Contact: Claire Teasdale
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Your ref: TR010062
Our ref: AACON/22/01871

A66Dualling@planninginspectorate.gov.uk

31 August 2022

Dear Sir/Madam

Planning Act 2008 (as amended) - Section 89 and The Infrastructure Planning (Examination Procedure) Rules 2010

Application by National Highways for an Order Granting Development Consent for the A66 Trans-Pennine Dualling Project

Representations of Durham County Council

I write in response to the above application made by National Highways.

Bowes Bypass
In principle, Durham County Council **SUPPORTS** the proposed route for the Bowes Bypass proposal.

Cross Lanes to Rokeby
In principle, Durham County Council **SUPPORTS** the proposed junction at Cross Lanes.

In principle, Durham County Council **DOES NOT OBJECT** to the proposed junction at Rokeby, **however**, given the lesser impact of the "Blue" route, referred to in the Statutory Consultation, in relation to increased traffic on the B6277 The Sills, the strong preference of the Council remains for the "Blue" route. Reasons for this are set out in Appendix 1 to this letter.

Furthermore, in terms of cultural heritage in respect of the "Blue" route, the balance of harm derived from the "Black" (subject of the DCO application) or "Blue" route is nuanced and, as such, whilst the "Blue" route remains the preference for the reasons set out in Appendix 1 to this letter, it is acknowledged that design refinement and the preparation of the heritage mitigation strategy in the Environmental Management Plan provides a reasoned justification for the selected route.

Durham County Council's consultee responses to the application are attached. A number of the responses raise queries which the Council consider require addressing in order for further comments to be made.

Regeneration, Economy and Growth
Durham County Council, Planning Development (Strategic), Room 4/123-128, County Hall, Durham DH1 5UL Main Telephone: 03000 262 830

Please do not hesitate to contact me should you have any queries regarding this letter.

Yours sincerely

Geoff Paul
Interim Corporate Director (Regeneration, Economy & Growth)

Encs.

Appendix 1 – Durham County Council consultee responses.
Appendix 2 – Public Health Data for County Durham

APPENDIX 1

Durham County Council Consultee responses

Highways

As a Local Authority which would be impacted by the A66 Northern Trans-Pennine Project, Durham County Council (DCC) has previously been consulted on the proposal. There are two sections of the proposed improvement within the DCC legislative boundary, Bowes Bypass, and Cross Lanes to Rokeby.

The last consultation response on the project from DCC was dated 5th November 2021. In this, DCC was able to support the preferred route for the Bowes Bypass. DCC also supported the preferred junction at Cross Lanes but objected to the preferred junction at Rokeby. Of the "Blue" and "Black" options, the preference of DCC was for the "Blue" route. This preference was based on the impacts of the "Black" option on the B6277 Moorhouse Lane of 1573 vehicles per day, an increase of over 500%, with no assessment of the impact of this increase, or any proposed mitigation.

In response to this objection, National Highways has produced a document entitled "A66 Impacts on Barnard Castle" (Ref HE565627-AMY-GEN-S08-RP-TR-000001). This document dated April 2022, has sought to consider the questions which arose from the previous consultation, and addresses changes to the modelling which has occurred since the previous round of consultation.

The model which would be used to inform the DCO has been updated to have a revised base year of 2019, rather than the previous 2015 base year. This has allowed for updated journey times and traffic flows to be used. This partially accounts for changes outlined below. The new model also contains a matrix specifically for LGVs and HGVs, and has brought the design year forward from 2046 to 2044.

DCC had previously raised that while the "Black" and "Blue" options both result in an increase in traffic on the B6277, there is a decrease of between 15% (black option) and 18% (blue option) in traffic through Barnard Castle and on Bridgegate, and DCC sought clarification on this point. This reduction has been attributed by National Highways due the improvements to the A66 resulting in faster journeys for East/West traffic from the A67 in Cumbria to the rural areas to the south and west of Darlington, thus resulting in rerouting to the improved A66. The reduced flows on the A67 had seen a reduction of circa 1600 vehicles crossing the 16th Century bridge in Barnard Castle in 2046, compared to the 'Do Minimum' scenario. However, the revised modelling has brought a more modest reduction of 384 vehicles per day, a 5% reduction rather than the 17% first envisaged. The revised modelling sees a reduction in traffic of 12% on the C165/Barnard Castle Road, down from the 18% in the original modelling.

In the November 2021 consultation response, DCC raised that in the "Black" option, this would reroute HGVs resulting in 188 additional HGVs daily using B6277 Moorhouse Lane, something which was not seen in the modelling of the "Do Minimum" scenario, or the proposed "Blue" route. The applicant has provided an explanation as to why this rerouting occurs in the "Black" scenario only but has confirmed that the number of rerouted HGVs would be 44 daily, rather than 188 as first predicted. The revised modelling has brought this down further to 33 per day.

DCC had raised concerns over the impact of additional traffic on the B6277 and objected to the Rokeby junction due to the preference of the “Blue” route, over the “Black” route due to far fewer vehicles using the B6277 in the “Blue” route scenario. However, the revised modelling shows that the increase in vehicles on the B6277 The Sills would be an additional 524 vehicles per day, a 53% increase from the Do Minimum scenario in the “Black” route scenario. The DCC preferred “Blue” option, would see an increase of 397 vehicles per day, a 34% increase over the Do Minimum scenario. Therefore, the difference across the day in traffic increase on the B6277 of “Black” vs “Blue” is 127 vehicles (19%) per day.

Therefore, overall when considering the merits of the “Black” route vs the “Blue” route, the differences in Highways terms are shown to be small with the revised modelling scenario. Given that both routes produce a benefit to trip reduction through the centre of Barnard Castle of circa 384 trips per day including over the 16th century bridge, this does in turn, lead to an increase in traffic on the B6277 The Sills of up to 524 additional vehicles per day.

When considering the “Black” vs “Blue” route, DCC had previously objected to National Highways preference of the “Black” route, mainly due to the impact of the additional traffic on the B6277 compared to the “Blue” route. However, the revised modelling has shown that the difference between the routes would be just 127 vehicles per day. Given the benefits of traffic reduction through Barnard Castle, it is not considered that the additional 127 vehicles per day in the “Black” route scenario vs the “Blue” route scenario, would be sufficient grounds for DCC to maintain an objection to National Highways preference of the “Black” route. However, given the lesser impact of the “Blue” route in relation to increased traffic on the B6277 The Sills, the strong preference of Durham County Council remains for the “Blue” route.

Notwithstanding the comments above, DCC as Local Highway Authority has a number of questions which it requires clarification. These being:

1. Under which legislation does National Highways propose to carry out ancillary highway works to the Local Highway Authority’s network? This is important for DCCl as both highway and permit Authority as to how it addresses the construction of the works.

2. As part of the preliminary design process and before land take is determined a Stage 1 Road Safety Audit should have been carried out which would include works on the LHN. Has this been seen by DCC Highways?

3. Has a Side Road Order been produced by National Highways? This would be needed to address, stopping / diversion / change in status / de-trunking / re-classification of highways impacted by the scheme. This Order is very important as it will determine what (and what not) the council inherits for the scheme.

4. It is understood that there would be a number of departures and relaxations from standard on some of the works proposed to become part of the LRN. DCC as Local Highway Authority would need to see these, and the rationale behind them before they could be agreed too. When would these be available for comment?

5. Changes to the A66 would result in some changes on the LRN which would require changes to signage, speed limits etc. Can National Highways confirm whether they would be paying for these changes or expecting DCC to fund these changes?

6. The changes to the routing of the A66 require some existing adopted highways which serve properties to be severed, to be replaced with new amended routes which would be offered up for adoption. Given that the existing routes do serve property, they could not be closed off until the new routes were fully adopted by the Local Highway Authority. Has this been considered and built into the timetable given the usual time scales for a new road being offered up for adoption, and becoming fully adopted?

Access & Rights of Way

In general attempts to accommodate and improve the public rights of way network, by providing opportunities to safely cross the A66 and by providing link routes alongside the carriageway are welcomed. However, many of the linking routes provided alongside the carriageway, which all appear, at least within County Durham, to be marked as “shared pedestrian/cycle path”. The legend for the maps mention “shared pedestrian/bridleway” but none were immediately apparent on the maps. It would seem to make sense to identify all these links as being multi-user shared paths, ie for pedestrians, equestrians and cyclists. If the physical space is available then a path suitable for all should be provided.

Durham County Council has recently received applications for historic bridleways to be added to the Definitive Map for several routes which lead to the A66. If those routes are proven to have bridleway status then they would need to connect to a route which equestrians know that they can use, and other users also know that equestrians are entitled to use. Future-proofing the link paths to accommodate all users would address that.

Cultural Heritage

Summary/Overview

These comments relate primarily to the impact of the proposals on cultural heritage with specific reference to above ground assets. The project has been the subject of extensive consultation as detailed in the submission. At the time of statutory consultation, it was highlighted that the promoted preferred option (“Black” route in County Durham, Cross Lanes to Rokeby specifically) differed from the route which was expected to be promoted by the Historic Environment Working Group. General agreement had been reached on the Black route options for the Bowes Bypass Section and Stephen Bank to Carkin Moor. It was anticipated that despite the expressed concerns of Historic England in relation to the impact on the Rokeby Park, Registered Park and Garden that the “Blue” route was being developed for promotion. The submitted consultation documentation acknowledged that with the exception of the impact on the Park and Garden, the “Blue” route at Rokeby provided greater benefits.

On this basis support could not be offered for the Black route at Rokeby as it failed to offer the wider public benefits identified below in relation to heritage assets. It was the contention of DCC’s Design and Conservation Team that National Highways has misinterpreted policy guidance on harm to designated assets and sought to remove perceived harm rather than undertaking an appropriate weighting exercise of the impact of the proposal in the round. This fact was reinforced when it was demonstrated in a plan provided to DCC by National Highways that further heritage benefits can be drawn from an amended “Blue” route.

Since the submission of these comments the scheme has been further developed and a greater breadth of documentation is now available supporting the proposals put forward by National Highways. A number of the benefits which could have been derived from this proposal in an amended form remain valid, however, it is considered that National Highways has undertaken a detailed and appropriate appraisal of the promoted route. The Design and Conservation Team cannot dispute that the EIA and resultant statement has followed industry standard methods, including for establishing significance along with topic specific guidance as appropriate.

On this basis the balance of harm derived from the "Black" or "Blue" route is nuanced and as such whilst the "Blue" route remains the preference of the Design and Conservation Team for the reasons set out below it is acknowledged that design refinement and the preparation of the heritage mitigation strategy in the Environmental Management Plan (EMP) provides a reasoned justification for the selected route.

Description/Context

The A66 is a key local, regional and national route for east/west journeys passing through County Durham providing vital connections for freight, tourism and businesses. As well as being a key transport corridor it passes by at very close proximity a wide range of designated and non-designated heritage assets. The route also plays a major role in setting and affords key views to a number of buildings, structures and landscapes.

The submitted documentation acknowledges that the A66 plays a crucial role in the life of nearby communities, it is also essential for journeys across the UK. It offers the most direct route between the central belt of Scotland and the eastern side of England and connects the north-east to the north-west and Midlands.

It also plays an important role for tourism, providing access to the North Pennines Area of Outstanding Natural Beauty (AONB), the Yorkshire Dales and the Lake District National Park. Locally it also plays a key role in allowing visitors to access Barnard Castle, Rokeby Park and the Teesdale villages beyond by the safest, most direct and most convenient route. It can reasonably be expected that the improved network should also continue to deliver these existing benefits, not denude them.

Significance

Bowes Bypass

The existing and proposed carriageway sits in very close proximity to Bowes Conservation Area which at points almost adjoins the boundary. Within the conservation area lie 21 individual listed buildings and structures all of which are grade II listed with the exception of Bowes Castle which is grade I listed. Bowes Castle and the Roman Fort (Lavatrae) which surround it to the south and west are also scheduled. Stone Bridge Farm to the east of Bowes Village also contains 3no. grade II listed buildings which sit in very close proximity to existing and proposed highway construction. The A66 features heavily in their setting. The temporary and permanent adverse impact on the assets at Stone Bridge Farm is duly acknowledged in the submission.

Cross Lanes to Rokeby

The existing and proposed carriageway and proposed junction at Cross Lanes sits immediately adjacent to two identified listed buildings, a grade II listed mile marker (the presence of which cannot be confirmed) and the grade II listed Cross Lanes Farmhouse. Further to the south (approx. 300m) lies the grade II listed Dent House Farm. The

proposed route will increase the presence of highway infrastructure within the setting of these assets.

Further to the east lies a further grade II listed milestone at the entrance to Tutta Beck Farm (the presence of which cannot be confirmed) south of this lies the grade II listed Tutta Beck Cottages. The current line of the A66 plays a role in the setting of the asset. Proposals for the "Black" route would reduce the distance to the highway network increasing impact on setting.

Moving east toward Rokeby Park the more significant heritage assets are encountered including the Grade II* listed Church of St Mary. The church appears on the Historic England Heritage at Risk Register with vacancy, theft and proximity to "the relentless A66" being cited in the entry. The building is described as suffering slow decay with no solution secured. The church lies within the Rokeby Park Registered Park and Garden II*, in the area affected by this proposal the park lies wholly to the north of the route. At the eastern extent of this widened section lie the grade II listed piers and railings to the south west of Rokeby Park, their setting is dominated by the current junction.

Adjacent to the Church of St Mary lie the former school building and the Rectory to the South, these are considered to be non-designated heritage assets with historic, architectural and communal value.

Stephen Bank to Carkin Moor
There are no above ground cultural heritage concerns with this very small section of the proposal which lies within the administrative boundary of Durham.

Policy
The policy context of this proposal is set out in detail in the submitted documentation and does not require repetition.

Impact on Significance

Bowes Bypass
No direct impact on cultural heritage anticipated due to selected route. Impact on setting of numerous designated assets may be intensified, however, subject to detailed design and appropriate mitigation this raises no objection.

Cross Lanes to Rokeby
The route including the junction west of Rokeby would cause some harm to the setting of the grade II* listed Church of St Mary as a result of the physical presence and highway experience of such a junction in use. The continued use of the A66 in such close proximity to the church compounds the issues surrounding risk to the structure. Alternatives exist to substantially reduce the highway impact and enhance setting associated with an amended blue route but these have not been developed and do not form part of these considerations.

Unquantified issues at the grade I listed and scheduled County Bridge in Barnard Castle as a result of traffic flows resulting from the "Black" route were identified at the consultation stage, however, revised modelling as accepted by highway colleagues has demonstrated that in time the proposal will actually improve the current situation, therefore this poses no further heritage issue.

Stephen Bank to Carkin Moor
There is no anticipated direct harm to above ground cultural heritage as a result of this selected route and no objection is raised given the minimal area for consideration.

Advice/Opportunities
Much has been achieved to secure a route which balances highway requirements with protecting the cultural heritage of the County. Had more time been afforded to developing a revised "Blue" route and establishing appropriate mitigation to the harm created at the registered Rokeby Park and Garden then it remains the contention that greater built heritage benefits could have been secured. Notwithstanding this it is acknowledged that the "Black" route has avoided physical harm to designated assets and as such meets the tests of such a proposal in the round. Either the "Blue" or the "Black" option imposes a degree of harm and it is this balance of harm which should be considered as part of the determination process. The following points are highlighted for consideration rather than as points of objection:

- The "Black" route imposes some harm on the setting of the Church of St Mary by the construction of the western junction arrangement. This compromises to a degree the gateway effect to Rokeby Park created historically as a result of localised topography
- The "Black" Route fails to remove the harm to the setting of the Church of St Mary which results from relentless traffic movements in close proximity, a primary reason for the inclusion of the asset on the risk register, this must be balanced with some benefits to the historic environment through reduction of severance between St Mary's Church and the Old Rectory and the likely reduction of impact risk at the Gate Piers at the southwest corner of the park.
- The revised proposal HE565627 AMY HGN S08 SK CH 000020 clearly carries substantial benefits for the improvement of the setting of the listed Church of St Mary by partially stopping up the A66 and de-trunking the section adjacent to the church providing a potential stimulus for reuse

Archaeology
The requisite phases of archaeological assessment and evaluation (HER search, geophysical survey, and trial trenching) have been completed and reports produced on these along with the preparation of a project specific research framework. No archaeological features worthy of preservation in situ have been identified along the section of the route lying within County Durham. It is understood that a mitigation strategy regarding archaeological features of lesser importance, informed by the results of this work, will be produced in due course.

Landscape & Visual Impact
It is considered that the Landscape and Visual Effects section of the ES is thorough in establishing the baseline conditions of the landscape and visual receptors that would be affected by the proposals and the likely magnitude and significance of effects. The general principles for mitigation set out in the Project Design Principles are well considered. The effectiveness of the proposed mitigation will depend on detailed schemes yet to be submitted.

Design considerations: Cross Lanes to Rokeby
As stated at the Statutory Consultation stage and as noted in the Cultural Heritage comments above, in the absence of design development of an evolved "Blue" route it is difficult to know whether an alternative could have been developed that entailed less harm to landscape and built heritage assets taken in the round than the preferred route. The proposed route avoids direct physical harm to the park. In the absence of an evolved alternative design it is difficult to establish the extent to which beneficial effects of an alternative route on the setting of the Park (and particularly Church Planation / Walk) together with beneficial effects on the setting of the Church of St Mary's, and beneficial effects on user experience of the landscape forming the immediate setting of the park could have offset the physical harm to the Park of a "Blue" route. Notwithstanding the above it is acknowledged that the route selected has avoided physical harm to designated landscape heritage assets and its effects would be of a similar order of magnitude to any practical alternative.

Drainage & Coastal Protection
No objections are raised to the proposals.

Ecology
It is considered that an appropriate level of ecological survey work has been undertaken and the ecological receptors have been identified alongside an assessment of impacts. A mitigation approach is provided that will minimise impacts and provide compensation where required.

There is an inconsistency with regards to biodiversity net gain, the ES Chapter 6 refers to the Environment Act and the need to deliver biodiversity net gains whilst the Environmental Management Plan states that no net loss will be achieved, these are contradictory and **clarification and consistency is required**. The assumption of officers is that the proposed development should meet the net gain requirements; as such all management and monitoring should align with the requirements for net gain.

Contaminated Land
The findings of the initial Phase 1 ground investigations and the proposal to carry out further ground investigation (Phase 2) prior to construction to further assess risks to human health/sensitive receptors are considered to be satisfactory. Given this, the following condition should apply.

Contaminated Land (Phase 2-3)

If the phase 1 assessment identifies that further investigation is required a Phase 2 site investigation shall be carried out, which shall include a sampling and analysis plan. If the Phase 2 identifies any unacceptable risks, a Phase 3 remediation strategy shall be produced and where necessary include gas protection measures and method of verification.

Reason: To ensure that the presence of contamination is identified, risk assessed and proposed remediation works are agreed in order to ensure the site is suitable for use, in accordance with Part 15 of the National Planning Policy Framework. Required to be pre-commencement to ensure that the development can be carried out safely.

Contaminated Land (Phase 4)

Remediation works shall be carried out in accordance with the approved remediation strategy. The development shall not be brought into use until such time a Phase 4 verification report related to that part of the development has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that the remediation works are fully implemented as agreed and the site is suitable for use, in accordance with Part 15 of the National Planning Policy Framework.

The following should be added as an informative:

If unforeseen contamination is encountered, the Local Planning Authority shall be notified in writing immediately. Operations on the affected part of the site shall cease until an investigation and risk assessment, and if necessary a remediation strategy is carried out in accordance with The Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) guidance and agreed with the Local Planning Authority. The development shall be completed in accordance with any amended specification of works.

Note: Following the submission of a preliminary ground gas risk assessment, for some developments the Local Planning Authority may agree in writing to the installation of Gas Protection Measures as a precautionary measure without first carrying out ground gas monitoring.

Population and Human Health

DCC Public Health (PH) has been asked to comment on the 'Population and Human Health' aspect of this application, to inform a Local Impact Report that is to be prepared by the Council.

CAVEAT: *Public Health (PH) notes that Noise and Air Quality issues are important public health considerations in projects of this nature. Matters relating to Noise and Air Quality for these proposed works have been considered by DCC Environmental Health officers. PH has no adverse comment to make over and above these findings, but notes the importance of ensuring satisfactory responses to any issues identified.*

Public Health comment

Key PH considerations in this project are communities, the environment, the local economies and matters relating to active travel/transport.

These matters are considered in the National Highways A66 ES, which sets out: a description of the Project and the reasonable alternatives considered in the development of the design, the environmental setting, the likely significant effects of the Project on local communities and the environment, and the measures proposed to mitigate these effects.

PH notes that Chapter 13 of the ES has been undertaken by competent experts with the relevant and appropriate experience in their respective topics.

As outlined above, the noise, dust and air quality matters are addressed in DCC EH comment, and the remainder of this PH comment will focus upon Population and Human Health, as addressed in the ES.

Population and Human Health

Potential negative impacts

This project has potential to impact upon population and human health receptors within the schemes that fall within the following boundaries of County Durham:

- **Bowes Bypass (Scheme 7)**
  - Construction phase: the ES identifies significant permanent adverse effects to one private property, three community assets, one business (in the construction phase, and one as a result of construction related dust, landscape changes, noise and vibration), 11 agricultural land holdings, and the National Cycle Route 70 Pennine Way.

- **Cross Lanes to Rokeby (Scheme 8)**
  - Construction phase: the ES identifies significant adverse effects to one business in the construction phase, and seven agricultural land holdings.

Likely effects:

- Adverse impacts of resident and business' proximity to construction activities
- Access to facilities and services during the construction phase
- Diversions for walkers, cyclists and horse riders during construction phase, including impact upon Public Rights of Way

Those affected by such negative impacts may suffer some adverse effects in terms of their health and wellbeing. This is a particularly important consideration for those residents who are vulnerable (and more likely to be negatively impacted by adverse effects) including children and young people, older aged adults, people with disabilities and those with other long-term health conditions.

Essential mitigations to address impact upon population and human health

In Chapter 13.9 of the ES, National Highways identifies essential mitigations that are required to minimise any negative impact of these works upon population and human health. It is not necessarily to list these as they can be accessed via the ES.

A key aspect of this PH comment is that these mitigations are implemented, their effectiveness and monitored/reviewed, and that any identified issues are addressed as required. Any delay or failure to address negative population or human health impacts is likely to have a detrimental effect.

PH also reinforces the importance of monitoring the construction phase aspects of these works to identify any unforeseen impact in order that any issues can be identified and addressed in efficiently and effectively.

Potential benefits

The ES notes the anticipated benefits of this project to those who live and work in and around the relevant schemes of work. These include improved accessibility - reduced congestion along the A66 as a result of the project to improve journey times for local traffic – which may give rise to potential effects on health and wellbeing including:

- accessibility and use of local facilities and services (including healthcare)

- accessibility of employment sites and business benefits resulting from improved connectivity, leading to improved earnings and positive effects on quality of life
- accessibility of public open space, sport and leisure facilities, leading to increases in the physical and mental health benefits associated physical activity, social interaction and contact with nature
- Changes to the safety and quality of journeys resulting from improved junction layouts and traffic flows

Improvements in these areas are consistent with local PH priorities, which include *supporting economic recovery through a local focus*, and *improving the places where people live, learn and play* (Public Health Strategic Plan, 2021-24).

Furthermore, the promotion of active travel is an important element of DCC's efforts to improve physical health (through increased movement), and it is a contributor to efforts to support the population to maintain a healthy weight. This is outlined in the county's *Strategic Walking and Cycling Delivery Plan 2019-29.* The outcomes of this project should serve to either improve or at least maintain (and not impede) existing access to these modes of travel.

Socio-economic and Community considerations

DCC's PH team contributes to wider council economic regeneration work, including efforts to *promote good work and equalities in education, training and employment*, and *to improve access to life-long learning across the social gradient* (PH Strategic Plan 2021-24). Furthermore, PH advocates for the engagement of local public, private and voluntary sector organisations to maximise the 'social value' aspect of their work in County Durham.

Accordingly, PH notes the outline 'Skills and Employment Strategy' (Annex B12 Environmental Management Plan) which will set out measures to upskill and maximise the use of a local workforce, support local training infrastructure, and provide opportunities for vulnerable members of the community. This will include measures to increase and extend the range of courses available to young people as well as employing them on the project to develop their skills and qualifications first-hand (i.e. through apprenticeships).

Public Health has also provided Public Health Data relevant to the areas where the junctions are located and this is appended to this response. The data is included in Appendix 2. Information provided by Public Heath will be incorporated into the Local Impact Report where appropriate.

Air Quality

DCC has commissioned AECOM to provide comments on Air Quality. AECOM also provided pre-application.

As commented on previous submission documents for this development, the scheme is led by National Highways (formerly Highways England) and therefore makes use of the Design Manual for Roads and Bridges (DMRB) guidance, which is considered the appropriate methodology for large scale infrastructure projects on the Strategic Road Network.

Comments on the Baseline:

- Baseline NO2, PM10 and PM2.5 have been presented in Appendix 5.3 Air Quality Baseline Monitoring. No Scheme specific PM10 or PM2.5 monitoring has been undertaken and it is noted that there is no nearby existing PM10 or PM2.5 monitoring in the study area within DCC. These three pollutants have been assessed for both construction and operational phases.

- DCC air quality baseline has not been reported specifically to inform the baseline appreciation however considering the distance to the DCC air quality monitoring locations, this is not considered a material issue.

- Four months of NO2 monitoring was undertaken for the Scheme between November 2021 to February 2022 at 16 NO2 locations in triplicate; four of these locations were in DCC (AQM 5, 6, 7 and 8). DCC were not consulted on the locations or given the opportunity to provide insightful, local feedback on the locations where monitoring would be useful. Based on the level of impact indicated by document 3.7 Transport Assessment in both construction and operational phases, it would have been useful to monitor at a sensitive receptor location along the A67 in Barnard Castle, near the river bridge, where a number of dwellings are located at locations nearby the road edge.

- It is not noted in Appendix 5.3 Air Quality Baseline Monitoring whether post-scheme monitoring is also proposed. This should be confirmed.

- Data from the NO2 monitoring survey was noted to be annualised to 2019, the model base year, for AQM1 to AQM14, however not for AQM15 and 16; neither of these locations are in DCC. AQM 5 is adjacent to the existing A66, AQM 6 is more than 250m from the A66 at Rokeby, AQM 7 is adjacent to the B6277, and AQM 8 is to the south of the B6277 Lartington Lane. The backcasted adjusted annual mean NO2 monitoring results for monitors in DCC ranges from 2.6 µg/m3 to 10.2 µg/m3 and therefore below the annual mean objective of 40 µg/m3. The highest concentrations were recorded at AQM 5, adjacent to the existing A66; the unadjusted concentration is noted to be 16.3 µg/m3, showing that the adjustment has reduced the concentrations at this location by almost 40%.

- There is no discussion of appropriateness of the method to adjust monitoring results in light of the Covid-19 pandemic and the changing traffic patterns associated with government lockdowns and post-lockdown trends. This should be provided.

- The air quality documents reviewed make reference to the influence of Helm Wind between December and April. There is no discussion around the baseline monitoring being undertaken during this period and whether the method of results adjustment or final results presented are representative of annual conditions or whether this should be seen as a limitation of the air quality assessment.

- NH3 Scheme specific monitoring was additionally undertaken during the same period at 13 of the 16 locations of NO2 monitoring. The same four locations are within DCC (AQM 5 to 8). The NH3 monitoring results for the monitors in DCC ranges from 1.6 µg/m3 to 3.3 µg/m3; again the concentration at AQM 5 was the highest. There is no provided discussion around representativeness of this data to the assessed base year of 2019.

- There is no source of background nitrogen deposition rates used in the assessment provided in Appendix 5.3 Air Quality Baseline Monitoring. As per LA 105, this should be included in any reporting.

- Defra annual mean background pollutants concentrations have been used in the assessment for 2019 and future year 2029; in grid square contribution from major road sector emissions have been removed from the background NOx estimates. This is reasonable. A comparison between Defra modelled and local authority background NO2 monitoring data has been made; this showed that Defra backgrounds were slightly lower than local authority monitored data however there is no discussion on this other than the difference is small (1 µg/m3) and concentrations are below the objective, nor any consideration discussed of factoring the Defra predictions using the monitoring. Given the low levels of predicted model result concentrations, this will not likely materially affect the conclusions.

- There was very little on verification provided in the PEIR. Baseline data from ten sites from local authorities and one National Highways monitor (total 11 sites) are presented in Table 1 of Appendix 5.3 Air Quality Baseline Monitoring; it is understood that seven of these 11 sites have been used to verify the roads model. It would be useful to provide discussion of whether the seven monitors have been used to verify both the construction and operational phase assessments, and the appropriateness of the chosen method to verify each model domain.

- **No DCC monitoring or National Highways monitoring within DCC boundaries has been used to verify the model outputs against measured data. It is further understood that none of the Scheme-specific monitoring has been used for verification. Discussion would be useful in this instance to present how representative the verification is of receptors within DCC.**

- The verification is understood to have been undertaken in two zones: rural and urban. It is further understood that the rural zone is to the east using met station RAF Leeming used two monitors to verify; and the urban zone is to the west using met station Warcop Range used five monitors to verify. It is not clear the boundary of the urban/rural receptors assessed, however it is assumed that those within DCC boundary fall within the rural zone. One of the two rural monitors is understood to be the automatic National Highways monitoring station at the A1M southbound at Leeming which only achieve a data capture of 56% in the baseline year of 2019; it should be outlined whether the data used from this station was annualised and whether the used data is considered representative.

- The rural verification zone of two monitors has a bias adjustment factor of 0.632 and an RMSE of 12.6 µg/m3; this is well outside the RMSE of 10% of the objective (4 µg/m3 for annual mean NO2) recommended by LAQM TG16. **Discussion is required to explain how the results at sensitive receptors presented in DCC and the rural zone as a whole are reliable in this instance. This is considered a potentially material consideration, particularly in light of the presented slight adverse (albeit concluded not significant) effects at receptors in DCC boundary.**

- 27 monitoring locations are noted to have been excluded from verification, and the reader of Appendix 5.4 Air Quality Assessment Results is directed to Table 1 for the reasons for exclusion. Table 1 only includes reasons for 19 monitors; none of the 19 sites are within DCC. The eight remaining monitors excluded from verification should

be presented alongside the 19 in Table 1. It would be useful to discuss the use of the scheme specific monitoring for verification in light of the poor RMSE, where these are located at site types acceptable for verification as per LAQM TG16.

Construction phase
Comments on the construction dust phase assessment:

- The PEIR stated that construction phase dust monitoring and post consent air quality monitoring may be required, subject to findings of the final ES. A qualitative assessment of the impact of nuisance dust arising during construction is noted to have been undertaken, using standards set out in Section 2.56 of DMRB LA 105. Sensitive receptors within 200m of dust producing activities have been identified within Figure 5.3.

- Following a review of the sections of the project (Schemes 7, 8 and 9) in DCC, there are a large number of sensitive receptors nearby the construction activity at Bowes village and a number in the vicinity of the A66. Three ecological sites assessed fall in DCC's boundary: Rokeby Park, Mortham Wood (ERIC LWS) and Graham's Gill Jack-Wood Ancient Woodland and Steven Band Road Verge (NEYEDC LWS). There would appear to be a number of residential dust sensitive receptors in DCC not identified in Figure 5.3 which should be considered in Table 5-8 of the Assessment of likely significant effects from construction dust in Chapter 5 Air Quality.

- There is no discussion provided in the documents reviewed of existing levels of baseline dust. For example, Hulands Quarry within DCC is an existing source of emissions; this would be useful to be considered in the assessment.

- At the scoping stage, as shown in the Scoping Opinion Appendices, it was requested that mitigation measures be included for non-road mobile machinery. Further assessment has been screened out of the ES chapter however in the Environmental Management Plan Annex B4 Air Quality and Dust Management there are measures listed in Section B4.6. The use of ultra-low sulphur diesel, electric plant and hydrogen plant is noted to be considered and used where practicable. This should be confirmed with DCC prior to construction commencement.

- The Project is considered to have a large construction dust risk potential due to potential impact to receptors and consequently mitigation measures are noted to be required to reduce the frequency and intensity of potential dust impacts. Best practice dust mitigation measures are proposed in the EMP; the Chapter states that this will reduce the impact to a negligible level through the use of a dust management plan with measures to monitor effectiveness of mitigation, on-site and off-site inspections and keeping a record of complaints/exceptional dust events. Final dust mitigation measures should be agreed with DCC.

- There are a number of human health and ecological receptors relevant to the construction phase air quality impacts in DCC. It is recommended that the EMP refers to 'Figure 5.3 Air Quality Construction Phase Assessment' so that receptor locations identified are considered within the refinement of the EMP.

- No monitoring other than visual inspection is committed to. Following reviews of recent Planning Applications, DCC are aware that DDG monitoring at receptors

adjacent to the A66 at Hulands Quarry has had historic exceedances of dust deposition limits. This location should be considered for monitoring.

- Should air quality monitoring be undertaken, the air quality samples are noted to be possibly sent to an accredited laboratory; this should be committed to.

AECOM has provided the following comments on the construction traffic assessment:

- It was noted at the PEIR stage that no construction phase road traffic was available for assessment. The PEIR stated that an assessment of such emissions will be undertaken as part of the EIA and reported in the Environmental Statement (ES). ADMS Roads modelling is understood to have been undertaken for limited sections of the scheme - between M60 Junction 40 to Brough and between east of Bowes, to Scotch Corner. This Affected Road Network is understood to be determined based on changes of 1000 AADT or more and/or changes of 200 AADT or more as a result of the construction phase; the chapter does not make reference to speed bands factoring into the determination of the construction phase traffic ARN therefore it is assumed that this is not a part of the criteria used; this is not following LA 105 guidance.

- It is not clear whether AADT has been used for the construction phase assessment, or whether traffic data provided was split by the four periods required by LA 105 at detailed air quality assessment stage of morning (AM), inter peak, evening peak (PM) and overnight period (OP). This should be clarified and if AADT has been used, reasons provided as to why this is considered acceptable and any limitations associated with this method choice.

- Construction years are between 2024 and 2029. With reference to Figures 11-2 and 11-3 in Chapter 3.7 Transport Assessment of the ES, the peak construction traffic from workers and wagons per month is understood to be in April/May 2025 and the overall busiest year for construction will be 2025. 2024 is understood to have been assessed. The year of traffic modelled, or a method to explain how the consultant has assessed the worst-case impacts of the scheme, and the chosen year of emissions factors should be explained.

- There is no detail on the methodology provided in the Environmental Statement Appendix 5.2 Air Quality Assessment Methodology for the dispersion modelling assessment of construction traffic, in the same level of detail as for the operational phase assessment. This should be provided to understand the construction phase traffic data and TRA, model input parameters, verification process and choice of met station data. If these parameters are the same as for the operation phase traffic emissions assessment of effects, then this should be stated, and justification of the method provided in relation to the construction phase affected road network.

- **With reference to Figure 5.3 Air Quality Construction Phase Assessment, the construction phase ARN only falls within DCCs boundary on the A66 to the east of Barnard Castle leading to Scotch Corner. There appears to be no ARN east of Bowes at Scheme 7 Bowes Bypass and also no ARN to the west of Scheme 8 Cross Lanes to Rokeby. One of two construction compounds is noted by the Air Quality Chapter to be in Bowes, amongst other locations. It is understood that the construction traffic impact assessment in this area does not fall into the ARN and has been scoped out of requiring assessment on local air quality, possibly due to the criteria for AADT and HDV flow changes provided in Paragraph 5.6.4 of the Chapter not being exceeded. Explanation as to why these**

sections would not be materially affected by the scheme should be provided to suitably scope out these sections of construction within DCC, particularly in light of Bowes construction compound being in this location. A table similar to that provided for the operational phase traffic Table 5-10 would be useful. The other construction compound locations should be confirmed and agreed with DCC prior to construction commencing.

- **Explanation should also be provided as to how Barnard Castle does not fall within the ARN for the construction phase. Following a review of Chapter 3.7 Transport Assessment it is apparent there is at least a 2,000 two-way AADT increase at A67 Barnard Castle Bridge in both Scenario C and D. It is additionally noted that Scenarios C and D combined are for a length of more than two years.**

- **Following a review of Figure 11-1 in Chapter 3.7 Transport Assessment, it would appear that some of the construction phase scenarios will have similarities. It should be confirmed in the Air Quality Chapter how long the construction phase as a whole will be in areas of DCC and evidence provided as to how this has informed the screening and ARN determination.**

- A particular concern is noted to be if construction-related vehicles affected or diverted local traffic within locations with sensitive receptors close to the routes for the compounds approaching the AQO. As noted in EMP Annex B13 Construction Traffic Management Plan (Application Document 2.7), the Construction Traffic Management Plan to be developed by the appointed contractor will ensure construction vehicles avoid these areas.

- There are predicted annual mean NO2 changes across the scheme at human health receptors of more than 0.4 µg/m³ but no exceedances of the AQO in the first year of construction 2024 across the entire project assessed receptors. There are two human receptors (HSR 64 and HSR 65) assessed in DCC for the construction phase modelling of impacts. The impact is 0.1 µg/m³ at both assessed receptor locations in DCC, with total predicted concentrations below 10 µg/m³. No exceedances of PM10 and PM2.5 AQOs are predicted. No significant adverse effects are therefore determined.

- Of the three designated habitats presented within Figure 5.3 in DCC, only one (Rokeby Park and Mortham Wood (ERIC LWS)) is reported on, however it would appear that transect receptor points have not been modelled. This does not align with the requirements of LA 105 guidance. At the distance of 7.5m from the road edge, there is a 24% increase in nitrogen deposition compared to the critical load for this site. Chapter 5 Air Quality does not reference this site in the discussion, although there may be an error in Paragraph 5.10.17 which refers to Lightwater Alluvial Forest part of the River Eden and Tributaries SSSI, located outside of DCC. This should be checked and confirmed. Chapter 6 of the ES Biodiversity is however noted by Chapter 5 Air Quality to conclude that there will be no likely significant effects at designated habitat sites.

- Graham's Gill Jack-Wood Ancient Woodland and Steven Band Road Verge (NEYEDC LWS) do not have receptor points or transects marked on Figure 5.3, nor results reported in Table-8. Reasons for not reporting impacts on these two designated habitats should be provided.

- With reference to Chapter 2.7 Environmental Management Plan Annex B4 Air Quality and Dust Management, construction phase traffic mitigation is proposed to include implementation of active traffic management measures. Of the active traffic management measures, it is noted in Paragraph B4.4.2 that there are a number currently being considered. It is therefore understood that no measures have yet been finalised. These should be agreed with DCC. Those listed as potential measures include limiting the use of speed reductions, i.e., through applying higher safe speeds, or limiting the amount of traffic management that is used in areas where the new route is being built adjacent to the existing A66. Reactive traffic management measures would be employed as a last resort, to stop traffic from using the least suitable diversion routes.

- The construction phase of the Project is noted to not impact compliance with the air quality limit values.

- Cumulative effects due to construction traffic from the cumulative proposed developments, if they occur at the same time as the Project, as well as dust and PM10 generated by construction activities, is noted by Chapter 15 Cumulative Effects to potentially lead to significant adverse effects if adequate mitigation is not implemented. The EMP is noted to ensure that adequate mitigation is in place.

Operational Phase
AECOM has provided the following comments on the operational phase assessment:

- The opening year was recognised to have not been assessed appropriately in the PEIR, but that the correct opening year of 2029 would be assessed in the ES; this has now been done.

- A compliance assessment using Pollution Climate Mapping (PCM) has been undertaken and none of these are within DCC.

- It is not clear whether AADT has been used for the operational phase assessment, or whether traffic data provided was split by the four periods required by LA 105 at detailing air quality assessment stage of morning (AM), inter peak, evening peak (PM) and overnight period (OP). This should be clarified and if AADT has been used, reasons provided as to why this is considered acceptable and any limitations associated with this method choice.

- A met station sensitivity assessment was welcomed by DCC at the PEIR stage. Two met stations are noted to have been used in the assessment for the ES, representing east and west study areas Warcop Range and RAF Leaming, for 2019. Leeming has been used in modelling for DCC. There is no discussion other than distance from the scheme as to how representative these two datasets are for the entire scheme, or consideration of alternatives such as Durham Tees Valley Airport. Chapter 5 Air Quality notes that the use of observations from Warcop Range ensure that the Helm Wind is accounted for in the model, however explanation should be provided as to whether this is important to be considered in the eastern model domain.

- An increase of 7,727 AADT is noted by Chapter 5 Air quality to be predicted at A66 near Bowes in 2029 as a result of the project, where traffic flow is noted to increase on A66 but flow is improved. However, Table 7-1 of the Transport Assessment states this value is 6,300 AADT increase. The difference should be explained.

- With reference to Figure 5.4 Operational Phase Air Quality Assessment, the ARN falls within DCCs boundary on the A1M to the east of Newton Aycliffe, along the A66 from Scotch Corner in the east to Bowes and the border of DCC in the west, the B6277 to Barnard Castle and Rutherford Lane.

- No AQMA is noted to be impacted by the scheme. The scoping report noted that the nearest ARN to the Durham City AQMA was 20km to the south and the TRA did not extend to this far north and was screened out at scoping stage. Paragraph 5.2.3.5 of the Environmental Statement Appendix 5.2 Air Quality Assessment Methodology notes that any potentially affected links not within the TRA have not been modelled as there is less confidence in them. The exclusion of wider areas of potential traffic changes is noted in Appendix 5.2 as appropriate for the Project due to the large difference between reported concentrations and the air quality objectives. This is considered reasonable.

- Paragraph 5.5.7 of the Air Quality Chapter states: "It is important to recognise the limitations of models and to use the outputs appropriately. For instance traffic flows of less than a 1,000 AADT are not used in assessment as they are below the confidence that can be attributed to a traffic model. In the same way that changes of less than 1% of the AQO for NO2 (40 µg/m³ - therefore the criterion is 0.4µg/m³) and NOX (30 µg/m³ - therefore the criterion is 0.3µg/m³) are considered to imperceptible and not considered further in assessment." This should be expanded on with further explanation.

- **DCC request information on the predicted changes in traffic flows on the A1 (M) northbound into DCC boundary to the east of Newton Aycliffe. It is noted that in the TA that the increase in traffic flows along the scheme route is 7,400 but that on the A1M NB and SB the total change is only 5,500 suggesting that over 1,900 AADT do not use the strategic road network but are dissipated onto the local road network. Information should be provided of the flow change as AADT on all of the links off the Scotch Corner junction to understand how traffic is expected. It would be useful to understand if the ARN ends due to changes in traffic flow/composition/speed, or whether this is due to the ending of the TRA and to see the location of the calibration/validation data used and reported in the Transport Assessment. This is of importance to DCC, in particular at the Durham City AQMA. There is additionally no mention of air quality in the Transport Assessment with reference to the determination of the TRA; this should be jointly agreed.**

- There are nine human health sensitive receptors assessed in DCC (HSR 57 to HSR 65) for the operational phase. There are no predicted exceedances at human health receptors of any pollutant reported in the chapter, and so no new exceedances as a result of the scheme would be expected within DCC. Results are confirmed to not be presented on a scheme by scheme basis and that the discussion for region 1 in Chapter 5 Air Quality is presents the impact of the overall scheme on the A66 region including the section of the scheme within DCC. The largest human health impact as a result of the scheme is reported to be +0.9 ug/m3, within the DCC boundary at Highly Sensitive Receptor 60 within the Cross Lanes to Rokeby section adjacent to the A66, south of Barnard Castle, to the east of the B6277 junction with the A66. At this location, concentrations are predicted to increase from 9 ug/m3 in DM 2029 to 9.9 ug/m3 in the DS scenario, where an increase of 3,603 AADT is predicted for the A66. It is not clear whether this receptor is the same receptor which was reported in the

PEIR to have an increase of +4.0 ug/m3 in annual mean NO2 at a residential property adjacent to the A66 at Cross Lanes, however the predicted impacts would appear to have dropped significantly in DCC compared to the PEIR stage.

- There are improvements in air quality predicted at three of the nine receptors assessment with the largest improvement predicted to have an impact of -0.6 ug/m3 at HSR 62 and 63 where the proposed A66 alignment moves further away from the HSRs at Rokeby.

- There are no human health sensitive receptors selected and modelled for each ARN link within DCC; this would have provided an understanding of impact of each ARN link. For example, the B6277 is a section of ARN within DCC and a residential property north of Thorsgill Beck has not been included in the dispersion modelling. Receptors are noted by the chapter to have been selected to represent the scale of impacts associated with the project.

- The greatest air quality constraint from the scheme at the PEIR stage related to impacts on nature conservation sites, where there were potential concerns and risk of significant effects with nitrogen deposition and ammonia concentrations. This was noted to be considered in greater detail within the ES. Ammonia was requested to be included at scoping stage however ammonia results at each receptor are not presented. It is noted in Paragraph 5.2.3.20 of Appendix 5.2 Air Quality Assessment Methodology that the National Highways tool has been used to account for ammonia emissions impact on deposited nitrogen.

- There are nine designated ecological sites (Rokeby Park and Mortham Wood (ERIC LWS), Graham's Gill Jack-Wood Ancient Woodland, Steven Band Road Verge (NEYEDC LWS), Bowes Moor SSSI, North Pennine Moors SPA and SAC, Mill Wood Ancient Woodland, Thorsgill Wood Ancient Woodland) plus a number of Ancient Trees within 200m of the ARN within DCC, with reference to Figure 5.4. Results are not presented for all of these sites in Appendix 5.4, or transect locations shown in Figure 5.4.

- Rokeby Park and Mortham Wood LWS nitrogen deposition is predicted to increase by 13.7% against the critical load whilst North Pennine Moors SPA and SSSI and Bowes Moor SSSI have a maximum increase of 17.6% against the critical load. Stephen Bank Road Verge LWS experiences a beneficial change due to the scheme. No other results of designated sites in DCC are reported. Chapter 5 Air Quality notes that: "These changes cannot be considered to be insignificant as defined in DMRB LA 105. Further discussion of the impacts of the Project on nitrogen deposition at these locations is included in Chapter 6: Biodiversity (section 6.10 Assessment of Likely Significant Effects)". The Biodiversity chapter considers the impact to Rokeby Park and Mortham Wood LWS as slight adverse (not significant) effect. The impact to North Pennine Moors SPA and SSSI and Bowes Moor SSSI in the Biodiversity chapter notes that blanket bog is the only qualifying feature that may be impacted by changes in nitrogen deposition at this location and it is predicted that a slight adverse (not significant) effect would occur.

- **Given the poor RMSE derived from the verification exercise, discussion should be provided on how robust and reliable the results presented are, particularly in light of the impacts to designated ecological sites.**

- There is no section in Chapter 5 Air Quality describing outcomes against relevant policies such as the County Durham Plan, other than NPSNN in Paragraph 5.10.84.

- The operational phase traffic data is noted to include traffic associated with other developments, therefore the air quality impact assessment is noted to be inherently cumulative.

Noise and Vibration

Officers have undertaken a technical review of information submitted in relation to the likely impact upon amenity in accordance with the relevant Durham County Council Technical Advice Notes. As such officers provide the following information to assist you in consideration of any impact upon amenity.

The information submitted indicates that the development is likely to breach the thresholds within the TANS (Noise TANS section 3.7 pg. 18). This indicates that the development may, without further controls, lead to a significant impact.

Officers have reviewed the information provided in relation to noise impact associated with the development, both in terms of the construction and operational phases.

The assessments have been undertaken by appropriately qualified and competent consultants and they have followed appropriate methodologies and standards in relation to their assessment and suggested control measures.

Noise Sensitive Receptors (NSRs) which are likely to be impacted upon during both phases have been correctly identified.

Within the area covered by Durham County Council sensitive receptors will be impacted upon during the construction phase to some degree; with regard to the operational phase some receptors will see benefits from the development and others will see adverse impact, the range of the impacts are detailed within chapter 12 of the ES.

The consultants have identified appropriate mitigation measures which should be incorporated within both the development phase and the operational phase, those measures will include use of the Noise Insulation Regulations 1975, that is provision of grants from the Highways Authority, for several properties along the route including several within DCC's area.

The environmental impacts which are relevant to the development in relation to their potential to cause a statutory nuisance, as defined by the Environmental Protection Act 1990 have been assessed. In relation to statutory nuisance there is potential for nuisance during the construction phase, however the developer has proposed measures to mitigate such impacts, which if implemented, should ensure that statutory nuisance will not arise.

Climate

DCC has commissioned AECOM to provide comments on the Climate chapter of the ES.

This document does not intend to provide comment on any element of the Climate chapter or GHG appendix that does not concern operational road-user emissions. It is advised

that these other elements of the Climate chapter and GHG appendix are reviewed by a competent climate change expert.

Comments and observations on the operational road-user elements described in Chapter 7 of ES and Appendix 7.1 are set out below:

- Paragraph 7.5.15 states that the *"assessment of operational phase emissions from vehicles using the highways infrastructure draws on existing traffic modelling information from earlier stages of the Project, as explained in the Combined Modelling and Appraisal Report (Application Document 3.8)".* **This document does not seem to be available on the PINS website**. The same paragraph states that *"This information is used to calculate emissions… associated with the Traffic Reliability Area".* The chapter then goes on to list the scenarios for which user GHG emissions have been quantified.
    - **Can the applicant please confirm that the "traffic modelling information from earlier stages of the project" that has been used to quantify road-user GHG emissions is the correct traffic dataset to be defended at examination, and that this data is consistent with the traffic data used to inform the air quality assessment and noise assessment chapters of the ES? It is noted that the Air Quality chapter of the Preliminary Environmental Information Report was informed by a traffic dataset based on 2031, not the year of opening 2029.**
    - **Can the applicant please provide details on how the Traffic Reliability Area (TRA) referred to was defined. We are interested to know whether or not the potential for climate change impacts was a consideration when the TRA was defined?**

- Paragraph 7.6.5 states that the TRA "was determined based on the regional screening criteria set out in DMRB LA 105".
    - **DMRB LA 105 does not include regional screening criteria. Can the applicant confirm how the TRA was defined?**

- Paragraph 7.5.15 and Table 5 of Appendix 7.1 confirm that Version 11 of the Emission Factor Toolkit (EFT) published by Defra was used to quantify CO2 emissions from the road traffic dataset.
    - **Can the applicant provide explanation as to why the National Highways version of the Emission Factor Toolkit (Version 4.3) was not used to quantify CO2 emissions, given that the A66 project is a highways scheme and the use of Design Manual for Roads and Bridges methodologies elsewhere?**

- Paragraph 7.5.16 states that the "emissions drawn from the traffic modelling are provided in carbon dioxide (CO2) not carbon dioxide equivalents (CO2e)".
    - **Version 11 of the EFT published by Defra provides direct CO2 tailpipe emissions and indirect CO2e emissions from electric vehicle charging. Can the applicant confirm whether or not the road-user GHG values reported in Chapter 7 and Appendix 7.1 of the ES include the indirect CO2e emissions, as well as tailpipe emissions.**

- Table 7-10 of Chapter 7 presents the annual road-user CO2e emissions for the 2019 baseline, 2029 Do-Minimum (opening year without the proposed scheme) and 2044 Do-Minimum (future year without the proposed scheme) scenarios, as well as Do-Minimum CO2e emissions over a 60-year appraisal period. Table 7-23 of Chapter 7

presents the equivalent, but for the Do-Something (opening and future years with the proposed scheme. Table 7-23 also provides the changes between Do-Minimum and Do-Something scenarios. Table 4 of Appendix 7.1 provides "operational emissions" associated with "vehicles using the highway infrastructure" for Do-Minimum and Do-Something scenarios.

  - **The operational values provided for the Do-Minimum and Do-Something scenarios, and the difference between Do-Minimum and Do-Something values reported in Table 4 of Appendix 7.1 do not match those reported in Table 7-10 and Table 7-23 within Chapter 7. Can the applicant provide clarity on why the values reported in Table 4 of Appendix 7.1 differ from the road_user values reported in Chapter 7 of the ES?**

- Nowhere within Chapter 7 or Appendix 7.1 does there appear to be reference to vehicle kilometres travelled. Vehicle kilometres travelled is a useful metric to provide context for changing GHG emissions. **It would be useful if the applicant could provide the vehicle kilometres travelled for the scenarios reported in Table 7-10 and Table 7-23 of Chapter 7 and Table 4 of Appendix 7.1.**

- With relation to the point above, there is no commentary as to why the proposed scheme is increasing road-user GHG emissions. **An explanation would have been useful to enhance understanding for the layperson, possibly including reference to the changing length of the proposed scheme and journey times – i.e. the proposed scheme itself making the route more favourable to road-users, thereby increasing flows.**

Development Plan Policy for County Durham

Comments have previously been made on this project relating to 1) the provisions of the County Durham Plan including upon its policies, designations and allocations within the vicinity of the A66 Trans-Pennine Project; 2) upon matters pertaining to minerals and waste matters including mineral safeguarding areas; and 3) upon the Whorlton Village Neighbourhood Plan 2015 – 2035. As such the information addressed in these previous responses is not repeated as part of this response. These responses can be provided if required.

Legislation and Policy Compliance Statement

Section 4.10 addresses DCC. Paragraphs 4.10.2 to 4.10.19 provide a reasonable high level overview of the statutory development plan in County Durham, with suitable references to emerging policies including the Minerals and Waste Policies and Allocations document which it is agreed that no weight can be currently attached to its provisions.

The section summarises some, but not all of the key relevant County Durham Plan policies specifically the following are referred to 10, 21, 24, 31, 38, 48 and 56 (with further policies being addressed in Appendix C specifically Policies 10, 14, 21, 26, 28, 29, 31, 35, 38, 39, 40, 41, 42, 43, 44, 48, 55, 56). Specifically in relation to CDP Policy 56 it refers to the partial sterilisation of a mineral safeguarding area and potential mineral site at Cross Lanes to Rokeby which it advises constitutes a large significant effect. It then advises that the Project when viewed as a whole outweighs the need to safeguard mineral in this particular location and also advises that this is demonstrated through the overarching benefits and overall need for the Project as outlined at chapter 3 and 7 of the CftP (Application Document 2.2).

Paragraph 4.10.19 advises that a full assessment of the Project and its compliance with the DCC policy documents mentioned above is set out in the Conformity Table at Appendix C of this document. Appendix C refers to the County Durham Plan (2020); Whorlton Village Neighbourhood Plan 2015- 2025 (2017); and County Durham Landscape Character Assessment (2008). In relation to the County Durham Plan it addresses the CDP Vision, Objectives and the following relevant policies 10, 14, 21, 26, 28, 29, 31, 35, 38, 39, 40, 41, 42, 43, 44, 48, 55, 56. It provides commentary on compliance with the CDP vison, strategic objectives and policies and provides cross references to where assessments of effects are provided. Methodologically the approach seems reasonable. It is noted that the commentary on compliance is on occasion high level, but generally detailed where there is a clear relationship between County Durham Plan Policy matters and the scope of the project i.e., Policy 24: Provision of transport Infrastructure or specific environmental policies.

Environmental Statement Chapter 11 Material Assets and Waste

Chapter 11 addresses mineral safeguarding sites and peat resources and reports upon Mineral Safeguarding Areas (MSAs) established by Durham County Council (paragraph 11.6.9) and Table 11-7 (Baseline Mineral Safeguarding Areas and Minerals Allocations for each scheme). Regarding:

- Table 11-7 (page 31 of 56) and references “A mineral operator is proposing a new site to both the west and east of Cross Lanes Junction however this site has not been allocated by DCC. (Boldron Cross Lanes Proposed New Site)” and “The scheme would lie within the unallocated Boldron Cross Lanes proposed mineral site. The design alteration since the PEIR has reduced the scheme footprint in this area, to the betterment of the MSA.”
- Table 11-36: (Potential impacts to mineral safeguarding sites for Cross Lanes to Rokeby) and paragraphs 11.9.15 to 11.9.18.

The Council acknowledges these findings and welcomes the work undertaken to reduce the scheme footprint thereby helping to minimise sterilisation of safeguarded mineral resources.

Chapter 11 also addresses the waste effects of the construction of the Project. The information provided on waste from the project including recycled content targets, waste arisings and waste capacity are noted. Regarding Table 11-10 it is suggested that the inert waste landfill capacity figure for County Durham is slightly higher than it should be, and for Northumberland it is slightly lower than it should be. This reflects the misallocation of Hollings Hill Quarry Landfill to County Durham rather than Northumberland in the Environment Agency Remaining Landfill Capacity dataset. The figure provided for non-hazardous landfill capacity for County Durham is queried. The County’s only non-hazardous landfill (Joint Stocks has been closed for a number of years and has been under restoration with inert materials – although the capacity has still been reported by the Environment Agency.

The potential impacts of the project and schemes in relation to waste are noted (paragraphs 11.7.3 to 11.7.10). The Council’s principal interest is related to the ‘projects potential to generate large amounts of CD&E waste which could potentially affect the capacity of waste management infrastructure in study area and cause a permanent decrease in landfill capacity. In total it is understood that the project will generate 1,507,883 tonnes of excavation and construction waste with 90% (tonnes) of this waste diverted from landfill via re-use, recycling and recovery based on existing industry practice and project targets outlined in paragraph 11.7.1, as well as mitigation in the ES and the requirements of the EMP (paragraph 11.7.8). The detailed information for each scheme is

set out in Table 11-28: (A summary of waste quantities estimated to be generated by demolition, excavation and construction on a scheme basis). See also Table 11-39 (Inert landfill capacity in study area 2 in 2024). In this regard the proposed quantity of CDE waste from the projects schemes within County Durham requiring offsite disposal do not appear significant and should be able to be accommodated within existing landfill capacity within County Durham during the construction time period associated with the project schemes.

APPENDIX 2

Public Health Data for County Durham

Northern Trans-Pennine Project AACON/22/01871A66

Public Health Data

17th August 2022

Background

National Highways proposes to improve the A66 by providing a dual two-lane carriageway between M6 Junction 40 at Penrith and the A1(M) Junction 53 at Scotch Corner (the Project).

The Project comprises eight individual schemes, two of which are within the boundaries of County Durham:

- Scheme 7: Bowes Bypass
- Scheme 8: Cross Lanes to Rokeby

Purpose

This note contains population health data relevant to these areas.

Data

- Barningham and Greta Lower Super Output Area (LSOA) profile:

County Durham
LSOA Report - Barni

- Barningham and Greta LSOA Index of Deprivation Report 2019:

County Durham
LSOA Deprivation Re

- Bowes and Greta Bridge settlement profile:

CAVEAT: *Data for settlements is not produced and has to be estimated from the lowest geographical areas we have which are Output Areas. Data at this level is restricted to Census data (2011 Current) and ONS mid-year population estimates. However, we do create our own in-house experimental population estimates from OAs to settlements.*
The following data is a result of combining these estimates with various GIS layers and the boundaries marked on the maps.

Area	Area (Estimate)	Population (2020-mid year estimate)	Population Density (people per hectare)	Households (estimate)
Bowes (Map 8)	627	400	0.64	185
Greta Bridge (Map 9)	830	135	0.16	61
Total	**1,457**	**535**	**0.37**	**246**
Barningham & Greta LSOA (E01020863)	16,734	1,420	0.08	640
Barnard Castle & Startforth MSOA (E02004347	57,620	7,318	0.13	3,510
County Durham	222,606	533,100	2.39	250,000

- Bowes and Middleton-in-Teesdale Medium Super Output Area (MSOA) Local Health Profile:

Bowes and Middlton-in-Teesda

CAVEAT: *due to low population density, this MSOA is large (please see front page of above health profile for map)*

- Bowes and Middleton-in-Teesdale MSOA data summary:

Bowes and Middleton-in-Teesd

- Health data – Barnard Castle Surgery (NB – This is the GP practice nearest to the study area. This contains spine charts for Long Term Conditions with comparison to England average)


BarnardCastleSurgery_Cancer.png


BarnardCastleSurgery_CVD.png


BarnardCastleSurgery_RespiratoryDisea


BarnardCastleSurgery_Stroke.png


BarnardCastleSurgery_Summary.png

Barningham & Greta
(E01020863)
Lower Super Output Area

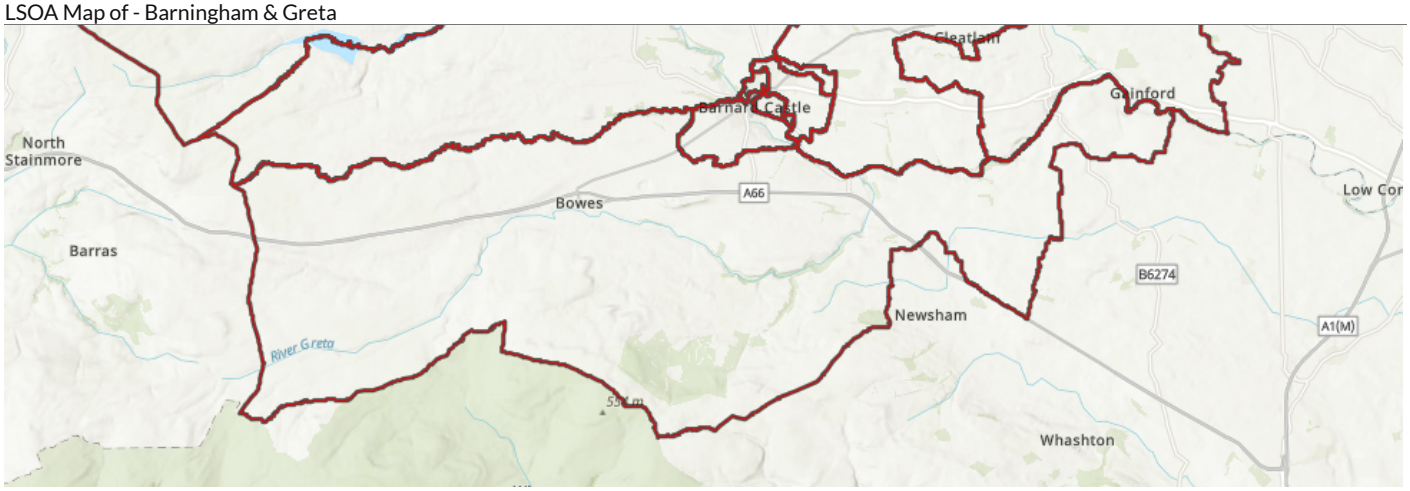
The following report provides an overview of the LSOA: **Barningham & Greta (E01020863)** using some of the main indicators used in the reports available via the 'Themes' menu above.

LSOA = Lower Super Output Area

Further information on these areas is available on [redacted]

Indicators included from:
Population & Ethnicity
Economy & Employment
Deprivation
Poverty
Children & Young People
Health & Wellbeing
Crime & Community Safety

LSOA Map of - Barningham & Greta



Population

It is essential to understand poulation size and characteristics in order to effectively plan and deliver services such as education, transport and healthcare. This section displays the latest population estimates for the **Barningham & Greta** LSOA.

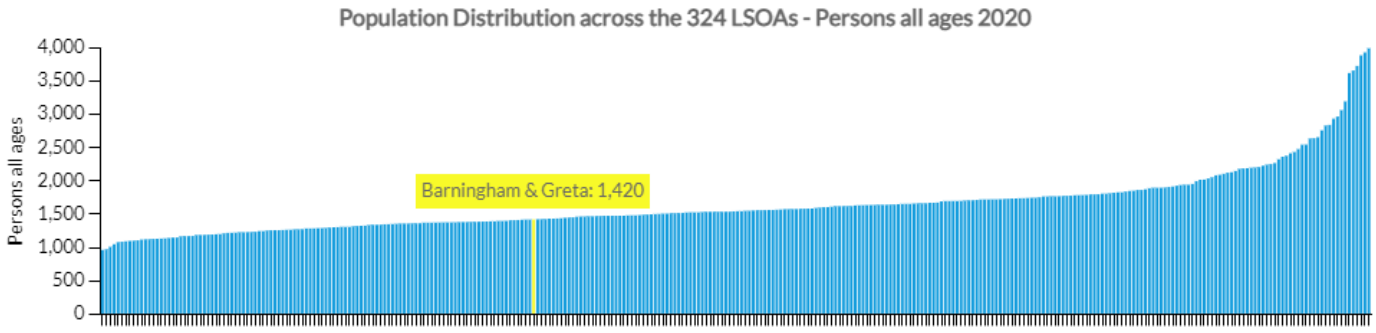
[redacted]

Sources:
Office for National Statistics (ONS): Mid-year population estimates (MYEs)

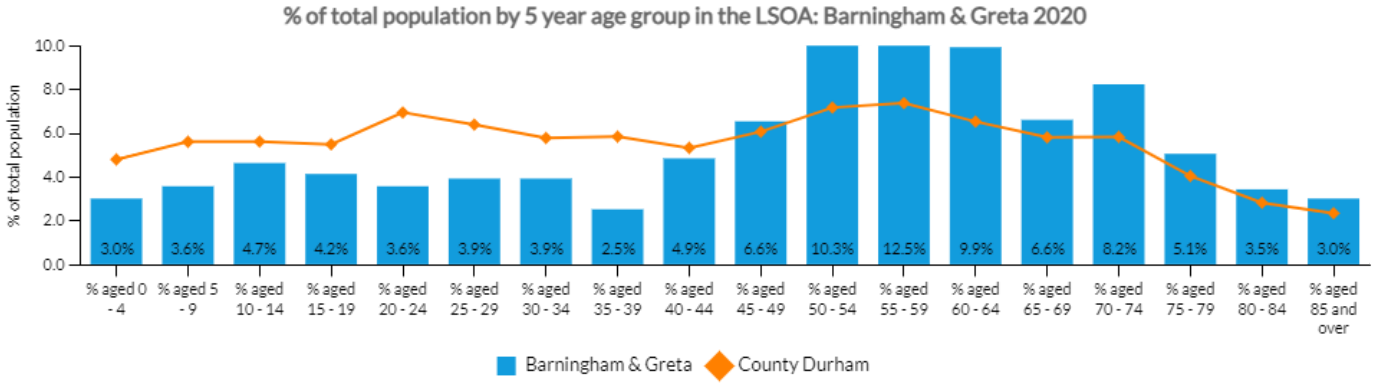
1,420	718	702
Total estimated population (2020)	(50.6%) Male estimated population (2020)	(49.4}%) Female estimated population (2020)
Source: ONS*	Source: ONS*	Source: ONS*

Population change								
	2013	2014	2015	2016	2017	2018	2019	2020
Persons all ages								
Barningham & Greta	1,392	1,346	1,377	1,355	1,387	1,403	1,392	1,420
County Durham	515,923	517,573	519,347	521,776	523,662	526,980	530,094	533,149
North East	2,610,563	2,618,736	2,624,579	2,636,589	2,644,727	2,657,909	2,669,941	2,680,763
England	53,865,817	54,316,618	54,786,327	55,268,067	55,619,430	55,977,178	56,286,961	56,550,138

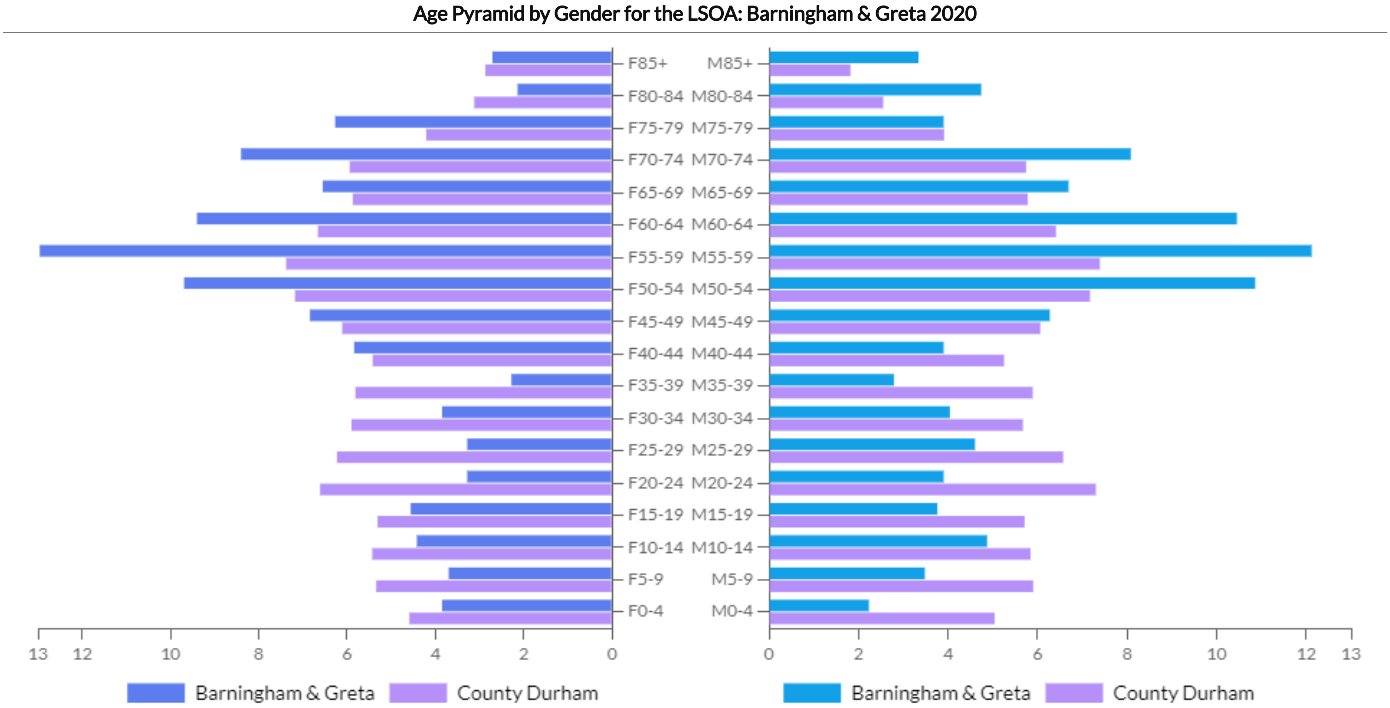
Source: ONS MYE - Change in the resident population in the area



Source: ONS MYE - Population Distribution across the 324 LSOAs



Source: ONS MYE - % of total population by 5 year age group in the LSOA: Barningham & Greta 2020



Source: ONS MYE - Age Pyramid by Gender for the LSOA: Barningham & Greta 2020

Ethnicity and Country of Birth in for the Barningham & Greta LSOA

Source:
Office for national Statistics (ONS): 2011 Census

Ethnic makeup

Ethnicity	Number	%
All Usual Residents	1,390	100
White: British	1,345	96.8
White: Irish	9	0.6
White: Gypsy or Irish Traveller	0	0
Other White	23	1.7
Asian British: Bangladeshi	0	0
Asian British: Chinese	5	0.4
Asian British: Indian	1	0.1
Asian British: Pakistani	1	0.1
Asian British: Other	0	0
Black British: African	0	0
Black British: Caribbean	0	0
Black British: Other	0	0
Mixed: White and Asian	4	0.3
Mixed: White and Black African	0	0
Mixed: White and Black Caribbean	2	0.1
Other Mixed	0	0
Any other ethnic groups	0	0

Source: ONS Census 2011 - Number and percentage of the populaiton by ethnic group

Country of Birth

Country	Number	%
England	1,280	92.1
Scotland	41	2.9
Wales	15	1.1
Northern Ireland	8	0.6
Ireland	4	0.3
UK not otherwise specified	0	0
EU: Member in March 2001	12	0.9
EU Accession countries April 2001 - March 2011	9	0.6
Other EU	21	1.5
Other	21	1.5

Source: ONS Census 2011 - Number and percentage of the popu-laiton by country of birth

Economy and Employment

The Index of Multiple Deprivation (IMD) 2019 - Employment Domain

This domain measures the number of working age people in receipt of unemployment and workless-ness related benefits including Jobseekers Allowance, Employment and Support Allowance, Incapacity Benefit, Severe Disablement Allowance and Carer's Allowance.

More information is available in our [redacted] or through the following link: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

Source: MHCLG - Ministry of Housing, Communities and Local Government

The LSOA **Barningham & Greta** is ranked

28,115

out of 32,844 LSOAs in England in the Employment Domain - with rank 1 being the most deprived - **Employment Domain**. This LSOA is in **decile**

9

(IMD2019) Source: MHCLG

2011 Census Indicators for the Barningham & Greta LSOA (E01020863)

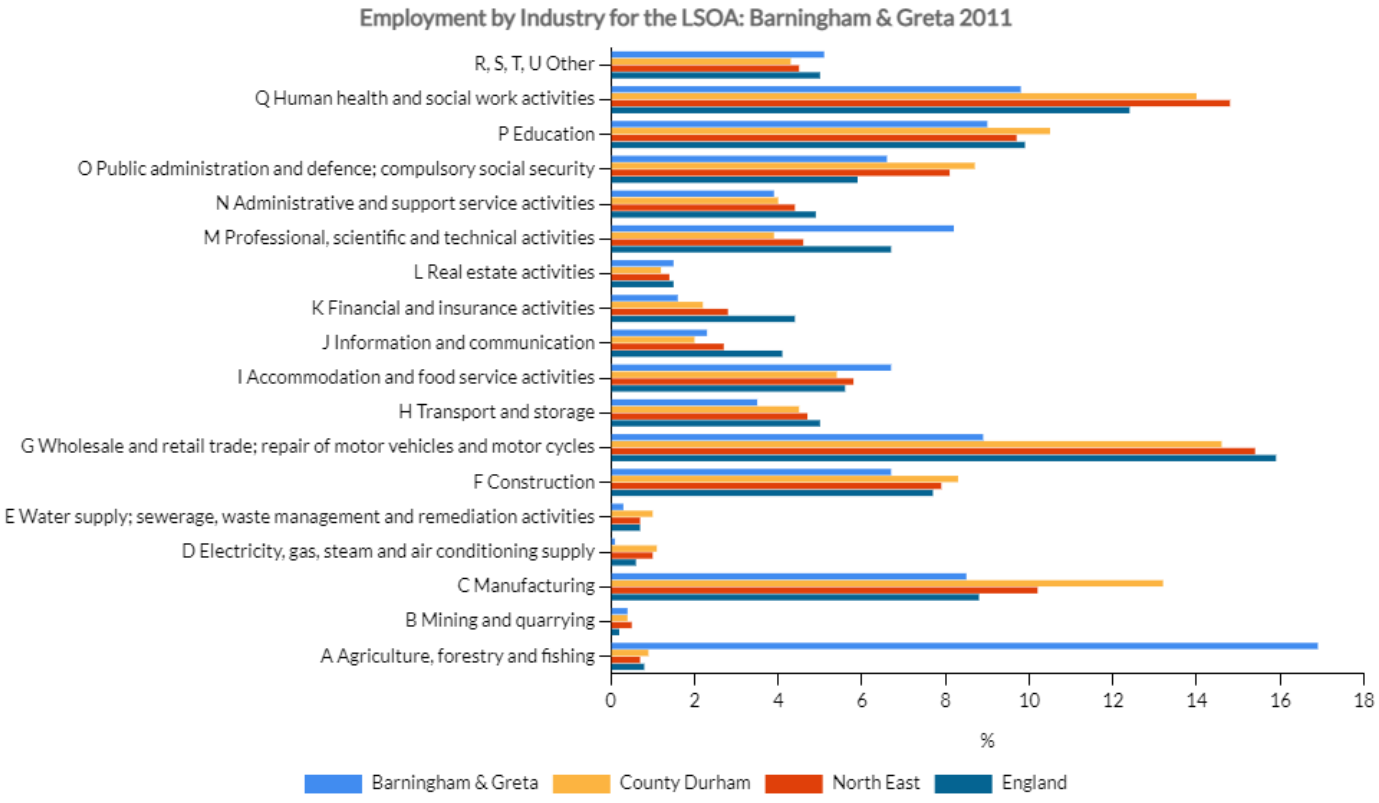
The following are some of the main economic indicators available for the LSOA: **Barningham & Greta.**

Note: Many of the indicators available in the main **Economy and Employment** theme below are not available for sub-county areas.

[redacted]

Sources:
Office for National Statistics (ONS): 2011 Census.

72.6%	70.0%	1.2%
(802.0 people)	(773.0 people)	(13.0 people)
Economic Activity Rate Source = ONS 2011 Census (2011)	In Employment Source = ONS 2011 Census (2011)	Unemployed Source = ONS 2011 Census (2011)



Source: 2011 Census - Employment by Industry in the LSOA: Barningham & Greta 2011

Employment - Jobs - 2018

Source abbreviations:
ONS BRES = Office for National Statistics Business Register Employment Survey

The BRES is a sample survey of businesses (sample size of around 80,000) collecting employment information from across the whole of the UK economy for each site that they operate. The data is broken down by full/part-time, public/private sector and by industry and is available from a national level down to sub-county areas (Lower Super Output areas – LSOAs - in England).

Related Factsheet
BRES Jobs in County Durham

377	13	364
Total local 'jobs' in **2018** Source = ONS BRES	Local jobs in the public sector in **2018** Source = ONS BRES	Local jobs in the private sector in **2018** Source = ONS BRES

Summary of Jobs in Barningham & Greta (2018)

	Barningham & Greta		County Durham	North East	England
	Count	% change in year	Count	Count	Count
Total number of Jobs	377	9.3	177,436	1,083,502	28,202,850
Total number of Employees	363	-10.6	170,527	1,054,695	27,249,383
Total number of Full-time Employees	243	-3.6	114,638	704,285	18,474,446
Total number of Part-time Employees	119	63	55,889	350,410	8,774,936

Source: ONS BRES - Local job estimates by full and part-time in the area

Claimant Count - 16+ population

Note: The Claimant Count **does not** meet the internationally agreed definition of unemployment specified by the International Labour Organisation (ILO). Estimates of unemployment are sourced from the **Labour Force Survey**, **Annual Population Survey** and modelled estimates which make use of the **Annual Population Survey**.

The Claimant Count measures the number of people claiming benefit principally for the reason of being unemployed:

- from April 2015, the Claimant Count includes all Universal Credit claimants who are required to seek work and be available for work, as well as all JSA claimants,
- between May 2013 and March 2015, the Claimant Count includes all out of work Universal Credit claimants as well as all JSA claimants,
- between October 1996 and April 2013, the Claimant Count is a count of the number of people claiming Jobseeker's Allowance (JSA),
- between January 1971 (when comparable estimates start) and September 1996, it is an estimate of the number of people who would have claimed unemployment-related benefit if Jobseeker's Allowance had existed at that time.

The Claimant Count includes people who claim unemployment-related benefits but who do not receive payment. For example, some claimants will have had their benefits stopped for a limited period of time by Jobcentre Plus. Some people claim JSA in order to receive National Insurance Credits.

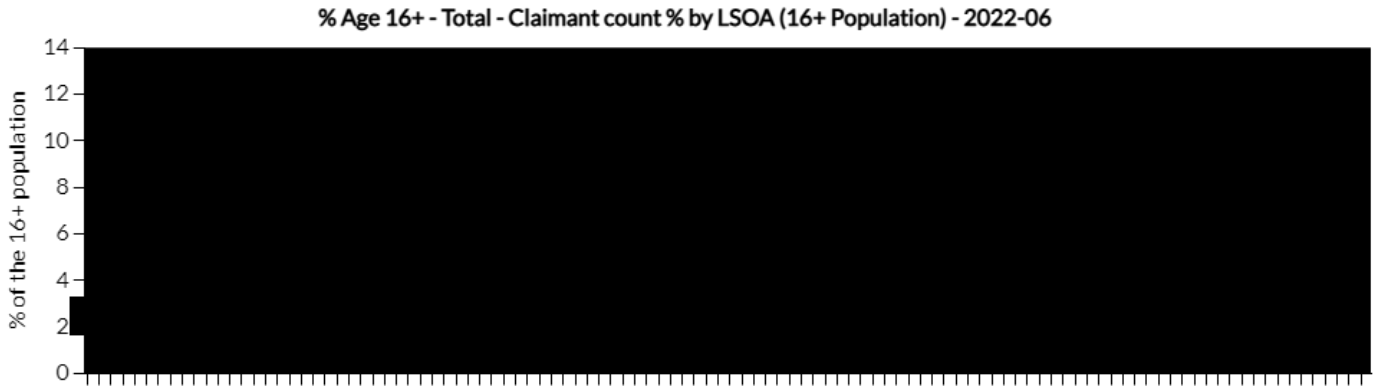
Under Universal Credit it is expected that a broader span of claimants will claim benefit principally for the reason of being unemployed and therefore be included within the Claimant Count. This means that, with the roll-out of Universal Credit, the level of the Claimant Count series is likely to be higher than it would have been otherwise, even if labour market conditions remain unchanged.

Further information is available on the Office for National Statistics website: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/claimantcountqmi

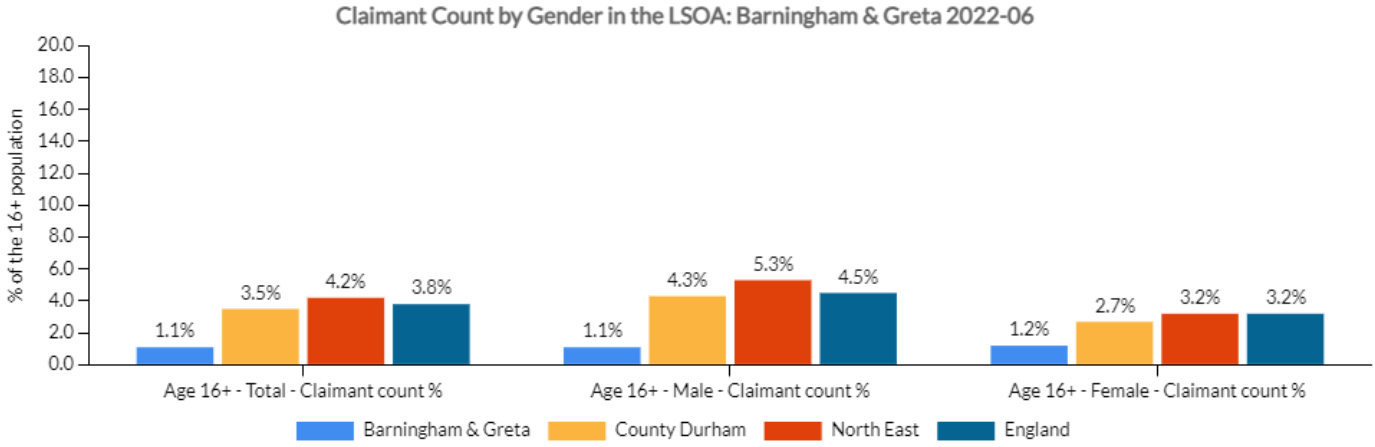
Claimant Count - 16+ population in Barningham & Greta 2022-06

	Barningham & Greta		County Durham	North East	England
	Rate	Count	Rate	Rate	Rate
Age 16+ - Total - Claimant count %	1.1	10	3.5	4.2	3.8
Age 16+ - Male - Claimant count %	1.1	5	4.3	5.3	4.5
Age 16+ - Female - Claimant count %	1.2	5	2.7	3.2	3.2

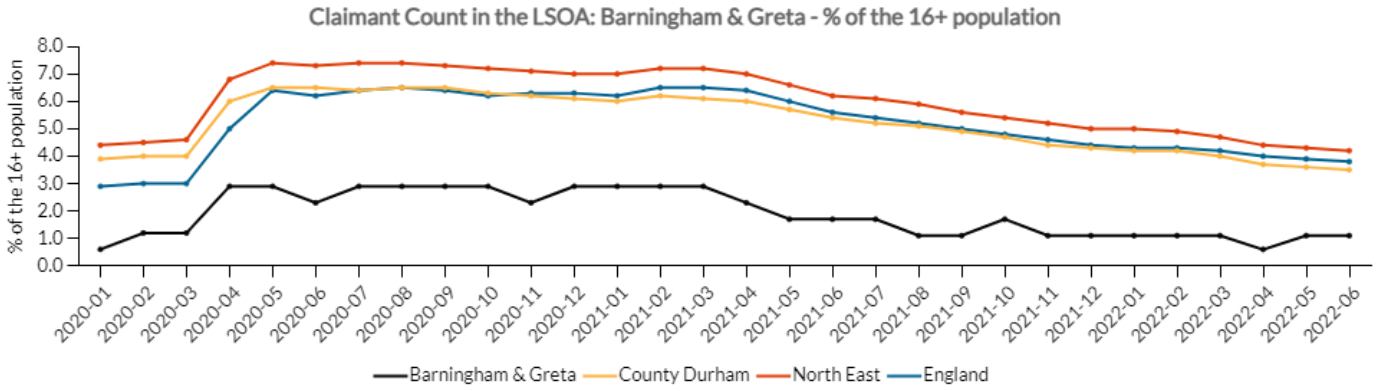
Source: ONS Claimant Count by gender



Source: ONS Claimant Count - % of the 16+ population claiming out of work benefits by LSOA



Source: ONS Claimant Count - By gender in the area with comparisons in the LSOA: Barningham & Greta 2022-06



Source: ONS Claimant Count - Change in the claimant count in the LSOA: Barningham & Greta

The Index of Multiple Deprivation (IMD) 2019 by LSOA

The Index of Multiple Deprivation (IMD) 2019 is the official measure of relative deprivation for small areas (or neighbourhoods) in England. The Index of Multiple Deprivation ranks every small area (Lower Super Output Area - LSOA) in England from 1 (most deprived area) to 32,844 (least deprived area).

This report shows information on IMD and the underlying domain indices.

More information is available in ou[redacted] or through the following link: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

Source: MHCLG - Ministry of Housing, Communities and Local Government

The LSOA **Barningham & Greta** is ranked

15,192

out of 32,844 LSOAs in England with rank 1 being the most deprived.
This LSOA is in

decile 5

(2019) Source: MHCLG

Summary for the Barningham & Greta LSOA, by Domain

Index/Domain	Rank of Average Score	Average Score	Decile (1 = top 10% most deprived)
Overall Index	15,192.0	19.1	5.0
Income Domain	26,602.0	0.0	9.0
Employment Domain	29,022.0	0.0	9.0
Education, Skills and Training Domain	28,115.0	4.3	9.0
Health Deprivation and Disability Domain	23,793.0	-0.5	8.0
Crime Domain	20,254.0	-0.2	7.0
Barriers to Housing and Services Domain	430.0	49.2	1.0
Living Environment Domain	805.0	58.6	1.0
Income Sub-domains			
Income Deprivation Affecting Children Index (IDACI) Sub-domain	23,414.0	0.1	8.0
Income Deprivation Affecting Older People (IDAOPI) Sub-domain	28,324.0	0.1	9.0

Source: MHCLG 2019 - Ranks and scores for the area by domain

Poverty

Children in Low Income Families - (2018-2019)

Further Information is available in the [redacted] factsheet.

These experimental Official Statistics on the number (and proportion) of children living in low income families across Great Britain by local area were first released on the 26th March 2020.

These new statistics complement and should be viewed as a companion release to the Households Below Average Income (HBAI) survey on children in low income households which provides National and Regional estimates but not local area estimates. These local area statistics are calibrated to, and thus match, the 3-year average HBAI survey estimates at Region and Country level for Great Britain.

Low income is defined as a family in low income Before Housing Costs (BHC) in the reference year. A family must have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income in these statistics.

Children in Low Income Families in the Barningham & Greta LSOA

Source:
HM Revenues and Customs:
https://www.gov.uk/government/publications/children-in-low-income-families-local-area-statistics-201415-to-201819/children-in-low-income-families-local-area-statistics-201415-to-201819

	Barningham & Greta	County Durham	North East	England
Percentage of children under 16 living in families with Relative Low Income	10.6	22.3	23.7	18.4
Number of children under 16 living in families with Relative Low Income	18	20,264	112,794	1,982,948
Percentage of children under 16 living in families with Absolute Low Income	14.1	18.1	19.3	15.3
Number of children under 16 living in families with Absolute Low Income	24	16,477	91,879	1,644,335
Number of children living in families with Relative Low Income	32	28,465	155,781	2,543,542
Number of children living in families with Absolute Low Income	33	24,071	133,337	2,085,401

Source: HM Revenue and Customs - Children living in low income families in the area

Free School Meals

For local free school meals data see t[redacted] page.

Fuel Poverty - 2020 - New

Department of Business Energy and Industrial Strategy (BEIS) Low Income – Low Energy Efficency (LILEE) measure.

Note: This new measure has now replaced the old Low Income/High Cost (LIHC) measure. Further information on this can be accessed using the links bleow.

The new Department of Business Energy and Industrial Strategy (BEIS) Low Income – Low Energy Efficiency (LILEE) measure, is defined as:

Under the LILEE indicator, a household is considered to be fuel poor if:

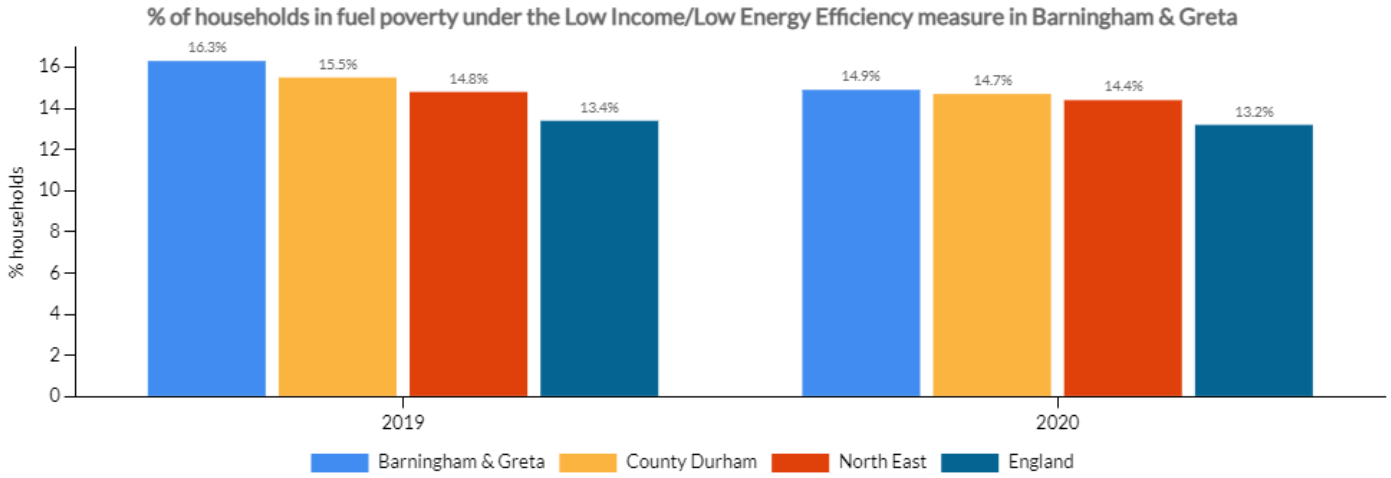
- they are living in a property with a fuel poverty energy efficiency rating of band D or below, and
- when they spend the required amount to heat their home, they are left with a residual income below the official poverty line

Further information is available in our Fuel Poverty factsheet or from the link below.

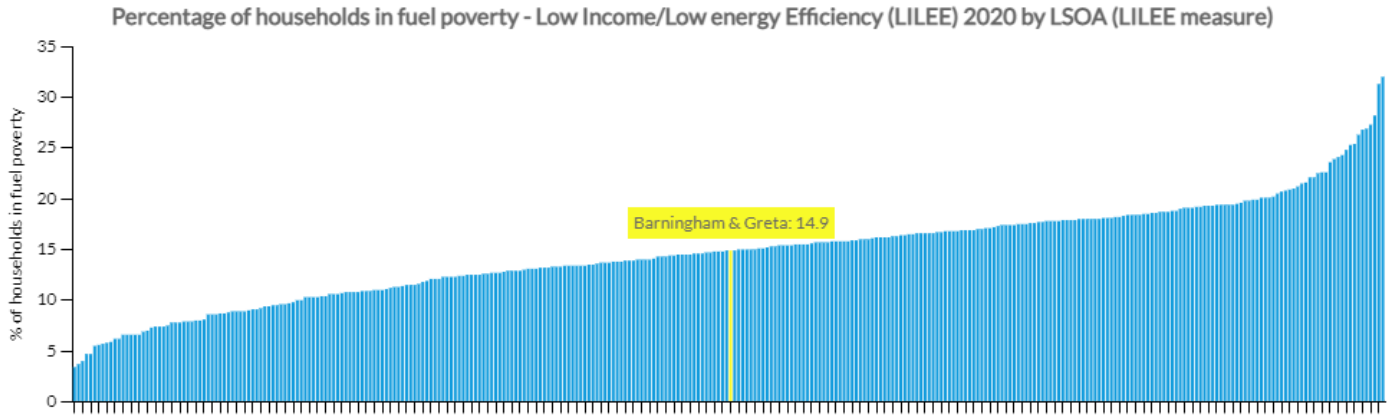
Source: https://www.gov.uk/government/collections/fuel-poverty-statistics#2019-statistics

14.9%

95 Households
in fuel poverty
New Measure: Households with Low Income/Low Energy Efficency
(2020)
Source: BEIS*



Source: BEIS



Source: BEIS Low Income/Low Energy Efficency measure - % of households in fuel poverty by LSOA

Fuel Poverty - (2018) - Discontinued

Department of Business Energy and Industrial Strategy (BEIS) Low Income – High Cost (LIHC) measure.

A household is considered to be fuel poor if it has higher than typical energy costs to provide an indoor environment that does not adversely affect their health and wellbeing (21c in living room and 18c in the rest of the house), and would as a result be left with a disposable income below the poverty line if it spent the required money to meet those costs.

It captures the fact that fuel poverty is distinct from general poverty: not all poor households are fuel poor, and some households would not normally be considered poor but could be pushed into fuel poverty if they have high energy costs.

Fuel poverty is therefore an overlapping problem of households having a low income and facing high energy costs.

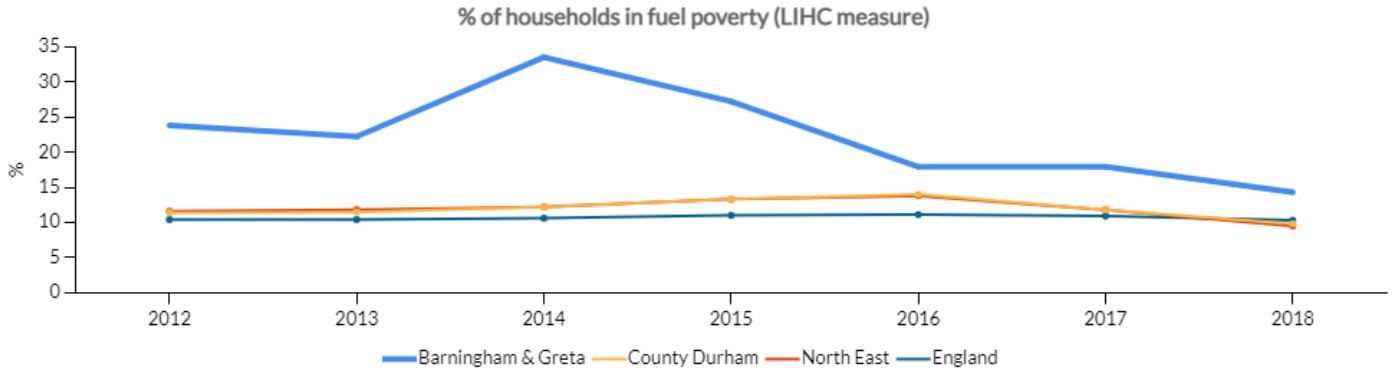
Further information is available in our Fuel Poverty factsheet or from the link below.

Source: Department of Business Energy and Industrial Strategy (BEIS) Low Income – High Cost (LIHC) measure: https://www.gov.uk/government/collections/fuel-poverty-statistics

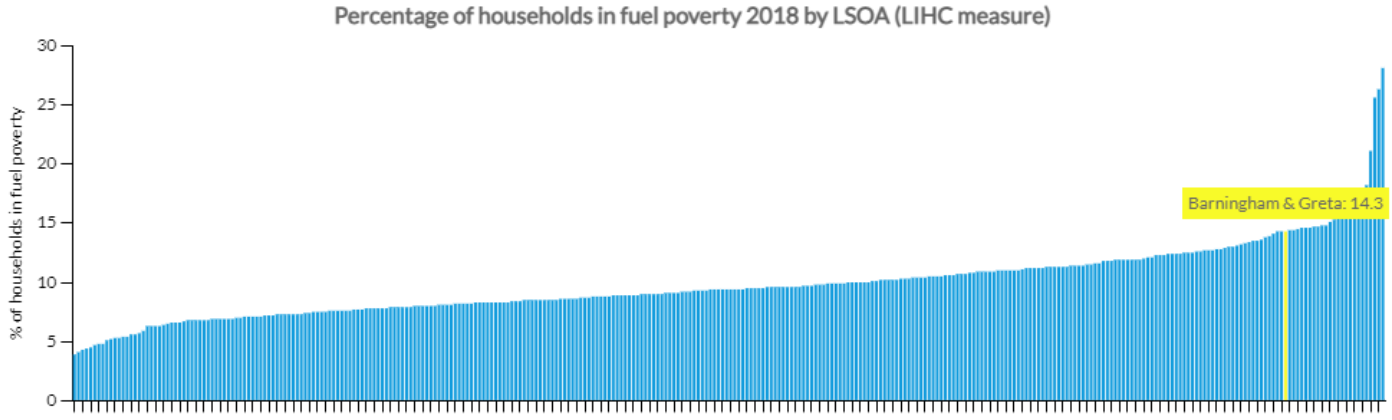
Fuel Poverty in the Barningham & Greta LSOA

	2012	2013	2014	2015	2016	2017	2018
Barningham & Greta							
Percentage of households in fuel poverty	23.8	22.2	33.5	27.2	17.9	17.9	14.3
Number of households in fuel poverty	137	133	201	163	108	110	89
County Durham							
Percentage of households in fuel poverty	11.4	11.5	12.2	13.3	14	11.8	9.8
Number of households in fuel poverty	25,079	26,050	27,618	30,242	31,906	27,309	22,919
North East							
Percentage of households in fuel poverty	11.6	11.8	12.2	13.3	13.8	11.8	9.5
Number of households in fuel poverty	128,971	134,895	139,490	151,942	159,311	138,230	112,668
England							
Percentage of households in fuel poverty	10.4	10.4	10.6	11	11.1	10.9	10.3
Number of households in fuel poverty	2,282,579	2,346,715	2,379,357	2,502,217	2,550,565	2,532,195	2,400,297

Department of Business Energy and Industrial Strategy (BEIS) Low Income – High Cost (LIHC) measure



Source: BEIS - Low Income/High Cost measure - % of households in fuel poverty



Source: BEIS Low Income/High Cost measure - % of households in fuel poverty by LSOA

Children and Young People in Barningham & Greta

The following indicators are taken from the [redacted]' theme accessible via the 'Themes' menu above.

Sources:
ONS: Office for National Statistics
MHCLG: Ministry of Housing, Communities and Local Government
HM Revenues and Customs

193

Total estimated population aged 0 - 17 (2020)
Source: ONS*

77

Total estimated population aged 18 - 24 (2020)
Source: ONS*

The LSOA **Barningham & Greta** is ranked

23,414

out of 32,844 LSOAs in England with rank 1 being the most deprived - **IDACI Index**.
This LSOA is in **decile**

8

(IMD2019)
Source: MHCLG

10.6%

of children under 16 living in relative poverty in families (2018-2019)
Source: HM Revenue & Customs

14.1%

of children under 16 living in absolute poverty in families (2018-2019)
Source: HM Revenue & Customs

Low income is defined as a family in low income Before Housing Costs (BHC) in the reference year. A family must have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income in these statistics.

Health and Wellbeing in Barningham & Greta

The following indicators are taken from the [redacted]' theme accessible via the 'Themes' menu above.

Sources:
Office for National Statistics (ONS): 2011 Census
MHCLG - Ministry of Housing, Communities and Local Government

The Index of Multiple Deprivation (IMD) 2019 - Health Domain

The LSOA **Barningham & Greta** is ranked
23,793
out of 32,844 LSOAs in England in the Health Domain - with rank 1 being the most deprived - **Health Domain**.
This LSOA is in **decile**
8
(IMD2019) Source: MHCLG

The Index of Multiple Deprivation (IMD) 2019 is the official measure of relative deprivation for small areas (or neighbourhoods) in England. The Index of Multiple Deprivation ranks every small area (Lower Super Output Area - LSOA) in England from 1 (most deprived area) to 32,844 (least deprived area).

This domain measures premature death and the impairment of quality of life from poor health. It considers both physical and mental health indicators comprising underlying indicators measuring years of potential life lost, comparative illness and disability ratio, acute morbidity and mood and anxiety disorders

More information is available in our [redacted] or through the following link: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

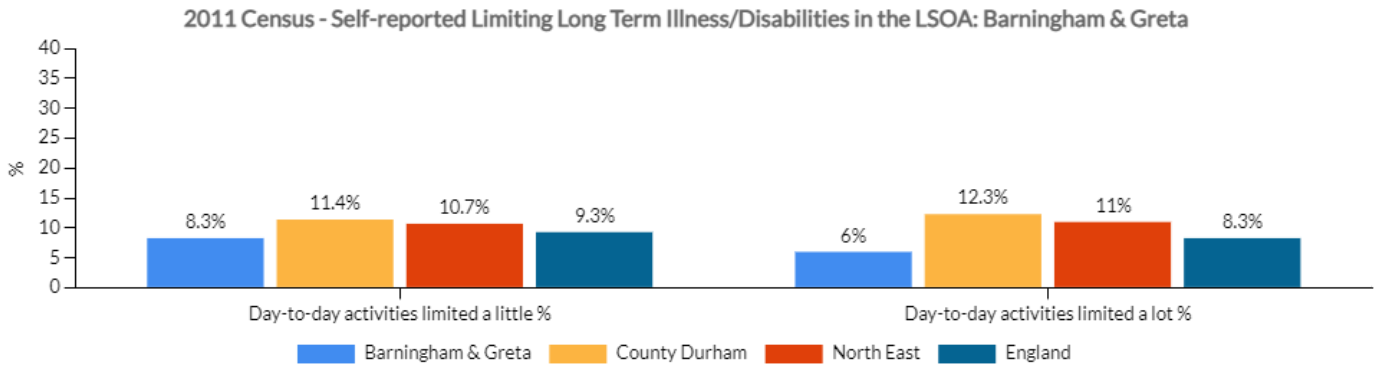
2011 Census - Self-reported indicators

The following indicators are derived from the 2011 Census results.

People with Limiting Long Term Illness or Disability - Self-reported

	Barningham & Greta		County Durham	North East	England
	%	Day-to-day activities not limited	%	%	%
Day-to-day activities limited a little %	8.3	1,192	11.4	10.7	9.3
Day-to-day activities limited a lot %	6	83	12.3	11	8.3
Day-to-day activities not limited %	85.8	115	76.4	78.4	82.4

Source: 2011 Census; Self-reported Limiting Long Term Illness/Disabilities

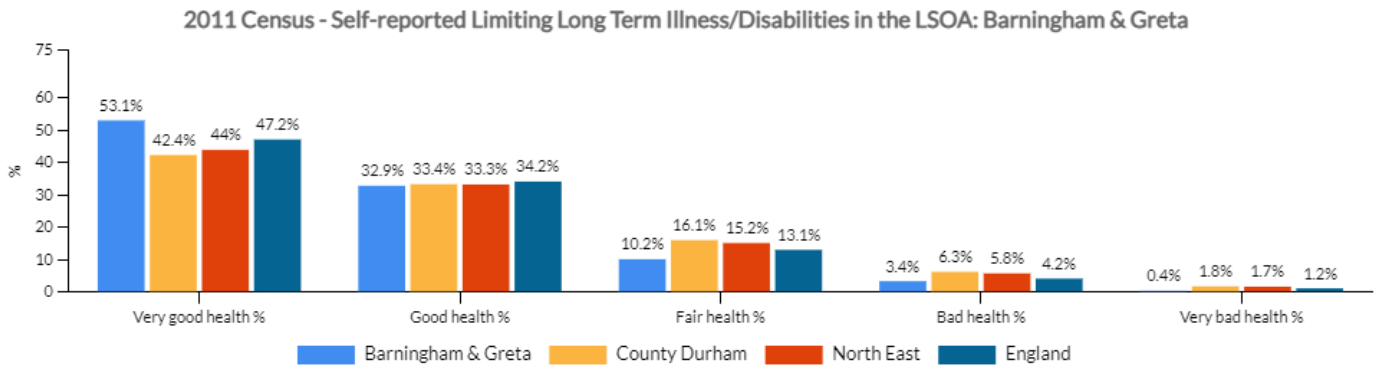


Source: 2011 Census - Self-reported Limiting Long Term Illness/Disabilities in the LSOA: Barningham & Greta

General Health - Self-reported

	Barningham & Greta		County Durham	North East	England
	%	Very good health	%	%	%
Very good health %	53.1	738	42.4	44	47.2
Good health %	32.9	457	33.4	33.3	34.2
Fair health %	10.2	142	16.1	15.2	13.1
Bad health %	3.4	47	6.3	5.8	4.2
Very bad health %	0.4	6	1.8	1.7	1.2

Source: 2011 Census; Self-reported General Health

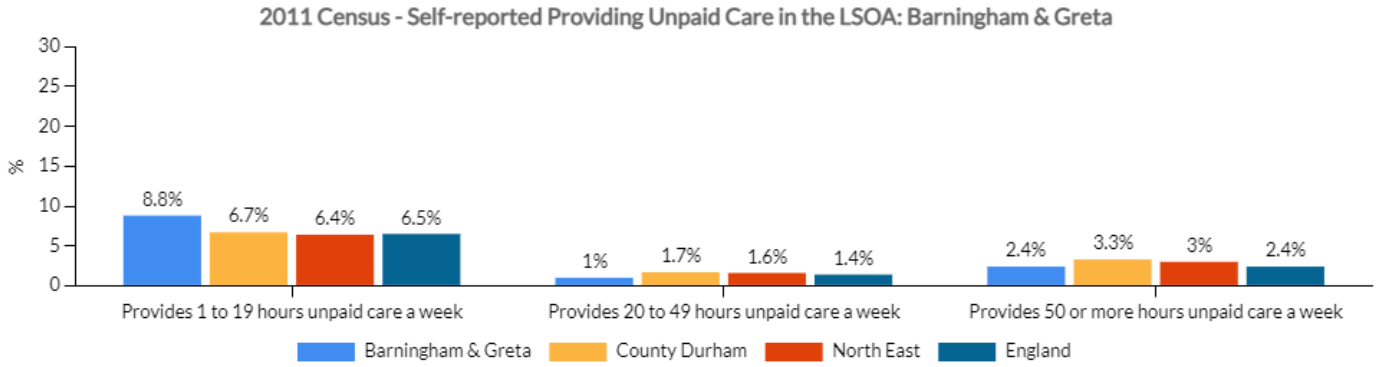


Source: 2011 Census - Self-reported Limiting Long Term Illness/Disabilities in the LSOA: Barningham & Greta

People providing Unpaid Care - Self-reported

	Barningham & Greta		County Durham	North East	England
	%	Provides no unpaid care	%	%	%
Provides no unpaid care %	87.8	1,220	88.3	89	89.8
Provides 1 to 19 hours unpaid care a week %	8.8	122	6.7	6.4	6.5
Provides 20 to 49 hours unpaid care a week %	1	14	1.7	1.6	1.4
Provides 50 or more hours unpaid care a week %	2.4	34	3.3	3	2.4

Source: 2011 Census; Self-reported Providing Unpaid Care



Source: 2011 Census - Self-reported Providing Unpaid Care in the LSOA: Barningham & Greta

Dwellings in the Barningham & Greta LSOA

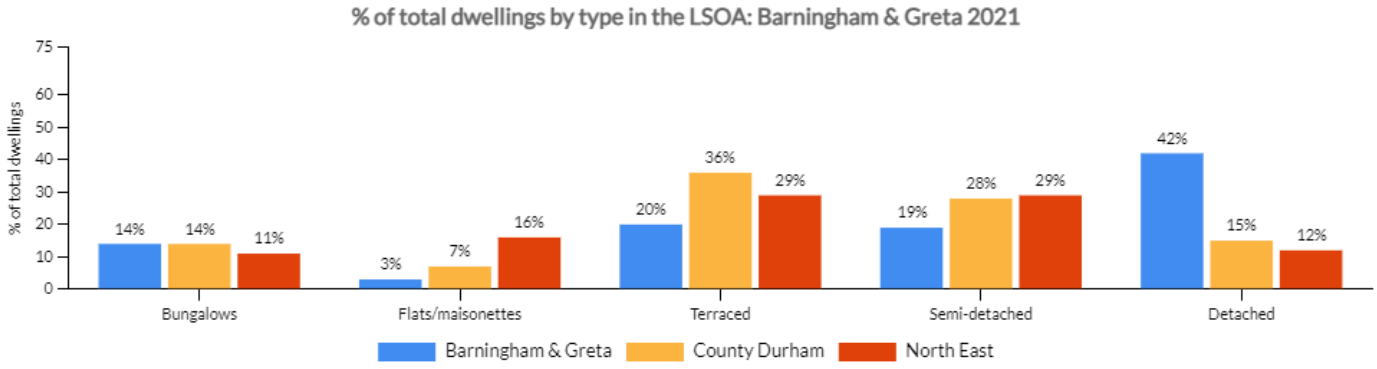
Sources:

MHCLG - Ministry of Housing, Communities and Local Government

VOA - Valuation Office Agency

	2019	2020	2021
Number of properties (including annexes, other types and unknown)			
Barningham & Greta	640	640	640
County Durham	246,380	248,500	249,520
North East	1,239,420	1,248,590	1,254,850
England	24,426,920	24,673,660	24,871,650

Source: MHCLG - Estimated number of properties in the area



Source: MHCLG - dwelling types as a percentage of all dwellings in the LSOA: Barningham & Greta 2021

Council Tax Bands in the Barningham & Greta LSOA in 2021

	Barningham & Greta		County Durham		North East		England	
	Count	% of total	Count	% of total	Count	% of total	Count	% of total
A	50	8	143,890	58	666,170	53	5,994,410	24
B	100	16	34,910	14	198,790	16	4,865,580	20
C	120	19	31,240	13	187,930	15	5,436,980	22
D	130	20	22,110	9	106,570	8	3,867,800	16
E	100	16	10,700	4	56,070	4	2,407,940	10
F	80	13	4,190	2	24,310	2	1,276,030	5
G	50	8	2,210	1	13,510	1	875,370	4
H	10	2	270	0	1,490	0	147,540	1

Source: VOA - Number and percentage of properties in the area by council tax band

Crime and Community Safety in Barningham & Greta

The following indicators are taken from the main [redacted]' theme accessible via the 'Themes' menu above.

Sources:
MHCLG - Ministry of Housing, Communities and Local Government

data.police.uk*

*geocoded, single crime case data have been aggregated to LSOA level and then sub-county geographies. Rates are calculated per 1000 population. 12 month rolling figures use an average of the population monthly figures over the same period. Where the dates for the crime data exceed the latest available date for population estimates, the latest population figure was used for any crime rates after that date (no extrapolating).

69	49.6	7	11	7.9
Total number of crime cases during the most recent 12 month period (Jul-21 - Jun-22) Source: data.police.uk*	Total crime rate per 1000 population during the most recent 12 month period (Jul-21 - Jun-22) Source: data.police.uk*	Total number of crime cases during the most recent month (Jun-22) Source: data.police.uk*	Total number of ASB cases during the most recent 12 month period (Jul-21 - Jun-22) Source: data.police.uk*	Total ASB rate per 1000 population during the most recent 12 month period (Jul-21 - Jun-22) Source: data.police.uk*

The Index of Multiple Deprivation (IMD) 2019 - Crime Domain

The Index of Multiple Deprivation (IMD) 2019 is the official measure of relative deprivation for small areas (or neighbourhoods) in England. The Index of Multiple Deprivation ranks every small area (Lower Super Output Area - LSOA) in England from 1 (most deprived area) to 32,844 (least deprived area).

The Crime domain measures the rate of recorded crime in an area for four major crime types representing the risk of personal and material victimisation at a small area level. The types are violence, burglary, theft and criminal damage.

More information is available in our [redacted] or through the following link: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

MHCLG - Ministry of Housing, Communities and Local Government

The LSOA **Barningham & Greta** is ranked

20,254

out of 32,844 LSOAs in England in the Crime Domain - with rank 1 being the most deprived - **Crime Domain**.
This LSOA is in **decile**

7

(2019)
Source: MHCLG

Crime Types

Overall geocoded, recorded crimes and rates per 1,000 resident population - by crime type in Jul-21 - Jun-22

data.police.uk

	Barningham & Greta		County Durham		North East		England	
	Rate	Count	Rate	Count	Rate	Count	Rate	Count
Anti-social behaviour Rate	7.9	11	29.1	15,444	30.4	81,262	18	1,015,271
Bicycle theft Rate	N/A	N/A	0.5	285	1.1	3,050	1.2	69,030
Burglary Rate	11.5	16	5.2	2,728	5.4	14,453	4.1	233,039
Criminal damage and arson Rate	12.2	17	15.2	8,043	14.7	39,319	8.1	455,819
Drugs Rate	0.7	1	1.8	933	2.3	6,186	2.6	146,128
Possession of weapons Rate	0	0	0.6	310	0.8	2,185	0.8	42,648
Public order Rate	2.9	4	8.7	4,584	11.6	30,985	8.7	487,910
Robbery Rate	0	0	0.3	141	0.7	1,796	1.1	59,556
Shoplifting Rate	N/A	N/A	6.4	3,387	7	18,796	4.4	249,905
Theft from the person Rate	N/A	N/A	0.4	220	0.7	1,898	1.5	86,886
Vehicle crime Rate	9.3	13	3.6	1,880	5.1	13,493	5.9	330,911
Violence and sexual offences Rate	10.8	15	39.5	20,928	43.5	116,057	34.9	1,965,845
Other theft Rate	2.2	3	5.9	3,110	7.9	21,202	7.1	398,757
Other crime Rate	0	0	2.5	1,299	2.6	6,810	1.7	93,466

Source: data.police.uk - Crime rates and counts in the area by crime type

The Index of Multiple Deprivation (IMD) 2019 by LSOA

Barningham & Greta (E01020863)

(LSOA = Lower Super Output Area)

For more information of these areas visit [redacted]

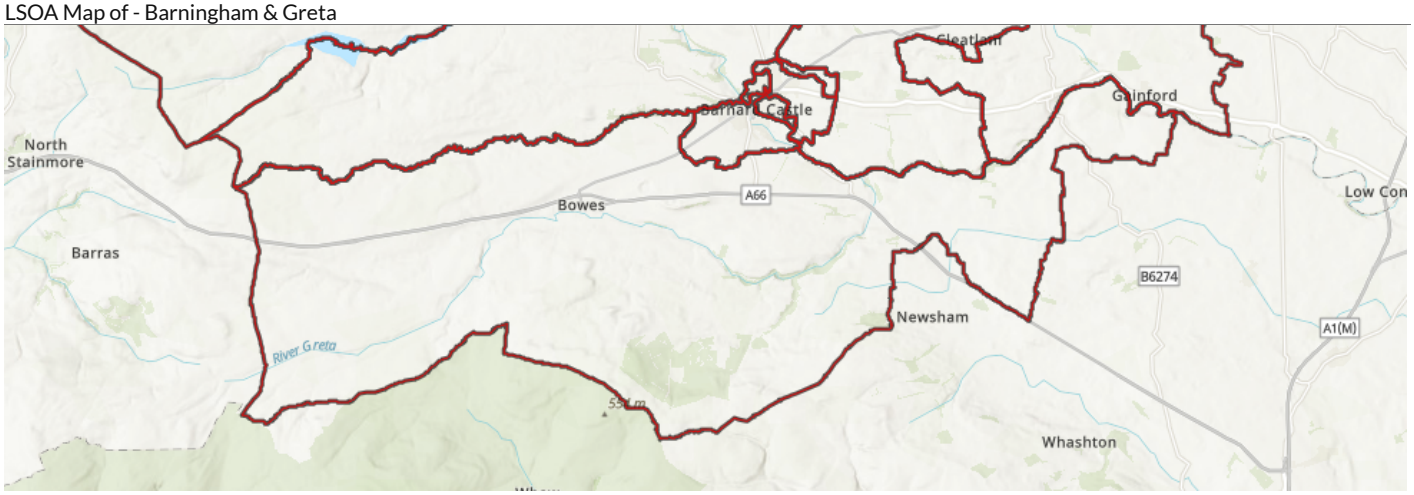
The Index of Multiple Deprivation (IMD) 2019 is the official measure of relative deprivation for small areas (or neighbourhoods) in England. The Index of Multiple Deprivation ranks every small area (Lower Super Output Area - LSOA) in England from 1 (most deprived area) to 32,844 (least deprived area).

This report shows information on IMD and the underlying domain indices.

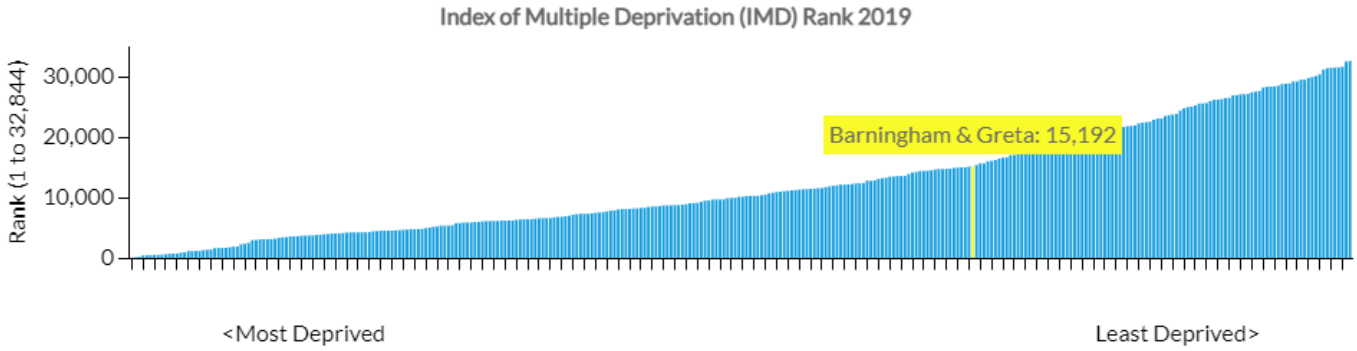
More information is available in our [redacted] or through the following link: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019

The LSOA **Barningham & Greta** is ranked
15,192th
out of 32,844 LSOAs in England with rank 1 being the most deprived.
This LSOA is in
decile 5.
(2019)
Source: MHCLG

LSOA Map of - Barningham & Greta



Rank of Average Rank for all County Durham LSOAs



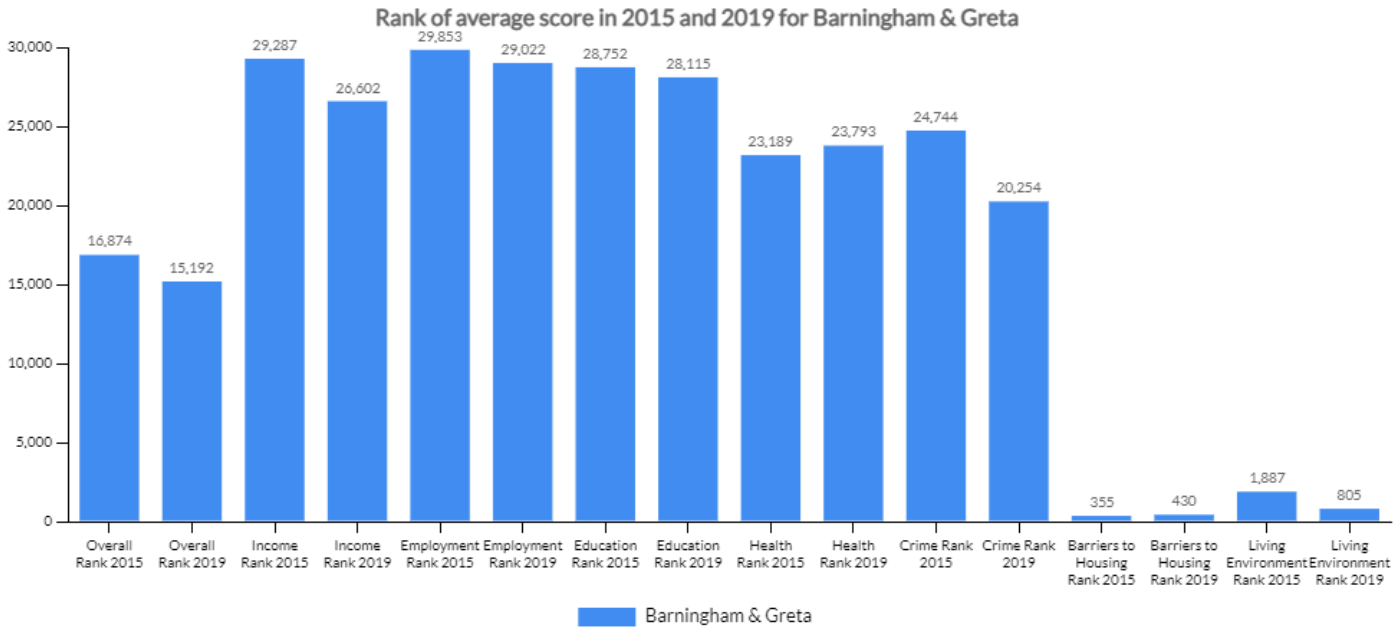
Source: MHCLG - Overall national rank by LSOA in the Index of Deprivation

Summary for the Barningham & Greta LSOA, by Domain

Index/Domain	Rank of Average Score	Average Score	Decile (1 = top 10% most deprived)
Overall Index	15,192.0	19.1	5.0
Income Domain	26,602.0	0.0	9.0
Employment Domain	29,022.0	0.0	9.0
Education, Skills and Training Domain	28,115.0	4.3	9.0
Health Deprivation and Disability Domain	23,793.0	-0.5	8.0
Crime Domain	20,254.0	-0.2	7.0
Barriers to Housing and Services Domain	430.0	49.2	1.0
Living Environment Domain	805.0	58.6	1.0
Income Sub-domains			
Income Deprivation Affecting Children Index (IDACI) Sub-domain	23,414.0	0.1	8.0
Income Deprivation Affecting Older People (IDAOPI) Sub-domain	28,324.0	0.1	9.0

Source: MHCLG 2019

Note: The chart below shows the rank of the average score for the Barningham & Greta LSOA for 2015 and 2019 .



Source: MHCLG - Rank of average score in 2015 and 2019 comparison

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - POPULATION

Population

These indicators shows the proportion of the population in each age band, and so can be used when considering population health and need services.

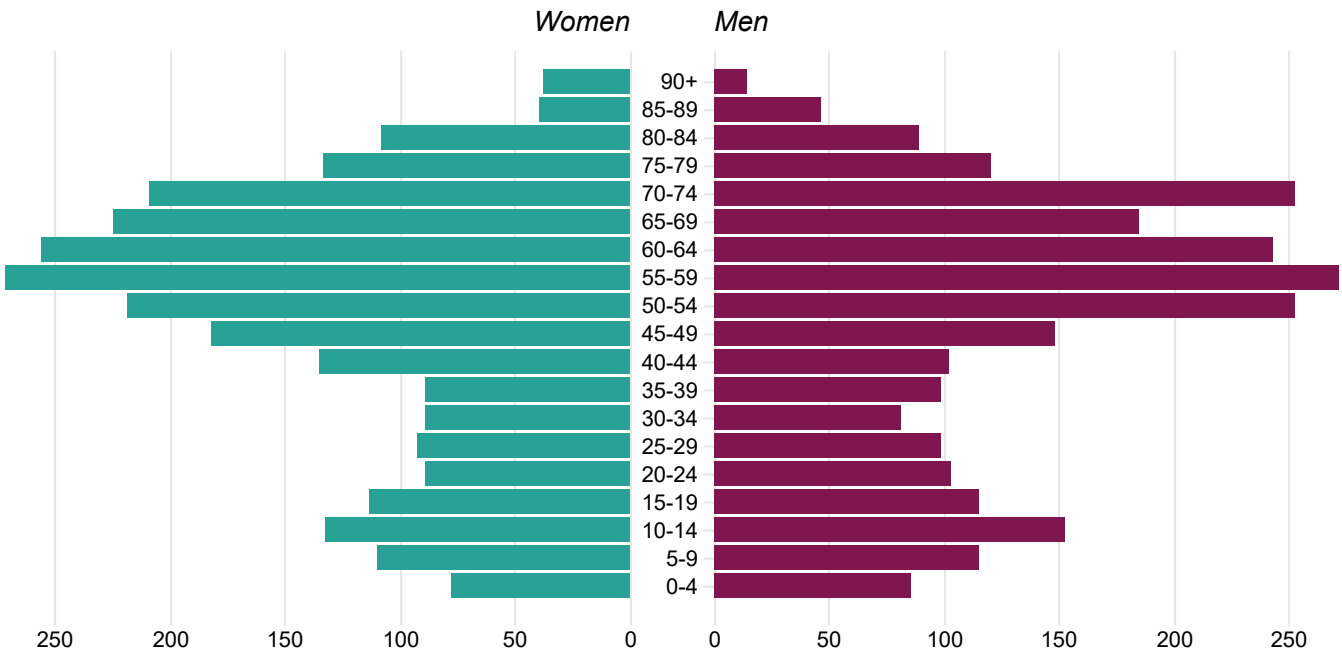
Population by age group, % 2020

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Population aged 0 to 4 years (%)	3.1	4.8	4.8	5.7
Population aged 5 to 15 years (%)	10.9	12.3	12.3	13.5
Population aged 16 to 24 years (%)	7.1	11.4	11.4	10.5
Population aged 25 to 64 years (%)	50.8	50.6	50.6	51.8
Population aged 50 to 64 years (%)	29.2	21.1	21.1	19.2
Population aged 65 years and over (%)	28.1	20.9	20.9	18.5

Source: Office for National Statistics (ONS) Small area population estimates, England and Wales: mid 2020

Age pyramid: male and female numbers per five-year age group, 2020

County Durham 065



Source: Office for National Statistics (ONS) Small area population estimates, England and Wales: mid 2020

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

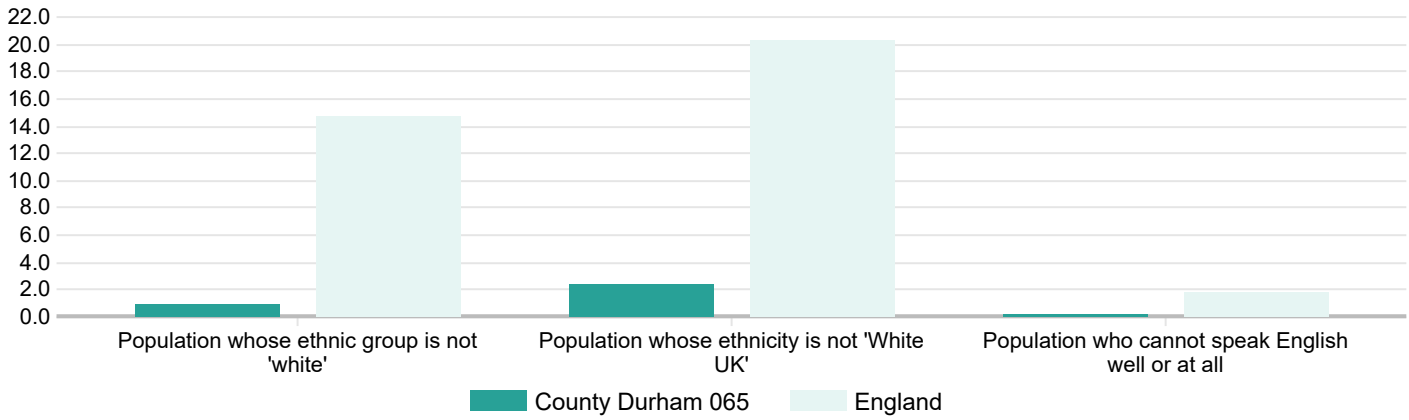
LOCAL HEALTH: REPORT PART 1 - ETHNICITY & LANGUAGE

Ethnicity and Language, %, 2011.

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Population whose ethnic group is not 'white' (%)	0.8	1.8	1.8	14.6
Population whose ethnicity is not 'White UK' (%)	2.3	3.4	3.4	20.2
Population who cannot speak English well or at all (%)	0.1	0.3	0.3	1.7

Source: Office for National Statistics (ONS) Census 2011

Ethnicity and language, %, 2011.



Source: Office for National Statistics (ONS) Census 2011

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - DEPRIVATION

Indices of Deprivation, 2019, Score

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Index of Multiple Deprivation (IMD) Score	18.1	26.8	26.8	21.7

Source: Ministry of Housing and Local Government 2019

Deprivation indicators, %, 2019. Households in poverty, %, 2014.

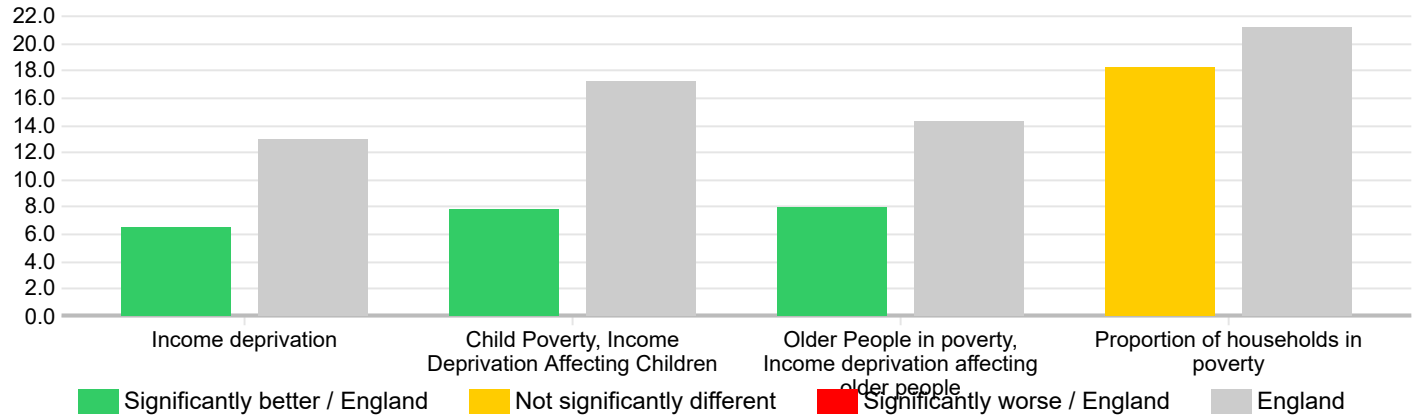
Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Income deprivation (%)	6.4	16.5	16.5	12.9
Child Poverty, Income Deprivation Affecting Children (%)	7.7	22.2	22.2	17.1
Older People in poverty, Income deprivation affecting older people (%)	7.9	17.0	17.0	14.2
Proportion of households in poverty (%)	18.2	N/A	N/A	21.1

Source: Ministry of Housing and Local Government 2019, Office for National Statistics, (ONS) 2014

Households in poverty data only available at MSOA level

Deprivation indicators, %, 2019. Households in poverty, %, 2014

County Durham 065



Source: Ministry of Housing and Local Government 2019, Office for National Statistics, (ONS) 2014

Households in poverty data only available at MSOA level

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - HOUSING AND LIVING ENVIRONMENT

Housing and living environment indicators, %

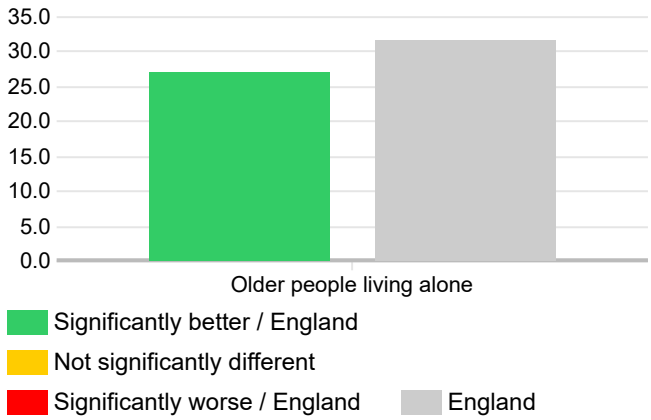
Older people living alone and Overcrowded houses, 2011, Fuel poverty, 2020

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Older people living alone (%)	27.1	33.0	33.0	31.5
Overcrowded houses (%)	1.9	3.6	3.6	8.7
Households in fuel poverty (%)	15.6	14.7	14.7	13.2
Population density (Crude rate)	9.0	239.5	239.5	434.1

Source: ONS Census 2011 / ONS Mid Year Population Estimates / Department for Business, Energy & Industrial strategy, 2020

Older people living alone, %, 2011

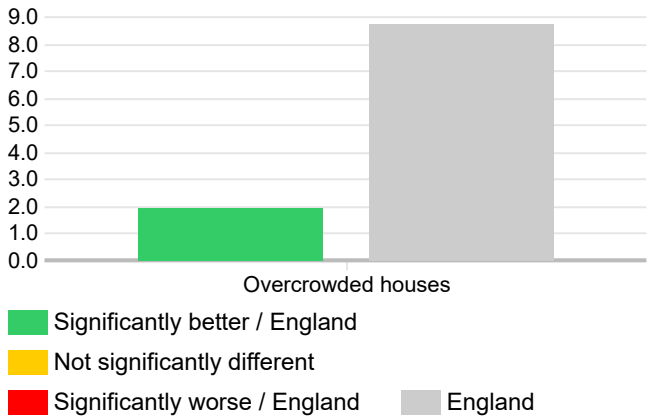
County Durham 065



Source: ONS, Census 2011

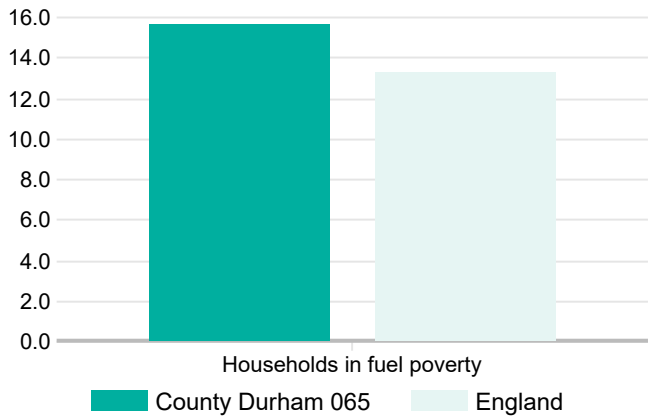
Overcrowded houses, %, 2011

County Durham 065



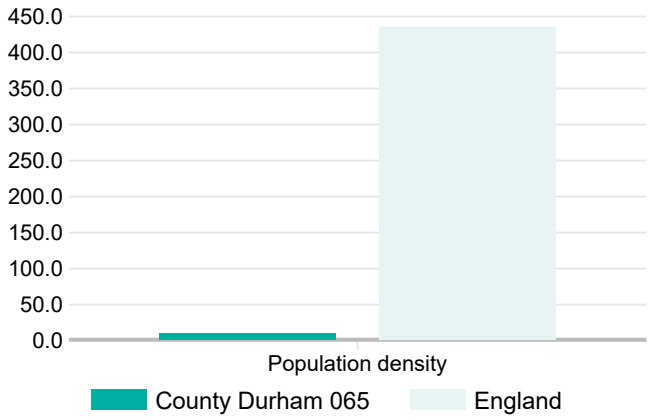
Source: ONS, Census 2011

Modelled estimates of the proportion of households in fuel poverty, %, 2020



Source: Department for Business, Energy & Industrial Strategy

Population density. Crude rate



Source: ONS Small area population estimates (SAPE) 2020 and ONS standard area measurements (SAM) for 2011 census areas for England

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - EMPLOYMENT

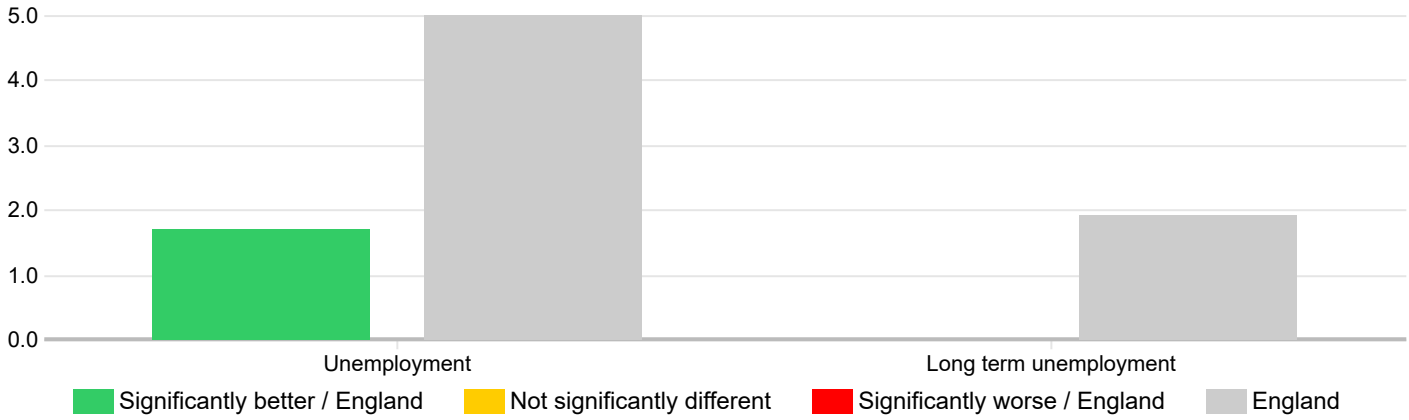
Employment Indicators, %, 2021 to 2022.

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Unemployment (%)	1.7	4.8	4.8	5.0
Long term unemployment (Crude rate per 1,000)	0.0	1.9	1.9	1.9

Source: NOMIS Labour Market Statistics

Employment Indicators, %, 2021 to 2022.

County Durham 065



Source: NOMIS Labour Market Statistics

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - LONG-TERM HEALTH CONDITIONS AND MORBIDITY

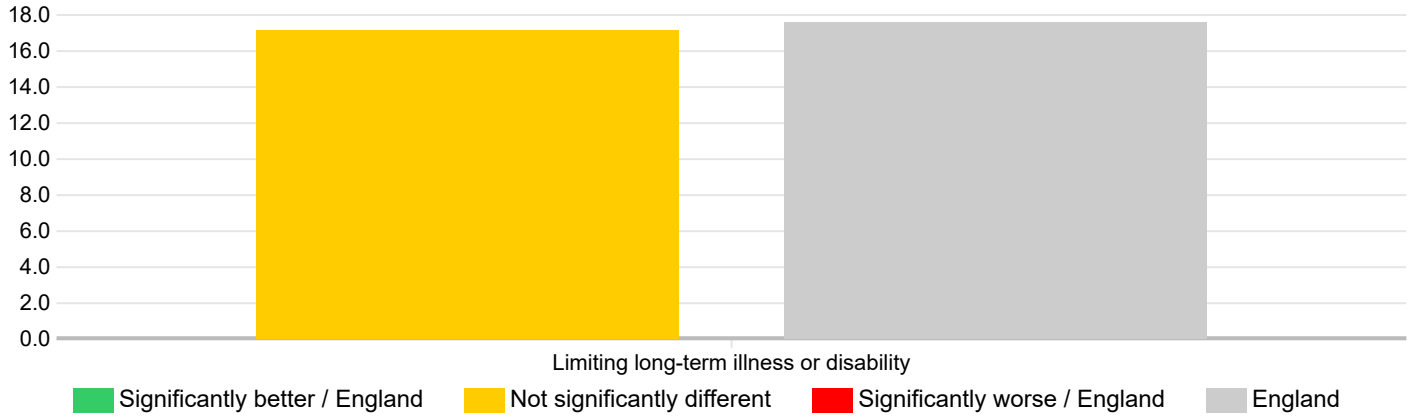
Long-term health conditions and morbidity, %, 2011

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Limiting long-term illness or disability (%)	17.1	23.6	23.6	17.6

Source: Office for National Statistics (ONS) Census 2011

Long-term health conditions and morbidity, %, 2011

County Durham 065



Source: Office for National Statistics (ONS) Census 2011

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - CHILDREN'S WEIGHT (NCMP)

Children's weight indicators, %, 2017 to 2018, to 2019 to 2020.

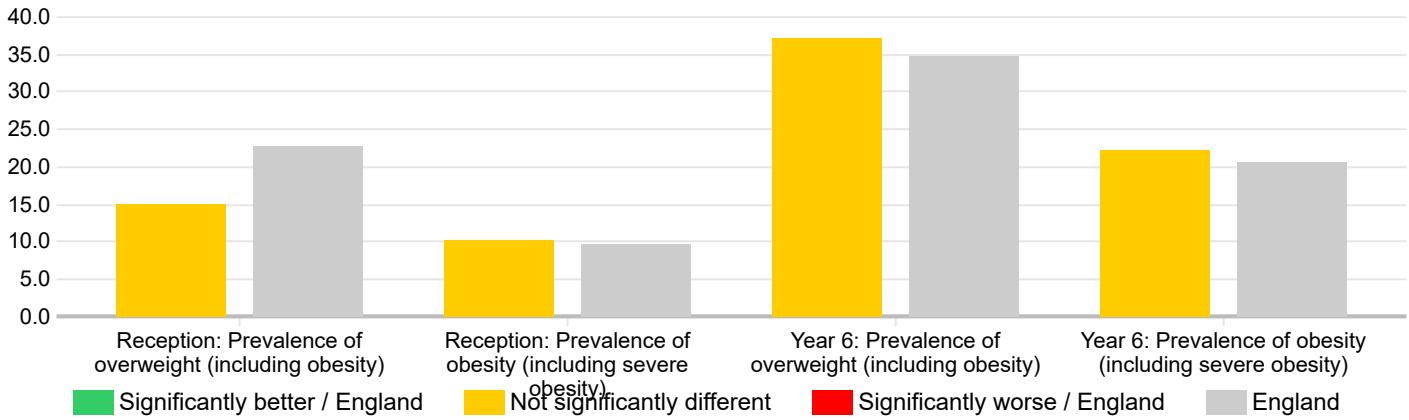
There have been data collection issues related to lockdown between 2019 to 2020 , please see metadata for details

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Reception: Prevalence of overweight (including obesity) (%)	15.0	24.6	24.6	22.6
Reception: Prevalence of obesity (including severe obesity) (%)	10.0	10.7	10.7	9.7
Year 6: Prevalence of overweight (including obesity) (%)	37.0	37.4	37.4	34.6
Year 6: Prevalence of obesity (including severe obesity) (%)	22.2	22.6	22.6	20.4

Source: National Child Measurement Programme (NCMP), NHS Digital

Children's weight indicators, %, 2017 to 2018, to 2019 to 2020.

There have been data collection issues related to lockdown between 2019 to 2020 , please see metadata for details - County Durham 065



Source: National Child Measurement Programme (NCMP), NHS Digital

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - CHILDREN'S HEALTH CARE ACTIVITY

Children's health care activity indicators, crude rate

Emergency admissions 2016 to 2017, to 2020 to 2021

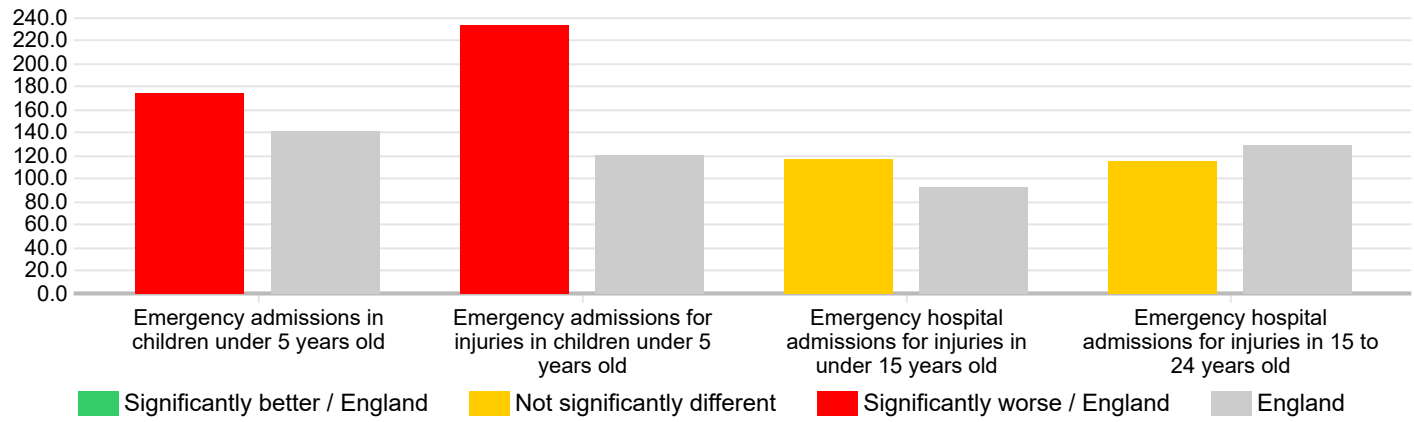
Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Emergency admissions in children under 5 years old (Crude rate per 1,000)	174.5	190.8	190.8	140.7
Emergency admissions for injuries in children under 5 years old (Crude rate per 10,000)	232.6	186.2	186.2	119.3
Emergency hospital admissions for injuries in under 15 years old (Crude rate per 10,000)	116.0	140.7	140.7	92.0
Emergency hospital admissions for injuries in 15 to 24 years old (Crude rate per 10,000)	114.0	151.4	151.4	127.9

Source: Hospital Episode Statistics (HES) NHS Digital; Small Area Mid-year Population Estimates, Office for National Statistics

Please see metadata: Counts, denominators and rates are based on rounded values, confidence intervals are based on actual values.

Children's health care activity indicators, crude rate

Emergency admissions 2016 to 2017, to 2020 to 2021 - County Durham 065



Source: Hospital Episode Statistics (HES) NHS Digital; Small Area Mid-year Population Estimates, Office for National Statistics

Please see metadata: Counts, denominators and rates are based on rounded values, confidence intervals are based on actual values.

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 1 - CHILD AND MATERNAL HEALTH

Child and maternal health, %

Deliveries to teen mothers, 2016 to 2017, to 2020 to 2021, Fertility rate and Low birth weight, 2016 to 2020

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Deliveries to teenage mothers (%)	N/A	1.2	1.2	0.7
Low birth weight of live babies (%)	N/A	7.4	7.4	6.8
General fertility rate: live births per 1,000 women aged 15 to 44 years (%)	42.4	52.4	52.4	59.2

Source: Hospital Episode Statistics (HES), NHS Digital, Office for National Statistics (ONS)

Deliveries to teenage mothers, %, 2016 to 2017, to 2020 to 2021

Data missing or insufficient to build this dataviz

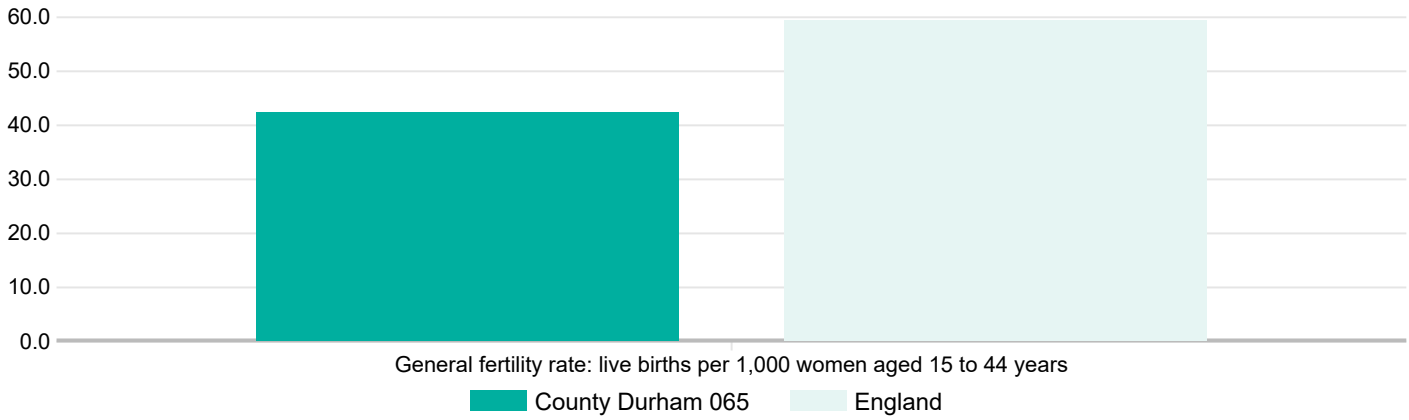
Source: Hospital Episode Statistics (HES), NHS Digital, Office for National Statistics (ONS)

Low birth weight of live babies, %, 2016 to 2020

Data missing or insufficient to build this dataviz

Source: Hospital Episode Statistics (HES), NHS Digital, Office for National Statistics (ONS)

General fertility rate: live births per 1,000 women aged 15 to 44 years



Source: Hospital Episode Statistics (HES), NHS Digital, Office for National Statistics (ONS)

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

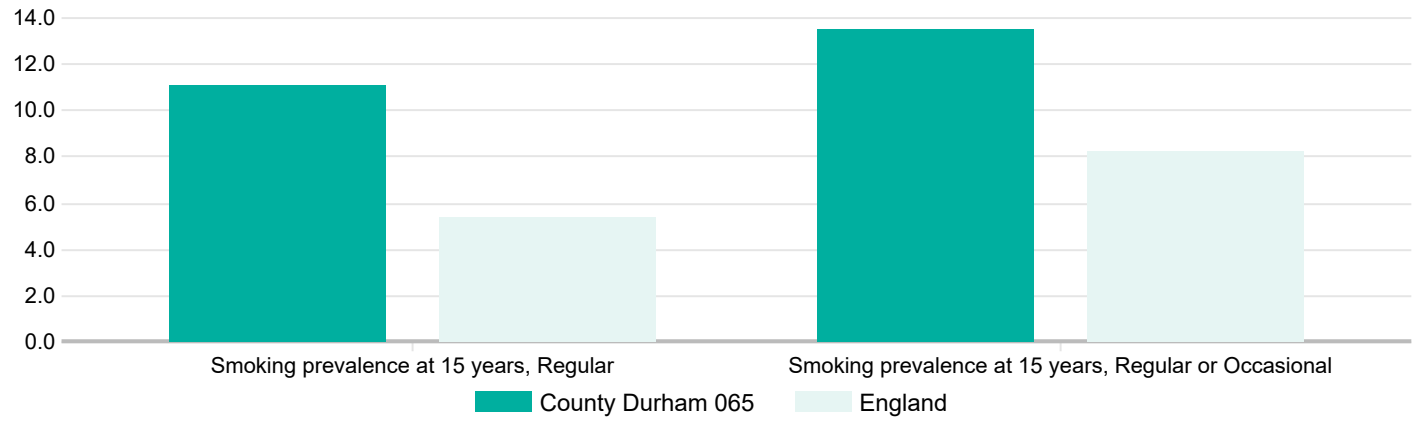
LOCAL HEALTH: REPORT PART 1 - BEHAVIOURAL RISK FACTORS

Smoking prevalence, %, 2014. (Modelled estimates)

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Smoking prevalence at 15 years, Regular (%)	11.1	8.6	8.6	5.4
Smoking prevalence at 15 years, Regular or Occasional (%)	13.5	11.2	11.2	8.2

Source: Department of Geography, University of Portsmouth and Department of Geography and Environment, University of Southampton; Mid year population estimates, Office for National Statistics.

Smoking prevalence, %, 2014. (Modelled estimates)



Source: Department of Geography, University of Portsmouth and Department of Geography and Environment, University of Southampton; Mid year population estimates, Office for National Statistics.

Adults (aged 16+): Estimated prevalence of obesity, including overweight, by national quintile (Number), 2014

Quintile 1 is the highest 20% and Quintile 5 is the lowest 20%

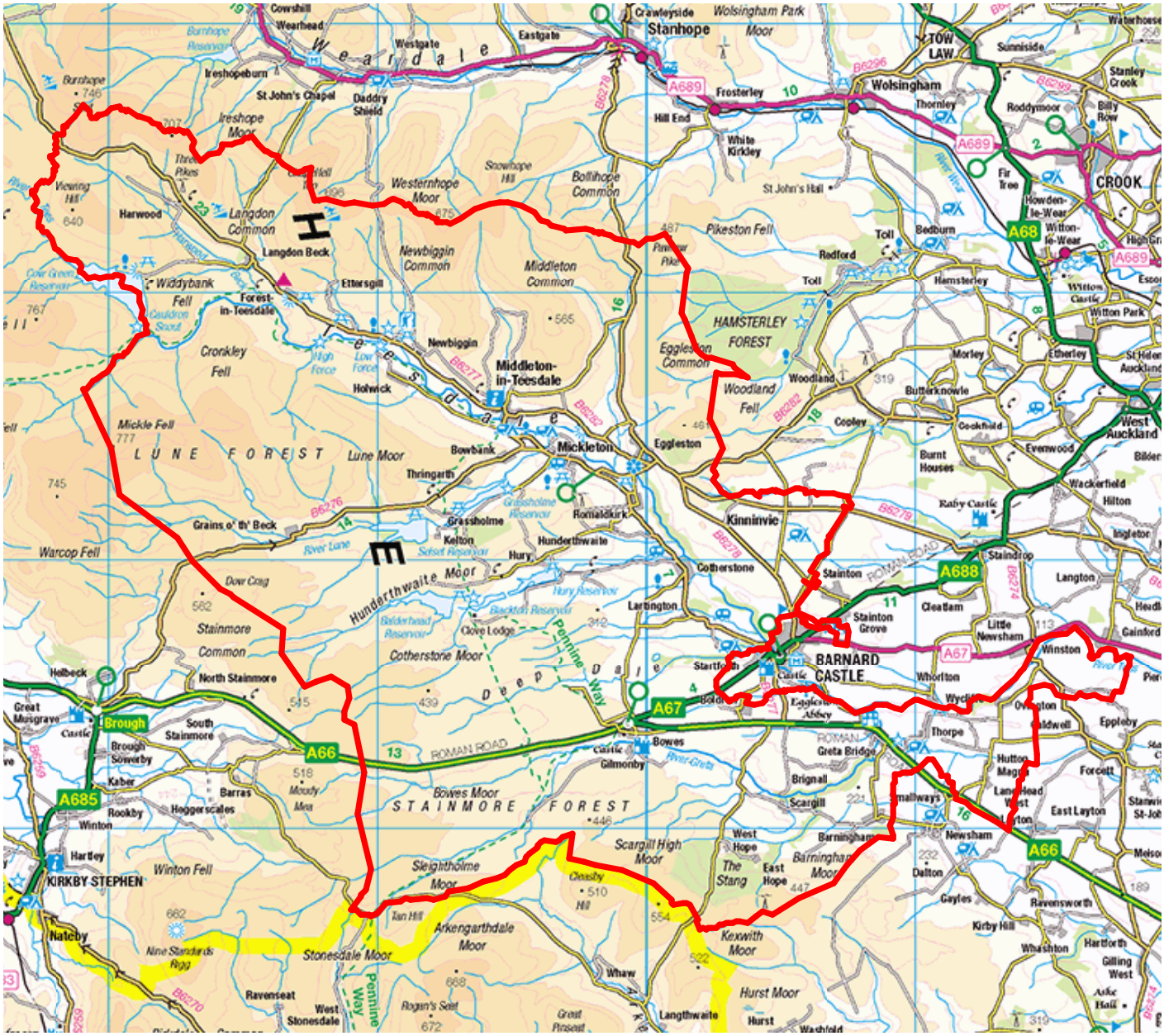
Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Adults (aged 16+): Estimated prevalence of obesity, including overweight, by national quintile (Number)	1	2	2	N/A

Source: Department of Geography and Environment, University of Southampton and Department of Geography, University of Portsmouth.

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2

Presentation map



Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2 - EMERGENCY HOSPITAL ADMISSIONS

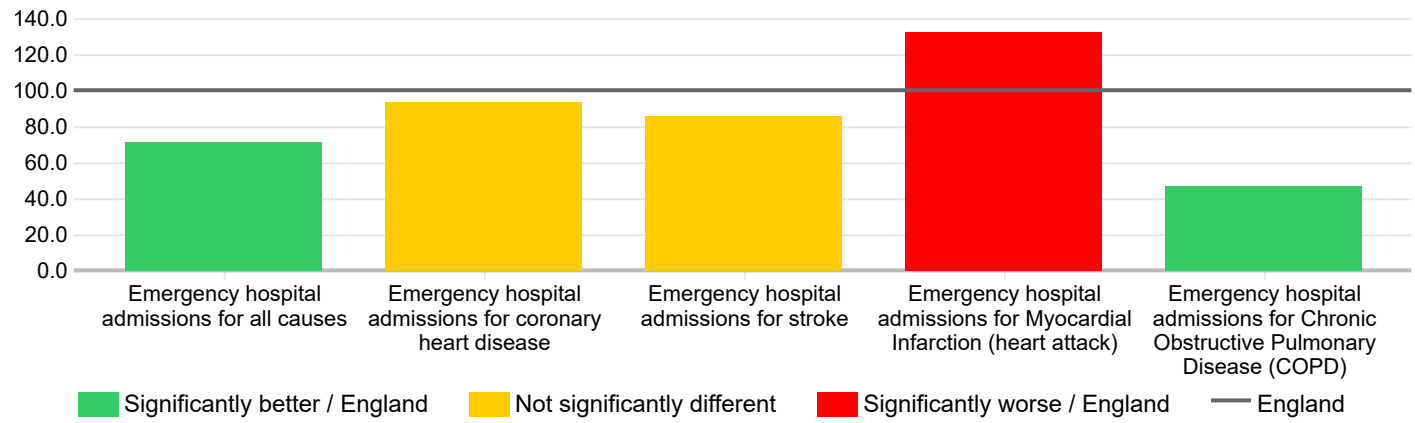
Emergency Hospital Admissions: Standardised Admission Ratios (SARs), 2015 to 2016, to 2019 to 2020

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Emergency hospital admissions for all causes (SAR)	70.8	108.1	108.1	100.0
Emergency hospital admissions for coronary heart disease (SAR)	93.3	131.9	131.9	100.0
Emergency hospital admissions for stroke (SAR)	85.1	113.6	113.6	100.0
Emergency hospital admissions for Myocardial Infarction (heart attack) (SAR)	132.7	165.9	165.9	100.0
Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) (SAR)	46.8	150.1	150.1	100.0

Source: Hospital Episode Statistics (HES) NHS Digital

Emergency Hospital admissions, Standardised Admission Ratios (SARs), 2015 to 2016, to 2019 to 2020

County Durham 065



Source: Hospital Episode Statistics (HES) NHS Digital

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2 - HOSPITAL ADMISSIONS - HARM AND INJURY

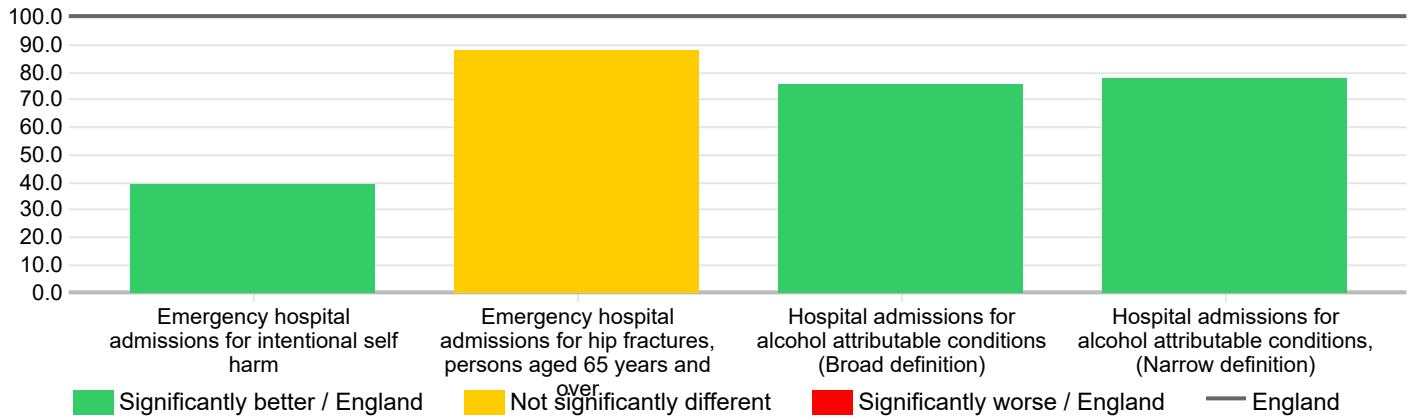
Hospital Standardised Admission Ratios (SARs) Admissions - harm and injury: 2016 to 2017, to 2020 to 2021

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Emergency hospital admissions for intentional self harm (SAR)	39.1	106.9	106.9	100.0
Emergency hospital admissions for hip fractures, persons aged 65 years and over (SAR)	87.4	110.2	110.2	100.0
Hospital admissions for alcohol attributable conditions (Broad definition) (SAR)	75.4	107.5	107.5	100.0
Hospital admissions for alcohol attributable conditions, (Narrow definition) (SAR)	77.3	113.9	113.9	100.0

Source: Hospital Episode Statistics (HES) NHS Digital

Hospital Standardised Admission Ratios (SARs) Admissions - harm and injury: 2016 to 2017, to 2020 to 2021

County Durham 065



Source: Hospital Episode Statistics (HES) NHS Digital

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2 - CANCER INCIDENCE

Cancer Incidence, 2015 to 2019, standardised incidence ratio (SIR)

Due to disclosure rules this data is not available at MSOA or CCG level, please see metadata for details.

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Incidence of all cancer (SIR per 100)	N/A	102.3	102.3	100.0
Incidence of breast cancer (SIR per 100)	N/A	95.8	95.8	100.0
Incidence of colorectal cancer (SIR per 100)	N/A	106.7	106.7	100.0
Incidence of lung cancer (SIR per 100)	N/A	133.6	133.6	100.0
Incidence of prostate cancer (SIR per 100)	N/A	78.2	78.2	100.0

Source: English cancer registration data from the NHS Digital Cancer Analysis System (AV2019 CASREF01), National Statistical Postcode Lookup (May 2021)

Cancer Incidence, 2015 to 2019, standardised incidence ratio (SIR)

Due to disclosure rules this data is not available at MSOA or CCG level, please see metadata for details.

Data missing or insufficient to build this dataviz

Source: English cancer registration data from the NHS Digital Cancer Analysis System (AV2019 CASREF01), National Statistical Postcode Lookup (May 2021)

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

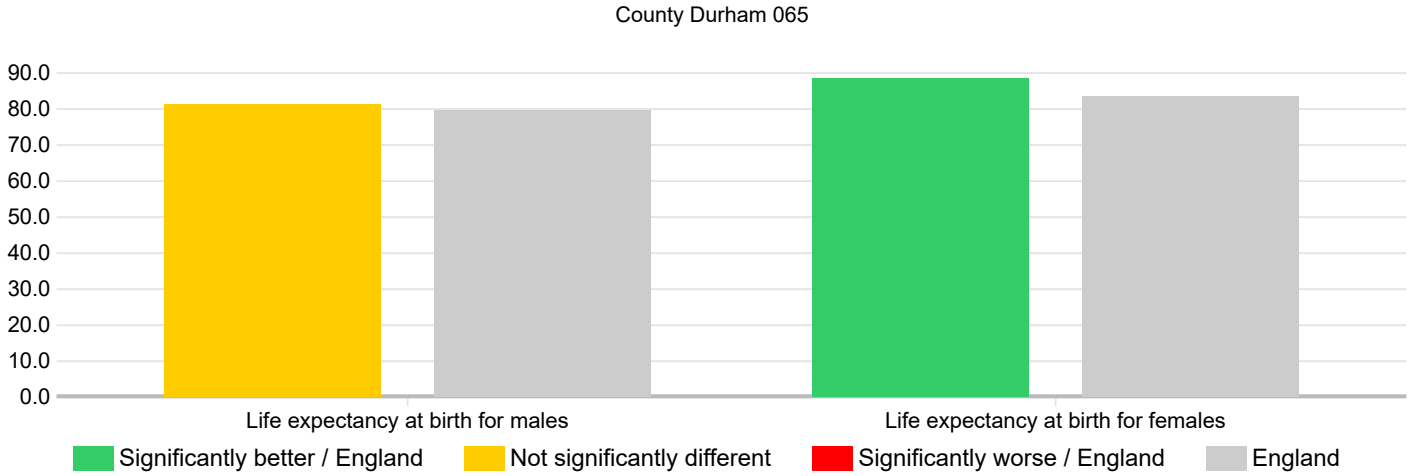
LOCAL HEALTH: REPORT PART 2 - LIFE EXPECTANCY

Life expectancy, 2016 to 2020, years

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Life expectancy at birth for males (years)	81.3	77.9	77.9	79.5
Life expectancy at birth for females (years)	88.2	81.3	81.3	83.2

Source: The Office for Health Improvement and Disparities analysis of ONS death registration data and mid-year population estimates.

Life expectancy, compared to England. Life expectancy, 2016 to 2020, years



Source: The Office for Health Improvement and Disparities analysis of ONS death registration data and mid-year population estimates.

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2 - MORTALITY AND CAUSES OF DEATH - PREMATURE MORTALITY

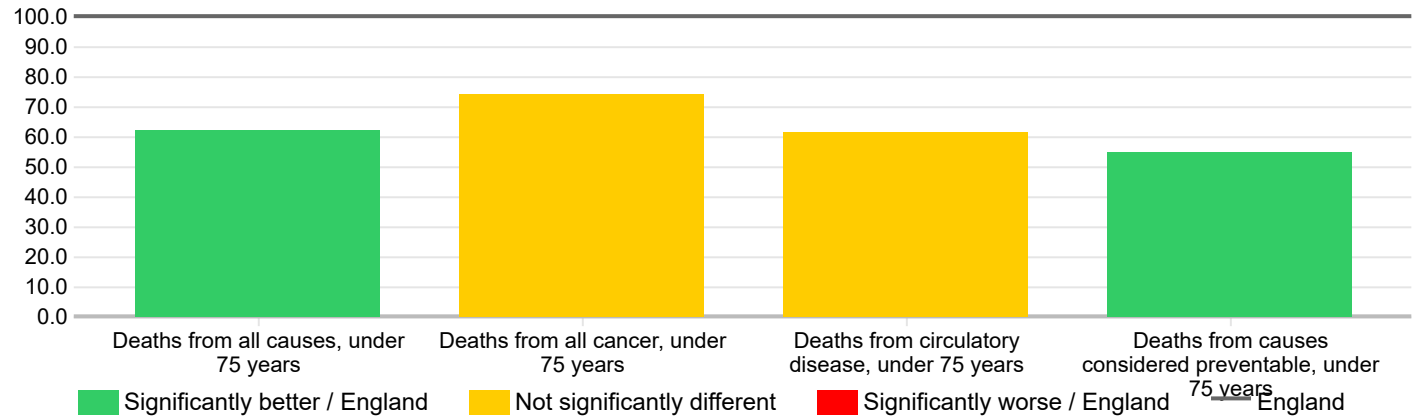
Causes of deaths - premature mortality: 2016 to 2020, Standardised Mortality Ratios (SMR)

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Deaths from all causes, under 75 years (Standardised mortality ratio (SMR))	62.1	116.3	116.3	100.0
Deaths from all cancer, under 75 years (Standardised mortality ratio (SMR))	73.8	112.0	112.0	100.0
Deaths from circulatory disease, under 75 years (Standardised mortality ratio (SMR))	61.2	110.4	110.4	100.0
Deaths from causes considered preventable, under 75 years (Standardised mortality ratio (SMR))	54.9	126.5	126.5	100.0

Source: Office for Health Improvement and Disparities, produced from Office for National Statistics (ONS) data, Office for Health Improvement and Disparities Annual Mortality Extracts (based on Office for National Statistics source data)

Causes of deaths - premature mortality, 2016 to 2020, Standardised Mortality Ratios (SMR)

County Durham 065



Source: Office for Health Improvement and Disparities, produced from Office for National Statistics (ONS) data, Office for Health Improvement and Disparities Annual Mortality Extracts (based on Office for National Statistics source data)

Study area **County Durham 065 (MSOA 2011)**, compared with **England**

LOCAL HEALTH: REPORT PART 2 - MORTALITY AND CAUSES OF DEATH

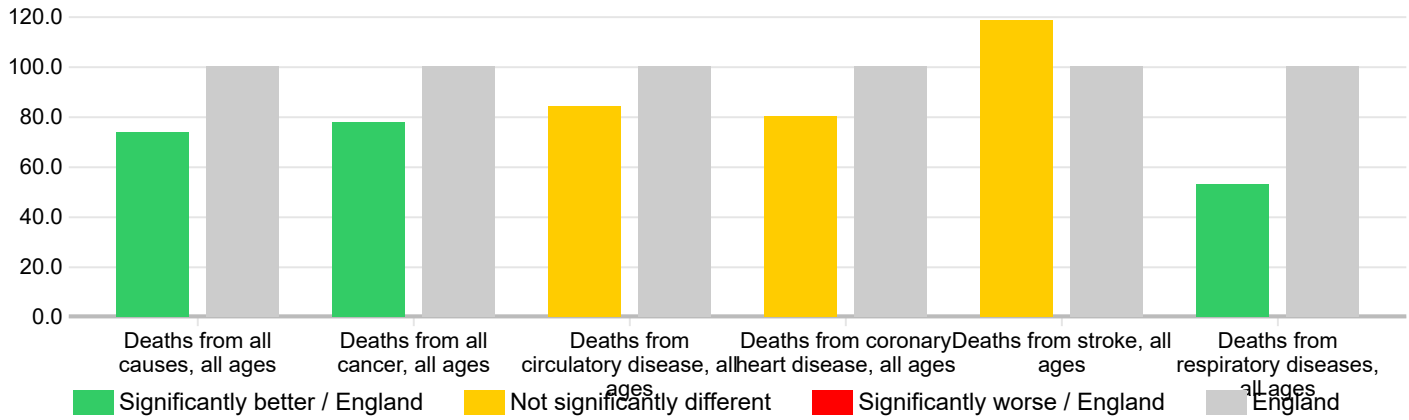
Causes of deaths - all ages, 2016 to 2020: Standardised Mortality Ratios (SMR)

Indicators	County Durham 065	County Durham (LTLA 2021)	County Durham (UTLA 2021)	England
Deaths from all causes, all ages (Standardised mortality ratio (SMR))	73.7	116.1	116.1	100.0
Deaths from all cancer, all ages (Standardised mortality ratio (SMR))	77.3	112.8	112.8	100.0
Deaths from circulatory disease, all ages (Standardised mortality ratio (SMR))	84.1	113.4	113.4	100.0
Deaths from coronary heart disease, all ages (Standardised mortality ratio (SMR))	80.2	118.6	118.6	100.0
Deaths from stroke, all ages (Standardised mortality ratio (SMR))	118.1	120.9	120.9	100.0
Deaths from respiratory diseases, all ages (Standardised mortality ratio (SMR))	53.1	122.6	122.6	100.0

Source: Office for Health Improvement and Disparities, produced from ONS data

Causes of deaths - all ages, 2016 to 2020, Standardised Mortality Ratios (SMR)

County Durham 065

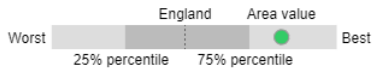


Source: Office for Health Improvement and Disparities, produced from ONS data

Area: County Durham 065

Significantly better / England | Not significantly different | Significantly worse / England

Indicators	Selection Value	England Value	England Worst	Spine chart	England Best
Income deprivation (%)	6.4	12.9	48.8		0.9
Child Poverty, Income Deprivation Affecting Children (%)	7.7	17.1	64.7		0.9
Proportion of households in poverty (%)	18.2	21.1	63.7		6.7
Older People in poverty, Income deprivation affecting older people (%)	7.9	14.2	76.0		2.0
Older people living alone (%)	27.1	31.5	87.2		14.4
Overcrowded houses (%)	1.9	8.7	60.9		0.6
Unemployment (%)	1.7	5.0	20.8		0.7
Long term unemployment (Crude rate per 1,000)	0.0	1.9	15.1		0.0
Reception: Prevalence of overweight (including obesity) (%)	15.0	22.6	40.0		5.7
Reception: Prevalence of obesity (including severe obesity) (%)	10.0	9.7	21.4		2.6
Year 6: Prevalence of overweight (including obesity) (%)	37.0	34.6	56.1		9.5
Year 6: Prevalence of obesity (including severe obesity) (%)	22.2	20.4	39.0		4.3
Emergency admissions in children under 5 years old (Crude rate per 1,000)	174.5	140.7	352.2		24.8
Emergency admissions for injuries in children under 5 years old (Crude rate per 10,000)	232.6	119.3	363.7		0.0
Emergency hospital admissions for injuries in under 15 years old (Crude rate per 10,000)	116.0	92.0	251.2		18.7
Emergency hospital admissions for injuries in 15 to 24 years old (Crude rate per 10,000)	114.0	127.9	733.3		14.4
Emergency hospital admissions for all causes (SAR)	70.8	100.0	215.6		31.5
Emergency hospital admissions for coronary heart disease (SAR)	93.3	100.0	396.1		23.0
Emergency hospital admissions for stroke (SAR)	85.1	100.0	260.9		28.4
Emergency hospital admissions for Myocardial Infarction (heart attack) (SAR)	132.7	100.0	318.7		21.4
Emergency hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) (SAR)	46.8	100.0	554.5		9.3
Emergency hospital admissions for hip fractures, persons aged 65 years and over (SAR)	87.4	100.0	527.4		29.3
Emergency hospital admissions for intentional self harm (SAR)	39.1	100.0	541.4		10.2
Hospital admissions for alcohol attributable conditions, (Narrow definition) (SAR)	77.3	100.0	471.9		22.6
Hospital admissions for alcohol attributable conditions (Broad definition) (SAR)	75.4	100.0	391.1		35.9
Limiting long-term illness or disability (%)	17.1	17.6	38.9		3.6
Life expectancy at birth for males (years)	81.3	79.5	66.6		94.1
Life expectancy at birth for females (years)	88.2	83.2	72.0		97.5
Deaths from all causes, all ages (Standardised mortality ratio (SMR))	73.7	100.0	251.0		36.0
Deaths from all causes, under 75 years (Standardised mortality ratio (SMR))	62.1	100.0	309.2		26.1
Deaths from all cancer, all ages (Standardised mortality ratio (SMR))	77.3	100.0	200.8		32.2
Deaths from all cancer, under 75 years (Standardised mortality ratio (SMR))	73.8	100.0	231.0		29.2
Deaths from circulatory disease, all ages (Standardised mortality ratio (SMR))	84.1	100.0	244.7		32.1
Deaths from circulatory disease, under 75 years (Standardised mortality ratio (SMR))	61.2	100.0	374.4		12.6
Deaths from coronary heart disease, all ages (Standardised mortality ratio (SMR))	80.2	100.0	307.5		16.6
Deaths from stroke, all ages (Standardised mortality ratio (SMR))	118.1	100.0	415.7		0.0
Deaths from respiratory diseases, all ages (Standardised mortality ratio (SMR))	53.1	100.0	335.4		21.8
Deaths from causes considered preventable, under 75 years (Standardised mortality ratio (SM	54.9	100.0	378.4		17.3



Indicator	Period	A83046 - Barnard Castle Surgery			CCGs (from Apr 2021)	England	England		
		Recent Trend	Count	Value	Value	Value	Lowest	Range	Highest
Cancer: QOF prevalence (all ages)	2020/21	→	446	4.1%	3.5%	3.2%	0.1%		
Personalised Care Adjustment (PCA) rate for cancer indicator	2020/21	↓	0	0.0%	1.5%	1.3%	0.0%		
New cancer cases (Crude incidence rate: new cases per 100,000 population)	2019/20	→	71	666	611	531	9		
% reporting cancer in the last 5 years	2021	→	5	3.8%	3.2%	3.1%	0.0%		
CAN003 - Patients with cancer reviewed within 6 mths of diagnosis (denominator incl. PCAs)	2020/21	→	11	26.8%	69.3%	78.4%	0.0%		100%
Personalised Care Adjustment (PCA) rate for cervical screening indicators	2020/21	→	85	3.3%	5.1%	8.6%	0.5%		
CS005 - Women, aged 25-49, with a record of cervical screening in the last 3.5 yrs (denominator includes PCAs)	2020/21	–	1,072	81.2%	75.7%	69.4%	0.0%		99.5%
CS006 - Women, aged 50-64, with a record of cervical screening in the last 5.5 yrs (denominator includes PCAs)	2020/21	–	973	78.6%	77.0%	76.0%	13.8%		100%
CS002 - Women, aged 25-64, with a record of cervical screening (last 5 yrs) - retired after 2018/19	2018/19	→	2,025	81.7%	79.3%*	75.9%	15.9%		99.5%
Persons, 25-49, attending cervical screening within target period (3.5 year coverage, %)	2020/21	→	1,073	81.1%	76.0%	69.1%	0.0%		95.2%
Persons, 50-64, attending cervical screening within target period (5.5 year coverage, %)	2020/21	→	977	78.4%	76.7%	75.0%	0.0%		100%
Females, 25-64, attending cervical screening within target period (3.5 or 5.5 year coverage, %) - retired after 2019/20	2019/20	→	2,033	80.2%	77.0%	72.3%	20.9%		93.8%
Persons, 50-70, screened for breast cancer in last 36 months (3 year coverage, %)	2020/21	→	1,522	81.9%	62.0%	61.3%	0.0%		86.9%
Persons, 50-70, screened for breast cancer within 6 months of invitation (Uptake, %)	2020/21	→	38	52.1%	64.9%	62.8%	0.0%		100%
Persons, 60-74, screened for bowel cancer within 6 months of invitation (Uptake, %)	2020/21	↑	814	78.6%	73.5%	70.7%	0.0%		100%
Persons, 60-74, screened for bowel cancer in last 30 months (2.5 year coverage, %)	2020/21	→	1,807	72.5%	69.2%	66.8%	0.0%		100%
Persons, 60-69, screened for bowel cancer within 6 months of invitation (Uptake, %) - retired after 2018/19	2018/19	→	545	67.5%	61.2%*	57.9%	0.0%		79.2%
Persons, 60-69, screened for bowel cancer in last 30 months (2.5 year coverage, %) - retired after 2018/19	2018/19	→	1,078	69.1%	61.0%*	58.0%	3.0%		85.0%
In-patient or day-case colonoscopy procedures (Number per 100,000 population)	2020/21	↓	10	93	201	511	0		
In-patient or day-case sigmoidoscopy procedures (Number per 100,000 population)	2020/21	↓	10	93	87	246	0		
In-patient or day-case upper GI endoscopy procedures (Number per 100,000 population)	2020/21	↓	20	185	368	759	20		
Number of emergency admissions with cancer (Number per 100,000 population)	2020/21	→	47	436*	486*	456*	0		
Number of emergency presentations (Number per 100,000 population)	2020/21	→	10	93*	105*	87*	0		
Number of other presentations (Number per 100,000 population)	2020/21	→	41	380*	346*	297*	0		

Indicator	Period	A83046 - Barnard Castle Surgery			CCGs (from Apr 2021)	England	England		
		Recent Trend	Count	Value	Value	Value	Lowest	Range	Highest
CHD: QOF prevalence (all ages)	2020/21	→	501	4.6%	4.4%	3.0%	0.0%		
Heart failure w LVSD: QOF prevalence (all ages)	2020/21	→	81	0.8%	0.9%	0.4%	0.0%		
Personalised Care Adjustment (PCA) rate for CHD indicators	2020/21	→	73	4.9%	5.7%	6.7%	0.0%		
CHD005 - For patients with CHD, a record that aspirin, APT or ACT is taken exists (den. incl. PCAs)	2020/21	→	438	87.4%	89.3%	88.5%	49.1%		100%
CHD007 - Patients with CHD immunised against flu (den.incl.PCAs)	2020/21	↑	442	88.2%	85.0%	82.0%	3.1%		100%
CHD008 - Last BP reading of patients (<80yrs, with CHD) in last 12mths is <=140/90 (denominator includes PCAs)	2020/21	–	189	59.2%	60.6%	54.9%	0.0%		0%
CHD009 - Last BP reading of patients (80+ yrs, with CHD) in last 12mths is <=150/90 (denominator includes PCAs)	2020/21	–	113	62.1%	69.4%	64.6%	0.0%		100%
CHD002 - Last BP reading in last 12mths is <=150/90 (den.incl.exc.) - retired after 2018/19	2018/19	→	459	90.5%	90.4%*	88.5%	0.0%		100%

Indicator	Period	A83046 - Barnard Castle Surgery			CCGs (from Apr 2021)	England	England		
		Recent Trend	Count	Value	Value	Value	Lowest	Range	Highest
COPD									
COPD: QOF prevalence (all ages)	2020/21	→	249	2.3%	3.1%	1.9%	0.0%		
Personalised Care Adjustment (PCA) rate for COPD indicators - retired after 2019/20 (due to changes in contributing indicators)	2019/20	→	122	17.6%	20.1%	18.2%	0.0%		
COPD007 - Influenza immunisation given 1 Aug - 31 Mar to patients with COPD (denominator incl. PCAs)	2020/21	→	222	89.2%	84.6%	81.4%	0.0%		100%
COPD008 - Patients with COPD w. MRC dyspnoea score >=3 (last 12mths) who have had an offer of referral to pulm. rehab. clinic (denominator incl. PCAs)	2020/21	–	11	19.0%	23.1%	30.5%	0.0%		
COPD010 - Patients with COPD who had a review in the last 12 months (denominator incl. PCAs)	2020/21	–	211	84.7%	47.2%	45.0%	0.0%		
COPD002 - Diagnosis conf. by spirometry (denominator includes PCAs) - retired after 2019/20	2019/20	→	114	78.6%	79.5%	80.2%	16.7%		100%
COPD003 - Assessed using MRC dyspnoea score last 12mths (denominator includes PCAs) - retired after 2019/20	2019/20	→	201	81.0%	79.3%	78.0%	0.0%		100%
COPD004 - Record of FEV1 in last 12mths (den. incl. exc.) - retired after 2018/19	2018/19	↓	130	52.4%	66.7%*	71.0%	0.0%		100%
COPD005 - Patients w. MRC dyspnoea score >=3 w.oxygen saturation value (last 12mths) (den.incl.exc.) - retired after 2018/19	2018/19	–	104	100%	97.6%*	96.3%	0.0%		100%
Asthma									
Asthma: QOF prevalence (6+ yrs)	2020/21	–	721	7.0%	7.3%	6.4%	0.1%		
Asthma: QOF prevalence (all ages) - retired after 2019/20 (now 6+ yrs)	2019/20	→	752	7.1%	7.3%	6.5%	1.0%		
Personalised Care Adjustment (PCA) rate for asthma indicators - retired after 2019/20 (due to changes in contributing indicators)	2019/20	→	188	19.0%	10.6%	9.9%	0.0%		
AST007 - Patients with Asthma: review in the last 12 months (denominator incl. PCAs)	2020/21	–	460	63.8%	30.0%	31.2%	0.0%		
AST008 - For patients (6-19 yrs) with asthma, (second-hand) smoking status is recorded (last 12 months), denominator incl. PCAs	2020/21	–	48	73.8%	53.4%	56.0%	0.0%		0%
AST002 - Patients with Asthma (8+): measures of variability/reversibility recorded, denominator includes PCAs - retired after 2019/20	2019/20	↑	179	89.9%	90.2%	91.1%	43.0%		100%
AST003 - Patients with Asthma: Review in the last 12 months (incl. an assessment using the 3 RCP questions), denominator includes PCAs - retired after 2019/20	2019/20	↓	494	65.7%	66.7%	67.1%	7.1%		99.7%
AST004 - Smoking recorded in the last 12 mths (14-19y w asthma), denominator includes PCAs - retired after 2019/20	2019/20	→	27	73.0%	79.5%	78.3%	0.0%		100%
Smoking									
Estimated smoking prevalence (QOF)	2020/21	↓	1,035	11.0%	15.9%	15.9%	2.3%		
Personalised Care Adjustment (PCA) rate for smoking indicators	2020/21	→	19	0.4%	0.7%	0.9%	0.0%		
% of active smokers (GPPS)	2021	→	28	17.5%	14.9%	14.3%	0.6%		
% of former smokers (GPPS)	2021	→	41	25.7%	28.1%	26.7%	1.6%		%
SMOK002 - Smoking status of patients with certain conditions is recorded in last 12 mths , denominator incl. PCAs	2020/21	↓	2,901	93.0%	91.1%	89.4%	55.4%		99.9%
SMOK005 - Smoking cessation support and treatment offered to patients with certain conditions, denominator incl. PCAs	2020/21	–	197	66.3%	77.7%	72.8%	2.1%		100%
SMOK004 - Record of offer of support and treatment for smokers (15+, last 24 mnths), denominator incl. PCAs	2020/21	–	663	64.1%	78.8%	75.5%	11.9%		100%

Indicator	Period	A83046 - Barnard Castle Surgery			CCGs (from Apr 2021)	England	England		
		Recent Trend	Count	Value	Value	Value	Lowest	Range	Highest
Stroke: QOF prevalence (all ages)	2020/21	→	351	3.3%	2.4%	1.8%	0.0%		
PAD: QOF prevalence (all ages)	2020/21	→	111	1.0%	0.9%	0.6%	0.0%		
Personalised Care Adjustment (PCA) rate for stroke indicators	2020/21	→	58	6.3%	7.3%	8.5%	0.0%		
STIA007 - For patients with stroke a record exists that an anti-platelet agent or an anti-coagulant is taken (denominator incl. PCAs)	2020/21	→	206	91.2%	92.0%	88.9%	0.0%		100%
STIA009 - Patients with stroke who got influenza immunisation given 1 Aug-31 Mar (denominator incl. PCAs)	2020/21	→	308	87.7%	83.2%	79.4%	0.0%		100%
STIA010 - Last BP reading of patients (<80yrs, with a history of stroke or TIA) in last 12mths is <=140/90 (denominator incl. PCAs)	2020/21	–	109	53.7%	55.8%	50.7%	0.0%		
STIA011 - Last BP reading of patients (80+ yrs, with a history of stroke or TIA) in last 12mths is <=150/90 (denominator incl. PCAs)	2020/21	–	97	65.5%	68.0%	62.9%	0.0%		100%
STIA003 - Last BP reading is <=150/90 (den. incl. exc.) - retired after 2018/19	2018/19	→	290	86.1%	85.3%*	83.9%	38.0%		100%
STIA008 - New patients referred for further investigation (den.incl.exc.) - retired after 2018/19	2018/19	→	90	85.7%	83.7%*	82.6%	0.0%		100%
PAD002 - last blood pressure reading (last 12 mnths) <=150/90 mmHg (den.incl.exc.) - retired after 2018/19	2018/19	→	89	83.2%	87.8%*	86.1%	0.0%		100%
PAD004 - record of aspirin being taken (last 12 mnth) (den.incl.exc.) - retired after 2018/19	2018/19	→	75	92.6%	88.0%*	85.9%	0.0%		100%
Exception rate for PAD indicators - retired after 2018/19	2018/19	→	12	6.4%	5.0%*	6.3%	0.0%		

Indicator	Period	A83046 - Barnard Castle Surgery			CCGs (from Apr 2021)	England	England		
		Recent Trend	Count	Value	Value	Value	Worst/ Lowest	Range	Best/ Highest
% aged 0 to 4 years	2021	→	357	3.3%	4.5%	5.1%*	0.0%		
% aged 5 to 14 years	2021	→	1,037	9.6%	10.9%	11.8%*	0.0%		
% aged under 18 years	2021	→	1,764	16.3%	18.5%	20.2%*	0.0%		
% aged 65+ years	2021	↑	2,971	27.5%	20.3%	17.4%*	0.0%		
% aged 75+ years	2021	→	1,386	12.8%	8.9%	7.9%*	0.0%		
% aged 85+ years	2021	→	398	3.7%	2.2%	2.1%*	0.0%		
Deprivation score (IMD 2019)	2019	–	-	15.1	-	21.7	68.7		3.4
% who have a positive experience of their GP practice	2021	–	138	87.4%	86.5%	83.0%	29.6%		100%
% satisfied with phone access	2021	→	103	66.9%	71.5%	67.6%	8.9%		100%
% satisfied with practice appointment times	2021	–	93	66.9%	66.0%	62.7%	17.3%		.2%
% reporting good overall experience of making an appointment	2021	↓	100	71.1%	74.3%	70.6%	19.2%		100%
% with a long-standing health condition	2021	→	71	47.2%	57.5%	51.1%	16.6%		
% with caring responsibility	2021	→	24	15.0%	20.5%	18.2%	0.0%		
% reporting to be in paid work or in full-time education	2021	→	95	61.1%	58.6%	61.8%	1.2%		98.2%
% reporting to be unemployed	2021	→	1	0.4%	4.3%	5.5%	0.0%		
Total QOF points	2020/21	–	566	99.8%	98.0%	96.2%	33.7%		
Life expectancy - MSOA based (Male)	2015 - 19	–	-	80.7	-	79.7	71.7		
Life expectancy - MSOA based (Female)	2015 - 19	–	-	83.1	-	83.2	76.0		