and accessible transport system which would help to improve the economy and tackle the poverty, inequalities and disconnect experienced by some communities across Glasgow.
- A lack of explicit transport policy focus on place and people above vehicles.
- A failure to demonstrate a long-term vision and to communicate the cumulative positive effects on health, wellbeing and the environment that an evidenced and ambitious transport strategy could have.

3 Scope and Level of Detail Proposed for Strategic Environmental Assessment

3.1 Identification of Alternatives

- 3.1.1 The Environmental Assessment (Scotland) Act 2005 Report (Para 14 (2)) requires all local authorities to consider in their Environmental Reports reasonable alternatives to the plan. These should take into account the objectives to be met by the plan, the geographical scope of the plan and the likely significant environmental effects of the alternatives selected. All the alternatives that local authorities put forward for discussion are required to be realistic and capable of implementation.
- 3.1.2 The GTS is adopting a scenario-based approach to thinking on future travel demand, which will also relate to alternative options being considered to address each scenario. Reasonable alternatives will therefore be closely aligned with this alternative scenario-based approach and will be assessed using the methodology described further below in section 3.3. Assessment of alternative options within the GTS will also use a Scottish Transport Appraisal Guidance (STAG)-based methodology.
- 3.1.3 In terms of alternatives to the GTS – the “without plan” scenario is set out in section 2.4 above, and would lack the coordinated strategic approach required to address the transport issues in Glasgow.

3.2 Scoping In/Out of SEA issues

- 3.2.1 In accordance with Schedule 2 of the Environmental Assessment (Scotland) Act (2005), the Council has considered which environmental issues should be scoped in or out of the Environmental Assessment for Glasgow’s new Transport Strategy.
- 3.2.2. Due to the strategic nature and scale of the GTS, and because the strategy content is still in development, it is not yet possible to meaningfully scope any issues out. Therefore, as a precautionary measure all of the environmental topics have been scoped in for consideration during the environmental assessment process at this stage. (Please note that Soil was removed at the SEA screening stage but has now been reinstated). Some commentary on the rationale for each is explored more fully in Table 2 below. It is anticipated that in this way the environmental assessment will fully cover all aspects of the Strategy likely to have significant environmental effects.
- 3.2.3 Due to the absence of any European Designated Sites within the study area, it is not proposed to carry out a Habitat Regulations Appraisal. An HRA screening has previously been prepared by GCC in relation to the City Development Plan in 2014, and concluded an appropriate assessment was not required. Any schemes emerging with cross-boundary and regional characteristics would more appropriately be assessed at the regional level.

OFFICIAL

Table 2 Scoping In/Out of Environmental Topics

SEA Topic	Scoped in/out	Rationale / comments
Biodiversity, Flora & Fauna	In	Transportation projects of any size, as a result of the GTS, have the potential to disrupt or improve natural habitats and any negative effects should be mitigated. The GTS will seek to increase access to Glasgow's natural environment and green networks through supporting active travel networks. Although this may reduce car use and emissions, increased human activity in sensitive areas may be to the detriment of biodiversity and habitats. The Environmental Report will review the likely impacts of the GTS on biodiversity on a strategic level, proposing policies to mitigate impact from transport projects and to support biodiversity. Individual projects would be subject to Environmental Impact Assessment as appropriate.
Population & Human Health	In	Transport can be a contributor to poorer health and economic outcomes. Implementing the GTS will steer policies to reduce these impacts and unequal access, and complete gaps in transport networks, thereby improving access to vital services and economic opportunities, and to develop a network to encourage active travel. It is likely that the GTS will have a positive impact on the health and wellbeing of the people of Glasgow.
Soil & Geology	In	Improving travel networks, creating active travel routes, increasing footfall, may impact negatively on sensitive soil and geological structures though some erosion or other damage. Whilst in an urban context, and transport improvements are likely to be within the extents of existing transport infrastructure and/or existing built environment, new transport infrastructure may disturb contaminated land and potentially lead to impacts on air and water quality. Soil biodiversity requires to be protected from contamination or other adverse impact from transport developments. Originally removed at the Screening stage, this topic has been reinstated so that any likely significant impacts can be considered during the Environmental Report stage on a strategic level, proposing policies to mitigate impact from transport projects. Individual projects would be subject to Environmental Impact Assessment as appropriate.
Water	In	Surface water bodies within the GCC area currently range from good to moderate status, which requires to be maintained or improved. Rivers, canals and other water habitats are important for biodiversity, leisure and the local economy. There is potential for negative impacts on water quality, drainage or flood risk through pollution, disruption or further damage, caused by transport, infrastructure projects and increased human access. The Environmental Report will review the likely significant impact on surface waterbodies on a strategic level, proposing policies to mitigate impact from transport projects. Individual projects would be subject to Environmental Impact Assessment as appropriate.
Air	In	Air quality is directly impacted by fossil fuel emissions from transport. It is anticipated that the GTS will seek to manage and reduce vehicular traffic within the city (aligned with the Scottish Government Climate Change Plan 20% car vehicle kilometre target), support a transition to cleaner vehicles and more sustainable forms of transport and seek to reduce the need to travel in the first place through land use and transport integration in the related City Development Plan. Air quality is therefore likely to improve and be sustained at a better level with implementation of the GTS.

OFFICIAL

SEA Topic	Scoped in/out	Rationale / comments
Climatic Factors	In	Transport-associated emissions contribute to climate change. The GTS is intended to provide the steer towards more sustainable forms of transport and to assist Glasgow and the Scottish Government reach their climate change commitments and achieve carbon neutrality. The overarching framework and policy steer of GTS has the potential to make Glasgow more resilient to the impacts of climate change, as well as set out transport's contribution to the 2030 carbon neutral goal for Glasgow, and the Environmental Report and GTS appraisal work will investigate this.
Material Assets	In	The strategic approach of the GTS is likely to result in positive effects on the transport network through improving connectivity and accessibility, enhancing active travel networks and considering maintenance as well as sustainable materials through policies.
Cultural Heritage	In	Listed and historic buildings require to be protected from new transport infrastructure developments, as well as from accelerated weathering from excessive and/or polluted rainfall or other extreme weather events, exacerbated by climate change. Positively, however, enhancing transport networks and creating new active travel routes and making more space for people can help to raise awareness of historic and cultural sites across the city area, with positive knock-on effects on tourism and the economy. The Environmental Report will review the likely impact on cultural heritage at a strategic level, proposing policies to mitigate impact from transport projects. Individual projects would be subject to Environmental Impact Assessment as appropriate.
Landscape & Natural Heritage	In	With 80% of the land area within Glasgow classed as urban, it is important to protect its highly valued green space and networks and natural landscape character. The GTS aims to increase walking and cycling in Glasgow, and whilst this may be largely within the extents of existing infrastructure and built environments, any creation of pathways in green spaces can impact the natural environment through increased human access - however, this can bring benefits through enhanced surveillance and personal security improvements, and increased connection and empathy between people and nature/their surroundings. The scale of transport developments as always needs to be carefully considered. There may be significant positive impacts from re-purposing the extensive areas of vacant, derelict and brownfield sites that exist across Glasgow into useful transport connections, with potential knock-on positive effects of encouraging economic investment and developments. The Environmental Report will review the likely impact on landscape and natural heritage at a strategic level, proposing policies to mitigate impact from transport projects. Individual projects would be subject to Environmental Impact Assessment as appropriate.

3.3 Methodology for Assessing Environmental Effects

- 3.3.1 In the next stage of the SEA process which will see the production of an Environmental Report, the emerging details of the GTS - draft objectives, outcomes and related policies - will be assessed against the criteria in Table 3 below.

OFFICIAL

OFFICIAL

- 3.3.2 Work is currently ongoing to develop a set of environmental objectives for each of the SEA topics and to establish a series of indicators related to these. This will help to contribute towards a more systematic and consistent framework within which to assess the environmental effects. It is proposed to engage directly with the SEA Consultation Authorities on the development of these SEA objectives in the next stage of the work.
- 3.3.3 The Table 3 matrix template allows for the assessors to add a symbol to indicate the predicted impacts each strategic action will have on the environment. As this is a quick visual and simplistic representation, room is also provided to add comments regarding longer/shorter term predicted effect, cumulative effects, and any potential mitigation measures.

Table 3 Environmental Report: Example Assessment Template

SEA Environmental Topics											Comments	
PPS Section	Biodiversity Flora & Fauna	Population & Human Health	Soil & Geology	Water	Air	Climatic Factors	Material Assets	Cultural Heritage	Landscape & Natural Heritage	Cumulative Effects/Interrelationships	Assessment Commentary Information on any short, medium or long term, permanent or temporary, secondary, or cumulative effects	Mitigation Potential measures identified that could prevent, reduce or offset any adverse effects
Proposed objective /vision / action 1												

General Notes:

Assessment Table Key:

Significant Positive Impact	++
Minimal Positive Impact	+
Positive and negative impact	+ -
Neutral	0
Minimal Negative Impact	-
Significant Negative Impact	- -
Unknown or Indeterminable Impact	?

3.3.2 The SEA environmental assessment stage for the GTS will be carried out by external consultants to ensure impartial assessment. The consultancy team will assess the draft Outcomes, Objectives and related policy focus proposals of the GTS against the environmental criteria detailed in this Scoping Report. There will also be further Equality Impact Assessment and STAG-based assessment workstreams for the GTS and it is hoped these workstreams will be complementary, and avoid duplication of effort over elements common to multiple assessment methodologies e.g. carbon and air quality, and population and human health criteria.

3.3.3 At both the Environmental Report and Proposed Plan stages all of the comments received through the consultation and engagement process will be used to inform the assessment process. In addition, it is proposed that the Environmental Report will include a statement about the scoping process, including details of how comments from the consultation authorities were taken on board.

4 Next Steps

4.1 Proposed Consultation and Engagement Timescales and Methods

4.1.1 Progress on the GTS will be posted on the GCC's dedicated Transport Strategy webpage at <https://www.glasgow.gov.uk/transportstrategy>. It is anticipated that the SEA process will align with the relevant preparation stages of the GTS. The Environmental Report and the draft GTS will be available for public consultation for a minimum period of six to eight weeks later in 2021.

4.1.2 Table 4 below summarises the stages and associated timeline.

Table 4 Key engagement and consultation stages on the GTS

Date	Stage
Sep 2019 - Feb 2020	Early Stakeholder Engagement – invited stakeholders to workshops, internal GCC workshops and focussed one-to-one interviews with stakeholders
Spring/Summer 2020	Covid-19 related delays Ongoing internal GCC development of Draft Case for Change report and some ongoing stakeholder engagement (one to one discussions)
Sep – Oct 2020	Public Conversation for 6 weeks (covering transport issues to be tackled across all new transport plans including the GTS)
Oct – Feb 2020/21	Analysis of feedback from the Public Conversation
Early 2021	Finalisation of Case for Change report with findings from Public Conversation, further analysis and some further engagement with stakeholders
Spring - Autumn 2021	Option development and appraisal with some further engagement with stakeholders
Winter 2021	Public and Stakeholder consultation on draft GTS.

4.1.3 It is intended that there is sufficient information in this Scoping Report to allow the Consultation Authorities to form a view on the proposed consultation periods associated with the development of the Plan. The timetable has been designed to give both the Consultation Authorities and the general public an effective opportunity to express their opinion on both the Plan and accompanying Environmental Report.

4.2 Anticipated Milestones

4.2.1 Table 5 below summarises the environmental assessment process and anticipated timeline.

Table 5 SEA stages key milestones

SEA Stage	Preparation Stage	Anticipated Timing
Screening	2020	Completed
Scoping	Collate and forecast baseline environmental information	September-December 2020
	Prepare Scoping Report	December / January 2020
	Scoping Report Submitted to Consultation Authorities (via SEA Gateway) (35 days)	February/March 2021
Environmental Assessment	Define environmental objectives Identify proportionate alternatives Assessment work	Spring -Summer 2021
	Preparation of draft environmental report	Summer 2021
Publish/consult	Publish and consult on the draft environmental report	Autumn 2021
Post-Adoption	Publish post-adoption statement with adopted strategy	Winter 2021/early 2022
Monitor and Review		Ongoing

- 4.2.2 Whilst it is not a statutory requirement, it is intended that a summary record and details of any associated actions will be prepared after each of the key stages above. This summary information will be available on request. The purpose of this is to aid transparency in the environmental assessment process and to provide a comprehensive record.

APPENDIX 1

Other Relevant Plans, Policies and Strategies

Other Relevant Plans, Policies and Strategies which will be analysed in the Environmental Report for their relationship to the Glasgow's Transport Strategy.

INTERNATIONAL

Name of Plan, Policy or Strategy	Summary of Key Environmental Protection Objectives
Kyoto Protocol (1997/2005)	<ul style="list-style-type: none"> To commit industrialised countries to a reduction of four greenhouse gases (GHG) (carbon dioxide, methane, nitrous oxide, sulphur hexafluoride) and two groups of gases (hydrofluorocarbons and perfluorocarbons).
United Nations Conference COP21 (2015-Paris)	<ul style="list-style-type: none"> Agreement to set a goal of limiting global warming to below +2C compared to pre-industrial levels.
Gothenburg Protocol (1999) (Amended 2012, entry into force 2019)	<ul style="list-style-type: none"> To abate acidification, eutrophication and ground-level Ozone. First binding agreement to target emissions reductions for PM2.5 which are a concern for most cities.
Johannesburg Declaration on Sustainable Development (2002)	<ul style="list-style-type: none"> Commitment to building a "humane, equitable and caring global society".

EUROPEAN

The European Union (Withdrawal) Act 2018 (Withdrawal Act) and UK Withdrawal from the European Union (Legal Continuity) (Scotland) Bill (Continuity Bill).

The Withdrawal Act provides that EU-derived domestic legislation continues to have effect after EU Exit and incorporates directly applicable EU law into domestic law. Together, these will become 'retained EU law'.

Name of Plan, Policy or Strategy	Summary of Key Environmental Protection Objectives
EU Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> To preserve, protect and improve the quality of the environment, including the conservation of natural habitats and wild fauna and flora. To maintain and restore natural habitats of wild fauna and flora, working towards ensuring biodiversity and taking account of economic social and cultural requirements and regional and local characteristics. Forms the foundation of nature conservation policy along with the Birds Directive, and established the network of Natura 2000 protected areas.
EU Birds Directive (79/409/EEC)	<ul style="list-style-type: none"> To protect, manage and regulate all bird species naturally living in the wild within the European territory of the Member States including the eggs of these birds, their nests and their habitats.
EU Water Framework Directive (2000/60/EC)	<ul style="list-style-type: none"> To enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands. To promote the sustainable use of water. To lessen the effects of floods and droughts. To reduce pollution of water. To rationalise and update existing water legislation and introduce a co-ordinated approach to water management, based on the concept of river basin planning.
EU Floods Directive (2007/60/EC)	<ul style="list-style-type: none"> Establishes a framework to assess and manage flood risk via a three-step procedure including: the creation of flood hazard,

OFFICIAL

	<p>flood risk maps and flood risk management plans.</p> <ul style="list-style-type: none"> To reduce the negative impacts on human health, economic activity, the environment and cultural heritage due to flooding.
EU Waste Framework	<ul style="list-style-type: none"> To protect human health and the environment against harmful effects caused by the collection, transport, treatment, storage and tipping of waste.
EU Air Quality Framework (96/62/EU) and other related Directives	<ul style="list-style-type: none"> To protect the environment as a whole and protect health. To maintain ambient air quality, where it is good, and to improve air quality in other cases using limit values and/or alert thresholds for ambient air pollution levels. Set established standards for a range of pollutants.
EU Environmental Noise Directive (EDC) 2002/49/EC	<ul style="list-style-type: none"> Concerned with developing community measures to reduce noise emitted by road and rail vehicles and infrastructure, and from aircraft.
EU Biodiversity Strategy for 2030 (and associated Action Plan)	<ul style="list-style-type: none"> To set Europe's biodiversity on a path to recovery by 2030, benefiting people, the climate and the planet. Build societal resilience to future threats such as climate change impacts. Elements include a network of protected areas on land and sea. Part of the European Green Deal.
EU Climate and Energy Framework 2030	<ul style="list-style-type: none"> EU-wide targets and policy objectives for the period 2021-2030, Moving towards a climate-neutral economy and implements its commitments under the Paris Agreement. Key targets for 2030.

NATIONAL

Name of Plan, Policy or Strategy	Summary of Key Environmental Protection Objectives
Scottish Government - National Performance Framework	<ul style="list-style-type: none"> To create a more successful country through sustainable and inclusive growth. The framework measures progress against Scotland's National Outcomes, which are linked to the UN Sustainable Development goals.
Scottish Government - Transport (Scotland) Act 2019	<ul style="list-style-type: none"> LEZs Improve bus services Encourage smart ticketing Pavement parking prohibitions Workplace parking levy
Scottish Government - National Transport Strategy (2020)	<ul style="list-style-type: none"> Takes climate action by helping deliver net-zero target; will adapt to the effects of climate change; will promote cleaner, greener choices. This document will be the basis upon which the Scottish Government takes decisions and evaluates the success of Scotland's transport policies going forward.
Scottish Government – Strategic Transport Projects Review 2	<ul style="list-style-type: none"> STPR2 will help to deliver the vision, priorities and outcomes for transport set out in the National Transport Strategy (NTS2) and will align with other national plans such as the National Planning Framework (NPF4 in development) and the Climate Change Plan. STPR2 involves conducting an evidence-based review of the performance of Scotland's strategic transport network across all transport modes – walking, cycling, bus, rail and road plus wider island connectivity – to identify interventions required to support the delivery of Scotland's Economic Strategy.
Scottish Government -	<ul style="list-style-type: none"> Vision of 10% of all journeys by bike by 2020.

OFFICIAL

OFFICIAL

Cycling Action Plan for Scotland (2017-2020)	
Scottish Government - Scotland's Accessible Travel Framework (2016)	<ul style="list-style-type: none"> • Vision: All disabled people can travel with the same freedom, choice, dignity and opportunity as other citizens.
Scottish Government - A Long-Term Vision for Active Travel in Scotland 2030 (2014)	<ul style="list-style-type: none"> • Aims for cycling and walking, across all communities, to be the mode of choice for shorter journeys.
Scottish Government - Let's Get Scotland Walking - National Walking Strategy (2014)	<ul style="list-style-type: none"> • Aims for a culture of walking for everyday travel, recreation and well-being; better quality walking environments and; convenient and safe mobility for all.
Scottish Government – Cleaner Air for Scotland (CAFS) (2015) The Road to a Healthier Future	<ul style="list-style-type: none"> • Provides a national strategy within which the Scottish Government and its partners can work together towards achieving the best possible air quality for Scotland. • As set out in CAFS, transport is one of the largest contributors to Scotland's PM10 and NOx emissions, the majority of these from road transport. The strategy makes a number of commitments towards reducing transport emissions and increasing active travel, outlines the importance of placemaking for improving air quality and, through the creation of the National Low Emission Framework, helps mark the way for Low Emission Zones (LEZ). • There is a strong requirement on local authorities to help deliver these targets. Creating a better environment for cycling and walking can help reduce the percentage of trips that are undertaken by motorised vehicles.
Scottish Government - Infrastructure Commission for Scotland Phase 1 Key Findings Report and Phase 2 Delivery Findings Report 2020/21	<ul style="list-style-type: none"> • Commission established by the Scot Government to provide informed and independent advice on creating a 30-year infrastructure strategy to meet the economic growth and societal needs of the future. • Provides 8 recommendations on how infrastructure investment can contribute to national outcomes in Scotland. • Prioritise investment decisions on the basis of their contribution to inclusive net zero carbon economy outcomes.
Scottish Government - Scottish Planning Policy (SPP)	<ul style="list-style-type: none"> • To set out planning policies for the nation with priorities for the use of and development of land, promoting consistency of application across Scotland. • Sits alongside the NPF, Creating Places, Designing Streets, Circulars.
Scottish Government - National Planning Framework 3 (2014) (NPF4 in development)	<ul style="list-style-type: none"> • The long term spatial plan for Scotland setting out where development and infrastructure is needed to support sustainable and inclusive growth. • NPF4 will look to 2050 and will have a wider alignment to other programmes and strategies, incorporating for the first time SSP.
Scottish Government - Planning etc. (Scotland) Act 2006	<ul style="list-style-type: none"> • To bring in a much more inclusive and efficient planning system. • To improve community involvement, support the economy, and help it to grow in a sustainable way.
Scottish Government – Planning (Scotland) Act 2019	<ul style="list-style-type: none"> • The Scottish Government is seeking to improve Scotland's planning system so that it responds to a changing world and ensure it plays its part in addressing climate change. This act will determine the future structure of the modernised planning system, including preparations for NPF4.
Scottish Government - Creating Places A Policy Statement on architecture and place for Scotland (2013)	<ul style="list-style-type: none"> • Reflecting the responsibility to preserve Scotland's rich built and natural heritage, but also to create future assets meeting the vision of quality, successful places which support communities, respect the environment and drive the economy.

OFFICIAL

	<ul style="list-style-type: none"> • Sets out the comprehensive value good design can deliver. • The policy statement, setting out the Scottish Government's position on architecture and place, recognises the strong and established relationship with planning and therefore the policies within the Statement are considerations in determining planning applications and appeals.
Scottish Government - Designing Streets (March 2010)	<ul style="list-style-type: none"> • Provides the first policy statement in Scotland for street design, predominantly for use on new streets but also applicable to existing streets undergoing redesign. • Emphasis on place-making and away from a system focused upon the dominance of motor vehicles. • Intended to work in tandem with Designing Places (2001).
Scottish Government - Scotland Economic Strategy (2015)	<ul style="list-style-type: none"> • Sustainable investment in people and infrastructure. • Encourage a culture of innovation. • Promote inclusive growth.
Scottish Government - Scottish Energy Strategy (2017) The future of energy in Scotland	<ul style="list-style-type: none"> • The first energy strategy for Scotland, setting out the government's vision for the future energy system though to 2050. • Guided by three core principles: a whole-system view; an inclusive energy transition; a smarter local energy model.
Scottish Government - Climate Change (Scotland) Act 2009	<ul style="list-style-type: none"> • Sets out targets for 2050 for the reduction of greenhouse gas emissions. • Provisions on mitigation of and adaptation to climate change, energy efficiency and the reduction and recycling of waste
Scottish Government – Climate Change (Emissions Reductions Targets) (Scotland) Act 2019	<ul style="list-style-type: none"> • Builds on the targets set in the Climate Change Act, seeking to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets.
Climate Change Plan – The Third Report on Proposals and Policies 2018-2032 (2018)	<ul style="list-style-type: none"> • Statutory requirement for Scottish Ministers to set out policies and projects before Parliament on meeting climate change targets. This is the third report, and sets out how Scotland can deliver a target of 66% emissions reductions for the period 2018-32.
Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update (2020)	<ul style="list-style-type: none"> • 2020 update to the plan – includes a focus on a green recovery from Covid-19. Sets out a transport vision for 2032 – no new petrol or diesel cars or vans, decarbonised railways, work has begun on decarbonising other modes, car kilometres have reduced by 20%, sustainable transport is a first choice for most particularly in urban settings, those who drive use electric cars, research into biofuels and hydrogen will have stimulated investment and innovation.
Climate Ready Scotland: Scottish Climate Change Adaptation Programme 2019-2024 – A Consultation Draft (2019)	<ul style="list-style-type: none"> • Five year programme with outcome-based approach, setting out policies and proposals to prepare Scotland for climate adaptation.
Scottish Government - The Land Reform (Scotland) Act 2003	<ul style="list-style-type: none"> • Development of Core Path plans and Local Access Forums to increase the public right of access.
Scottish Government - Nature Conservation (Scotland) Act 2004)	<ul style="list-style-type: none"> • Conservation of biodiversity, conserve and enhance Scotland's natural features.
Scottish Government - Scottish Biodiversity Strategy - It's In Your Hands (2004)	<ul style="list-style-type: none"> • To set out a 25 year framework (to 2030) for Government action to conserve biodiversity for the health, enjoyment and wellbeing of the people of Scotland • Aims to halt biodiversity loss by 2010 and for Scotland to be recognised as a world leader in biodiversity by 2030.
Scottish Government -	<ul style="list-style-type: none"> • To provide the legislative framework for the identification and

OFFICIAL

Part IIA of the Environmental Protection Act 1990: Contaminated Land	<p>remediation of contaminated land, introducing for the first time a statutory definition of contaminated land.</p> <ul style="list-style-type: none"> Aimed at addressing land which has been historically contaminated and which poses unacceptable risks to human health or the wider environment in the context of the current land use.
Scottish Government - Flood Risk Management (Scotland) Act 2009	<ul style="list-style-type: none"> To set out local authorities' and the Scottish Environment Protection Agency's functions in relation to flood risk management.

REGIONAL

Name of Plan, Policy or Strategy	Summary of Key Environmental Protection Objectives
Glasgow City Region Economic Strategy 2017-2035 and City Region Deal	<ul style="list-style-type: none"> Vision for sustained and inclusive economic growth, an outward-looking economy.
Regional Transport Strategy 2008-2021 "A Catalyst for Change" (Update in progress)	<ul style="list-style-type: none"> Statutory duty on the seven Regional Transport Partnerships (RTPs) in Scotland to produce a Regional Transport Strategy (RTS) for their area. Notes 4 key outcomes: improved connectivity; access for all; reduced emissions; attractive, seamless and reliable travel.
Glasgow and Clyde Valley Strategic Development Plan / (Regional Spatial Strategy in progress)	<ul style="list-style-type: none"> Clydeplan's role is to prepare and maintain an up to date Strategic Development Plan (SDP) for the Glasgow city region.
Glasgow & Clyde Valley Green Network	<ul style="list-style-type: none"> Partnership approach to developing a green network across the region, to provide easy and well-linked access to the outdoors. Includes active travel connections.
Climate Ready Clyde Climate Adaption Strategy (in development)	<ul style="list-style-type: none"> In development, a climate adaptation strategy for the Glasgow City Region

LOCAL

Name of Plan, Policy or Strategy	Summary of Key Environmental Protection Objectives
Glasgow City Council - The Glasgow City Council Strategic Plan (2017-22)	<ul style="list-style-type: none"> To build on the vision of a world class city with a thriving, inclusive, economy where everyone can flourish and benefit from the city's success. Transport remains a high priority as part of the focus in moving to a sustainable and low carbon city.
Glasgow City Council - Glasgow City Development Plan 2017 (10 years)	<ul style="list-style-type: none"> Aims for a healthy, high quality place and a compact city form that supports sustainable development. Outcomes include a well-connected place to move around and do business in and a green place which is resilient, accessible and attractive. Overarching policies are: Placemaking Principle and Sustainable Spatial Strategy.
Glasgow City Council – Glasgow Economic Strategy 2016-2023	<ul style="list-style-type: none"> Aiming to make Glasgow the most productive major city economy in the UK. Focus areas include smart infrastructure investment and investing in connectivity. City Deal should lead to a greatly improved transport network.
Glasgow City Council - Glasgow's Housing Strategy 2017-2022	<ul style="list-style-type: none"> Themes include improving access to appropriate housing - increasing the supply and improving the quality of available housing. Promoting area regeneration, promoting health and wellbeing. Transport links are vital for improving employment opportunities and a key action is to work with transport providers to improve connections where communities have identified this as a priority.
Glasgow Community Planning Partnership -	<ul style="list-style-type: none"> Focus on economic growth and resilient communities and a fairer more equal Glasgow.

OFFICIAL

OFFICIAL

Glasgow Community Plan 2017 & Community Action Plan 2018-2020	<ul style="list-style-type: none"> Objective of inclusive growth. Transport is a priority action.
Glasgow City Council – Glasgow’s Open Space Strategy 2019	<ul style="list-style-type: none"> The strategy’s vision is by 2050 for a network of good quality, well-distributed, multi-functional open spaces and connecting infrastructure, that contributes positively to the strategy’s outcomes and helps address many of the critical issues facing the city.
Glasgow City Council - Core Paths Plan (2012)	<ul style="list-style-type: none"> To ensure that the public are given reasonable access throughout Glasgow. To illustrate existing designated routes such as rights of way and public paths.
Glasgow City Council – Strategic Plan for Cycling 2016-2025 (undergoing review)	<ul style="list-style-type: none"> Vision to create a vibrant Cycling City where cycling is accessible, safe and attractive to all. Aim for Glasgow to be one of the most sustainable cities in Europe.
Glasgow City Council – City Centre Transport Strategy 2014-24	<ul style="list-style-type: none"> City centre transport strategy linked to the City Centre Strategy – to be updated with new City Centre Transformation Plan
Glasgow City Council – Energy & Carbon Masterplan (ECM) to 2020 & Carbon Management Plan 2 (2013-21)	<ul style="list-style-type: none"> The ECM builds on the first Sustainable Energy Action Plan (SEAP) for Glasgow from 2010 and provides a single, coordinated strategy and plan of project and actions across the city to meet targets of reducing carbon emissions by 30% from 2006 levels by 2020.
Glasgow City Council - Air Quality Action Plan (2009)	<ul style="list-style-type: none"> To reduce levels of Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) within the City’s Air Quality Management Areas within a specified period of time.
Glasgow City Council - Local Biodiversity Action Plan (2001)	<ul style="list-style-type: none"> To protect, enhance and promote local biodiversity throughout the City.
Glasgow City Council - Town Centre Action Plans	<ul style="list-style-type: none"> To consider matters such as the appropriate mix of uses, improvements to the physical environment, traffic management measures, improvements to car parking and public transport issues.
Glasgow City Council - River Clyde Flood Management Strategy (2005)	<ul style="list-style-type: none"> To provide information about the implementation of flood management solutions and improvements to quay walls, incorporating the creation of and improvements to public spaces along the River Clyde corridor and feeding into the strategic drainage plan for Glasgow.
Glasgow City Council - Climate Change Strategy and Action Plan 2009	<ul style="list-style-type: none"> To identify opportunities to reduce Greenhouse Gas emissions and reduce & offset carbon emissions. To identify service areas that require adaptation to climate change scenarios. To embed climate change considerations into existing and new Council strategies, plans and policies. To establish and identify actions, targets and to undertake monitoring and reporting. To raise awareness of climate change impacts and actions to staff, developers, communities and local business.
Glasgow City Council – Climate Emergency Implementation Plan (Draft), 2020	<ul style="list-style-type: none"> An action plan on how the city can achieve the 2030 carbon neutral goal for Glasgow. The implementation plan focuses on five main themes - communication and community empowerment, just and inclusive place, well-connected and thriving city, health and well-being and Green Recovery.

Note: Information gaps in the environmental baseline information will be addressed through the monitoring process.