# **Final Environmental Report**

City Mobility Plan Strategic Environmental Assessment

February 2021

The City of Edinburgh Council



#### **Environmental Report**

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# **Key Facts**

Name of Responsible Authority	City of Edinburgh Council (CEC)
Title of plan, programme or strategy (PPS)	Edinburgh City Mobility Plan (CMP)
Requirement for the PPS	Edinburgh's current Local Transport Strategy, the fourth iteration, expired at the end of 2018 – it will be succeeded by the City Mobility Plan. Although there is no statutory requirement for local authorities to produce transport strategies, City of Edinburgh Council has routinely updated its Local Transport Strategy every five years.
Subject of the PPS	Transport, mobility and placemaking.
Period covered by the PPS	2021 - 2030
Frequency of updates	Reviewed every 2 years
Requirement for SEA	In accordance with The Environmental Assessment of Plans and Programmes (Scotland) Act 2005 (the Act), the CMP requires a SEA under Section 5(3) of the Act.
Geographic area covered by the PPS	The main focus of the CMP will be the City of Edinburgh Council area. However, it will also examine wider regional transport issues, seeking to address the adverse impacts of transport movements originating or terminating in Edinburgh.
Purpose and/or objectives of PPS	To set out the transport vision, objectives, policies and plans which support the Council's economic, social and environmental objectives. This includes how City of Edinburgh Council will meet national and regional objectives relevant to transport at a local level and details the actions required to meet current and future local challenges and achieve community objectives through a combination of short, medium and long-term action plans.

# **Non-Technical Summary**

#### Introduction

This report summarises the findings of the Strategic Environmental Assessment (SEA) which was conducted for the City of Edinburgh Council's City Mobility Plan (CMP). The Environmental Assessment (Scotland) Act 2005 sets out the statutory requirements for conducting a SEA, which ensures the environment and other sustainability aspects are considered at an early stage of decision making when preparing public plans, programmes and strategies (PPS).

The purpose of the Environmental Report is to:

- Provide information on the draft Edinburgh CMP
- Identify, describe and evaluate the likely environmental influence of the draft Plan; and
- Provide an opportunity for the Consultation Authorities and the public to comment on any aspect of the draft Environmental Report.

#### Background to the Edinburgh City Mobility Plan

The CMP has been developed to support Edinburgh's ambitious target to be carbon neutral by 2030. The CMP includes a series of policy measures which would seek to deliver the following vision:

Edinburgh will be connected by a safer and more inclusive carbon neutral transport system delivering a healthier, thriving, fairer and compact capital city and a higher quality of life for all residents.

In line with European best practice (Developing Sustainable Urban Mobility Plans), the initial stages of preparing the CMP involved an extensive review of the existing transport strategy, identifying and understanding mobility issues, reviewing literature, exploring the best practice from other cities' approaches and analysis of feedback from relevant recent Council consultations (Economic Strategy 2018, and 2050 Edinburgh City Vision).

Following consultation on the prospectus, an interim report was drafted and presented to the CEC's Transport and Environment Committee on 28th February 2019. The committee noted the findings of the engagement and approved the next stages involved in developing the CMP.

Further workshops were undertaken involving 100 stakeholders and the Transport Forum (which continues to serve as the stakeholder advisory group for mobility policy development), to help identify policy measures that would support the CMP.

In order to sift the initial long list of policy measures, each was considered against a series of questions, including whether the objectives have been met, issues addressed (Traffic & Freight/Health & Wellbeing/Access & Equality/Built Environment) and delivery mechanisms/cost.

Following this initial sift, a set of draft objectives and preliminary list of policy measures were presented to the CEC Transport and Environment Committee on the 17th May 2019.

Further internal consultation with CEC delivery teams and other plan teams, including ECCT and City Plan was undertaken, to ensure alignment with current and future plans.

Public transport appraisals have also been undertaken by consultants to identify technical and cost issues, and develop business cases and where appropriate, add a spatial layer to policy measures, for example, identify where public transport corridors require to be developed or expanded.

#### **Assessment Methodology**

The SEA focuses on strategic level issues and does not consider detailed measures for specific developments and construction projects within the study area. Strategic mitigation for negative effects of the CMP has been identified throughout the assessment and forms the basis of future project level assessments that focus on interventions identified in the CMP.

Listed below are the environmental topics that have been scoped into the SEA as it was concluded that the CMP has the potential to significantly impact each of these topics:

- air and climatic factors;
- land and soil;
- water;
- landscape and townscape;
- biodiversity, flora and fauna;
- material assets;
- population and human health; and
- cultural heritage.

The SEA uses a set of SEA objectives and assessment criteria which cover each of the environmental topics scoped into the assessment. These have been developed from a comprehensive review of the baseline and policy requirements to align with the SEA objectives with the forthcoming City Plan 2030 and the recently adopted City Centre Transformation Strategy.

To ensure the SEA influenced each stage of the CMP (including public consultation, stakeholder engagement, workshops, framework drafting), it was aligned with the CMP development. This informed refinement and revision of the proposed plan, as outlined in section 2 of this Environmental Report. SEA specialists worked with the CMP development team to conduct detailed assessments on the draft CMP, to improve the environmental and sustainability benefits resulting from the plan. This involved assessing:

- the compatibility of the SEA objectives with the CMP objectives;
- the policy measures against the SEA objectives to determine mitigation measures and enhancement recommendations;
- the effects of implementing these policies where mitigation measures and recommendations were adopted; and
- individual policy measures where further detail was required to identify effects of mitigation measures.

Where negative impacts or positive opportunities were identified, mitigation measures and recommendations were proposed. Recommendations included refinement to the CMP objectives, the addition of policies, amendments to policy wording, caveats and monitoring controls based on the environmental criteria that consider and respond to both direct and indirect, secondary and cumulative impacts.

In accordance with the Environmental Assessment (Scotland) Act 2005, the statutory consultation authorities, which include: Scottish Natural Heritage (now NatureScot); Scottish Environmental Protection Agency; and Historic Environment Scotland (HES), were consulted on the scoping report and their comments and views were considered. These are provided in Appendix C of the Environmental Report.

## **Policy Context**

The City of Edinburgh Council's CMP sets out the strategic approach for the movement of people and goods into and around Edinburgh. The plan outlines policies to make Edinburgh a fair, thriving, connected and inspired capital city, superseding the existing Local Transport Strategy for Edinburgh.

The CMP plays a pivotal role in linking national, regional and city policy context through to guiding delivery plans and resourcing across the city, which is outlined in Section 3.2. The SEA considered the Plan within the context of a focussed range of other plans, programmes and strategies (PPS). This process helped to identify a range of environmental protection objectives and problems and issues that the Plan should take cognisance of and might support with its delivery. This comprehensive policy review has been undertaken and is included as Appendix B to the Environmental Report. A summary of the key environmental protection objectives identified from the review is provided in section 2 of the draft report.

#### **Environmental Context**

A baseline information gathering exercise was carried out in order to summarise the key environmental characteristics against the SEA topics. The full baseline report is provided in Appendix A of this Environmental Report.

An assessment was also undertaken to provide an overview of the key environmental issues and an assessment of the likely evolution of each baseline issue in the absence of the CMP (i.e. a do-nothing option). Key environmental issues and problems included:

- Transport is a significant contributor to carbon dioxide emissions in Edinburgh. Motorised transport results in poor air quality in parts of Edinburgh, as nitrogen dioxide and PM originate principally from road traffic.
- Edinburgh's transport infrastructure needs to be resilient against adverse climate impacts, and also consider potential positive impacts, such as a longer summer season.
- Depending on where it is located, transport infrastructure can have a detrimental impact on soil through air/run off pollution and sealing.
- Run-off from roads and new transport infrastructure can negatively affect water quality or hydrological regimes. Regular flood events can increase the amount of run-off from roads and exacerbate the problem.
- Potential reduction in landscape/townscape visual amenity through the construction and operation of new transport infrastructure. Potential loss of access to important sites e.g. World Heritage Site.
- Land-take as a result of transport infrastructure can lead to loss, disturbance and fragmentation of habitats. The presence of people and vehicles associated with transport can create disturbances for local wildlife, including disturbance resulting from noise and artificial light.
- There are currently a number of deficiencies in Edinburgh's transport network, resulting in a transport system operating below its capabilities. These include congested roads, roads in need of maintenance, a limited cycle network, a limited bus lane network and poorly maintained public transport facilities in some locations.
- Increasing numbers of people living and working in, and visiting the city, puts pressure on the existing transport network.
- Transport has a number of negative impacts on human health, in terms of air quality, emissions of key air
  pollutants and noise. A transport system that is not conducive to walking and cycling reduces opportunities
  for people to undertake physical activity and can lead to an increase in obesity and other conditions arising
  from inactivity.
- New transport infrastructure could lead to the loss of or damage to known and previously undiscovered historical/heritage sites or features. Congestion in and around conservation areas can undermine the distinctive character of such areas. Street clutter, including inappropriate signage and materials can cause

negative visual impacts. Air pollution can cause deterioration of buildings and monuments. Vibration from road traffic can damage historical/heritage sites or features.

In the absence of a new transport strategy, it is possible that some existing environmental problems would persist and even increase. In line with Schedule 3 of the 2005 Act, the environmental evolution without the PPS should be considered. This should take account of the environmental issues identified in the evolution of the environmental baseline, particularly the environmental problems and trends identified. These are presented in section 3 of the Environmental Report.

## **Key Findings**

The SEA concluded that the proposed strategy would have a predominantly positive effect across the SEA topics, with key benefits identified for air quality and population and human health. Localised negative effects were identified where proposals could impact on natural or cultural heritage designations. It was determined that mitigation would be put in place as detailed proposals develop. A summary of the findings is presented in the table below against each of the SEA topics.

SEA Topic	Summary of Assessment Findings
Air Quality & Climatic Factors	Significant positive effects were identified associated with an overall reduction in traffic due to stricter parking measures, traffic free zones, street closures and road user charges, freight consolidation zones, public transport accessibility improvements, integrated/flexible services and ticketing, low emissions zone and improved walking and cycling measures.
	To achieve significant benefits to air quality and climatic factors, a co- ordinated approach to modal shift is required, for example, similar timing of demand management package implementation to public transport and walking and cycling packages. Effects would be greater over time as more measures are implemented.
	Potential adverse effects could arise where parking controls and/or street closures result in the displacement of private vehicles to other parts of the city. A transport appraisal may be required to determine the impact of displacement effects - for example, the resulting effects on air quality.
Land & Soil	The draft CMP approach to effective integrated land use and mobility planning can prevent cities from becoming dispersed and polarised. Concentrating infrastructure and environmental costs could prevent large areas of land becoming affected by construction of transport infrastructure and car dominated developments. This should lead to reduced detrimental effects on land use change.
	Potential for some localised negative effects where new or expanded regional park and ride may require additional land take. Further environmental appraisal would be required as proposals are developed.
Water	The draft CMP approach to integrated land use planning is likely to reduce widespread construction across the city. This is likely to reduce flood risk, as natural drainage patterns are less likely to be affected by dispersed development and impermeable surfaces. It was also identified that the implementation of the CMP could improve water quality through reduced runoff pollutants, following a reduction in private vehicles and encouraging modal shift. Any new infrastructure should aim to improve sustainable drainage and pollutant filtration.

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A generally positive effect on landscape and townscape was identified with key benefits anticipated through the overall reduction of traffic and parking within the city facilitating public realm improvements. However, the location of any new freight consolidation centres, regional park and rides, logistics zones or hubs needs to be sympathetic to landscape considerations. The extension of the tram route and bus routes would also need to be designed sympathetically.
The draft CMP policies to concentrate infrastructure could prevent large areas of natural environment, including designated sites and protected species, from becoming affected by construction of transport infrastructure and car dominated developments. This should lead to reduced detrimental effects on biodiversity, flora and fauna. Reductions in usage of private vehicles through improved public transport and active travel networks would also improve air quality with a possible positive impact on biodiversity. Where site specific measures are proposed, there is the potential for adverse impacts to occur where proposed interventions result in habitat loss. However, as more interventions are implemented the potential for habitat creation also increases in the long-term.
Positive effects on material assets were identified through the overall improvement to the public transport network. Encouraging greater use of the network through more flexible services, improved accessibility and integrated fares and ticketing is likely to lead to less congestion on the roads due to a fewer number of cars. New bus routes servicing areas with current low public transport access would lead to reduced car use in more remote parts of the city. The introduction of walking and cycling measures would require improvements to cycle facilities and access to streets. It is likely that this would lead to an improvement to the existing transport network.
The improvements to public transport would also promote sustainable mass-transit opportunities for people to access work, education, social activities, healthcare and other services. Active travel network improvements promote a healthy lifestyle and quality of life would be improved through a more integrated network, better facilities and safety improvements such as secure bike storage. Human health would also be positively impacted by reductions in air pollutants and noise resulting from an overall reduction in traffic.
Mixed effects were identified on Cultural Heritage. Dense developments could potentially affect townscape and the setting of heritage assets if taller buildings are part of the development. Heritage assets could also be affected by the construction footprint of new freight consolidation centres, logistics zones or hubs and expansion of both bus and tram routes. There may be opportunities for improved accessibility to heritage assets through improvements to the public transport network and patient travel routes and the viewal patience of come horitage

#### Post Consultation 2021 Amendments

The draft CMP and Environmental Report were issued to the SEA Consultation authorities (SEPA, Nature Scot (formally SNH and HES)) for public consultation in January 2020 for a period of 8 weeks. This was extended in response to Covid-19, with the public consultation period ending 7 May 2020. Responses from this period of consultation were considered and resulted in slight amendments to the objectives, policies and themes of the draft CMP.

The SEA reviewed the changes post consultation to identify if there were any potential negative environmental effects across the SEA objectives. The SEA concluded that the changes to the Draft CMP would still result in predominantly positive effects across the SEA topics, with key benefits identified for air quality and population and human health.

#### **Next Steps and Monitoring Framework**

Best practice in SEA Monitoring requires that a detailed monitoring framework reflects the implementation of the Strategy actions, identifies where existing indicators (from the delivery of related PPS) can be used to track progress and, ideally, is embedded within the final Plan to ensure that monitoring is undertaken as part of CMP delivery.

It is proposed that the monitoring framework would align with the forthcoming City Plan 2030 and recently adopted Edinburgh City Centre Transformation Strategy, to ensure an integrated approach. Developing this integrated framework was discussed at a workshop with the Consultation Authorities following the public consultation. A monitoring framework and associated targets/indicators will be presented in the Post Adoption SEA statement, the final stage in the SEA process.

# 1. Introduction

### 1.1 Purpose of this report

Strategic Environmental Assessment (SEA) provides plan-making authorities with a transparent process to incorporate environmental considerations into decision making at an early stage and in an integrated and documented manner.

The overall objective of SEA is to:

"Provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development" (Article 1 of the European SEA Directive 2001/42/EC).

The purpose of this report is to report the findings of the SEA of Edinburgh Council's City Mobility Plan (CMP). This Environmental Report (ER) responds to statutory SEA requirements, considers the evolution of the emerging CMP to date and presents an assessment of its likely significant effects. As required by the SEA regulations (see Section 1.4), a Non-Technical Summary (NTS) of the ER has also been prepared to summarise the key findings from the SEA.

### 1.2 Structure of Report

This report is structured as follows:

- Section 1 introduces the report, identifies core statutory requirements for undertaking the SEA, explains the background to the development of the CMP and provides a summary of the proposed plan and purpose.
- Section 2 provides an overview of the SEA process which has been undertaken to date, the SEA scoring
  process and the response to consultation comments. A detailed response to consultation comments is
  provided in Appendix C.
- Section 3 provides a review of relevant Plans, Programmes and Strategies (PPS) and a summary of the baseline characteristics and the evolution of the baseline in the absence of the CMP. A detailed baseline is provided in Appendix A, with a full list of relevant PPS, which identifies applicable legislative and policy requirements and targets at international, national, regional and local scale provided in Appendix B.
- Section 4 presents the approach to the SEA assessment, providing the assessment criteria, scoring system and approach to reasonable alternatives.
- Section 5 presents the key findings of the high-level SEA undertaken on the package of policy measures in the CMP and the SEA assessment on individual policy measures identified for further assessment. The highlevel assessment matrix of the package and individual policy measures is provided in Appendix D.
- Section 6 presents the approach to cumulative assessment.
- Section 7 identifies embedded and future mitigation, as well as enhancement measures.
- Section 8 identifies the next steps in the SEA process and outlines potential monitoring arrangements.
- Section 9 summarises the key changes to the ER following amendments to the CMP after consultation.

The report is supported by the following appendices:

- Appendix A: CMP SEA Baseline
- Appendix B: Relationship with relevant Plans, Programmes and Strategies
- Appendix C: Consultation Responses
- Appendix D: High-level SEA Assessment
- Appendix E: Post Consultation Amendments

### 1.3 Statutory Context for the SEA

In Scotland, the Environmental Assessment (Scotland) Act transposes the EU Directive (2001/42/EC) into Scottish legislation, and Section 1 of the Act sets out the primary requirement, which is to secure the completion of an environmental assessment during the preparation of a qualifying plan or programme. The Act requires responsible authorities to assess the likely significant effects on the environment of implementing PPS, as defined within the 2005 Act. This assessment must also examine the likely significant effects of implementing reasonable alternatives to the PPS under consideration (i.e. the CMP).

The CMP is a qualifying plan under Section 5(3) of the 2005 Act, therefore a SEA is required.

Under the 2005 Act, once the need for a SEA of a PPS has been established, a three-stage process is required:

- SEA Scoping (Section 15): Responsible Authorities must provide the Consultation Authorities with sufficient information to enable them to consider the proposed scope, level of detail and consultation period for an ER to accompany the PPS;
- Preparation of an ER, and consultation on it (Section 14): Responsible authorities must prepare an ER to "identify, describe and evaluate the likely significant effects on the environment of implementing" a PPS. This report should be based on the outcomes of the SEA Scoping and the information requirements specified in Schedule 3 of the 2006 Act. The report must be consulted on in tandem with the PPS for a period as agreed with the Consultation Authorities through the SEA Scoping. This report responds to these legislative requirements; and
- Preparation of a Post Adoption SEA Statement (Section 18): Following the adoption of a PPS, the Responsible Authority must prepare a statement setting out, amongst other matters, how environmental considerations and the SEA have been considered within the adopted PPS.

#### 1.4 Background to the City Mobility Plan

The City Mobility Plan succeeded Edinburgh's current Local Transport Strategy 2014-2019 (LTS). The current LTS was published in 2014 to set out the City of Edinburgh's policies and plans in working towards an integrated and sustainable transport system. The LTS considered the Council's wider objectives and outcomes and was aligned with the Local Development Plan and Economic Strategy as well as other regional and national transport policies.

In September 2018, CEC published a prospectus for public consultation entitled 'Edinburgh: connecting our city, transforming our places'. The prospectus set out a series of 15 ideas for a more active and connected city, a healthier environment, a transformed city centre, neighbourhood streets and civic life.

This prospectus combined three major projects being prepared throughout 2018 and 2019, including:

- Edinburgh City Centre Transformation (ECCT) an action plan for a vibrant and people-focused capital city centre to improve community, economic and cultural life, which was approved in September 2019 and was subject to its own SEA.
- The City Mobility Plan setting the strategic approach for how people and goods travel into, and around, our growing city. Its development supersedes the existing LTS for Edinburgh, in setting policies and actions that help to make Edinburgh a fair, thriving, connected and inspired capital city.
- Low Emission Zones (LEZs) the Council is taking a comprehensive approach to developing Low Emission Zones as a step towards protecting Edinburgh's citizens from the harmful health effects of poor air quality, in line with Scottish Government priorities to introduce LEZs in Aberdeen, Dundee, Edinburgh, and Glasgow by 2020.

These major projects are being considered in the context of the emerging City Plan 2030, which is subject to its own SEA. Following extensive public and stakeholder consultation on the ideas in the prospectus, detailed proposals were then developed for each project.

#### 1.5 CMP Development Approach

The CMP has been developed to support Edinburgh's ambitious target to be carbon neutral by 2030. The CMP comprises a series of objectives and policy measures which seek to deliver the following vision:

Edinburgh will be connected by a safer and more inclusive carbon neutral transport system delivering a healthier, thriving, fairer and compact capital city and a higher quality of life for all residents.

In line with European best practice (<u>Developing Sustainable Urban Mobility Plans</u>), the initial stages of preparing the CMP involved an extensive review of the existing transport strategy, identifying and understanding mobility issues, reviewing literature, exploring the best practice from other cities' approaches and analysis of feedback from relevant recent Council consultations (<u>Economic Strategy 2018</u>, and <u>2050 Edinburgh City Vision</u>).

Following consultation on the prospectus, an interim report was drafted and presented to the CEC's Transport and Environment Committee (TEC) on 28<sup>th</sup> February 2019. The committee noted the findings of the engagement and approved the next stages involved in developing the CMP.

Further workshops were undertaken involving 100 stakeholders and the Transport Forum (which continues to serve as the stakeholder advisory group for mobility policy development), to help identify policy measures that would support the CMP.

In order to sift the initial long list of policy measures, each was considered against a series of questions, including whether the objectives have been met, issues addressed (Traffic & Freight/Health & Wellbeing/Access & Equality/Built Environment) and delivery mechanisms/cost.

Following this initial sift, a set of draft objectives and preliminary list of policy measures were presented to the TEC on the 17<sup>th</sup> May 2019.

Further internal consultation with CEC delivery teams and other plan teams, including ECCT and City Plan was undertaken, to ensure alignment with current and future plans.

Public transport appraisals have also been undertaken by consultants to identify technical and cost issues, and develop business cases and where appropriate, add a spatial layer to policy measures, for example, identify where public transport corridors require developing or expanding.

## 2. SEA Process

### 2.1 Introduction

The SEA process, as described in paragraph 1.4.3, has been aligned with the CMP development to ensure the SEA has had influence at each stage of the strategy development and, along with the Integrated Impact Assessment (IIA) process, has informed the refinement and revision of the proposed plan.

Focussed assessments were undertaken by SEA specialists and the CMP development team, who worked together to understand both the intention and ambition of the draft policy. This includes examining the options available and making recommendations to strengthen the likely environmental gain or improve the sustainability benefits associated with the CMP policy. Figure 2.1 below sets out the SEA approach alongside the CMP development.

Figure 2.1: The SEA and CMP approach



The SEA adopted a matrix-based approach, assessing:

- The compatibility of the CMP Objectives against SEA Objectives. In line with SEA recommendations, the CMP objectives were refined to ensure the best environmental and wider sustainability outcomes.
- The packages of policy measures and alternative policies within each package against the SEA objectives and SEA assessment criteria to determine mitigation and enhancement recommendations and to assess the likely in-combination, secondary and synergistic effects of implementing these policies.
- The packages of policy measures focusing on the key changes, identifying where mitigation measures and
  recommendations had been adopted and considering the in-combination, secondary and synergistic effects
  of implementing these policies.
- Individual policy measures where it was identified there was further detail or spatial information identifying where mitigation measures and recommendations had been adopted and considering the in-combination, secondary and synergistic effects of implementing these policies.

Following each stage of assessment, any negative impacts or positive opportunities that were identified were discussed with the project team to determine effective mitigation and enhancement recommendations.

The key recommendations have included refinements to the objectives, alternative policies and policy wording, caveats and monitoring controls based on the environmental criteria that consider and respond to both direct impacts and indirect, secondary and cumulative impacts.

### 2.2 Scoping of SEA Topics

The baseline and policy review were carried out to determine the SEA topics which should be scoped into the assessment and would be anticipated to have a positive and/or negative impact, as well as topics where a significant cumulative impact is anticipated. Schedule 3 of the 2005 Act requires the CMP to be assessed against the following environmental issues:

- Air and climatic factors
- Land and soil
- Water
- Landscape and townscape
- Biodiversity, flora and fauna
- Material assets
- Population and human health
- Cultural heritage

In accordance with the requirements of the 2005 Act, CEC has considered if the environmental effects (positive or negative) of the City Mobility Plan on each SEA topic are likely to be significant. The initial scoping exercise was based on preliminary information about the likely scope of policy and projects within the CMP production, the known environmental baseline of the area and the likely environmental issues.

It was determined that the CMP has the potential to significantly impact all of the environmental issues. Accordingly, all of the issues were scoped into the SEA and provide the framework for the SEA objectives and the criteria and questions which have been used in the assessment process.

A Scoping Workshop was held with Scottish Natural Heritage (now NatureScot), Scottish Environmental Protection Agency and Historic Environment Scotland in January 2019 to discuss and inform the scope and methodology.

#### 2.3 Response to consultation comments

Statutory requirements of the SEA include the requirement to provide the statutory consultation authorities with a detailed explanation of the plan in order to fully understand the likely environmental effects. The consultation authorities were asked to provide a view on the CMP Scoping Report produced in February 2019. A summary of the key comments from the statutory consultation authorities and the response to them in the SEA is provided in Appendix C.

#### 2.4 Habitats Regulations Appraisal

Article 6(3) of the EC Habitats Directive requires that any plan which is not directly connected with or necessary to the management of a European site (otherwise known as 'Natura 2000' sites), but may be likely to have a significant effect on such a site, either individually or in combination with other plans or projects, shall be subject to an 'appropriate assessment' of its implications for the European site in view of the site's conservation objectives. This procedure is applied in Scotland through The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), and is known as the 'Habitats Regulations Appraisal' (HRA) of plans.

Natura 2000 sites include Special Areas of Conservation (SACs) designated under the Habitats Directive (92/43/EEC) and Special Protection Areas (SPAs) designated under the Birds Directive (2009/147/EEC). In addition, Candidate and Possible SACs, Potential SPAs and Ramsar wetlands should also be included in appraisals. Natura 2000 sites are designated due to the presence of specific habitats and species of internationally important biodiversity value, otherwise known as 'qualifying interest features.'

Each stage in the development of the CMP was reviewed to determine any potential indirect or direct impacts on Natura 2000 sites. For example, each draft of the CMP objectives and policies have been checked to determine any potential impacts on Natura 2000 sites in the Edinburgh area – primarily the Firth of Forth SPA and the Imperial Dock SPA. The CMP objectives and policies are strategic in nature, with few specific spatial implications. As a result, no potential impacts on the Natura 2000 sites were identified.

# 3. Policy and Environmental Context

## 3.1 Introduction

This section summarises relevant baseline environmental characteristics, environmental issues and considers the evolution of the baseline in the absence of the CMP. It also notes the relationship between the CMP and other relevant PPS. This has served as an important base upon which to build the SEA Framework.

This section presents a review of the environmental aspects, context and baseline scenario within which the CMP has been developed. Information on air quality, climatic factors, land, soil, water, landscape, biodiversity, material assets, population, human health and cultural heritage have been included in establishing the environmental baseline.

#### 3.2 Relationship with other Plans Programmes or Strategies

The CMP plays a pivotal role in linking national, regional and city policy context through to guiding delivery plans and resourcing across the city which is illustrated in Figure 3.1.



Figure 3.1: Diagram showing how the City Mobility Plan links to national, regional and local strategies

A comprehensive policy review has been undertaken and is included in Appendix B to this report. An understanding of the relevance of other legislation, policy and plans to the CMP is an essential step in the SEA process.

A summary of the key environmental objectives identified through the review is presented in Table 3.1.

Table 3.1: Key Environmental Requirements/Objectives



SEA Topic	Key Environmental Requirements/Objectives
Air quality and climatic factors	<ul> <li>The need to minimise harmful emissions (CO<sub>2</sub>, NO<sub>x</sub> and Particulate Matter) to the air.</li> </ul>
	<ul> <li>Improve air quality particularly within the six Air Quality Management Areas (AQMAs) within Edinburgh.</li> </ul>
	<ul> <li>Support target for Edinburgh to be carbon neutral by 2030</li> </ul>
	<ul> <li>Reduce the impact from transport on climate change and air quality by reducing the need to travel, providing attractive and viable alternatives to private vehicles.</li> </ul>
	<ul> <li>Promote active travel options (including walking, cycling and public transport).</li> </ul>
	<ul> <li>Improve the resilience of Edinburgh's transport infrastructure to climate change.</li> </ul>
Land and soil	<ul> <li>Reduce the requirement for construction of large-scale transport infrastructure to reduce the impact on soil.</li> </ul>
	<ul> <li>Protect high quality soil by encouraging the use of vacant or derelict land.</li> </ul>
Water	<ul> <li>Reduce the requirement for construction of large-scale transport infrastructure which could have a direct effect on water quality.</li> </ul>
	<ul> <li>Reduce run-off from roads and transport infrastructure to improve water quality.</li> </ul>
Landscape	<ul> <li>Ensure the unique qualities of Edinburgh's landscape are safeguarded from construction of new transport infrastructure.</li> </ul>
	<ul> <li>Ensure access to important designated and non-designated sites.</li> </ul>
Biodiversity, flora and fauna	<ul> <li>Conserve habitats and reduce the disturbance to local wildlife from noise and artificial light.</li> </ul>
	<ul> <li>Protect biodiversity by reducing the requirement for large-scale transport facilities.</li> </ul>
	<ul> <li>Create a natural environment resilient to the threats of climate change, invasive species, habitat fragmentation, pests and diseases.</li> </ul>
Material assets	<ul> <li>Improve congested roads, poor maintenance of roads, limited cycle and bus lane network and poorly maintained transport facilities in some areas.</li> </ul>
Population and human health	<ul> <li>Protect health and well-being of Edinburgh's population.</li> </ul>
	<ul> <li>Promote active travel to reduce obesity and other conditions arising from inactivity.</li> </ul>
	<ul> <li>Create a public transport system that is fit-for-purpose and accessible to all of Edinburgh's population.</li> </ul>
	<ul> <li>Promote access to quality open space.</li> </ul>
Cultural heritage and historic environment	<ul> <li>Protect and enhance Edinburgh's cultural heritage assets and their settings.</li> </ul>
	<ul> <li>Protect buildings from deterioration caused by air pollution.</li> </ul>

## 3.3 Relevant Environmental Aspects, Issues and Problems

A baseline information gathering exercise was carried out in order to summarise the key environmental characteristics against the SEA topics. The full baseline report is provided in Appendix A of this document.

Following consideration of the key environmental issues in Edinburgh, and the relevant PPS, the outcomes of the CMP can be identified. Table 3.2 lists the environmental problems identified by SEA topic and the implications for the CMP and this SEA.

Table 3.2: Relevant SEA Environmental Issues and Implications for CMP

SEA Topic	Baseline Key Characteristics	Environmental Issues and Problems	Implications for CMP
Air Quality and Climatic Factors	<ul> <li>Edinburgh has six AQMAs, five AQMAs are in locations where annual mean limits for NO2 are regularly exceeded. There is one AQMA, at Salamander Street, where annual mean limits for PM10 are regularly exceeded.</li> <li>Summary of climate impact projections for 2050:</li> <li>sea levels to rise by 0.24m;</li> <li>flooding to increase to 1:200 severity;</li> <li>increased potential for drought as water availability decreases by 20%;</li> <li>storms and high winds to increase to 1:50 severity;</li> <li>increase in the chance of heatwaves to 1 in 10; and</li> <li>reduction in extreme cold spells, with an increase in tourist season days.</li> </ul>	Transport is a significant contributor to carbon dioxide emissions in Edinburgh. Motorised transport results in poor air quality in parts of Edinburgh, as nitrogen dioxide and PM originate principally from road traffic. Edinburgh's transport infrastructure needs to be resilient against adverse climate impacts, and also consider potential positive impacts, such as a longer summer season.	The CMP must aim to reduce the impact of transport on climate change and air quality through reducing the need to travel, providing attractive and viable alternatives to the car (including walking, cycling and public transport) and promoting cleaner fuels and technologies. The CMP would need to accommodate a longer summer season, which could see more tourists visiting the city for longer periods.
Land and Soil	The majority of farmland in the area is classified as prime agricultural land, with the majority also within the Edinburgh Green Belt. Edinburgh has a relatively low incidence of vacant and derelict land compared with other central belt authorities. High land values and pressures for development means that land tends to be re-used quickly.	Depending on where it is located, transport infrastructure can have a detrimental impact on soil.	The CMP should reduce the requirement for the construction of large-scale transport infrastructure, thus reducing transport's impact on soil quantity and quality. Although the Plan has the potential to reduce the need for large scale infrastructure, some measures may have an impact (e.g. construction of new park and rides, mobility hubs, new walking and cycling routes).
Water	Edinburgh is drained by a number of relatively short rivers which generally flow from south west to north east, rising in and around the Pentland Hills and	Run-off from roads and new transport infrastructure can negatively affect water or hydrological regimes. Regular flood	The CMP should improve water quality, primarily through reducing the requirement

SEA Topic	Baseline Key Characteristics	Environmental Issues and Problems	Implications for CMP
	discharging into the Firth of Forth. Principal among these is the Water of Leith, which flows through the heart of the city. The Water of Leith regularly floods following heavy rain, most recently in June 2019. There are approximately 3,300 residential properties and 480 non-residential properties at risk of flooding in the Water of Leith catchment area. Edinburgh currently has 3 Integrated Pollution Prevention and Control (IPPC) installations across the city, all located within the Water of Leith catchment. Edinburgh's water requirements are now supplied via a network of reservoirs in the Tweedsmuir, Moorfoot and Pentland Hills, some acting as main supply reservoirs and others as a holding or compensation reservoir. This infrastructure was the subject of a recent major investment programme.	events can increase the amount of run-off from roads and exacerbate the problem.	for the construction of large-scale transport facilities. Drainage improvements to the existing transport network should also be considered, for example, installation of filter drains. The CMP should also consider the susceptibility of the transport network to flooding, particularly around vulnerable areas prone to regular flood events.
Landscape	Edinburgh has numerous outstanding features within close proximity to the City Centre: Holyrood Park including Arthur's seat and Salisbury Crags, the Braid Hills and Blackford Hill, Corstorphine Hill and the Pentland Hills. These fall within the Green Belt and are also designated as Special Landscape Areas.	Potential reduction in visual amenity through the construction and operation of new transport infrastructure. Potential loss of access to important sites.	The CMP should protect the landscape from the development of unsightly transport infrastructure and look to maintain access to important sites.
Biodiversity, Flora and Fauna	Edinburgh has three Special Protection Areas (SPA) and one proposed Special Protection Area (Outer Firth of Forth and St Andrews Bay Complex pSPA). The SPAs comprise Imperial Dock Lock SPA, the Firth of Forth SPA and Forth Islands SPA. Edinburgh also has 7 Sites of Special Scientific Interest (SSSI) covering a total area of 1,239 hectares, 8 local	Land take as a result of transport infrastructure can lead to loss, disturbance and fragmentation of habitats. The presence of people and vehicles associated with transport can create disturbances for local wildlife, including disturbance resulting from noise and artificial light.	The CMP should protect biodiversity, primarily through reducing the requirement for the construction of large-scale transport facilities.



SEA Topic	Baseline Key Characteristics	Environmental Issues and Problems	Implications for CMP
	nature reserves and 109 non-statutory designated sites.		
Material assets	Edinburgh is well served by public transport, with an extensive bus and rail network and developing tram and park and ride network. The Edinburgh Tram project is the largest infrastructure proposal to improve the city's overall transport networks and to date connects the Airport to the city centre. Many people travel to work by car causing traffic congestion and significant pressure on parking spaces.	There are currently a number of deficiencies in Edinburgh's transport network, resulting in a transport system operating below its capabilities. These include congested roads, roads in need of maintenance, a limited cycle network, a limited bus lane network and poorly maintained public transport facilities in some locations.	The CMP must contribute to the development of a 21st Century transport system, improving opportunities for travel by sustainable modes of transport and reducing reliance on the private car.
Human Health	Noise can be a serious problem to people living in urban areas. The Council have identified 18 noise Management Areas and 10 Quiet areas. An emerging public health priority in Edinburgh as well as many cities in the UK and across the world, is dealing with poor air quality. These can have significant impacts on health, child development and environmental quality. The council's Air Quality Action Plan and Active Travel Action Plan both aim to bring health benefits to Edinburgh, through implementing controlled parking zones to improve air quality and by encouraging model shift to more active travel.	Transport has a number of negative impacts on human health, in terms of air quality, emissions and noise. A transport system that is not conducive to walking and cycling reduces opportunities for people to undertake physical activity and can lead to an increase in obesity and other conditions arising from inactivity.	The CMP should seek to improve human health by increasing opportunities for physical activity, especially walking and cycling, and through the development and promotion of clean, healthy and quiet modes of transport.
Population	The total resident population of Edinburgh is 507,170 and covers an area of 26,373 hectares (National Records of Scotland, 2018). The population of Edinburgh is projected to increase by 15% or 75,965 between 2016 and 2041.	Increasing numbers of people living and working in, and visiting the City, puts pressure on the existing transport network.	The CMP should benefit the population by reducing road congestion, improving opportunities for travelling by non-car modes of transport and contributing to the development of a fit-for-purpose public transport system.

SEA Topic	Baseline Key Characteristics	Environmental Issues and Problems	Implications for CMP
Cultural Heritage	The key historic designation in Edinburgh is the New and Old Town World Heritage Site, which was inscribed by UNESCO in 1995. Edinburgh has the largest concentration of listed buildings in the UK outside London, with 4,830 listed items, comprising approximately 34,000 individual properties. There are 50 conservation areas, 56 Scheduled Ancient Monuments and 17 historic gardens and designed landscapes in Edinburgh.	New transport infrastructure could lead to the loss of or damage to known and previously undiscovered historical/heritage sites or features. Congestion in and around conservation areas can undermine the distinctive character of such areas. Street clutter, including inappropriate signage and materials can cause negative visual impacts. Air pollution can cause deterioration of buildings and monuments. Vibration from road traffic can damage sites.	The CMP should protect the historic environment from the impacts of transport (especially new transport facilities, congestion and parking demand) and seek opportunities for enhancement wherever possible.

#### 3.4 Environmental Baseline Evolution

In the absence of a new transport strategy, it is possible that some existing environmental problems would persist and even increase. In line with Schedule 3 of the 2005 Act, the environmental evolution without the PPS should be considered. Taking account of the environmental issues identified in Table 3.2, the evolution of the environmental baseline, particularly the environmental problems and trends identified, are presented in Table 3.3.

SEA Topic	Baseline Evolution Without the CMP – 'Do Nothing' Scenario
Air quality and climatic factors	If the CMP is not implemented, it is likely that demand for, and use of, motorised forms of transport will increase as the City develops, while opportunities to encourage transport mode shift to walking, cycling and public transport will be lost.
	Increased traffic will increase carbon dioxide emissions and energy consumption and air quality will continue to worsen, potentially leading to the implementation of more AQMAs in the City. CEC could fail in meeting its obligations under the Climate Change (Scotland) Act 2009, while continued breaches of European air quality limits could see fines being imposed on the UK government, which could eventually filter down to the City Council itself.
	If the CMP is not implemented, it is likely that the transport network would be less resilient and less able to accommodate future climate impacts (including increased severity and frequency of flooding, storms, temperature extremes, heatwaves and changes to the length of the summer and winter seasons).
Land and soil	If the CMP is not implemented and demand for motorised transport increases, it may be necessary to construct further large-scale transport facilities, such as new roads and bridges, to cope with demand. Construction and use of such facilities could lead to land contamination, soil erosion and soil sealing. Pressure for the development of new transport facilities could also lead to the loss of any prime agricultural land remaining in the City.
Water	If the CMP is not implemented and demand for motorised transport increases, it may be necessary to construct further large-scale transport facilities, such as new roads and bridges, to cope with transport demand, which could contribute to the pollution of nearby watercourses, primarily through runoff.
Landscape	If the CMP is not implemented, it is likely that demand for motorised travel will increase and this will necessitate the construction of new transport infrastructure, such as roads and bridges, throughout the City. This could have a significant adverse impact on the landscape character of Edinburgh.
Biodiversity, flora and fauna	If the CMP is not implemented and demand for motorised travel increases, there will likely be a requirement for new and significant transport infrastructure to cope with this demand. Construction of such infrastructure could put pressure on biodiversity, including the loss and fragmentation of habitats, while increases in traffic, vehicle emissions and noise could disturb sensitive species.
Material assets	If the CMP is not implemented, it is likely that a range of sustainable transport facilities (including walking and cycling routes, cycle parking,

SEA Topic	Baseline Evolution Without the CMP – 'Do Nothing' Scenario
	public transport hubs) would not be delivered. This in turn could continue the high reliance on cars and demand for cars and could jeopardise Edinburgh's vision of a 21st century transport system that meets the needs of all those living in, working in and visiting the City.
Population and human health	If the CMP is not implemented and the population of the City continues to increase, demand for transport will outstrip supply, leading to overcrowding of transport facilities. If improvements are not made to the walking, cycling and public transport environments, it is likely that most of the demand for transport will be for road transport, leading to increased congestion and pollution.
	If the CMP is not implemented and a significant switch to healthy and active modes of transport, such as walking and cycling, is not achieved, various health issues, such as obesity, inactivity and poor air quality, will continue to affect the population, causing increases in ill-health and potentially a reduction in life expectancy.
	Developmental pressures for new transport infrastructure to cope with the increased demand for road traffic could lead to the loss of open space areas, reducing opportunities for physical activity. Busier roads could increase the risk to pedestrians at certain times of the year if the CMP is not implemented. Without the CMP, these health and safety risks could have the potential to disproportionately impact vulnerable users such as children, elderly, and those with a disability.
Cultural heritage and historic environment	If the CMP is not implemented and demand for road transport and parking continues to increase, this may put development pressure on areas of historic and/or archaeological interest and undermine the character of conservation areas. Air pollution impacts on Edinburgh's historic buildings may also increase.

# 4. Assessment Approach

#### 4.1 Introduction

The 2005 Act requires the Environmental Report to present the assessment and evaluation of the likely significant effects that CMP has on the environment. It is important to recognise that the SEA focuses on strategic level issues and does not consider detailed measures for specific developments and construction projects within the study area. Such effects would be the focus of a project level Environmental Impact Assessment (EIA), where appropriate. Strategic mitigation has been identified throughout the assessment and this forms the basis of future, project level assessments that focus on interventions identified in the CMP.

### 4.2 SEA Objectives and Assessment Criteria

The SEA assessments used a set of SEA objectives and assessment questions identified in Table 4.1, that cover each of the environmental topics scoped into the assessment. The SEA objectives and assessment criteria presented have been developed from a comprehensive review of the baseline issues and policy requirements to align with the SEA objectives used with the forthcoming City Plan 2030 (LDP) SEA and recently adopted ECCT SEA to ensure a consistent approach and have been updated to reflect Consultation Authorities' feedback.

CMP SEA Objectives	SEA Assessment Questions					
	How will the policy					
1. <b>Air quality and climatic factors</b> : To improve air quality and reduce emissions of key pollutants and reduce the causes and effects of climate change.	<ul> <li>contribute to reducing emissions and particulates of key pollutants to air from road transport?</li> <li>contribute towards a reduction NOx and PM levels, in particular within AQMAs?</li> <li>assist in meeting air quality objectives within AQMAs?</li> <li>support measures outlined in the council's air quality action plan?</li> <li>support reductions in greenhouse gas emissions?</li> <li>support access to active and sustainable transport options?</li> <li>encourage the provision of low/zero carbon technologies?</li> <li>promote and facilitate modal shift to active and sustainable transport options?</li> </ul>					
2. Land and soil: Protect valuable land resources and minimise detrimental effects of land use change.	<ul> <li>impact upon important geodiversity features?</li> <li>encroach on Greenbelt/valuable greenfield areas?</li> <li>protect prime agricultural land and carbon-rich peat soils?</li> </ul>					
3. Water: Prevent the deterioration and where possible, enhance the status of the water environment and reduce/manage flood risk in a sustainable way.	<ul> <li>maintain and enhance the resilience of existing and planned transport infrastructure?</li> <li>protect water quality within the CMP region?</li> <li>contribute to reducing emissions and particulates of key pollutants to water from road transport?</li> <li>support network resilience to anticipated extreme weather events and climate change?</li> <li>promote the avoidance of flood risk?</li> </ul>					
4. <b>Landscape</b> : Protect and, where appropriate enhance the landscape and visual amenity and distinctiveness of the areas.	<ul> <li>avoid impact on landscape/townscape character and/or visual amenity of sensitive receptors?</li> <li>help to maintain or enhance landscape/townscape character?</li> </ul>					

Table 4.1: Outlines the eight SEA objectives and the assessment criteria for each

CMP SEA Objectives	SEA Assessment Questions					
	How will the policy					
	<ul><li>improve sustainable access to open space and the countryside?</li></ul>					
5. <b>Biodiversity, flora and fauna</b> : Protect and enhance the natural environment including the condition and management objectives of designated sites, protected species and green infrastructure including green and blue networks.	<ul> <li>support delivery of wider CEC environmental objectives/obligations?</li> <li>avoid adverse effects on integrity of European Protected Sites and/or Species (for example Natura sites)?</li> <li>avoid or minimise impact on any other designated or priority sites or species?</li> </ul>					
6. <b>Material assets</b> : Improve and enhance the existing transport network.	<ul><li>support or lead to reduced congestion?</li><li>support or lead to enhanced maintenance activity?</li></ul>					
7. <b>Population and human health</b> : Improve accessibility, health and quality of life for Edinburgh's population and for all city users.	<ul> <li>increase provision of walking and cycling facilities and reduce severance or other detriment to existing walking and cycling routes?</li> <li>improve links between CEC Core Path Networks?</li> <li>improve social inclusion and accessibility to healthcare services?</li> <li>improve safe and sustainable access to new and/or existing education facilities?</li> <li>improve safe and sustainable access to new and/or existing employment sites and/or existing residential areas?</li> <li>result in any adverse impacts to sensitive receptors and/or residential areas?</li> <li>result in significant noise increases above those currently experienced, in particular within designated Noise Management Areas?</li> <li>result in significant air pollution above concentrations currently experienced, in particular within designated AQMA's?</li> </ul>					
8. <b>Cultural heritage &amp; historic</b> <b>environment</b> : Protect and, where appropriate, enhance the historic environment. Protect and, where appropriate, enhance use of, and access to, the cultural and historic environment for all.	<ul> <li>impact on designated and non-designated historic sites, places and spaces?</li> <li>improve accessibility to all townscape including historic sites, places and spaces?</li> <li>improve access to and understanding of the historic environment?</li> <li>respect/respond to the historic urban spatial structure / plan of the city?</li> </ul>					

## 4.3 SEA Scoring System

All stages of the SEA process have followed a matrix-based approach, using a qualitative scoring system to identify likely significant effects on the SEA objectives. The scoring system used for the assessment of effects is described in Table 4.2. This approach has several advantages including the systematic recording of potential effects and their significance together with any assumptions, uncertainties and suggested mitigation or enhancement measures.

Score	Descriptions	Symbol
Significant Positive Effect	The proposed option/policy contributes significantly to the achievement of the SEA objective.	++
Minor Positive Effect	The proposed option/policy contributes to the achievement of the SEA objective but not significantly.	+
Neutral Effect	The proposed option/policy is related to but does not have any effect on the achievement of the SEA objective	0
Minor Negative Effect	The proposed option/policy detracts from the achievement of the SEA objective but not significantly.	-
Significant Negative Effect	The proposed option/policy detracts significantly from the achievement of the objective. Mitigation is therefore required.	
Uncertain Effect	The proposed option/policy has an uncertain relationship to the SEA objective or the relationship is dependent on the way in which the aspect is managed. In addition, insufficient information may be available to enable an assessment to be made.	?
No or negligible relationship	There is no clear relationship between the proposed option/policy and the achievement of the SEA objective or the relationship is negligible.	~

Table 4.2: SEA Scoring System for Likely Significant Effects

## 4.4 CMP elements subject to SEA

In line with the Scottish Governments *Strategic Environmental Assessment Guidance 2013*, the assessment has been focused on the key elements within the CMP which are likely to have significant environmental effect to ensure a proportionate approach to assessment.

Table 4.3: CMP elements subject to SEA Assessme
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CMP Elements	Subject to SEA assessment	Comment
Vision	Yes	The vision presented to the CECs' TEC was assessed to ensure it supported a positive environmental outcome.
		(The three stage vision presented in the draft CMP was considered to be the desired outcome of delivering against the CMP objectives and would not have a significant effect on the environment.)
Objectives	Yes	It was determined that the objectives could be refined to ensure a better environmental outcome which would then filter down to the development of the policy measures. This assessment also informed

		the development of indicators and have been presented in the monitoring framework.
Policy Measures	Yes	It was determined that the policies could have the potential for significant effects on the environment.
Spatial Strategy (as presented in Appendix 3)	No	It was considered that the spatial strategy was of such a high level that it could not be determined at this stage in the assessment process of the potential for additional significant effects than those already captured in the policy measures assessment. This approach was reviewed as further detail emerged following the consultation exercise and any changes to the assessment were captured in the final Environmental Report.

The overall approach to the SEA has been refined to take account of Scoping consultation responses, as detailed in Appendix C.

### 4.5 SEA Assessment Stages

The SEA was undertaken in three stages to inform the development of the proposed CMP. The three stages of the SEA are outlined in Figure 4.1.



Figure 4.1: Stages of the SEA

## 4.6 Approach to Reasonable Alternatives

The evolution of the baseline scenario was not considered to constitute a reasonable alternative and instead consideration was given at each stage of the CMP development to identify and assess any reasonable alternatives to the key components of the draft CMP. The SEA considered alternatives and made recommendations at each of the key CMP stages, - objective setting, developing packages of measures and individual policy measures. as shown in Figure 4.1. SEA recommendations and the findings of the assessment directly fed into the development of the final list of policy measures presented in the draft CMP.

# 5. Assessment Findings

This section provides a summary of the results of the three stages of assessment as shown in Figure 4.1.

#### 5.1 Stage 1: SEA of Proposed Vision and CMP Objectives

This section outlines the findings of Stage 1 of the SEA process. A compatibility assessment was undertaken to consider the likely significant environmental effects arising from the proposed CMP vision and objectives.

#### 5.1.1 Approach

The assessment has considered the proposed vision and objectives received from the council, and, following the SEA process, a gap analysis was undertaken on the revised vision and objectives to identify if there were any significant changes.

#### 5.1.2 Initially the CMP objectives were based around the following vision:

'Edinburgh will have a cleaner, safer, inclusive and accessible transport system delivering a healthier, thriving and fairer capital city and a high quality of life for Edinburgh residents.'

To support the implementation of this vision, the CMP identified four strategic objectives:

- Improved built and natural environment;
- Improved health, wellbeing and safety;
- Improved equality and social inclusion; and
- Responsible and sustainable economic growth.

Each strategic objective had several operational objectives. A high-level compatibility assessment was used to determine whether the CMP objectives were compatible with the SEA objectives and assessment criteria, Table 4.1), the compatibility assessment is presented in Table 5.1. The key used for the compatibility assessment is provided below:

Кеу								
Compatible	+							
Not compatible	-							
No or negligible relationship	0							
Uncertainty over compatibility	?							



Table 5.1: Compatibility Assessment of the CMP Vision and Objectives against the SEA Objectives

CMP Objectives	SEA Objectives							Summary	
	Air and climatic factors	Land and Soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage	
Vision	+	0	0	0	0	+	+	0	The CMP vision is compatible with the air quality, material assets and population and human health objectives. There is no direct relationship identified with the other SEA objectives. However, it is assumed that the vision could indirectly benefit the other five SEA topics.
Protect and enhance our enviror	nment, an	d respon	d to clim	ate change	9				
1. Reduce carbon emissions associated with road transport	+	0	0	0	+	+	+	0	The CMP objective is compatible with the air quality, biodiversity, material assets and population and human health objectives. No direct relationships with the other SEA objectives have been identified.
2. Improve the resilience of our transport system to better cope with a changing climate	+	0	?	0	?	+	+	0	The CMP objective is compatible with the air quality, material assets and population and human health objectives. There is the potential for positive indirect effects on the water and biodiversity objectives. No direct relationships with the other SEA objectives have been identified.
3. Reduce the impact of noise associated with transport	0	0	0	0	?	0	+	0	The CMP objective is compatible with the population and human health objective. There is the potential for positive indirect effects on the biodiversity objective. No direct relationships with the other SEA objectives have been identified. Recommendation - The objective could include the impact from vibration as well as noise.

## City Mobility Plan Strategic Environmental Assessment



CMP Objectives	SEA Obj	ectives				Summary			
	Air and climatic factors	Land and Soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage	
Improve health and well-being									
4. Reduce local pollutant emissions from road transport which impact upon our health	+	0	0	0	+	0	+	0	The CMP objective is compatible with the air quality, biodiversity and population and human health objectives. No direct relationships with the other SEA objectives have been identified.
5. Increase the proportion of trips people make by foot, bike, and public transport	+	0	0	+	0	+	+	0	The CMP objective is compatible with the air quality, landscape, material assets and population and human health objectives. No direct relationships with the other SEA objectives have been identified. Recommendation - refer to 'sustainable modal shift' instead of naming a few active travel options and public transport. Suggest 'Encourage a modal shift to more sustainable travel options, including active travel'.
6. Make our communities great places for people	0	0	0	+	0	?	+	?	The CMP objective is compatible with the landscape and population and human health objectives. There is the potential for positive indirect effects on material assets and access to cultural heritage sites. No direct relationships with the other SEA objectives have been identified.
7. Create safer streets for all	0	0	0	0	0	+	+	0	This CMP objective is compatible with the material assets and population and human health objectives. No direct relationships with the other SEA objectives have been identified.
8. Reduce vehicular dominance	+	0	0	0	0	+	+	0	This CMP objective is compatible with the air quality, material assets and population and human health

## City Mobility Plan Strategic Environmental Assessment



CMP Objectives	SEA Obj	ectives							Summary
	Air and climatic factors	Land and Soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage	
									objectives. No direct relationships with the other SEA objectives have been identified.
									Recommendation - refer to 'private vehicles' in particular, as vehicle dominance could also imply public transport.
Improve equality and social inclu	usion								
9. Increase the proportion of people who are well served by public transport	+	0	0	0	0	+	+	0	The CMP objective is compatible with the air quality, material assets and the population and human health objectives. No direct relationships with the other SEA objectives have been identified.
10. Improve travel choices for all regardless of age, disability, ethnicity, gender or income	0	0	0	0	0	0	+	0	The CMP objective is compatible with the population and human health objective. No direct relationships with the other SEA objectives have been identified.
11. Improve the quality of our streets, footways and cycle routes to enable access for people of all abilities	?	0	0	0	0	+	+	0	The CMP objective is compatible with the material assets and population and human health objective. It is assumed that, by improving street quality and thereby encouraging more active travel, there could potentially be a positive effect on air quality. No direct relationships with the other SEA objectives have been identified. Recommendation - this objective is similar to Objectives 7
									and 15 - potentially combine into one.
Support inclusive and sustainab	le econon	nic growtł	1						
12. Improve public transport and active travel connectivity	+	0	0	0	0	+	+	0	The CMP objective is compatible with the air quality, material assets and population and human health



CMP Objectives	SEA Obj	SEA Objectives							Summary
	Air and climatic factors	Land and Soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage	
across our growing city, and city region.									objectives. No direct relationships with the other SEA objectives have been identified.
13. Improve rail and bus/coach connectivity across the UK, and air connectivity to international destinations	+	0	0	0	0	+	+	0	The CMP objective is compatible with the air quality, material assets and population and human health objectives. No direct relationships with the other SEA objectives have been identified.
14. Maintain and improve the economic vitality and viability of the city centre	?	?	?	?	?	?	?	?	It is unclear how this influences the SEA objectives at this stage. However, there is the potential for positive and negative indirect effects on the other SEA objectives.
15. Prioritise the use of space to maximise people movement	0	0	0	0	0	0	+	0	While the CMP objective is compatible with the population and human health objective. No direct relationships with the other SEA objectives have been identified.
16. Better manage the movement and delivery of goods to reduce impacts	?	?	?	?	?	?	?	?	It is unclear how this influences the SEA objectives at this stage. However, there is the potential for positive and negative indirect effects on the other SEA objectives.

The vision and objectives were hereafter updated based on previous LTS objectives, consultation comments, internal team discussions and recommendations following the SEA process (these recommendations are outlined in Table 5.1). A gap analysis between the proposed and revised vision and objectives were undertaken to identify any significant changes.

#### 5.1.3 Findings

The revised objectives reduced the four strategic objectives to three, following the themes: Places, People and Movement. These are similar to the key principles identified in the ECCT (CEC Transport and Environment Committee, 2019). The SEA recommendation of combining some objectives that appeared similar has been met, with the total number of objectives reduced from 16 to 7. This has led to the objectives becoming more focused. The vision now places a greater focus on reducing carbon emissions by encouraging the movement towards more sustainable travel modes. The objectives draw more focus on improving travel choices for those with impaired mobility to progress equality and inclusion within Edinburgh.

The changes to the vision and objectives were not considered to be significantly different and therefore did not require a re-assessment. Overall, the CMP objectives are compatible with the majority of the SEA objectives, with the exception of SEA objectives 2 (land and soil), 3 (water) and 8 (cultural heritage and historic environment).

The revised vision and objectives were included in Appendix 3 of the draft City Mobility Plan Committee Paper presented to CEC Transport and Environment Committee, January 2020. They are:

# 'Edinburgh will be connected by a safer and more inclusive carbon neutral transport system delivering a healthier, thriving, fairer and compact capital city and a higher quality of life for all residents'

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.

Movement objectives to support inclusive and sustainable economic growth:

Maximise the efficiency of our streets to better move people and goods.

#### 5.2 Stage 2: SEA of Packages

This section presents key findings of Stage 2 of the SEA Process. A high-level assessment was undertaken to consider the likely environmental effects arising from the five packages of policy measures within the CMP.

#### 5.2.1 Approach and Findings

Five packages of policy measures were initially included in the high-level assessment. These are:

- Demand management
- Land use planning
- Public transport
- Walking and cycling

#### Optimising our streets

These were presented to the CEC Transport and Environment Committee, May 2019. As with the CMP objectives, the packages of policy measures were revised following recommendations from the SEA process, consultation and a review of the previous LTS measures. Subsequently, a second review was carried out to identify if there were any significant changes to the packages that would have implications for the SEA objectives. The main change was that the packages of Optimising Our Streets and Walking and Cycling were combined into the People Friendly Streets package. The high-level assessment and outcome of the sifting exercise are detailed in Appendix D. If more detailed spatial information was presented within the plan the related policy measures were taken forward for a more detailed assessment (see Section 5.3).

The high-level assessment summary tables below present a summary of the findings focusing on those topics that were expected to experience a positive or negative effect from the package of measures. Effects that were considered neutral or uncertain are not included in these tables and are detailed in Appendix D.



Table 5.2: Summary of the high-level SEA matrix for the Enhancing Public Transport package

Enhancing Public Transport					
Summary against SEA Objectives	Recommendations and Mitigation				
Summary against SEA Objectives The introduction of enhanced public transport measures is expected to have a minor positive effect on air quality and landscape. Significant positive effects are expected on material assets and population and human health. The package is not expected to affect the land and soil, water, biodiversity and cultural heritage objectives.	<ul> <li>Recommendations and Mitigation</li> <li>There may be an opportunity to improve social inclusion through orbital bus routes. This should be included as a consideration in planning these routes - for example, planning to improve public transport uptake by people with impaired mobility or disadvantaged communities (refer to Indices of Multiple Deprivation).</li> <li>Any new infrastructure associated with this package may be subject to Environmental Impact Assessment, depending on its size and location.</li> <li>Explore opportunities to incorporate renewable energy into any new public transport infrastructure or use renewable fuels in public transport.</li> <li>Package could refer to improving storage for bicycles on trams, trains and buses.</li> <li>Package could refer to emerging technologies relevant to the vehicles (alternative fuels), ticketing and live departure times.</li> <li>Consider referring to the quality of public transport, to make it a more attractive option.</li> <li>Consider referring to any aspirations for private/public ownership proportions, and also potential references to relevant subsidies or grapts for public transport for example, for alternative fuels.</li> </ul>				
	<ul> <li>Remove reference to environmentally-friendly and consider 'low carbon' or 'low emission'</li> </ul>				
	<ul> <li>Expand on 'accessibility' to specifically refer to disabled access and vulnerable users</li> </ul>				
	<ul> <li>Consider referring to improving connections to the areas of deprivation shown on the recently circulated 'Development and Public Transport Access' map.</li> </ul>				
	<ul> <li>Any new infrastructure should aim to improve sustainable drainage and pollutant filtration.</li> </ul>				
Overall this package is expected to have a minor positive but not significant effect on the SEA objectives.					



Table 5.3: Summary of the high-level SEA matrix for the People Friendly Streets package

People Friendly Streets	
Summary against SEA Objectives	Recommendations and Mitigation
The introduction of various people friendly streets measures is expected to have a minor positive effect on water and material assets. Significant positive effects are expected on air quality, landscape and population and human health. The package is not expected to affect the land and soil, biodiversity and cultural heritage SEA objectives.	<ul> <li>Any new walking and cycling infrastructure should aim to improve sustainable drainage and pollutant filtration.</li> <li>Link package to any city-wide green infrastructure plans.</li> <li>Specifically refer to how walking and cycling network could link with public transport hubs/ routes.</li> <li>Consider making reference to multiple benefits of green infrastructure which can be used for walking and cycling but with other benefits, such as amenity, climate change adaptation etc.</li> <li>Consider referring to the bike hire scheme, as discussed in the Enhanced Public Transport package.</li> <li>Any new infrastructure associated with this package (for example, construction of city operation centres) may be subject to Environmental Impact Assessment, depending on their size and location.</li> <li>Recommendation to remove policy 29 from People Friendly Streets, as it is a duplication of policy 44 in Planning New Developments, where it is more relevant.</li> <li>Any new infrastructure should aim to improve sustainable drainage and pollutant filtration.</li> <li>The package should refer to how climate change adaptation could be improved with any new infrastructure – for example, resilience to flooding, extreme temperature, storminess.</li> <li>Explore opportunities to incorporate renewable energy and/or recycled and locally sourced materials into any new infrastructure.</li> <li>Link package to any city-wide green infrastructure plans – for example, Edinburgh Shoreline project, as well as public realm spaces/ projects, recreation and play areas etc.</li> </ul>
Overall this package is expected to have a	ninor positive but not significant effect on the SFA objectives



## Table 5.4: Summary of the high-level SEA matrix for Planning New Developments package

Planning New Developments	
Summary against SEA Objectives	Recommendations and Mitigation
Summary against SEA Objectives The introduction of 'planning new development' measures is expected to have a minor positive effect on air quality, water, landscape and biodiversity. Significant positive effects are expected on land and soil, material assets and population and human health. There are uncertain effects of the package on cultural heritage.	<ul> <li>Recommendations and Mitigation</li> <li>There is a need to ensure sustainable transport infrastructure, including public transport hubs which should be in place when new developments are ready to be used (co-ordinated timing).</li> <li>Any new infrastructure should aim to improve sustainable drainage and pollutant filtration.</li> <li>Link package to any city-wide green infrastructure plans, as well as public realm spaces/projects, recreation and play areas.</li> <li>Cross-reference the most relevant spatial development plans, to ensure a co-ordinated approach to planning.</li> <li>The prioritisation of dense developments near to shops, services and transport connections should also consider the proximity of the Core Path Network and public and recreational spaces for leisure activities.</li> <li>The package should refer to how climate change adaptation could be planned for, particularly for any new infrastructure – for example, resilience to flooding, extreme temperature, storminess.</li> <li>This package could cross-reference land use planning in relation to helping implement the other packages – for example, land use planning for enhanced public transport and people friendly streets.</li> <li>This package could potentially refer to land use planning for new or emerging technologies, for example, electric which charge and public transport and people friendly streets.</li> </ul>
	vehicle charging infrastructure, mass transit, autonomous vehicles or prioritised parking/lanes for electric/hybrid vehicles.
	This package could refer to encouraging employers/businesses to introduce or extend flexible working patterns.
	This package could specifically refer to how transport planners and spatial planners could work together.
Overall this package is expected to have a	minor positive but not significant effect on the SEA objectives.



## Table 5.5: Summary of the high-level SEA matrix for the Managing Demand package

Managing Demand					
Summary against SEA Objectives	Recommendations and Mitigation				
The introduction of various 'managing demand' measures is expected to have minor positive effects on air quality and material assets. Significant positive effects	<ul> <li>Potential adverse effects could arise where parking controls and/or street closures result in the displacement of private vehicles to other parts of the city. A transport appraisal may be required to determine the impact of displacement effects - for example, the resulting effects on air quality.</li> <li>To avoid displacement of impacts that relate to various recentors across the SEA topics, a co-ordinated approach to a stress of the second stress o</li></ul>				
are expected on landscape and population and human health. The package is not	modal shift is required, for example, similar timing of 'managing demand' package implementation to 'enhanced public transport' and 'people friendly streets' packages.				
biodiversity and cultural heritage objectives.	<ul> <li>Consider and plan for impacts of package on businesses that are dependent on private vehicle usage (for example, emergency services and shift workers) and vulnerable groups, for example, people with impaired mobility.</li> </ul>				
	<ul> <li>There could be a policy that covers matching bus or train size to demand (for example, during low-demand times of day and peak hours).</li> </ul>				
Overall this package is expected to have a minor positive but not significant effect on the SEA objectives.					

## 5.3 Stage 3: SEA of Policy Measures

This section outlines the findings of Stage 3 of the SEA process. This section presents the policies within the draft CMP that were taken forward for an individual assessment following the high-level package assessment (Section 5.2).

#### 5.3.1 Approach and Findings

#### Policy 3 – Tram extension

Policy 3 was determined to have sufficient spatial information presented in the draft CMP to enable a policy specific assessment to be undertaken. In addition to the spatial detail provided in the CMP policy measure, the Edinburgh Strategic Sustainable Transport Study – Phase 1 report, presented to CEC Transport and Environment Committee October 2020, identified four corridors which could accommodate trams (Jacobs/Steer, 2019). The route options, which were considered to be suitable for tram, included expansion to Granton (north of the city centre), the south-east (past the University and the Bioquarter), towards Newbridge and west of Hermiston.

Expansion of the tram/mass rapid transport network to the north and south of the city, in addition to the Newhaven expansion, is expected to reduce vehicle dominance and emissions. It would also improve the overall public transport infrastructure across the city, benefiting tourists, residents and commuters. Exploring the expansion for tram/mass rapid transport network west of the city and into Fife, West, Mid and East Lothian, is also expected to reduce vehicle dominance in and out of the city and improve access to areas that are not currently well serviced by public transport.

Table 5.6 shows this policy is expected to have a positive effect on air quality, material assets and population and human health. Minor negative effects are expected on land and soil and landscape as the expansion of the network would require land take. It is acknowledged that any expansion to the tram/mass raid transport network within the city centre, and in particular the World Heritage Site, could have a negative impact on amenity at historic sites.

SEA Objective	Air Quality and climatic factors	Land and soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage
Effect	+	-	0	-	0	+	+	-

Table 5.6: Scoring of SEA objectives for Policy 3

#### Policy 15 – Low Emission Zone

Within this stage of assessment additional consideration has been given to Edinburgh's proposed Low Emissions Zone (LEZ) policy. This is due to the following:

- Additional detail on the approach to LEZ is available at the time of assessment and was presented at the Transport and Environment Committee <u>Report</u> 11 October 2019
- A formal SEA Pre-Screening was undertaken on the proposed LEZ and, while it was determined that the LEZ would be exempt from a full SEA, it was stated that the LEZ would be included within the series of interventions assessed under the CMP, which is subject to full SEA. This would ensure a detailed assessment is undertaken on the LEZ proposal and assess the cumulative environmental effects of a LEZ alongside wider transportation interventions. The LEZ is also considered within the cumulative impacts of the ECCT SEA.

The Pre-Screening can be viewed on the Scottish Government SEA database.

The LEZ has been considered within both the Stage 2 SEA of Packages and Stage 3 SEA of policy measures as part of the suite of policies presented in the CMP. Further assessment has been undertaken using the information presented in the TEC committee report referenced above to consider in more detail the anticipated effects of implementing both the City Centre and City-Wide LEZ. Table 5.7 shows the effects the LEZ is expected to have on the SEA objectives. A minor positive effect is expected on the air quality, landscape, population and human health and cultural heritage SEA objectives. Negligible effects are expected on the land and soil, water, biodiversity and material assets SEA objectives.

SEA Objective	Air Quality and climatic factors	Land and soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage
Effect	+	0	0	+	0	0	+	+

Table 5.7: Scoring of SEA objectives for Policy 15

A summary table of the effects and recommendations/mitigation for the LEZ are presented in Table 5.8 below.

#### Table 5.8: Summary of LEZ Assessment

SEA Topic	Summary of Significant Effects	<b>Recommendations/Mitigation</b>
Air quality and climatic factors	Implementing the proposed LEZ boundaries would improve vehicle standards which in turn would bring air quality improvements and health & wellbeing improvements. Interventions that reduce local air pollution (NO <sub>2</sub> and PM <sub>2.5</sub> /PM <sub>10</sub> ) are also likely generate a positive effect on reducing factors contributing to climate change through reduced greenhouse gas emissions (measured in CO <sub>2</sub> equivalent tonnes). Depending on potential displacement of traffic, there may be locations outside of the LEZ boundaries where air quality is made poorer by a change in the quantity and types of vehicles passing through. Initial transport modelling shows that roads outside the LEZ boundary are likely to see an increase in traffic volumes.	Displacement effects need to be considered to ensure no significant negative effects occur elsewhere in the city region, particularly around the edge of the LEZ. Analysis is required to determine the scale of these impacts on areas that see increases in traffic and the affected populations; appropriately designed mitigation would require similar investigation.
Land and soil	The introduction of a LEZ is not likely to significantly affect land and soil resources.	No mitigation required
Water	The introduction of a LEZ is not likely to significantly affect water.	No mitigation required
Landscape	The introduction of the LEZ is not likely to significantly affect landscape. However, there may be a minor (i.e. not significant enough to score) positive impact on townscape from a reduction in vehicles on the streets.	Where signage is required this needs to be sensitively located to avoid negative impacts on key views and listed buildings setting

SEA Topic	Summary of Significant Effects	Recommendations/Mitigation
Biodiversity, flora and fauna	The introduction of the LEZ is not likely to significantly affect biodiversity. However, there may be a minor positive impact from a reduction in vehicles on the streets (hence reduced air pollutant deposition on habitats).	No mitigation required
Material assets	LEZ would lead to reduced congestion from road vehicles, in particular heavy goods vehicles.	No mitigation required
Population and human health	LEZ is likely to promote sustainable forms of transport via modal shift from cars to buses, shared cars, bicycles or walking, which in turn would have positive impact on air quality. Dependent on what modes people shift to there may be positive effects on the health and well-being of people due to physical activity (cycling/ walking) and exposure to outdoor spaces. Improvements to air quality can be directly linked to improvements to physical environment and to places.	LEZ needs to ensure access to healthcare facilities. Displacement effects need to be considered and monitored to ensure no significant negative effects occur elsewhere in the city region, particularly around the edge of the LEZ. Analysis is required to determine the scale of these impacts on areas that see increases in traffic and the affected populations; appropriately designed mitigation would require similar investigation
Cultural heritage and historic environment	Vehicle emissions contain various pollutants that can damage buildings, including carbon dioxide (CO <sub>2</sub> ) and sulphur and nitrogen oxides. Unless placed sensitively, new signage could potentially affect important viewpoints in Edinburgh, including the visual setting of historic sites and buildings.	Where signage is required this needs to be sensitively located to avoid negative impact on key views and setting of historic sites and buildings.

# 6. Cumulative Effects

Cumulative effects have been considered throughout the proposed policy development (intra – plan) and the inter-plan (the impact of the plan alongside other plans and polices) focusing on possible proposals in the ECCT and City Plan 2030.

This inter-plan cumulative assessment has been undertaken in discussion with the teams responsible for preparing these other emerging plans and based on the information available at the time of the assessment. A combined CMP, ECCT and LEZ workshop with the consultation authorities was held following the public consultation discuss the final cumulative assessment approach. It was agreed that this assessment would build on the adopted ECCT and City Plan Main Issues Report SEA.

**Error! Reference source not found.** below presents a high-level narrative of the potential cumulative effects of i mplementing the CMP alongside the recently adopted ECCT 2019 and City Plan 2030

SEA Topic	Cumulative impact of CMP	Cumulative impact with other PPS
Air Quality and Climatic factors	Significant positive effects were identified associated with an overall reduction in traffic due to stricter parking measures, traffic free zones, street closures and road user charges, freight consolidation zones, public transport accessibility improvements, integrated/flexible services and ticketing, low emissions zone and improved walking and cycling measures. To achieve significant benefits to air quality and climatic factors, a co- ordinated approach to modal shift is required, for example, similar timing of demand management package implementation to public transport and walking and cycling packages. Effects would be greater over time as more measures are implemented. Potential adverse effects could arise where parking controls and/or street closures result in the displacement of private vehicles to other parts of the city. A transport appraisal may be required to determine the impact of displacement effects - for example, the resulting effects on air quality.	The cumulative effect of the CMP and other PPS on air quality is likely to remain positive, with the proposed City Plan MIR proposing higher density development closely linked to public transport and active travel service supporting modal shift and a reduction in traffic in the city. Any new development on greenfield sites may generate higher vehicle trips rates which may lead to negative effects on air quality particularly along key transport corridors. The air quality issues are mostly attributable to traffic congestion and AQMAs are in place with action plans to help reduce emissions in these areas. Effective implementation of the CMP in conjunction with other plans such as the Active Travel Plan and Core Path Plan may encourage further use of sustainable transport modes.
Land & soil	The draft CMP approach to effective integrated land use and mobility planning can prevent cities from becoming dispersed and polarised. Concentrating infrastructure and environmental costs could prevent large areas of land becoming affected by	There may be cumulative and synergistic negative effects on soil quality due to the scale of development considered for City Plan 2030, with the potential for some greenfield development. This would require careful mitigation and further

Table 6.1: Potential Cumulative effects with other PPS

SEA Topic	Cumulative impact of CMP	Cumulative impact with other PPS
	construction of transport infrastructure and car dominated developments. This should lead to reduced detrimental effects on land use change. Potential for some localised negative effects where new or expanded regional park and ride may require additional land take or the extension to the tram network.	environmental appraisal would be required as proposals are developed.
Water	The draft CMP approach to integrated land use planning is likely to reduce widespread construction across the city. This is likely to reduce flood risk, as natural drainage patterns are less likely to be affected by dispersed development and impermeable surfaces. It was also identified that the implementation of the CMP could improve water quality through reduced pollutants, following a reduction in private vehicles and encouraging modal shift	The cumulative effect of the ECCT and other PPS on water is likely to remain mixed, with the potential for significant impacts/opportunities depending on the location of higher density development tram extension and park and ride interchanges. Any new development/ infrastructure should aim to improve sustainable drainage and pollutant filtration. If sites are developable, appropriate design of development would be required in order to ensure that there is no associated increase in flood risk out with the site and to ensure there is no unacceptable flood risk for future uses of the site.
Landscape	A generally positive effect on landscape and townscape was identified with key benefits anticipated through the overall reduction of traffic and parking within the city facilitating public realm improvements. However, the location of any new freight consolidation centres, regional park and rides, logistics zones or hubs needs to be sympathetic to landscape considerations. The extension of the tram route and bus routes would also need to be designed sympathetically.	Uncertain (positive and negative impacts), potential for adverse impacts from combinations of transport and land use developments. However, there is potential for combined enhancements to landscape/streetscape through sensitive design and planning.
Biodiversity, flora and fauna	The draft CMP policies to concentrate infrastructure could prevent large areas of natural environment, including designated sites and protected species, from becoming affected by construction of transport infrastructure and car dominated developments. This should lead to reduced detrimental effects on biodiversity, flora and fauna. Reductions in usage of private vehicles through improved public transport and active travel networks would also improve air	The cumulative effect of the CMP and other PPS on biodiversity is likely to remain mixed with the potential for significant impacts/opportunities depending on the location of higher density development and park and ride interchanges. Through appropriate layout and design of development, higher levels of biodiversity could be established within development

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SEA Topic	Cumulative impact of CMP	Cumulative impact with other PPS	
	<ul> <li>quality with a possible positive impact on biodiversity.</li> <li>Where site specific measures are proposed, there is the potential for adverse impacts to occur where proposed interventions result in habitat loss.</li> <li>However as more interventions are implemented the potential for habitat creation also increases in the long-term.</li> </ul>	sites compared to existing uses, such as agricultural land or industrial sites. Strategic HRA screening would be required if there is potential for the CMP, combined with other PPS, to have a cumulative significant effect on a Natura 2000 site.	
Material assets	Positive effects on material assets were identified through the overall improvement to the public transport network. Encouraging greater use of the network through more flexible services, improved accessibility and integrated fares and ticketing is likely to lead to less congestion on the roads due to a fewer number of cars. New bus routes servicing areas with current low public transport access would lead to reduced car use in more remote parts of the city. The introduction of walking and cycling measures would require improvements to cycle facilities and access to streets. It is likely that this would lead to an improvement to the existing transport network.	The cumulative effect of the CMP and other PPS on material assets could see more significant positive effects through modal shift to sustainable transport modes, and the integration of sustainable transport options into new developments.	
Population and human health	The improvements to public transport would also promote sustainable mass- transit opportunities for people to access work, education, social activities, healthcare and other services. Active travel network improvements promote a healthy lifestyle and quality of life which would be improved through a more integrated network, better facilities and safety improvements such as secure bike storage. Human health would also be positively impacted by reductions in air pollutants and noise resulting from an overall reduction in traffic.	The cumulative effect of the CMP and other PPS on population and human health is likely to remain positive, with the PPS supporting a significant reduction in traffic within the city and supporting the provision of additional facilities for sustainable travel such as mobility hubs, core paths, cycleways etc.	
Cultural heritage and historic environment	Mixed effects were identified on Cultural Heritage. 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.	The cumulative effect of the CMP and other PPS on cultural heritage is likely to remain mixed with similar benefits identified within the CMP. The benefits are associated with the significant reduction in traffic anticipated within the city. However, there could be adverse visual impacts on the setting of heritage assets from higher	

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SEA Topic	Cumulative impact of CMP	Cumulative impact with other PPS
	There may be opportunities for improved accessibility to heritage assets through improvements to the public transport network and active travel routes and the visual setting of some heritage assets may be improved as there would be fewer private vehicles on the streets.	density developments, depending on the location and design.

# 7. Mitigation and Enhancement

Schedule 3 of the 2005 Act requires consideration to be given to "the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme".

## 7.1 Embedded Mitigation

Following each stage of assessment, any negative impacts or positive opportunities that were identified were discussed with the project team to determine effective mitigation and enhancement recommendations and to embed these in the development of the plan. The key recommendations have included refinements to the objectives, alternative policies and policy wording, based on the environmental criteria that consider and respond to both direct impacts and indirect, secondary and cumulative impacts.

Following the adoption of the recommendations, where appropriate, a second SEA review was undertaken to determine the residual impact of the objective/policy and to determine whether there was a need for any further mitigation.

## 7.2 Future Mitigation

Where mitigation could not be embedded at this stage due to the strategic nature of the policy, but the policy may still have a significant environmental effect, future mitigation measures were described. This predominantly comprised recommendations for further studies and/or future project-specific environmental appraisals.

# 8. Post Consultation Amendments to the CMP

#### 8.1 Introduction

The draft CMP and Environmental Report were issued to the SEA Consultation authorities (SEPA, Nature Scot (formally SNH and HES)) for public consultation in January 2020 for a period of 8 weeks. This was extended in response to Covid-19, with the consultation period ending on 7 May 2020. Responses from this period of consultation were considered and resulted in slight amendments to the objectives, policies and themes of the draft CMP.

This section summarises the key changes following consultation and the impact, if any, on the final scores outlined in Section 5.2.

## 8.2 Summary of key changes and SEA review

#### **Vision & Objectives**

The Vision has been slightly amended following consultation. The most notable changes are the introduction of a carbon neutral transport system and achieving a compact capital city. The revised vision now reads:

'Edinburgh will be connected by a safer and more inclusive carbon neutral transport system delivering a healthier, thriving, fairer and compact capital city and a higher quality of life for all residents'

The number of objectives has increased from seven to nine in total following consultation and these are still presented under the high-level themes of People, Movement and Place. The key change to the objectives is the themes with which they fall under e.g. previously there was one objective within the Movement theme and now there are five. The two new objectives are both within the People theme and are:

- Objective 1: Encourage behaviour change to support the use of sustainable travel modes
- Objective 2: Ensure that transport options in the city are inclusive and affordable

As the changes to the objectives are not considered substantial, only a compatibility assessment of the revised vision and the two new objectives against the SEA objectives has been presented here. Table 8.1 presents the compatibility scores for the revised vision and new objectives. The compatibility assessment for all objectives is presented in Appendix E: Post Consultation Amendments.

CMP Vision &	ision & SEA Objectives							
Objectives	Air and climatic factors	Land and Soil	Water	Landscape	Biodiversity	Material assets	Population and human health	Cultural heritage
Vision	+	+	0	0	0	+	+	0
People: To improve health, wellbeing, equality and inclusion								
Objective 1	+	0	0	0	0	0	+	0
Objective 2	0	0	0	0	0	+	+	0

Table 8.1: Compatibility Assessment for the Post Consultation Vision and Objectives

Overall, the vision is now considered compatible with objective 2 (land and soil) in addition to objective 1 (air and climatic factors), objective 6 (material assets) and objective 7 (population and human health). The new objectives are both compatible with objective 7 (population and human health). No changes to the draft CMP vision and objectives are considered to be incompatible with the SEA objectives.

#### Policies

A total of 49 policy measures (previously 51) across the three themes are now considered within the draft CMP following consultation.

The main amendments to the policies have been minor changes to wording, splitting of policies and some additional policies. A health check of all individual policies was carried out to ensure that any negative significant effects on the SEA objectives were identified. A total of eight policies were considered to require re-scoring using the SEA scoring system in Table 4.2. Appendix E: Post Consultation Amendments presents the re-scoring for these eight policy measures

Of the eight policies that required re-scoring none are expected to lead to potential negative effects on any of the SEA objectives. In most instances the outcomes of the policies brought positive impacts on objective 1 (air and climatic factors) and objective 7 (population and human health).

#### Themes

Post consultation, the number of themes (previously referred to as packages) has remained the same, continuing under the broad headings of People, Movement and Place. However, each theme is now split into a number of sub-sections which the policies sit within, these are:

- People:
  - Supporting behaviour change (2 policies)
  - Equal access to the city (1 policy)
- Movement:
  - Sustainable and integrated travel (18 policies)
  - Safe and efficient movement (12 policies)
  - Clean air and energy (3 policies)
  - Managing demand (6 policies)
- Place:
- A transformed city centre (1 policy)
- o 20-minute neighbourhoods (2 policies)
- Streets for people (4 policies)

These sub-sections were scored against the SEA objectives to identify if the cumulative effect of the policies within each sub-section would result in any significant negative effects (see Appendix E: Post Consultation Amendments). Table 8.2 outlines the overall cumulative score for each sub-section.

#### Table 8.2 Summary of High-level Cumulative Effects by Section

Themes	Cumulative Score	
People		
Supporting behaviour	This theme is not expected to have a significant	
change	effect on the SEA Objectives	
Equal access to the city	This theme is not expected to have a significant	
	effect on the SEA Objectives	
Movement		
Sustainable and integrated	Significant positive effect	
travel		
Safe and efficient movement	Minor positive effect	
Clean air and energy	Significant positive effect	
Managing demand	Significant positive effect	
Place		

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A transformed city centre	Minor positive effect
20-minute neighbourhoods	Minor positive effect
Streets for people	Minor positive effect

The review has concluded that no changes to the draft CMP have resulted in new negative effects on the SEA objectives that would require to be mitigated. In addition, no further recommendation measures are proposed to those outlined in Section 5 of the ER.

# 9. Next Steps

## 9.1 Monitoring

Section 19 of the 2005 Act requires the CEC, as the Responsible Authority, to monitor the significant environmental effects of the implementation of the Strategy.

Best practice in SEA Monitoring requires that a detailed monitoring framework reflects the implementation of the Plan actions, identifies where existing indicators (from the delivery of related PSS) can be used to track progress and, ideally, is embedded within the final Plan to ensure that monitoring is undertaken as part of CMP delivery.

It is proposed that the monitoring framework would align with the adopted ECCT and City Plan 2030 to ensure an integrated approach. Developing this integrated framework was agreed at a workshop with the consultation authorities in July 2019.

A monitoring framework and associated targets/indicators will be agreed with CEC and presented in the Post Adoption SEA statement.

## 9.2 SEA activities to date and next steps

SEA Stage	SEA Requirements	CMP SEA Activities
SEA Activities to Date		
Screening	Determining whether the CMP is likely to present significant environmental effects and deciding whether a SEA is required.	It was determined in-house that the CMP would be likely to present significant environmental effects; therefore, a screening determination was not submitted.
Scoping	Considering the scope and level of detail of the Strategic Environmental Assessment, and the consultation period for the ER. Decided in consultation with Scottish Natural Heritage (now NatureScot), Historic Environment Scotland and the Scottish Environment Protection Agency.	A Scoping Workshop on the 24 <sup>th</sup> January 2019 to agree scope and assessment methodology. The Scoping Report was issued to the Consultation Authorities on 27 <sup>th</sup> February 2019. Responses were received on 3 <sup>rd</sup> April 2019. A summary of the comments and team response is included in the Environmental Report.
Environmental Report	Publishing an ER which outlines the environmental analyses undertaken for the CMP and its environmental effects, and consulting on that report.	The Draft ER was made available for a period of 8 weeks on 31 <sup>st</sup> January 2020.
Next Steps	-	
Adoption and SEA Statement	Provides information on how the SEA process informed and improved the finalised CMP; how consultation	Publication of a post-adoption SEA statement will follow adoption of the CMP. This will demonstrate how the SEA has influenced the

Table 9.1: SEA activities and next steps

City Mobility Plan Strategic Environmental Assessment

SEA Stage	SEA Requirements	CMP SEA Activities	
	comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the strategy.	final CMP, summarise consultation feedback and SEA responses and set out a monitoring framework	
Monitoring	Monitoring significant environmental effects in such a manner so as to also enable the Responsible Authority to identify any unforeseen adverse effects at an early stage and undertake appropriate remedial action.	To be undertaken by CEC following adoption. To be aligned with ECCT and City Plan 2030 SEA monitoring requirements.	

# 10. References

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# List of Abbreviations Used in The Report

- Air Quality Management Area (AQMA)
- City of Edinburgh Council (CEC)
- City Mobility Plan (CMP) Edinburgh City Centre Transformation (ECCT)
- Environmental Report (ER)
- Integrated Impact Assessment (IIA)
- Integrated Pollution Prevention and Control (IPPC)
- Local Transport Strategy 2014-2019 (LTS)
- Low Emission Zones (LEZs)
- Non-Technical Summary (NTS)
- Plan, Programme or Strategy (PPS)
- Site of Special Scientific Interest (SSSI)
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Strategic Environmental Assessment (SEA)
- Scottish Environmental Protection Agency (SEPA)
- The Environmental Assessment (Scotland) Act 2005 (The Act)
- Transport and Environment Committee (TEC)