



Air Quality Management: Protecting Health and Addressing Climate Change Supplementary Planning Document (SPD)

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1. Introduction

- 1.1. This Supplementary Planning Document (SPD) has been prepared by Burnley Council as part of its planning policy framework.
- 1.2. It supplements the policies of the Burnley's Local Plan in relation to the protection and the improvement of air quality. The text of the relevant policies can be seen in Appendix C1.
- 1.3. SPDs elaborate upon the policy and proposals in Local Plans, but do not have their formal statutory 'Development Plan' status. They are however, material considerations in the consideration of relevant development proposals.
- 1.4. The SPD was adopted by the Council on *to be inserted*.

2. Purpose and Scope of the Guidance

- 2.1. In relation to air quality management, the planning system can play its part in two main ways;
 - by limiting emissions and controlling the location and design of emissions sources, such as transport, industry and households; and also receptors, such as schools, nurseries, hospitals, nursing homes - where new development requires planning permission; and
 - by protecting existing green infrastructure, and where possible enhancing it, to help mitigate against impacts.
- 2.2. Whilst the Local Plan addresses the planning-related aspects of both these matters and the wider pollution issues through a number of its policies, this SPD focuses on the impacts of new development in relation to air quality; and in particular, transport emissions and exposure. These impacts can be through an increase in harmful emissions arising from the traffic generated by new development, or by new development being exposed to existing harmful emissions.
- 2.3. Reducing polluting and harmful transport emissions can not only help protect health, but can also contribute to efforts to address climate change. Transport emissions are a significant source of greenhouse gases. By targeting transport emissions, there is a dual benefit of both addressing local air pollution and climate change.
- 2.4. The SPD supports the Local Plan by setting out the process for assessing and mitigating air quality impacts of new development through the development management process in order to minimise harmful pollutant emissions, avoid significant impact on local concentrations and protect the public from unacceptable exposure. In doing so it tailors assessment and mitigation requirements according to specific site characteristics which relate both to the nature and also the scale of associated impacts and risk.
- 2.5. The guidance explains:
 - How to classify a development site in order to streamline its passage through the planning system
 - What assessment and mitigation needs to be considered for a given type of site
 - What submissions a developer needs to make and how these will be considered by the Council
- 2.6. There are a range of worked examples for a typical range of development types and sites available at http://www.lowemissionstrategies.org/les_planning_guidance.html

3. Air Pollution

Air Quality Concerns

3.1. New development poses three related but distinct concerns in relation to air quality:

Pollutant Emissions	Emissions which arise from the initial construction and ongoing use of a site which may add cumulatively to existing pollution levels across the borough.
Local Concentrations	These occur where pollutants build up in significant quantities in particular locations, for example near busy road junctions, industrial installations or large intensive farming operations. (During the construction phase and/or when the site is brought into use).
Human Exposure	Harm to individuals arising as a result of introducing new exposure to air pollutants.

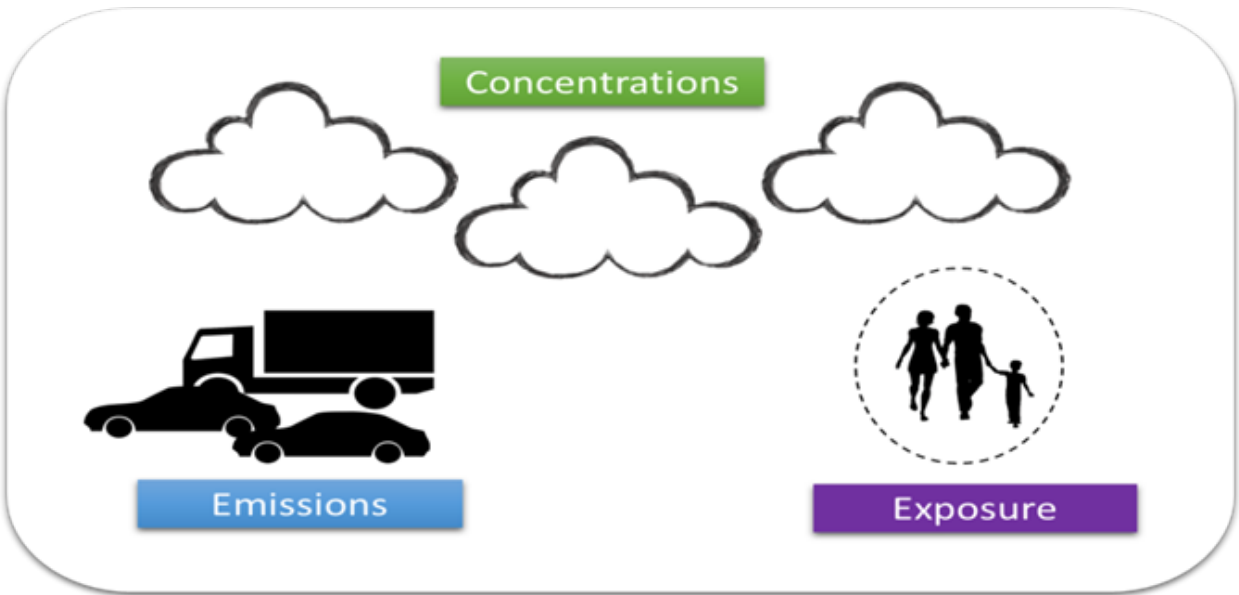


Figure 1: Air Quality Concerns

3.2. Once emitted into the atmosphere, pollutants are carried and dispersed with air movements and may be subject to chemical change. Controlling concentrations either within pollution hotspots or across a wider area, must take such processes into account. This means that action is needed not only in the specific locations where most harm occurs, but also more widely across the entire Burnley borough as well.

Pollutants

3.3. Many substances can pollute the air. Some of these are very harmful and their sale and use is strictly regulated. Others are not immediately harmful, but are released in thousands or millions of tonnes per year nationally as by-products of transport, energy production, chemicals manufacture, domestic combustion and farming and have a gradual but significant impact on health and the environment.

3.4. Poor air quality has a significant impact on public health, both on mortality rates and on quality of life. It is estimated that each year 44 deaths in the Burnley district are attributable to air pollution. In Lancashire as a whole this figure rises to 540.¹ Air pollution is the top environmental risk to human health in the UK, and the fourth greatest threat to public health after cancer, heart disease and obesity.² It is important that measures are taken to address the situation.

3.5. In the UK, there are statutory obligations to keep concentrations of specified pollutants below certain levels. The only specified pollutant in respect of which the UK is not currently meeting these limits, in common with many other countries in Europe, is roadside nitrogen dioxide (NO₂) concentrations. The UK also has national policy emission reduction commitments for overall UK emissions of five damaging air pollutants. These are:

- fine particulate matter (PM)
- ammonia (NH₃)
- nitrogen oxides (NO_x)
- sulphur dioxide (SO₂); and
- non-methane volatile organic compounds (NMVOCs)

3.6. Exceedance of nitrogen dioxide air quality objectives and elevated levels of particulate pollution in areas of Burnley are a major health concern.

3.7. According to the Public Health England Mortality Profile, 'Fraction of mortality attributable to particulate air pollution' in Burnley (2017)³ is 4.1%. This value is intended to represent the proportion of deaths attributable to sources of particulate matter (PM_{2.5}), and therefore the intention of the Council in the 2019 Air Quality Annual Status Report is to reduce this value in Burnley. The value is comparable with Lancashire (3.8%), the North West Region (4.1%) and England (5.1%). Burnley's Local Plan and this SPD are identified as key components in achieving this reduction.

Nitrogen Oxides

3.8. Nitrogen oxides (NO_x) are a group of gases that are predominantly formed during the combustion of fossil fuels. The majority of NO_x emitted as a result of combustion is in the form of nitric oxide (NO). When NO reacts with other gases present in the air, it can form nitrogen dioxide (NO₂), which is harmful to health. In the UK, the main sources of NO_x are road transport, energy generation, for example power stations and refineries, domestic and industrial combustion and 'other' transport such as rail and shipping.

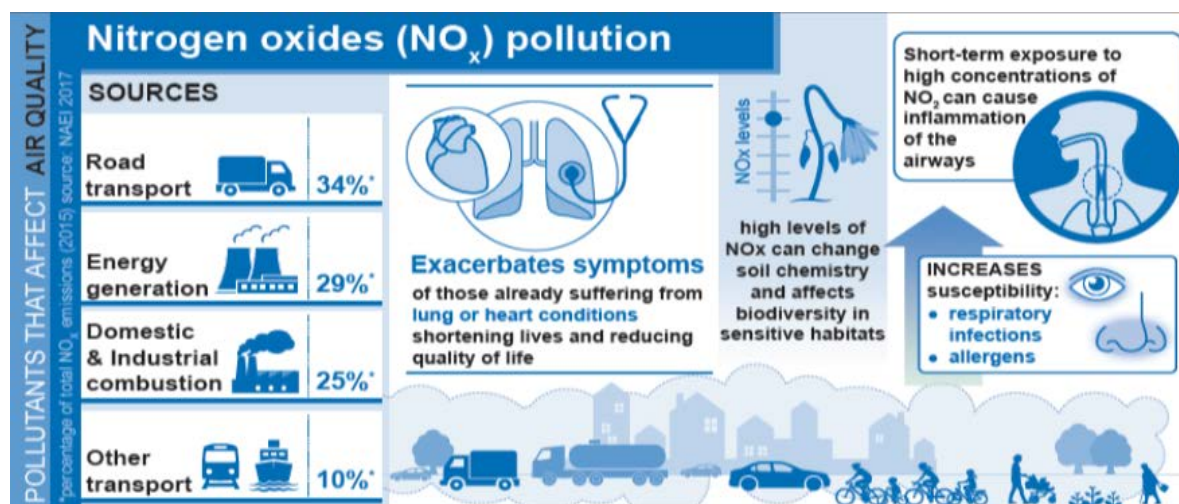
3.9. Short-term exposure to concentrations of NO₂ can cause inflammation of the airways and increase susceptibility to respiratory infections and to allergens. It exacerbates the symptoms of those who are already suffering from lung or heart conditions, shortening their lives.

¹ Estimating Local Mortality Burdens associated with Particulate Air Pollution: Public Health England. 2014 <https://www.gov.uk/government/publications/estimating-local-mortality-burdens-associated-with-particulate-air-pollution>

² Clean Air Strategy 2019: DEFRA

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

³ Public Health England Mortality Profile, 'Fraction of mortality attributable to particulate air pollution' <https://fingertips.phe.org.uk/search/air%20pollution#page/1/gid/1/pat/6/par/E12000002/ati/101/are/E07000117/iid/30101/age/230/sex/4>. Concentrations of anthropogenic, rather than total, PM_{2.5} are used as the basis for this indicator, as burden estimates based on total PM_{2.5} might give a misleading impression of the scale of the potential influence of policy interventions.



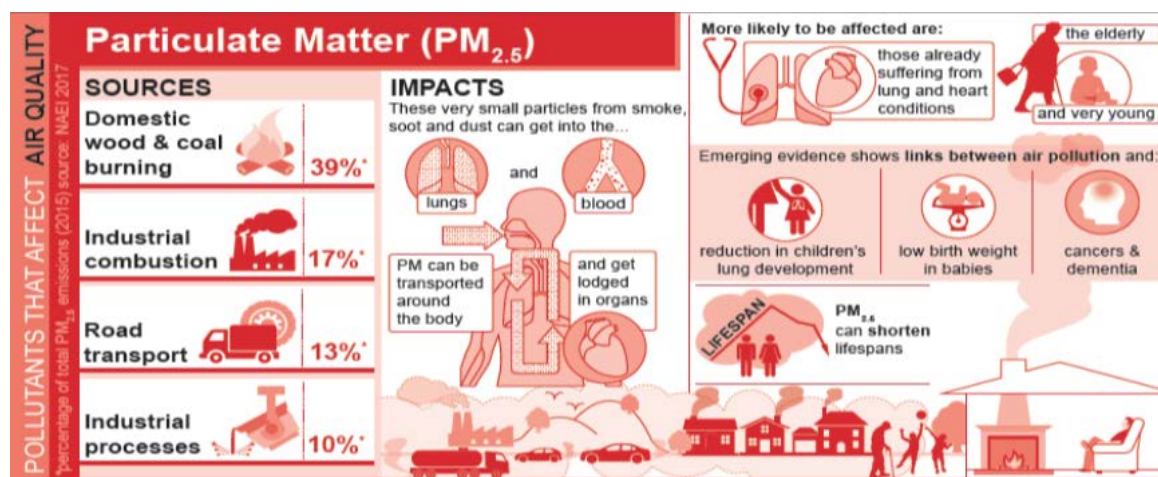
Source: National Atmospheric Emissions Inventory Report on Air Pollutant Inventories for England, Scotland, Wales, and Northern Ireland: 1990-2017

Particulate Matter

3.10. Particulate Matter (PM) is an air pollutant which contains a mixture of microscopic solid and liquid particles suspended in air. It is made of various physical and chemical components such as nitrates, sulphates, ammonium and other inorganic ions; organic and elemental carbon; polycyclic aromatic hydrocarbons (PAHs); metals such as copper, zinc and nickel; dust, soil and smoke. Biological components such as allergens and microbial compounds are also found in PM.

3.11. The commonly used definition of PM refers to the mass concentration of particles with a specified diameter. PM with a diameter of 10µm or less referred to as PM₁₀ and particles with a diameter 2.5µm or less are referred to as PM_{2.5}. PM also includes ultrafine particles which have a diameter of less than 0.1µm.

3.12. PM affects health in two ways: by being toxic or by providing a surface for transporting toxic compounds to where they can do harm. PM can have short-term health impacts over a single day when concentrations are elevated, and long-term impacts from lower-level exposure throughout a person's life. Effects are amplified in vulnerable groups including young children, the elderly, and those suffering from breathing problems like asthma. There is therefore a need to reduce concentrations of these pollutants and so minimise their associated health impacts.



Source: National Atmospheric Emissions Inventory Report on Air Pollutant Inventories for England, Scotland, Wales, and Northern Ireland: 1990-2017

4. Policy Context

National Policy

4.1. National planning policy exists in the form of the National Planning Policy Framework (NPPF) and a small number of other policy documents and written ministerial statements, supported by a frequently updated online practice guidance covering a series of themes. It also exists in the provisions of the relevant Act of Parliaments, key sections of which are also reproduced in Appendix C1.

4.2. The NPPF provides guidance as to how planning can take account of the impact of new development on air quality. Paragraph 103 states that “the planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health.”

4.3. Paragraph 181 requires policies and development to specifically identify opportunities to improve air quality or mitigate impacts, such as through traffic and travel management, green infrastructure provision and enhancement. In relation to the promotion of sustainable travel, paragraph 105 states that when setting local parking standards, policies should take into account the need to ensure an adequate provision of spaces for charging plug-in and other low emission vehicles.

4.4. Local authorities also have a statutory duty to work towards compliance with the health based Air Quality Objectives set for seven key pollutants in the National Air Quality Regulations.⁴ Public Health managers also have responsibilities to respond to air quality impacts detailed under the Public Health Outcomes Framework.⁵ In Lancashire this latter role is the responsibility of Lancashire County Council.

4.5. Defra and the Low Emission Partnership⁶ published national guidance on Low Emission Development in 2016. Since then, there has been a growing body of adopted local policies, guidance and practice which can help to both guide and inspire best approaches.

4.6. Burnley’s Local Plan and this SPD reflect this national policy and guidance.

4.7. Environmental Protection UK guidance on Planning for Air Quality⁷ provides useful technical context particularly in relation to the detailed undertaking of concentration assessment. However, it must be emphasised that guidance contained within this document takes precedence.

Planning Reforms

4.8. This SPD does not take account of the proposals set out the Government’s consultation document ‘changes to the current planning system’ or in the White Paper ‘Planning for the Future’, both issued for consultation in August 2020.

⁴ <http://www.legislation.gov.uk/ukxi/2010/1001/contents/made>

⁵ <https://www.gov.uk/government/collections/public-health-outcomes-framework>

⁶ The Low Emission Partnership is a group of local authorities working together to protect public health, and tackle climate change, by reducing emissions from road transport.

⁷ <https://iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>

Local Policy

4.9. Local Plans are prepared to be consistent with national policy. Current local policies can be found in Burnley's Local Plan which was adopted on 31st July 2018.

4.10. Local Plan Policy NE5: Environmental Protection, establishes local planning policy in relation to air quality. This policy seeks to ensure that proposals for new development will not have an unacceptable negative impact on air quality and will not further exacerbate air quality in AQMAs (see glossary) or contribute to air pollution in areas which may then result in an AQMA being declared. It identifies the need for an air quality assessment to accompany a planning application, in certain circumstances, and the issues that any air quality assessment would need to address. These include any mitigation measures to reduce the impact of development on local air quality.

4.11. The Infrastructure and Connectivity section of the Local Plan includes policies on travel, transport and parking, setting out local planning policy in relation to Sustainable Travel (IC1), Managing Transport and Travel Impacts through Transport Assessments, Transport Statements and Travel Plans (IC2) Car Parking Standards (IC3). Policy IC1 promotes more sustainable forms travel as an alternative to the private car, Policy IC2 sets out the requirements for the preparation of transport assessments and travel plans, including assessing the impact of development on air quality and Policy IC3 sets the local parking standards to ensure adequate parking is provided to serve development, whilst still encouraging more sustainable forms of transport and sets out the requirement for ULEV Charging points.

4.12. Green infrastructure can play a part in promoting healthy and safe communities by helping to reduce air pollution. Local Plan Policy SP6 sets out local planning policy in relation to Green Infrastructure and seeks to protect, enhance and extend the borough's multifunctional green infrastructure network in order to maintain and develop the wider public health, ecological and economic benefits it provides and to ensure that there is an overall net gain. Local Plan Policy NE1 protects key ecological assets and Policy NE2 protects specific open spaces in situ.

5. Site Classification

What are the site types?

5.1. Policy NE5 3) states that an air quality assessment will be required where a development may result in a significant increase in air pollution, or lead to a significant deterioration in local quality. The site classification set out in this SPD identifies by virtue of a site's location, use etc which developments are most likely to result in a significant increase in air pollution or lead to a significant deterioration in local quality.

5.2. This classification helps signpost development proposals through the air quality assessment process. Developments are classified by their size, proposed use, location and predicted traffic generation and this results in their assignment to one of **six** possible types: **Type 1, Type 2, Type 3, Type 1X, Type 2X or Type 3X**.

5.3. Once assigned, the site type is used to establish requirements for an impact assessment (air quality assessment under Policy NE5 3). It also has bearing on the likely scope of mitigation. These differences are summarised in the table below:

Type 1	Smaller sites requiring standard safeguards to minimise emissions
Type 2	Larger sites with potential to generate higher levels of traffic and pollution likely to require further emissions mitigation beyond standard safeguards
Type 3	As Type 2 but generating even higher levels of traffic which pose a specific risk of more directly impacting existing areas of particularly poor air quality
X Suffix	Any site with potential to introduce significant new public exposure to existing levels of poor air quality (i.e. Types 1X, 2X, 3X accordingly)

How to classify a site?

5.4. Classification is to be initiated by the developer, who should establish a provisional type based on the guidelines laid out below (steps 1-5).

5.5. The developer then confirms this assignment with the Council at the earliest opportunity (step 6).

5.6. If determined correctly according to the guidelines, the Council is likely to simply confirm the provisional classification as proposed. However, due to the site-specific nature of air quality problems, it may, in some cases, be necessary for the Council to adjust this assignment. In such an event, a clear explanation would be provided.

5.7. Sites are classified through the following steps; further information on each is provided in the corresponding paragraphs, indicated in brackets:

Step 1:	Establish the size of the development as 'small' or 'large'	[para 5.8]
Step 2:	Identify whether the site is within the 'plain' or 'hatched' area	[para 5.9]

Step 3:*	Estimate the trip rate for the development site and determine whether the specified thresholds are exceeded	[para 5.11]
Step 4:*	Consider whether the development has potential to introduce significant new exposure to poor air pollution	[para 5.12]
Step 5:	Determine the provisional classification as Type 1, Type 2, Type 3, Type 1X, Type 2X or Type 3X	[para 5.13]
Step 6:	Confirm the final classification through discussion with the Local Planning Authority at the earliest opportunity	[para 5.14]

***Short-cuts for selected cases**

- (1) Small sites located in unhatched areas do not require steps 3 or 4
 - (2) Small sites located in hatched areas, do not require step 3
 - (3) Large sites located in unhatched areas do not require step 3
- (note: size and location are characterised in steps 1 and 2, respectively)

Step 1: Size (performed by developer)

5.8. All sites are categorised as **large** or **small** according to the following thresholds:⁸

	Land Use	Unit	Large Sites
A1	Food retail	GFA*	>800
A1	Non-food retail	GFA	>1500
A2	Financial and professional services	GFA	>2500
A3	Restaurants and cafes	GFA	>2500
A4	Drinking establishments	GFA	>600
A5	Hot food takeaway	GFA	>500
B1	Business	GFA	>2500
B2	General industry	GFA	All Sites
B8	Storage or distribution	GFA	All Sites
C1	Hotels	Bedroom	>100
C2	Hospitals and nursing homes	Beds	>50
C2	Residential education	Student	>150
C2	Institutional hostels	Resident	>400
C3	Dwelling houses	Unit	>80
D1	Non-residential institutions	GFA	>1000
D2	Assembly and leisure	GFA	>1500
-	Others	Discuss with LPA	Discuss with LPA

*GFA – Gross Floor Area in square metres

Note: For mixed used developments, the entire site is considered large if any single use exceeds the limits indicated in the table above or if the total combined GFA > 1500

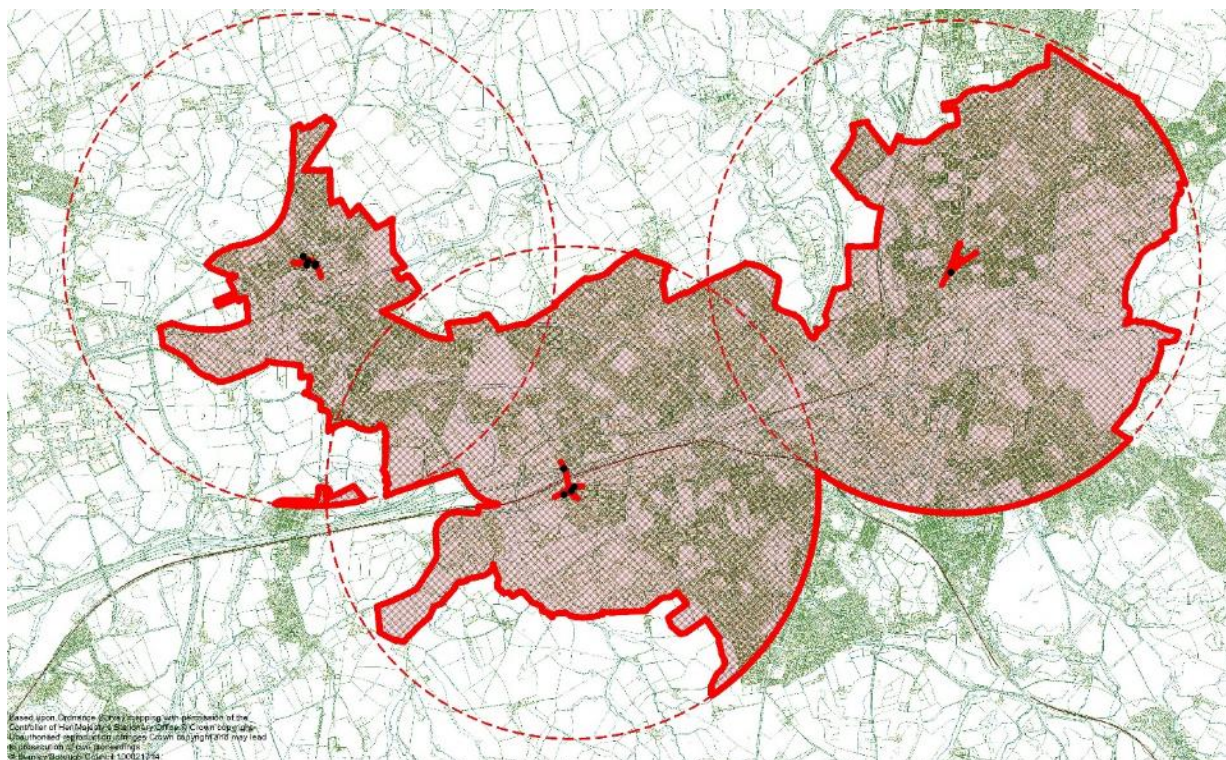
⁸ These thresholds match those set out in Appendix 8 of Burnley's Local Plan with regard to the submission of a Transport Assessment and Travel Plan with the exception of B2 and B8 where these thresholds refer to all sites.

Step 2: Determine Location (performed by developer)

5.9. Sites are categorised as being located in the **plain** or **hatched** areas as shown on the following map.

5.10. These 'plain' or 'hatched' areas reflect the relative potential of new development within them to generate traffic which could impact on priority areas of poor air quality. In Burnley, air quality monitoring has identified three priority areas, at: Burnley Road, Padiham; the junction of Accrington Road and Rossendale Road; and Colne Road (Duke of York).

Figure 2: Hatched and Plain Areas



Note: The hatched area is the area within the Local Plan Development Boundary which is within 2km of the three priority areas.

Step 3: Estimate Traffic (performed by developer)

5.11. Large sites in the hatched areas are categorised directly in relation to the **traffic** they are likely to generate. This requires an estimate of the associated traffic flows for all vehicles and also for Heavy Goods, buses or coaches.* These need to be expressed as annual average daily trips (AADT) and then assessed against the following thresholds:

AADT Increase Large Sites in Hatched area	Estimated Increase in Traffic Flow	
	All Vehicles (>1,000)	and/or HGV, buses and coaches (>30)

* Note: estimation of increased traffic flow is likely to require specialist input, for example from a transport consultant, or potentially as advice from the planning authority. Relevant data may also be available from a transport assessment, where this is available.

Step 4: Consider Exposure to Poor Air Quality (performed by developer)

5.12. Step 4 considers whether use or occupation of the site introduces new* exposure to poorer air quality. This requires an opinion as to whether the site meets the 'exposure sensitive site' definition in the box below. Specialist knowledge is required to interpret this definition, which would normally be provided by the developer's air quality consultant or potentially through discussion with the planning authority.

Definition of Exposure Sensitive Sites

Exposure sensitive sites comprise locations where air quality is a concern and members of the public have access and are likely to stay there for a period of time. In some locations the time period may be as little as an hour, such as a café. More common is the possibility of longer exposure introduced by developments such as houses, flats, student accommodation, schools and hospitals.

Notes.

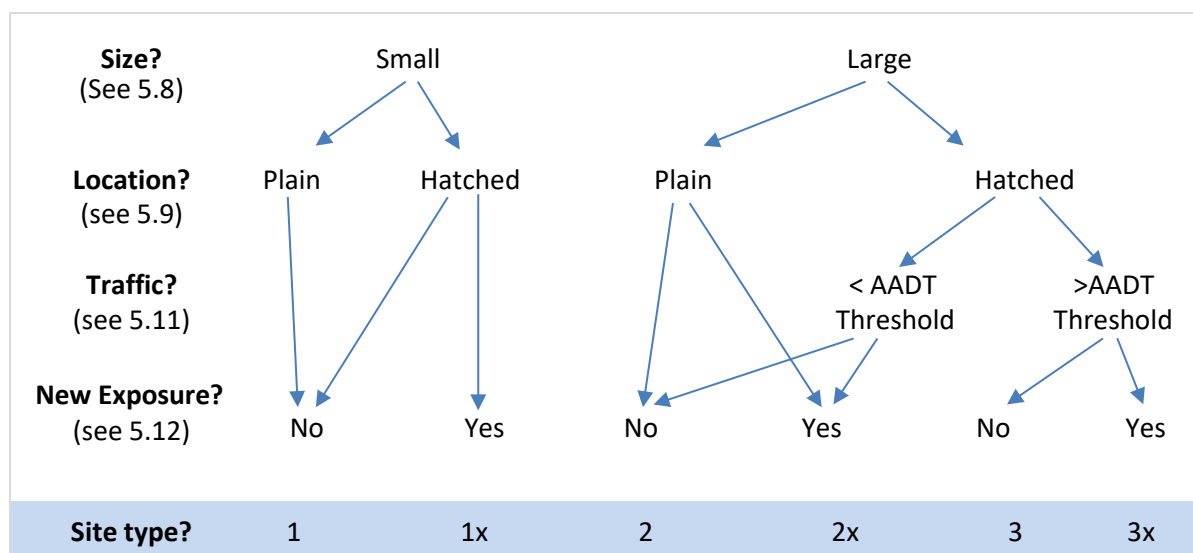
(1) Occupational exposure is covered by other legislation and so is not relevant here.

(2) Exposure sensitive sites include those which would fall under the above criteria through exercising permitted development rights, for example - the permitted conversion of office space to residential.

* This step concerns protecting those occupying and using/occupying the development site (i.e. new exposure). Potential worsening of existing exposure is managed via the consideration of emissions and concentrations.

Step 5: Provisional Classification Determined (performed by developer)

5.13. The chart below shows how to combine the results of steps 1 to 4, in order to determine the provisional site type:



Step 6: Final Classification (confirmed by the planning authority)

5.14. The provisional classification is confirmed through discussion with the planning authority. This should occur at the earliest opportunity. If determined correctly according to the preceding guidelines, the authority is likely to simply confirm the provisional classification as provided. However, due to the site specific nature of air quality problems, it may be that in some cases, it is necessary for the assignment to be adjusted to reflect site specific factors or other concerns (such cases are relatively rare, and a clear explanation would be provided for the adjustments).

5.15. Once finalised, the site type is used to establish requirements for an impact assessment. It also has bearing on the likely scope of mitigation necessary to meet planning policies. These aspects and implications are explained fully in section 6.

6. Assessment and Mitigation

Type of Assessment Required

6.1. Depending on the nature of the development site, different types of impact assessment are required.

6.2. These correspond to the three air quality concerns identified in para. 3.1:

Emissions Assessment	associated with overall level of pollutant emissions
Concentration Assessment	associated with direct impacts on pollutant concentrations
Exposure Assessment	associated with risk of human exposure to air pollution

6.3. The site type, established in section 5, is used to set the requirements for an impact assessment. It also has bearing on the likely scope of subsequent mitigation. These stipulations are summarised in the table below, with further explanation provided in the corresponding paragraphs (colour coded and indicated on the right-hand side).

6.4. It is important that impact assessment and mitigation proposals are considered together, since the former needs to include evidence on the efficacy of the latter. Such close linkage is enabled through a requirement for combined reporting by the developer in the form of an ‘impact and mitigation report’. This reporting requirement applies for large sites (i.e. types 2, 2X, 3 and 3X). Section 6 covers the associated developer submissions and LPA decision-making.

Type 1 Small Site:	
No Assessment Required	
Default Mitigation Provisions	Para. 6.14
Type 2 Large Site:	
Default Mitigation Provisions	Para. 6.14
Emissions Assessment	Para. 6.5 – 6.8
Large Sites Mitigation	Para. 6.15
Type 3 Large Site:	
Default Mitigation Provisions	Para. 6.14
Emissions Assessment	Para. 6.5 – 6.8
Concentration Assessment: Taking concentrations in account	Para. 6.9 – 6.10
Large Sites Mitigation	Para. 6.15
Type X Sites:	
Exposure Assessment: Managing Exposure	Para. 6.11 – 6.12

Emissions Assessment

6.5. The selection and design of mitigation measures for large sites is informed by the use of an Emissions Assessment to quantify associated emissions. This is used to determine whether the mitigation proposals represent a balanced and proportionate level of mitigation compared to the harm that would otherwise be caused by emissions associated with the development site.

6.6. Appendix A1 provides technical detail on how to undertake an emissions assessment and present the findings (specialist knowledge is required to understand and respond effectively to these requirements, which would normally be provided by the developer's air quality and transport consultant).

6.7. The box below identifies the headline indices which the LPA will use to review and interpret the results, by forming a view as to the balance and proportionality of the proposed mitigation. It should be noted however, that these indices while important, do not limit the Council's freedom to take other aspects or evidence into account.

Review and Interpretation of Emission Assessment Results

Overall, the authority will consider whether:

- the assurance requirements are met, and - the balance and extent of mitigation is commensurate to emissions harm

In considering the balance and extent of mitigation, the authority will give weight to the following indices (expressed in absolute terms and also as a % of base harm):

Design Credit	Credit awarded in recognition of design features which go beyond minimum policy requirements and contribute to air quality and emission goals, but for which the value is not otherwise adequately reflected by the emissions assessment calculations.
On-Site Mitigation	Benefit-based valuation of proposed on-site mitigation calculated as emissions damage costs avoided over the benefits period (usually 5 years).
Contribution	Monetary value of any proposed supplementary contribution for off-site compensatory measures.
Total Mitigation Credit	The simple sum of design credit, on-site mitigation credit and contribution.

6.8. The Council will consider the merit of mitigation proposals on a site by site basis, while seeking to maintain a balanced and consistent approach overall.

Concentration Assessment: Taking concentrations into account (applies to type 3 and 3X sites)

6.9. Type 3 sites require a concentration assessment to estimate changes in ambient pollutant levels arising from the development and to consider implications for meeting air quality objectives. Concentration assessment complements emissions assessment, by providing a safeguard to ensure that a single development does not cause unacceptable localised impacts to ambient concentrations of air pollutants.

6.10. Appendix A2 provides technical detail on how to undertake a concentrations assessment and report on the findings. The box below explains how the authority will review and interpret these results. Specialist knowledge is required to understand and respond effectively to these requirements, which would normally be provided by the developer's air quality consultant.

Review and Interpretation of Concentration Assessment Results

The test metric is: Percentage increase in pollutant concentration (usually NO₂), arising from construction, occupation and use of the site. An increase of 5% or more of the corresponding air quality objective or limit value is cause for concern.

The level of concern is influenced by the location where impacts occur. If the impact occurs within an AQMA, or would of itself lead to the potential creation of a new or extended AQMA, this indicates a severe impact on local concentrations. Where severe impacts are unlikely to lead to the worsening, creation or extension of an AQMA, they are nonetheless a significant concern and so trigger a 'warning light'.

Severe impacts are likely to lead to a refusal of planning permission. It is therefore important for the developer to identify potential for such impacts at the earliest opportunity and to consider associated design and mitigation options. A warning light remains a major concern and should be avoided if at all possible, including by giving particular emphasis to the design and optimisation of on-site mitigation.

Attributing concentration changes to individual development sites, is a challenging task and requires a careful approach. It is the developer's responsibility to ensure that assessment is made using reasonable and transparent assumptions. Failure to do so is likely to incur delays or additional cost.

The Council reserves the right both to form an independent view as to the uncertainty associated with inputs or outputs, presented by the developer; and also to adopt a precautionary approach when taking these uncertainties into account.

Exposure Assessment: Managing Exposure (applies to type 1X, 2X and 3X sites)

6.11. Type 1X, 2X and 3X sites require an exposure assessment to determine if future occupants of a development are likely to be exposed to unacceptable levels of air pollution. This is usually a simple screening exercise undertaken by reviewing local monitoring data, considering location of AQMAs, and discussion with a local air quality officer (further details Appendix A3).

6.12. Where new exposure is introduced by the development, this triggers a warning light, indicating that suitable exposure measures are required (further details Appendix A3). Failure to propose suitable measures will be considered as a severe impact and is likely to result in refusal.

Mitigation

6.13. Most developments will generate some level of impact and risk in relation to air quality. Consequently, most sites will require some level of mitigation. As well as providing measures which will help to reduce emissions, mitigation can also have co-benefits in relation to addressing climate change.

Site Type 1 - Small Site Default Mitigation Provision

6.14. Default mitigation, as set out in the policies of the Local Plan, will apply to all relevant developments⁹ providing relatively simple and widely applicable measures to help reduce emissions. Some developments may need to make other specific provisions relating to concentration or exposure effects.

- (i) **Control of Construction Emissions:** Typically will require adoption of a 'construction environmental management plan' which covers issues such as construction vehicle emission standards, construction staff travel planning and delivery arrangements and control of fugitive dust emissions. (Further details: Appendix B1)
- (ii) **Ultra Low Emission Vehicle (ULEV) Infrastructure:** Aimed at encouraging the uptake of ULEV vehicles. Generally requires ground work for and/or installation of recharging infrastructure for ULEV vehicles (inside/outside, single/multiple users). (Further details: Appendix B2)

Site Type 2 & 3 - Large Sites Mitigation (applies to type 2, 2X, 3 and 3X sites)

6.15. In addition to the default mitigation, larger sites (Type 2, 2X, 3 and 3X) are required to design and implement a package of measures. The broad scope of which is described in the text below:

The following hierarchy of mitigation is expected to be considered:

- (i) **Additional ULEV Infrastructure:** Although a minimum standard level of ULEV infrastructure is expected in accordance with Policy IC3 and the associated car parking standards set out in Appendix 9 of the Local Plan, additional infrastructure provision beyond these may be considered part of the mitigation proposed for larger sites.
- (ii) **Trip reduction:** It is important that the sites minimise trips initially through sensible location and good design; and then through effective mitigation. Requirements are usually established via the separate transport assessment process and packaged in the form of either a transport assessment, transport statement or travel plan. Policy IC2 and the associated thresholds in Appendix 8 of the Local Plan set out the requirements for Transport Assessments, Transport Statements and Travel Plans. The requirements for these will be dependent on the size, nature, scale, location and potential impact of the development in question.
- (iii) **Emissions Reduction Measures:** are aimed at reducing emissions from individual vehicle trips that remain following trip reduction. Measures typically encourage fitting of emission reduction technologies for existing vehicles or by enabling and promoting the uptake of newer or alternatively fuelled ones. (Further details: Appendix B3)

⁹ The Local Plan policies set out thresholds and minimum standards e.g. in respect of Charging points for ULEVs (IC3) and Travel Plans (IC2)

- (iv) **On-site Green Infrastructure:** The planting of trees and shrubs on-site may be required by other policies; additional and strategically placed planting can be a relatively low cost intervention that can have significant impacts on local air quality.
- (v) **Contributions:** Where the emission impact can't be fully mitigated by measures on, or in close proximity to a development, a financial contribution may be requested towards wider mitigation measures, typically including investment in local fleets, road networks and junctions, low emission public infrastructure or green infrastructure. Green infrastructure is increasingly promoted as a method for air pollution mitigation: street and park trees, green walls, green roofs and other means of introducing vegetation into the urban landscape, on the basis that pollutants deposit more efficiently onto vegetation than onto smoother, impervious, artificial surfaces. (Further details: Appendix B4 and B5)

7. Developer Submissions

7.1. It is the developer's responsibility to establish the air quality assessment and mitigation expectations for their site at an early stage in the planning process, using the guidelines laid out in this document. Early discussion with the local planning authority is necessary to confirm site classification (section 4) and is recommended in relation to any other aspect of the process, about which they are uncertain or unclear.

7.2. Small sites (Type 1 and Type 1X) do not require substantial submissions by the developer, providing that the relevant default mitigation provisions and exposure screen/measures are appropriately addressed and documented. Larger sites (Type 2, 2X, 3 and 3X) require a formal 'impact assessment and mitigation report.' To avoid repetition, these elements can be incorporated within the applicant's transport assessment submitted to satisfy Local Plan policy IC2.

7.3. The Council offers a paid pre-application advice service which provides feedback on proposed developments and any submission requirements.¹⁰ Further information is also available in the Council's Validation Checklist which will be updated in due course to reflect the content of this SPD.¹¹

7.4. Developer submissions are reviewed by the Council's Environmental Health team, and where appropriate external consultants, who will form an opinion as to the acceptability of the proposal in relation to air quality and will provide a response and recommendation to the development management officer. This opinion will be based, according to the type of site, on the following tests:

Test Number	Test Description	Detail	Applicable Sites
1	Meets default mitigation provisions for mitigating emissions	Para. 6.14	All relevant sites
2	Provides balanced and proportionate emissions mitigation	Para. 6.7	Type 2, 2X, 3, 3X
3	Avoids unacceptable direct impact on local concentrations	Para. 6.9	Type 3, 3X
4	Avoids the introduction of new unacceptable exposure	Para 6.11	Type 1X, 2X, 3X

7.5. Developments meeting the relevant tests will be considered acceptable with regards air quality (transport). Those failing any single test will be considered unacceptable and the Environmental Health team are likely to recommend their refusal.

7.6. These tests are applied first and foremost on the basis of outcomes, reflecting the net air quality impacts and risk associated with the site taking proposed mitigation into account. In situations, where outcomes are not clear cut, perhaps due to the quality of the best available data, uncertainties in an assessment or limited mitigation options, the authority may also take into account the extent to which the developer has taken all reasonable steps to identify and address relevant impacts and risks (i.e. their endeavour). Any such consideration however will not necessarily override the primary consideration of outcomes.

7.7. Final recommendations by the Environmental Health team are then considered as part of the wider planning balance through the application process.

¹⁰ <https://www.burnley.gov.uk/residents/planning/development-control/permission-needed>

¹¹ <https://www.burnley.gov.uk/residents/planning/how-make-application/what-makes-valid-application>

8. Glossary and Key Terms

These include abbreviations, technical terms and terms used in a specific way within this document.

Air Quality Action Plan (AQAP)	An air quality action is drawn up by a local authority in order to lay out the action to be undertaken in relation to a designated Air Quality Management Area (AQMA) in order to meet Air Quality Objectives (AQOs).
Air Quality Management Area (AQMA)	If an authority identifies a location where Air Quality Objectives are not met or are unlikely to be met, they have a duty to declare an Air Quality Management Area and take action to improve the situation.
Air Quality Objective (AQO)	Air Quality Objectives are targets set by national government, which local authorities have a duty to work towards. Compliance with AQ objectives is important to protect health; however it does not represent safe levels of pollution, since considerable harm occurs below these levels.
Annual Average Daily Traffic (AADT)	Total volume of vehicle traffic on a highway or road for a year divided by 365 days.
Balanced and Proportionate	The intended level of emissions mitigation for all sites.
Concentration Assessment	Assessment of direct impacts on pollutant concentrations (CNA).
Default Mitigation Provisions	Mitigation provisions which apply to all sites, ensuring simple universal precautions.
Emissions Assessment	Assessment of overall impact of pollutant emissions (EMA).
Exposure Assessment	Assessment of site occupant's exposure to air pollution (XPA).
Impact Assessment and Mitigation Report	A single report prepared by the developer which lays out site impacts and proposed mitigation.
Larger Site Mitigation	In addition to the default mitigation provisions, larger sites should also provide a package of emissions measures commensurate to their site classification.
Local Air Quality Management (LAQM)	Duties assigned under Part IV of the Environment Act 1995, which require local authorities to monitor and assess air quality and take action to protect it.
Local Planning Authority (LPA)	The local authority or council that is empowered by law to exercise statutory town planning functions for a particular area of the United Kingdom.
Nitrogen Dioxide (NO₂)	Nitrogen dioxide (NO ₂) is a gaseous air pollutant produced from combustion processes. In urban outdoor air, its presence is mainly due to traffic.
Particles (PM)	A mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen. Others are very small, making them invisible to the naked eye.
Review and Assessment (R&A)	Local authorities have a duty under Local Air Quality Management to review and assess the air quality across their area.
Severe Impact	Level of impact that is likely to lead to planning refusal
Site Classification	Classification is used to simplify passage of a development through the appraisal process. It is based on the general characteristics of the site.
Warning Light	A level of impact that is a cause for concern though, if managed appropriately, is unlikely to lead to planning refusal.

Appendices

Appendix A1 - Emissions Assessment

Aims

A1.1 To assess the transport emission impacts of the development, propose corresponding mitigation and demonstrate that the latter is both balanced and proportionate.

Work

A1.2 The study comprises the following tasks (although presented as a linear sequence, they are best approached as an iterative process of optimisation):

- Identify and describe relevant characteristics and features of the development and its design
- Estimate the type and levels of traffic generated by the site through its construction, occupation and use
- Estimate the associated emissions and the health damage caused by this traffic
- Select and specify on-site mitigation and estimate associated cost and emission benefits
- Consider and, if justified, propose a financial contribution for further mitigation measures
- Present findings in a summary report, supplemented by detailed tables and technical notes (results should include the headline indices, identified in para. 5.9 of the main text)

Assurance

A1.3 The report should contain a statement to the effect that in undertaking the work, efforts have been made to ensure that:

- The work reflects relevant guidance and reporting is concise, transparent and of good quality
- Base design is well described and reflects good environmental design principles
- Estimated fleet activity and impacts are based on reasonable and realistic assumptions
- Appropriate effort has been made to identify, assess and propose mitigation
- Balance of mitigation reflects the mitigation hierarchy and also local site characteristics
- Scale of mitigation is commensurate to the emissions harm

Further Guidance

A1.4 Detailed Guidelines for undertaking emission assessment are provided by the Low Emission Partnership. The most recent update should be followed (In Nov 2016, this was EMA-TG-2.0 available at: http://www.lowemissionstrategies.org/les_planning_guidance.html).

A1.5 Emission changes presented in assessments must be based on current or very recent site use impacts. Impacts associated with historic land uses or potentially conferred through previous planning approvals should not be used to discount impacts. In all cases a possible 'worst case' scenario impact should be included in the assessment and this should be based on similarly selected traffic data. The recommended approach for emission assessment (with examples) is provided at the above link but in summary the assessment should ideally include:

- A calculation showing the developments mass emissions impact by pollutant and also by each identified transport source (by fleet, journey or vehicles type as appropriate). This should then be used to calculate the associated pollutant damage cost over a 5 year period (see <https://www.gov.uk/guidance/air-quality-economic-analysis>).
- Splitting transport impacts into vehicle, fleet or journey groupings can be important in identifying appropriate mitigation measures.

- An estimation of the cost of providing any proposed pollution reducing mitigation.
- A calculation of the predicted reduction in polluting emissions and associated reduction in air pollution damage costs after mitigation.

Appendix A2 - Concentration Assessment

A2.1 The purpose of concentration assessment is to examine likely changes in local pollutant concentrations as a result of a proposed development. The following provides a checklist for undertaking such an assessment.

A2.2 This checklist is intended as a guide. It is not exhaustive and other elements may be required. Before an assessment is undertaken, the methodology, datasets and assumptions, and the reporting/evaluation requirements should be agreed with the Local Authority.

Aims

- Assess the existing air quality in the study area
- Predict the future air quality without the development
- Predict the future air quality with the development (with default mitigation)
- Predict the future air quality with the development (with mitigation above and beyond default mitigation)

Methodology

A2.3 This will include:

- Pollutants to be modelled and the standards which apply
- Data sources: meteorological, population, traffic and emissions - for background assessment
- Assumptions used to predict future air quality without the development
- The effects of other committed¹² large developments (as defined in paragraph 5.8) within 2 KM of the site (cumulative effects)
- Output parameters
- The model to be used, including:
 - whether screening or local scale dispersion
 - use of individual receptors or contour modelling
 - location of receptors (or area for contour modelling)
 - model validation

Report

A2.4 Should present all relevant detail on the following:

- The development
- The study area (including receptors or the area for contour modelling and any sensitive sites)
- Air quality standards and objectives
- Methodology (see above)
- Modelling results (presented with a clear summary alongside all supporting data).
- Model validation
- Evaluation of results (see below)

¹² sites with planning permission not started, completed or operational and newly operational development not already assessed in the above

Evaluation

A2.5 Should include, as a minimum:

- Changes in emissions to air as a result of the development, by source, pollutant and time.
- The impact that these emissions will have on ambient air quality (pollutant concentrations).
- The likely changes in population exposure over time.
- Any exceedances of the NAQS air quality objectives, or EU limit values brought about by the development, or any worsening of a current breach, including the geographical area affected.
- If the development will compromise any aspects of the actions identified in the Council's Air Quality Annual Status Report.

Further Guidance

A2.6 Environmental Protection UK guidance on Planning for Air Quality (available at: <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>) provides useful technical context particularly in relation to concentration assessment.

Appendix A3 - Exposure Assessment & Measures

Assessment

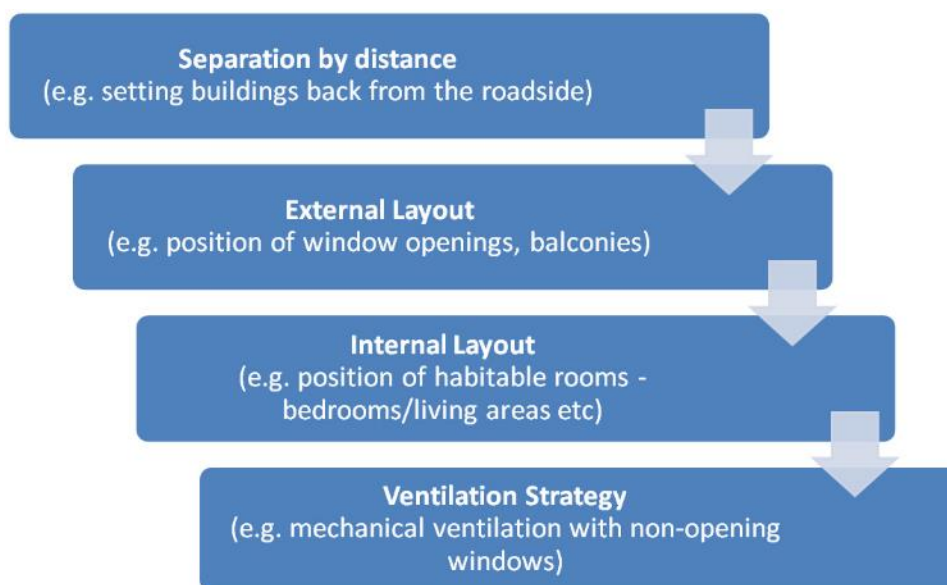
A3.1 Assessment will usually comprise a simple screening involving a review of local monitoring data, AQMA designations and, potentially, discussion with the local air quality officer.

A3.2 The screen should identify, in broad terms:

- the approximate number of people at an increased risk of exposure to poor air quality;
- the location, age and relative health of these individuals;
- broad conclusions regarding the exposure risk presented by the development.

Mitigation

A3.3 Any increase in exposure to poor air quality is a concern and relevant provisions must be taken to prevent it, or to reduce its extent as far as practically possible. The best approach is indicated by the design hierarchy laid out below:



Acceptance

A3.4 Suitable measures will ensure that:

- (i) Pollution levels at facades with openings to habitable rooms do not exceed the Air Quality Objective*
- (ii) Effective room ventilation is maintained within habitable rooms

*Where the proposed design leaves uncertainty regarding the pollution levels at facades with openings to habitable rooms, the developer is likely to be required to demonstrate via appropriate monitoring/modelling that the acceptance criteria will be achieved.

Appendix B1 - Construction Practice

General Approach

B1.1 As set out in Local Plan Policy NE5 1), where required due to the nature and scale of a development proposal, a construction environmental management plan (CEMP) must be submitted to and approved by the planning authority. The plan should include appropriate measures, which will be implemented, to minimise emissions to air and restrict them to within the site boundary during the construction (or demolition) phase.

B1.2 Measures, may include:

- On site wheel washing
- Restrictions on use of unmade roads
- Agreement on the routes to be used by construction traffic with the Council (larger schemes)
- Restriction of stockpile size, also covering or spraying them to reduce possible dust
- Targeted sweeping of roads subject to high traffic levels and silt loading
- Minimisation of evaporative emissions and prompt clean-up of liquid spills
- Prohibition of intentional on-site fires and avoidance of accidental ones
- Control of construction equipment emissions (incl. use of low emission fuels and technology)

B1.3 In presenting these measures, the plan should also provide detail on the management and control processes, which will ensure that they will be implemented effectively and adhered to.

Typical Wording for planning conditions

B1.4 Prior to any works commencing on site, a CEMP shall be submitted to and approved in writing by the Local Planning Authority. The CEMP shall identify the steps and procedures that will be implemented to minimise the creation and impact of noise, vibration and dust resulting from the site preparation, demolition, groundwork and construction phases of the development. It is recommended that routing of construction traffic is also agreed within this plan, to prevent increased emissions and noise from construction vehicles affecting the wider urban area.

Sources of Guidance

B1.5 Guidance to assist developers with the assessment of dust from construction and demolition activities has been produced by the Institute of Air Quality Management (IAMQ) and should be followed for major developments. Guidance notes are available for download from <http://iaqm.co.uk/guidance/>

B1.6 Further guidance on the control of dust and emissions from construction and demolition has been produced in partnership by London Councils and the Greater London Authority (with assistance from the Building Research Establishment and the PRECIS Working Group). Available for download: <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust-and>

Appendix B2 - ULEV Charging Minimum Requirements

B2.1 The table below sets out standard provision levels included in Burnley's Local Plan Parking Standards (Policy IC3 and Appendix 9: Car Parking Standards)

Provision of parking bays and charging points for Ultra Low Emission Vehicles in new developments (including conversions)	
Residential development schemes over 10 dwellings	1 off-street charging point per detached dwellings
Non-residential developments	<p>20 to 50 spaces: 1 bay with charging point for use by electric vehicles only</p> <p>> 50 spaces: Minimum 2 bays with charging points for use by electric vehicles only</p>

B2.2 Additional provision over and above the minimum requirements set out above will be encouraged and supported in line with Policy NE5: Environmental Protection subject to the consideration of the townscape impact in accordance with Policy SP5: Development Quality and Sustainability and IC5: Protection and Provision of Social and Community Infrastructure. Where these affect heritage assets, care should also be taken to avoid harm and damage to historic fabric in accordance with Policies HE2: Designated Heritage Assets: Listed Buildings; Conservation Areas; and Registered Parks and Gardens and HE3: Non-designated Heritage Assets.

Appendix B3 - Emissions Reduction Measures

B3.1 Emissions reduction measures are a package of measures which help to reduce emissions over and above design features and other aspects of mitigation which may have already been incorporated into the scheme proposal. The package sets out to encourage and incentivise the use of low emission fuels and transport technology.

B3.2 The package may tackle one or a combination of the following site sub-fleets:

- Private cars (residential and/or visiting the site)
- Captive fleet(s) (site based – light and/or heavy)
- Service vehicles (goods) (visiting site: light/heavy for collection/delivery of goods)
- Service Vehicles (people) (visiting site: light/heavy for personal transport, e.g. school buses/taxis)

B3.3 Non exhaustive examples¹³ of individual measures include:

- Travel plan measures discouraging high emission vehicles
- Travel plan measures encouraging low and ultra-low emission vehicles
- Travel plan measures including the introduction of a car club (particularly one using ultra low emission vehicles)
- Provision of spaces with charging points for electric vehicles.
- Designation of preferential parking spaces for low emissions vehicles to incentivise use.
- Differential parking charges depending on vehicle emissions.
- Commercial vehicles Euro based standard¹⁴
- On-site fleet low emission operations plan¹⁵
- Use of ultra-low emission service vehicles

B3.4 The developer should consider the full raft of possible measures and select an appropriate mix, which delivers mitigation commensurate to the scale and impact of the development.¹⁶

B3.5 Selected measures should be presented in the form of an on-site mitigation plan comprising:

- a list of measures, indicating for each measure: target fleet(s), nature and scale of mitigation
- an estimate of total mitigation expressed as mass of pollutant and also %TBD¹⁷
- an estimate of additional cost to the developer for each measure and overall
- a timed plan for when and how each measure will be implemented and monitored

¹³ Examples of other actions that could be included in an Low Emission Strategy can be found on the Low Emissions Partnership website and on the Low Emissions Hub at http://lowemissionstrategies.org/les_planning_guidance.html

¹⁴ Or equivalent national standard post-‘Brexit’

¹⁵ Example wording: ‘Fleet operations should provide a plan for reducing emissions and encouraging the take up of low emissions technologies and alternative fuels.’

¹⁶ Early and ongoing liaison with the planning authority on the nature, scale and intensity of proposed mitigation and also the methodology, assumptions, format and presentation of associated data is recommended.

¹⁷ See Appendix B2 for further information on the emission assessment approach and site performance benchmarks.

Appendix B4 - Contributions

B4.1 Where required and appropriate, the financial contribution will usually be agreed at a level which reflects residual site emissions¹⁸ cumulated over a 5 year period¹⁹ from first operation, expressed as monetised harm to society. In calculating the financial contribution an assessment will be made with regard to the impact of this contribution, and any other contributions such as education or off site affordable housing, on scheme viability. More information on contributions and how the Council will prioritise them where viability is an issue is available in the Council's Developer Contributions SPD²⁰. However, where contributions are considered entirely necessary to make the scheme acceptable in planning terms such that its absence the scheme would be wholly unsatisfactory, and the applicants is unwilling to agree to these, viability will not be relevant and applications will be refused. In this the Council's Developer Contributions SPD, such infrastructure is described as 'necessary and critical'..

B4.2 In cases of 'necessary and important' on and off-site other infrastructure required by local or national policy, viability can be factored in and failure to provide or contribute to certain infrastructure may or may not result in the refusal of the scheme based on the consideration of the scheme against the Local Plan read as whole, and whether material considerations indicate otherwise. Discussions about contributions and their prioritisation will take place as early as possible in the planning process, including at the pre-application stage and where relevant will involve infrastructure providers such as Lancashire County Council in its role as highways and education authority.

B4.3 On payment of the agreed contribution, the responsibility for achieving and demonstrating associated good value emission reduction passes to the local authority other public sector body or relevant private sector operator.

B4.4 A non-exhaustive example of possible uses of secured funds include:

- On-street EV charging points;
 - Other off-site low emissions refuelling infrastructure;
 - Low emission bus service provision;
 - Low emission waste collection services;
 - Cycle hire schemes and cycling infrastructure;
 - Incentivising for the take up of low emissions fuels and technologies;
 - Public transport improvements;
 - Contributions to renewable energy generation projects;
 - Supporting low emission car clubs;
 - Highway network improvements (e.g. signal improvements and traffic management);
 - AQMA relief road(s);
 - Air quality monitoring
 - Enhancement/extension of the borough's multifunctional green infrastructure network;
- and
- Greening of roadways, planting of 'Living Walls' and other suitable areas planted up with native trees & shrubs to improve air quality.

¹⁸ i.e. after taking all on-site mitigation into account

¹⁹ or the anticipated lifetime of the site occupation/operation if < 5 years.

²⁰ This SPD is currently a draft.

Appendix B5 - Examples of good practice and potential uses

B5.1 Ways in which developers are working individually and in conjunction with Local Authorities to reduce air pollution can be seen in some of the following examples.

Living Walls/Pillars

B5.2 Living walls/pillars in new developments including community buildings, commercial settings and new urban roadways.²¹ Depending on the plant selection, increased absorption of PM has been observed and helped contribute to reducing pollution levels. As well as reducing PM in the surrounding area, studies have shown the benefit of increasing biodiversity, heat retention to buildings and noise reduction/insulation²².



London Westfield Shopping Centre



Stockport Town Centre



Smart Living Pillars Ebury St London



Selbourne Rd Walthamstow

²¹ Photo credits: <https://www.ansgroupglobal.com/living-wall/about>
<https://www.scotscape.co.uk/services/smart-pillar>

²² Impact of Roadside Tree Lines on Indoor Concentrations of Traffic-Derived Particulate Matter Barbara A. Maher, Imad A. M. Ahmed, Brian Davison, Vassil Karloukovski, Robert Clarke. Efficient Removal of Ultrafine Particles from Diesel Exhaust by Selected Tree Species: Implications for Roadside Planting for Improving the Quality of Urban Air. Environmental Science & Technology 2019, 53 (12) Huixia Wang, Barbara A Maher, Imad AM Ahmed, Brian Davison.

Electric Vehicle Charging Points

B5.3 The County Council is working in partnership with BP Chargemaster to provide several locations where drivers of electric or hybrid vehicles can charge when they are in the Lancashire area. As part of the partnership the County Council is providing an initial 150 parking bays, either at the side of the road or in their own car parks, where charging facilities can be provided.

B5.4 The County Council is installing two different types of charge units. These will include 50 kWh rapid charge points which will allow most vehicles to take a full charge in less than an hour and 7 kWh charge points that are more suited to dwell times of 2 hours or longer. The mix of these units will depend on location, power supply and demand. In Burnley four 7 kWh charge points have been installed on Kingsway. A further 2 on Padiham Road are currently under investigation.



EV Charging points Kingsway Burnley



Blackpool All Electric Taxi Fleet

B5.5 Blackpool is the first local authority in the UK to have a privately operated 100% full EV private hire taxi fleet as part of the private hire fleet operating within the Borough. This has been in part due to the Local Authority's forward thinking in developing an extensive network of EV charging points within its Borough.

B5.6 Burnley Council and five other local authorities across Lancashire submitted a successful bid for Government funding that could see four rapid charging points installed in each area. Potential sites on council-owned car parks have been identified and are currently being evaluated by Electricity North West.

B5.7 The funding bid was intended to promote the uptake of electric taxis. However, until such time as taxi demand for the chargers is high enough, the aim is to initially make the charging points available for wider public use. Developer contributions could be used to build on this network of charging points.

B5.8 Whilst the local plan policies require the installation of electric vehicle charging points for certain new developments, a number of private sector businesses are also providing these at their own instigation, for example in supermarket and hotel car parks and at petrol filling stations, and this is helping to build up the area's recharging infrastructure.

B5.9 Developer contributions may be used to work in partnership with the County and Borough Council to install further charging points on the highway and in public car parks.

Cycling and Walking in Lancashire

B5.10 Lancashire County Council's cycling and walking strategy 'Actively Moving Forward'²³ – sets out an ambitious plan for increasing the number of people walking and cycling in the county by 2028. Through improving and increasing access to cycling and walking infrastructure, alongside training and promotional activities, it aims to significantly increase public participation in cycling and walking.

B5.11 As part of the strategy, work has now commenced on developing Local Cycling and Walking Infrastructure Plans (LCWIPs) for the five Lancashire Highway and Transport Masterplan areas. The Plans will include a network plan for cycling and walking infrastructure and a prioritised list of schemes for delivery over short, medium and long term timeframes. These plans will be used to support future infrastructure decisions and access new funding schemes as they become available. Funding could include developer contributions.

Encouraging Transport Modal Shift

B5.12 Through their involvement in providing comments on planning applications as Highway Authority, Lancashire County Council are seeking a strong commitment from developers to encourage transport modal shift. Consequently they have been requesting that within residential schemes each dwelling is provided with a cycle voucher for the value of £150 and each dwelling also receives a free bus pass for use on the local bus service. The bus pass should be for a minimum of 3 months to encourage a modal change towards public transport. These proposals would be funded via a section106 agreement, detailed within the approved Travel Plan and ultimately administered through the Travel Plan Coordinator.

B5.13 Further information and assistance on developing low emission strategies to assist developers in reducing environmental pollution may be found at <http://lowemissionstrategies.org/index.html>

²³ <https://democracy.blackburn.gov.uk/documents/s2174/Lancashire%20Cycling%20and%20Walking%20Strategy%20-%201%20August%2018.pdf>

Appendix C1 - National, Regional & Local Policies

Acts

Environment Act 1995

The UK Government and the devolved administrations are required under the Environment Act 1995 to produce a national air quality strategy. This was last reviewed and published in 2007. The strategy sets out the UK's air quality objectives and recognises that action at national, regional and local level may be needed, depending on the scale and nature of the air quality problem.

Part IV of the Environment Act 1995 requires local authorities in the UK to review air quality in their area and designate air quality management areas if improvements are necessary. Where an air quality management area is designated, local authorities are also required to work towards the Strategy's objectives prescribed in regulations for that purpose. An air quality action plan describing the pollution reduction measures must then be put in place. These plans contribute to the achievement of air quality limit values at local level.

The Air Quality Standards Regulations 2010

The 2008 ambient air quality directive (2008/50/EC) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems.

The 2008 directive replaced nearly all the previous EU air quality legislation and was made law in England through the Air Quality Standards Regulations 2010, which also incorporates the 4th air quality daughter directive (2004/107/EC) that sets targets for levels in outdoor air of certain toxic heavy metals and polycyclic aromatic hydrocarbons.

National Planning Policy Guidance

National planning policy exists in the form of the NPPF and a small number of other policy documents and written ministerial statements, supported by an online practice guidance covering a series of themes – See ministry of Housing, Communities and Local Government website:

<https://www.gov.uk/guidance/national-planning-policy-framework>

Local Plan Policy

Policy SP6: Green Infrastructure

- 1) In line with Burnley's Green Infrastructure Strategy, the Council will, in partnership with other agencies and stakeholders, seek to protect, enhance and extend the borough's multifunctional green infrastructure network in order to maintain and develop the wider public health, ecological and economic benefits it provides and to ensure that there is an overall net gain.
- 2) In addition to satisfying the requirements of other policies, development proposals should, as appropriate to their nature and scale:
 - a) Seek to retain and enhance green infrastructure assets and functionality through the design process, in particular the key assets identified in Figure 5; and

- b) Be accompanied by an audit of the green infrastructure functions within and adjacent to the site as set out in Table 2 together with a statement demonstrating:
 - i) How these will be retained or enhanced through the development process; or
 - ii) Where loss of or negative impact on GI functionality is unavoidable, what mitigation measures are proposed and/or replacement GI will be provided. Any replacement or mitigation measure should be deployed as closely as possible to the affected GI asset.

Policy NE5: Environmental Protection

1) Development proposals, as appropriate to their nature and scale, should demonstrate that environmental risks have been evaluated and appropriate measures have been taken to minimise the risks of adverse impacts to air, land and water quality, whilst assessing vibration, heat, energy, light and noise pollution both during their construction and in their operation.

Air Quality

2) The Council will seek to ensure that proposals for new development will not have an unacceptable negative impact on air quality and will not further exacerbate air quality in AQMAs or contribute to air pollution in areas which may result in an AQMA. Applicants should consult with the Council's environmental health service to establish if the proposed development is located within an AQMA.

3) An air quality assessment will be required where a development may result in a significant increase in air pollution, or lead to a significant deterioration in local air quality resulting in unacceptable effects on human health, local amenity and/or the environment. Assessments shall address the following:

- a) The existing background levels of air pollution;
 - b) Existing developments and sources of air pollution throughout the borough and the cumulative effect of planned developments; and
 - c) The feasibility of any mitigation measures that would reduce the impact of the development on local air quality.
- 4) The Council will support and promote the provision of charging points for ultra-low emission vehicles.

Light Pollution

5) New lighting schemes should be appropriate to the type of development and its location. Proposals for outdoor lighting should not have an unacceptable adverse impact by reason of light spillage or glare on neighbouring building/uses, the countryside, highway safety or biodiversity in line with Policy NE4. Where appropriate, a light impact assessment will be required as part of the application submission.

Noise Pollution

6) Developments generating noise which is likely to create significant adverse impacts on health and quality of life and cannot be mitigated and controlled through the use of conditions or through pre-existing effective legislative regimes, will not be permitted.

Contaminated Land

7) On sites that are known to be or potentially contaminated, applicants will be expected to carry out an appropriate survey by a suitably qualified and experienced person.

- a) A Phase 1 Desk Study will be required for any application which results in a sensitive end use on a site where such a site is or may be contaminated by virtue of previous users.
- b) A Phase 2 Study will be required if the site is known or identified as having high levels of contamination. A Remediation Strategy shall be provided by the developer to bring the site to an acceptable level of condition which is relevant to the proposed use.

Unstable Land

8) On sites that are known to be or where there is reason to suspect them to be unstable and the risk of instability has the potential to materially affect either the proposed development or neighbouring uses/ occupiers, applicants will be expected to carry out an appropriate assessment by a suitably qualified and experienced person to demonstrate that the proposed development is safe and stable or can be made so. This should:

- a) Include a preliminary assessment including a desk based survey of the previous uses of the site and their potential for instability in relation to the proposed development; and
- b) Where the preliminary assessment establishes that instability is likely but does not provide sufficient information to establish its precise extent or nature, site investigation and risk assessment must be carried out to determine the standard of remediation required to make the site suitable for its intended use.

9) Where remediation, treatment or mitigation works are considered necessary to make the site safe and stable and/or to protect wider public safety, conditions or obligations will be imposed to ensure appropriate works are completed prior to the commencement of development or in accordance with an alternative programme agreed.

Water Quality

10) Development will not be permitted where it would have an adverse effect on the quality or quantity of groundwater resources or watercourses and water bodies.

Policy IC1: Sustainable Travel

1) Development schemes should, as appropriate to their nature and scale:

Promoting Sustainable Travel

- a) Be located in areas well-served by walking, cycling and public transport. Where this is not achievable and where schemes are otherwise acceptable, they will be expected to provide or contribute to providing such linkages before occupation of the site, or at an appropriate trigger point to be agreed, by assessing existing and predicted flows to and from the site and providing improvements that will encourage sustainable travel trips;
- b) Maximise opportunities for the use of sustainable modes of travel by adopting the following user hierarchy:
 - i) pedestrians
 - ii) cyclists
 - iii) public transport
 - iv) private vehicles;

Safe and Convenient Access

- c) Provide for safe pedestrian, cycle and vehicular access to, from and within the development, including adequate visibility splays;
- d) Ensure convenient and inclusive accessibility to all sections of the community to, from and within developments for pedestrians, cyclists and public transport users;
- e) Ensure adequate access for emergency, service and refuse collection vehicles;
- f) For non-residential developments, secure adequate delivery, servicing and drop off facilities;
- g) Maintain the safe and efficient flow of traffic on the surrounding highway network;
- h) Ensure existing public rights of way are retained and where appropriate improved or rerouted; and

Infrastructure

- i) Provide or contribute towards the provision or improvement of on or off-site infrastructure to ensure the development will not materially add to highway safety concerns or reduce the efficiency of the highway network.

Policy IC2: Managing Transport and Travel Impacts

Transport Assessments and Transport Statements

- 1) Development proposals above the thresholds in Appendix 8 should be accompanied by a Transport Assessment or Statement indicating:
 - a) The impact of the development on highway safety, air quality and noise;
 - b) How this impact will be satisfactorily mitigated; and
 - c) How the hierarchy of users (as set out in Policy IC1) have been taken into account and how links have been utilised to encourage connectivity within, from and to the site.

Travel Plans

- 2) Development proposals above the thresholds set out in Appendix 8 should also be accompanied by either a Framework Travel Plan²⁴ or a Full Travel Plan which encourages the use of public transport, cycling and walking.
- 3) The Council may also require a Transport Assessment and a Full Travel Plan for new developments that do not meet the thresholds set out in Appendix 8, where the Council considers that a development is likely to have a significant negative impact on the operation of transport infrastructure; or a cumulative impact from a number of developments in the vicinity, is expected.

“Local Plan Appendix 8: Transport Assessments and Travel Plans

Transport Assessments/Transport Statements

Transport Assessments are required to assess the impact of proposals on transport infrastructure, including the capacity of roads, public transport and walking and cycling infrastructure, and to detail action to manage this impact. They are required to present qualitative and quantitative information

²⁴ A Framework Travel Plan is submitted when the end occupiers of the development are unknown and is prepared in anticipation of a Full Travel Plan

about the anticipated transport and related environmental impacts before, during and after implementation of the proposed development, including details of the accessibility of the site by all transport modes and all users, including disabled people, and the likely modal split of journeys to and from the site.

Where a full Transport Assessment is not necessary, a less detailed assessment in the form of a Transport Statement may be required. Whatever the scale of Transport Assessment/Statement undertaken, it should be used to inform the final design of the development and if applicable, the Full Travel Plan.

Developers are required to demonstrate that the Transport Assessment/Transport Statement has informed the design of the proposed development and the Full Travel Plan. Development proposals should meet the identified needs and address anticipated impacts of the development through the design of the scheme, effective management, including through a Travel Plan where appropriate, and through mitigating any impacts of the scheme, including through planning contributions where appropriate.

Travel Plans

Travel Plans are the key management tool for implementing any transport solutions highlighted by the Transport Assessment/Statement, and are one of the primary tools for mitigating negative transport impacts of development proposals. Travel Plans are required to detail the developer's response to the Transport Assessment/Statement and deliver sustainable transport objectives with a package of measures to promote sustainable transport, including measures to achieve a shift to the most sustainable forms of transport: walking and cycling.

Although a Travel Plan will be unique to any given site, all should contain the following:

- Background – explaining the site, location, numbers of staff and visitor/residents measures already in place or confirmed/committed
- Named Travel Plan Co-ordinator
- Baseline Data – current travel patterns to and from work, business travel undertaken during the working day, travel patterns of visitors to the site or residents trips from it
- Objectives – stating in general terms what the Plan is trying to achieve
- Travel and Infrastructure Audit – description of existing travel infrastructure and facilities and the accessibility of the site
- Targets – clearly identified targets against which the effectiveness of the Plan will be measured, or targets for its delivery. Targets should be site-specific, measurable, achievable, realistic and time related (SMART)
- Actions – detailing the proposed actions and measures for achieving the stated targets, with specific dates and named responsible person
- Promotion – how the Plan itself and specific measures will be promoted
- Monitoring – setting out arrangements for the review and monitoring of the Travel Plan to determine whether the objectives are being met; a monitoring period of at least 5 years from occupation will normally be appropriate

Framework Travel Plan

A Framework Travel Plan is usually associated with an unoccupied or undeveloped site. It sets out the intention, timeframe and steps to be taken to develop a Full Travel Plan.

Full Travel Plan

A Full Travel Plan requires a site or location to be occupied either in full or in part. It must incorporate all the components of a Travel Plan. Where a site isn't fully occupied there should be a commitment to

review the Travel Plan as occupation increases or when the site becomes fully occupied. No detail or content should be presumed, estimated or proxy in nature. All measures and actions included in a Full Travel Plan are expected to be implementable within the timescales specified and should not be speculative or subject to further approval.

Timescales

Where a Travel Plan is required, the documents should be submitted at the following stages in the development process:

- Submission of planning application: Framework Travel Plan
- 6 months after first occupation or other agreed milestone: Full Travel Plan

Thresholds for Transport Assessments and Travel Plans

Developments above the following thresholds will be required to submit a Transport Assessment, Transport Statement and a Full Travel Plan.

Table: Thresholds for Transport Assessments, Statements and Travel Plans

Use Class	Transport Assessment and Travel Plan Threshold (Gross floor area in m ² unless stated)
A1 Retail	>800
A1 Non Food Retail	>1500
A2 Financial and professional services	>2500
A3 Restaurants and cafes	>2500
A4 Drinking Establishments	>600
A5 Hot food takeaways	>500
B1 (a) Offices other than those within A2; (b) Research and Development; and (c) Light Industry	>2500
B2 General Industry	>4000
B8 Storage and Distribution	>5000
C1 Hotels	>100 bedrooms
C2 Residential Institutions, Hospitals and nursing homes	>50 bedrooms
C2 Residential College and school	>150 students
C2 Residential institutions – Institutional hostels	>400 residents
C3 Dwelling houses	>80 units
D1 Non-residential institutions	>1000
D2 Assembly and Leisure	>1500
Other Uses	To be determined in consultation with the local highway authority
Transport Statement	
All	‘Major’ development not above the thresholds

The Council may still require that a Transport Assessment and a Full Travel Plan accompany applications for new developments below these thresholds, where the Council, in consultation with the local highway authority, considers that a development is likely to have a significant negative impact on the operation of transport infrastructure; or a cumulative impact from a number of developments in the vicinity is expected.”

Policy IC3: Car Parking Standards

1) Adequate car parking should be provided for developments as appropriate to their nature and scale. When applying parking standards, the Council will consider the overall merits of the proposal and the following matters/objectives:

- a) The need to encourage the use of alternative means of travel to the private car;
- b) The availability of existing public parking provision or on-street parking nearby;
- c) Whether any under-provision might cause or exacerbate congestion, highway safety issues or on-street parking problems; and
- d) The need to provide increased housing quality and choice.

Residential Development Standards

2) For residential schemes, development will be expected to provide a minimum number of parking spaces per new dwelling depending on their type and location. These minimum standards are set out in Appendix 9. Parking provision should not normally exceed the maximums set out.

3) Adequate provision for cycle parking will also be expected.

Non-residential Standards

4) For commercial and other developments, car parking provision should be adequate to serve the needs of the development but should normally be in accordance with the standards set out in Appendix 9. In areas suffering from significant on-street parking problems, greater provision will be sought, or alternative measures to address potential issues will be required.

5) A minimum number of mobility parking spaces will also be expected as out in Appendix 9.

6) Provision for convenient and secure cycle and motorcycle parking will also be required in line with standards set out in Appendix 9.

Design

7) In operating these parking standards, the following considerations will also apply:

- a) Off and on-street parking provision should be carefully designed, safe and appropriate for the streetscene. Car parking provision that would have a significant adverse impact upon the character of an area will be resisted;
- b) The Council will expect developers to have regard to the Manual for Streets²⁵ when considering parking design; and all parking spaces, including garages, should be of an adequate size; and
- c) Layouts and designs should wherever practicable accommodate the need of disabled road users.

ULEV Charging Points

8) Charging points for ultra-low emission vehicles should be provided in accordance with the standards set out in Appendix 9 where practical.

²⁵ <https://www.gov.uk/government/publications/manual-for-streets>
<https://www.gov.uk/government/publications/manual-for-streets-2>

“Local Plan Appendix 9: Car Parking Standards

i. The following minimum and maximum parking standards will be used as set out in Policy IC3.

Use Class	Broad Description	Specific Land Use	Minimum Car Parking Standards (including garages)	Maximum Car Parking Standards (gross floor space where applicable)
A1	Shops	Food Retail	1 space per 14 m ²	
		Non Food Retail	1 space per 20 m ²	
		Retail Warehouse	1 space per 40 m ²	
A2	Financial and Professional Services	Banks / Building Societies, Estate and Employment Agencies, Professional and Financial Services	1 space per 30 m ²	
A3	Restaurants and Cafes	Restaurants and Cafes	1 space per 5 m ² of public floor area	
A4	Drinking Establishments	Public Houses / Wine bars / Other Drinking Establishments	1 space per 5 m ² of public floor area	
A5	Hot Food Takeaways including Drive - Through's	Use for the sale of hot food off the premises	1 space per 12 m ² unless in a town / district centre location	
B1	Business	Light Industry, Business Parks, Offices, Call Centres, Research and Development	1 space per 30 m ²	
B2	General Industry	General Industry	1 space per 45 m ²	
B8	Storage and Distribution	Storage or Distribution Centres, Wholesale Warehouses, Repositories	1 space per 100 m ²	
C1	Hotels	Hotels, Boarding Houses and Guest Houses	1 space per bedroom inclusive of staff provision parking	
C2	Residential Institutions	Residential Care Homes / Nursing Homes	1 space per 5 beds <i>plus</i> 1 space per 10 beds for visitors / staff. Note: There may be a requirement for additional car parking where a proposal includes an element of low care or where there would be a number of more "mobile" residents, in which case C3 Dwelling House Standard will apply.	
		Residential Training Centres and Halls of Residence	1 space per bed	
		Hospitals	1 space per bed	

C3	Dwellings (including HMOs)	1 Bedroom	1 space per dwelling	1 space
		2 Bedroom	1.5 spaces per dwelling (one allocated and one shared between 2 units for flexible use);	2 spaces
		3 Bedrooms	2 spaces per dwelling	2 spaces
		4+ Bedrooms	3 spaces per dwelling	4 spaces
	Retirement developments	Warden assisted independent living accommodation	1 space per 3 beds <i>plus</i> 1 space per 10 beds for visitors / staff	1 space per 2 beds <i>plus</i> 1 space per 10 beds for visitors / staff
	Visitor unallocated	per dwelling	0.25 spaces per dwelling	
C4	Houses in Multiple Occupation	As per C3 Standards	As per C3 Standards	
D1	Non-Residential Institutions	Art Galleries, Museums, Libraries	1 space per 20 m ²	
		Halls and Places of Worship	1 space per 5 m ²	
		Schools	1 space per 2 staff <i>plus</i> 1 space per 10 students	
		Crèche / Day Nurseries	1.5 per 2 staff plus drop off zone (in or outside of curtilage) of 1 space per 10 children	
		Medical Health Facilities	4 spaces per consulting room	
D2	Assembly and Leisure	Cinemas, Bingo and Casinos, Conference Centres, Music and Concert Halls	1 per 5 seats	
		General Leisure: Dance Halls (But not Night Clubs), Swimming Baths, Skating Rinks and Gymnasiums	1 space per 22 m ²	
Miscellaneous / Sui-Generis		Theatres	1 space per 5 seats	
		Motor Car Showrooms	1 space per 50 m ² internal showroom	
		Petrol Filling Stations	1 space per pump	
		Taxi Booking Offices	1 space per licenced taxi operating from the business. On-site off-street and dedicated car parking to be provided, or where this cannot be achieved spaces should be located within 100 metres of the office.	

		Vehicle Repair and Service Stations	1 space per 50 m ²
Charging Points for ULEV's		Non-residential developments	20 to 50 spaces: 1 bay for use by electric vehicles only > 50 spaces: Min 2 bays for use by electric vehicles only
		Residential Development Schemes over 10 dwellings:	1 per detached dwelling

Further Guidance and Application

What constitutes a car parking space?

1. A car parking space is a clearly defined and suitably surfaced space or garage.

Dimensions

2. Each space should be 2.4m in width and 5m in length.
3. Parking spaces in front of garage doors should be a minimum of 5.5m in length to enable up and over doors to open. A relaxation of this standard to 5m may be considered depending on the type of garage door to be installed.
4. Domestic garages should be a minimum size of 3m in width x 6m* in length to enable bicycles or other storage at the rear of the garage. (*unless alternative storage is provided)

Accessing Spaces

5. A minimum 6 metres clearance is required to enable cars to reverse out of a car parking space.

Mobility parking in non-residential developments

6. Mobility parking spaces (3m by 5m) shall be provided at a minimum level of 1 per 10 car parking spaces.
7. A 1.2m hatched area is required both sides of the space (only 1 space if it is at the open end of a row) and normally 1 metre hatched area behind.

Cycle parking in residential developments

8. Adequate space within should be provided for cycle parking either within the curtilage of each dwelling or within a convenient and secure communal space.

Cycle parking in non-residential developments

9. A minimum of 1 per 10 car parking spaces is required. Long stay covered areas shall be provided on all developments employing 30 or more full or part time staff.

Motorcycle parking in non-residential developments

10. A minimum of 1 per 25 car spaces. Long stay covered areas shall be provided on all developments employing 30 or more full or part time staff.

Parking in Town Centre Locations

11. In the Town Centres of Burnley and Padiham or where schemes including redevelopment to secure the future of a heritage asset, the minimum standards (other than for taxi booking offices) may not be applied in full in cases where public parking exists nearby or where on-street parking is available and the development would not cause or exacerbate congestion, highway safety issues or on-street parking problems.

Electric Car Charging Points

12. Additional provision over and above the minimum requirements set out above will be encouraged and supported in line with Policy NE5 subject to the consideration of the townscape impact in accordance with Policy SP5 and IC5. Where these affect heritage assets, care should also be taken to avoid harm and damage to historic fabric in accordance with Policies HE2 and 3.”

