City of London Transport Strategy

Integrated Impact Assessment

Prepared by LUC
March 2019

Project Title: IIA of the City of London Transport Strategy

Client: City of London Corporation

Version	Date	Version Details	Prepared by	Checked by	Approved by
V1.0	12/10/2018	Interim draft issued to communicate emerging conclusions to officers and members; not for publication	Alex Martin	Jon Pearson	Not yet subject to director QA
V2.0	26/10/2018	Final draft report to accompany consultation of draft Transport Strategy	Alex Martin	Jon Pearson	Jeremy Owen
V3.0	06/11/2018	Final report to accompany consultation of draft Transport Strategy	Alex Martin	Jon Pearson	Jeremy Owen
V4.0	08/11/2018	Updated final report to accompany consultation of draft Transport Strategy	Alex Martin	Jon Pearson	Jeremy Owen
V5.0	15/03/2019	Final report following updates to Transport Strategy resulting from consultation	Alex Martin	Jon Pearson	Jeremy Owen

City of London Transport Strategy

Integrated Impact Assessment

Prepared by LUC
March 2019

Contents

1   Introduction

1.1   The City of London has commissioned LUC to undertake the Integrated Impact Assessment (IIA) of its Transport Strategy and Local Implementation Plan Delivery Plan (LIP). This document is the IIA of the Transport Strategy, while the LIP Delivery Plan will be assessed separately.

1.2   An IIA Scoping Report was prepared in April 2018. This provided the context for, and determined the scope of the IIA and set out the assessment framework to be used to undertake this IIA. The Scoping Report was consulted on in April / May 2018 and consultation comments were received from statutory consultees. A record of the comments and how these were addressed is included in **Appendix 1**.

1.3   IIA brings together Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA), Equality Impact Assessment (EqIA) and Health Impact Assessment (HIA) into a single assessment process.

1.4   SA is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic effects of the policies and proposals within a plan from the outset of its development.

1.5   SEA is also a statutory assessment process, required under the SEA Directive, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA). The purpose of SEA, as defined in Article 1 of the SEA Directive, 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…with a view to promoting sustainable development"*.

1.6   SEA and SA are separate processes but have similar aims and objectives. SEA focuses on the likely environmental effects of a plan while SA includes a wider range of considerations, extending to social and economic impacts. National Planning Practice Guidance shows how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and how to present a report that incorporates the requirements of the SEA Regulations. The IIA of the Transport Strategy is **being undertaken using this integrated approach and throughout this report the abbreviation 'SA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.**

1.7   The requirement to undertake EqIA of plans was introduced in the Equality Act 2010, but was abolished in 2012 as part of a Government bid to reduce bureaucracy. Despite this authorities are still required to have regard to the provisions of the Equality Act, namely the Public Sector Duty which requires public authorities to have due regard for equalities considerations when exercising their functions.

1.8   HIA is not a statutory requirement but can support decision making by identifying possible impacts of a plan on the health of a community.

Context for the City of London Transport Strategy

1.9   The City of London covers an area of just over one square mile, located within the central area of London. It is bordered by the London Boroughs of Islington, Hackney, Tower Hamlets, Southwark, Westminster, Camden, and Lambeth.

1.10   The City represents the original core from which London developed and so it contains important historic buildings and areas as well as archaeological remains. There are a large number of conservation areas in the City, as well as protected vistas and views and the Tower of London

World Heritage Site. There are over 600 listed buildings and several biodiversity designations, including a Metropolitan Site of Importance for Nature Conservation (SINC), The River Thames and its Tidal Tributaries.

1.11   The principal activity of the City is financial and businesses services; it is a centre of global importance for these services, and as a result forms a major component of the British economy.

1.12   The City provides employment for approximately 487,000[1] people, most of whom commute to work from elsewhere in London and the surrounding regions. The extensive provision of public transport in the area makes this possible.

1.13   The City contains the highest density of development in Britain and its buildings are subject to a high rate of redevelopment. Offices dominate the land use, and occupy approximately three quarters of its floorspace. Other land uses include retail, recreation and cultural activities which provide important services for workers and residents of the area. However, each of these only accounts for a small proportion of total floorspace. Open spaces occupy a small but important proportion of the land area.

1.14   The residential population of the City, as defined by the 2011 Census, is approximately 7,400 people and the number is growing. Over 29,000 students study in the City and increasing numbers of visitors need to be accommodated.

The City of London Transport Strategy

1.15   How people and goods travel to and around the City has a significant impact on the experience of living, working and studying in, or visiting the Square Mile. Facilitating the safe, clean and efficient movement of people and vehicles serving the City, alongside improving the quality of streets and public spaces, will be essential to the continued success of the City as a global centre for business and as a cultural destination.

1.16   The City of London Transport Strategy provides a 25-year framework for future investment in and **management of the City's streets, as well as measures to reduce the social, economic and** environmental impacts of motor traffic and congestion. **It also sets out the City's aspirations for** improvements to the Transport for London Road Network (TLRN**, also known as 'Red Routes')** and local, national and international transport connections. It details an ambitious approach to transport and the design and management of streets in response to the challenges arising from significant growth, fast moving technological development and changing travel habits. The City of London Transport Strategy should be read in conjunction with its Delivery Plan, which comprises the Local Implementation Plan (LIP) and which, **when finalised will incorporate the City's wi**der transport projects. The draft LIP has been subject to a separate IIA.

1.17   The City Corporation, along with the London Boroughs, is required to produce a Local Implementation Plan (LIP) that details how it **will support the delivery of the Mayor's Transport** Strategy (MTS). **The City's LIP** Delivery Plan will be published alongside the City of London Transport Strategy and highlights the alignment between the vision, aims and outcomes of the City of London Transport Strategy and the MTS. The Delivery Plan for the City of London Transport Strategy also provides a detailed breakdown of the projects that will be delivered over the next three years with Transport for London funding. The final Delivery Plan will incorporate all of **the City's transport projects.**

1.18   As stated above, the Transport Strategy includes detailed proposals for achieving a number of outcomes. The main outcomes of the document and proposals for achieving these include:

- Healthy Streets Approach.

    - Embed the Healthy Streets Approach in transport planning and delivery.

- **The Square Mile's** streets are great places to walk and spend time.

    - Put the needs of people walking first when designing and managing our streets.

---

[1] Long Term Labour Market Projections, GLA, 2019, Projections

- Complete the riverside walkway and improve walking connections between the riverside and the rest of the City.
- Enhance the Barbican high walks.
- Ensure new developments contribute to improving the experience of walking and spending time on **the City's streets.**
- Promote and celebrate walking.
- Provide more public space and deliver world-class public realm.
- **Incorporate more greenery into the City's streets and public spaces.**
- Reduce rainwater run-off on City streets and public realm.
- Incorporate protection from adverse weather on the design of streets and the public realm.

- Street space is used more efficiently and effectively.

  - Take a proactive approach to reducing motor traffic.
  - Design and manage the street network in accordance with the City of London Street Hierarchy.
  - Use timed and temporary street closures to help make streets safer and more attractive places to walk, cycle and spend time.
  - Make the best and most efficient use of the kerbside and car parks.
  - **Support and champion the 'Turning the Corner' campaign.**

- The Square Mile is accessible to all.

  - Develop and apply the City of London Street Accessibility Standard.
  - Keep pavements free of obstructions.
  - Keep pedestrian crossings clear of vehicles.
  - Support and champion accessibility improvement to underground stations.

- People using our streets and public spaces are safe and feel safe.

  - Apply the safe system approach and the principles of road danger reduction to deliver Vision Zero.
  - Work with the City of London Police to reduce crime and fear of crime.
  - Ensure on-street security measures are proportionate and enhance the experience of spending time on our streets.
  - Improve the quality and functionality of street lighting.

- A wide range of people choose to cycle.

  - Apply a minimum cycling level of service to all streets.
  - Increase the amount of cycle parking in the City.
  - Ensure new development contribute to improving the experience of cycling in the City.
  - Promote and celebrate cycling.
  - Improve cycle hire in the City.

- **The Square Mile's air** and streets are cleaner and quieter.

  - Support and champion a central London Zero Emission Zone (ZEZ).
  - Install additional electric vehicle charging infrastructure.
  - Request an accelerated roll out of zero emission capable buses.
  - Support small businesses to accelerate the transition to zero emission capable vehicles.
  - **Make the City of London's own vehicle fleet zero emissions.**
  - Reduce the level of noise from motor vehicles.
  - Reduce noise from streetworks.
  - Encourage innovation in air quality improvements and noise reduction.
  - Ensure street cleansing regimes support the provision of a world-class public realm.

- Delivery and servicing needs are met more efficiently and impacts are minimised.

  - Reduce the number of freight vehicles in the Square Mile.
  - Develop a sustainable servicing programme.

- Our street network is resilient to changing circumstances

- Allow some local access streets to function as City Access streets during significant disruption.
        - Reduce the impact of construction and streetworks.
        - Make the street network resilient to severe weather events.

- Emerging transport technologies benefit the Square Mile.

        - Establish a Future Transport Programme.
        - Establish a Future Transport Advisory Board.
        - Explore the need for legislative change to ensure emerging technology and innovation benefits the Square Mile.

- The Square Mile benefits from better transport connections.

        - Support and champion better national and international connections to the Square Mile.
        - Support and champion improved connections to the Square Mile from Greater London and the surrounding region.
        - Support the increased use of the Thames for passenger services.
        - Review bus provision across the City.
        - Support the Mayor of London in retaining locally-generated taxation.
        - Encourage continued central government investment in major London transport projects.

1.19   A Vision, Aims and Outcomes version of the Transport Strategy was consulted on, along with an accompanying IIA Commentary, in June / July 2018. No consultation comments were received on the IIA commentary.

1.20   The final draft of the Transport Strategy was consulted on from November 2018 to January 2019; again no consultation comments were received on the accompanying IIA. This IIA had been updated to reflect minor changes made to the Transport Strategy as a result of consultation comments.

Structure of this report

1.21   **Table 1.1** below signposts how the requirements of the SEA Regulations have been met within the IIA work undertaken to date.

1.22   This chapter has set the context for the Transport strategy and outlined its contents. The remainder of the report is structured as follows:

- Chapter 2: Methodology.

- Chapter 3: Environmental baseline, context and issues.

- Chapter 4: Assessment of the Transport Strategy.

- Chapter 5: Cumulative effects.

- Chapter 6: Conclusions and monitoring.

1.23   The main body of the report is supported by a number of appendices:

- Appendix 1: Consultation comments on IIA Scoping Report.

- Appendix 2: Review of plans, policies and programmes.

- Appendix 3: Baseline information.

- Appendix 4: Options selection.

- Appendix 5: IIA recommendations.

Table 1.1 Requirements of the SEA Regulations and where these have been addressed

SEA Regulations Requirements	Where covered in this IIA report
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Part 3 and Schedule 2 of the SEA Regulations):	
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes	**Chapter 1, Chapter 3** and **Appendix 2.**
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	**Chapter 3** and **Appendix 3.**
c) The environmental characteristics of areas likely to be significantly affected	**Chapter 3** and **Appendix 3.**
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	**Chapter 3** and **Appendix 3.**
e) The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation	**Chapter 3** and **Appendix 2.**
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors[2].	**Chapter 4** and **Chapter 5.**
g) 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;	**Chapter 4** (no significant adverse effects currently identified).
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	**Chapter 2** and **Appendix 4**.
i) a description of measures envisaged concerning monitoring in accordance with Reg. 17;	**Chapter 6.**
j) a non-technical summary of the information provided under the above headings	A separate **non-technical summary** document has been prepared to accompany this full IIA report.
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Reg. 12(3))	Addressed throughout this IIA report.

[2] These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects

SEA Regulations Requirements	Where covered in this IIA report
Consultation: • authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Reg. 12(5))	Consultation on the IIA Scoping Report for the Transport Strategy was undertaken between 5th April and 10th May 2018. The consultation comments and our responses are included in **Appendix 1**.
• authorities with environmental responsibility and the public shall be given an effective opportunity to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Reg. 13(3), 13(4))	Consultation was undertaken in relation to the draft Transport Strategy and accompanying IIA between 12th November and early January 2019.
• other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Reg. 14).	The Transport Strategy is unlikely to have a significant effect on another EU Member State.
Taking the environmental report and the results of the consultations into account in decision-making (Reg. 16)	
Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Reg. 13 and Reg. 14 must be informed and the following made available to those so informed: • the plan or programme as adopted • a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Reg. 12, the opinions expressed pursuant to Reg. 13(2)(d) and the results of consultations entered into pursuant to Reg. 14(4) have been taken into account, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and • the measures decided concerning monitoring (Reg. 16(4)(f))	**Chapter 6** and **Appendix 5** and to be addressed after the Transport Strategy is adopted.
Monitoring of the significant environmental effects of the plan's or programme's implementation (Reg. 17)	To be addressed after the Transport Strategy is adopted, although initial suggestions are provided in **Chapter 6**.
Quality assurance: environmental reports should be of a sufficient standard to meet the requirements of the SEA Regulations.	This report has been produced in line with current guidance and good practice for SEA and this table demonstrates where the requirements of the SEA Regulations have been met.

2 Methodology

Approach to the IIA

2.1 In addition to complying with legal requirements, the approach taken to the IIA of the Transport Strategy is based on current best practice and guidance set out in the National Planning Practice Guidance. **Table 2.1** below sets out the main stages of the planning process and shows how these correspond to the IIA process.

Table 2.1 Corresponding stages in IIA

Step 1: Evidence Gathering and Engagement
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope
• 1: Identifying other relevant policies, plans and programmes, and environmental objectives
• 2: Collecting baseline information
• 3: Identifying environmental issues and problems
• 4: Developing the IIA framework
• 5: Consulting on the scope of the IIA
Step 2: Production
Stage B: Developing and refining options and assessing effects
• 1: Testing the Strategy against the IIA Framework
• 2: Developing the options
• 3: Evaluating the effects of the Strategy
• 4: Considering ways of mitigating adverse effects and maximising beneficial effects
• 5: Proposing measures to monitor the significant effects of implementing the Strategy
Stage C: Preparing the IIA Report
• 1: Preparing the IIA Report
Stage D: Seek representations on the Strategy and the IIA Report
• 1: Public participation on the Strategy and the IIA Report
• 2(i): Appraising significant changes
• 2 (ii) Appraising significant changes resulting from representations
Step 3 & 4: Adoption and Monitoring
• 3: Making decisions and providing information
Stage E: Monitoring the significant effects of implementing the Strategy
• 1: Finalising aims and methods for monitoring
• 2: Responding to adverse effects

2.2 The following sections describe the approach that has been taken to the IIA of the Transport Strategy to date, and provides information on the subsequent stages of the process.

Stage A: Scoping

2.3 The IIA process began in April 2018 with the production by LUC of a Scoping Report for the Transport Strategy and Local Implementation Plan (LIP).

2.4 The scoping stage involved collating information about the environmental baseline for the Transport Strategy area and the key environmental issues facing it, as well as information about the policy context for the preparation of the Strategy. The IIA Scoping Report presented the outputs of the following tasks:

• Policies, plans and programmes of relevance to the Transport Strategy were identified and the relationships between them were considered. The policy, plan and programme review can be found in **Chapter 3** and **Appendix 2**.

- In line with the requirements of the SEA Regulations, baseline information was collected on **the following 'SEA topics': biodiversity** (including flora and fauna); population; human health; soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage; and landscape. This baseline information, presented in **Chapter 3** and **Appendix 3**), provides the basis for predicting and monitoring the likely effects of the Strategy and helps to identify alternative ways of dealing with any adverse effects identified.

- Drawing on the review of relevant plans, policies and programmes and the baseline information, key environmental issues for the City were identified (including environmental problems, as required by the SEA Regulations). Consideration was given to the likely evolution of each issue if the Transport Strategy were not to be implemented. If, drawing on the baseline information and relevant plans, policies and programmes it was considered that the Transport Strategy was unlikely to have significant effects upon certain SEA topics, they were scoped out.

- An IIA **'framework' was the**n presented, setting out the IIA objectives against which the proposals of the Transport Strategy would be appraised. The IIA framework provides a way in which the impacts of implementing a plan and reasonable alternatives (i.e. options) can be described, analysed and compared. The IIA framework comprises a series of sustainability objectives and associated questions **that can be used to 'interrogate' options during the** plan-making process. These IIA objectives define the long-term aspirations of the City with regard to sustainability issues. During the IIA, the performance of the options is assessed against these IIA objectives and questions.

2.5   **Table 2.2** presents the IIA objectives in the Transport Strategy IIA framework and shows how the SEA Regulations topics have been covered by these. It also shows which objectives relate to which element of the IIA (Sustainability Appraisal, Equality Impact Assessment, and Health Impact Assessment).

Table 2.2 IIA Framework

IIA Objectives	SEA Regulations Topic(s) covered	Appraisal question	SA	EqIA	HIA
Economic growth To sustain economic growth and employment opportunities locally, nationally and internationally **maintaining the City's status as a leading** international financial and business centre and to help enable the continuing success of its historic visitor attractions.	Population	Will the strategy / plan provide the business environment to attract and retain global financial, business services and TMT companies?	X		
		Will the strategy / plan provide the business environment to attract, retain and support SMEs?	X		
		Will the policy provide employment in supporting businesses and services providing a range of job opportunities?	X		
		Will the strategy / plan enable the City to grow and compete with other global financial and business centres?	X		
		Will the strategy / plan help to sustain and increase the City's contribution to the London and UK economies?	X		
		Will the strategy / plan enable the successful management of pedestrian and visitor movements and support the continuing growth of the tourism sector and visitor attractions?	X		
		Will the strategy / plan unlock heritage-led regeneration opportunities?	X		
Built environment and public realm To provide an attractive, efficient, accessible and digitally connected built environment and public realm for business, visitor, student and residential communities that respects and enhances local character and distinctiveness.	Landscape Population Human health Material assets	Will the strategy / plan provide an attractive public realm?	X		
		Will the strategy / plan secure high-quality design that enhances the built environment and character of the City?	X		
		Will the strategy / plan enable the efficient use of land?	X		
		Will the strategy / plan enable accessibility for everyone?	X	X	X
		Will the strategy / plan facilitate integrated urban solutions to problems such as congestion, waste, resource use and demographic changes?	X		
		Will the strategy / plan enable effective enforcement of planning conditions to reduce adverse impacts of development?	X		
		Will the strategy / plan make better use of the river for transport?	X		
Safe environment and crime reduction To reduce crime and antisocial behaviour and to manage and respond to the security challenges	Population Human health	Will the plan / strategy reduce crime and fear of crime?	X		X
		Will the plan / strategy tackle anti-social behaviour through design, use and management of buildings and spaces?	X		
		Will the plan / strategy provide effective security in the public realm beyond individual buildings?	X		

IIA Objectives	SEA Regulations Topic(s) covered	Appraisal question	SA	EqIA	HIA
that the City faces.		Will the plan / strategy help to reduce moped crime in the City?	X		X
Heritage assets To conserve and enhance the significance of heritage assets and their settings enabling public appreciation and access wherever possible.	Cultural heritage Landscape	Will the plan / strategy conserve or enhance the significance of heritage assets (listed buildings, conservation areas, historic street furniture, scheduled monuments, historic parks and gardens, historic trees, world heritage sites and archaeological remains) and their settings in and around the City?	X		
		Will the plan / strategy preserve archaeological remains and other heritage assets in situ and allow access for viewing?	X		
		Will the strategy / plan protect the views of historically important landmarks and buildings?	X		
		Will the strategy / plan successfully balance access, energy efficiency and digital connectivity requirements with the need to conserve and enhance heritage assets?	X		
		Will the strategy / plan contribute to the better management of heritage assets and tackle heritage at risk?	X		
Waste management To decouple waste generation from economic growth enabling a circular economy in the City that minimises waste arisings.	Material assets	Will the policy enable waste to be managed further up the waste hierarchy?	X		
		Will the strategy / plan facilitate sustainable waste transport?	X		
		Will the strategy / plan provide opportunities for businesses to benefit from the circular economy?	X		
		Will the strategy / plan encourage the transport of materials by rail or river where possible?	X		
		Will the strategy / plan safeguard existing wharves, particularly Walbrook Wharf?	X		
		Will the strategy / plan reduce the negative effects of servicing and freight?	x		x
Environmental protection (pollution) To maximise protection and enhancement of the natural environment.	Biodiversity, flora and fauna Water Soil	Will the strategy /plan improve air quality?	X		X
		Will the strategy / plan improve water quality and prevent contamination?	X		X
		Will the strategy / plan improve water quality by reducing diffuse urban pollution?	X		X
		Will the strategy / plan reduce waste water volumes and the risk of sewer flooding, for example through the use of SuDS?	X		X

IIA Objectives	SEA Regulations Topic(s) covered	Appraisal question	SA	EqIA	HIA
		Will the strategy / plan result in minimisation of noise and light pollution and nuisance?	X		X
		Will the strategy / plan reduce harmful emissions from transport?	X		X
Climate change mitigation and resilience To mitigate climate change, assist in maintaining energy security and promote climate change resilience.	Climatic factors Air	Will the strategy / plan improve energy efficiency or reduce carbon emissions associated with buildings or transport?	X		
		Will the strategy / plan enable the use of low and zero carbon technologies including decentralised energy networks?	X		
		Will the strategy / plan improve energy security for City premises?	X		
		Will the strategy / plan make the City's buildings and spaces more resilient to climate impacts (flooding, storm damage, drought, overheating)?	X		X
		Will the strategy / plan improve the microclimate and ameliorate the heat island effect?	X		X
		Will the strategy / plan assist in reducing vulnerability to flood risk within and beyond the City (e.g. by supporting TE2100 plan)?	X		X
Open spaces To increase provision and enhance the quality of open spaces enabling public access to them wherever possible.	Landscape Population Human health	Will the strategy / plan protect existing open spaces and streets?	X		X
		Will the strategy / plan increase the amount of publicly accessible open space?	X	X	X
		Will the strategy / plan improve the quality and design of existing open spaces and streets?	X	X	X
		Will the strategy / plan enhance tranquillity of open spaces and streets?	X		X
		Will the strategy / plan encourage multiple uses for open spaces such as sport, recreation, relaxation, food growing, public and private events (subject to local byelaws)?	X		X
		Will the strategy / plan ensure that open spaces reflect and interpret the local distinctiveness of an area, particularly in historic places?	X		
		Will the strategy / plan provide new or improve existing amenity space?	X		X
		Will the strategy / plan improve access for **all to the City's public** realm and open spaces?	X	X	X

IIA Objectives	SEA Regulations Topic(s) covered	Appraisal question	SA	EqIA	HIA
Biodiversity and urban greening To improve opportunities for biodiversity and increase the provision of natural environments.	Biodiversity, flora and fauna	Will the strategy / plan increase protection and improve opportunities for biodiversity in particular black redstarts, sparrows, bats and stag beetles?	X		
		Will the strategy / plan enhance the River Thames as a Site of Metropolitan Importance for Nature Conservation (e.g. through the provision of roosting structures for birds and bats)?	X		
		Will the strategy / plan affect any other Sites of Importance for Nature Conservation?	X		
		Will the strategy / plan protect existing trees and increase tree planting?	X		
		Will the strategy / plan increase green roofs, green walls and soft landscaping and lead to their positive management for biodiversity?	X		
		Will the strategy / plan affect any Natura 2000 sites?	X		
		Will the strategy / plan protect or improve residential amenity?	X		X
Social and cultural facilities To provide suitable social and cultural facilities for all the City's communities.	Population	Will the strategy / plan encourage a vibrant social environment which attracts workers to the City while respecting the needs of residents?	X		
		Will the strategy / plan decrease social isolation and improve the provision of opportunities for social interaction, leisure and sport?	X	X	X
		Will the strategy / plan ensure the City's historic environment continues to contribute significantly to social and cultural life in the square mile?	X		
Health To improve the health of the City's resident, worker and student populations.	Human health	Will the strategy / plan enable and encourage healthy lifestyles – exercise, healthy food, social interaction etc.?	X		X
		Will the strategy / plan maintain or improve access to health facilities?	X		X
		Will the strategy / plan reduce exposure to poor air quality?	X		X
		Will the strategy / plan provide opportunities for stress reduction?	X		X
		Will the strategy / plan reduce intrusive noise levels?	X		X
		Will the strategy / plan improve health and wellbeing through the provision of cultural facilities and activities?	X		X
		Will the strategy / plan have negative health impacts beyond the City?	X		X
		Will the strategy / plan improve road safety for all, particularly vulnerable road users (pedestrians, cyclists and motor cyclists)?	X	X	X

IIA Objectives	SEA Regulations Topic(s) covered	Appraisal question	SA	EqIA	HIA
X		Will the strategy / plan encourage active transport (walking and cycling)?	X		X
Education To enable excellence in education for all the City's communities.	Population	Will the strategy / plan enable access to educational facilities in the City?	X	X	
Equality and inclusion To enable social and economic inclusion in and around the City for workers, residents and visitors.	Population Human health	Will the strategy / plan contribute to the elimination of discrimination, harassment & victimisation?	X	X	
		Will the strategy / plan advance equality of opportunity between people who share protected characteristics and those who don't, particularly the disabled and elderly?	X	X	
		Will the strategy / plan reduce economic inequality for individuals and communities in and around the City?	X	X	
		Will the strategy / plan improve the accessibility of the City's transport network?	X	X	
		Will the strategy / plan encourage safe, convenient, accessible, economic and efficient public transport?	X	X	X

Stage B: Developing and refining options and assessing effects

2.6　Developing options for a plan is an iterative process, which can involve a number of rounds of consultation with stakeholders and the public. Consultation responses and the IIA process can **help to identify where there may be other 'reasonable alternatives' to the options being** considered for a plan. In terms of the Transport Strategy, options include different proposals and outcomes for improving transport and public realm within the City.

2.7　Regulation 12 (2) of the SEA Regulations requires that:

"The (environmental or SA) report must identify, describe and evaluate the likely significant effects on the environment of—

(a) implementing the plan or programme; and

(b) reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme".

2.8　Schedule 2 (h) of the SEA Regulations requires that the Environmental Report includes a description of:

2.9　"(h) an outline of the reasons for selecting the alternatives dealt with".

2.10　National Planning Practice Guidance states that reasonable alternatives *"must be sufficiently distinct to highlight the different sustainability implications of each"* [3].

2.11　**It should be noted that any alternatives considered need to be 'reasonable'. This implies that alternatives that are 'not reasonable' do not need to be subject to appraisal. Examples of** unreasonable alternatives could include options that do not meet the objectives of the plan, that do not comply with national policy (e.g. the National Planning Policy Framework), or that are unlikely to be deliverable.

2.12　It also needs to be recognised that the IIA findings are not the only factors taken into account when determining which options to take forward in a plan. There will often be an equal number of **positive or negative effects identified for each option, such that it is not possible to 'rank' them** based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for their plan.

2.13　The following section provides an overview of how the appraisal of options has fed into the development of outcomes and proposals that are now included in the Transport Strategy. The **City of London Corporation's** reasons for either taking forward each reasonable alternative in the Transport Strategy or for rejecting it are described in **Appendix 4.**

Identification and appraisal of options

2.14　Reasonable alternative options for the Transport Strategy were identified by the City of London during the preparation of the Transport Strategy. Having established the outcomes for the Transport Strategy (which were endorsed and refined through consultation) a set of proposals were drafted which would be necessary to deliver these outcomes. During the process of developing proposals, variations on these and also alternative options were considered. Selection of the preferred option was based on effectiveness in achieving the outcome, deliverability, and through some of the engagement exercises.

2.15　Alternative options are considered for proposals 9, 10, 16, 20, 22, 29, 30 and 36 and include the continuation of current measures, the use of traditional road safety approaches, and the banning of all motor vehicles in a zone. The alternatives for proposals 9 and 10 were unachievable and so were not considered reasonable alternatives and were not appraised.

Stage C: Preparing the Integrated Impact Assessment Report

2.16　This IIA report describes the process that has been undertaken in carrying out the IIA of the Transport Strategy. It sets out the findings of the appraisal of the **Transport Strategy's** outcomes

---

[3] Reference ID: 11-018-20140306

/ proposals, highlighting any likely significant effects (both positive and negative) and taking into account the likely secondary, cumulative, synergistic, short, medium and long-term and permanent and temporary effects, as relevant). Where any significant negative effects are identified, recommendations are made for preventing, reducing or offsetting these.

Stage D: Consultation on the Transport Strategy

2.17 The City of London invited comments on the draft Vision, Aims and Outcomes for the Transport Strategy and the accompanying IIA commentary in June / July 2018. No comments were received on the IIA commentary.

2.18 The draft Transport Strategy and the accompanying IIA were consulted on between November 2018 and January 2019. Again no comments were received on the IIA, and this IIA has been updated only to reflect the minor changes made to the Transport Strategy.

Stage E: Monitoring implementation of the Transport Strategy

2.19 Monitoring of the significant sustainability effects of implementing the Strategy should be carried out after its adoption. Initial suggestions for monitoring are presented in **Chapter 6.**

Appraisal methodology

2.20 The reasonable alternative proposals and the selected proposals set out in the Transport Strategy have been appraised against the IIA objectives in the IIA framework (see **Table 2.2**), with scores being attributed to each option to indicate its likely effects on the baseline in relation to achievement of each objective as follows:

Figure 2.1 Key to symbols and colour coding used in the IIA

++	Significant positive effect likely
+	Minor positive effect likely
0	Negligible effect likely
-	Minor negative effect likely
--	Significant negative effect likely
?	Likely effect uncertain
+/-	Mixed effect likely

2.21 Note that where a potential positive or negative effect is uncertain, a question mark was added to the relevant score (e.g. +? or -?) and the score colour coded as per the potential positive, negligible, or negative score.

2.22 The likely effects of the outcomes / proposals need to be determined and their significance assessed, which inevitably requires a series of judgements to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects and record these through the use of the symbol shown above. The dividing line in making a decision about the significance of an effect is often quite small. **Where either '++' or '--' has been used to** distinguish significant effects from more minor effects (+ or -) this is because the effect of an option in relation to the SEA objective in question is considered to be of such a magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, scores are relative to the scale of proposals under consideration.

Consultation

2.23   Public and stakeholder participation is an important element of the IIA and wider plan/making process. It helps to ensure that that the IIA report is robust and has due regard for all appropriate information that will support the Transport Strategy in making a contribution to sustainable development. The IIA Scoping Report for the Transport Strategy was published in April 2018 for a five week consultation period with the statutory consultees (Natural England, the Environment Agency and Historic England) and Transport for London / Greater London Authority. The comments received were then reviewed and addressed as appropriate in subsequent stages of the IIA. **Appendix 1** of this report lists the comments that were received during the IIA scoping consultation and describes how each one was addressed.

2.24   The draft Vision, Aims and Outcomes document and the accompanying IIA commentary were consulted on between June and July 2018, and the final draft Transport Strategy and IIA were consulted on between November 2018 and January 2019. No comments were received in regards to the IIA from either consultation.

Difficulties encountered

2.25   It is a requirement of the SEA Regulations that the SA Report describes any data limitations or other difficulties that are encountered during the SEA process.

2.26   There were very few difficulties encountered during the IIA of the Transport Strategy. However, due to the high level nature of the outcomes and proposals in the Strategy, at times it has been difficult to assess in detail or with great certainty the likely effects of the outcomes and proposals in relation to each IIA objective.

3 Environmental baseline, context and issues

Review of plans, policies and programmes

3.1 The Transport Strategy is not prepared in isolation but should seek to address relevant sustainability objectives set at an international and national level as well as sustainability issues facing the City of London. The IIA therefore gathers information on relevant international and national plans, policies, and programmes (described in this section) and on the sustainability baseline (described in the next section) and uses this information to inform the framework of objectives against which the Transport Strategy is assessed.

3.2 Schedule 2 of the SEA Regulations requires that Environmental Reports include information on:

"(1) An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans or programmes.

(5) The environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation."

3.3 Given the SEA Regulations' requirements above, it is also necessary to consider the relationship between the Transport Strategy and other relevant plans, policies and programmes. This enables any potential synergies to be built upon and any inconsistencies and constraints addressed.

International policy

3.4 At the international level, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') is particularly important as it sets out the requirements for SEA. SEA should be undertaken iteratively and integrated into the production of the Transport Strategy in order to ensure that any potential negative environmental effects are identified and can be mitigated.

3.5 Also at the international level is the Air Quality Directive, 2008/50/EC, on ambient air quality and cleaner air for Europe. The objective of this Directive is to avoid, prevent and reduce harmful effects of ambient air pollution on human health and the environment.

3.6 There are a wide range of other EU Directives, most of which have been transposed into UK law through national-level policy; the international Directives have been summarised in **Appendix 2** for completeness.

National policy

3.7 There is also a wide range of national level plans, policies and programmes with relevant objectives for the IIA, which are summarised in **Appendix 2**. Amongst the most significant national policy documents providing context for the Transport Strategy are the Transport Investment Strategy (2017), the Air Quality Strategy for England (2007), and the National Planning Policy Framework (NPPF) (2018) and associated Planning Practice Guidance (PPG). The City of London Transport Strategy must be consistent with these, key requirements of which are summarised below.

3.8 The Transport Investment Strategy[4] sets out how the Department for Transport will build on the progress that has been made in regards to transport in recent years and how they will respond to today's challenges while putting the travelling public at the heart of the choices made. The Transport Investment Strategy seeks to:

---

[4] Transport Investment Strategy, Moving Britain Ahead, Department for Transport, July 2017

- create a more reliable, less congested and better connected transport network that works for the users who rely on it;

- build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;

- enhance our global competitiveness by making Britain a more attractive place to trade and invest; and

- support the creation of new housing.

3.1 The Air Quality Strategy for England[5] provides an overview and outline of the UK Government's and devolved administrations' ambient air quality policy. It sets out a way forward for work and planning on air quality issues, details objectives to be achieved and proposes measures to be considered further to help reach them. The Air Quality Strategy emphasises the role local authorities have to play in helping to deliver its air quality objectives and the mandatory European air quality limit values. It states that *"action taken at a local level can be an effective way of tackling localised air quality problems, leading to an overall improvement of air quality across the UK"*.

3.2 The NPPF[6] sets out information about reductions in emissions and congestion and the use of sustainable transport modes. Paragraph 102 states that:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- *The potential impacts of development on transport networks can be addressed;*

- *Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*

- *Opportunities to promote walking, cycling and public transport use are identified and pursued;*

- *The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*

- *Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."*

Regional policy

3.3 There are a number of regional policy documents that the Transport Strategy will need to have due regard to. These are summarised in **Appendix 2** and include:

- The London Plan[7] and the new London Plan[8];

- **The Mayor's Transport Strategy (MTS) 20**18[9];

- The Mayor of London River Action Plan 2013[10]; and

- A City for all Londoners 2016[11].

3.4 The Mayor of London has published a number of additional strategies:

- Environment Strategy (2018)[12] – brings together a range of actions and approaches to improving every a**spect of London's environment including**: air quality, green infrastructure,

---

[5] The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, DEFRA, 2007

[6] National Planning Policy Framework, Department for Communities and Local Government, July 2018

[7] The London Plan, The Spatial Development Strategy for London Consolidated with Alterations Since 2011, Mayor of London, March 2016

[8] The London Plan, The Spatial Development Strategy for Greater London, Draft for Public Consultation, December 2017

[9] The Mayor's Transport Strategy, March 2018

[10] River Action Plan, Mayor of London and Transport for London, February 2013

[11] A City for all Londoners, Mayor of London, October 2016

[12] Mayor of London, London Environment Strategy, May 2018.

climate change mitigation and energy, waste, adapting to climate change, ambient noise and low carbon circular economy; and

- Housing Strategy (2018)[13] – **sets out the Mayor'**s plans to tackle the capital's housing crisis and his vision to provide Londoners with a good quality home they can all afford.

3.5   The following strategies will be published in the lifetime of the Transport Strategy:

- Health Inequalities Strategy;

- Economic Development Strategy; and

- Culture Strategy.

City of London policy

3.6   The following is a list of relevant City of London Policy and documents that the Transport Strategy and LIP should be guided by and be in conformity with. Outlines of the documents are included in **Appendix 2.**

- City of London Local Plan 2015[14];

- The Standard Highway and Servicing Requirements for Developments in the City of London[15];

- The City of London Air Quality Strategy 2015-2020[16];

- The City of London Noise Strategy 2016–2026[17];

- The City of London Road Danger Reduction and Active Travel Plan[18];

- The Thames Strategy Supplementary Planning Document (SPD)[19];

- The City of London Public Realm SPD[20]; and

- Freight and Servicing SPD[21].

Existing and forthcoming schemes

Low Emission Neighbourhood

3.7   The City of London Low Emission Neighbourhood (LEN) is being introduced in the Barbican area by 2019. This project, which is part-funded by the Mayor of London, aims to trial several high-impact activities that will address local air quality issues and act as a pilot area for the rest of the City. Proposals include working with businesses to tackle emissions from delivery and servicing trips, looking at the potential for local freight consolidation, and zero emission last mile deliveries.

Low Emission Zone

3.8   Covering most of Greater London, the Low Emission Zone requires larger vehicles and older small commercial vehicles to pay a charge if they do not reach certain emissions standards. At present, only vehicles registered before 2006 are required to pay the charge, and compliance is very high.

London Lorry Control Scheme (LLCS)

3.9   Administered by London Councils, the LLCS restricts the routes of large goods vehicles over 18 tonnes at night and at weekends. The aim of the scheme is to reduce noise pollution in residential areas. The scheme restricts large vehicles to a core network of main roads for as much of their journey as possible, with penalties issued for use of inappropriate routes. Vehicles

---

[13] Mayor of London, London Housing Strategy, May 2018.

[14] The City of London Local Plan, January 2015

[15] Standard Highway and Servicing Requirements for Developments in the City of London, City of London, 2007

[16] City of London Air Quality Strategy 2015-2020, City of London, June 2015

[17] City of London Noise Strategy 2016 to 2026,

[18] City of London Road Danger and Active Travel Plan 2018-2023

[19] City of London Thames Strategy Supplementary Planning Document, June 2015

[20] City Public Realm, People Places Projects Supplementary Planning Document, July 2016

[21] City of London Freight and Servicing Supplementary Planning Document, February 2018

wishing to use roads off the core network during the restricted hours must apply for a free permit to do so.

Congestion Charge

3.10 The Congestion Charge is a daily charge applying to all vehicles entering central London between 7 am and 6 pm Monday to Friday. The charge does not vary with the type of vehicle, so a large HGV would pay the same as a small van to enter the zone. Some discounts and exemptions do apply for Ultra Low Emission Vehicles, but in general most internal combustion engine vehicles will pay the charge.

Emissions Surcharge (T charge)

3.11 The Emissions Surcharge, which uses the same boundaries and time restrictions as the Congestion Charge, requires older vehicles not meeting certain emissions criteria to pay a daily charge to enter the area. The Emissions Surcharge was introduced from 23rd October 2017 as an interim scheme, pending the introduction of the Ultra Low Emission Zone.

Ultra Low Emission Zone

3.12 The Ultra Low Emission Zone (ULEZ) will come into force in September 2020 and will replace the Emissions Surcharge. The ULEZ will require all vehicles within the Congestion Charge area to meet strict emissions standards, or pay a daily charge in addition to the Congestion Charge.

Baseline information and key sustainability issues

3.13 Schedule 2 of the SEA Regulations requires information to be provided on:

"(2) The relevant aspects of the current state of the environment and the likely evolution therefore without implementation of the plan.

(3) The environmental characteristics of areas likely to be significantly affected.

(4) Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC on the conservation of wild birds and the Habitats Directive."

Baseline information

3.14 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps identify key sustainability issues and means of dealing with them.

3.15 The baseline information for the City of London, which was originally presented in the Scoping Report is set out in **Appendix 3.**

Key sustainability issues

3.16 Together with the sustainability objectives set by other plans, policies and programmes, the sustainability issues facing the City of London inform the framework of objectives against which the Transport Strategy is assessed. The key sustainability issues facing the City of London and their likely evolution without the Transport Strategy was identified during the scoping stage of the IIA and was presented in the Scoping Report; this information is reproduced in **Table 3.1**.

Table 3.1 Key sustainability issues for the City of London and their likely evolution without the Transport Strategy

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
Climatic Factors		
While total energy consumption and associated carbon emissions for the City show a declining trend, they continue to result in significant carbon emissions which contribute to climate change. **While the most of the City's** emissions are from its commercial activities, motorised transport also contributes and the Transport Strategy and LIP provide a means of reducing transport emissions.	The City of London Local Plan includes the following policies to tackle a reduction in carbon emissions: CS15 – Sustainable Development and Climate Change; DM15.1 – Sustainability requirements; DM15.2 – Energy and CO2 emissions assessments; DM15.3 Low and zero carbon technologies; DM15.4 Offsetting of carbon emissions; and DM15.5 Climate change resilience and adaptation. The implementation of the Transport Strategy and LIP offer opportunities to further tackle this issue through measures to reduce motorised transport – a major contributor to carbon emissions, and promote and improve active travel and public transport. Without the implementation of the Transport Strategy and LIP it is considered that a reduction in carbon emissions is still achievable with the support of policies in the Local Plan but this may be to a lesser extent or be achieved over a longer time scale as the issues associated with motorised transport will not be as well addressed. However as a global issue, climate change will continue to be a key consideration, regardless of the policies and measures within both the Local Plan and the Transport Strategy and LIP.	Objective 6 – Environmental protection (pollution) Objective 7 – Climate change mitigation and resilience
Biodiversity, Flora and Fauna		
The baseline information identifies a number of priority habitats, Sites of Metropolitan Importance for Nature Conservation (Tidal Thames) and Sites of Importance for Nature Conservation. Changes to streets, the public realm, river transport and / or vehicle movements may have the potential to impact upon these habitats.	The City of London Local Plan includes Policy DM19.2: Biodiversity and urban greening which promotes biodiversity and urban greening and sets out the protection and maintenance of habitats. The implementation of the Transport Strategy and LIP may further benefit these habitats through its aims, such as the reduction in road traffic however, the impact is unknown. If the Transport Strategy were not to be implemented it is considered that adequate protection would be **afforded to the City's habitats and species through policies within the** Local Plan as well as supporting documents such as the Biodiversity Action Plan.	Objective 9 – Biodiversity and urban greening

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
Cultural Heritage and Landscape		
The City is the historic core from which London developed. Consequently it is an area of great archaeological importance and contains many buildings and areas of historic and architectural value. Changes to streets and / or vehicle movements, including public realm improvement proposals designed to manage increasing numbers of pedestrians, may affect the settings and views of city landmarks, listed buildings and other heritage assets and can affect archaeological remains.	The City of London Local Plan aims for thorough protection of its cultural assets through a large number of policies that will protect and enhance the City's heritage and archaeological assets. These policies include: DM 11.1 – Protection of visitor, arts and cultural facilities; CS12 – Historic Environment; DM12.1 Managing change affecting all heritage assets and spaces; DM 12.2 Development in conservation areas; DM 12.3 Listed buildings; DM 12.4 Ancient monuments and archaeology; and DM 12.5 Historic parks and gardens. The implementation of the Transport Strategy and LIP may add further protection to these assets through its aims, such as the reduction in road traffic however, the impact is unknown. If the Transport Strategy were not to be implemented it is considered that more than adequate protection would still be afforded to the City's heritage and archaeological assets through policies within the Local Plan as well as supporting documents such as Conservation Area Plans.	Objective 2 – Built environment and public realm Objective 4 – Heritage assets
Air quality		
The City has some of the highest levels of air pollution in the country due to its location at the heart of London and the density of development. Levels of pollutants in the City such as sulphur dioxide, carbon monoxide and benzene have reduced over the past decade but levels of fine particulates (PM10) and nitrogen dioxide (NO_2) remain high. For this reason the City of London is a designated AQMA. Exposure to these pollutants is considered to be a	The City of London Local Plan sets out a specific policy to improve air quality in the City, Policy DM 15.6 – Air quality, as well as some of those policies set out in the climatic factors issue. There are also policies in the Local Plan which address traffic reductions and shift to more sustainable modes of transport. This includes policies: CS16 – Public transport streets and walkways; DM 16.1 - Transport impacts of development; DM 16.4 – Facilities to encourage active travel; and DM 16.8 – River transport. The implementation of the Transport Strategy offers an opportunity to further improve air quality in the City through, for example the reduction in vehicular traffic and congestion. Although it is considered that the issue of air quality is addressed in the Local Plan, the Transport Strategy	Objective 6 – Environmental protection (pollution) Objective 12 - Health

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
significant cause of ill health. Much of the air pollution in the City is associated with vehicle emissions, and so a reduction in emissions should be sought.	would lend further measures and support to this and ensure that vehicular traffic does not contribute to a decline in air quality. In terms of a reduction in traffic, the Local Plan sets out a number of policies to this effect and it is considered that the Transport Strategy and LIP would lend further support to these policies in the reduction in traffic and congestion and a decrease in pollution. In the absence of the Transport Strategy and LIP, the policies in the Local Plan will work towards this reduction with support from forthcoming GLA policies such as the Ultra Low Emissions Zone but the Strategy will further support these measures.	
Water and soils		
Vehicular transport has the potential to pollute water in the City. Pollutants from transport can enter surface or ground water either directly or indirectly and can spread to other water bodies, such as the River Thames. The water quality of the Thames has been decreasing in recent years and is now classed as moderate.	The Local Plan protects against water pollution though Policy DM15.8: Contaminated land and water quality. Potential adverse impacts of development on water quality must be prevented. While not setting out specific aims in regards to water quality, the Transport Strategy and LIP have the potential to reduce pollution of water in the City through its aim to cut motorised transport. It is considered that without the transport strategy the Local Plan would provide adequate protection. However, reducing water pollution from transport may not be so easily achieved without the Transport Strategy and LIP.	Objective 6 – Environmental protection (pollution)
Population		
The baseline information shows that the resident, working and visitor populations of the City are expected to rise. An efficient transport network is required to accommodate these additional people and protect against traffic congestion.	The current population trends of the City are expected to continue with or without the implementation of the Transport Strategy, supported by policies in the Local Plan, such as: CS1 Offices; DM1.1 Protection of office accommodation; DM1.2 Assembly and protection of large office development sites; DM1.3 Small and medium sized business units; CS2 Utilities infrastructure; DM3.3 Crowded places; DM3.4 Traffic management; DM10.1 New development; DM11.1 Protection of visitor, arts and cultural facilities; CS16 Public transport, streets and walkways;	Objective 1 – Economic growth Objective 2 – Built environment and public realm Objective 3 – Safe environment and crime reduction Objective 8 – Open spaces

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
	DM16.1 Transport impacts of development; and CS21 Housing. The Transport Strategy and LIP are expected to support and facilitate the rise in population.	Objective 10 - Housing Objective 11 – Social and cultural facilities Objective 12 – Health Objective 13 – Education Objective 14 – Equality and inclusion
Health		
Consideration of health for the City must take account of the health of the resident, working and visitor populations. Therefore the City must be designed to encourage healthy lifestyles through the provision of facilities for walking and cycling as well as improving safety for pedestrians and cyclists and improving air quality.	Policies relating to the health of the population are set out in the Local Plan and include those set out above in 'Air quality' to encourage and facilitate active travel and also: CS19 – Open spaces and recreation; DM 19.3 – Sport and recreation; and CS22 – Social infrastructure and opportunities. The Transport Strategy and LIP have the potential to further improve the health of the City's residents and working population through the reduction in road traffic, congestion and air pollution, and the promotion of active travel. Without the implementation of the Transport Strategy and LIP, health targets will still be in place but the effects of air quality may be more of a barrier to meeting these, along with road traffic and noise pollution.	Objective 3 – Safe environment and crime reduction Objective 12 – Health Objective 14 – Equality and inclusion
Equality		
The City of London is generally affluent however, areas around it fall into some of the most deprived areas in the country. Some Index of Multiple Deprivation domains illustrate the issues the City	The City of London Local Plan provides policies to promote equality, e.g. CS22 Social infrastructure and opportunities and DM22.1 Location and protection of social and community facilities. It also sets out policies that address housing, air quality and road traffic incidents e.g. CS21 Housing, DM21.2, DM21.3 Residential environment, DM21.5 Housing quality standards, DM15.6 Air quality, CS16 Public transport, streets and	Objective 8 – Open spaces Objective 10 – Housing Objective 11 – Social and cultural facilities

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
currently has with housing, air quality and road traffic incidents.	walkways, DM16.1 Transport impacts of development and DM16.2 Pedestrian movement. Without the implementation of the Transport Strategy and LIP, the policies in the Local Plan will continue to address these issues. However, the Transport Strategy and LIP, particularly in regards to air quality and road traffic incidents, will make meeting targets much more achievable.	Objective 13 – Education Objective 14 – Equality and inclusion
Material assets		
Office space is the predominant land use in the City, serving its large working day population. The City Corporation aims to ensure that people have a range of sustainable modes of transport to choose from when travelling to and from work and is working to ensure that a high quality public realm is provided.	The Local Plan promotes sustainable transport with Policies DM16.1: Transport Impacts of Development, CS16: Public transport, streets and walkways, DM16.2: Pedestrian movement, DM16.3: Cycle parking, and DM16.4 Facilities to encourage active travel. Policy DM10.4: Environmental enhancement ensures that highways and public realm are designed to a high standard. Although the Local Plan includes policies aimed at promoting sustainable transport, the Transport Strategy and LIP will build upon and add further weight to this. Without the production of the Transport Strategy and LIP the Local Plan policies will still be in place, but could be harder to meet.	Objective 1 – Economic growth Objective 2 – Built environment and public realm Objective 8 – Open spaces
Waste		
The City itself has no waste management sites so all waste has to be transported elsewhere. The high rate of redevelopment in the City means that large quantities of demolition and construction waste are generated.	There are policies in the Local Plan that address the need to minimise waste and the transport of waste in the City, including CS17 – Waste; DM 17.3 - New waste management sites; DM 17.4 – Development affecting waste management sites, DM 17.1 Provision for waste in development schemes and DM 17.2 - Designing out construction waste. In the absence of the Transport Strategy and LIP, the Local Plan and supporting documents provide a range of policies and measures that will work to reduce waste and waste transfer in the City.	Objective 5 – Waste management

Sustainability issues of relevance to the Transport Strategy	Likely evolution without the Transport Strategy	IIA objective
Economy		
The City of London is a leading financial and business centre. Offices are the predominant land use and the largest industrial sector is business services and banking. Economic growth in the City is expected to continue and accelerate.	The Local Plan sets out policies to encourage office development and promote economic development including: CS1 Office; DM1.1 Protection of office accommodation; DM1.2 Assembly and protection of large office development sites; DM1.3 small and medium sized business units; and DM1.5 Mixed uses in commercial areas. The Local Plan will support the economic development of the City with or without the implementation of the Transport Strategy. However, the Transport Strategy and LIP will support and assist in the continued economic development of the City through improved accessibility and transport infrastructure for those who work in the area, potentially making the City a more attractive place for businesses and workers.	Objective 1 – Economic growth

4 Assessment of the Transport Strategy

4.1   This chapter presents the IIA findings for the proposals selected by the City of London for inclusion under each outcome in the Transport Strategy and for the reasonable alternatives to these proposals considered by the City but not taken forward in the Strategy.

4.2   A total of 11 outcomes with associated proposals have been set out in the Strategy and are subject to IIA. The assessment is set out with a sub-section for each outcome. A table is provided for each outcome, setting out the scores for each related proposal against each IIA objective. Each table is followed by a narrative summary of the IIA results and an explanation of any significant scores given.

4.3   Particular consideration has been given to the likely significant effects identified (both positive and negative), in line with the requirements of the SEA Regulations. All effects are assumed to be long term unless otherwise specified. The SEA Regulations require the SA to report on *"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."* No such significant adverse effects were identified and therefore identification of potential mitigation measures was not required.

4.4   It is noted that there is a section at the end of the Transport Strategy entitled 'Delivering the Strategy' which contains three proposals. Unlike all of the other proposals in the Strategy these three have not been assessed as they relate only to how the Strategy will be delivered and monitored and do not specifically propose anything new or any changes to transport and streets in the City.

Outcome: Healthy Streets Approach

Table 4.1 IIA scores for Healthy Streets Approach

IIA objectives	Proposals
	1. Embed the Healthy Streets Approach in transport planning and delivery
Economic growth	+
Built Environment and public realm	+ +
Safe environment and crime reduction	+
Heritage assets	+
Waste management	0
Environmental protection (pollution)	+ +
Climate change mitigation and resilience	+ +
Open spaces	+ +
Biodiversity and urban greening	+?
Social and cultural facilities	+
Health	+ +
Education	0
Equality and Inclusion	+ +

4.5   The proposal under this outcome is anticipated to give rise to significant positive effects for the following IIA objectives:

- Built environment and public realm, as the elements of the Healthy Streets Approach e.g. providing places to stop and rest, less noise, feeling of safety, things to see and do, clear air, easy to cross etc. will work to improve the built environment and public realm in the City and make it more accessible to all.

- Environmental protection and climate change mitigation and resilience, as the Healthy Streets Approach promotes and facilitates walking, cycling and public transport use, which will reduce road traffic and congestion, subsequently decreasing carbon emissions and improving air quality. The approach also aims to make the streets less noisy.

- Open spaces, as places to stop and rest, shade and shelter, less noise, safety and relaxation are all priorities of the Healthy Streets Approach which will work to improve existing and future open spaces in the City.

- Health, as similarly to environmental protection the Approach will result in improved air quality and less noise pollution, as well as supporting active travel. It also aims to provide a safe, relaxing and interesting public realm.

- **Equality and inclusion as the Approach should improve accessibility to the City's open spac**es and facilities for people from all walks of life.

4.6   Mainly minor positive and significant positive effects, with a negligible effect expected only against waste management and education, as it is not expected to impact these IIA objectives.

Reasonable alternatives

4.7   No reasonable alternative proposals have been identified for this outcome.

Outcome: The Square Mile's streets are great places to walk and spend time

Table 4.2 IIA scores for The Square Mile's streets are great places to walk and spend time

IIA objectives	2. Put the needs of people walking first when designing and manging our streets.	3. Complete the riverside walkway and improve walking connections between the riverside and the rest of the City.	4. Enhance the Barbican high walks.	5. Ensure new developments contribute to improving the experience of walking and spending time on the City's streets.	6. Promote and celebrate walking.	7. Provide more public space and deliver world-class public realm.	8. Incorporate more greenery into the City's streets and public spaces.	9. Reduce rainwater run-off on City streets and public realm.	10. Incorporate protection from adverse weather in the design of streets and the public realm.
Economic growth	+/-	+	0	+?	0	+?	0	0	0
Built Environment and public realm	+ +	+ +	+	+ +	+	+ +	+ +	+	+ +
Safe environment and crime reduction	+ +	+	+	0	+	+	0	0	0
Heritage assets	0	0	0	+?	0	+ +	+	0	0
Waste management	0	0	0	0	0	0	0	0	0
Environmental protection (pollution)	+ +	+	0	+	+ +	+	+ +	+ +	0
Climate change mitigation and resilience	+ +	+	0	+	+ +	+	+ +	+ +	+ +

IIA objectives	Proposals								
Open spaces	+	+ +	+	+	+	+ +	+ +	+	+
Biodiversity and urban greening	0	0	0	0	0	+	+ +	+ +	+
Social and cultural facilities	+	+ +	0	+	0	+	0	0	0
Health	+ +	+	+	+ +	+ +	+ +	+ +	+	+
Education	0	0	0	0	0	0	0	0	0
Equality and Inclusion	+	0	+	+	+	+	0	0	0

4.8   As can be seen from **Table 4.2** the proposals under outcome 'The City's streets are great places to walk and spend time', have received a mixture of significant positive, positive and negligible scores.

4.9   Significant positive effects are expected in relation to the following IIA objectives:

- Built environment and public realm, as the strategy will require the provision of attractive, safe and well-designed streets and public realm which will enhance the quality and character of the built environment. This will improve accessibility for everyone and ensure that residents **and visitors want to spend time on the City's streets.** It will also encourage more people to walk around the City, reducing congestion on the roads and on public transport.

- Safe environment and crime reduction, as the proposals in the strategy that require pedestrian friendly streets and public spaces should improve pedestrian safety, for example by allowing more time to use road crossings or pedestrianising some streets where pavement capacity is inadequate.

- Heritage assets, as proposal 7 aims to improve the public realm in areas where there are buildings and structures of significant historical interest to enhance the setting and improve accessibility.

- Environmental protection and climate change mitigation and resilience - as the proposals in the Transport Strategy require both the greening of the streets and public realm in the City, reducing the impact of greenhouse gas emissions, and promote and facilitate walking, which is likely to reduce the numbers of vehicles on the road and subsequently road traffic congestion, reducing resultant greenhouse gas emissions. Proposals 9 and 10 provide climate change resilience as they aim to reduce rainwater run-off and protect pedestrians and cyclists from extreme weather events.

- Open spaces, as the Strategy requires improvements to existing public spaces, the greening of public spaces and the identification of opportunities for new open space.

- Biodiversity and urban greening, as in particular proposals 8 and 9 will work to increase the **amount of greenery on the City's streets.**

- Social and cultural facilities, as proposal 3 aims to introduce more ground floor leisure uses, such as restaurants and cafes along the riverfront.

- Health, as a number of proposals will promote and facilitate walking as an alternative option to driving or using public transport. Walking as a form of exercise has health benefits and an increase in people choosing to walk over using motorised transport will reduce congestion on **the City's roads and as a result reduce air pollution.**

4.10   Mixed effects are considered possible for economic growth as a result of proposal 2 as while the environment for workers who walk in the City will be improved, delays and reduced capacity for other road users may arise, which may make the City a less attractive place to work, or locate their business for some.

4.11   Proposal 4 is anticipated to have a neutral effect on heritage assets. The IIA of the draft Transport Strategy identified this as having uncertain effects as any enhancements could have potentially resulted in adverse effects on the heritage significance of the Barbican. Therefore, it was recommended that the proposal be modified to require that any enhancement to the Barbican Highwalks will ensure that its heritage significance is respected. As a result of this **recommendation proposal 4 now states that 'any enhancements made to the high walks will be in** line with the special architectural and historic interest of the Barbican and the requirements of the Barbican Listed Management Guidelines SPD.

Reasonable alternatives

4.12   The City Corporation has identified alternatives to proposals 9 and 10. The alternative to selected proposal 9 would be for all transport and public realm schemes to incorporate Sustainable Drainage Systems, aiming for a green field site run-off rate. However, the Corporation has stated that the reason that this alternative proposal was not selected is due to severe space constraints **on and below the City's streets,** meaning that it is nearly always impossible to install Sustainable Drainage infrastructure on streets in the City, making the proposal unlikely to be deliverable. For

this reason, this option is not considered to be a reasonable alternative for the purposes of the IIA and has not been assessed.

4.13   The alternative considered to proposal 10 is **for the City's streets and public realm to be designed** to provide protection from all weather. The Corporation stated that the reason that this alternative proposal was not selected is because providing protection from all weather is possibly unattainable. Therefore, as above, this is not considered to be a reasonable alternative option and has not been assessed.

Outcome: Street space is used more efficiently and effectively

Table 4.3 IIA scores for Street space is used more efficiently and effectively

IIA objectives	Proposals				
	11. Take a proactive approach to reducing motor traffic	12. Design and manage the street network in accordance with the City of London street hierarchy	13. Use timed and temporary street closures to help make streets safer and more attractive places to walk, cycle and spend time.	14. Make the best and most efficient use of the kerbside and car parks.	15. Support and champion the 'Turning the Corner' Campaign.
Economic growth	+/-?	+	+	+	0
Built Environment and public realm	+	+ +	+ +	+ +	+
Safe environment and crime reduction	0	+	+	0	0
Heritage assets	+	+	+	0	0
Waste management	+ +	+ +	0	+	0
Environmental protection (pollution)	+ +	+	+	+	+
Climate change mitigation and resilience	+ +	+	+	+	+
Open spaces	+	+	+	+	0

IIA objectives	Proposals				
Biodiversity and urban greening	0	0	0	0	0
Social and cultural facilities	0	+	+ +	+	0
Health	+ +	+	+ +	+ +	+ +
Education	0	0	0	0	0
Equality and inclusion	0	+ +	+	+	+

4.14 This outcome's proposals are expected to result in minor positive effects in relation to almost of all of the IIA objectives. Some of the proposals are anticipated to have negligible effects in relation to a number of the objectives. A large number of significant positive effects are also expected as a result of this outcome. These include:

- Built environment and public realm, as proposals in the outcome look to improve the public realm by prioritising walking and cycling, improving the look and feel of streets, providing additional public space and reducing traffic.

- Waste management, as the outcome seeks to retime, and reduce and consolidate the number of delivery and servicing vehicles in the Square Mile.

- Environmental protection and climate change mitigation and resilience, as proposal 11 aims to manage and remove motor traffic from the City and reduce the number of delivery and servicing vehicles. This is likely to reduce congestion in the City and lower traffic-related carbon emissions and air pollution, as well a traffic noise.

- Social and cultural facilities, as proposal 13 seeks to improve the experience of spending time on the City's streets by launching a lunchtime streets programme, supporting the leisure and cultural offer of the city by introducing a traffic-free weekend every year, exploring the potential of making wider use of street closures for existing events and supporting closures by third parties which allow residents and visitors to enjoy the City's leisure, cultural and historic offer.

- Health, as the outcome will work to reduce traffic in the City, thus improving air quality and reducing noise, and will encourage walking and cycling which provide health benefits associated with a more active lifestyle. It will also encourage social interaction, health and well-being through street closures and events which allow residents and visitors to enjoy the City's leisure and cultural facilities. Furthermore it will ensure that response times for emergency vehicles are maintained.

- Equality and inclusion, as proposal 12 will ensure that access for those with disabilities is of particular consideration when deciding how space is allocated on streets.

Reasonable alternatives

4.15 No reasonable alternative proposals have been identified for this outcome.

Outcome: The Square Mile is accessible to all

Table 4.4 IIA scores for The Square Mile is accessible to all

IIA objectives	Proposals			
	16. Develop and apply the City of London Street Accessibility Standard.	17. Keep pavements free of obstructions.	18. Keep pedestrian crossings clear of vehicles.	19. Support and champion accessibility improvement to underground stations.
Economic growth	0	0	0	0
Built Environment and public realm	+ +	+ +	+	0
Safe environment and crime reduction	+	0	0	0
Heritage assets	0	+	0	0
Waste management	0	0	0	0
Environmental protection (pollution)	0	0	0	0
Climate change mitigation and resilience	0	0	0	0
Open spaces	+	+	0	0
Biodiversity and urban greening	0	0	0	0
Social and cultural facilities	+ +	0	0	+
Health	+ +	+ +	+	+

IIA objectives	Proposals			
Education	0	0	0	0
Equality and Inclusion	+ +	0	0	+ +

4.16   As **Table 4.4** illustrates, this outcome, 'The Square Mile is accessible to all', is likely to have a negligible effect on many of the IIA objectives. However, it is also considered likely to have a either a minor positive effect, or a significant positive effect on a number of the objectives. The significant positive effects were identified for the following IIA objectives:

- Built environment and public realm, because proposal 16 will improve the public realm and built environment, making the streets accessible for everyone. Proposal 17, through removing unnecessary street clutter will work to improve the attractiveness and efficiency of the City's streets and public realm.

- Social and cultural facilities, as proposal 16, in providing streets that are accessible to everyone, is likely to decrease the social isolation of those who would otherwise find it difficult to get out in the City.

- Health, as similarly to social and cultural facilities, proposal 16 is likely to result in significant positive effects as it would allow people who would otherwise struggle to access health facilities, cultural facilities and activities. Along with proposal 17, it will also work to reduce the danger that the current cluttered streets can pose to those with limited accessibility.

- Equality and inclusion, as the proposals under this outcome will work to make the streets, spaces, stations and facilities in the City more accessible to all. This will be achieved through the development of a Street Accessibility Standard and facilitating step free access at rail stations.

Reasonable alternatives

4.17   A reasonable alternative to proposal 16 has been considered under this outcome. The reasonable alternative is to 'continue with minimum accessibility standards as per the Design Manual for Roads and Bridges (DMRB)'. The assessment of this alternative is set out below:

IIA Objectives	Reasonable alternatives score
	Proposal 16: Continue with minimum accessibility standards as per DMRB.
Economic growth	0
Built Environment and public realm	0
Safe environment and crime reduction	0
Heritage assets	0
Waste management	0
Environmental protection (pollution)	0
Climate change mitigation and resilience	0
Open spaces	0
Biodiversity and urban greening	0
Social and cultural facilities	0
Health	0
Education	0
Equality and Inclusion	0

4.18   As can be seen from the above, the reasonable alternative will only have negligible effects on the IIA objectives, as it is a continuation of the current approach. Therefore the selected proposal 16 is more likely to have positive effects.

Outcome: People using our streets and public spaces are safe and feel safe

Table 4.5 IIA scores for People using our streets and public spaces are safe and feel safe

IIA objectives	Proposals			
	20. Apply the safe system approach and the principals of road danger reduction to deliver Vision Zero.	21. Work with the City of London Police to reduce crime and fear of crime.	22. Ensure on-street security measures are proportionate and enhance the experience of spending time on our streets.	23. Improve the quality and functionality of street lighting.
Economic growth	0	+	0	0
Built Environment and public realm	+	+	+	+ +
Safe environment and crime reduction	+	+ +	+ +	+ +
Heritage assets	0	0	0	0
Waste management	+	0	0	0
Environmental protection (pollution)	0	0	+?	0
Climate change mitigation and resilience	0	0	+?	0
Open spaces	0	0	+	+
Biodiversity and urban greening	0	0	+	0
Social and cultural facilities	0	+	+	0
Health	+ +	+	+	+ +

IIA objectives	Proposals			
Education	0	0	0	0
Equality and Inclusion	+	++	++	++

4.19 The proposals under the outcome , **'People using our streets and public spaces are safe and feel safe'**, will have a negligible effect on many of the IIA objectives, a number of minor positive effects are also expected, particularly in relation to built environment and public realm, and Health. Significant positive effects are expected for the following IIA objectives:

- Built environment and public realm, as proposal 23 aims to use street lighting to improve the look, feel and ambience of the Square Mile.

- Safe environment and crime reduction, as the outcome aims to reduce crime in the City and the fear of crime through a number of measures which include motorcycle ground anchors, campaigns, car park security reviews, better street lighting, and working with the City of London Police.

- Health, as the outcome will result in improvements to road safety for all, particularly more vulnerable road users through speed restrictions, redesigning streets to be safer, ensuring safer vehicles on the roads, and encouraging safe behaviours.

- Equality and inclusion, as the outcome will contribute to the elimination of harassment and victimisation in the City and will encourage and facilitate safe transport.

Reasonable alternatives

4.20 Reasonable alternatives have been identified to proposals 20 and 22. For proposal 20 it is considered that an alternative method of reducing road danger is a traditional road safety approach. Rather than aiming to remove the danger on roads, it seeks to mitigate it, for example by increasing segregation between vehicles and pedestrians with guard railing.

4.21 The alternative considered to proposal 22 is to continue with the use of bollards for all hostile vehicle mitigation (HVM).

IIA Objectives	Reasonable alternatives score	
	Proposal 20: traditional road safety approach, mitigation.	Proposal 22: continue with the use of bollards for all HVM.
Economic growth	0	0
Built Environment and public realm	0	0
Safe environment and crime reduction	+	0
Heritage assets	0	0
Waste management	0	0
Environmental protection (pollution)	0	0
Climate change mitigation and resilience	0	0
Open spaces	0	0
Biodiversity and urban greening	0	0
Social and cultural facilities	0	0
Health	+ +	0
Education	0	0
Equality and Inclusion	+	0

4.22   The alternative to proposal 20 is expected to have mainly negligible effects on the IIA objectives. Significant positive effects are considered likely in relation to health through the mitigation of road danger. However, the alternative option to proposal 20 is anticipated to have fewer positive effects than the selected proposal.

4.23   The alternative to proposal 22 is a continuation of the current measure, therefore it will have negligible effects on the IIA objectives. The selected proposal is anticipated to have a number of positive effects.

Outcome: A wider range of people choose to cycle

Table 4.6 IIA scores for A wider range of people choose to cycle

IIA objectives	Proposals				
	24. Apply a minimum cycling level of service to all streets.	25. Increase the amount of cycle parking in the City.	26. Ensure new developments contribute to improving the experience of cycling in the City.	27. Promote and celebrate cycling.	28. Improve cycle hire in the City.
Economic growth	+?	+?	+?	0	+?
Built Environment and public realm	+	+	+	+	+
Safe environment and crime reduction	0	0	0	0	0
Heritage assets	0	0	0	0	0
Waste management	+	0	0	0	0
Environmental protection (pollution)	+ +	+	+ +	+ +	+ +
Climate change mitigation and resilience	+ +	+	+ +	+ +	+
Open spaces	+	0	0	0	0
Biodiversity and urban greening	0	0	0	0	0
Social and cultural facilities	+	+	+	0	+
Health	+ +	+ +	+ +	+ +	+ +

IIA objectives	Proposals				
Education	0	0	0	0	0
Equality and Inclusion	+	+	+	+	+

4.24   **Table 4.6** illustrates that the proposals under the outcome, 'A wider range of people choose to cycle', are likely to result in a large number of minor positive and significant positive effects. While some of the proposals will have a negligible effect on some of the IIA objectives; no negative effects are anticipated.

4.25   Significant positive effects are expected for the following IIA objectives:

- Environmental protection and climate change mitigation and resilience, as the promotion and facilitation of cycling in the City is likely to work to reduce the number of vehicles on the roads as an increased number of residents and visitors may cycle. This in turn will reduce **congestion on the City's streets and subsequent carbon emissions and air pollution.**

- Health, as cycling is an active form of transport with consequent health benefits. The measures described under the proposals will enable an increased number of people, who may have originally used alternative forms of transport, to cycle.

4.26   Minor positive effects are likely in regards to economic growth have been recorded as uncertain as the benefits to the economy of the City of **improvements to the City'**s cycle network are less certain than the other, more direct benefits of this outcome.

Reasonable alternatives

4.27   No reasonable alternative proposals have been identified for this outcome.

Outcome: The Square Mile's air and streets are cleaner and quieter

Table 4.7 IIA scores for The Square Mile's air and streets are cleaner and quieter

IIA objectives	Proposals								
	29. Support and champion a central London Zero Emission Zone.	30. Install additional electric vehicle charging infrastructure.	31. Request an accelerated roll out of zero emission capable buses.	32. Support small businesses to accelerate the transition to zero emission capable vehicles.	33. Make the City of London's own vehicle fleet zero emissions.	34. Reduce the level of noise from motor vehicles.	35. Reduce noise from streetworks.	36. Encourage innovation in air quality improvements and noise reduction.	37. Ensure street cleansing regimes support the provision of a world-class public realm.
Economic growth	+/-?	0	0	+	0	0	0	+	0
Built Environment and public realm	+	0	+	0	+	+	+	+	++
Safe environment and crime reduction	0	0	0	0	0	0	0	0	0
Heritage assets	0	0	0	0	0	+	+	+	+
Waste management	+	0	0	0	0	0	0	0	++?
Environmental protection (pollution)	++	++	++	+	++	++	++	++	++
Climate change mitigation and resilience	++	++	++	+	++	0	0	++	0

IIA objectives	Proposals								
Open spaces	0	0	0	0	0	+	+	+	+ +
Biodiversity and urban greening	0	0	0	0	0	0	0	0	0
Social and cultural facilities	0	0	0	0	0	0	0	0	+
Health	+ +	+	+	+	+ +	+ +	+ +	+ +	+
Education	0	0	0	0	0	0	0	0	0
Equality and Inclusion	0	0	0	0	0	0	0	0	0

4.28   The proposals under this outcome are expected to have a range of effects. Significant positive effects are considered likely for the following IIA objectives:

- Built environment and public realm and open spaces, as proposal 37 ensures that street cleansing regimes will result in world-class public realm.

- Waste management, as proposal 37 states that the City will work with businesses to minimise the impact of waste collection on the public realm, including through time-banded collections. It is likely that this will have significant positive effects on waste management as it will encourage more sustainable waste collection methods. However, this has not been explicitly mentioned and so the effect is uncertain.

- Environmental protection, as the outcome will result in an increase of low or zero emission vehicles which will reduce air pollution caused by petrol/diesel motorised traffic. The outcome also contains proposals to reduce noise pollution from traffic and streetworks.

- Climate change mitigation and resilience, as similarly to the above, the move to low and zero emission vehicles will work to reduce the carbon emissions resulting from current traffic in the City.

- Health, as the majority of proposals within the outcome are promoting or requiring the use of zero emission vehicles, which will reduce levels of air pollution in the City, thus making it healthier for visitors and residents. The remainder of the proposals require a reduction in noise resulting from traffic and streetworks, which will reduce any loss of amenity resulting from noise pollution.

4.29   Proposal 30 is anticipated to have negligible effects on the built environment and public realm. The IIA of the draft Transport Strategy identified this proposal as having potential negative effects due to the visual impact the charging points may have on the public realm. It was recommended that additional text was added to the proposal which requires the design of charging points to be sensitive to the streetscape and public realm. Based on this recommendation the proposal now **includes a sentence which states** 'where it is essential to locate on-street, charge points will be installed in the carriageway rather than on the pavement and in a way that is sensitive to the **streetscape and public realm'.'.**

4.30   A mixed effect, including a minor negative effect, is possible in regards to the effect of a zero emission zone on the economic growth of the City as it is considered possible that some businesses may be put off locating in the City if access for certain vehicles is restricted. The exact impact is not known, hence the uncertainty added to the score. The negative effect is anticipated to be minor, rather than significant, due to a phased introduction and consultation with businesses which will give businesses time to prepare and contribute to the proposals. It is also considered that these potential negative effects will be medium term rather than long term as low and zero emission vehicles become cheaper and more widespread in the long term. Furthermore, the negative effects are likely to be offset somewhat by positive economic effects resulting from the city becoming a healthier and more attractive place to live and do business and through the restriction making driving in the City easier for those vehicles that do remain in the area.

Reasonable alternatives

4.31   Reasonable alternatives have been identified to proposals 29, 30 and 36. For proposal 29 it is considered that an alternative to championing a central London Zero Emission Zone would be to ban all motor vehicles. An alternative to selected proposal 30 would be to rely on the private installation of EV charge points, while the alternative to selected proposal 36 would be to allow the market to lead in air quality improvements and noise reduction, rather than this being encouraged by the City.

IIA Objectives	Reasonable alternatives score		
	Proposal 29: Ban all motor vehicles	Proposal 30: Rely on private installation of EV charge points	Proposal 36: Allow the market to lead
Economic growth	+/-?	0	0
Built Environment and public realm	++	0	0
Safe environment and crime reduction	+	0	0
Heritage assets	+	0	0
Waste management	--	0	0
Environmental protection (pollution)	++	0	0
Climate change mitigation and resilience	++	0	0
Open spaces	+	0	0
Biodiversity and urban greening	0	0	0
Social and cultural facilities	-?	0	0
Health	++/-	0	0
Education	0	0	0
Equality and Inclusion	-	0	0

4.32   The alternative to proposal 29 is anticipated to have a range of effects. The impact on the built environment and public realm; safe environment and crime reduction; heritage assets; and open space is expected to be more beneficial that the selected option. However, the impact on waste management, social and cultural facilities and equality and inclusion is expected to be more adverse. A significant negative effect is considered likely with regard to waste management as a total ban on vehicles in the City would not allow for appropriate and convenient deliveries and servicing. As highlighted in **Appendix 4**, this is the main reason why this reasonable alternative has not been selected.

4.33   The alternatives to proposals 30 and 36 are a continuation of the current situation, therefore they will have negligible effects on the IIA objectives. The selected proposal is anticipated to have a number of positive effects.

Outcome: Delivery and servicing needs are met more efficiently and impacts are minimised

Table 4.8 IIA scores for Delivery and servicing needs are met more efficiently and impacts are minimised

IIA objectives	Proposals	
	38. Reduce the number of freight vehicles in the Square Mile	39. Develop a sustainable servicing programme.
Economic growth	+?	0
Built Environment and public realm	+	+
Safe environment and crime reduction	0	0
Heritage assets	+	+
Waste management	+ +	+
Environmental protection (pollution)	+ +	+ +
Climate change mitigation and resilience	+ +	+ +
Open spaces	0	0
Biodiversity and urban greening	0	0
Social and cultural facilities	0	0
Health	+ +	+ +
Education	0	0
Equality and Inclusion	0	0

4.34   This outcome's proposals are likely to result in a mixture of effects in relation to the IIA objectives.

4.35   A number of objectives are expected to receive significant positive effects as a result of this outcome. This includes:

- Waste management, as proposal 38 will require a consolidated approach to servicing, use of the river for transport of waste and a sustainable servicing programme. These measures will **work to reduce the number of waste collection and servicing vehicles on the City's streets and** improve the sustainability of waste collection.

- Environmental protection and climate change mitigation and resilience, as the proposals under this **outcome will work to reduce the number of freight and servicing vehicles using the City's** streets as a whole, and also to increase the proportion of vehicles that are low or zero emission. As a result road traffic emissions, air pollution and other harmful emissions will decrease.

- Health, **as the reduction in the number of large vehicles using the City's streets and a move to** low and zero emission vehicles will both reduce the amount of air pollution and other harmful emissions and reduce noise pollution, affecting the amenity of City residents.

4.36   Proposal 38 is anticipated to have significant positive effects on environmental pollution due to the reduction in air and noise pollution from freight vehicles. The IIA of the draft Transport Strategy also identified this proposal as having the potential for negative effects on environmental pollution as the use of the river for freight may also have adverse effects through potential decreases in the water quality of the river, and for this reason biodiversity as well through potential adverse impacts on the River Thames SINC. Therefore, it was recommended in the IIA that text be added to the proposal which states that as far as possible adverse effects on the water quality and biodiversity of the river will be avoided. The proposal now includes a caveat that reads 'working with river freight operators to ensure that their fleets meet port of London Authority air quality standards and minimise impact on water quality'. This, in addition to regulation by the Environment Agency and Port of London Authority regarding activities that could lead to pollution of the river, removes the likelihood of negative effects on pollution and biodiversity.

4.37   A minor positive effect is anticipated on economic growth in the City as a result of proposal 38. The IIA of the draft Transport Strategy also identified the potential for minor negative effects as the freight measures may not be attractive to some types of business, for example those that require a large number of delivery, freight or servicing vehicles to operate. It was therefore recommended that to reduce the potential negative effect a caveat could be added to the text allowing for certain types of businesses, who can justify the need, to retain bespoke servicing arrangements on an exception basis where this can be clearly justified. The City Corporation **therefore added text which states that they will 'work with the freight industry to target interventions at the most appropriate types of delivery'.**

Reasonable alternatives

4.38   No reasonable alternative proposals have been identified for this outcome.

Outcome: Our street network is resilient to changing circumstances

Table 4.9 IIA scores for Our street network is resilient to changing circumstances

IIA objectives	Proposals		
	40. Allow some Local Access streets to function as City Access streets during significant disruption.	41. Reduce the impact of construction and streetworks.	42. Make the street network resilient to severe weather events.
Economic growth	+	0	+
Built Environment and public realm	+	+	0
Safe environment and crime reduction	0	0	0
Heritage assets	+	0	+
Waste management	0	0	0
Environmental protection (pollution)	+	0	+
Climate change mitigation and resilience	+	0	+ +
Open spaces	0	+	+
Biodiversity and urban greening	0	0	+
Social and cultural facilities	0	0	0
Health	0	+	+

IIA objectives	Proposals		
Education	0	0	0
Equality and Inclusion	0	+	+

4.39 The proposals under this outcome are expected to result in a range of negligible, minor positive, significant positive and some mixed scores.

4.40 Significant positive results are expected in relation to the following IIA objective:

- Climate change mitigation and resilience, as the outcome will require the street network to be resilient to severe weather events, thus the streets and public realm will become more resilient to the potential impact of climate change in the future.

4.41 Proposal 40 is considered likely to have minor positive effects on the built environment, heritage assets and environmental protection. The IIA of the draft Transport Strategy also identified the potential for proposal 40 to have minor negative effects on these objectives as, while the policy may be beneficial to those streets where congestion will be alleviated, negative effects may be felt on the Local Access Streets that are accommodating additional traffic. For example they may experience a decrease in air quality, safety or amenity. Only minor negative effects were expected as the streets would only be opened temporarily and the proposal states that management arrangement will ensure the streets remain safe for all users. However, to further mitigate the potential adverse effects, it was recommended in the IIA that text be added to the proposal which requires monitoring of the Local Access Streets to ensure any negative effects are appropriately recorded and mitigated. Therefore, the proposal now requires monitoring to ensure that management arrangements are working well and to ensure that any negative effects on the built environment and air quality are mitigated.

Reasonable alternatives

4.42 No reasonable alternative proposals have been identified for this outcome.

Outcome: Emerging transport technologies benefit the Square Mile

Table 4.10 IIA scores for Emerging transport technologies benefit the Square Mile

IIA objectives	Proposals		
	43. Establish a Future Transport Programme.	44. Establish a Future Transport Advisory Board.	45. Explore the need for legislative change to ensure emerging technology and innovation benefits the Square Mile.
Economic growth	+	+?	0
Built Environment and public realm	+ +	+?	+
Safe environment and crime reduction	+ +	+?	0
Heritage assets	+	+?	0
Waste management	0	0	0
Environmental protection (pollution)	+ +	+?	0
Climate change mitigation and resilience	+ +	+?	0
Open spaces	+ +	+?	0
Biodiversity and urban greening	0	0	0
Social and cultural facilities	0	0	0
Health	+ +	+?	+
Education	0	0	0

IIA objectives	Proposals		
Equality and Inclusion	+ +	+?	+

4.43   The proposals under this outcome are expected to result in a large number of positive effects on the IIA objectives. However, a number of these positive effects are uncertain, particularly in regards to proposal 44. This is because it does not set out specific measures, rather it focuses on engagement and advice and review of technology and transport innovations.

4.44   Significant positive effects are anticipated for a number of the IIA objectives. These include:

- Built environment and public realm, as the proposals will work to provide an enhanced public realm with improved accessibility through a reduction in motor traffic, removal of street clutter and cleaner and quieter streets.

- Safe environment and crime reduction as proposal 43 specifically mentions innovations that **will make the City's streets safer.**

- Environmental protection and climate change mitigation and resilience as proposal 43 will **work to reduce the number of vehicles using the City's streets thus decreasing carbon** emissions and air pollution.

- Open spaces, as proposal 43 **promotes the increased provision and enhancement of the City's** open spaces.

- Health, as the outcome will result in a reduction in motor traffic in the City, reducing both air and noise pollution and will make the streets safer for pedestrians and cyclists, reducing accidents and encouraging healthy, active modes of transport.

- Equality and inclusion, as the outcome should result in safe and accessible public transport **and improve the accessibility of the transport network as well as making the City's streets** safer.

Reasonable alternatives

4.45   No reasonable alternative proposals have been identified for this outcome.

Outcome: The Square Mile benefits from better transport connections

Table 4.11 IIA scores for The Square Mile benefits from better transport connections

IIA objectives	Proposals					
	46. Support and champion better national and international connections to the Square Mile.	47. Support and champion improved connections to the Square Mile from Greater London and the surrounding region.	48. Support the increased use of the Thames for passenger services.	49. Review bus provision across the City.	50. Support the Mayor of London in retaining locally-generated taxation.	51. Encourage continued central government investment in major London transport projects.
Economic growth	+ +	+ +	0	+	+	+
Built Environment and public realm	0	+	+ +	+?	+?	0
Safe environment and crime reduction	0	0	0	0	0	0
Heritage assets	?	?	0	0	0	0
Waste management	0	0	0	0	0	0
Environmental protection (pollution)	+/-	+ +	+	+	+?	+
Climate change mitigation and resilience	+/-	+ +	+	+	+?	+
Open spaces	0	0	0	0	0	0

IIA objectives	Proposals					
Biodiversity and urban greening	-?	-?	0	0	0	-?
Social and cultural facilities	0	0	0	0	0	0
Health	0	+ +	+	+	+?	+
Education	0	0	0	0	0	0
Equality and Inclusion	+ +	+ +	0	+ +	+?	+ +

4.46   This outcome's proposals are expected to have a negligible effect on many of the IIA objectives. The remaining objectives are expected to receive a mixture of effects.

4.47   The outcome is expected to have significant positive effects on the following IIA objectives:

- Economic growth, as proposals 46 and 47 will work to improve regional, national and international connections to the City, making it a more attractive place for business to locate and a more accessible place for people to work and visit.

- Built environment and public realm as proposal 48 will increase and promote the use of the River Thames for transport and the enhancement of walking routes to piers.

- Environmental protection, as proposal 47, which will improve transport connections into the City from Greater London, should help **to remove vehicle traffic from the City's s**treets as better transport links become available. This will decrease congestion, emissions and air and noise pollution.

- Climate change mitigation and resilience, as traffic in the City is likely to decrease as a result of proposal 47 as described above, thus decreasing carbon emissions.

- Health, as proposal 47 is **also expected to improve the health of the City's residents and** visitors through the reduction of air and noise pollution.

- Equality and inclusion, as the proposals under this the outcome are likely to provide a range of accessible and efficient public transport options, improving the accessibility to the City for all.

4.48   Proposal 48 is likely to have a positive impact on environmental protection and a negligible effect on biodiversity. The IIA of the draft Transport Strategy identified the potential for negative effects on these objectives due to reductions in the quality of water in the river, which may then also impact the River Thames SINC. Therefore, it was recommended that text be added to the proposal which requires as far as possible that adverse effects on the water quality of the river be avoided. As a result, **the proposal has been amended to include 'We will also work with river** passenger service operators to ensure that their fleets meet Port of London Authority air quality **standards and minimise impacts on water quality'. This, along** with Environment Agency and Port of London regulation regarding activities that could lead to pollution of the river, reduces the likelihood of adverse effects.

4.49   Mixed effects are expected in relation to environmental protection and climate change mitigation and resilience from proposal 46 because it supports improved airport capacity and connections to airports, thus encouraging air travel, which has adverse effects on air quality and emissions. On the other hand it also promotes better rail connections which will work to reduce traffic on the **City's streets, having the opposite effect on air quality and carbon emissions.**

4.50   Negative effects in relation to urban greening and biodiversity may result from proposals 46, 47 and 51. This is because major transport infrastructure projects, such as new stations and station and rail expansions, are likely to have some impact on habitats in or around the City. However, this is uncertain because the specifics of the projects are unknown; it is also anticipated that the impact of the Transport Strategy on the effects will be limited and it effects are therefore unlikely to be significant.

4.51   Proposals 46 and 47 have uncertain effects on heritage. The schemes proposed are high level and therefore, at this stage it is unknown what the effects may be. However, it is considered that there is the opportunity to enhance heritage assets through the schemes. This should be taken into account in their design and any opportunity to enhance assets pursued.

Reasonable alternatives

4.52   No reasonable alternative proposals have been identified for this outcome.

5 Cumulative effects

5.1 Cumulative effects have been considered in terms of the impact of the Strategy as whole (i.e. all of the outcomes and proposals within each outcome) on each IIA objective, as well as the cumulative effect of the Transport Strategy in combination with other London wide plans and schemes. For this the Integrated Impact Assessment of the draft London Plan prepared by Arup in November 2017 has been considered, and it is the results of the IIA of the preferred strategic options and emerging policies of the draft London Plan that have been reviewed.

5.2 **Table 5.1** below shows all of the scores for the outcomes and proposals in the Transport Strategy. The text below considers the overall impact on the IIA objectives and the cumulative effect of the Transport Strategy with the draft London Plan on the IIA objectives.

Table 5.1 Summary score table

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
Outcome: Healthy Streets Approach													
1	+	+ +	+	+	0	+ +	+ +	+ +	+?	+	+ +	0	+ +
Outcome: The Square Mile's streets are great places to walk and spend time													
2	+/-	+ +	+ +	0	0	+ +	+ +	+	0	+	+ +	0	+
3	+	+ +	+	0	0	+	+	+ +	0	+ +	+	0	0
4	0	+	+	0	0	0	0	+	0	0	+	0	+
5	+?	+ +	0	+?	0	+	+	+	0	+	+ +	0	+
6	0	+	+	0	0	+ +	+ +	+	0	0	+ +	0	+
7	+?	+ +	+	+ +	0	+	+	+ +	+	+	+ +	0	+
8	0	+ +	0	+	0	+ +	+ +	+ +	+ +	0	+ +	0	0
9	0	+	0	0	0	+ +	+ +	+	+ +	0	+	0	0

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
10	0	++	0	0	0	0	++	+	+	0	+	0	0
Outcome: Street space is used more efficiently and effectively													
11	+/-?	+	0	+	++	++	++	+	0	0	++	0	0
12	+	++	+	+	++	+	+	+	0	+	+	0	++
13	+	++	+	+	0	+	+	+	0	++	++	0	+
14	+	++	0	0	+	+	+	+	0	+	++	0	+
15	0	+	0	0	0	+	+	0	0	0	++	0	+
Outcome: The Square Mile is accessible to all													
16	0	++	+	0	0	0	0	+	0	++	++	0	++
17	0	++	0	+	0	0	0	+	0	0	++	0	0
18	0	+	0	0	0	0	0	0	0	0	+	0	0
19	0	0	0	0	0	0	0	0	0	+	+	0	++

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
Outcome: People using our streets and public spaces are safe and feel safe													
20	0	+	+	0	+	0	0	0	0	0	+ +	0	+
21	+	+	+ +	0	0	0	0	0	0	+	+	0	+ +
22	0	+	+ +	0	0	+?	+?	+	+	+	+	0	+ +
23	0	+ +	+ +	0	0	0	0	+	0	0	+ +	0	+ +
Outcome: More people choose to cycle in the City													
24	+?	+	0	0	+	+ +	+ +	+	0	+	+ +	0	+
25	+?	+	0	0	0	+	+	0	0	+	+ +	0	+
26	+?	+	0	0	0	+ +	+ +	0	0	+	+ +	0	+
27	0	+	0	0	0	+ +	+ +	0	0	0	+ +	0	+
28	+?	+	0	0	0	+ +	+	0	0	+	+ +	0	+
Outcome: The Square Mile's air and streets are cleaner and quieter													

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
29	+/-?	+	0	0	+	+ +	+ +	0	0	0	+ +	0	0
30	0	0	0	0	0	+ +	+ +	0	0	0	+	0	0
31	0	+	0	0	0	+ +	+ +	0	0	0	+	0	0
32	+	0	0	0	0	+	+	0	0	0	+	0	0
33	0	+	0	0	0	+ +	+ +	0	0	0	+ +	0	0
34	0	+	0	+	0	+ +	0	+	0	0	+ +	0	0
35	0	+	0	+	0	+ +	0	+	0	0	+ +	0	0
36	+	+	0	+	0	+ +	+ +	+	0	0	+ +	0	0
37	0	+ +	0	+	+ +?	+ +	0	+ +	0	+	+	0	0
Outcome: Delivery and servicing needs are more efficiently and impacts are minimised													
38	+?	+	0	+	+ +	+ +	+ +	0	0	0	+ +	0	0
39	0	+	0	+	+	+ +	+ +	0	0	0	+ +	0	0

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
Outcome: Our street network is resilient to changing circumstances													
40	+	+	0	+	0	+	+	0	0	0	0	0	0
41	0	+	0	0	0	0	0	+	0	0	+	0	+
42	+	0	0	+	0	+	+ +	+	+	0	+	0	+
Outcome: Emerging transport technologies benefit the Square Mile													
43	+	+ +	+ +	+	0	+ +	+ +	+ +	0	0	+ +	0	+ +
44	+?	+?	+?	+?	0	+?	+?	+?	0	0	+?	0	+?
45	0	+	0	0	0	0	0	0	0	0	+	0	+
Outcome: The Square Mile benefits from better transport connections													
46	+ +	0	0	?	0	+/-	+/-	0	-?	0	0	0	+ +
47	+ +	+	0	?	0	+ +	+ +	0	-?	0	+ +	0	+ +
48	0	+ +	0	0	0	+	+	0	0	0	+	0	0

Proposals	IIA objectives												
	Economic growth	Built environment and public realm	Safe environment and crime reduction	Heritage assets	Waste management	Environmental protection	Climate change mitigation and resilience	Open spaces	Biodiversity and urban greening	Social and cultural facilities	Health	Education	Equality and inclusion
49	+	+?	0	0	0	+	+	0	0	0	+	0	+ +
50	+	+?	0	0	0	+?	+?	0	0	0	+?	0	+?
51	+	0	0	0	0	+	+	0	-?	0	+	0	+ +

Economic growth

5.3   The proposals within the Transport Strategy are expected to have mainly minor positive or negligible effects on economic growth. Significant positive effects are expected as a result of proposals 46 and 47 because they will help to improve regional, national and international connections to the City, making it a more attractive place for businesses to locate and a more accessible place for people to work and visit. Uncertain mixed effects are possible for this IIA objective, in relation to proposals 2, 11 and 29 as it is considered possible that some businesses may be put off locating in the City if access for vehicles is restricted, while on the other hand the restrictions will make the City a more healthy and attractive place to work and will improve driving for those vehicles still permitted access Overall , the Strategy is expected to have positive effects in relation to the economic growth IIA objective.

5.4   These positive effects on the economy that will result from the Transport Strategy are likely to combine with the **strategic options 'making the best use of land' and 'growing a good economy'** and **emerging policy 'economy'** from the draft London Plan to create a more significant positive effect on the economy of the City.

Built environment and the public realm

5.5   The proposals within the Transport Strategy are considered likely to result in a mix of minor positive and significant positive effects on the built environment and public realm. This is generally because the Strategy will work to enhance the public realm, making it more attractive and accessible. Therefore, cumulatively, all of the proposals within the Strategy are expected to have positive effects on the built environment and public realm IIA objective.

5.6   The positive effects that the Strategy is likely to have in relation to the built environment and public realm, will be made more significant through strategic options and emerging policies in the draft London Plan, which are also expected to have positive effects. These options and policies **include; 'building strong and inclusive communities', 'making the best use of land', 'transport' and 'Green Infrastructure and natural environment'.**

Safe environment and crime reduction

5.7   Mainly negligible and minor positive effects are expected on the safe environment and crime reduction objective as a result of the proposals within the Transport Strategy, although a number of significant positive effects are considered likely as a result of proposals that include measures to **reduce crime and improve safety on the City's streets.** Overall, the Strategy is expected to have positive effects on the safe environment and crime reduction IIA objective.

5.8   The positive effects in relation to a safe environment and crime reduction as a result of the Transport Strategy are likely to be increased by strategic options and policies in the draft London Plan, which have also been assessed as having positive effects. These options and policies **include: 'building strong and inclusive communities' and 'design'.**

Heritage assets

5.9   The impacts of the Transport Strategy on heritage within the City are expected to be mainly negligible and minor positive. However, significant positive effects are expected to result from proposal 7 as it aims to enhance the settings of significant heritage assets. Uncertain effects are expected from proposals 46 and 47 as the effects of high level schemes on heritage assets are unknown at this stage. However, it is considered that they may present the opportunity to enhance assets. Overall therefore, the Strategy is expected to have positive effects in relation to the heritage assets IIA objective.

5.10   The positive effects in relation to heritage in the City which will arise as a result of the Transport Strategy will be further increased by emerging policy 'heritage and culture' in the draft London Plan, which is also expected to have positive effects on heritage assets in London.

Waste management

5.11   A mixture of negligible and minor positive effects is expected to result from the Transport Strategy in relation to the waste objective. Four proposals are likely to have significant positive effects: 11, 12, 37 and 38. This is because these proposals will result in a reduction in the number of servicing vehicles and more sustainable waste collection. Therefore, the Strategy is expected to have positive effects in relation to the waste IIA objective.

5.12   Positive impacts in relation to the waste objective that will arise from the implementation of the Transport Strategy are likely to be supported and further strengthened by emerging policies in the draft London Plan, in particular 'sustainable infrastructure' and 'transport' which have been assessed as having positive effects.

Environmental protection

5.13   The majority of proposals within the Transport Strategy are expected to have significant positive, minor positive or negligible effects in relation to the environmental protection objective. These positive effects are generally because many of the proposals promote a reduction in road traffic, which will reduce air and noise pollution in the City. Overall the Strategy is likely to have a positive impact in relation to the environmental protection IIA objective.

5.14   The positive effects of the Transport Strategy in relation to the environmental protection objective are expected to be supported and enhanced by strategic options and policies in the draft London Plan that address this issue and have been assessed as having positive effects. These options and emerging policies include; 'increasing efficiency and improving resilience', 'sustainable infrastructure', 'design' and 'transport'. However, the emerging policy 'heritage and culture' in the draft London Plan has been assessed as having the potential for short and medium term significant negative effects on noise. This is considered to partially offset the beneficial effects of the Transport Strategy and other draft London Plan policies, though it has been recommended in the IIA of the draft London Plan that this is addressed through related London Plan policies which address noise management.

Climate change mitigation and resilience

5.15   The Transport Strategy is likely to have a mixture of significant positive, minor positive and negligible effects in relation to the climate change mitigation and resilience objective. Similarly to environmental protection, this is mainly due to the emphasis on reducing road traffic and congestion in the City and a modal shift to walking and cycling, which will result in a reduction in transport emissions. A number of the proposals also promote urban greening, and require the City to be resilient to severe weather events. Overall therefore the Strategy is likely to have positive effects in relation to the IIA objective.

5.16   Positive impacts in relation to the climate change and mitigation objective from the Transport Strategy will be increased by strategic option 'increasing efficiency and improving resilience' and by emerging policies 'sustainable infrastructure', 'design' and 'transport' included within the draft London Plan as these have also been assessed as having positive effects in the IIA of the draft London Plan.

Open spaces

5.17   Mainly negligible and minor positive effects are expected in relation to the open spaces objective as result of the Transport Strategy, although significant positive effects are expected as a result of a number of proposals. This is because these proposals promote the enhancement of open space, or a reduction in traffic which will improve the tranquillity of open space. Positive effects therefore are expected overall as a result of the Transport Strategy.

5.18   The positive impacts on open spaces resulting from the implementation of the Transport Strategy are likely to be further improved through a number of strategic options and emerging policies in the draft London Plan which are also expected to result in positive effects. **These include 'creating a healthy city', 'building strong and inclusive communities', 'design' and 'Green Infrastructure and the natural environment'.**

Biodiversity and urban greening

5.19   The proposals within the Transport Strategy are anticipated to have mainly negligible effects on biodiversity and urban greening, although some minor positive effects are expected and significant positive effects are considered likely as a result of proposals 8 and 9 as these proposals promote additional greenery in the City. Uncertain minor negative effects are considered possible as a result of proposals 46, 47, and 51 because of the impacts major transport infrastructure projects, such as new stations and station and rail expansions are likely to have some impact on habitats in, or around the City. However, this is uncertain because the specifics of the projects are unknown. Overall therefore it is expected that the effect of the Transport Strategy in relation to this objective will be mainly positive.

5.20   An emerging policy in the draft London Plan **'Green Infrastructure and the natural environment',** which is also expected to have positive effects on biodiversity and urban greening, will improve on the positive effects that the Transport Strategy is anticipated to have in relation to this IIA objective.

Social and cultural facilities

5.21   The Transport Strategy is expected to have a mixture of negligible and minor positive effects in relation to the social and cultural facilities objective, although significant positive effects are considered likely as a result of proposals 3, 13 and 16 through the provision of accessible streets, improved leisure facilities and the promotion of lunchtime streets events. Therefore, the impact of the Strategy in relation to the social and cultural facilities objective will be positive.

5.22   The positive impacts in relation to the social and cultural facilities objective that are expected to arise as a result of the implementation of the Transport Strategy will be further enhanced through a number of strategic options and policies in the draft London Plan which are also expected to have positive effects these include; **'building strong and inclusive communities', creati**ng a healthy **city', social infrastructure', and 'heritage and culture'.** It is noted however that a negative impact of the policy **'heritage and culture'** in relation to the night time economy has been raised as a result of anticipated noise pollution. This **has been addressed under 'environmental protection' and 'health'.**

Health

5.23   The impact of the Transport Strategy in relation to the health objective is anticipated to be a mixture of minor positive and significant positive effects. This is mainly due to the proposals which reduce road traffic thus improving air pollution, noise pollution and road safety. Overall the **Strategy will have a positive effect on the health of the City's residents and visitors.**

5.24   The positive impact that the Transport Strategy is anticipated to have on the health of the City's residents and visitors is expected to be further enhanced by the following strategic options and emerging policies in the draft new London Plan; 'creating a healthy city', Green Infrastructure and the natural environment', 'social infrastructure' and 'building strong and inclusive communities'. These have also been assessed, in the IIA of the draft London Plan to have positive effects. However, a significant negative effect has been identified in relation to policy 'heritage and culture' in regards to the impact a night time economy will have on noise. This effect is anticipated to offset some of the positive effects the Transport Strategy will have in relation to the health objective, through it is recommended in the IIA of the draft London Plan that the negative effect is mitigated through noise policies.

Education

5.25   The Transport Strategy is anticipated to have a negligible effect in relation to the education objective as this is unlikely to be affected by the implementation of the outcomes and proposals within the Strategy.

5.26   While the Transport Strategy is anticipated to have a negligible effect on education, the London Plan is expected to have positive effects as a result of strategic option 'growing a good economy' and emerging policy 'social infrastructure'. Therefore cumulatively the Strategy and draft London Plan are likely to have positive effects.

Equality and inclusion

5.27   The proposals within the Transport Strategy are anticipated to have a mixture of negligible, minor positive and significant positive effects in relation to the equality and inclusion objective. Significant positive effects are considered likely as a number of proposals aim to make the streets in the City and public transport more accessible to all. Therefore, overall the Strategy will have positive effects in relation to the equality and inclusion IIA objective.

5.28   The positive effects arising from the Transport Strategy in relation to the equality and inclusion objective are expected to be further improved by the following strategic outcome / policy in the draft London Plan, which are also expected to have positive effects: 'building strong and inclusive communities'; and 'transport'.

6   Conclusions and monitoring

Conclusions

6.1   The selected proposals and reasonable alternatives for the City of London Transport Strategy have been subject to a detailed appraisal against the IIA objectives, which were developed at the scoping stage of the IIA process.

6.2   The IIA has identified the potential for significant effects (positive) for proposals under all of the outcomes contained with the Transport Strategy.   **Chapter 4** sets out the appraisal scores and findings.   No significant negative effects have been identified as a result of the proposals in the Transport Strategy.

6.3   Cumulatively all of the proposals within the Transport Strategy are expected to have positive effects on the baseline in relation to achievement of all of the IIA objectives apart from education for which negligible effects are anticipated.   These positive effects are, for the majority of IIA objectives, expected to be enhanced when the Strategy is considered in combination with the draft London Plan.

6.4   The IIA has been undertaken alongside the preparation of the Transport Strategy and therefore has been able to feed into the proposals and ensure that sustainability considerations are integrated within the Strategy.   For example:

- In relation to proposal 4, it was recommended that text be added to the proposal to ensure that the heritage significance of the Barbican is respected, as set out in paragraph 4.11.

- In relation to proposal 30, recommendations were made which would reduce the impact of electric vehicle charging points on the streetscape and public realm, as set out in paragraph 4.29.

- In relation to proposal 38, recommendations were made to reduce the impact of freight and servicing changes on the economy of the City, as set out in paragraph 4.37.

- Also in relation to proposal 38, further recommendations were made which would help ensure that adverse effects on the water quality and biodiversity of the River Thames are avoided. This is set out in paragraph 4.36.

- In relation to proposal 40 it was recommended that text be added to the proposal which requires monitoring of Local Access Streets to ensure that any negative effects are recorded and mitigated. This is set out in paragraph 4.41.

- In relation to proposal 48 it was recommended that text be added to the proposal which would ensure, as far as possible that adverse effects on water quality and biodiversity in the Thames is avoided, as set out in paragraph 4.48.

6.5   The recommendations and the City of London Corporation's responses to these are also set out in a table in **Appendix 5**.

Monitoring proposals

6.6   The SEA regulations require that *"the responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action"* and that the environmental report should provide information on *"a description of the measures envisaged concerning monitoring".*   Monitoring proposals should be designed to provide information that can be used to highlight specific issues and significant effects, and which could help decision making.

6.7   Monitoring should be focussed on the significant environmental effects of a plan or programme and so, based on this, monitoring indicators have been proposed for effects on all of the IIA objectives apart from education; this is not included as it is unlikely to be significantly affected by the implementation of the Transport Strategy. It is noted that no significant negative effects are considered likely as a result of the plan and so the monitoring is based on significant positive effects, with the aim of validating that these effects do indeed arise when the Transport Strategy is implemented.

6.8   **Table 6.1** sets out a number of suggested indicators for monitoring the potential significant effects of implementing the Transport Strategy. Indicators are proposed in relation to the IIA objectives for which potential significant positive effects were identified as a result of any of the proposals. As stated above, this includes all IIA objectives apart from education.

6.9   The data used for monitoring in many cases will be provided by outside bodies. Information collected by other organisations can also be used as a source of indicators. It is therefore recommended that that City of London continues the dialogue with the statutory consultees and other stakeholders described in the Transport Strategy, and works with them to agree the relevant environmental effects to be monitored and to obtain information that is appropriate, up to date and reliable.

Table 6.1 Proposed monitoring framework for the Transport Strategy

IIA objectives	Proposed monitoring indicators
Economic growth	• New business registration rate • Overall change in employment floorspace • Commuting numbers / statistics to the City • Number of international businesses located in the City
Built environment and public realm	• Number of people walking or cycling • Public perception of public realm in the City • Amount of street clutter and cleanliness of the streets • Passenger numbers using river transport
Safe environment and crime reduction	• Number of reported crimes
Heritage assets	• Quality and usage of the Barbican high walks • Number of visits to heritage assets in the City, in particular the Barbican • Applications refused due to impact on the historic environment • Number of heritage assets at risk
Waste management	• Percentage and delivery and servicing trips made by zero emission transport • The number of large delivery and servicing vehicles using the transport network
Environmental protection	• Changes in the concentration of air pollutants in the City • Number of planning applications that include an air quality assessment[22] • Number of complaints regarding noise • Changes in water quality at the River Thames SINC
Climate change mitigation and resilience	• The number of vehicles that meet the Zero Emissions Zone standards • The percentage of Zero Emission Capable buses on the network • The modal shift from private car use to walking, cycling or public transport • Changes in greenhouse gas emissions from the City • Net increase in Green Infrastructure
Open spaces	• Open space / parks usage • Amount of public open space as percentage of total land

---

[22] Air quality assessment should demonstrate how the development has met air quality challenges thereby avoiding refusal.

IIA objectives	Proposed monitoring indicators
	use
Biodiversity and urban greening	• Net increase in Green Infrastructure, parks and open spaces • Number of sites designated for nature conservation and their quality • Changes in areas of biodiversity importance
Social and cultural facilities	• Adults participating in sports, recreation and cultural activities • **Number of 'lunchtime streets' events taking place**
Health	• Number of hospital admissions in relation to road accidents • Number of accidents involving cyclists and pedestrians • Number of complaints regarding amenity (e.g. in relation to noise) • **Proportion of residents reporting their health as 'good' or 'very good' (source: Census)** • Levels of obesity
Equality and inclusion	• Number of new or extended bus services • Number of step free rail stations • Public transport usage by the elderly or disabled

Appendix 1 Consultation comments on IIA Scoping Report

Consultee Comment	Response / comment and how it was addressed in the IIA report
Environment Agency	
The Environment Agency did not have any detailed comments to make on the Transport Strategy except to note that they were pleased that BEIS data uploaded to .gov.uk had been quoted.	Noted.
Historic England	
In general Historic England welcomed the approach taken in the Scoping Report and the direct relationship with the historic environment of objectives 2 (built environment and public realm) and 4 (heritage assets) is noted. The baseline section was considered suitable.	Noted.
It was recommended that the following plans and policy documents were included in Appendix 1: • UNESCO World Heritage Convention • The Convention for the protection of the Architectural Heritage of Europe • Historic England Advice NOTE 8: Sustainability Appraisal and Strategic Environmental Assessment • City of London Historic Environment Strategy • City of London area enhancement strategies • Conservation Area SPDs and management plans • Tower of London World Heritage Site Management Plan	These documents have been reviewed and added to Appendix 1 of the Scoping Report and Appendix 2 of this IIA.
It was considered that the potential impacts of measures to manage increasing numbers of visitors and workers in the City on individual heritage assets, the historic public realm and local character should be reflected in the Scoping Report. Therefore it was recommended that the following change was made to the first column of Table 4.1 in regards to cultural **heritage and landscape:** 'Changes to streets and / or vehicle movements *including public realm improvement proposals designed to manage increasing numbers of pedestrians,* may affect the settings and views of city landmarks, listed buildings *and other heritage assets*, and can affect archaeological remains'.	The suggested change has been made to the text in Table 4.1 of the Scoping Report and Table 3.1 of this IIA.
To reflect the importance of the visitor economy and the historic attractions within the City it was recommended that objective 1 – Economic growth was amended to read '… a leading financial and business centre and *help enable the continuing success of its historic visitor attractions'.*	The suggested alterations to objective 1, in Table 5.1 of the Scoping Report and Table 2.2 of this IIA have been made.

Consultee Comment	Response / comment and how it was addressed in the IIA report
Based on the above point it was suggested that the following appraisal questions are added: • Will the strategy / plan enable the successful management of pedestrian and visitor movements and support the continuing growth of the tourism sector and visitor attractions? • Will the strategy / plan unlock heritage-led regeneration opportunities?	The appraisal questions have been added to objective 1 in Table 5.1 of the Scoping Report and Table 2.2 of this IIA.
To reflect potential impacts on the historic environment it was recommended that the following amendment to objective 2 – Built environment and public realm was made '...student and residential communities *that respects and enhances local character and distinctiveness'*.	The suggested alterations to objective 2, in Table 5.1 of the Scoping Report and Table 2.2 of this IIA have been made.
It was recommended that a new appraisal question be added to objective 4 – Heritage assets: • Will the plan / strategy contribute to the better management of heritage assets and tackle heritage at risk?	The appraisal question has been added to objective 4 in Table 5.1 of the Scoping Report and Table 2.2 of this IIA.
Natural England	
Natural England welcomed the opportunity to give their views however, as the topic of the Transport Strategy does not relate to their interests to a significant extent they did not have any comments to make. However, should the plan change in a way that significantly affects its impact on the natural environment then Natural England should be consulted again.	Noted.
Transport for London / Greater London Authority	
It was requested that the LIP be mentioned explicitly throughout the document.	This IIA Report is assessing the effects of the Transport Strategy, a separate IIA Report will assess the effects of the LIP. Reference to the LIP was added to section 2 and paragraph 5.4 of the Scoping Report.
It was advised that the time horizon for the LIP is to 2041, with one and three year programmes and that the 5 year horizon mentioned on pages 3 and 8 is not relevant.	This IIA Report is assessing the effects of the Transport Strategy, a separate IIA Report will assess the effects of the LIP.

Consultee Comment	Response / comment and how it was addressed in the IIA report
	Reference to the 5 year horizon on pages 3 and 8 of the Scoping Report has been removed and amended to refer to 2041.
It was advised that TfL / GLA are currently re-consulting on a number of safeguarded wharfs and so reference should only be made to the new London Plan and not to the Safeguarding Wharf Final Recommendation Report.	References to the Safeguarding Wharfs Final Recommendation Report have been removed from the Scoping Report and this IIA.
It was advised that the following strategies will be adopted in the lifetime of the Transport Strategy and LIP, and requested that they be referred to in the report: • Environment Strategy • Health Inequalities Strategy • Housing Strategy • Economic Development Strategy • Culture Strategy	Reference to these documents has been made in section 2 of the Scoping Report and Chapter 3 of this IIA.

Appendix 2 Review of plans, policies and programmes

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
International		
Johannesburg Declaration on Sustainable Development (2002)	Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all. Renewable energy and energy efficiency. Accelerate shift towards sustainable consumption and production.	Consider the enhancement of the natural environment. *Relates to all IIA objectives.*
Aarhus Convention (1998)	Established a number of rights of the public with regard to the environment. Local authorities should provide for: • The right of everyone to receive environmental information • The right to participate from an early stage in environmental decision making • The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.	Ensure that public are involved and consulted at all relevant stages of IIA production. *Relates to all IIA objectives.*
Strategic Plan for Biodiversity 2011 – 2020 (2010)	Overarching framework for biodiversity for United Nations partners.	IIA objectives should reflect the goals of this strategy. *Relates to IIA objective 9 – Biodiversity and urban greening.*
United Nations Sustainable Development Goals (2015)	The Sustainable Development Goals were set in September 2015 to replace and update the Millennium Development Goals. They cover all three dimensions of sustainable development: economy, social and environment.	IIA objectives should reflect the goals. *Relates to all IIA objectives.*
UN Framework Convention on Climate Change (1992), Kyoto Protocol (1997) and Paris Agreement (2015)	The Kyoto Protocol agreed in 1997 was designed to address the fact that greater cuts in emissions were needed to prevent serious interference with the climate. It has been ratified by over 166 countries. It sets legally binding emissions reductions targets on the developed countries that have ratified it (including the UK). In December 2007, the United Nations Framework Convention on Climate Change took place and brought together over 180 countries. The Paris agreement sets the target of limiting temperature change to below a 2 degree increase on pre- industrial levels.	IIA objectives must reflect these agreements. *Relates to IIA objective 6 – Environmental protection (pollution) and objective 7 – Climate change mitigation and resilience.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
European		
SEA Directive 2001 Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment	Provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.	Requirements of the Directive must be met in Strategic Environmental Assessment. *Relates to all IIA objectives.*
EU Environment Action Programme to 2020. (2013)	Sets out sustainability goals for the EU.	The IIA objectives should reflect these goals. *Relates to all IIA objectives.*
The Industrial Emissions Directive 2010 Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.	Consider reducing pollution. *Relates to objective 6 – Environmental protection (pollution).*
The Birds Directive 2009 Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended	The preservation, maintenance, and re-establishment of biotopes and habitats shall include the following measures: Creation of protected areas. Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones. Re-establishment of destroyed biotopes. Creation of biotopes.	Consider implications of the Transport Strategy for birds. To be covered by HRA screening. *Relates to objective 9 – Biodiversity and urban greening.*
The Waste Framework Directive 2008 Directive 2008/98/EC on waste	Prevention or reduction of waste production and its harmfulness. The recovery of waste by means of recycling, re-use or reclamation. Recovery or disposal of waste without endangering human health and without using processes that could harm the environment.	Consider minimising waste production as well as promoting recycling. *Relates to objective 5 – Waste management.*
The Air Quality Directive 2008 Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Avoid, prevent and reduce harmful effects of ambient air pollution on human health and the environment	Consider maintaining and enhancing air quality. *Relates to objective 6 – Environmental protection (pollution).*
The Habitats Directive 1992	Promote the maintenance of biodiversity taking account of economic,	Consider the effect of the strategy on biodiversity

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.	and habitats within and around the City. *Relates to objective 9 – Biodiversity and urban greening*
European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	Consider the conservation of natural resources and cultural heritage and economic and social cohesion. *Relates to objective 1 – Economic growth, objective 4 – Heritage assets, objective 5 – Waste management, objective 6 – Environmental protection, objective 9 – biodiversity and urban greening and objective 14 – Equality and inclusion.*
EU Seventh Environmental Action Plan (2002-2012)	The EU's objectives in implementing the programme are: **(a) to protect, conserve and enhance the Union's natural capital;** (b) to turn the Union into a resource-efficient, green and competitive low-carbon economy; (c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing; (d) to maximise the benefits of the Union's environment legislation; (e) to improve the evidence base for environment policy; (f) to secure investment for environment and climate policy and get the prices right; (g) to improve environmental integration and policy coherence; (h) to enhance the sustainability of the Union's cities; **(i) to increase the Union's** effectiveness in confronting regional and global environmental challenges.	Consider the protection and enhancement of the natural environment and promote energy efficiency, where relevant. *Relates to all IIA objectives.*
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992) *Revision of the 1985 Granada Convention*	Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater. Creation of archaeological reserves and conservation of excavated sites.	Consider the protection of archaeological heritage. *Relates to objective 4 – Heritage assets.*
UNESCO World Heritage Convention	Recognises the duty of identification, protection, conservation, presentation and transmission to future generations of cultural and natural heritage	Consider the protection of heritage assets *Relates to objective 4 – Heritage assets and*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	belong to the State. Effective and active measures should be taken to protect, conserve and present heritage and this should be reflected in national policy.	*objective 2 – Built environment and public realm.*
The Convention for the protection of the Architectural Heritage of Europe	To reinforce and promote policies for the conservation and enhancement of **Europe's heritage. Re**-affirms the need for European solidarity with regard **to heritage conservation and establishes the principles of 'European co-**ordination of conservation policies'.	Consider the protection of heritage assets *Relates to objective 4 – Heritage assets and objective 2 – Built environment and public realm.*
National		
Inclusive Transport Strategy: Achieving equal access for disable people (2018)	**This strategy sets the Government's plans to make our tran**sport system more inclusive, and to make travel easier for disabled people. While it is focussed on the inclusion of disabled people, many of the improvements will also benefit other travellers. The five main themes of the Strategy are: • Awareness and enforcement of passenger rights; • Staff training; • Improving information; • The future of inclusive transport; • Improving physical infrastructure.	To consider the importance of inclusivity *Relates to objective 12 – Health and objective 14 – Equality and inclusion.*
Transport Investment Strategy (2017)	This document sets out how the Department for Transport will build on the progress that has been made in regards to transport in recent years and **how they will respond to today's challenges while putting the travelling** public at the heart of the choices made. The Strategy seeks to: • create a more reliable, less congested and better connected transport network that works for the users who rely on it; • build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities; • enhance our global competitiveness by making Britain a more attractive place to trade and invest; and • support the creation of new housing.	Ensure the objectives of the Transport Investment Strategy are embedded within the IIA framework. *Relates to objective 1 – Economic growth, objective 2 – Built environment and public realm, objective 10 – Housing, and objective 14 – Equality and inclusion.*
Localism Act (2011)	The Localism Act introduces a number of measures to decentralise decision making process to the local level, creating space for Local Authorities to lead and innovate, and giving people the opportunity to take control of decisions that matter to them. The Localism Act includes a number of important packages. • The new act makes it easier for local people to take over the amenities they love and keep them part of local life; • The act makes sure that local social enterprises, volunteers and	To ensure the concepts of the Localism Act are embedded within the SEA framework. *Relates to all IIA objectives.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	community groups with a bright idea for improving local services get a chance to change how things are done. • The act places significantly more influence in the hands of local people over issues that make a big difference to their lives. • The act provides appropriate support and recognition to communities who welcome new development. • The act reduces red tape, making it easier for authorities to get on with the job of working with local people to draw up a vision for **their area's future.** • The act reinforces the democratic nature of the planning system passing power from bodies not directly to the public, to democratically accountable ministers. • The act enables Local Authorities to make their own decisions to adapt housing provision to local needs, and make the system fairer and more effective. • The act gives Local Authorities more control over the funding of social housing, helping them plan for the long- term. In relation to planning, the Localism Act enables the Government to abolish regional spatial strategies, introduce Neighbourhood Plans and Local Referendums.	
National Planning Policy Framework (2018)	Presumption in favour of sustainable development. Delivering sustainable development by:	Sustainability appraisal should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors. *Relates to all IIA objectives.*
	Promoting sustainable transport	Consider sustainable transport.
	Promoting healthy and safe communities.	Consider health and well-being.
	Meeting the challenge of climate change, flooding, and coastal change.	Consider climate change mitigation.

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	Conserving and enhancing the natural environment.	Consider the conservation and enhancement of the natural environment.
	Conserving and enhancing the historic environment	Consider the conservation of historic features.
National Planning Practice Guidance (2014)	The National Planning Practice Guidance provides technical guidance on topic areas in order to support policies set out within the NPPF. It aims to allow for sustainable development as guided by the NPPF.	The principles and requirements of national policy will need to be embedded within the IIA framework and appraisal *Relates to the IIA process.*
National Planning Policy for Waste (2014)	**Sets out the Government's ambition to work towards a more sustainable** and efficient approach to resource use and management. Replaces Planning Policy Statement 10.	Consider waste generation and management. *Relates to objective 5 – Waste Management.*
UK Government Sustainable Development Strategy: Securing the Future (2005)	The Strategy sets out 5 principles for sustainable development: • Living within environmental limits; • Ensuring a strong, healthy and just society; • Achieving a sustainable economy; • Promoting good governance ; and • Using sound science responsibly. The strategy sets four priorities for action: • Sustainable consumption and production; • Climate change and energy; • Natural resource protection and environmental enhancement; • Sustainable communities The strategy commits to: • A programme of community engagement; • Forums to help people live sustainable lifestyles; • Open and innovative ways for stakeholders to influence decision; educating and training	To ensure that the requirements of the Strategy are embedded within the IIA framework. *Relates to all IIA objectives.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
English Heritage Historic England Corporate Plan 2015 to 2018 (2015)	The plan sets out its three purposes as to: • Secure the preservation of ancient monuments and historic buildings; • Promote the preservation and enhancement of the character and appearance of conservation areas; and • **Promote the public's enjoyment of, and advance their knowledge** of, ancient monuments and historic buildings.	Consider the historic environment. *Relates to IIA objective 4 – Heritage assets.*
Energy White Paper: Our Energy Future (2003)	There are four key aims in this document: • To put ourselves on a path to cut the United Kingdom carbon dioxide emissions- the main contributor to global warming- by some 60 % by about 2050, with real progress by 2020; • To maintain the reliability of energy supplies; • To promote competitive markets in the United Kingdom and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and • To make sure that every home is adequately and affordably heated.	Consider energy efficiency. *Relates to objective 7 – Climate change mitigation and resilience.*
The Carbon Plan: Delivery our Local Carbon Future (2011)	**The Carbon Plan sets out the government's plans for achieving the** emissions reductions it committed to in the first four carbon budgets. Emissions in the UK must, by law, be cut by at least 80% of 1990 by 2050. The UK was first to set its ambition in law and the Plan sets out progress to date.	Consider greenhouse gas emissions. *Relates to objective 7 – Climate change mitigation and resilience.*
The Climate Change Act (2008)	The Climate Change Act was passed in 2008 and established a framework to develop an economically credible emissions reduction path. It also **strengthened the UK's leadership internationally by highlighting the role it** would take in contributing to urgent collective action to tackle climate change under the Kyoto Protocol. The Climate Change Act includes the following: • 2050 target. The act commits the UK to reducing emissions by at least 80% in 2050 from 1990 levels. This target was based on advice from the CCC report: Building a Low- carbon Economy. The 80% target includes GHG emissions from the devolved administrations, which **currently accounts for around 20% of the UK's total emissions.** • Carbon Budgets. The Act requires the Government to set legally **binding 'carbon budgets'. A carbon bu**dget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. The first four carbon budgets have been put into legislation and run up	Consider climate change. *Relates to objective 7 – Climate change mitigation and resilience.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	to 2027.	
Heritage Protection for the 21st Century: White Paper (2007)	The proposals in this White Paper reflect the importance of the heritage protection system in preserving our heritage for people to enjoy now and in the future. They are based around three core principles: • Developing a unified approach to the historic environment; • Maximising opportunities for inclusion and involvement; and • Supporting sustainable communities by putting the historic environment at the heart of an effective planning system	Consider cultural heritage. *Relates to objective 4 – Heritage assets.*
The Air Quality Strategy for England vol. 1 (2007)	The Air Quality Strategy sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles, and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of strategy are to: • Further improve air quality in the UK from today and long term. • Provide benefits to health, quality of life and the environment.	Consider air quality. *Relates to objective 6 – Environmental protection (pollution).*
Energy Act (2008)	The Act works towards a number of policy objectives including carbon emissions reduction, security of supply, and competitive energy markets. Objectives: Electricity from Renewable Sources: changes to Renewables Obligation (RO), designed to increase renewables generation, as well as the effectiveness of the RO. Feed in tariffs for small scale, low carbon generators of electricity. Smart meters: the Act mandates a roll-out of smart meters to medium sized businesses over the next five years. Renewable heat incentives: the establishment of a financial support mechanism for those generating heat from renewable sources.	Consider energy efficiency and climate change. *Relates to objective 7 – Climate change and mitigation.*
National Infrastructure Plan (2014)	The Infrastructure Plan allows for long term public funding certainty for key infrastructure areas such as: roads, rail, flood defences and science. All elements highlighted in the Plan represent firm commitment by government to supply the funding levels stipulated. The Plan also highlights what steps the government will take to ensure effective delivery of its key projects	To ensure that the IIA promotes efficient infrastructure. *Relates to objective 1 – Economy, objective 2 – Built environment and public realm and objective 3 – safe environment and crime reduction.*
Waste Management Plan for England (2013)	The Waste Management Plan follows the EU principal of waste hierarchy. This requires that prevention of waste, preparing for reuse and recycling	The objectives of the national waste policy will be required to be embedded within the IIA

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	should be given priority order in any waste legislation and policy. From this principal a key objective of The Plan is to reduce the level of waste going to landfill and to encourage recycling. The Plan also requires that larger amounts of hazardous waste should be disposed of at specially managed waste facilities.	framework. *Relates to objective 5 – Waste management.*
Historic England Advice Note 8: Sustainability Appraisal and Strategic Environmental Assessment	Seeks to provide advice on historic environment considerations as part of the SA / SEA process	IIA should reflect the guidance. *Relates to objective 4 – Heritage assets and objective 2 – Built environment and public realm.*
Regional		
The London Plan (2016) and the new London Plan (2018)	The London Plan is the strategic planning document for the 32 London boroughs and the City of London. It sets out the framework for development in London and the policy context for local planning policies. Policies from the London Plan relevant to the Transport Strategy include: • Policy 3.2 – Improving health and addressing health inequalities; • Policy 5.2 – Minimising carbon dioxide emissions; • Policies 6.1 to 6.15 in relation to transport; • Policy 7.5 – Public realm; • Policy 7.14 – Improving Air Quality; • Policy 7.15 Reducing and Managing Noise, Improving and Enhancing the Acoustic Environment and promoting appropriate soundscapes; • Policy 7.24 – Blue Ribbon Network; • Policy 7.25 increasing the use of the Blue Ribbon Network for passengers and tourism; and • Policy 7.26 – Increasing the use of the Blue Ribbon Network for Freight Transport. The New London Plan will replace the current London Plan as the strategic planning document for the 32 London Boroughs and the City of London. The following draft policies are likely to be applicable to the Transport Strategy: • Policy GG1 – Building strong and inclusive communities; • Policy GG3 – Creating a healthy city; • Policy GG5 – Growing a good economy;	IIA objectives should reflect the goals of the Plan. *Relates to all objectives.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	• Policy GG6 – Increasing efficiency and resilience; • Policy D7 – Public realm; • Policy D13 – Noise; • Policy SI1 – Improving air quality; • Policy S12 – Minimising Greenhouse gas emissions; • Policy SI15 – Water transport; and • Policies T1 to T9 in relation to transport.	
The Mayor's Transport Strategy (2018) (MTS)	The MTS sets out the Mayor's plans to transform London's streets, improve public transport and create opportunities for new homes and jobs. To achieve this, use of public transport, walking and cycling is encouraged. The Strategy was adopted on the 13th March 2018. The City of London Transport Strategy will need to have due regard to this document throughout its preparation. The MTS contains three key themes: • Healthy Streets and healthy people; • A good public transport experience; and • New homes and jobs.	IIA objectives should reflect the goals and themes of the strategy. *Relates to all objectives.*
The Mayor of London River Action Plan (2013)	This plan outlines a number of specific measures to be taken by TfL to help boost the number of river trips in line with achieving the Mayor's target of 12 million passenger journeys a year by 2020.	IIA objectives should support the goals of the Action Plan. *Relates to objective 2 – Built environment and public realm*
A City for all Londoners (2016)	This report sets out the Mayor's strategic vision for London. The document does not include specific policies but gives an indication of the priorities of the Mayor. The overarching 'Healthy Streets' approach to managing the street network is a key part of the Mayor's vision. In central London this means a shift towards reducing motorised traffic.	IIA objective should reflect the goals of the strategy. *Relates to all IIA objectives.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
Local		
City of London local Plan (2015)	The City of London Local Plan, adopted in January 2015 is the statutory planning document for the City. The following policies are applicable to the Transport Strategy which must be in general conformity with the Local Plan. • Policy DM 3.4 Traffic management; • Policy DM 15.6 Air quality; • Policy DM 15.7 Noise and light pollution; • Core Strategic Policy CS9: Thames and the Riverside; • Core Strategic Policy CS16: Public Transport Streets and Walkways; and • Polices DM 16.1 to 16.8 in regards to transport. **The City of London is currently preparing its new Local Plan, 'the City Plan 2036'. This will set out the City Corporation's vision, stra**tegy and objectives for planning in the City over the next 20 years. Once adopted this Plan will replace the current City of London Local Plan. Work on the new Local Plan is currently underway and a full draft version is expected to be consulted on from June 2018.	The IIA should support and conform with the objectives and policies of the Local Plan. *Relates to all IIA objectives.*
The Standard Highway and Servicing Requirements for Developments in the City of London (2007)	This document sets out guidelines for physical infrastructure associated with development-related highway and servicing arrangements. The document should be the point of reference for all matters relating to development impact on the public highway. The City of London Delivery and Servicing Guidance provides practical information on how to manage freight associated with an existing site or new development through a Delivery and Servicing Plan.	The IIA objectives should align with the guidelines in the document. *Relates to IIA objective 5 – Waste management.*
The City of London Air Quality Strategy (2015 – 2020)	The City of London Air Quality Strategy and emerging Air Quality SPD set **out the City's aims and responsibilities on managing Air Quality. The** strategy aims to fulfil statutory obligations relating to air quality management, encourage measures to reduce harmful emissions in the City, and raise public awareness of air quality issues. Relevant Air Quality Strategy policies include; • Policy 2: Political influence and commitment; • Policy 5: Reducing emissions from transport; and	The IIA objectives should support the aims of the strategy. *Relates to objective 7 – Climate Change and objective 6 – Environmental protection.*

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	• Action 29: Reducing Air Quality Impact of Freight.	
The City of London Noise Strategy (2016-2026)	This document sets out the City Corporation's strategy for managing noise levels from all sources. Unwanted noise can be a nuisance to both residents and businesses and while some noise in a working environment is inevitable, the City Corporation has a statutory responsibility to manage and minimise exposure to excessive or unnecessary noise, while ensuring that the City can function and flourish. Policies in the Noise Strategy which are relevant to the Transport Strategy include: • Policy Transport 12 – Night Time Servicing; • Policy Transport 13 – General; and • Policy Transport 14 – General	The IIA objectives should support the aims of the strategy. *Relates to objective 6 – Environmental protection*
The City of London Road Danger and Active Travel Plan (2018-2023)	This plan seeks to achieve a reduction in danger for all, to make the streets safer and improve the quality of life for everyone in the City of London. Road danger will be targeted at source, working towards the elimination of the number of people killed or seriously injured on London's Roads. Walking and cycling is encouraged, helping to reduce levels of physical inactivity and associated health impacts.	The IIA objectives should support the goals of this plan. *Relates to objective 3 – Safe environment and crime reduction, objective 2 – Built environment and public realm and objective 12 – Health.*
The Thames Strategy SPD (2015)	The SPD sets out the City Corporation's strategy for use of the river. The strategy supports the Local Plan policy CS9 Thames and the Riverside with regard to promoting the use of the river for freight as well as passenger transport.	The IIA objectives should support the use of the river. *Relates to objective 2 – Built environment and public realm.*
The City of London Public Realm SPD (2016)	The SPD sets out 10 aims relating to maintaining and enhancing the City's built environment and providing a safe, high quality and inclusive place in which to work, live and enjoy. Particularly relevant to the Transport Strategy, the SPD aims to: • Encourage simpler, more spacious and less cluttered streets and spaces (Aim 3); • Provide more sustainable streets and spaces (Aim 6); • Support and encourage wellbeing and healthy lifestyles (Aim 7); and • Provide better connected and more inclusive streets and spaces (Aim 9).	The IIA objective should support the aims of the SPD. *Relates to objective 2 – Built environment and public realm, objective 3 – Safe environment and crime reduction, objective 12 – Health and objective 14 – Equality and inclusion.*
The City of London Freight and Servicing SPD (2018)	This document sets out the City of London's requirements for new development in relation to the management of freight and servicing. The	The IIA should support the aims of the SPD.

Plan/ Policy/ Programme	Objectives and Requirements	Implications for the IIA
	three principal aims of the document are: • to minimise freight and servicing trips; • to match demand to network capacity; and • to mitigate the impact of freight trips. **The overall vision for freight and servicing is to 'reduce the number of** freight and servicing vehicles and their environmental impact on the City, particularly at peak times, while still allowing the City to flourish and **avoiding negative impacts beyond the City's boundaries'.**	*Relates to objective 5 – Waste management.*
City of London Historic Environment Strategy 2017	**Provides policy and guidance on all aspects of the City's historic** environment. Sets out the history, character and development of the City with guidance on specific buildings and types of heritage assets that form **its unique townscape. Specific documents such as 'Management of the Historic Environment SPD', 'City of London: History and Characterisation', 'City of London: Townscape analysis', 'Interpretation Strategy for Monuments and Archaeology SPD' and 'Registered Parks and Gardens' have** yet to be published.	The IIA should align with the guidance within the Strategy. *Relates to objective 4 – Heritage assets and objective 2 – Built environment and public realm.*
City of London area enhancement strategies	16 are being prepared which will be the foundation for improving the streets and public spaces in the City. Each sets out the vision for issues such as public realm, transport, road danger and others. Each has a set of objectives to achieve the vision for the area.	The IIA should reflect and align with the visions of the strategies. *Relates to objective 4 – Heritage assets, objective 2 – Built environment and public realm, objective 3 – Safe environment and crime reduction, objective 12 – Health and objective 14 – Equality and inclusion*
Tower of London World Heritage Site Management Plan 2007	To ensure the effective management of the site for present and future generations. The vision for the Tower is to sustain its outstanding universal value and to effectively manage it in order to protect, conserve and present it to the public and to transmit it to future generations. **Objective 2 of the plan is to 'work with all relevant organisations,** particularly planning authorities, to develop and implement a common and consistent approach to sustaining the outstanding universal value of the **tower in its setting'.**	The IIA should support the aim and objectives of the Plan. *Relates to objective 4 – Heritage assets.*
City of London Conservation Area SPDs and Management Plans	Individual documents prepared for each conservation area, analysing the character of each one and setting out the policies for its management.	The IIA should consider and align with the policies in the Plans. *Relates to objective 4 – Heritage assets and objective 2 – Built environment and public realm.*

Appendix 3   Baseline information

Baseline information

Climatic factors
Energy consumption and related emissions

Energy consumption and the consequent emissions of carbon dioxide are of significant importance to the City of London and have a contributory impact on climate change. As can be seen from **Table A3.1**, petroleum products, though not the largest source of energy consumed in the City or London as a whole, still contribute a large amount to energy consumption. Much of this will be a result of motorised transport.

The design and construction of the built environment, including transport infrastructure, together with economic and social activities can have an effect on energy consumption and subsequent greenhouse gas emissions and this can be influenced by planning policies for new development.

It is important to consider the trend in energy consumption and carbon dioxide emissions for the City to see whether the policies that are already in place are having a positive effect. **Table A3.1** shows energy consumption figures for both the City of London (C of L) and Greater London (GL) for 2005–2015 and demonstrates that electricity accounts for the greatest proportion of energy consumption in the City, while for London this is Natural Gas. Total energy consumption in the City has decreased by 22% during this period, with Greater London seeing a 16% fall[23].

Table A3.1 Energy consumption in the City of London (GWh) 2005-2015

Year	Petroleum Products		Natural Gas		Electricity		Renewables and Waste		Total	
	C of L	GL	C of L	GL	C of L	GL	C of L	GL	C of L	GL
2005	261	34,494	982	79,849	2,616	41,434	2	89	3,860	156,052
2006	255	34,656	925	76,950	2,742	42,843	2	125	3,924	154,736
2007	258	34,387	964	74,349	2,555	42,197	2	288	3,778	151,368
2008	225	33,333	945	72,799	2,584	41,814	0	154	3,754	148,274
2009	208	32,352	940	67,387	2,467	41,081	0	153	3,615	141,131
2010	239	31,818	900	67,423	2,684	41,714	0	189	3,584	141,299
2011	228	30,755	831	63,915	2,385	39,945	0	306	3,444	135,076
2012	219	30,473	800	63,038	2,482	40,807	0	288	3,501	134,749
2013	213	30,045	780	61,946	2,440	40,478	0	319	3,433	132,960
2014	234	30,648	669	59,102	2,103	40,957	0	451	3,006	131,303
2015	245	30,498	736	58,439	1,894	39,654	0	1,450	2,875	130,195

Table A3.2 shows carbon emission figures for the City of London for 2005–2015.[24] This demonstrates that commercial use by far accounts for the greatest proportion of emissions, followed by transport. The table shows that while total carbon emissions have been reducing, they will need to be reduced to around 600 kT CO_2 per annum to meet the GLA's target of a 60% reduction in CO_2 emissions by 2025[25].

Table A3.2 Trends in carbon emissions (kT CO2 per annum)

Year	Commercial	Domestic	Transport	Total
2005	1,547	20	74	1,641
2006	1,680	20	73	1,773
2007	1,580	21	72	1,673
2008	1,604	21	66	1,691
2009	1,402	20	62	1,483
2010	1,551	21	61	1,637
2011	1,317	19	59	1,395
2012	1,462	21	57	1,539

---

[23] Total final energy consumption at regional and local authority level, https://www.gov.uk/government/statistical-data-sets/total-final-energy-consumption-at-regional-and-local-authority-level

[24] 2005 to 2015 UK local and regional CO2 emissions, https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015

[25] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016

| Year	Commercial	Domestic	Transport	Total
2013	1,346	20	56	1,419
2014	966	17	57	1,039
2015	788	15	57	860

Flood risk

Local Authorities are responsible for carrying out Strategic Flood Risk Assessments (SFRA) for their areas to determine the level of risk from river and coastal flooding, ground water flooding and surface water flooding including its interaction with the sewer network. Developers must submit Flood Risk Assessments (FRA) demonstrating the mitigation of any flood risk posed by new development. The Environment Agency provides information and advice to assist in the **production of FRA's and SFRAs and also produce Fl**ood Zone maps for river and coastal flooding. The map for the City shows some risk of flooding from the River Thames, however the main flood risk is to the south of the river outside the City boundary.

Climate change is an important factor in increasing flood risk, particularly through the impacts of rising sea levels and more extreme weather events. Despite efforts to reduce carbon emissions some level of climate change is inevitable and the likelihood is that we will experience more extreme weather events as a result.

Figure A3.1 shows the areas of the City that will be most vulnerable to flooding as a result of climate change[26].

Figure A3.1 Areas at risk of flooding in the City
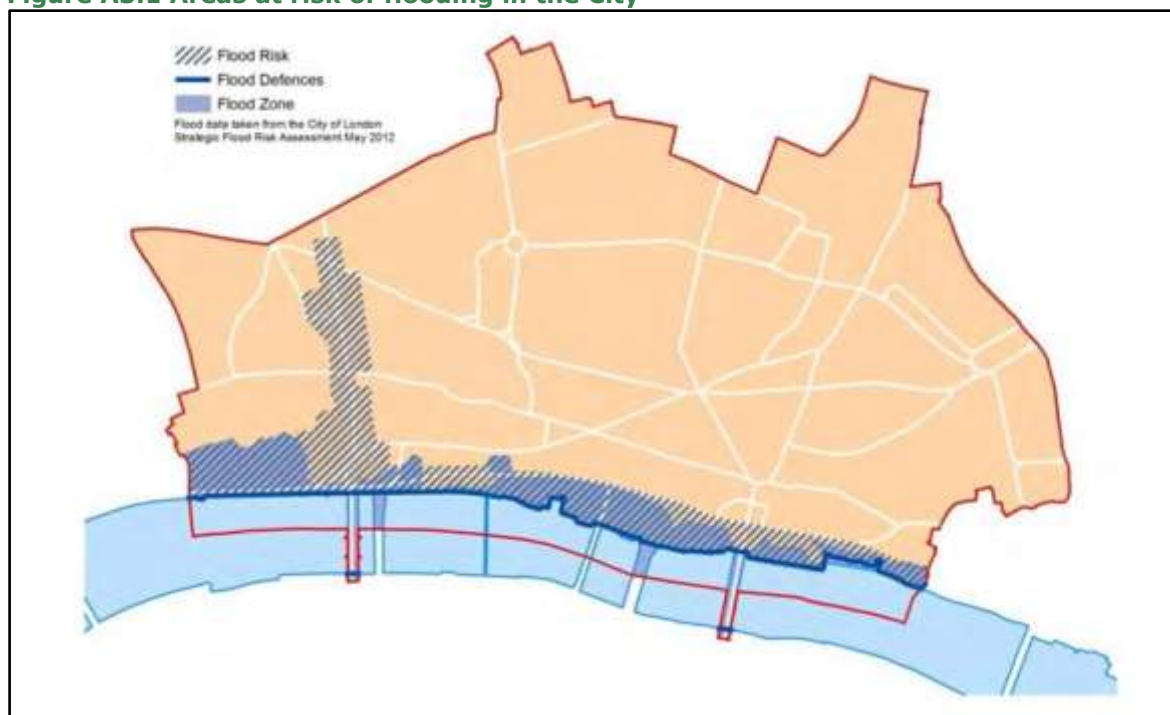
Biodiversity, flora and fauna

The City of London Corporation has produced a Biodiversity Action Plan (BAP) which identifies the habitats and species that are under threat, important to the City and can be monitored and promoted as an indication of local biodiversity[27].

A number of factors led to the City BAP being different to those of other local authority areas:

- High density buildings and built infrastructure;

- Small size and isolated nature of existing spaces within the City;

---

[26] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016
[27] City of London Biodiversity Action Plan 2016-2020

- Demographic composition of the City; and

- Intense pressure on all outdoor spaces during lunchtime periods.

The species that have been identified as priorities are:

- Black Redstart.

- Peregrine Falcon.

- House Sparrow.

- Bats.

- Stag Beetles.

- Swift.

- Bumblebee.

The priority habitats identified by the London Biodiversity Partnership that are most relevant to the Square Mile are 'parks and urban green spaces', with an 'important habitat' identified as 'built structures'. Action plans have been developed to take into consideration these priority habitats. Further habitats recognised as by London biodiversity target within the City of London are the Tidal Thames, which is also the City's only Site of Metropolitan Importance for Nature Conservation (SMINC), and standing water, which includes ponds.

There are several sites which have been designated as SINCs in the City of London. The sites were identified as a result of a survey carried out jointly by the City of London Corporation and the GLA's biodiversity strategy team using criteria and procedures which are set out in Appendix I of the Mayor's Biodiversity Strategy. **Table A3.3** lists the SINCs that were identified in the survey.

Table A3.3 Sites of Importance for Nature Conservation

Site Name	Designation	Area (ha)
The River Thames and tidal tributaries	Site of Metropolitan Importance	26
The Temple Gardens	Site of Borough Importance GII	2.19
The Barbican and St Alphage Gardens	Site of Borough Importance GII	3.06
Pepys Garden Seething Lane and St Olave's Churchyard	Site of Local Importance	0.12
St Pauls Cathedral Gardens	Site of Local Importance	0.71
Cleary Gardens	Site of Local Importance	0.11
St Botolph's Bishopsgate Church Grounds	Site of Local Importance	0.27
Aldermanbury Gardens	Site of Local Importance	0.10
The Roman Wall Noble Street	Site of Local Importance	0.06
Finsbury Circus	Site of Local Importance	0.74

Cultural Heritage and Landscape

The City of London, by virtue of its rich heritage and development, has a legacy of buildings of high architectural merit and areas of distinctive townscape quality and character. This includes 26 conservation areas, 48 scheduled ancient monuments, over 600 listed buildings and four registered parks and gardens at Finsbury Circus, Barbican and the Temples and also includes the

setting of a World Heritage Site – the Tower of London. At the time of writing Historic England's 'Heritage at Risk Register' lists 4 buildings and 3 sections of the London Wall as being at risk.

There are also a number of Sites of Archaeological Potential in the City and areas with archaeological remains in situ cover much of the area.

The Local Plan provides extensive protection to heritage and archaeological assets in the City through the following policies; CS12 Historic Environment, DM 12.1 Managing change affecting all heritage assets and spaces, DM 12.2 Development in conservation areas, DM 12.3 Listed buildings, DM 12.4 Ancient monuments and archaeology and DM 12.5 Historic Parks and Gardens. A series of Conservation Area Strategies and Supplementary Planning Documents published by the City Corporation provide more detailed information and management plans for heritage assets.

The City of London and its environs contain many famous landmarks which are visible both within and beyond the City's boundaries. Views of the City's skyline from the River Thames are especially notable and certain local views of St Paul's Cathedral have been protected successfully by the City Corporation's "St Paul's Heights code" since the 1930's. Landmarks such as St Paul's Cathedral, the Monument and the Tower of London are internationally renowned and add to the City's "world class" status. These views are protected by an integrated range of national regional and local policies.

The Tower of London has additional view protection, implemented through the Tower of London World Heritage Site Management Plan (2016). This defines and protects a range of "settings" of the Tower World Heritage Site, which includes its relationship with historic features which are visible in the urban landscape.

Air Quality

The Environment Act 1995 introduced the National Air Quality Strategy and the requirement for local authorities to determine if statutory air quality objectives (AQOs) are likely to be exceeded. All local authorities now report to DEFRA on an annual basis, and have the obligation to declare Air Quality Management Areas (AQMAs) and develop action plans for improvement of air quality if objectives are likely to be exceeded.

The primary air pollutants of concern in the City historically were black smoke and sulphur dioxide caused by the burning of fossil fuels (such as coal) for industrial and domestic use. Subsequent controls successfully tackled these problems. Today, the major contributor to poor air quality is motorised vehicles. Petrol and diesel engines emit a wide range of pollutants, principally carbon monoxide, oxides of nitrogen, volatile organic compounds and fine particulate matter.

Assessment of these pollutants has been carried out in accordance with the requirements of the Air Quality (England) Regulations 2000 with the result that, in 2001, the whole of the City was declared an Air Quality Management Area for Nitrogen Dioxide and fine particulate matter (PM10). The cross boundary nature of air pollution means that, although actions can be taken at local level to combat some sources of air pollution, a high proportion of pollutants originate outside the City, so a wider approach is required.

In the City, nitrogen dioxide is continuously monitored at six locations (Beech Street, Walbrook Wharf, Senator House, Sir John Cass School, Farringdon Street and Walbrook rooftop). The air quality objective of 40 μg m-3 (annual average) was exceeded at all of these sites.

Fine Particulate Matter (PM10) is monitored in the City at Beech Street, Upper Thames Street and at the Sir John Cass School. The PM10 objective of 50 g μm-3 has been exceeded on many occasions, with Upper Thames Street showing the highest concentrations.

Exposure to PM10 and nitrogen dioxide is considered to be a significant cause of ill health and premature death in London. Research by King's College London estimated that air pollution was responsible for up to 141,000 life years lost or the equivalent of up to 9,400 deaths in London in 2010, as well as over 3,400 hospital admissions. The total economic cost associated with this was estimated at £3.7 billion. Poor air quality in the City is now considered to be a corporate risk.

Carbon monoxide, sulphur dioxide, lead, 1.3 butadiene, and benzene concentrations in the City are low and continue to comply with the air quality objectives set for these pollutants.

The main contributor to local air pollution is road traffic. Diesel vehicles contribute the largest proportion. Offices make up over 70% of all buildings in the City and many vehicles are servicing business needs. Public transport upgrades, the introduction of cleaner vehicles, the use of the River Thames and encouragement of active transport modes will all make a contribution to reducing air pollution.[28]

Water and Soils

Many human activities have the potential to pollute water e.g. industrial processes, urban infrastructure, transport and accidental or deliberate pollution incidents. Pollutants from these and many other sources may enter surface or ground water directly, may move slowly within ground water and emerge eventually in surface water, may run off the land or may be deposited from the atmosphere. Pollution may be from point sources or may be more diffuse and can be exacerbated by weather conditions.

The Environment Agency is responsible for maintaining and improving the quality of fresh marine, surface and underground water in England and Wales and as part of this role carries out assessments of the water quality of all natural bodies of water. The only natural bodies of water occurring in the City are the River Thames, which is a transitional water as it flows through the City, and the ground waters that exist below the City. Transitional waters are characterised by their salinity, tidal category and size.

The proportion of the River Thames having "Very Good" water quality has decreased slightly in 2007/08 and Good quality water has decreased by 5.5 percentage points. There has been an increase in the percentage of Fairly Good, Fair, Poor and Bad quality water.

Environment Agency water quality data for the River Thames for 2016 show the current ecological quality as "moderate" for the City of London stretch of the Thames and the current chemical quality is shown as failing to meet the required standard[29].

Part IIA of the Environmental Protection Act 1990 and the Contaminated Land (England) Regulations 2006 provide the legal framework for the management of contaminated land. Under this legislation, the City of London published its Contaminated Land Strategy in 2001. The aims of this strategy were to:

- Identify and record all sensitive receptors

- Identify and record all sites which have the potential to be contaminated

- Assess whether a pathway exists between the potential source and receptor

- If a potential pathway exists carry out a detailed inspection of the site

The Contaminated Land Strategy Review (Oct 2004) outlines the results of a series of activities carried out to achieve these aims. This review concludes that "no evidence of significant harm or pollution of controlled water is currently taking place and there is no contaminated land in the City as defined by the legislation" The City Corporation continues to monitor potential land contamination associated with development sites and no evidence to conflict with this finding has emerged.

New guidance was published in April 2012 by DEFRA. While the findings above still stand, the City's Contaminated Land Strategy (2015) concludes that there is scope for further review, strategic inspection and documentation of the City's ground.

Population

The residential population of the City of London as defined by the 2011 Census of Population is 7,400, 4,100 of these being male and 3,300 being female. A significant proportion of the City's residential property is occupied as second homes – of the 6,100 residential properties on the

[28] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016
[29] Environment Agency Middle Thames Water Quality Data 2009-2016

City's council tax register, 1,400 are registered as second homes[30]. It should be noted that the workday population is approximately 483,000.

The City's resident population is largely in the 20-64 age range, with proportionately fewer old and young people[31]. The largest age bands are 25-29 and 30-34. In terms of the workday population there is a strong weighting towards males in the City, and those in the age band 20-45. People this age make up 75% of the entire workday population with the peak age being 31. This is consistent with the Greater London workforce which peaks at age 30 however, the City does have a clear trend towards a younger working age population[32].

The majority of the workforce population are employed in either professional occupations or associate professional and technical occupations. Only a small proportion is employed in process plant and machine occupations or caring, leisure and other services. Much of the workplace population of Greater London are also employed in the professional and associate professional and technical occupations however, significantly more people are employed within the caring and leisure services, process plant and machine occupations as well as sales, customer service and skilled trades[33].

In terms of industrial sectors, the largest proportion of **the City's working population works in the** financial and insurance sector (46%), followed by professional and estate (24%). The administrative and education sector dominates in Greater London (37%) followed by professional and estate (13%); only 9% of the Greater London workforce works in financial and insurance.[34]

The white ethnic group had decreased from 84% in 2001 to 78% in 2011. The Asian ethnic group has increased to over 12%. The black ethnic group has increased by 1% between 2001 and 2011.[35]

City workers and residents generally report high levels of educational qualification. Two thirds of City workers have a qualification of degree level or above, compared to the London average of 40%. This greater proportion of level 4 qualifications is consistent with the predominant work sectors within the City – financial and insurance and associated professional services.[36]

Health

The general perception of health in the City of London is 'Very good' (56%) with 'Good' (32%) at the next level; less than 1% ra**ted their health as 'Very Bad'**[37]. Some 4.4% of the population stated that their day to day activities are limited a lot by their health; the majority (89%) stated that their day to day activities are not limited. More than 90% of the population is not provided with any unpaid care, just over 6% are provided with 1 to 19 hours of unpaid care per week and less than 1% receive either 20 to 49 hours or 50 or more hours of unpaid care per week. In general Health is reported as better in the City than in Greater London where almost 4% of residents report that they are in very bad health and 11% are in fair health; 51% report themselves to be in very good health[38].

It is noted that there are variations in health between neighbourhoods in the City which reflect patterns of relative social and economic deprivation. For example poor heath is more prevalent in the Portsoken and Golden Lane areas, where ill health and disability affect around 20% of households.[39]

In general health in the City has improved since 2001 with the percentage of those reporting good health rising and those reporting bad or fair health decreasing.

---

[30] City of London Resident Population, Census 2011, Population

[31] City of London Resident Population, Census 2011, Population

[32] City of London Resident Population, Census 2011, Workday Population

[33] City of London Workforce Census 2011, Analysis by Age and Occupation

[34] City of London Workforce Census 2011, Analysis by Industrial Sector

[35] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016

[36] Health and wellbeing board

[37] City of London Resident Population, Census 2011, Health

[38] ONS Neighbourhood Statistics, City of London, Health and Provision of Unpaid Care 2011

[39] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016

In terms of road safety in the City, large vehicles, including goods vehicles and servicing vehicles are disproportionately involved in collisions with vulnerable road users, for example pedestrians and cyclists. A reduction in the number of these vehicles using the roads at the same time as the more vulnerable users may have a positive impact on the safety of the City's population.

In 2014, visits to attractions in the City totalled approximately 6.5 million with over 10 million total visitors. 7.7% of the City's workforce is employed in the tourism sector. Visitor numbers increased up to 2014 and are continuing to increase. The City Corporation is looking to set a target of an additional 1.5–2.0 million visitors per year.

Equality

Protected characteristics are defined by the Equality Act 2010 as: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.

Based on 2011 census data, the age profile of the City shows that there are proportionally fewer very young and older people living in the City with the largest age bands being 25-29 and 30 -34.

The current population of the City is 78% white, 12% Asian, 3% Black, and 4% mixed ethnicity. 55% of the population is male and 45% female. 33% are married and 1.7% are in a same sex civil partnership. 7.8% are divorced.

As stated in the section above, health in the City is generally perceived to be good, with only 4.4% of residents stating that their day to day activities are limited a lot, and 7.8% of the population receiving any unpaid care (between 1 and 50 hours or more).

57% of the population identify themselves as having a religion; of these 45% are Christian, 6% are Muslim, 2% are Jewish and 2% are Hindu.

As can be seen from **Figure A3.2** the City is a relatively affluent place, with all wards but part of Tower Ward ranking amongst the 50% least deprived neighbourhoods in the country, and the majority of the City falling within the 40% least deprived neighbourhoods in the country. Aldersgate and Bassishaw wards are amongst the 20% least deprived neighbourhoods in the country.

The ranking is similar for all domains (e.g. income, employment, education, health, crime, children and the elderly) apart from barriers to housing and services and living environment, where the ranking for the City falls into some of the most deprived areas in the country. This demonstrates the issues the City has with housing and services provision and quality, air quality, and road traffic incidents.

The City is also surrounded by less affluent areas which have higher levels of deprivation. Examples include part of Holborn and Covent Garden Ward and part of Spitalfields and Banglatown ward. The City has the potential to be a catalyst for improvement in these more deprived wards through, for example, improving accessibility to jobs and services.

Figure A3.2 Index of Multiple Deprivation in the vicinity of the City of London[40]
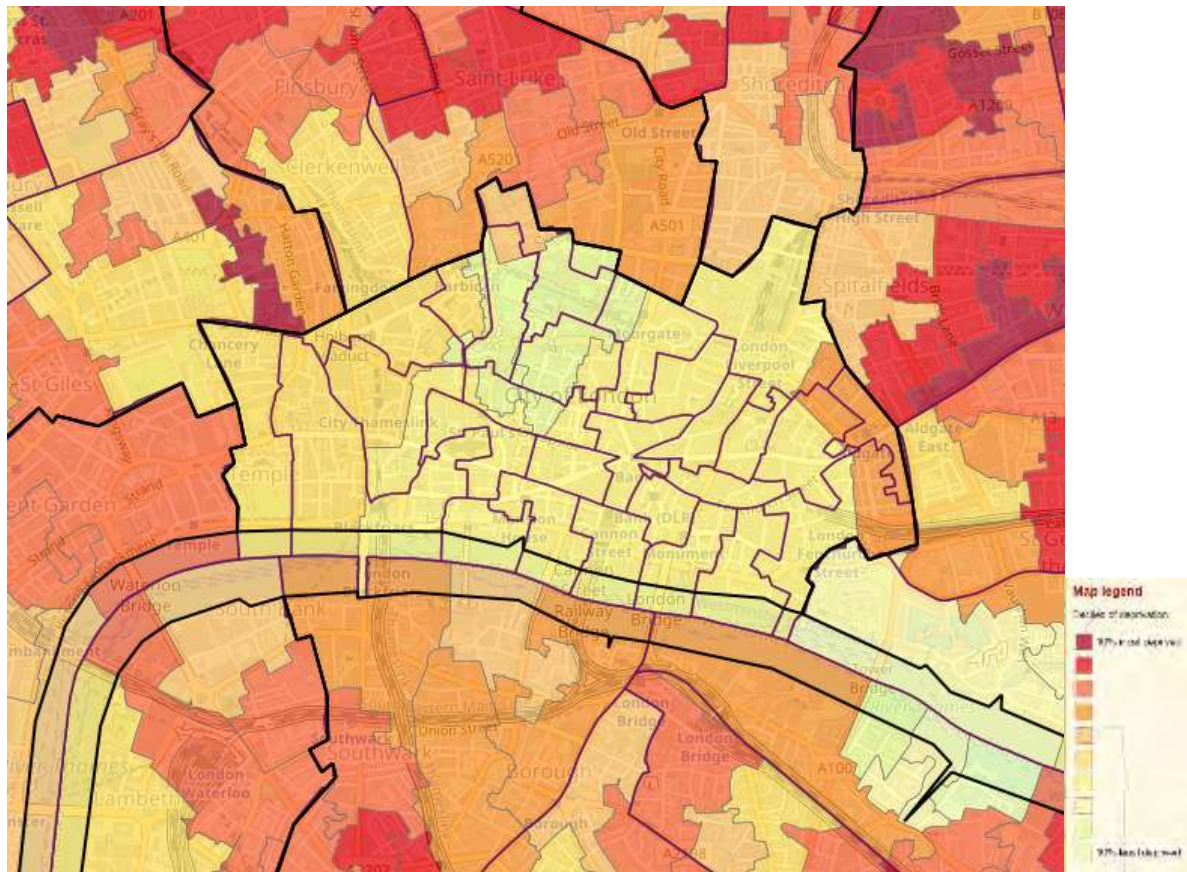

Figure A3.3 below shows the Index of Multiple Deprivation (IMD) ranking for the City between 2004 and 2015, compared to neighbouring boroughs. The neighbouring boroughs of Islington, Hackney and Tower Hamlets are amongst the most deprived in the country.

---

[40] http://dclgapps.communities.gov.uk/imd/idmap.html

Figure A3.3 IMD rating for the City and surrounding boroughs[41]
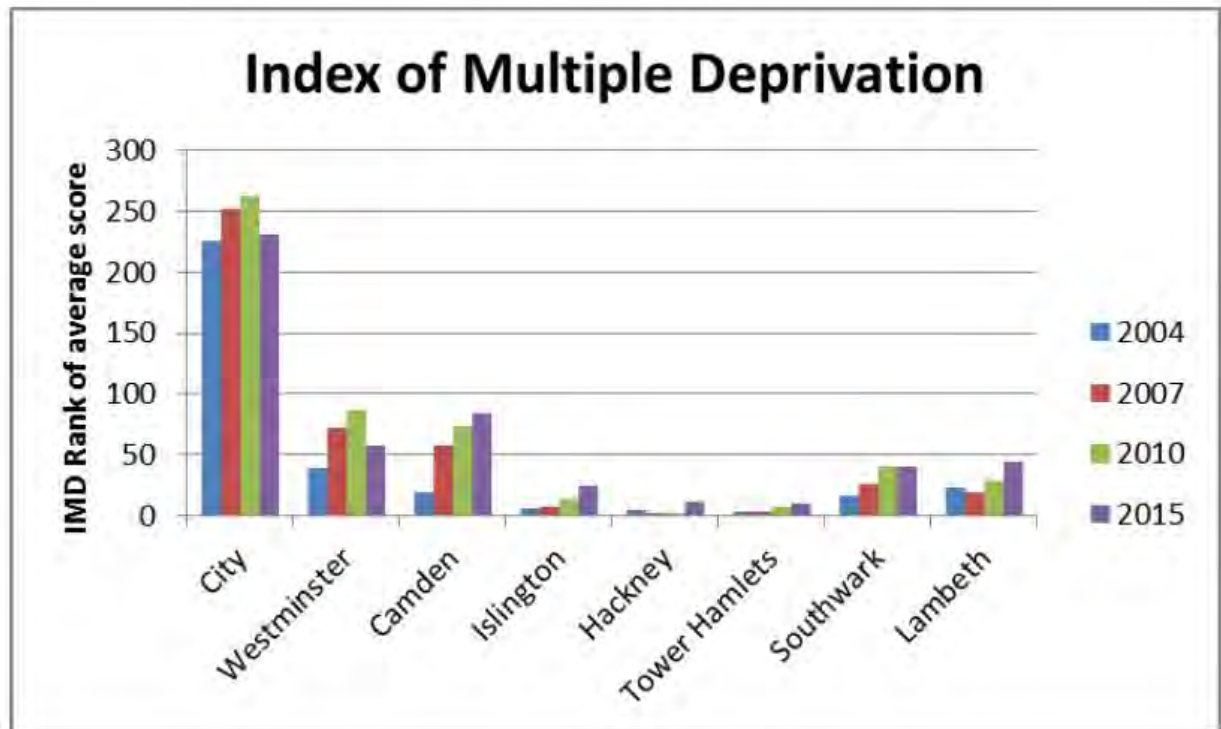
Due to the low resident population of the City and the high numbers of people working and visiting daily, crime patterns differ slightly to more residential wards.

In 2017 the highest number of crimes fell under 'other theft', followed by 'anti-social behaviour' and 'violence and sexual offences'.

Crime throughout the year peaked in March and again in August and then fell dramatically to November and December when it was at its lowest.

The City of London is currently facing issues with moped crime. In 2017 there were 14,030 motorcycle thefts and 23,430 motorcycle-enabled crimes in London. A significant number of these took place in the City. The Mayor of London and City of London and Metropolitan police are currently working on ways to reduce this type of crime.[42]

Material Assets

Offices are the predominant land use in the City. It was estimated in March 2017 that there was 8.66 million m^2 of gross B1 office floor-space within the City, with a further 1.4 million m^2 under construction[43] . This forms approximately three quarters of all City floor-space. Other main land uses are transport, open space, housing, retailing, utilities, public buildings, education and health.

Office stock in the City is continually updated to accommodate the City's growth projections and to accommodate businesses' technological requirements, ensuring that it remains at the competitive edge. There is increasing pressure for residential development in the City and it is important that this is managed so as not to affect the competitiveness of the business City. At the 31st March 2017 a total of 852 residential units were under construction with a further 77 units permitted but not commenced.

The City's transport infrastructure incorporates the streets, walkways and public realm which enable pedestrian movement; the shared spaces, highways and cycle parking facilities which enable safe and secure cycling; the highways, roads lanes and vehicle parking facilities which

---

[41] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016

[42] https://www.london.gov.uk/press-releases/mayoral/mayor-working-to-end-moped-related-crime

[43] City of London Development Information Report 2017

accommodate motor vehicles, essential for servicing and the delivery and operation of buses, taxis and private vehicles; the underground tube systems and overground rail networks and stations which provide public transport connections within and beyond the City nationally and internationally; and the river transport system for both freight and passenger transport to and from the City's wharf and piers.[44]

The City Corporation aims to ensure that people can choose from a range of sustainable transport modes which operate in a safe, secure and efficient manner. The City's streets encompass a range of spaces from highways suitable for through traffic to lanes and walkways, many of which accommodate pedestrian movement and form important local links within the City. [45]

In order to provide a high quality public realm, the City of London is working on a number of Area Enhancement Strategies which are the foundation for improving the streets and public spaces in the Square Mile.[46]

Waste

The quantity and composition of municipal waste has been monitored by the City of London Corporation. There are two main categories of waste produced in the City: commercial and household waste. However, many companies in the City employ independent contractors to deal with waste and recycling, therefore total waste figures for the City are difficult to establish.

Municipal Waste collected by the City of London Corporation is transported by river to the Riverside Resource Recovery Energy Waste Facility at Belvedere in Bexley.

The City of London also transports waste for some local authorities and companies who operate their own waste management and recycling schemes using private contractors.

In addition to the Municipal waste management in the city a large number of private waste contractors operate in the City collecting waste from commercial premises. The commercial and industrial waste estimate for the City for 2014 was 187,000 tonnes[47].

The high rate of redevelopment in the City means that large quantities of demolition and construction waste are generated. The constricted nature of the City and the tight timescales involved in redevelopment mean that most of this demolition waste is transported off site for either recycling or disposal. The historical lack of monitoring data makes it difficult to accurately determine the level of production of secondary and recycled aggregates from construction and demolition waste material.

Economy

The City of London is a leading financial and business centre. It generated £45 billion in economic output (as measured by Gross Value Added) in 2014. This is equivalent to 14% of London's output and 3% of the UK's total economic output.

Offices are the predominant land use in the City. It was estimated that in March 2014 there was 8.6 million m² of gross office floor space within the City.[48]

The largest industrial sectors in the City overall are businesses services and banking although professional and estate services is the largest sector in the west of the City. In 2016 the UK's financial services sector employed over 1.1 million people which represented 3.4% of the UK's total workforce.[49]

Over the past 10 years employment and output growth in the City and also more widely in London have outpaced the UK's growth rate due to the concentration of high productivity industries and labour.[50]

[44] City of London Infrastructure Delivery Plan, 2011
[45] City of London Infrastructure Delivery Plan, 2011
[46] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016
[47] Waste arisings and waste management capacity study review 2016, Anthesis
[48] City of London Local Plan Review, IIA Scoping Report Issues and Options Consultation Draft, Appendix 2 Baseline Information, 2016
[49] PwC and The City of London, total Tax Contribution of UK Financial Services, December 2016.
[50] The Future of the City of London's Economy, June 2015

The 2015 document 'The Future of the City of London's Economy' sets out the expectation that, over the coming decade, the City of London's growth rate is expected to accelerate as its high productivity industries continue to grow. The City is projected to generate an additional £16 billion in output by 2025 and productivity is projected to rise from £114,000 per job to £141,000 per job – almost three times the UK's productivity.

Figure A3.4 shows the projections for output, employment and productivity to 2025.

Figure A3.4 Projections for output, employment and productivity to 2025[51]

Projections for output, employment and productivity to 2025

	2014	2015	2016	2017	2018	2019	2020	2025
Employment 000s								
City of London	397	399	404	406	408	411	414	436
Central London	1868	1881	1898	1909	1921	1934	1948	2013
Greater London	5551	5584	5629	5663	5697	5737	5777	5955
UK	33331	33498	33699	33867	34036	34207	34412	35261
Gross Value Added (£2011bn)								
City of London	45	46	48	49	50	52	53	61
Central London	165	169	173	177	182	187	192	218
Greater London	334	342	349	357	366	376	387	438
UK	1514	1547	1575	1605	1640	1680	1723	1920
Productivity (£2011 000s)								
City of London	114	117	119	121	124	126	129	141
Central London	88	90	91	92	94	96	98	108
Greater London	57	58	59	60	61	62	63	74
UK	45	46	46	47	48	49	50	54

---

[51] The Future of the City of London's Economy, June 2015

Appendix 4   Options selection

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
The Square Mile's streets are great places to walk and spend time	None identified	Pedestrians are significantly the largest mode using the City streets; making up 65% of all travel movements. There are over 480,000 workers in the City, and most of these workers will be a pedestrian on City streets at least once during the working day. The City streets are the largest type of public space in the City, and therefore must appropriately cater for people to walk and spend time. In addition, in order to deliver the Healthy Streets approach (which is the core framework **for the Mayor's Transport Strategy) the City's streets** must prioritise people walking, cycling and using public transport.
Put the needs of people walking first when designing and managing our streets	None identified	As above
Complete the riverside walkway and improve walking connections between the riverside and the rest of the City	None identified	As above
Enhance the Barbican high walks	None identified	As above
Ensure new developments contribute to improving the experience of walking and **spending time on the City's** streets	None identified	As above
Promote and celebrate walking	None identified	As above
Provide more public space and deliver world-class public realm	None identified	As above
Incorporate more greenery into **the City's streets and public** spaces	None identified	From our City Streets survey, respondents asked for a more pleasant and attractive street environment; when asked to change one thing to improve the City streets, the most frequent non-transport request was for more greenery.

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
Reduce rainwater run-off on City streets and public realm	All transport and public realm schemes must incorporate Sustainable Drainage systems aiming for a green field site run off rate	Due to severe space constraints on and below the City streets, it is nearly always impossible to install Sustainable Drainage infrastructure on streets in the City and therefore the proposal would be unattainable. Instead, the opportunities for SUDs will be explored for every transport and public realm project and installed wherever possible.
Incorporate protection from adverse weather in the design of streets and the public realm	The **City's streets and public** realm should be designed to provide protection from all weather	Providing protection from all weather is possibly unattainable. Instead, ensuring to incorporate features that provide walkers and cyclists from rain, wind and high temperatures where possible, is a more reasonable proposal.
Street space is used more efficiently and effectively		We want the use of the Square **Mile's streets to better match** the priorities of residents, workers and businesses. The most common suggestion, made by a third of City Streets survey respondents, for one change people would like to **see on the City's streets was** for a reduction, cap, targeted or City-wide ban of motor vehicles. The second and third most requested changes were for more space for walking and more space for cycling respectively[i]. When asked **how different uses of the City's** streets should be prioritised, respondents ranked people walking, cycling and using buses as the highest priorities. Over the last two decades there has been a 50% reduction of motor traffic levels in the Square Mile while the number of workers in the City has increased by 50%[ii].

---

[i] 'City Streets: Transport for a Changing Square Mile' survey, 2018. (https://www.cityoflondon.gov.uk/services/transport-and-streets/transport-planning/Documents/transport-strategy-phase-1-engagement-report.pdf)
[ii] Traffic in the City, November 2017 (https://www.cityoflondon.gov.uk/services/transport-and-streets/transport-planning/Documents/traffic-in%20the-city-2018.pdf)

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		Currently, 45% of motor vehicles in the Square Mile are cars (including private hire vehicles), 21% are taxis and 22% vans and goods vehicles. Cycles and buses represent the most space efficient modes of vehicular transport.
Take a proactive approach to reducing motor traffic	None Identified	Delivering this Strategy will result in a reallocation of street space from motor vehicles to provide more space for people walking, cycling and spending time on the City's streets. To avoid unreasonably impacting the movement of essential motor traffic it will be necessary to reduce the overall volume of motor vehicles on the City's streets. Reducing the motor traffic is also key to improving air quality and delivering Vision Zero.
Design and manage the street network in accordance with the City of London Street Hierarchy	None identified	To encourage drivers to use the right street for the right journey and help inform how space is allocated between different users and uses of each street.
Use timed and temporary street closures to help make streets safer and more attractive places to walk, cycle and spend time	None identified	To help support other outcomes, such as making walking and cycling safer and more accessible.
Make the best and most efficient use of the kerbside and car parks	None identified	As set out in outcome justification.
Support and champion the 'Turning the Corner' Campaign	None identified	In order to give the necessary improved priority to people walking and cycling at junctions and efficiency for all users, changes to the Highway Code and national legislation is required.

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
The Square Mile is accessible to all	None identified	To guarantee the world class reputation of the Square Mile, we must ensure that our streets are accessible to those of all abilities who live, work and visit the City
Develop and apply the City of London Street Accessibility Standard	Continue with minimum accessibility standards as per the Design Manual for Roads and Bridges (DMRB)	City streets are significantly constrained due to its narrow medieval layout. These constraints are exacerbated by the demand for space of 483,000 workers in the Square Mile. Lack of space for pedestrians was highlighted by 84% of those surveyed as a major issue in the Square Mile. This issue is intensified for those with mobility or ability impairments. Developing our own street accessibility standard will ensure that we deliver the most accessible streets in this challenging and unique context.
Adopt a clear pavement policy	None Identified	To remove physical barriers to mobility for people of all abilities who use City streets
Keep pedestrian crossings clear of vehicles	None identified	Highway Code rule 192 states that in queuing traffic crossings should be kept clear. However, this is not enforceable due to lack of legislation to support the rule. We must therefore lobby government to introduce legislation to support enforcement of clear crossings to assist those with mobility impairments with a clear crossing route.
Support and champion accessibility improvement to stations	None identified	We must ensure that public transport is a viable and accessible option to all City visitors, workers and residents.
People using our streets and public spaces are safe and feel safe	None identified	In 2017 there were 52 serious injuries and two deaths on City Streets. To guarantee the world class reputation of the Square Mile, we must ensure that our streets are completely

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		safe who those who live, work and visit the City.
Apply the safe system approach and the principles of road danger reduction to deliver Vision Zero	An alternative method of reducing road danger is a traditional road safety approach Rather than aiming to remove the cause of danger on roads, it seeks to mitigate it. This can involve increasing segregation between vehicles and pedestrians with solutions such as guard railing.	The safe systems approach is a holistic method of reducing road danger on streets. It encompasses safer streets, speeds, vehicles and behaviours. Furthermore, it includes proportionate accountability, focussing on users of streets which have the greatest potential to cause harm. This approach directly improves conditions for those who walk and cycle and reduces the feel of motor traffic dominance in the Square Mile, contributing to our walking City ambition.
Work with the City of London Police to reduce crime and fear of crime	None Identified	To ensure that visitors, workers and residents feel safe in the City we must design crime out of our streets.
Ensure on-street security measures are proportionate and enhance the experience of spending time on our streets	Continue with use of bollards for all hostile vehicle mitigation (HVM).	While effective, bollards reduce the sense of place and ability to placemaking for those who use our streets. By developing and adopting HVM in the form of benches, planters or fountains we can significantly improve our streetscape without diminishing security.
Improve the quality and functionality of street lighting	None identified	Quality of street lighting is a key factor in mitigating crime, perception of crime and reducing road danger.
A wider range of people choose to cycle	None identified	Only 4% of people currently consider the experience of cycling in the City to be pleasant (and 56% consider it to be unpleasant). More than half of people cycling in the City scored their feeling of safety while cycling as a 1 or 2 out of 5. Cycling is a healthy, sustainable, and effective way to get around the City and it is important we prioritise getting more people cycling to improve our streets and capacity on public transport as the City's

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		working population grows.
Apply a minimum cycling level of service to all streets	None identified	Minimum cycling levels of service are used by the Dutch government and cities to improve the quality of cycling infrastructure on their streets. Adopting a similar approach allows the City to improve conditions for cycling and make our streets safer and more pleasant to cycle on.
Increase the amount of cycle parking in the City	None identified	Both the working population of the City and number of those who choose to cycle are expected to increase. We must increase the availability of parking to those who live, work and visit the Square Mile
Ensure new developments contribute to improving the experience of cycling in the City	None identified	
Promote and celebrate cycling	None identified	To encourage uptake in cycling, we will run a series of campaigns and events targeting businesses and residents
Improve cycle hire in the City	None identified	Cycle hire is an important mobility option to fill gaps in the public transport network. It is also used in great numbers for short, local trips and an option for encouraging more people to cycle. Improving cycle hire is necessary to support this outcome.
The Square Mile's air and streets are cleaner and quieter		
Support and champion a central London Zero Emission Zone	Banning all motor vehicles would achieve necessary air quality targets	Give that deliveries and servicing is necessary we recommend that a transition to electric vehicles, (and cargo bikes for smaller loads), for essential motor traffic, is appropriate rather than a total ban.
Install additional electric vehicle charging infrastructure	Rely on private installation of EV charge points	Charging infrastructure is required if we are going to support a transition to Electric Vehicles, some on-street and public car park sites are considered essential,

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		particularly to support electric taxis.
Request an accelerated roll out of zero emission capable buses	None identified	This will accelerate the improvement in air quality in the Square Mile as TfL is committed to whole fleet of London buses being zero emission or hybrid by 2030.
Support small businesses to accelerate the transition to zero emission capable vehicles	None identified	Small businesses may have difficulty with the additional upfront costs, although are often keen to meet higher standards if supported. Working with industry/small business federation for a cooperative approach.
Make the City of London's own vehicle fleet zero emissions	None identified	Vehicles incur a charge if not meeting the standards; the opportunity to demonstrate good practice and trial vehicles is seen as a positive role for the City.
Reduce the level of noise from motor vehicles	None identified	Recent public feedback states noise from vehicles as the single highest factor of negative noises in the City; with construction noise the second. Also, health-based evidence indicates a clear impact on quality of life. The ambition to reduce noise further is therefore endorsed.
Reduce noise from street works	None identified	Recent public feedback states noise from vehicles as the single highest factor of negative noises in the City; with construction noise the second. Also, health-based evidence indicates a clear impact on quality of life. The ambition to reduce noise further is therefore endorsed.
Encourage innovation in air quality improvements and noise reduction	Allow market to lead	The opportunity to demonstrate good practice and trial vehicles is seen as a positive role for the City as it embraces its corporate responsibility role recently adopting a Responsible

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		Businesses Strategy which includes a Climate Change priority.
Ensure street cleansing regimes support the provision of a world-class public realm.	None identified	Investment in high quality public realm and walking streets should be matched by maintaining a clean street environment.
Delivery and servicing needs are met more efficiently and impacts are minimised	None identified	Freight traffic serving our businesses is necessary in the operation of all our buildings. Increasing the efficiency of freight operations in the Square Mile is a requirement to reduce the harmful impact of freight to our streets.
Reduce the number of freight vehicles in the Square Mile	None identified	To improve air quality, road danger and release space for those walking and cycling we must reduce the number of vehicles that are on our streets.
Develop a sustainable servicing programme	None identified	We estimate that servicing vehicles are approximately 50% of vans on our streets. To achieve our freight outcome, we must better understand the servicing industry and developing servicing specific proposals.
Our street network is resilient to changing circumstances		
Allow some Local Access Street to function as City Access Streets during significant disruption	None identified	Allows for management in a congested environment, and flexibility whilst providing greater pedestrian priority the majority of the time.
Reduce the impact of construction and streetworks	None identified	As highway authority there is a duty to manage the network efficiently and significant financial savings as well as reducing nuisance factor from construction and streetworks is a major benefit to coordination and better management techniques. Dust and noise control also

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		helps improve environmental quality for those working, living and travelling in the City.
Make the street network more resilient to long term severe weather events	None identified	Network management is a statutory role of the City as highway authority and the need to manage and mitigate to changing environmental conditions is recognised. Additionally the ambition to meet the Healthy Streets agenda by providing more shade and shelter for people walking will assist in coping with more extreme weather events on day to day basis.
Emerging transport technologies benefit the Square Mile	None identified	Technological innovations in transportation can be disruptive to the demands for and operation of public and private transport. We must work closely with the industry to ensure that technological innovation works to the benefit of the City, supporting walking and cycling and minimising the impacts of motorised vehicles to those who live, work and visit the Square Mile.
Establish a Future Transport Programme	None identified	Establishing a programme will provide the City Corporation an opportunity to test emerging transport technologies in the Square Mile and assess their benefit.
Establish a Future Transport Advisory Board	None identified	To provide expertise to both the Future Mobility Programme and identify new opportunities to make best use of emerging transport technology we require expertise from across the industry. The board will consist of academics, industry leaders and City Corporation officers.
Explore the need for legislative change to ensure emerging technology and innovation benefits the Square Mile	None identified	As new transport technologies emerge legislation may not be appropriate to support or restrict its use. We therefore need to engage with

Outcome / Proposal	Alternative Proposal / Approach	Why preferred option selected
		government, industry and sector representatives to ensure that frameworks and legislations support technology to the benefit of the City.
The Square Mile benefits from better transport connections	None identified	Public transport will remain the main way that people travel to the Square Mile. As the City's working population is set to continue to grow, the pressures on these transport systems will increase. We must ensure that public transport connections to and around the City improve.
Support and champion better national and international connections to the Square Mile	None identified	See above
Support and champion improved connections to the Square Mile from Greater London	None identified	See above
Support the increased use of the Thames for passenger services	None identified	Better of passenger services to Blackfriars and Tower piers, as well as potential new piers, will increase capacity on rail, underground and bus services to the City.
Support the Mayor of London in retaining locally-generated taxation	None identified	New revenue opportunities for transport infrastructure will support development and construction of improved transport connectivity to and around the City.
Encourage continued central government investment in major London transport projects	None identified	Major transport infrastructure such as Crossrail 2 will require continued investment and support from central government.
Review bus provision across the City	None identified	Buses currently operate with an average spare capacity on routes that enter the Square Mile. Ensuring appropriate bus provision to demand will reduce the number of buses on our streets, improving air quality and road danger.

Appendix 5   IIA recommendations

Proposal	LUC Recommendation	City of London Response
4 – 'Enhance the Barbican high walks'.	To reduce the impact on heritage assets it was recommended that the proposal be modified to require that any enhancements to the Barbican will ensure that its heritage significance is respected.	**Text added to the proposal which states: 'Any enhancements made to** the high walks will be in line with the special architectural and historic interest of the Barbican and the requirements of the Barbican Listed **Building Management Guidelines SPD'.**
30 – 'Install additional electric vehicle charging **infrastructure'.**	To reduce the impact on the built environment and public realm it was recommended that additional text is added to the proposal which requires the design of charging points to be sensitive to the streetscape and public realm.	Text added to the proposal which states: 'where it is essential to locate on-street, charge points will be installed in the carriageway rather than on the pavement and in a way that is sensitive to the **streetscape and public realm'.**
38 – 'Reduce the number of freight vehicles in the Square **Mile'.**	To further reduce the negative effect on economic growth a caveat could be added to the text allowing for certain types of businesses, who can justify the need, to retain agreed bespoke servicing arrangements on an exception basis where this can be clearly justified.	Text added to the pro**posal which states: 'These solutions are not** uniformly applicable to all types of deliveries and we will work with the freight industry to target interventions at the most appropriate **types of delivery.'**
38 – 'Reduce the number of freight vehicles in the Square **Mile'.**	To reduce the negative impact on environmental protection it was recommended that text is added to the proposal which states that as far as possible adverse effects on the water quality and biodiversity of the river will be avoided.	The text already references working with the Port of London Authority to ensure that river fleets meet their air quality standards, which includes impacts to water and surrounding environment. **The** proposal has been amended to include: Working with river freight operators to ensure that their fleets meet Port of London Authority air quality standards and avoid adverse impacts on water quality and biodiversity.
40 – 'Allow some local access streets to function as city access streets during significant disrupti**on'.**	To monitor potential negative effects on the built environment, heritage assets and pollution it was recommended that text be added to the proposal which requires monitoring of the Local Access streets to ensure any negative effects are appropriately recorded and mitigated.	The proposal has been amended to include: Monitoring of any uses of Local Access streets in this way will ensure management arrangements are working well and identify and mitigate and negative effects on the built environment and air quality.
48 – 'Support the increased use of the Thames for passenger **services'.**	It was advised that negative effects on environmental pollution could be further reduced through text added to the proposal which requires as far as possible that adverse effects on the water quality of the river be avoided.	**The proposal has been amended to include** Working with river passenger service operators to ensure that their fleets meet Port of London Authority air quality standards and avoid adverse impacts on water quality.