# **A57 Link Roads Scheme**

# **Peak District National Park**

# **Local Impact Report**

Produced by the Peak District National Park Authority (January 2022)

# **Contents**

1.	Introduction to the Report and Terms of Reference		
2.	Executive Summary		
3.	Context		
	3.1	Background information on the Peak District National Park	9
	3.2	The relationship between the A57 Link Roads scheme and the Peak District National Park	12
4.	Policy Context		
	4.1	The National Policy Context	16
	4.2	The Local Policy Context	17
5.	Loca	I Growth and Development	21
6.	Existing local area characteristics		
	6.1	Air quality	22
	6.2	Cultural heritage	25
	6.3	Landscape and visual	27
	6.4	Biodiversity	32
	6.5	Noise and vibration	34
	6.6	Population and health	35
	6.7	Climate	42
7.	Peak District Roads potentially affected by the scheme		
	7.1	The Current Situation	47
	7.2	With the scheme	51
8.	Local Impacts		56
	8.1	Introduction	56
	8.2	Concerns about the Landscape assessment methodology	56
	8.3	Air quality	60
	8.4	Cultural heritage	62
	8.5	Landscape and visual	63
	8.6	Biodiversity	63
	8.7	Noise and vibration	64
	8.8	Population and health	65
	8.9	Climate	68
	8.10	Cumulative impacts	69
		Appendix A – A628 Site Visit in relation to the proposed Trans Pennine Upgrade Programme	

# 1. Introduction to the Report and Terms of Reference

- 1.1 This Local Impact Report has been prepared by the Peak District National Park Authority and forms part of the National Park Authority's response to the National Highways A57 Link Roads scheme.
- 1.2 The Planning Act (2008) sets out the process for dealing with proposals for Nationally Significant Infrastructure Projects (NSIPs). This process includes the examination of major proposals, including those for transport. The examination offers opportunities for individuals and organisations to comment on the proposals prior to a decision being taken by the relevant Secretary of State.
- 1.3 As part of the examination process, appropriate local authorities are invited to produce a Local Impact Report. This report should contain an assessment of the impact of the proposed scheme on the local authority's area.
- 1.4 The scheme under discussion within this report is the National Highways A57 Link Roads scheme. This scheme focusses on the delivery of two relief roads providing bypasses of congested areas in the east of Tameside Metropolitan Borough. Both of these proposed link roads fall outside of the boundary of the Peak District National Park.
- 1.5 Because the proposed schemes fall outside the boundary of the National Park, the focus of this Local Impact Report is on the wider effects of the scheme, beyond the Development Consent Order boundary; and within the Peak District National Park.
- 1.6 English and Welsh National Park Authorities have specific statutory duties in relation to the designation of 'National Park' and the land contained within each National Park. For the purposes of this Local Impact Report, the focus will be on the effects of the proposed schemes on the following topic areas within the National Park; Air Quality, Climate Change, Cultural Heritage, Ecology, Landscape, Noise; and the environment for walkers, cyclists and horse riders.
- 1.7 It should be noted that in some cases, particularly sensitive areas of the National Park may be affected by more than one type of impact. In such cases, we will also be providing comment on the cumulative effects of these impacts on those sites.

# 2. Executive Summary

#### Context

The Peak District National Park was the first National Park to be designated in the United Kingdom, in April 1951. The Peak District National Park lies at the heart of England and covers parts of the East Midlands, North West, West Midlands and Yorkshire & Humber regions.

The Peak District National Park Authority is not a highway or transport authority, but it is the planning authority for the whole of the National Park, regardless of other local authority boundaries.

The Peak District National Park Authority has two statutory purposes, these are "the conservation and enhancement of the natural beauty, wildlife and cultural heritage of the National Park" and "the promotion of opportunities for the understanding and enjoyment of the special qualities of the National Park." Other public bodies have a statutory duty to have regard to these purposes when carrying out work that affects land within the National Park.

The Peak District National Park is one of the most popular visitor locations nationally, attracting between 13 and 26 million visits per annum. Lying at the heart of England, the Peak District National Park owes its popularity to the large urban populations that surround it, including the Greater Manchester and South Yorkshire conurbations.

The A57 Link Roads scheme falls wholly outside the Peak District National Park boundary. At its closest point the scheme lies approximately 2km from the edge of the National Park.

#### **Policy Context**

There has been a long-standing presumption against major development in National Parks including for trunk roads and motorways. The National Planning Policy Framework places great weight on the conservation and enhancement of the landscape and scenic beauty of National Parks.

#### **Local Growth and Development**

The Peak District National Park was designated for its landscape, cultural heritage and wildlife. As such, development is generally limited and focussed on the achievement of national park purposes and our statutory duty to foster the economic and social well-being of local communities within the National Park.

#### **Existing local area characteristics**

Tintwistle is a settlement located on the western edge of the Peak District National Park. The village is divided east and west by the National Park boundary, with the eastern half of the village falling inside the National Park. The A628 Trunk road passes through the village of Tintwistle. High Peak Borough Council to declare an Air Quality Management Area (AQMA) in Tintwistle in 2018. The AQMA was declared in relation to exceedances of the annual mean for Nitrous oxides (NOx). The Tintwistle AQMA is located inside the Peak District National Park.

Roads that are potentially affected by changes in traffic flow as a result of the proposed A57 Link Roads Scheme pass through two Conservation Area; Tintwistle (A628) and Little Hayfield (A624). In addition to these Conservation Areas, Peak District roads such

as the A628(T), A57 Snake Pass, A54 and Monks' Road pass in close proximity to a number of listed buildings and Scheduled Ancient Monuments.

The A57 Link Roads scheme is adjacent to that part of the National Park known as the Dark Peak. Much of the area of the Dark Peak is uncultivated land, with little signs of development; this is known as the Natural Zone. Generally, there is a presumption against development within the Natural Zone.

Much of the Dark Peak area of the Peak District National Park is subject to additional ecological designations. These are the South Pennine Moors SAC, Peak District Moors SPA, the Dark Peak SSSI and the Eastern Peak District Moors SSSI.

The National Park has acted as a tranquil refuge for more than 70 years. A sense of tranquillity delivers both physical and mental health and well-being benefits.

There is an extensive rights of way network across the Dark Peak Area of the Peak District. In addition to footpaths and bridleways, the area is crossed by a number of nationally important routes – the Pennine Way, the Pennine Bridleway and the Trans Pennine Trail. These routes cross both the A628 Trunk Roads and the A57 Snake Pass within the National Park.

The Peak District National Park is crossed by a number of rural roads that are subject to the climate and geography of the Peak District. This means that many of the roads rise from valley bottoms with twists and turns that follow rivers before crossing are over high and exposed ground. Many of these high-level routes are closed on a regular basis due to snow, winds or flooding. These severe weather events appear to becoming more frequent; it is likely that with the ongoing effects of climate change, such events may be more frequent and / or more severe in the future. The Peak District National Park contains some roads that have frequently been assessed as high risk by Road Safety Foundation European Road Assessment Programme (EuroRAP).

Excluding point sources, by far the largest CO<sup>2</sup> within the Peak District National Park emissions come from road transport.

#### Peak District Roads potentially affected by the scheme

The scheme leads to a general increase in traffic across four Peak District roads; the A628(T), the A57 Snake Pass, the A6024 Holme Moss and Monks' Road, when compared to the 'Do Minimum' scenario (in both 2025 and 2040). There is a decrease in flows on two Peak District roads; the B6015 Woodhead Road and the A624 Glossop to Chapel Milton Road, when compared to the 'Do Minimum' scenario (in both 2025 and 2040).

#### **Local Impacts**

The Peak District National Park is located to the east of the proposed scheme. As such, none of the proposed works have a direct impact on the National Park. However, the Environmental Statement accompanying the DCO submission for the scheme raises concerns for the Authority with regard to the indirect effects of the scheme on the National Park. In all cases, these effects are related to increased traffic flows on National Park roads, principally the A628 Woodhead and A57 Snake Passes.

The A628 Woodhead route across the National Park is predicted to experience a daily increase in traffic of up to 950 vehicles (2025) and 1,100 vehicles (2040); whilst the A57 Snake Pass will see an increase in vehicles of 1,150 (2025) and 1,450 (2040).

This growth in traffic has the potential to negatively affect the Special Qualities of the Peak District, whilst impacting on the achievement of the Statutory Purposes of the National Park (Section 61, Environment Act, 1995).

In the village on Tintwistle the negative effects of the scheme include on the Tintwistle Air Quality Management Area, the noise of traffic, severance for vulnerable road users and the effect on the Tintwistle Conservation Area.

In the wider National Park our concerns are focussed on the effects of the following

- Nitrate deposition on ecologically designated sites as a result of increased nitrous oxide emissions;
- Traffic noise impact on the quiet enjoyment of the National Park and its tranquillity;
- Severance of rights of way due to increased traffic flows, including on the Pennine Way, the Pennine Bridleway and the Trans Pennine Trail;
- Road safety, the scheme is predicted to increase the number of accidents on the A628(T) and the A57 Snake Pass;
- Increased carbon emissions as a result of the scheme.

#### 3. Context

#### 3.1 Background information on the Peak District National Park

- 3.1.1 The Peak District National Park was the first National Park to be designated in the United Kingdom, in April 1951. The Peak District National Park lies at the heart of England and covers parts of the East Midlands, North West, West Midlands and Yorkshire & Humber regions.
- 3.1.2 This complex political geography means that the National Park has seven constituent highway authorities¹ (see Figure 3.1) and six constituent transport authorities². The Peak District National Park also falls within part of nine local authority areas³ (see Figure 3.2). The National Park is also split roughly north and south between two sub-National transport bodies; Transport for the North and Midlands Connect.
- 3.1.3 The Peak District National Park Authority is not a highway or transport authority, but it is the planning authority for the whole of the National Park, regardless of other local authority boundaries.
- 3.1.4 The Peak District National Park was designated under the National Parks and Access to the Countryside Act (1949). National Park Authorities were established under the Environment Act (1995). The National Parks and Access to the Countryside Act (1949) set out the statutory purposes for National Parks. These were restated in Section 61 of the Environment Act (1995). These purposes are:
  - i. The conservation and enhancement of the natural beauty, wildlife and cultural heritage of the National Park, and
  - ii. The promotion of opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.
- 3.1.5 Section 62 of the Environment Act (1995) also sets out specific statutory duties for National Park Authorities and other bodies. For National Park Authorities, the duty is to: -

"Seek to foster the economic and social well-being of local communities within the National Park"<sup>4</sup>.

For other specified bodies, the duty is: -

To have regard to National Park purposes when exercising or performing any functions in relation to, or so as to affect, land in a National Park.

<sup>&</sup>lt;sup>1</sup> Barnsley Metropolitan Borough Council, Cheshire East Council, Derbyshire County Council, Kirklees Council, Oldham Council, Sheffield City Council and Staffordshire County Council.

<sup>&</sup>lt;sup>2</sup> Cheshire East Council, Derbyshire County Council, South Yorkshire Mayoral Combined Authority, Staffordshire County Council, Transport for Greater Manchester and West Yorkshire Combined Authority.

<sup>&</sup>lt;sup>3</sup> Barnsley Metropolitan Borough Council, Cheshire East Council, Derbyshire Dales District Council, High Peak Borough Council, Kirklees Council, North East Derbyshire District Council, Oldham Council, Sheffield City Council and Staffordshire Moorlands District Council.

<sup>&</sup>lt;sup>4</sup> Section 62, Environment Act (1995), Environment Act 1995 (legislation.gov.uk)

Figure 3.1 – The constituent highway authorities with responsibility in the Peak District National Park

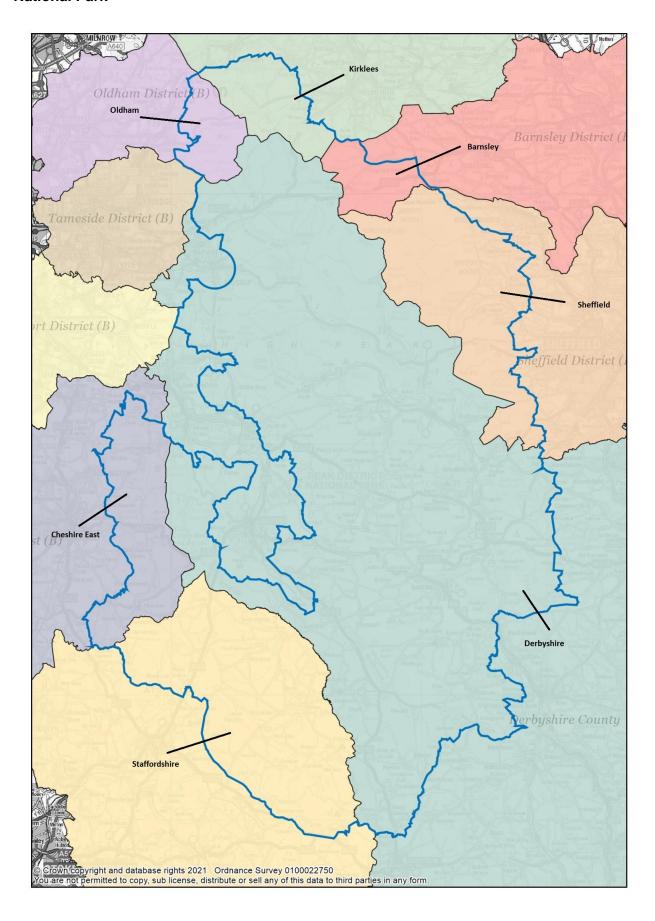
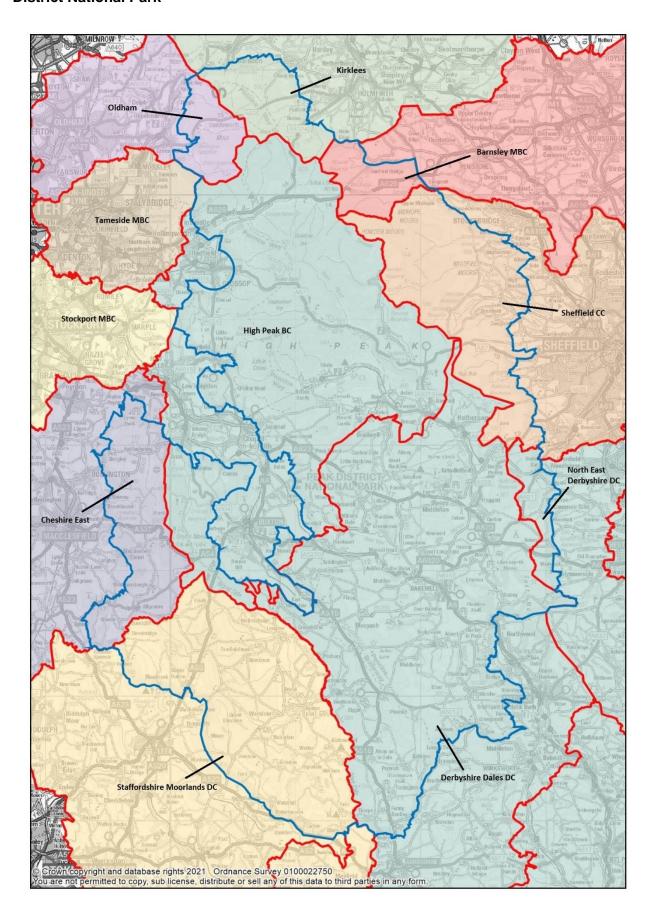


Figure 3.2 – The additional constituent and neighbouring local authorities of the Peak District National Park



This duty applies to a range of public bodies; in the context of this Local Impact Report, the section 62 duty applies to National Highways and any agents acting on their behalf.

- 3.1.6 The Peak District National Park is one of the most popular visitor locations nationally, attracting between 13 and 26 million visits per annum. Lying at the heart of England, the Peak District National Park owes its popularity to the large urban populations that surround it, including the Greater Manchester and South Yorkshire conurbations. According to the Census (2011), the Peak District National Park lies within a one-hour drive of approximately 16 million people.
- 3.1.7 This ease of access by car means that the majority of visits to the National Park are car-borne. Surveys undertaken by the National Park Authority indicate that 83% of visitors arrive by private car. However, for some popular recreation hubs, with limited alternative means of access, survey data suggests that this percentage is higher.
- 3.1.8 In addition to its National Park designation large parts of the Peak District are also subject to high level international ecological designations, including Special Area of Conservation (SAC) and Special Protection Area (SPA). In the Peak District, these two types of protection relate to the protection of rare species (particularly ground nesting birds) and their habitats. In many cases within the Peak District an area is subject to both SAC and SPA designation. In some cases, the locations are also designated as Sites of Special Scientific Interest (SSSI). Natural England is responsible for the protection of SSSI, SAC and SPA sites.

# 3.2 The relationship between the A57 Link Roads scheme and the Peak District National Park

- 3.2.1 As stated in paragraph 1.5, the A57 Link Roads scheme falls wholly outside the Peak District National Park boundary. At its closest point the scheme lies approximately 2km from the edge of the National Park.
- 3.2.2 The scheme comprises of two links roads that principally act to ease congestion on the existing A57 Trunk Road at Mottram Moor (the Mottram Moor Link Road) and the A57 at Woolley Bridge (the A57 Link Road). Whilst the scheme lies outside of the National Park, both of the proposed link roads connect into existing cross-Park routes.
- 3.2.3 The National Highways managed trunk road route continues from the eastern edge of the proposed Mottram Moor Link Road via the A628(T). The route passes through Hollingworth and enters via the National Park in Tintwistle. The A628(T) then climbs over the Woodhead Pass before descending to the Flouch Roundabout on the eastern edge of the National Park (see Figure 3.3).
- 3.2.4 In crossing the National Park, the A628(T) passes through moorland areas with the following ecological designations; South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI (see Figure 3.4). The road is bounded on both sides by these designations for approximately 5km between Woodhead Station in the west and Fiddlers Green in the east. Beyond Fiddlers Green, the southern edge of the A628 is bounded by the designations for approximately 1.5km towards Bord Hill.

Figure 3.3 – The A628 Trunk Road and A57 in the context of the National Park

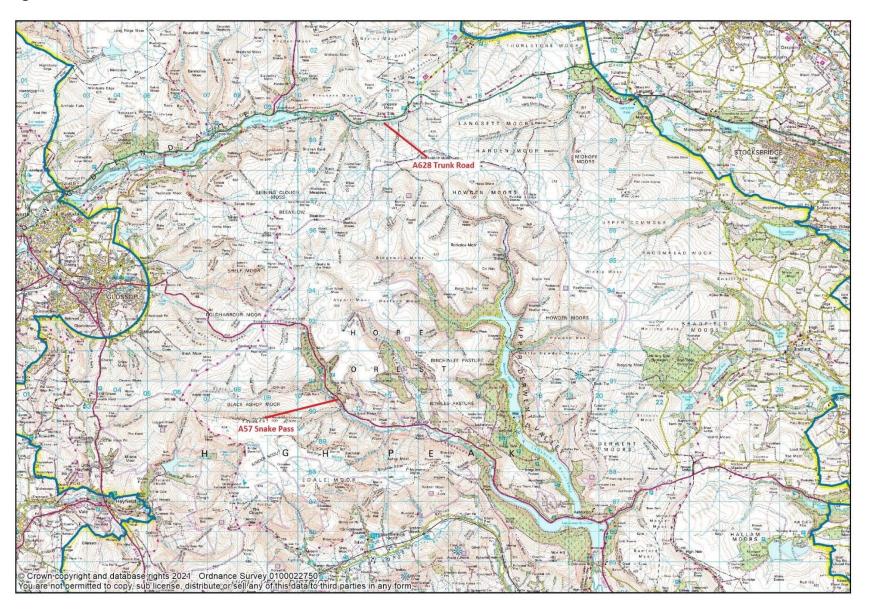
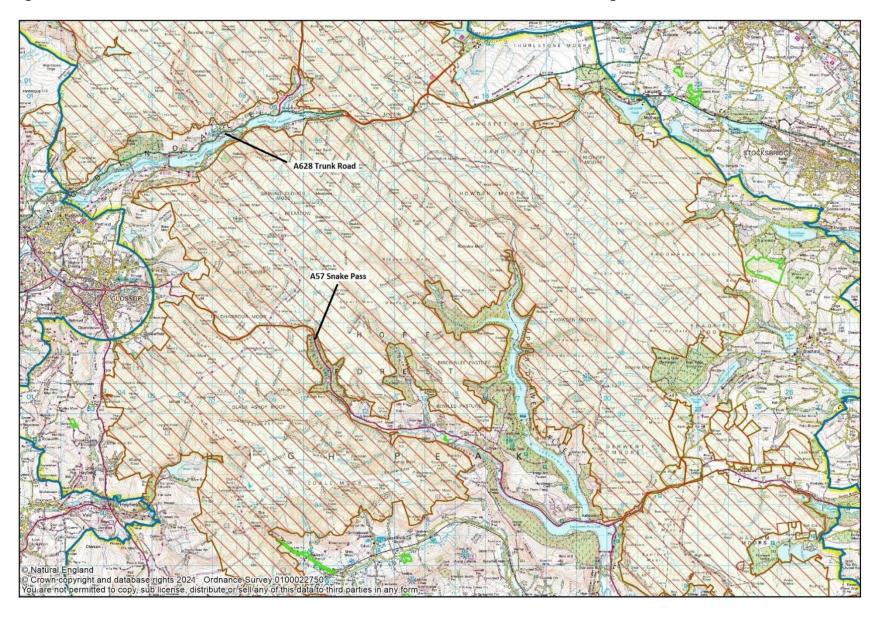


Figure 3.4 – The A628 Trunk Road and A57 in the context of the SAC / SPA / SSSI designations



- 3.2.5 In addition to the ecological designations, the A628(T) features a number of crossing points for major walking and cycling routes. These include: -
  - The Pennine Bridleway crossing point at the eastern edge of Tintwistle
  - The Pennine Way crossing at Torside
  - The Longdendale / Trans Pennine Trail crossings at Woodhead Station, Longside End and Carr Bottom
- 3.2.6 From Flouch, the Trunk Road joins the A616 running alongside the boundary of the National Park for approximately 1.6km to Langsett, before continuing on eastwards towards the Westwood roundabout.
- 3.2.7 The proposed A57 Link Road will connect to the existing A57 at the border between Tameside and Derbyshire. Travelling eastwards, the A57 continues through Glossopdale to Glossop. From Glossop the route crosses the boundary into the National Park below Shire Hill. The road then climbs the Snake Pass over the Snake summit before descending towards the Ladybower Reservoir.
- 3.2.8 From Ladybower, the A57 climbs eastwards over Moscar before descending along the Rivellin Valley and leaving the National Park at the junction with the A6101 Rivellin Valley Road. Beyond the National Park boundary, the A57 continues to Sheffield.
- 3.2.9 In crossing the Peak District National Park, the A57 passes through two distinct areas of moorland designated as SSSI, SAC and SPA. In the west, it passes through the South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI. The A57 is bounded by these designations on both sides for approximately 5.5km between Wash Brow in the west and Lady Clough in the east.
- 3.2.10 To the east of Ladybower, the A57 passes through the Peak District Moors SAC and the Eastern Peak District Moors SSSI. The road is loosely bounded on both sides for approximately 3km by these designations between the Ladybower Inn in the west and Moscar Lodge in the east. Beyond Moscar Lodge, the southern edge of the road is bounded by these designations for approximately 0.6km eastwards to Moscar Plantation.
- 3.2.11 In addition to the ecological designations, the A57 is crossed by the Pennine Way at the Snake Summit, along with a number of other footpaths and bridleways.

# 4. Policy Context

#### 4.1 The National Policy Context

- 4.1.1 The Peak District National Park was designated under the National Parks and Access to the Countryside Act (1949). National Park Authorities were established under the Environment Act (1995). The National Parks and Access to the Countryside Act (1949) set out the statutory purposes for National Parks. These were restated in Section 61 of the Environment Act (1995). These purposes are:
  - i. The conservation and enhancement of the natural beauty, wildlife and cultural heritage of the National Park, and
  - ii. The promotion of opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.
- 4.1.2 Both purposes carry equal weight except where there may be conflict between them. In such cases, National Park Authorities are directed to give greater weight to the first purpose over the second. This is known as the Sandford principle which is named after Lord Sandford who chaired the National Parks Policy Review Committee which reviewed national parks of England and Wales in between 1971 and 1974.
- 4.1.3 Section 62 of the Environment Act (1995) also sets out specific statutory duties for National Park Authorities and other bodies. For National Park Authorities, the duty is to: -

"Seek to foster the economic and social well-being of local communities within the National Park"<sup>5</sup>.

For other specified bodies, the duty is: -

To have regard to National Park purposes when exercising or performing any functions in relation to, or so as to affect, land in a National Park.

This duty applies to a range of public bodies; in the context of this Local Impact Report, the section 62 duty applies to National Highways and any agents acting on their behalf. This section also indicates that the relevant bodies also have to abide by the Sandford principle.

4.1.4 The Department for the Environment Circular 4/76 – Report of the National Parks Review Committee (1976) sets out the principle that the development of strategic roads should avoid National Parks, stating: -

"It is now the policy of Government that investment in trunk roads should be directed to developing routes for long distance traffic which avoid National Parks; and that no new road for long distance traffic should be constructed through a National Park, or existing road upgraded, unless it has been demonstrated that there is a compelling need which would not be met by any reasonable alternative means."

<sup>&</sup>lt;sup>5</sup> Section 62, Environment Act (1995), Environment Act 1995 (legislation.gov.uk)

4.1.5 The Department of the Environment Circular 125/77 – Roads and traffic – National Parks (1977) adds further clarity, stating: -

"Where there is a compelling need for some solution to be found to the problem of increased through traffic, or to problems of road safety, in a National Park, a determined search should be made for alternatives which do not involve upgrading the existing route or new construction"

4.1.6 The English National Parks and the Broads: UK government vision and circular was published by Defra in 2010. The circular provided updated guidance on the matter of road building within National Parks; paragraph 85 states: -

"Improvements of main routes through the Parks are governed largely by considerations outside those relating to the Park area itself. However, there is a strong presumption against any significant road widening or the building of new roads through a Park, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Any investment in trunk roads should be directed to developing routes for long distance traffic which avoid the Parks."

4.1.7 Paragraph 176 of the National Planning Policy Framework (2021)<sup>7</sup> states that

"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas."

#### 4.2 The Local Policy Context

4.2.1 The Peak District National Park Core Strategy (2011)<sup>8</sup> sets out the strategic planning policies for the whole area of the National Park. Chapter 7 sets out the General Spatial Policies for the National Park. GSP 1: Securing national park purposes and sustainable development sets out the following approach: -

"Policy GSP1 seeks that any development proposal will comply with core policies so that any development in the National Park must satisfy the statutory purposes of national park designation."

4.2.2 Chapter 9: Landscapes and conservation sets out the Authority's strategic policies for landscape. Part A of Policy L1: Landscape character and valued characteristics states: -

"Development must conserve and enhance valued landscape character, as identified in the Landscape Strategy and Action Plan, and other valued characteristics."

<sup>&</sup>lt;sup>6</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/221086/pb13387-vision-circular2010.pdf

<sup>&</sup>lt;sup>7</sup> National Planning Policy Framework (publishing.service.gov.uk)

<sup>&</sup>lt;sup>8</sup> Local Development Framework Core Strategy - Final Errata 2 (30/11/11) (peakdistrict.gov.uk)

- Where development is proposed outside of the National Park, but with a negative effect on the National Park, Policy L1A is considered in developing a response to that proposed development.
- 4.2.3 Chapter 15: Accessibility, travel and traffic sets out the Authority's position in relation to the delivery of new road schemes either within or effecting the National Park.
- 4.2.4 Core Strategy Policy T1: Reducing the general need to travel and encouraging sustainable transport sets out a high-level ambition for transport within the National Park. Of particular relevance are parts B, C and E of the policy: -
  - B. Cross-Park traffic will be deterred.
  - C. Modal shift to sustainable transport will be encouraged.
  - E. Impacts of traffic within environmentally sensitive locations will be minimised.
- 4.2.5 Core Strategy Policy T2: Reducing and directing traffic provides the Authority's strategic approach to road-building within the National Park, with parts A, B and C being of particular relevance: -
  - A. Transport developments, including traffic management schemes, which reduce the amount of cross-Park traffic, will be supported if they can be accommodated without adverse impact on the National Park's valued characteristics. Transport developments which increase the amount of cross-Park traffic or have other adverse effects on its setting and character, amenity and enjoyment will be opposed.
  - B. In exceptional circumstances, transport developments (including expansion of capacity, widening or a new route) that increase the amount of cross-Park traffic may be accepted where: there is a demonstrable long-term net environmental benefit within the National Park:
  - C. No new road schemes will be permitted unless they provide access to new businesses or housing development or there are exceptional circumstances. Those road schemes (including improvements) that fall outside of the Planning Authority's direct jurisdiction will be strongly resisted except in exceptional circumstances.
- 4.2.6 The Peak District National Park Development Management Policies (2019)<sup>9</sup> document provides detailed polices that underpin the Core Strategy. Chapter 9: Travel and transport includes two policies dealing with road building within the National Park.
- 4.2.7 Development Management Policy DMT1: Cross park roads offers clarity to Core Strategy Policy T2 by providing the criteria by which transport developments that increase cross-Park traffic might be acceptable. The policy states: -

New roads for cross-Park travel will not be supported, and proposals for a major alteration to an existing road will not be permitted, unless:

(i) there is a compelling national need which cannot be met by any reasonable alternative means; and

<sup>&</sup>lt;sup>9</sup> Webpage-Final-Branded-DMP-Doc-Copy.pdf (peakdistrict.gov.uk)

- (ii) it is demonstrated to be in the overall public interest; and
- (iii) it is demonstrated to provide long term local transport benefit; and
- (iv) there is a demonstrable long-term net environmental benefit within the National Park; and
- (v) there is a demonstrable long-term net economic benefit for the National

#### 4.3 Assessment of scheme against policy

- 4.3.1 The proposed scheme lies wholly outside the boundary of the Peak District National Park. However, because the scheme is predicted to have indirect impacts on national park purposes through increased traffic flows, Section 62 of the Environment Act (1995) is applicable.
- 4.3.2 Paragraph 176 of the National Planning Policy Framework (2021) makes it clear that development within the setting of the National Park should be "sensitively located and designed to avoid or minimise adverse impacts on the designated areas."
- 4.3.3 The stated Environmental Objectives of the scheme include measures to address the effects of traffic in residential areas, particularly those relating to noise and air quality. The following statement is also included: -
  - "The Scheme is also being designed to avoid unacceptable impacts on the natural environment and landscape in the Peak District National Park."
- 4.3.4 As originally proposed, the A57 Link Roads scheme (formerly the Trans Pennine Upgrade Programme) included the delivery of two sections of climbing lanes along the A628(T) between Tintwistle and Flouch roundabout, within the National Park. This led to early, regular and ongoing engagement between Highways England / National Highways and the Peak District National Park Authority in relation to the scheme.
- 4.3.5 The Peak District National Park Core Strategy Policy T1: Reducing the general need to travel and encouraging sustainable transport sets out a strategic approach to transport within the National Park. The aim of the policy is to "deter traffic beyond that which is necessary for the needs of local residents, businesses and visitors."
- 4.3.7 There is a predicted increase in traffic flows on cross Park roads (principally the A628 Woodhead Pass and the A57 Snake Pass) as a result of the proposed A57 Link Roads scheme. This would appear to be in conflict with Core Strategy Policy T1(B) which advocates deterring cross Park traffic. Core Strategy Policy T1(E) focuses on minimising the impacts of traffic on environmentally sensitive locations. Again, given the designations adjacent to these link roads and the predicted traffic growth, the scheme appears to be in conflict with Core Strategy Policy T1(E).
- 4.3.7 Core Strategy Policy T2: Reducing and directing traffic includes specific policy in relation to road schemes. There is a general presumption against transport schemes that either increase traffic or have other negative impacts on the National Park (Part A). However, the policy allows for exceptional circumstances where such schemes might be deemed acceptable (Part B). Part C of the policy makes it clear that the where schemes fall outside the Authority's direct control, the same principles

- described above would apply to the way in which they would be viewed by the Authority.
- 4.3.8 The Development Management Plan Policy DMT2: Cross park roads sets out the criteria that the Authority believes constitutes the exceptional circumstances under which a scheme that increases traffic and has other negative effects on the National Park would be acceptable to the Authority. From the Development Consent Order submission documents accompanying the scheme, it does not appear to meet all of these criteria; in particular the following parts: -
  - (iii) it is demonstrated to provide long term local transport benefit; and
  - (iv) there is a demonstrable long-term net environmental benefit within the National Park; and
  - (vi) there is a demonstrable long-term net economic benefit for the National Park.

### 5. Local Growth and Development

- 5.1 The Peak District National Park was designated for its landscape, cultural heritage and wildlife. As such, development is generally limited and focussed on the achievement of national park purposes and our statutory duty to foster the economic and social well-being of local communities within the National Park.
- 5.2 This means that housing development is limited to the provision of dwellings to fulfil local need or open market housing leading to enhancement of exiting brownfield sites. The Peak District National Park Authority does not have any specific housing targets and does not allocate land for development. However, under normal circumstances approximately sixty new dwellings are approved per annum across the whole of the National Park. These contribute to the housing targets of the constituent planning authorities within the National Park.
- 5.3 With the exception of Tintwistle<sup>10</sup>, the area of the Peak District National Park that lies closest to the A57 Link Roads scheme is sparsely populated and is classified as the 'natural zone'. There is a general presumption against development within the natural zone. The additional internationally important ecological designations (South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI) also serve to limit the opportunities for development likely to generate additional traffic.
- 5.4 The area of the National Park that is closest to the A57 Link Roads scheme falls within High Peak borough. The responsibility for planning lies with High Peak Borough Council beyond the National Park boundary. Development is proposed and land allocated within the High Peak borough settlements outside the National Park boundary. The close proximity to Greater Manchester is a driver for housing development.

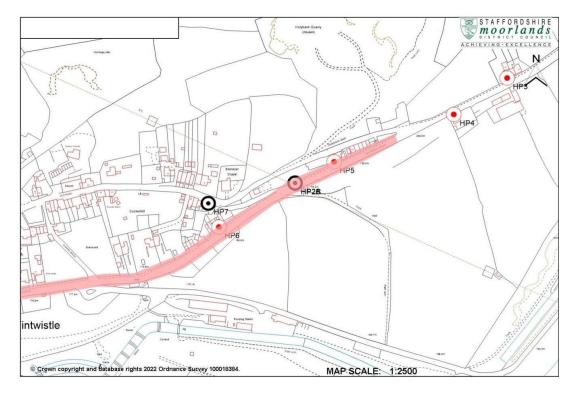
<sup>&</sup>lt;sup>10</sup> Tintwistle is the most easterly of the Longdendale villages; the National Park boundary follows the edges of Armfield Road, Bank Row and Bank Lane, effectively dividing the village in two, with the western part of the village falling inside the National Park.

# 6. Existing local area characteristics

#### 6.1 Air Quality

- 6.1.1 This section focusses on the effects of air-borne pollutants associated with road transport. The area of the National Park most closely associated with the A57 Link Roads scheme falls within High Peak borough. High Peak Borough Council is the environmental health authority for that part of the National Park that falls inside the borough. This includes responsibility for air quality monitoring and management.
- 6.1.2 Tintwistle is a settlement located on the western edge of the Peak District National Park. The village is divided east and west by the National Park boundary, with the eastern half of the village falling inside the National Park. The A628 Trunk road passes through the village of Tintwistle.
- 6.1.3 As the A628 Trunk Road passes through the village of Tintwistle it climbs quite steeply from the centre of the village eastwards. The gradient acts to slow vehicles, particularly heavy goods vehicles resulting in increased exhaust emissions. The presence of Pegasus crossing for the Pennine bridleway on the east of the village may lead to more stopping and starting of climbing vehicles.
- 6.1.4 The effect of these vehicular emissions caused High Peak Borough Council to declare an Air Quality Management Area (AQMA) in Tintwistle in 2018. The AQMA was declared in relation to exceedances of the annual mean for Nitrous oxides (NOx). The Tintwistle AQMA is located inside the Peak District National Park. High Peak Borough Council has installed a set of monitoring sites to record nitrous oxide levels in and around the Tintwistle AQMA. Figure 6.1 shows the locations of these monitoring sites.

Figure 6.1 – High Peak Borough Council nitrous oxide monitoring sites in Tintwistle<sup>11</sup>



<sup>&</sup>lt;sup>11</sup> Figure 6.1 supplied courtesy of High Peak Borough Council

-

6.1.5 Two of the NOx monitoring sites have shown regular exceedances of annual mean figure of 40 μg/m3. It is this exceedance that led to the declaration of an AQMA. The sites where exceedances were recorded are HP2a and HP5. Table 6.1 shows the annual mean totals for the two sites. Prior to the Covid-19 pandemic, both remained in exceedance but were showing a downward trend. Further detail can be seen in Table 6.1.

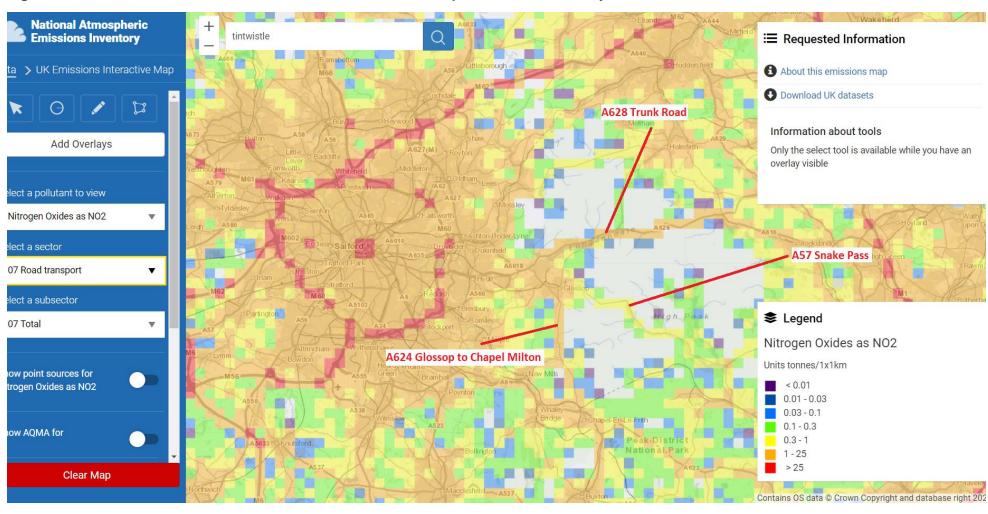
Table 6.1 – Annual mean totals for NOx at HP2a and HP5 monitoring sites<sup>12</sup>

Year	HP2a (annual mean NOx in μg/m3)	HP5 (annual mean NOx in μg/m3)
2014	60.8	50.2
2015	65.0	51.8
2016	60.2	49.9
2017	59.5	50.9
2018	n/a	47.0

- 6.1.6 Nitrous oxide emissions generally act as a proxy for other airborne pollutants associated with road transport. Exposure to poor air quality is can have a detrimental effect on health, and is linked with a range of conditions including lung cancer and cardiovascular and respiratory diseases. Children and older people are particularly susceptible to the effects of poor air quality.
- 6.1.7 In addition to being associated with poor health in humans, nitrous oxides are known to have a negative effect on habitats, particularly those that are nutrient deficient. Deposition of nitrous oxide can lead to nitrate enrichment of the soil with a subsequent negative effect on native plants that favour nutrient poor soils. This goes on to affect the habitat and the fauna that it supports.
- 6.1.8 Figure 6.2 shows the current levels of nitrous oxides associated with road transport within the National Park and the surrounding area. The Roads that are expected to be affected by the A57 Link Roads Scheme are shown on the figure.
- 6.1.9 Even without labels the road network can be clearly seen within Figure 6.2, with the motorway network (M56, M60, M62 and M67) clearly seen in red (>25-unit tonnes of NO<sub>2</sub> per km). From the National Park perspective, the nitrogen dioxide profile of the A628 and A624 are important, with both showing 1 25-unit tonnes of NO<sub>2</sub> per km.
- 6.1.10 The A57 Snake Pass can also be clearly seen based on NO<sub>2</sub> emissions. It is clear that the level of emissions on the A57 go down considerably as the road enters the National Park. This is in line with the lower levels of traffic currently using the route. Nevertheless, over most of its length, NO<sub>2</sub> emissions are at 0.3 1-unit tonnes of NO<sub>2</sub> per km.

<sup>&</sup>lt;sup>12</sup> Source of information High Peak Borough Council 2018 and 2019 Air Quality Annual Status Report (September 2019) <u>Executive summary (highpeak.gov.uk)</u>

Figure 6.2 – Nitrous oxide emissions associated with road transport within the vicinity of the A57 Link Roads scheme<sup>13</sup>



<sup>&</sup>lt;sup>13</sup> Figure 6.2 is a screen print from the BEIS UK emissions interactive map <u>UK Emissions Interactive Map</u> (beis.gov.uk)

#### 6.2 Cultural Heritage

6.2.1 The Peak District National Park was designated to further the "conservation and enhancement of the natural beauty, wildlife and cultural heritage of the National Park" Paragraph 49 of the English National Parks Vision and Circular (2010) states that: -

"Cultural heritage and landscape are fundamental to quality of place and, as they are central to attractiveness, distinctiveness, diversity and quality of place in the Parks, should be protected and enhanced." <sup>15</sup>

- 6.2.2 The Peak District National Park Management Plan lists seven special qualities; Special Quality 4 is 'Landscapes that tell a story of thousands of years of people, farming and industry'. The National Park Management Plan describes the Peak District National Park as "a lived-in landscape that has been shaped by people for thousands of years."
- 6.2.3 Visitors to the National Park are surrounded by cultural heritage, including prehistoric monuments, stately homes, packhorse bridges and former railways. The National Park Management Plan describes these features in the following way: -

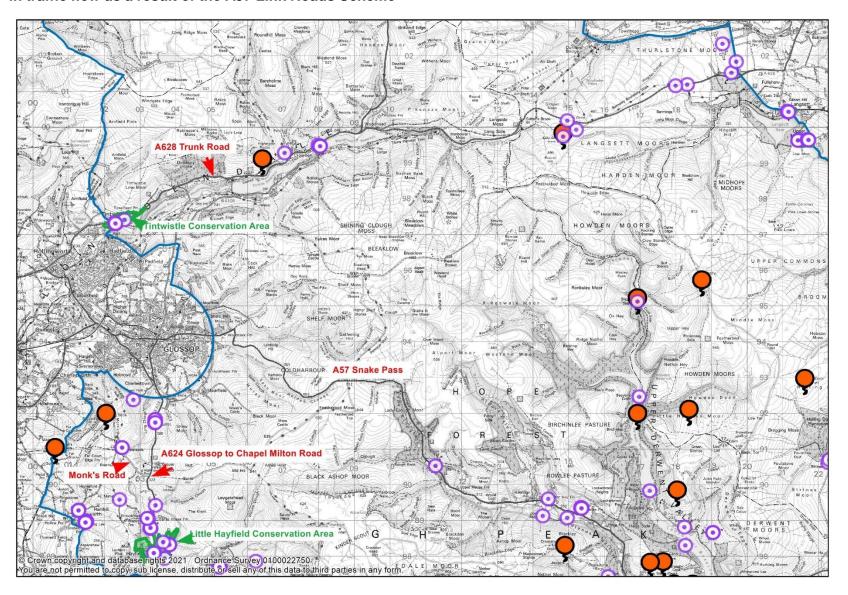
"The landscape itself bears witness to these past lives, having been transformed by people. The Peak District National Park's famous grassy dales and open moorland have been largely created by people and their industry; moulded by over 10,000 years of woodland clearance and thousands of years of agricultural development. Subsequent industries supporting generations of local people have further shaped the landscape, leaving distinctive imprints in managed woodlands, mine shafts, meadows, quarry faces and lead rakes. Many of these have become unique habitats."

- 6.2.4 The roads that are expected to see the largest changes in traffic flows within the Peak District National Park are the A628(T) and A57 Snake Pass. Changes are also predicted for the A624 between Glossop and Hayfield and for Monks' Road. The A628 (T) passes through the Tintwistle Conservation Area, whilst the A624 passes through the Little Hayfield Conservation Area. In addition, there are a number of heritage features in close proximity to these roads including listed buildings or structures, and several Scheduled Monuments SMs (see Figure 6.3). None of these assets would be directly physically impacted, but the proposed scheme would impact to some degree upon their settings, which will affect how the assets are experienced.
- 6.2.5 Designated heritage features include the following: -
  - A628 Tintwistle Sunday School (Grade II); Tintwistle Sunday School wall and railings (Grade II); Roman fortlet, east of Highstones (SAM); Valve Station, west of Bleak House (Grade II); Bleak House (Grade II), Wall and railings at Bleak House (Grade II); Milepost on Woodhead Road (Grade II); Milepost on Woodhead Road east of Dog & Partridge (Grade II); Ellerslie Lodge (Grade II)

<sup>&</sup>lt;sup>14</sup> Section 61 of the Environment Act (1995) Environment Act 1995 (legislation.gov.uk)

<sup>&</sup>lt;sup>15</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/22108 6/pb13387-vision-circular2010.pdf

Figure 6.3 – Designated Cultural Heritage features within the Peak District National Park adjacent to roads predicted to experience changes in traffic flow as a result of the A57 Link Roads Scheme



- A57 Snake Pass Milestone opposite Snake Inn (Grade II); Round cairn and clearance cairn 770m north west of Crookhill Farm (SAM); Round cairn 430m west of Crookhill Farm (SAM); Bronze Age field system, 400m south east of Ladybower Inn (SAM); Romano-British farmstead 475m east of Ladybower Inn (SAM); Romano-British farmstead and post-medieval charcoal burning site 570m north east of Ladybower Inn (SAM); Hordron Edge stone circle, 540m south east of Cutthroat Bridge (SAM); Milepost A57 near Moscar Cross Farm (Grade II)
- A624 Glossop to Hayfield road Horseshoe Farm (Grade II); Horseshoe
  Cottage (Grade II); The White House (Grade II); Cruck Barn South of
  Shepley farmhouse (Grade II); 2-3 Carr Meadow Cottages (Grade II); Carr
  Meadow Cottage (Grade II); Brookhouses (Grade II); Barn at Marl House
  (Grade II); Marl House (Grade II); Hay Barn at Marl House (Grade II)
- Monks Road Plainsteads Farmhouse (Grade II); Outbuildings to Plainsteads (Grade II); Round cairn between Coombes Edge and Cown Edge (SAM).

#### 6.3 Landscape and visual

6.3.1 The Peak District National Park was designated to further the "conservation and enhancement of the natural beauty, wildlife and cultural heritage of the National Park" Paragraph 7 of the English National Parks Vision and Circular (2010) 17 states that: -

"Together with the Broads, the National Parks combine a range of stunning landscapes which are rich in wildlife, biological diversity, geological diversity, archaeology and heritage, with a myriad of opportunities for outdoor recreation. They are home to over 313,000 people and attract millions of visitors every year."

- 6.3.2 The Peak District National Park Management Plan lists seven special qualities; Special Quality 1 is 'Beautiful views created by contrasting landscapes and dramatic geology'. The National Park Management Plan describes this special quality in the following way "the combination of contrasting landscapes and dramatic geology across the Peak District National Park creates its famous beautiful views."
- 6.3.3 The Peak District is split into eight Landscape Character Areas; the area through which the roads likely to be most affected by changes in traffic flows as a result of the scheme all lie within the Dark Park area of the National Park. The National Park Management Plan describes the features of the Dark Peak in the following way: -

"The Dark Peak's Millstone Grit horseshoe has scattered rock outcrops and deep cloughs across a moorland landscape, its elevation giving panoramic views that contrast the perceived wilderness of the moors with the neighbouring cities. Walk on Holme Moss and enjoy uninterrupted moorland views across miles of blanket bog, heather and peat and out over the neighbouring cities. Experience the unique

<sup>&</sup>lt;sup>16</sup> Section 61 of the Environment Act (1995) Environment Act 1995 (legislation.gov.uk)

<sup>&</sup>lt;sup>17</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/22108 6/pb13387-vision-circular2010.pdf

<sup>&</sup>lt;sup>18</sup>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/22108 6/pb13387-vision-circular2010.pdf

position of the Peak District National Park, with beautiful views surrounded by urban life."

- 6.3.4 The roads that are most likely to be affected by changes in traffic flow as a result of the A57 Link Roads scheme generally enter the National Park and then climb steadily over exposed high-level terrain. In doing so, they cross a range of distinct Landscape Character Types, that are defined within the Peak District National Park Landscape Strategy and Action Plan 2009 – 2019<sup>19</sup>.
- 6.3.4 For the Dark Peak Area, the Peak District National Park Landscape Strategy and Action Plan identifies five distinct Landscape Character Types: -
  - Open moors these are described as "An open undulating high gritstone plateau with extensive blanket peat covered by cottongrass bog and heather moorland. This is a wild, unsettled landscape with wide views to distant surrounding hills."
    - The key characteristics of open moors are: undulating high gritstone plateaus; localised rock outcrops and boulders, in the form of rocky edges and tors; thick deposits of peat with incised groughs (drainage channels); unenclosed heather and grass moorland and extensive areas of blanket bog; rough grazing land; wild, unsettled landscape with vast panoramas over surrounding hills and lower ground.
  - Moorland slopes & cloughs these are described as "Steep slopes and cloughs rising to open moorland on the high plateaux above, with widespread rough grassland and heather moor, grazed by sheep. This is a wild unsettled landscape with exposed views over lower ground."
    - The key characteristics of moorland slopes and cloughs are: steep slopes and cloughs rising to the moorland plateaux above; prominent gritstone outcrops, boulders and scree slopes; thin soils over gritstone bedrock; rough acid grassland, bracken and heather moorland grazed by sheep; exposed views over lower ground, sometimes limited by clough sides; numerous springs and flushes arising on slopes and clough sides; relict areas of oak-birch woodland in clough.
  - Enclosed gritstone uplands these are described as "An enclosed upland pastoral landscape associated with high uplands, ridge tops and slopes. This is a landscape of isolated stone farmsteads, straight roads and regular fields enclosed by drystone walls, largely reclaimed from moorland during Parliamentary Enclosure. Localised boulder fields and rocky outcrops are a feature in places, often associated with patches of remnant moorland vegetation."
    - The key characteristics of enclosed gritstone uplands are: high uplands and ridge tops with some steeper slopes; thin soils over gritstone bedrock with localised pockets of peat; permanent pasture and rough grazing enclosed by gritstone walls; remnant patches of rough land with bracken and gorse, some heather and bilberry; regular

<sup>&</sup>lt;sup>19</sup> Peak District National Park Landscape Strategy and Action Plan 2009 – 2019 <u>Peak District Landscape</u> <u>Strategy & Action Plan</u>

- pattern of medium to large fields; straight roads with wide verges of grass and, in some places, heather; isolated gritstone farmsteads with stone slate roofs; tree groups around farmsteads providing shelter.
- Reservoir valleys with woodland these are described as "Steep sided valleys dominated by large reservoirs. Some of the steep valley slopes have been planted with interlocking blocks of coniferous and mixed plantation woodland while others support acid grassland and clough woodlands. Views along the valleys are framed by woodland and the slopes rising to moorland."
  - The key characteristics of reservoir valleys with woodland are: interlocking coniferous and mixed plantation woodland with some limited semi-natural woodland; large reservoirs providing water supplies to adjoining urban areas; steep valley slopes, dissected by cloughs; land was largely cleared of settlement during reservoir construction leaving occasional isolated gritstone farmsteads; pastoral fields bounded by gritstone walls with many relict boundaries.
- Upper valley pastures these are described as "A pastoral landscape with a
  low lying, undulating topography, rising more steeply in places towards nearby
  hills. Settlement is restricted to dispersed gritstone farmsteads set within a
  well-defined pattern of small to medium sized fields, mostly bounded by
  hedgerows, but with some walls. Views are enclosed by valley sides and
  filtered through scattered hedgerow and streamline trees."
  - The key characteristics of upper valley pastures are: a low lying gently undulating topography, rising towards adjacent higher ground; network of streams and localised damp hollows; pastoral farmland enclosed by hedgerows; small to medium sized fields; dense streamline and scattered hedgerow trees; narrow, winding lanes, sunken on slopes; dispersed settlement with isolated farmsteads and small clusters of farms and dwellings.
- 6.3.6 The A628 and A57 Snake Pass both pass through these landscape area types across the National Park (see Figure 6.4), with travellers on those routes experiencing many of the characteristics described above. Similarly, the A624, A6024 and B6015 pass through some of the landscape area types.
- 6.3.7 Much of the area of the Dark Peak is uncultivated land, with little signs of development; this is known as the Natural Zone (see Figure 6.5). Generally, there is a presumption against development within the Natural Zone.

Figure 6.4 – Landscape Character Areas of the National Park in the vicinity of roads with traffic flows potentially affected by the A57 Link Roads Scheme

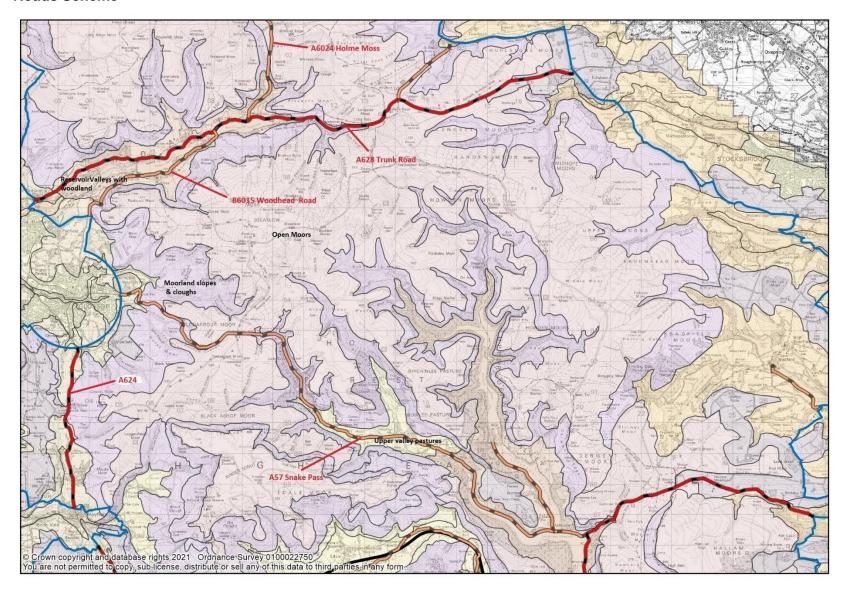
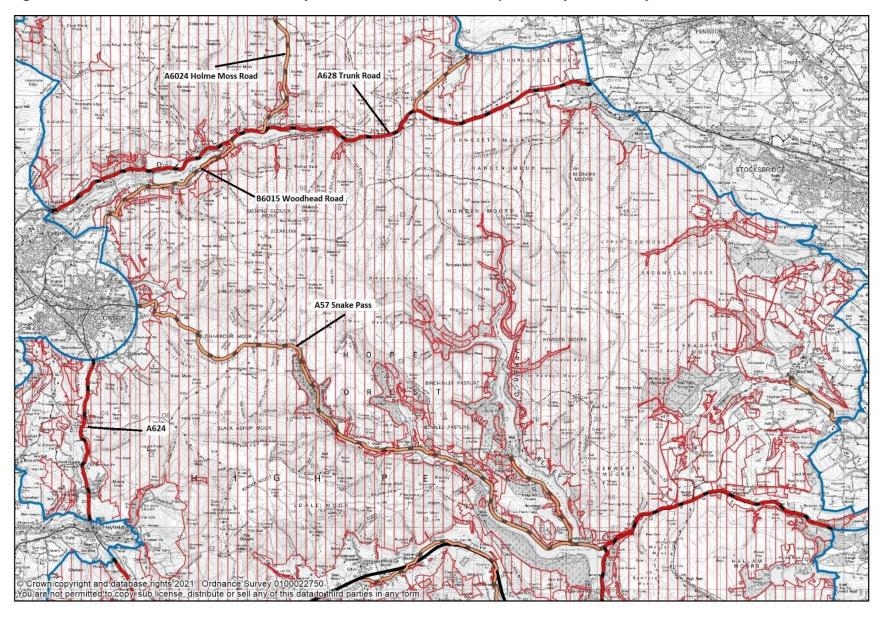


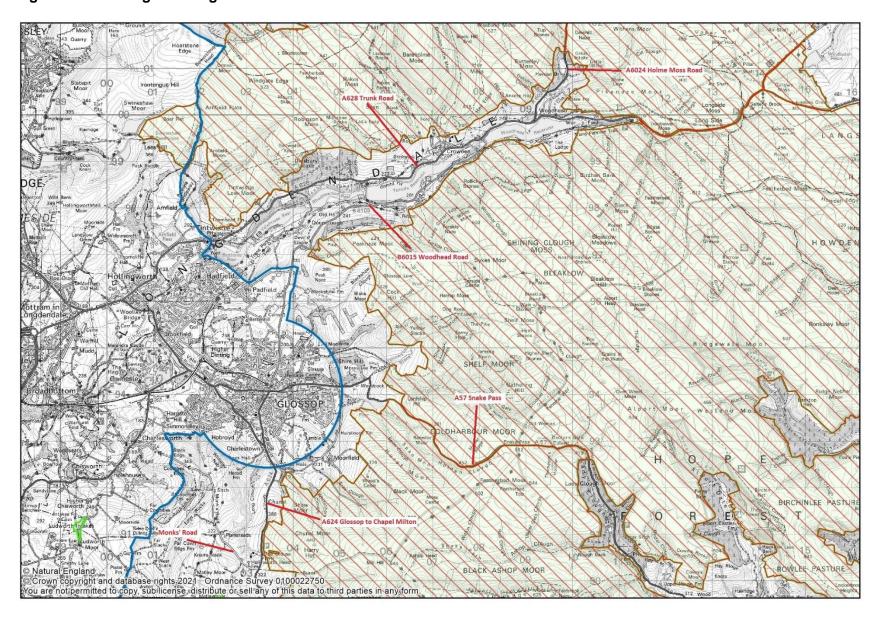
Figure 6.5 – The Natural Zone in the vicinity of roads with traffic flows potentially affected by the A57 Link Roads Scheme



#### 6.4 Biodiversity

- 6.4.1 Much of the Dark Peak area of the Peak District National Park is subject to additional ecological designations (see Figure 6.6). In most cases, the roads that are predicted to experience a change in traffic flows as a result of the A57 Link Roads scheme pass through these designations: -
  - The A628(T) passes through moorland areas with the following ecological designations; South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI;
  - The A57 passes through two distinct areas of moorland designated as SSSI, SAC and SPA. In the west, it passes through the South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI; in the east it passes through the A57 passes through the Peak District Moors SPA and the Eastern Peak District Moors SSSI;
  - The A624 is bounded on the east by the following ecological designations;
     South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI
  - The A6024 passes through moorland areas with the following ecological designations; South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI;
  - The B6105 is bounded by the South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI at the Devil's Elbow bend.
- 6.4.2 Special Areas of Conservation are designated to protect rare or threatened habitats. The Annex I habitats that are the primary reason for selection of the South Pennine Moors SAC are 4030 European dry heaths; 7130 Blanket bogs and 91A0 Old sessile oak woods with Ilex and Blechnum. The South Pennine Moors SAC has the following site character: -
  - Inland water bodies (Standing water, Running water) (1%);
  - Bogs, Marshes, Water fringed vegetation, Fens (42.7%)
  - Heath, Scrub, Maquis and Garrigue, Phygrana (45.5%)
  - Dry grassland, Steppes (4.8%)
  - Humid grassland, Mesophile grassland (4.8%)
  - Broad-leaved deciduous woodland (1%)
  - Mixed woodland (0.1%)
  - Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas) (0.1%).
- 6.4.3 The Peak District Moors SPA was designated to protect the following bird species; short-eared owl, merlin and golden plover.

Figure 6.6 – Ecological designations in relation to road network

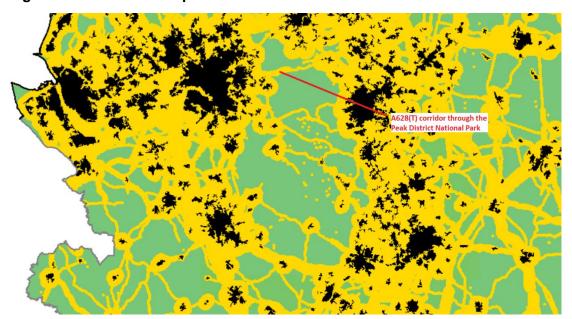


#### 6.5 Noise and vibration

- 6.5.1 The Peak District National Park is associated with a range of special qualities that combine to make the National Park a unique and treasured place at the heart of the nation. The special qualities of the Peak District National Park are defined within the Peak District National Park Management Plan (2018-23)<sup>20</sup>.
- 6.5.2 The Peak District National Park Management Plan lists seven special qualities; Special Quality 3 is 'Undeveloped places of tranquillity and dark night skies within reach of millions'. The National Park Management Plan describes the Peak District National Park as "an accessible backdoor wilderness allowing millions of people to find a welcome sense of tranquillity."
- 6.5.3 The National Park has acted as a tranquil refuge for more than 70 years. A sense of tranquillity delivers both physical and mental health and well-being benefits. The National Park Management Plan describes these benefits in the following way: -
  - "As modern life offers fewer opportunities for tranquillity, the Peak District National Park's tranquil places are all the more important. They offer a powerful sense of timelessness and escape, with the relative peace and quiet in stark contrast to the hustle and bustle of the surrounding cities."
- 6.5.4 However, even though the National Park does offer areas of tranquillity, the noise associated with road traffic is an auditory intrusion on this tranquillity. For users of the high moorland stretch of the Longdendale / Trans Pennine Trail; the noise of traffic on the A628 approaching Longside is audible before the road itself is visible.
- 6.5.5 Similarly, whilst the A628 is separated from users of the lower section of the Trans Pennine Trail by the width of the valley and the Longdendale valley reservoirs, the road is still audible; albeit as a distant rumble.
- 6.5.6 Visitors to the high gritstone edges that parallel the A57 Snake Pass are reminded of the presence of an often not visible road by the sound of traffic. This is particularly the case at weekends when high-revving motorcycle engines often obscure the sounds of birdsong, the breeze or the trickle of water in the cloughs.
- 6.5.7 The Campaign for Rural England produced an intrusion map for England in 2007. The maps show areas of noise and visual intrusion is quite clear on this map where the major road network is located within the Peak District National Park (see Figure 6.7)

<sup>&</sup>lt;sup>20</sup> https://www.peakdistrict.gov.uk/\_\_data/assets/pdf\_file/0040/378949/National-Park-Management-Plan-2018-23-2020-Update.pdf

Figure 6.7 – Intrusion Map for the Peak District National Park<sup>21</sup>



#### 6.6 Population and health

- 6.6.1 The overall population of the Peak District National Park is approximately 38,000. However, this population is disproportionately distributed across the National Park, with the majority of residents living in the larger settlements of the White Peak and Hope Valley.
- 6.6.2 There are relatively few settlements within the National Park that are located either close to the A57 Link Roads scheme. Similarly, few National Park settlements are located on the roads that are predicted to see changes in traffic flow as a result of the scheme.

#### **Tintwistle**

- 6.6.3 Tintwistle is a settlement located on the western edge of the Peak District National Park. The village is divided east and west by the National Park boundary, with the eastern half of the village falling inside the National Park. The A628 Trunk road passes through the village of Tintwistle.
- 6.6.4 The A628 carries large numbers of vehicles through Tintwistle. According to the DfT Road Traffic Statistics webpages<sup>22</sup>, 12,324 vehicles per day passed the cordon point at Crowden, east of Tintwistle in 2019. Of these vehicles, 1,629 were HGVs (13%).
- 6.6.5 This high level of vehicles and the nature of the gradient to the east of the village has led to the declaration of an Air Quality Management Area for nitrous oxides at the eastern end of Tintwistle (see Section 6.1).
- 6.6.6 The high levels of traffic through Tintwistle also lead to exposure to traffic noise for residents, with the relatively high proportion of HGVs adding to the general traffic noise. The high levels of traffic also lead to severance, making crossing the road difficult.

#### **Rights of Way**

<sup>&</sup>lt;sup>21</sup> This image is taken from the CPRE Intrusion Map – England early 1990s (2007)

<sup>&</sup>lt;sup>22</sup> Map Road traffic statistics - Road traffic statistics (dft.gov.uk)

- 6.6.7 There is an extensive rights of way network across the Dark Peak Area of the Peak District (see Figure 6.8). In addition to footpaths and bridleways, the area is crossed by a number of nationally important routes the Pennine Way, the Pennine Bridleway and the Trans Pennine Trail. These routes cross both the A628 Trunk Roads and the A57 Snake Pass within the National Park. The principle crossing points are: -
  - The A628 Trunk Road
    - The Pennine Bridleway crossing point at the eastern edge of Tintwistle
    - The Pennine Way crossing at Torside
    - The Longdendale / Trans Pennine Trail crossings at Woodhead Station, Longside End and Carr Bottom
  - The A57 Snake Pass
    - o The Pennine Way crossing at Snake Summit
- 6.6.8 These and other crossing points on the A628 and A57 in particular can be difficult to use due to existing levels of traffic. Users of these routes are also exposed to traffic noise, dust and vehicle fumes when utilising these crossing points. Appendix A shows contains photos detailing the effect of the A628(T) on users of the Trans Pennine Trail between Woodhead Station and Longside End<sup>23</sup>.

#### **Road Safety**

- 6.6.9 The Peak District National Park is crossed by a number of rural roads that are subject to the climate and geography of the Peak District. This means that many of the roads rise from valley bottoms with twists and turns that follow rivers before crossing are over high and exposed ground. Many of these high level routes are closed on a regular basis due to snow, winds or flooding. These severe weather events appear to becoming more frequent; it is likely that with the ongoing effects of climate change, such events may be more frequent and / or more severe in the future.
- 6.6.10 Peak District roads carry a mix of traffic, with differing knowledge and expectations of the road network. Residents are familiar with their local roads and use them frequently; the same can be said of both in-bound and out-bound commuters. Cross-Park traffic can be made up of a mix of those who are familiar with the roads and those who are not, the same is true of business traffic.
- 6.6.11 The ease of access of the National Park by car means that a large proportion of road users in the National Park are visitors, particularly at weekends, on Bank Holidays and during school holidays. The Peak District is also very popular with leisure motorcyclists and leisure cyclists. This mix of traffic can lead to issues with road safety. The Peak District National Park contains some routes that have frequently been assessed as high risk by Road Safety Foundation European Road Assessment Programme (EuroRAP). One of these roads is the A57 Snake Pass which is described as a "persistently high-risk road"<sup>24</sup>.

<sup>&</sup>lt;sup>23</sup> Taken during a site visit on a weekday in September 2017.

<sup>&</sup>lt;sup>24</sup> http://rsfmaps.agilysis.co.uk/



<sup>&</sup>lt;sup>25</sup> Figures produced from screen prints taken from the CrashMap webpages CrashMap

Figure 6.8 The Rights of Way Network in the vicinity of the A57 Link Roads Scheme

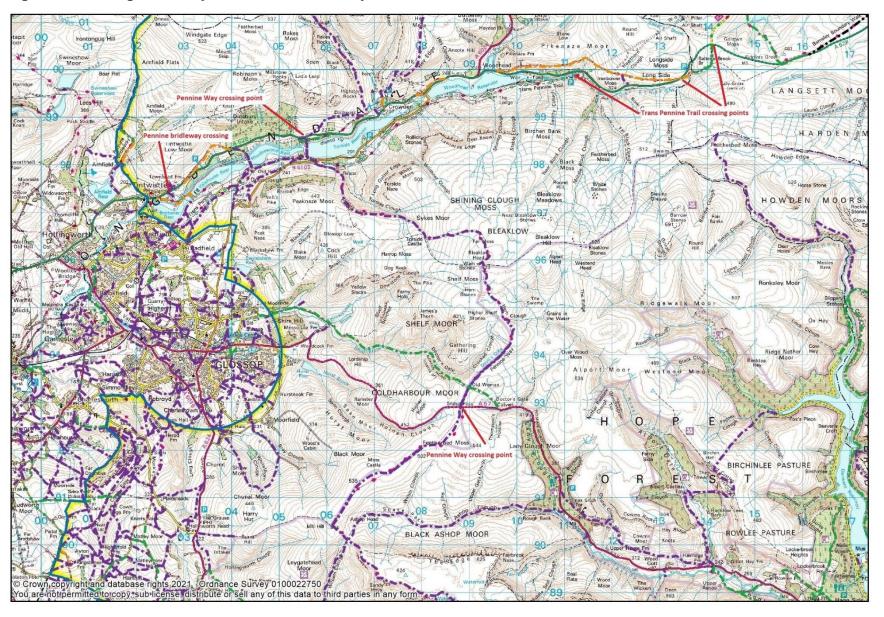


Figure 6.9 Crash map A57 Snake Pass West 2016-2020 taken from CrashMap

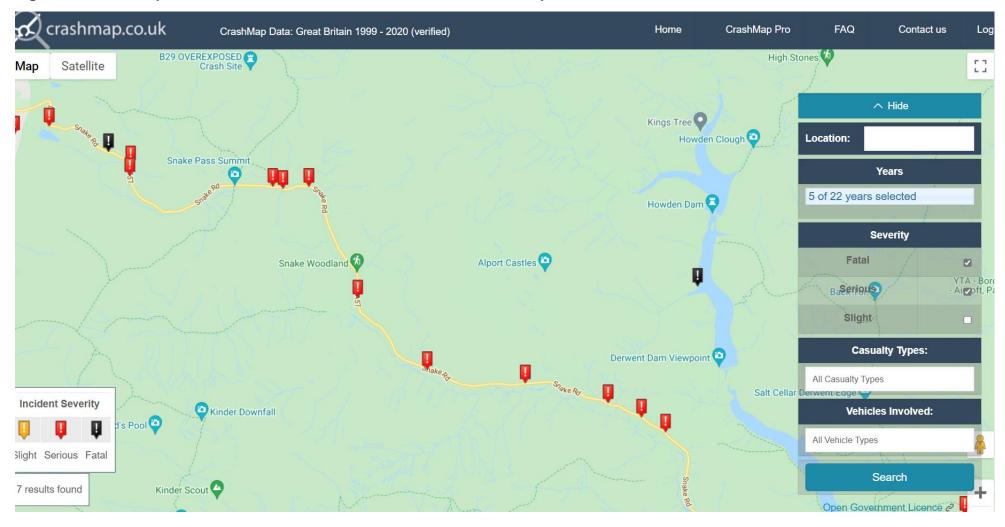


Figure 6.10 Crash map A57 Snake Pass East 2016-2020 taken from CrashMap

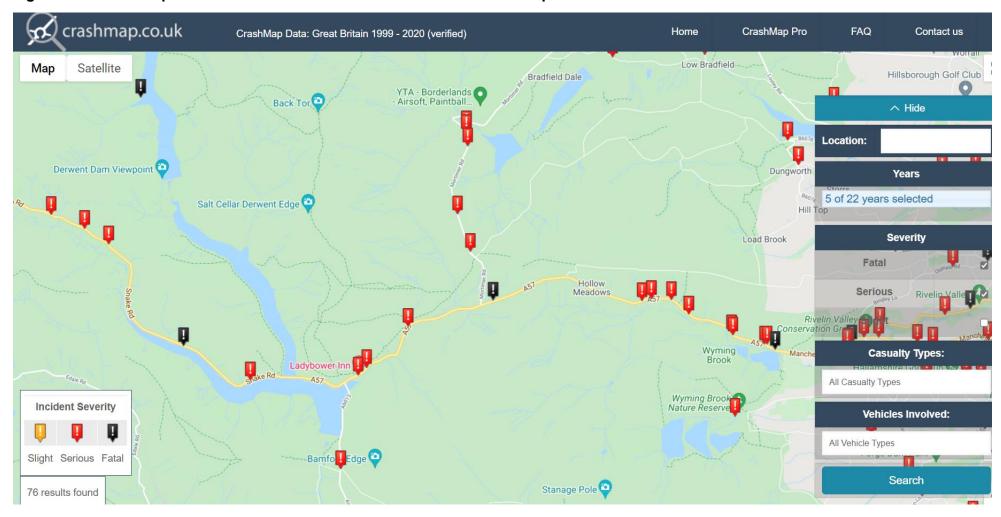
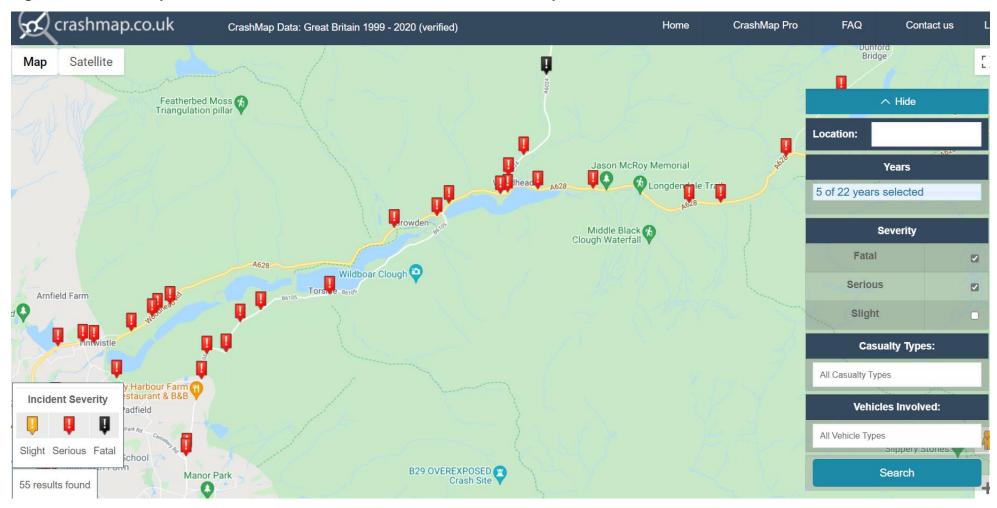


Figure 6.11 Crash map A628 Trunk Road West 2016-2020 taken from CrashMap

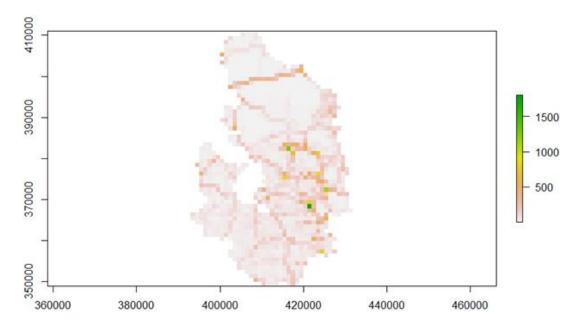


#### 6.7 Climate

#### **Carbon Emissions**

6.7.1 Excluding point sources, by far the largest CO<sup>2</sup> within the Peak District National Park emissions come from road transport. The 'A' road network in the Peak District National Park can be clearly seen in Figure 6.12; particularly the A628. The hot spots in Castleton, Baslow and Bakewell can also be clearly seen. The link between carbon emissions and Transport has been firmly established, and the continued growth in traffic across the National Park is a source of increased Carbon emissions associated with these journeys.

Figure 6.12 Road transport carbon dioxide emissions within the Peak District



- 6.7.2 Figure 6.13 provides further detail on the Peak District road transport related carbon emissions in the vicinity of the A57 Link Roads scheme. Figure 6.13 shows the current levels of carbon dioxide as carbon, associated with road transport within the National Park and the surrounding area. The Roads that are expected to be affected by the A57 Link Roads Scheme are shown on the figure.
- 6.7.3 Even without labels the road network can be clearly seen within Figure 6.2, with the motorway network (M56, M60, M62 and M67) clearly seen in red (>1,995 units of CO<sub>2</sub> as carbon). From the National Park perspective, the carbon dioxide as carbon profile of the A628 and A624 are important, with both showing 100 1,995 units of CO<sub>2</sub> as carbon.
- 6.7.4 The A57 Snake Pass can also be clearly seen based on CO<sub>2</sub> emissions. It is clear that the level of emissions on the A57 go down considerably as the road enters the National Park. This is in line with the lower levels of traffic currently using the route. Nevertheless, over most of its length, CO<sub>2</sub> emissions are at 32 100 units of CO<sub>2</sub> as carbon.

# **Transport Flow / Usage**

- 6.7.5 The Peak District National Park is the fourth largest National Park in the United Kingdom. It is surrounded by large conurbations, such as Sheffield, Manchester and Derby, which increase cross-Park movements and commuting. The Peak District National Park also attracts a high volume of tourist visits. 16.1 million People live within 40 miles or approximately one hours' driving time of the National Park boundary. This attracts between somewhere between 13 million and 26 million per annum of which we know roughly 8 in 10 come by car<sup>26</sup>.
- 6.7.6 Traffic flow data is collated from a number of roads within the National Park. Historically traffic growth within the National Park was roughly in line with or below National levels of around 2% per annum. However, from 2009 onwards there was a fluctuating decline in average flows across the Park to 2013; with the Average Annual Daily Total (AADT) falling to 5,780; 7% lower than the 2009 total of 6,216 but this trend has reversed with 6,547 vehicles in 2017 (see below).

Average annual daily traffic flows 2017

Cross-Park Roads<sup>27</sup> 8,563 (-1.82% on 2016)
 A Roads<sup>28</sup> 7,341 (+0.60% on 2016)
 Recreational Roads 3,737 (+2.08% on 2016)

Overall Combined Average 6,547 (-0.19% on 2016)

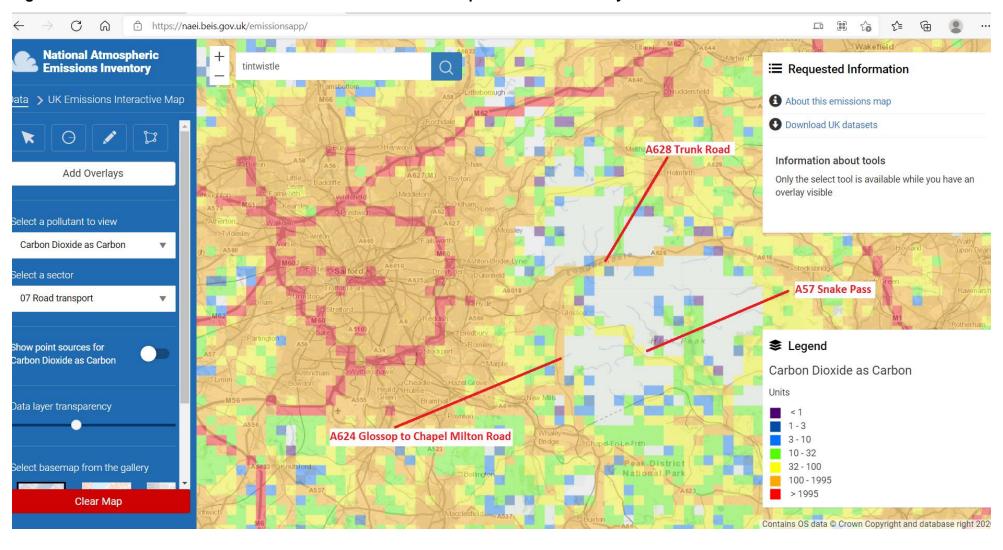
- 6.7.7 The Touche Ross Assessment of visitor numbers in 1996 estimated that during the peak July Aug period the percentage of vehicles due to recreational visitors on major routes was 40% (39.5%) and on minor roads 24.2%.
- 6.7.8 There are 38,000 residents and 18,360 dwellings in the Peak District. There is approximately, 26,438 cars or vans in Peak District Households. In England & Wales 74% of households have access to a car or van compared with 89% in the Peak District. Access to services is more difficult in rural areas and therefore we see above average Car or Van ownership and more than likely above average use of cars (see Table 6.2).

<sup>&</sup>lt;sup>26</sup> PDNPA Visitor Survey 2015

<sup>&</sup>lt;sup>27</sup> AADT Data from the A619 East of Baslow site was estimated for 2017, due to significant gaps in the available data. The estimated figure utilised the 2016 AADT figure multiplied by the average growth figure for other Cross-Park roads used for the AMR.

<sup>&</sup>lt;sup>28</sup> AADT Data from the A54 Macclesfield Road site was estimated for 2017, due to significant gaps in the available data. The estimated figure utilised the 2016 AADT figure multiplied by the average growth figure for other A roads used for the AMR.

Figure 6.13 – Caron dioxide emissions associated with road transport within the vicinity of the A57 Link Roads scheme<sup>29</sup>



<sup>&</sup>lt;sup>29</sup> Figure 6.2 is a screen print from the BEIS UK emissions interactive map <u>UK Emissions Interactive Map (beis.gov.uk)</u>

Table 6.2 - KS404EW Census 2011 Car or Van Availability

KS404EW	Peak District National Park	%	England & Wales National Park Average	%	England & Wales	%
All categories: Car or van availability*	16,461		13,466		23,366,044	
No cars or vans in household*	1,864	11.3	1,670	12.4	5,989,770	25.6
1 car or van in household*	6,259	38.0	5,472	40.6	9,861,642	42.2
2 cars or vans in household*	5,976	36.0	4,486	33.3	5,777,662	24.7
3 cars or vans in household*	1,649	10.0	1,275	9.5	1,283,780	5.5
4 or more cars or vans in household*	713	4.3	563	4.2	453,190	1.9
All cars or vans in the area**	26,438		20,868		27,294,656	

<sup>\*(</sup>Households) \*\*(Cars or Vans)

6.7.9 People living in both rural and urban areas make a similar numbers of trips per person per year. Whilst the majority of driving trips made by individuals living in urban areas are shorter than 5 miles, for most rural drivers their typical car journeys are longer than 5 miles<sup>30</sup>.

#### **Current & Future Transport Trends (National)**

- 6.7.10 Prior to the Covid-19 pandemic, 64% of all trips were made by Car (78% of total trip distance). Most transport modes are used for a mixture of purposes, however over half (57%) of all trips by rail were for commuting/business purposes<sup>31</sup>.
- 6.7.11 The total net domestic emissions from all transport sources is 124.4 million Tonnes of CO<sub>2</sub> equivalent. Twenty-one percent of UK domestic greenhouse gas emissions were from transport in 2015, up from 15% in 1990. The vast majority of total domestic transport greenhouse gas emissions were from road transport (93%). Cars and taxis were responsible for 54%, down from 60% in 1990<sup>32</sup>. While the proportion from vans

<sup>&</sup>lt;sup>30</sup> Department of Transport: Transport Statistics Great Britain (2015) <u>Transport Statistics Great Britain:</u> 2015 (publishing.service.gov.uk)

<sup>&</sup>lt;sup>31</sup> Department of Transport: National Travel Survey (2005 - 2015) <u>National Travel Survey Factsheet: Mode Use 2005 - 2015, a view into a travel week (publishing.service.gov.uk)</u>

<sup>&</sup>lt;sup>32</sup> Department of Transport: National Travel Survey (2005 - 2015) <u>National Travel Survey Factsheet: Mode Use 2005 - 2015</u>, a view into a travel week (publishing.service.gov.uk)

- has increased from 8% to 13% of emissions. The total emission of greenhouse gases from transport is largely unchanged since 1990.
- 6.7.12 There has been a long term (2000/2014) decrease in new car fuel consumption due to more fuel-efficient cars (Petrol -31% and Diesel -25%). However, this has not been sufficient to offset the increase in emissions due to greater car ownership and the resulting increase in total miles driven.

# 7. Peak District Roads potentially affected by the scheme

#### 7.1 The Current Situation

#### A628 Trunk Road

- 7.1.1 The A628 Trunk road crosses the north of the Peak District National Park between Tintwistle in the west and Flouch in the east. The road is managed by National Highways and provides a strategic link between the M1 in South Yorkshire and the M67 in Greater Manchester. The A628(T) within the National Park consists of a single carriageway road with one set of dual carriageway to allow overtaking via an additional climbing lane to the west of Flouch. The road is subject to the National speed limit for most of its length within the National Park.
- 7.1.2 The A628(T) is a high-level route crossing high ground over the Woodhead summit; it is often closed during the winter due to snow-fall or other poor weather conditions<sup>33</sup>. The road follows the Longdendale valley and accordingly has a number of bends along the route.
- 7.1.3 There are two main visitor car parks along the route within the National Park, Crowden and Woodhead Station. The car parks serve visitors to the Woodhead reservoirs, the Trans-Pennine Trail, the Pennine Way and other off-road walking / cycling routes.
- 7.1.4 The A628(T) is subject to a number of crossing points for important walking and cycling routes, including: -
  - The Pennine Bridleway crossing point at the eastern edge of Tintwistle
  - The Pennine Way crossing at Torside
  - The Longdendale / Trans Pennine Trail crossings at Woodhead Station, Longside End and Carr Bottom
- 7.1.5 According to the DfT Road Traffic Statistics webpages<sup>34</sup>, there are four manual traffic count points on the A628(T) within the National Park:
  - i) Site number: 7373; Crowden (west of junction with B6105)
  - ii) Site number: 57435; Woodhead (east of junction with B6105, west of junction with A6024)
  - iii) Site number: 17325; Salter's Brook (east of junction with A6024, west of junction with Windle Edge)
  - iv) Site number: 73013; Dog & Partridge (east of junction with Windle Edge; west of Flouch roundabout).

<sup>33</sup> According to Highways England / National Highways updates the A628 has been closed

<sup>34</sup> Map Road traffic statistics - Road traffic statistics (dft.gov.uk)

7.1.6 Data from the count points for 2019<sup>35</sup> is provided below within Table 7.1

Table 7.1 – Annual Average Daily Totals (AADT) for A628(T) Traffic Count Points inside the Peak District National Park

Link No.	Location	AADT (all motor vehicles) AADT HGVs		Percentage HGVs	
7373	Crowden	12,324	1,629	13.22	
57435	Woodhead	13,788	1,803	13.08	
17325	Salter's Brook	12,956	1,621	12.51	
73013	Dog & Partridge	13,148	1,693	12.88	

#### **A57 Snake Pass**

- 7.1.7 The A57 Snake Pass crosses the Peak District National Park between Shire Hill in the west and Rivellin Glen in the east. The western part of the route within the National Park is managed by Derbyshire County Council, with the shorter eastern section being managed by Sheffield City Council. The A57 Snake Pass provides a link between Sheffield in the east and Glossopdale / Greater Manchester in the east. The majority of the route is subject to a 50mph speed limit.
- 7.1.8 The A57 Snake Pass is a high-level route crossing high ground over the Snake summit and at Moscar; it is often closed during the winter due to snow-fall. The road follows river valleys and accordingly has a number of bends along the route. The section between Ladybower and Snake Summit is subject to geological instability and undergoes regular closures for maintenance against slippage.
- 7.1.9 There are a number of parking areas along the A57 Snake Pass along the route within the National Park. These car parks serve visitors to the Upper Derwent Valley, Alport Castles, Kinder plateau and Bleaklow including numerous walking and cycling routes. The Pennine Way crosses the A57 Snake Pass at Snake Summit.
- 7.1.10 According to the DfT Road Traffic Statistics webpages, there are three manual traffic count points on the A57 within the National Park:
  - i) Site number: 46584; Snake Woodlands (east of Glossop, west of junction with A6103)
  - ii) Site number: 73377; Cutthroat Bridge (east of junction with A6103, east of junction with Mortimer Road)
  - iii) Site number: 26576; Hollow Meadows (east of junction with Mortimer Road, west of junction with A6101)

-

<sup>&</sup>lt;sup>35</sup> Data from 2019 is used as it provides the most recent pre-Covid-19 data available.

7.1.11 Data from the count points for 2019 is provided below within Table 7.2

Table 7.2 – Annual Average Daily Totals (AADT) for A57 Snake Pass Traffic Count Points inside the Peak District National Park

Link No.	Location	AADT (all motor vehicles)	AADT HGVs	Percentage HGVs	
46584	Snake Woodlands	4,008	136	3.39	
73377	Cutthroat Bridge	5,732	143	2.49	
26576	Hollow Meadows	5,642	160	2.84	

#### A624 Glossop to Chapel Milton

- 7.1.12 The A624 crosses the Peak District National Park between Gnathole Wood in the north and Hayfield in the South, where it leaves the National Park. South of Hayfield the road enters the National Park near Newhouse Farm. The road continues southwards to White Knowle (north of Chapel Milton), where it again leaves the National Park. The route is managed by Derbyshire County Council. The A624 provides a link between Chapel-en-le-Frith and Chinley in the south and Glossop in the north.
- 7.1.13 The A624 crosses high ground between Glossop and Hayfield (Hollingworth Head), and Hayfield and Chapel Milton (Chinley Head). There are a number of bends on either side of the high ground descending into Glossop, Little Hayfield, Hayfield and Chapel Milton respectively. For the majority of its route inside the National Park, the A624 is subject to a 50mph speed limit.
- 7.1.14 According to the DfT Road Traffic Statistics webpages, there is one manual traffic count point on the A624 within the National Park. The site is numbered 7368 and located north of the junction with Monks' Road and south of Glossop. Data from 2019 provides an AADT for all motor vehicles of 7,370 and an AADT for HGVs of 275; this equates to 3.73% HGVs.

#### A6024 Holme Moss

- 7.1.15 The A6024 links the A628(T) inside the National Park with Holmfirth in the north east, crossing over Holme Moss summit. The road exits the National Park on the eastern edge of Holme village. The route is managed by Derbyshire County Council to the south-west of Holme Moss summit and Kirklees council to the north-east of Holme Moss summit. The route is subject to the national speed limit for most of its length within the National Park.
- 7.1.16 The A6024 crosses high ground over Holme Moss summit and includes a number of bends. The route is often subject to weather related road closures. The road is an iconic cycling climb and featured in the recent Yorkshire section of the Tour de France. The junction between the A6024 and the A628(T) is challenging for vehicles joining the A628(T) with poor visibility eastwards.

- 7.1.17 There are a number of parking areas along the A6024 Holme Moss route, including at Holme Moss summit. These car parks serve visitors to the area, and provide access to the open countryside.
- 7.1.18 According to the DfT Road Traffic Statistics webpages, there are two manual traffic count points on the A6024 within the National Park:
  - i) Site number: 73378; Dewhill Naze (north of the A628 junction, south of junction Holme Moss summit)
  - ii) Site number: 47803; Hill Gate Sike (north of Holme Moss summit, south of junction with Rake Head Road)
- 7.1.19 Data from the count points for 2019 is provided below within Table 7.3

Table 7.3 – Annual Average Daily Totals (AADT) for A6024 Holme Moss Traffic Count Points inside the Peak District National Park

Link No.	Location	AADT (all motor vehicles)	AADT HGVs	Percentage HGVs	
73378	Dewhill Naze	1,083	5	0.46	
47803	Hill Gate Sike	1,083	5	0.46	

#### **B6015 Woodhead Road**

- 7.1.20 The B6015 connects the A628(T) inside the National Park with Glossop in the south-west. The road crosses southwards from the A628(T) over the Woodhead reservoir embankment. It then parallels the Torside, Rhodeswood and Valehouse reservoirs in a westerly direction before turning southwards towards Glossop. The road leaves the National Park just prior to the Padfield Main Road junction. The route is managed by Derbyshire County Council and is subject to a 50mph speed limit for most of its length within the National Park.
- 7.1.21 The B6015 crosses high ground between Glossop and Torside reservoir, and includes a number of over bends. There is a main car park along the B6105 at Torside Reservoir. This car park serves visitors to the area, and provides access to the Woodhead reservoirs, the Trans Pennine Trail and other off-road walking and cycling routes. The junction between the B6105 and the A628(T) is challenging for vehicles joining the A628(T) with poor visibility westwards and a tight turn for west-bound vehicles.
- 7.1.22 According to the DfT Road Traffic Statistics webpages, there is one manual traffic count point on the B6015 within the National Park. The site is numbered 800042 and located adjacent to Torside Car Park. Data from 2019 provides an AADT for all motor vehicles of 2,126 and an AADT for HGVs of 64; this equates to 3.01% HGVs.

#### Monks' Road

7.1.22 Monks' Road connects the A624(T) inside the National Park with Charlesworth and Broadbottom. The road leaves the A624 junction in a north-westerly direction over high ground, and alongside Coombes Edge before descending towards

- Charlesworth. The road leaves the National Park to the east of Chapel Brow at Charlesworth. The route is managed by Derbyshire County Council and is subject to a 50mph speed limit for most of its length within the National Park.
- 7.1.23 Monks' Road crosses high exposed ground from its junction with the A624 before descending into Charlesworth. There are a number of parking areas along the route providing access to public rights of way. The route acts as short cut for journeys from the south towards Greater Manchester.

#### 7.2 With the scheme

- 7.2.1 The scheme leads to a general increase in traffic across four of the six roads within the National Park described in section 7.1 when compared to the 'Do Minimum' scenario. It should be noted that the figures produced by the National Highways modelling appear at odds with those available on the DfT website used to populate section 7.1 of this report. In some cases, the figures in 7.1 from 2019 appear to be equal or higher than those provided for the 2025 'Do Minimum' scenario. This may be due to the methods used to derive the DfT data, with manual counts being used to derive AADT figures. However, it also raises the question of possible undercounting through the model.
- 7.2.2 The data provided to accompany the DCO application can be seen in Tables 7.4 and 7.5 in relation to roads and links within the Peak District National Park.

# A628 Trunk Road

- 7.2.3 According to the Traffic Modelling data supplied as part of the DCO application, the A628(T) within the National Park will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the opening year (2025):
  - i) Between Tintwistle and the B6105 junction (western section) there will be a total increase of 950 motor vehicles (9%) and an increase of 26 HGVs (2%).
  - ii) Between the B6105 junction and the A6024 junction (middle section) there will be a total increase of 900 motor vehicles (7%) and an increase of 117 HGVs (7%).
  - iii) East of the A6024 junction (eastern section) there will be a total increase of 850 motor vehicles (7%) and a decrease of 13 HGVs (-1%).

The busiest section of the route is between the B6105 junction and the A6024 junction with 14,000 vehicles per day.

- 7.2.4 According to the Traffic Modelling data supplied as part of the DCO application, the A628(T) within the National Park will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the design year (2040):
  - Between Tintwistle and the B6105 junction (western section) there will be a total increase of 1,100 motor vehicles (10%) and an increase of 153 HGVs (11%).
  - ii) Between the B6105 junction and the A6024 junction (middle section) there will be a total increase of 950 motor vehicles (7%) and an increase of 105 HGVs (7%).

iii) East of the A6024 junction (eastern section) there will be a total increase of 900 motor vehicles (7%) and an increase of 108 HGVs (7%).

The busiest section of the route is between the B6105 junction and the A6024 junction with 15,650 vehicles per day.

#### **A57 Snake Pass**

- 7.2.5 According to the Traffic Modelling data supplied as part of the DCO application, the A57 Snake Pass will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the opening year (2025): -
  - A total increase of 1,150 motor vehicles (38%) and an increase of 11 HGVs (36%).

It is unclear from the model how the traffic will be dispersed eastwards from the A57 Snake Pass beyond the cordon point. Total vehicle flows are predicted to be 4,200 per day.

- 7.2.6 The traffic model indicates the A57 Snake Pass will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the design year (2040): -
  - A total increase of 1,450 motor vehicles (38%) and an increase of 14 HGVs (36%).

Total vehicle flows are predicted to be 5,300 per day.

# A624 Glossop to Chapel Milton

- 7.2.7 According to the Traffic Modelling data supplied as part of the DCO application, the A624 Glossop to Chapel Milton road will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the opening year (2025): -
  - A decrease of 100 motor vehicles (-1%) and an increase of 92 HGVs (32%).

It is unclear from the model how the traffic will be dispersed southwards from the A624 beyond the cordon point. Total vehicle flows are predicted to be 9,550 per day.

- 7.2.8 The traffic model indicates the A624 Glossop to Chapel Milton road will see the following change in AADT traffic flows with the scheme compared to the 'Dominimum' scenario in the design year (2040): -
  - A decrease of 600 motor vehicles (-5%) and an increase of 100 HGVs (27%).

Total vehicle flows are predicted to be 11,850 per day.

#### A6024 Holme Moss

- 7.2.9 According to the Traffic Modelling data supplied as part of the DCO application, the A6024 Holme Moss road will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the opening year (2025): -
  - An increase of 100 motor vehicles (14%) and no use by HGVs either with or without the scheme.

It should be noted that the DfT data suggests a current (2019) use of the route by HGVs of 5 per day (0.4% of total flows).

Total vehicle flows are predicted to be 800 per day.

- 7.2.10 The traffic model indicates the A6024 Holme Moss road will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the design year (2040): -
  - An increase of 50 motor vehicles (6%) and no use by HGVs either with or without the scheme.

Total vehicle flows are predicted to be 950 per day.

#### **B6015 Woodhead Road**

- 7.2.11 According to the Traffic Modelling data supplied as part of the DCO application, the B6015 Woodhead road will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the opening year (2025): -
  - A decrease of 50 motor vehicles (-2%) and a decrease of 2 HGVs (-2%).

Total vehicle flows are predicted to be 2,350 per day.

- 7.2.12 The traffic model indicates the B6015 Woodhead road will see the following change in AADT traffic flows with the scheme compared to the 'Do-minimum' scenario in the design year (2040): -
  - A decrease of 200 motor vehicles (-6%) and a decrease of 45 HGVs (-25%).

Total vehicle flows are predicted to be 3,450 per day.

#### Monks' Road

- 7.2.13 National Highways provided the Peak District National Park Authority on request additional traffic flow data for Monks Road. Whilst the information is not comprehensive, it indicates the following:
  - i) An increase of 241 in vehicles in 2025 with the scheme over the 'Do Minimum' scenario, and
  - ii) An increase of 654 in vehicles in 2025 with the scheme over the 'Do Minimum' scenario.

#### Net increase in traffic across the Peak District National Park

- 7.2.14 Whilst the scheme does appear to deliver traffic benefits in specific locations outside of the National Park boundary, the traffic modelling indicates that overall it will increase traffic flows on several roads within the National Park. Specifically, it will:
  - i) Increase traffic on the A628(T) by 950 vehicles (2025) and 1,100 vehicles (2040)
  - ii) Increase traffic on the A57 Snake Pass by 1,150 vehicles (2025) and 1,450 vehicles (2040)
  - iii) Increase traffic on the A6024 Holme Moss road by 100 vehicles (2025) and 50 vehicles (2040)

Table 7.4 – Comparison of Current situation with Do minimum and Do something (2025 and 2040) – All vehicles

Road	Location	Opening Year (2025)			Design Year (2040)				
		AADT 2025 (Do minimum)	AADT 2025 (with scheme)	Numerical difference with DS to DM	Percentage difference with DS to DM	AADT 2040 (Do minimum)	AADT 2040 (with scheme)	Numerical difference with DS to DM	Percentage difference with DS to DM
A628(T)	Crowden	10,700	11,650	+950	+8.9%	11,100	12,200	+1,100	+9.9%
A628(T)	Woodhead	13,100	14,000	+900	+6.9%	14,700	15,650	+950	+6.5%
A628(T)	Salter's Brook	12,400	13,250	+850	+6.9%	13,800	14,700	+900	+6.5%
A57 Snake Pass	East of Hurst Rd	3,050	4,200	+1,150	+37.7%	3,850	5,300	+1,450	+37.7%
A624	Gnathole	9,650	9,550	-100	-1.0%	12,450	11,850	-600	-4.8%
A6024 Holme Moss	Heyden Bridge	700	800	+100	+14.3%	900	950	+50	+5.6%
B6015 Woodhead Rd	Torside	2,400	2,350	-50	-2.1%	3,650	3,450	-200	-5.5%
Monks' Road	Unknown	n/a	n/a	+241	n/a	n/a	n/a	+654	n/a

Table 7.4 – Comparison of Current situation with Do minimum and Do something (2025 and 2040) – HGVs

Road	Location	Opening Year (2025)			Design Year (2040)				
		AADT 2025 (Do minimum)	AADT 2025 (with scheme)	Numerical difference with DS to DM	Percentage difference with DS to DM	AADT 2040 (Do minimum)	AADT 2040 (with scheme)	Numerical difference with DS to DM	Percentage difference with DS to DM
A628(T)	Crowden	1,605	1,631	+26	+1.6%	1,433	1,586	+153	+10.7%
A628(T)	Woodhead	1,703	1,820	+117	+6.9%	1,617	1,722	+105	+6.5%
A628(T)	Salter's Brook	1,736	1,723	-13	-0.8%	1,656	1,764	+108	+6.5%
A57 Snake Pass	East of Hurst Rd	31	42	+11	+35.5%	39	53	+14	+35.9%
A624	Gnathole	290	382	+92	+31.7%	374	474	+100	+26.7%
A6024 Holme Moss	Heyden Bridge	0	0	0	0.00%	0	0	0	0.00%
B6015 Woodhead Rd	Torside	120	118	-2	-1.7%	183	138	-45	-24.6%
Monks' Road	Unknown	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

- iv) Increase traffic on Monks' Road by 241 vehicles (2025) and 654 vehicles (2040)
- 7.2.14 The scheme does lead to a decrease in traffic flows on two National Park roads, specifically there is a:
  - i) Decrease in traffic on the A624 Glossop to Chapel Milton road of 100 vehicles (2025) and 600 vehicles (2040); however, this is offset by the increase in flows on Monks Road
  - ii) Decrease in traffic on the B6015 Woodhead Road Milton of 50 vehicles (2025) and 200 vehicles (2040).

# 8. Local Impacts

#### 8.1 Introduction

- 8.1.1 The Peak District National Park Authority recognises the aims of the A57 Link Roads scheme to improve conditions for the residents of Mottram Moor and Woolley Bridge, and also for those who visit these areas to access employment, education and other services.
- 8.1.2 The Peak District National Park is located to the east of the proposed scheme. As such, none of the proposed works have a direct impact on the National Park. However, the Environmental Statement accompanying the DCO submission for the scheme raises concerns for the Authority with regard to the indirect effects of the scheme on the National Park. In all cases, these effects are related to increased traffic flows on National Park roads, principally the A628 Woodhead and A57 Snake Passes.
- 8.1.3 The A628 Woodhead route across the National Park is predicted to experience a daily increase in traffic of up to 950 vehicles (2025) and 1,100 vehicles (2040); whilst the A57 Snake Pass will see an increase in vehicles of 1,150 (2025) and 1,450 (2040).
- 8.1.4 This growth in traffic has the potential to negatively affect the Special Qualities of the Peak District, whilst impacting on the achievement of the Statutory Purposes of the National Park (Section 61, Environment Act, 1995). The National Park Authority has concerns regarding the effects of the scheme on the following topic areas.

# 8.2 Concerns about the Landscape assessment methodology

- 8.2.1 Officers of the Peak District National Park Authority have raised concerns with the scheme promoters in relation to how some impacts on the National Park have been assessed. In effect this relates to indirect impacts, which have largely been judged to be insignificant. However, given the national importance of the National Park and its landscape and special qualities, we wish to raise the following concerns.
- 8.2.2 The A57 Link Roads scheme lies approximately 2km away from the boundary of the Peak District National Park at its nearest point. Therefore, the landscape and visual effects of the scheme on the National Park would be indirect, not direct.
- 8.2.3 Therefore it is important that the methodology for considering the indirect effects of the scheme is appropriate. In the case of the National Park, the main effect is the indirect impact of increased vehicles on existing roads across the Park. Of additional concern is that increased vehicle numbers will act as a driver for additional demand for increased capacity on these roads and/or associated infrastructure upgrades (signage, lighting, straightening, widening; or for other schemes to cope with the safety impact of additional traffic on unsuitable routes
- 8.2.4 The Peak District National Park Authority and natural England were engaged in discussions with Highways England and Arcadis about the methodology for determining indirect effects of the scheme. However, since the decoupling of the A57 Links Roads scheme from the Trans Pennine Upgrade Programme in 2019 these discussions do not appear to have been considered pertinent by the current consultant.

# **Effect Significance**

8.2.5 In terms of the scheme promoter's assessment methodology, they defined significance categories (in Table 4.1 and 4.2 – and again in Table 7.13) and state 'slight effects are not considered material in the decision-making process'. We believe that this statement is contrary to national planning policies. Paragraph 176 of the National Planning Policy Framework (2021) states: -

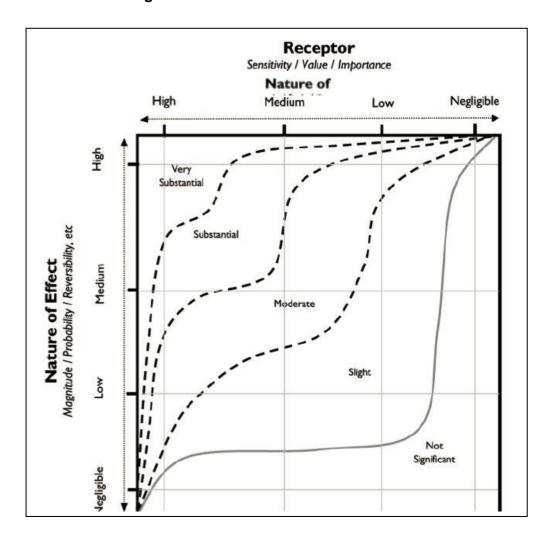
"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas"

8.2.6 Paragraph 177 of the National Planning Policy Framework (2021) goes on to state: -

"When considering applications for development within National Parks...
permission should be refused for major development other than in exceptional
circumstances, and where it can be demonstrated that the development is in the
public interest. Consideration of such applications should include an assessment
of:

- a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated'
- 8.2.7 It is worth noting that neither of aforementioned paragraphs from the National Planning Policy Framework (2021) is referenced within the 'Landscape Legislation and Policy' section in Chapter 7 of the Environmental Statement.
- 8.2.8 In addition, this approach does not accord with good assessment practice; the Institute of Environmental Assessments table (below 8.1) is taken from 'The state of Environmental Assessment Practice' (IEMA, 2011) and clearly shows that effects of even slight/low magnitude have the potential to result in substantial effects on sensitive receptors.

Table 8.1 - EIA significance evaluation matrix



8.2.9 Peak District National Park Core Policy L1: Landscape character and valued characteristics states that "Development must conserve and enhance valued landscape character, as identified in the Landscape Strategy and Action Plan, and other valued characteristics". Whilst the development in question does not take place within the National Park, the effects of increased traffic flow are felt within the National Park. We believe that effects which are slight adverse (or even negligible) do not conform with Policy L1 by 'conserving and enhancing'. Effects of this magnitude should therefore be considered a material consideration in the decision-making process where the effects are within National Parks.

How are indirect effects (on the Landscape and visual amenity of the NP) considered and assessed within the LVIA?

#### Identification of the Baseline

8.2.10 We believe that a more detailed area of landscape indirectly affected by the development be identified (rather than the entire LCT areas). This is because the effects of increased traffic flow are likely to be relatively localised. The Environmental Statement states that 'a scheme level landscape character assessment has been undertaken (Figure 7.3)' (Chap 7, p.15), but this fails to address the issue. This is because the 'scheme level' landscape character areas are all outside the Park boundary, rather than including areas within the Park.

- 8.2.11 Therefore, we do not believe that the appropriate landscape receptors have been adequately defined at the correct level of detail to determine indirect landscape effects of the scheme (on character and perceptual aspects such as tranquillity, wildness, remoteness etc) within the Park.
- 8.2.12 The scheme promoters have assured officers of the National Park Authority that specific perceptual aspects (tranquillity / wildness / scenic beauty) have been assessed as part of the 'consideration of the Special qualities of the Park'. Whilst the defined special qualities are important, these do not specifically address the perceptual issues important to landscape character. We consider this to be a significant omission by the LVIA in terms of methodology and does not satisfactorily address the issues raised during the consultation process.

# **Methodology for determining Indirect effects**

8.2.13 Following on from this, the LVIA states (p.22 para 7.3.32): -

"DMRB LA 107 does not define a specific methodology for indirect landscape or visual assessment. Therefore, a methodology for this type of assessment has been agreed with stakeholders to consider indirect landscape and visual effects experienced within the Peak District National Park as a result of potential increased traffic flows through the National Park"

- 8.2.14 We do not consider that an adequate methodology has been put forward by the Applicant. We commented on their approach but we do not feel that this has been agreed prior to the submission of the ES. (However, that being said, their approach as outlined in sections 7.3.8 7.3.44 is acceptable as far as it goes).
- 8.2.15 Paragraph 7.3.45 of the Environmental Statement states "*Professional judgement was used to determine the magnitude of change*". Whilst this acceptable in principle, it does not go far enough: this is the crux of the issue; how is the magnitude of effect (of changing vehicle numbers) determined? The Environmental Statement does not state the factors that have been used/considered to judge this effect.
- 8.2.16 Paragraph 7.5.9 of the Environmental Statement states "The assessment of indirect visual effects within the Peak District National Park is as per methodology agreed with the stakeholders, as detailed within section 7.3". Officers of the National Park Authority do not believe that a methodology was agreed. For example, we specifically requested that more detailed landscape receptor areas were identified, this was not undertaken.
- 8.2.17 Paragraph 7.9.16 of the Environmental Statement takes information from the Noise and Vibration section of the Environmental Statement. In previous discussions between the Officers of the National Park Authority and Natural England the case was firmly made that it was not acceptable to use noise levels as a 'proxy' for landscape or visual effects.

#### **Assessment of Indirect effects on the National Park**

8.2.18 Environmental Statement Table 7.29 Indirect effects on landscape character areas within the PDNP indicates a "Slight adverse significance of change is defined for the Moorland Slopes and Cloughs, Reservoir Valleys with Woodlands and Open Moors LCTs". We believe that: -

- The magnitude of change is poorly defined (see comments above re. para 7.3.45). It is unclear what reasoning or factors have been considered when coming to the 'professional judgement'.
- We would suggest that a higher magnitude of change would be identified if a more detailed local character area were assessed.
- In the methodology employed, 'slight adverse' effects are not considered to be material. We would disagree and state that slight adverse effects are a material consideration when applied to a highly sensitive National Park landscape (see Table 8.1 above).
- 8.2.19 Within Environmental Statement Table 7.32 Indirect visual effects on representative viewpoints within the PDNP, 'No change' is consistently identified for the magnitude of change. The Environmental Statement acknowledges that vehicle numbers will increase. It is difficult to equate a large increase in vehicles with a 'no change' judgement. The Environmental Statement offer no justification for the assessment of 'no change'. Change may well be of a low magnitude, but there is still clearly a degree of adverse change (which has not been taken into account within the assessment process).
- 8.2.20 In our view, the change in vehicle numbers would be apparent, though magnitude is likely to be negligible. However, given the sensitivity of the visual receptors, this would likely result in a slight adverse significance of effect based on the methodology used. Within a National Park, we believe this effect is a material consideration.
- 8.2.21 We believe that there are a number of issues in the ES and LVIA methodology. The issue of 'slight adverse' effects not being a material consideration in a National Park is one of them. We also believe that indirect visual effects are under assessed.

#### 8.3 Air Quality

#### **Tintwistle AQMA**

- 8.3.1 The Tintwistle Air Quality Management Area (AQMA) is acknowledged within the Environmental Statement Chapter 5 (paragraph 5.6.2, Table 5-4 and Figure 5.1. However, paragraph 5.6.2 makes it clear that the Tintwistle AQMA falls outside the criteria of the Affected Road Network (as defined within DMRB LA105). In effect, the predicted increase in traffic on the A628 through Tintwistle is predicted to be 50 vehicles per day below the 1,000 vehicle AADT increase required for the AQMA to meet this criterion.
- 8.3.2 Table 6.1 provides nitrous oxide data recorded at two air quality monitoring sites within the Tintwistle AQMA. One of these HP2a was a temporary site, whilst HP5 is a permanent site. HP5 suggests an overall downward trend in annual mean nitrous oxide emissions from 50.2 μg/m3 in 2014 to 47.0 μg/m3 in 2018. However, it should be noted that this is not a continuous downward trend with the counter recording peaks of 51.8 μg/m3 in 2015 and 50.9 μg/m3 in 2017.
- 8.3.3 Figure 5.1 of Chapter 5 of the ES shows the Tintwistle AQMA, but does not give any indication of the effects of the scheme on the Tintwistle AQMA. Whilst the HP5 monitoring site was indication a downward trend in nitrous oxides prior to the Covid-19 pandemic, it is unclear how locked in this trend is.

- 8.3.4 Traffic modelling indicates that there will be an increase in traffic of 950 vehicles per day (AADT) as a result of the A57 Links Road scheme in 2025. It should be noted that this is unlikely to represent a uniform flow throughout the day. Whilst the effects of Covid-19 are still to be fully understood, it is still likely that there will be morning and evening peak flows of traffic and associated congestion.
- 8.3.5 Overall, traffic levels through Tintwistle are predicted to be even higher in the Design Year (2040) with the scheme at 12,200 AADT (an increase of 1,100 over the 'Do Minimum' scenario'.
- 8.3.6 Even allowing for a general improvement in emissions across the region's vehicle fleet over time, it is likely that nitrogen dioxide and particulate matter emissions<sup>36</sup> will remain problematic in the opening year of the scheme and beyond.
- 8.3.7 It is difficult to accurately assess what the possible impact of the scheme on the Tintwistle AQMA will be because it lies outside of the ARN and as such is not covered within the Environmental Statement.

#### **Designated sites**

- 8.3.8 The Environmental Statement does assess the possible impact of the air quality impacts of increased traffic flows on the A57 Snake Pass on the South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI. The predicted increase in traffic flows is 1,150 AADT in 2025 with the scheme compared to the 'Do Minimum'. Whilst this is a significant increase in traffic, the actual totals are lower than on the A628 Trunk Road, which also crosses the National Park through the South Pennine Moors SAC, Peak District Moors SPA and the Dark Peak SSSI.
- 8.3.9 In assessing the impact on the designated sites adjacent to the A57 Snake Pass, Paragraph 5.7.34 states that
  - "The change in nitrogen deposition rates with the Scheme are less than the DMRB LA 105 designated habitat screening criteria and the magnitude of change of the nitrogen deposition is less than 0.4 kg N/ha/yr at all relevant statutory designated sites."
- 8.3.9 For the A628 Trunk Road across the National Park, the appropriate traffic flow figures are taken from the modelled traffic flows east of Woodhead Station, where the route passes through the SAC, SPA and SSSI. At this location traffic flow is predicted to increase by 850 vehicles AADT in 2025 with the scheme compared with the 'Do Minimum'. However, in comparison to the A57 Snake Pass, this is an increase of 850 vehicle on top of predicted flows of 12,400 vehicles AADT 'Do Minimum'.
- 8.3.10 The predicted increase in traffic flow at Salters Brook on the A628(T) is only 7% (2025 'Do Something'). However, unlike the A57 Snake Pass, a high proportion of the total number of vehicles is HGV traffic (1,723 AADT), with a bias towards diesel engines which produce greater amounts of nitrous oxides.
- 8.3.11 Unfortunately the relatively small predicted increase in vehicles along the A628 means that an assessment of impact on the SAC, SPA and SSSI have been scoped out as the road is not part of the ARN.

<sup>&</sup>lt;sup>36</sup> Even with the general electrification of the fleet, particulate matter will continue to be generated by the wear of tyres and brake pads; as well as the general erosion of the road surface.

8.3.12 Figure 6.2 of this report shows that existing levels of nitrogen dioxide emissions are relatively high along the A628 corridor at 1 - 25-unit tonnes of NO<sub>2</sub> per km<sup>37</sup>; whilst those along the A57 Snake Pass are lower 0.3 - 1-unit tonnes of NO<sub>2</sub> per km. Given the existing high levels of nitrous oxide emissions along the A628 Trunk Road. We believe that the impacts of the scheme on the SAC, SPA and SSSI adjacent to the A628(T) should have been fully assessed.

#### 8.4 Cultural Heritage

#### Assets in scope

- 8.4.1 For the development of the Environmental Statement, a 500km search area was used for non-designated assets, and 1km for designated assets. The baseline was reassessed for heritage assets between 1-2km from the development, using the ZTV. From this, and following consultation, Chapter 6 now includes consideration of Tintwistle Conservation Area, which is welcomed.
- 8.4.2 The Environmental Statement states 'It is considered that beyond the 2 km study area the Scheme would not be readily perceptible' (para 6.5.3 and also 7.5.6). The lack of longer-distance views (and more distant heritage assets) was a point raised by officers of the National Park Authority previously. We had proposed consideration of heritage assets south of Simmondley, east of Charlesworth and views from Peak Naze, east of Padfield but these have not been included. Presumably, they were considered to be out of scope.

# Physical impacts on heritage

8.4.3 Physical impact to heritage assets (known and unknown) will lie wholly outside the national park. This is being dealt with by the relevant Local Authorities and a mitigation strategy will be in place.

#### Visual impact on heritage

8.4.4 Tintwistle Conservation Area and its assets fall outside of the 1km zone and off of the map. Therefore, it is difficult to assess if they would be visually impacted.

# Setting and indirect impact on heritage

- 8.4.5 The key impacts on heritage in the National Park are indirect, and arise from increased traffic flows. There will a slight increase (8.9%) in traffic through the Tintwistle Conservation Area (2025) over the Do Minimum scenario, which the Environmental Statement authors have judged to have a 'non-significant, neutral, residual effect'. This will, nonetheless, have an adverse effect on how the Conservation Area is experienced. It should be noted that by the Design Year (2025), the percentage increase in flows for the 'Do Something' over the 'Do Minimum' is 9.9%; an increase in AADT of 1,100 vehicles (including 1,586 HGVs). This means that the impact of the scheme on the Tintwistle Conservation Area will increase over time.
  - 8.4.6 The percentage increase in flow on the A57 Snake Pass in 2025 with the scheme seems to be very large (37.7%) but the Environmental Statement (Table 7.32) only notes a 'slight increase' of traffic on the A57 (e.g. in relation to VP23) with no change

<sup>&</sup>lt;sup>37</sup> Figure 6.2 is a screen print from the BEIS UK emissions interactive map for road related nitrogen dioxide emissions <u>UK Emissions Interactive Map (beis.gov.uk)</u>

- to the Special Qualities of the National Park. We are concerned that the assessment of impact of increased traffic on the A57 is underestimated. The A57 does not run through any Conservation Areas, but heritage assets are one part of the major attractions for people to the Ladybower Reservoir area.
- 8.4.7 Within the National Park, the A57 falls in the setting of a significant cluster of scheduled monuments that run along Hordron Edge, Bamford Edge, Crook Hill and Bridgend Pasture. The increased traffic flow could impact adversely on the enjoyment and experience of these important landscapes. As noted in Table 7.8 'the presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right'. These receptors have not been identified within Chapter 6 or Chapter 7 of the Environmental Statement, as being indirectly affected by the scheme.
- 8.4.8 It should be noted that whilst the 20240 Design Year increase in flows of the 'Do Something' over the 'Do Minimum' for the A57 Snake Pass remains at 37.7%; in effect this is an increase in the AADT of 1,450 additional vehicles.
- 8.4.9 In sum, the effects on heritage in the National Park are indirect, and relatively small—scale, mainly relating to increases in traffic movement. This will affect how people experience the historic built environment (Tintwistle Conservation Area) and heritage features in the upland rural environment. These heritage assets are bound up closely with other landscape characteristics that contribute to several of the Park's Special Qualities.
- 8.4.10 Generally, we were disappointed that no opportunities for the enhancement of the historic environment could be identified within Environmental Statement paragraph 6.10.4.

#### 8.5 Landscape and visual

- 8.5.1 We are concerned with how the indirect landscape impacts (increased traffic flow) of the scheme have been assessed. National Policy sets great store in ensuring the road schemes and their effects are thoroughly assessed to avoid or minimise impacts on National Parks. We do not believe that appropriate landscape receptors have been adequately defined at the correct level of detail to determine indirect landscape effects of the scheme (on character and perceptual aspects such as tranquillity, wildness, remoteness etc) within the National Park.
- 8.5.2 We are concerned that where negative impacts have been recognised, 'slight adverse' effects are not considered to be material. In the case of a protected landscape we believe that slight adverse effects are a material consideration. This is particularly pertinent due to the cumulative harm caused by additional traffic loads on top of the existing high levels of traffic through these valleys.

# 8.6 Biodiversity

8.6.1 We are concerned that increases in air pollution, notably Nitrogen deposition, and the impact of this on Blanket Bog and Upland Heathland habitats within the South Pennine Moors SAC. I note that this potential impact has been scoped out in the Habitats Regulations Assessment as having no likely significant effects on the basis that the predicted traffic increases are below the threshold of 1000 AADT; however, some of the figures are very close to the 1000 AADT figure and we would question

- what the confidence limits are for those figures. Should the confidence limits mean that the figures could exceed the 1000 AADT threshold, and notwithstanding the predicted improvements in quality of vehicle emissions, then we would suggest that the potential Nitrogen deposition impact should be factored in as a potential impact warranting further consideration as part of an Appropriate Assessment.
- 8.6.2 We are concerned about the increases in visual and noise disturbance to breeding moorland birds; both the SPA-qualifying species (Short-eared Owl, Merlin, Golden Plover) and the wider range of birds for which the Dark Peak SSSI qualifies, such as Curlew, Snipe and Dunlin. There may also be similar impacts on Mountain Hare- a species of Principal Importance in England and for which the Peak District population is the sole English population. These potential disturbance effects have been scoped out of further consideration on the basis that the roads are already busy. However, no evidence appears to be presented to substantiate that conclusion.
- 8.6.3 There is research evidence to suggest that both visual and noise disturbance can impact negatively on breeding birds, with some studies suggesting that there may be thresholds of tolerance by different species. No evidence appears to be presented to consider what disturbance thresholds might be relevant to the species concerned; whether the existing levels of disturbance already exceed those tolerances; or whether the predicted traffic increases might push the disturbance levels above key tolerance thresholds. This is particularly the case for the A57 where significant traffic increases of 38% are predicted.
- 8.6.3 We are also concerned about the increase in fire risk associated with higher traffic flows. This has not been scoped into potential factors having a significant effect; however, between 2007-2016 there were 260 recorded wildfires on the Peak District moors. Only 28 of these had causes attributed, of which 1 was specifically attributable to a vehicle and a further 6-7 attributable to discarded cigarettes, a proportion of which may arise from vehicles on roads traversing the moors. So, it is likely that at least 1 wildfire per year on the Peak District moors is attributable to vehicle use. Any increase in traffic volumes; particularly as large as the 38% predicted increase on the A57, is likely to increase the risk of wildfire. We would therefore suggest that the assessment of increased wildfire risk has wrongly been scoped out of having a potential significant impact on Blanket Bog and Upland Heathland habitat in the SAC.

# 8.7 Noise and vibration

#### **Tintwistle**

- 8.7.1 Tintwistle is a settlement located on the western edge of the Peak District National Park. The village is divided east and west by the National Park boundary, with the eastern half of the village falling inside the National Park. The A628 Trunk road passes through the village of Tintwistle.
- 8.7.2 The A628 carries large numbers of vehicles through Tintwistle. The traffic modelling indicates that with the scheme in 2025, there will be 11,650 vehicles passing through Tintwistle (950 vehicles more than in the 'Do Minimum' scenario). HGVs make up 14% of this total (1,631).
- 8.7.3 This high level of traffic and the percentage of HGVs will have a negative effect on residents of the village of Tintwistle. This will be particularly acute for those

properties adjacent to the road and where vehicles are climbing eastwards out of the village. The pedestrians and equestrian crossings within the village, necessary to allow crossing of the A628 exacerbate the situation as motor vehicles are generally noisier in low gears and accelerating; this is particularly the case for diesel engine HGVs.

8.7.4 Whilst it is difficult to predict the effects of the move towards decarbonising road transport on noise impacts; it should be noted that with the scheme the Design Year (2040) predictions are for a 12,200 vehicle AADT (an increase of 1,100 over the 'Do Minimum' scenario'. This is predicted to include 1,586 HGVs per day.

# Effects on designated sites

8.7.5 We are concerned about the increases in visual and noise disturbance to breeding moorland birds; both the SPA-qualifying species (Short-eared Owl, Merlin, Golden Plover) and the wider range of birds for which the Dark Peak SSSI qualifies, such as Curlew, Snipe and Dunlin. There may also be similar impacts on Mountain Hare- a species of Principal Importance in England and for which the Peak District population is the sole English population.

#### Effects on the quiet enjoyment of the National Park

- 8.7.6 Section 6.5 describes the effect of current traffic levels on the quiet enjoyment of the National Park. For users of the high moorland stretch of the Longdendale / Trans Pennine Trail; the noise of traffic on the A628 approaching Longside is audible before the road itself is visible.
- 8.7.7 Similarly, whilst the A628 is separated from users of the lower section of the Trans Pennine Trail by the width of the valley and the Longdendale valley reservoirs, the road is still audible; albeit as a distant rumble.
- 8.7.8 Visitors to the high gritstone edges that parallel the A57 Snake Pass are reminded of the presence of an often not visible road by the sound of traffic. This is particularly the case at weekends when high-revving motorcycle engines often obscure the sounds of birdsong, the breeze or the trickle of water in the cloughs.
- 8.7.9 Given the existing levels of noise disturbance for visitors to the National Park as described above, it is likely that this nuisance will be become worse. For users of the Trans Pennine / Longdendale Trail adjacent to the A628, traffic noise is already a fairly constant intrusion. The addition of between 850 and 950 additional vehicles per day (2025 Do Something') is likely to reduce the number or length of quieter periods.
- 8.7.10 For the A57 Snake Pass, the increase in vehicles is more pronounced (1,150 or 38%) with the scheme (2025). It is likely that this will have a more noticeable effect for visitors to the National Park.

#### 8.8 Population and health

#### **Tintwistle**

8.8.1 Tintwistle is a settlement located on the western edge of the Peak District National Park. The village is divided east and west by the National Park boundary, with the eastern half of the village falling inside the National Park. The A628 Trunk road passes through the village of Tintwistle. Tintwistle lies to the east of the A57 Link

- Roads scheme and is the easternmost of the three Longdendale villages; with the others being Mottram and Hollingworth.
- 8.8.2 The A628 carries large numbers of vehicles through Tintwistle. The traffic modelling indicates that with the scheme in 2025, there will be 11,650 vehicles passing through Tintwistle (950 vehicles more than in the 'Do Minimum' scenario). HGVs make up 14% of this total (1,631). However, with the scheme; by the Design Year (2040) there are predicted to be 12,200 vehicles per day (an increase of 1,100 over the 'Do Minimum' scenario'. This is predicted to include 1,586 HGVs per day.
- 8.8.3 The increase in traffic flows as a result of the scheme are likely to affect the Tintwistle Air Quality Management Area as described in Section 8.3. They are also likely to increase noise and vibration as detailed in Section 8.7.
- 8.8.4 The increase in traffic flows is also likely to increase severance through the village making crossing of the road more difficult. It is also likely to affect the resident's propensity to cycle or to walk for journeys that necessitate either crossing the road or utilising narrow sections of pavement adjacent to the A628.

#### Severance

- 8.8.5 As described in Section 6.6 and shown in Figure 6.8, there is an extensive rights of way network across the Dark Peak Area of the Peak District National Park. In addition to footpaths and bridleways, the area is crossed by a number of nationally important routes the Pennine Way, the Pennine Bridleway and the Trans Pennine Trail. These routes cross both the A628 Trunk Roads and the A57 Snake Pass within the National Park. The principle crossing points are: -
  - The A628 Trunk Road
    - The Pennine Bridleway crossing point at the eastern edge of Tintwistle
    - The Pennine Way crossing at Torside
    - The Longdendale / Trans Pennine Trail crossings at Woodhead Station, Longside End and Carr Bottom
  - The A57 Snake Pass
    - The Pennine Way crossing at Snake Summit
- 8.8.6 These and other crossing points on the A628 and A57 in particular can already be difficult to use due to existing levels of traffic. Users of these routes are also exposed to traffic noise, dust and vehicle fumes when using, or waiting to use these crossing points.
- 8.8.7 Both the A628(T) and A57 Snake Pass are predicted to see increased traffic flows as a result of the scheme compared with the 'Do Minimum Scenario'. For those crossing these roads, the increase in traffic flows will make these crossings even more difficult. Table 8.2 shows the predicted traffic flows at each of the crossing points described above both with and without the scheme.
- 8.8.8 The Peak District National Park is a popular destination for road cyclists. The Holme Moss and Snake Pass Routes include popular hill climbs, which are linked via the A628 (T). The increase in traffic on all three roads, but particularly the A628(T) and A57 Snake Pass are likely to act as a deterrent to cyclists. It is acknowledged that concerns about road safety strongly influence the public's propensity to cycle.

Table 8.2 – Predicted traffic flows past key walking and cycling routes affected by the A57 Link Roads Scheme

Crossing Point	AADT Opening Year (2025)		AADT Design Year (2040)		
	Without scheme	With scheme	Without scheme	With scheme	
A628 (T) Pennine Bridleway - eastern edge of Tintwistle	10,700	11,650	11,100	12,200	
A628 (T) Pennine Way crossing at Torside	10,700	11,650	11,100	12,200	
A628 (T) Longdendale / Trans Pennine Trail crossing at Woodhead Station	12,400	13,250	13,800	14,700	
A628 (T) Longdendale / Trans Pennine Trail crossing at Longside End	12,400	13,250	13,800	14,700	
A628 (T) Longdendale / Trans Pennine Trail crossing at Carr Bottom	12,400	13,250	13,800	14,700	
A57 Snake Pass Pennine Way crossing at Snake Summit	3,050	4,200	3,850	5,300	

8.8.9 The A628(T) does have an alternative off-road route for those who don't wish to use the road in the Trans Pennine / Longdendale Trails. However, the A57 has no such route and is set to experience a dramatic increase in vehicles. It is likely that this will affect people's decisions on cycling on the road.

# **Road Safety**

- 8.9.10 Section 6.6 and Figures 6.9 to 6.11 set out the current situation in relation to road safety on Peak District roads affected by the scheme. The Road Safety Foundation European Road Assessment Programme (EuroRAP) describes the A57 Snake Pass as a "persistently high-risk road" 38.
- 8.9.11 Paragraph 7.2.13 of the Transport Assessment acknowledges the current high accident rate on the A57 Snake Pass. It goes on to state that the increase in traffic flows as a result of the scheme is likely to increase the number of accidents by: -

"more than 160 over the 60-year appraisal period, as a result of increased flows in the DS scenario." <sup>39</sup>

- 8.9.12 Paragraph 7.2.13 goes on to state that: -
  - "Small increases in accidents are also expected through Glossop and along the rural sections of the A628 east of Tintwistle."
- 8.9.13 We recognise that the levels of risk ascribed to both the A628(T) and the A57 Snake Pass do not themselves change, the higher levels of traffic flow make accidents more

<sup>38</sup> http://rsfmaps.agilysis.co.uk/

<sup>&</sup>lt;sup>39</sup> A57 Link Roads TR010034 7.4 Transport Assessment Report

likely to occur. In the case of the A628, the Transport Assessment indicates that traffic is being rerouted on to the A628 from the M62 as a result of the scheme. Given the inherent safety benefits of motorways over rural trunk roads, this would appear to be a negative effect of the scheme, particularly if it increases the risk of collision on the A628.

- 8.9.14 The overall suggested negative impact on road safety for Peak District roads is a grave concern. Given the geography and topography of the roads in question, it is likely that such collisions are more likely to be severe than slight. The human cost of such events is devastating for those involved. It is also likely that any such increase in collisions will put pressure on the appropriate highway authority to undertake remedial works that may in turn negatively impact on the landscape of the National Park.
- 8.9.15 The documents accompanying the DCO application make it clear that in the case of the A57 Snake Pass, the responsibility for dealing with the expected increase in traffic will fall to Derbyshire County Council as the highway authority to deal with. As has already been noted, the A57 Snake Pass crosses open moorland amidst high level ecological designations. The delivery of sympathetic measures to address road safety concerns within this setting is likely to be both costly and bespoke. As the introduction of the A57 Link Roads scheme is likely to necessitate such measures, National Highways should contribute both funding and expertise to ensure that any measures accord with National Park purposes.

#### 8.9 Climate

#### Context

8.9.1 The Climate Change Act 2008 as amended in 2019 commits the UK to reduce net carbon emissions to zero by 2050. However, emissions of greenhouse gases from surface transport have remained at consistent levels between 1990 and 2019 of approximately 110 MtCO2 with no sign of long-term reduction<sup>40</sup>.

#### **Observations**

8.9.2 The Environmental Statement contains detailed consideration of the physical effects of climate change on the planned road structure that appear robust and thorough. However, consideration of the schemes contribution to climate change is not analysed with an equivalent rigour. Paragraph 14.13.1 provides the following statement.

"The scheme is likely to contribute 116,332 tCO2e to the UK's Carbon Budgets across the period 2023-37, compared with the Do-Minimum scenario. The (net) contribution of the scheme to the fourth Carbon Budget period would be 55,253 tCO2e (equivalent to 0.0028% of that budget), including construction and operational phase emissions. The contribution of the scheme to the fifth Carbon Budget would be 29,231 tCO2e (equivalent to 0.0017% of that budget), from operational emissions. The contribution of the scheme to the sixth Carbon Budget would be 31,848 tCO2e (equivalent to 0.0033% of that budget). It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. In this context, it is considered unlikely that this Scheme will in isolation conclude significant effects

<sup>&</sup>lt;sup>40</sup> BEIS (2020) Provisional UK greenhouse gas emissions national statistics 2019

on climate. However, mitigation measures have been embedded into the Scheme design (Section 14.9) to reduce emissions as far as possible."

- 8.9.3 This simplistic comparison is an inadequate assessment, as it is inevitable that almost all individual site or project-based greenhouse gas emissions will appear insignificant when compared to the National Carbon Budget and reduction targets. By extension, it also suggests that all individual GHG emissions can be ignored due to their relative scale when compared to National Targets; an approach which would not be considered acceptable in other areas of activity.
- 8.9.4 The summary suggests that the scheme in isolation is unlikely to produce significant effects on the climate. However, it should not be considered in isolation but as part of an accumulative process that is changing the climate and damaging the environment.
- 8.9.5 We believe that a more local assessment of impact should be undertaken to consider the emissions in relation to those who are likely to benefit from the scheme and the immediate area where its impact will be felt, would be more appropriate.
- 8.9.6 By way of example; the Updated Short-term Traded Carbon Values Used for UK public policy appraisal published April 2019 by BEIS suggest a carbon value in 2023 under their central figure assumptions of 33.94 £/tCO2e. This would suggest the emissions associated with the scheme have a projected price/value of approximately £3,950,000. A more sophisticated assessment allowing for the tailpipe emissions over the full life of the scheme would produce a higher figure as the value of carbon reduction is expected to increase with time.
- 8.9.7 The government 's guidance states that assigning a value to carbon helps to ensure that such choices are made in a transparent fashion and in a way that seeks to be cost-effective for UK society as a whole. Valuing emissions impacts explicitly when making policy decisions helps to:
  - ensure the climate impacts of policies are fully accounted for
  - ensure consistency in decision making across policies
  - improve transparency and scrutiny of decision making
- 8.9.8 This assessment of the mitigation costs associated with the carbon released by the scheme may in practice fall short of the real abatement costs but this does provide a starting point for consideration and should form part of the assessment. We would recommend that Highways England produce their own figures as part of the Environmental Statement.

# 8.10 Cumulative impacts

The Peak District National Park Authority recognises that our submission is focussed on the indirect impacts of the scheme on the National Park. We also appreciate that some of these impacts have been assessed as minor or insignificant within the ES. However, we are particularly concerned about the cumulative impacts of the scheme on the following: -

- a) **Tintwistle** increased traffic flows through the village are likely to worsen air quality and noise & vibration; increase severance and effect experience of the Conservation Area.
- b) **Designated sites** increased traffic flows are likely to increase nitrate deposition, noise disturbance, risk of wildfire and collisions with wildlife. It is of particular concern that the

- effects of the increase in traffic on the A628 have not been assessed in relation to these impacts.
- c) **Quiet enjoyment** increased traffic flow will affect both tranquillity and the quiet enjoyment of the landscape. It is also likely to negatively affect the use of important multi-user routes due to the increased difficulty of using crossing points.

# **Appendix A**

# A628 Site Visit in relation to the proposed Trans Pennine Upgrade Programme

September 2017

























