

Examination into the Soundness of Newcastle-under-Lyme's Local Plan.

Matter 11- Infrastructure, Transport and Delivery

Matter Statement by Newcastle-under-Lyme Borough Council

May 2025

1. Introduction

This statement sets out the Council's response to the Inspector's Matters regarding Infrastructure, Transport and Delivery

All documents referenced in this statement are listed in Appendix 1.

Policies IN1, IN2, IN3, IN4, IN5, IN6 and IN7

Issue 12 – Does the Plan set out a positively prepared strategy and policies relating to the infrastructure, transport and delivery which are justified, effective and consistent with national policy?

Qu 11.1 a) Does Policy IN1 provide an effective framework to ensure the delivery of the necessary infrastructure? In particular,

- 11.1.1 Yes. As further considered by the responses to qu 11.1 b) to 11.1 f) that follow, the policy provisions of IN1 serve to ensure that relevant infrastructure to accommodate development is provided in a timely and coordinated way to support the development process. This extends to the funding for infrastructure and the role (all or in part) that developers may prospectively make in contributing towards the cost of providing relevant infrastructure that is directly related to the development or adds to the cumulative impact on strategic infrastructure.
- 11.1.2 The value of good infrastructure planning in achieving a high quality of development and allowing for the appropriate integration of development into its wider environment is highlighted, and the integral role that the Infrastructure Delivery Plan [CD016] ("IDP") plays within this. Emphasis is also placed on appropriate timing and, where necessary, phasing of provision to best address the demands of occupants and service users. Allied to this, specific schemes, such as the Madeley High School expansion, are explicitly stated owing to their nature and scale.

Qu 11.1 b) Are the policy's requirements supported by up-to-date evidence?

- 11.1.3 Yes. CD16 was published in December 2024 and presents a contemporary picture of the correlation between the development scale and locations in the Submitted Local Plan [CD01] and the consequent infrastructure implications, across a range of issues including transport and education. Engagement with infrastructure providers and stakeholders [CD16 (Appendix C] was also a key component in shaping outcomes.
- 11.1.4 This analysis [CD16] builds on earlier iterations of infrastructure analysis undertaken at the Regulation 19 Consultation Stage [ED003] and the Infrastructure Baseline Report [ED030] that was produced to accompany the Issues and Options stage consultation in late 2021/early 2022 [CD06a].
- 11.1.5 The first paragraph of the Executive Summary to CD16 (pg 6) acknowledges that planning for infrastructure is dynamic the context changes constantly due to new evidence, changing priorities, changes to available funding streams and available technologies. As such, any infrastructure report must be regarded as a 'snapshot' in time and that the infrastructure picture will continue to evolve after its publication.

- 11.1.6 In terms of specific infrastructure proposals as detailed in Policy IN1, the following aspects derived from CD16 are especially pertinent.
- 11.1.7 Paragraph 3.116 and Table A.2 of CD16 (pg 161) sets out that, while an expansion to Madeley High School is currently proposed to increase the school by 0.5 form entry (FE), there is need for a further expansion at the school to mitigate the impact of the number of homes proposed in the Local Plan in the Rural Central sub area. The requirement for this improvement was informed by engagement with Staffordshire County Council.
- 11.1.8 Paragraph 3.259 and Table A.7 (CD16, pg 171] sets out capacity issues at the recycling centre on Leycett Lane in Newcastle-under-Lyme and that the level of growth set out in the Local Plan will require an increase in recycling centre capacity. The requirement for this improvement was informed by engagement with Staffordshire County Council.
- 11.1.9 Paragraph 3.67 and Table A.1 [CD16 pg 159] set out the need for a new link road running between University Avenue/Barkers Wood Road (which connect to Keele Road) and Whitmore Road as identified through the Strategic Transport Assessment [ED011]. The new road would provide a connecting access route for all modes of transport to aid movements generated by development site KL15: Land south of A525 between Keele University and Newcastle-under-Lyme, and other sites in proximity (KL13: Keele Science Park Phase 3, University of Keele, SP11: Lyme Park, SP23: Land at Cemetery Road / Park Lane and TB19: Land south of Newcastle Golf Club), address capacity issues, as well as improve linkages to existing services & facilities and new education provision, such as the new primary school at SP11. A supplementary note is included in Appendix 2 of this matter statement on the Link Road. Allied to this, active travel improvements and betterment of bus infrastructure and services are highlighted in CD16 (Appendix A).
- 11.1.10Paragraph 3.62 and Table A.1 [CD16 pg 159] set out the need for the extension of the north west-bound Newcastle Road two-lane approach to the signalised junction at Newcastle Road/Coalpit Hill as identified through the Strategic Transport Assessment [ED011]. Improvements to this route are needed to mitigate the impact of the growth proposed in the Local Plan in the Kidsgrove Urban Centre sub area.

Qu11.1c) Have the implications of the policy in relation to viability been appropriately tested?

- 11.1.11Yes. The viability implications of Policy IN1 on the viability of allocated developments in the NuL area have been appropriately tested as part of the whole plan viability work detailed in [ED004], the Local Plan Viability Study ("the Study"). This report assessed the expected developments of sites being viable and capable of delivering all infrastructure requirements and other policies within the Local Plan. Chapter 6 of the Study discusses the residential development assumptions for local plan testing. Chapter 7 discusses non-residential development.
- 11.1.12In doing so, all site typologies were tested with assumptions for:

- External site costs to reflect related site infrastructure works covering landscaping, access roads, connections to infrastructure, etc [ED004 (paras 6.29 to 6.31)];
- Infrastructure cost allowances on tested large greenfield sites (above 50 dwellings) with site infrastructure costs at varying rates from £7,500 to £20,000 per dwelling [ED004 (para 6.18)]; and
- S106 contributions towards off-site infrastructure at £3,660 per dwelling, which
 was taken from a review of s106 receipts between 2015 and 2022 that have been
 agreed through past developments (as referenced in ED004 (paras 6.63 and
 6.64); and
- S106 contributions at 4% of non-residential build costs (as referenced in ED004 (paras 7.15 and 7.16).
- 11.1.13This is additional to further policy contribution requirements related to policies CRE1: Climate Change, CRE2: Renewable Energy and HOU1 Affordable Housing [CD01], as set out at ED004 paras 6.52 6.57.
- 11.1.14Chapter 7 of the viability study provides further information on the non-residential development assumptions used for Plan testing [ED004]. The viability study notes viability challenges for forms of non-residential development and advises that it is likely to be market conditions that are a key determinant for non-residential sites [ED004, paras 8.13 8.16].
- 11.1.15As such, the viability testing assumptions in ED004 reflect policy IN1 requirements for all sites to be supported by appropriate utility, transport, social, community and environmental infrastructure delivered in a timely and sustainable manner.

Qu 11.1 d) Has the Infrastructure Delivery Plan up to date and does it provide a comprehensive assessment of future infrastructure requirements based on a competent assessment of existing provision?

- 11.1.16The IDP has been prepared to align with the requirements of the version of the NPPF (December 2023) relevant at the time of the plan's submission. This includes the requirement (para 11) for the planning system to "promote a sustainable pattern of development that seeks to: meet the development needs of their area [and] align growth and infrastructure".
- 11.1.17Furthermore, the NPPF states at paragraph 20 that Local Planning Authorities should include strategic policies which make sufficient provision for:
 - "b) infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
 - c) community facilities (such as health, education and cultural infrastructure); and
 - d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation".

- 11.1.18To inform the development of relevant policies, Chapter 3 of the IDP [CD16] sets out a baseline assessment of existing infrastructure provision within Newcastle-under-Lyme and the infrastructure planning issues and opportunities arising from the proposed development sites included in the Local Plan. This chapter is set out to ensure that these issues are addressed for each of the infrastructure types included in paragraph 20 of the NPPF. As such Chapter 3 is presented by infrastructure topic area with the following aspects addressed:
 - transport;
 - o education;
 - health and wellbeing;
 - o green and blue infrastructure;
 - o open space and sports;
 - o utilities (including water supply, water treatment, electricity and gas);
 - waste management;
 - flooding and drainage;
 - o community; and
 - o emergency services.
- 11.1.19The infrastructure schedules are presented by infrastructure type with sites grouped by relevant sub-areas within the plan area. Each schedule sets out the priority of the infrastructure for the delivery of development as well as its phasing, costs and funding sources where this information is known. The costs identified for infrastructure have been provided in consultation with infrastructure providers (with more detail provided below). Where this was not possible, the Council was able in some instances to assign costs where recognised industry costing sources were available. For example, costings have been assigned in relation to open space provisions based on information in Spon's External Works and Landscape Price Book 2024.
- 11.1.20National Planning Practice Guidance (PPG) (Paragraph: 059 Reference ID: 61-059-20190315) provides advice about how infrastructure for the plan area should be considered.
- 11.1.21The PPG states "At an early stage in the plan-making process strategic policy-making authorities will need to work alongside infrastructure providers, service delivery organisations, other strategic bodies such as Local Enterprise Partnerships, developers, landowners and site promoters. A collaborative approach is expected to be taken to identifying infrastructure deficits and requirements, and opportunities for addressing them. In doing so they will need to:
 - assess the quality and capacity of infrastructure, and its ability to meet forecast demands. Where deficiencies are identified, policies should set out how those deficiencies will be addressed; and
 - take account of the need for strategic infrastructure, including nationally significant infrastructure, within their areas"
- 11.1.22LUC (on behalf of the Council) initially prepared an IDP report in April 2023 to support the Regulation 18 consultation on the emerging Newcastle-under-Lyme Local Plan. This

considered the sites proposed for allocation in the First Draft Local Plan. The report drew on the information in the Newcastle-under-Lyme Infrastructure Baseline Report [ED030] to present the existing baseline situation for infrastructure provision in the plan area. The context for infrastructure provision in the borough was also informed by the Staffordshire and Stoke on Trent Strategic Infrastructure Plan (2018) which sets out an overview of growth patterns in Staffordshire and Stoke on Trent up to 2038 as well as the infrastructure required and likely costs and funding gaps.

- 11.1.23The preparation of the IDP report at the Regulation 18 stage was also informed by a review of the strategies of infrastructure providers, discussions with infrastructure providers, neighbouring councils and officers of Staffordshire County Council and Newcastle-under-Lyme Council officers via virtual meetings, calls, emails and stakeholder workshops.
- 11.1.24In preparing the updated IDP for the Regulation 19 Local Plan [ED003], responses from infrastructure providers to the Regulation 18 Local Plan consultation were reviewed and taken into account, and further direct consultation and engagement with infrastructure providers via emails and virtual meetings was undertaken in 2024 until the time of publication.
- 11.1.25A list of infrastructure providers engaged with to inform the preparation of the IDP is presented in Appendix C of the IDP [ED003] prepared to support the Regulation 19 Local Plan [CD01]. This includes Newcastle Borough Council officers, Stoke-on-Trent City Council officers, Staffordshire County Council officers, representatives for Neighbourhood Planning areas and a range of infrastructure providers.
- 11.1.26 Having reflected on the outcomes of the consultation on the Regulation 19 Local Plan [CD01], a further iteration of the IDP [CD16] was produced to accompany the Local Plan's submission for examination.

Qu11.1 e) Is the policy sufficiently flexible?

11.1.27Yes. The policy includes a commitment to working with infrastructure providers to ensure timely and sustainable delivery of appropriate utility, transport, social, community and environmental infrastructure. Recognising the evolving picture of infrastructure wants, technology and delivery, it is asserted that IN1 and the latest IDP together with its accompanying delivery schedule form a strong basis from which decisions can be made on the latest contemporary evidence available. A (non-exhaustive) variety of provision types are identified and the approaches to on/off site contributions/delivery, whilst the Supporting Information at para 10.5 recognises the wider policy demands of the Local Plan.

Qu 11.1 f) Are there any omissions from the proposed policy and supporting text?

11.1.28Subject to the modifications presented in CD15a, namely MOD038, MOD141and MOD039 which are in part a response to comments from Sport England and Staffordshire County Council, it is considered there are no omissions from IN1 and its supporting text.

Qu11.2a) Do Policies IN2, IN3 and IN4 provide an effective framework for assessing the impacts of development in relation to transport, accessibility and parking? Are there any omissions from the proposed policy and supporting text?

- 11.2.1 Taking each in turn. IN2 emphasises appropriate provision being made for sustainable transport infrastructure and serves to ensure that development proposals which contribute towards an accessible, efficient and safe transport network that offers a range of transport choices and improves accessibility through sustainable modes of travel will be supported.
- 11.2.2 For those schemes that generate significant travel movements, the undertaking of Transport Assessments and Travel Plans are specified, to deliver travel choices and sustainable opportunities for travel, in line with the latest government guidance and best practice. New developments that are predicted to have an adverse impact on the transport network will be expected to contribute towards capacity and mitigation measures. Proposals that require new projects will be required to make a proportionate financial contribution.
- 11.2.3 The Local Transport Plan produced by Staffordshire County Council is identified as a key reference guide. It is also stated in the Supporting Information to IN2 (para 10.13) that regard in particular should be had to any relevant aspects of the Borough Integrated Transport Strategy for Newcastle-under-Lyme and the Staffordshire Local Walking and Cycling Infrastructure Plan. The most up to date iteration of the Infrastructure Delivery Plan will also be a significant determinant in establishing appropriate mitigation requirements.
- 11.2.4 Design, access and egress of development, including impacts on local traffic circulation and wider road networks, allied to parking and servicing arrangements, which safeguards the needs of pedestrians, cyclists and buses as well as emergency services, delivery's and refuse collection vehicles with routes that are accessible and appropriately lit, are all addressed by IN1.
- 11.2.5 Developments that make a positive contribution to the Borough's other networks such as public rights of way, railways and waterways, as well as development that enables the efficient and sustainable movement of freight, will be supported, including the use of low and zero emission vehicles.
- 11.2.6 IN3 and the accompanying Appendix 3, when viewed alongside the provisions of IN2(3), presents certainty to the provision of safe, convenient and secure car parking.
- 11.2.7 These minimum standards have been established to overcome issues associated with low parking provision. In determining the right levels of parking, the Council will consider the anticipated demand from the type of housing proposed, the likely occupiers, the design of the public realm and highway, the proposed parking design solutions and any local restrictions.
- 11.2.8 Careful consideration of car parking (including garage sizes), as part of the wider layout of development, can also help ensure that the visual impacts of parking on the street

- scene are reduced. Furthermore, it can also assist in the efficient operation of the highway network and the safety of pavements for pedestrians.
- 11.2.9 It is also acknowledged that in time, owing to new initiatives on climate change and low carbon objectives, there may be a need to review these parking standards.
- 11.2.10IN4 seeks to achieve the proper integration of routes within development sites that will provide safe, convenient and attractive routes for users, and avoid scenarios whereby paths are physically constrained, poorly surfaced and harmful to the safety and amenity of the area. The needs of all individuals and groups within the Borough are also highlighted to safeguard their consideration within the design and layout of public rights of way within new development.
- 11.2.11Principals of least restriction of access will support active lifestyles and sustainable travel opportunities within and out with the wider site, linking to existing / new routes to support healthy and sustainable travel and leisure options.
- 11.2.12Connectivity and ease of movement (including through the provision of minimum route widths and boundary expectations) are integral to the approach advocated. In doing so, developments will also be expected to contribute positively to the delivery of the Rights of Way Improvement Plan for Staffordshire, the Local Cycle and Walking Infrastructure Plan and the walking, cycling and public transport aspects of the Staffordshire Local Transport Plan.
- 11.2.13 Given this, the Supporting Information to IN4 is justified in stating that early liaison between the developer and the Borough Council Staffordshire County Council Highways, and any other relevant party, will be essential to ensure an acceptable scheme is achieved.
- 11.2.14Through IN4's explicit reference to ensuring the routes are formalised and recorded on the appropriate legal record will also act to secure the long-term protection of the route and formalise responsibility for maintenance.
- 11.2.15Individually and collectively, policies IN2, IN3 and IN4 provide an effective framework for assessing the impacts of development in relation to transport, accessibility and parking. Subject to the modifications presented in CD15a, namely (for IN2) MOD041 and MOD042, and (for IN4) MOD043 and MOD044 which are in part a response to comments from the British Horse Society and Staffordshire County Council, it is considered there are no omissions from IN2, IN3 or IN4 and their supporting text.

Qu11.3 a) Does Policy IN5 provide an effective framework for assessing the impacts of development in relation to Community Facilities? Are the terms of the policy clear, including how community facilities are defined and when the policy will be applied? Are there any omissions from the policy and supporting text?

- 11.3.1 Yes. The role played by community facilities and services in the quality of life of residents, and the prevention of the loss of such facilities, is fundamental to the policy approach of IN5. Accordingly, IN5 provides for a general policy of retention subject to limited exceptions.
- 11.3.2 The Supporting Information accordingly states that the Council will seek to prevent the loss of such community facilities to other forms of development, unless alternative provision is made, there is some over-riding public benefit arising from development, or there is demonstrable evidence that there is insufficient demand to warrant their retention.
- 11.3.3 Prior to granting permission for proposals that result in the loss of community facilities, the evidential requirements for identified periods of marketing at a realistic price, allied to the audit of uses taking place and evidence that needs can be met elsewhere in the area, aids the preservation of viable sites and premises.
- 11.3.4 Para 10.33 of the Supporting Information provides a non-exhaustive list of what would constitute community facilities, including community centres, village halls, youth centres, medical facilities, places of worship, nurseries, libraries, theatres, arts venues and accommodation providing an element of care.
- 11.3.5 Para 10.33 also provides that other types of facilities which offer benefits to the community may be assessed on a case-by-case basis, with due regard to their respective use class e.g. Use Class F2 Local Community.
- 11.3.6 IN5 provides an effective framework for assessing the impacts of development in relation to community facilities, providing clarity as to how community facilities are defined and when the policy will be applied. Subject to the modifications presented in CD15a, namely MOD045 which is in response to comments from NHS Property Services, it is considered there are no omissions from IN5 and its supporting text.

Qu11.4 a) Does Policy IN6 provide an effective framework for assessing the impacts of development in relation to Telecommunications Development? Are the terms of the policy clear? Are there any omissions from the policy and supporting text?

- 11.4.1 Yes. In aligning with IN1(7) whereby is it stated developers will be required to work with appropriate providers to establish the necessary digital infrastructure, Policy IN6 provides further information on the detailed expectations for development of communications networks.
- 11.4.2 In doing so, it aims to ensure businesses and residents have access to suitable, high-quality communication services (including high speed broadband) wherever possible, while minimising disruption and environmental impact especially with demand for these and emerging new technologies which are likely to continue to grow over the Plan period (to 2040).
- 11.4.3 As part of new housing and commercial development, policy provision (IN6(2d)) is also made for essential existing telecommunications infrastructure being protected unless it is no longer required or can be adequately relocated and/or replaced.
- 11.4.4 As the Supporting Information explains at para 10.36, through the guidance on design, siting and layout of telecommunications apparatus that IN6 yields, the Council, relevant providers and lead agencies and developers can promote and encourage the provision and expansion of the communications network across the whole of the Borough, whilst minimising adverse impacts such as visual intrusion. Permitted development rights, and the nuance of such infrastructure proposals in conservation areas and nature conservation areas, are also acknowledged (para 10.37).
- 11.4.5 IN6 provides an effective framework for assessing the impacts of development in relation to telecommunications development, with the terms of the policy considered to be clear. Subject to the modifications presented in CD15a, namely MOD046 which is in response to comments from Historic England, it is considered there are no omissions from IN6 and its supporting text.

Qu11.5 a) Does Policy IN7 provide an effective framework for assessing the impacts of development in relation to the provision of utilities? Are the terms of the policy clear and in accordance with national policy? Are there any omissions from the policy and supporting text?

- 11.5.1 Yes. The requirement for major development schemes to include a Utilities Masterplan, to outline phasing of delivery and demonstrate co-ordinated early engagement with infrastructure providers, exemplifies the approach to assessing the impacts of development in relation to utility provision.
- 11.5.2 Furthermore, ensuring that existing utilities assets are safeguarded promotes efficient infrastructure utilisation and supports long-term sustainable growth.
- 11.5.3 The sensitivities associated with providing utilities are also recognised through their careful siting and screening in locations such as in proximity to heritage assets.

 Potential financial mechanisms for the delivery of utilities infrastructure are identified (para 10.41).
- 11.5.4 Policy IN7 (which directly supports the aims of Policy IN1) can therefore be seen to establish a robust framework to ensure that new development proposals positively contribute to both the provision and enhancement of utilities networks, and in doing so, meeting the needs of current and future populations.
- 11.5.5 IN7 provides an effective framework for assessing the impacts of development in relation to utilities, with the terms of the policy considered to be clear and in accordance with national policy. Subject to the modifications presented in CD15a, namely MOD047 which is in response to comments from Historic England, it is considered there are no omissions from IN7 and its supporting text.

Qu11.6Is the plan sufficiently clear as to how its implementation will be monitored?

- 11.6.1 Yes. Appendix 1: Monitoring Framework [CD01], sets out the framework that has been developed to monitor policies in the Local Plan. It lists the detailed 20 indicators that will be considered through the Council's Authority Monitoring Report ("AMR") in relation to the Local Plan, giving both a target and trigger for each indicator.
- 11.6.2 Para 1.1 of Appendix 1 provides that where it appears, through monitoring, that a target is not being met, the Council will consider a number of actions including: -
 - Reviewing policies in the Local Plan (over and above the plan review period of at least once every 5 years)
 - o Work with relevant partners to facilitate delivery of the Plan.
 - o Consider alternative strategies.
 - o Take appropriate action to remedy causes of under-performance.
 - Review impacts on monitoring documents including housing land supply reports.
- 11.6.3 The need to update policies will consider feedback from appropriate parties and also reflect the position set out in the AMR.

2. Appendix 1 – List of Reference Documents

A. The Council's evidence for Infrastructure, Transport and Deliver is set out below.

B. National Policy:

- National Planning Policy Framework
- National Planning Practice Guidance

C. Government Regulations and Acts:

- Town and Country Planning Act
- Planning and Compulsory Purchase Act 2004

D. Newcastle-under-Lyme Local Plan Submission / Examination Documents

- CD01 Newcastle-under-Lyme local plan
- CD06a Newcastle-under-Lyme Regulation 22 statement part 1 (Regulation 18 stage)
- CD15a Schedule of Proposed Modifications
- CD16 Infrastructure delivery plan (submission stage)
- ED003 Infrastructure delivery plan at Regulation 19 stage
- ED004 Viability assessment
- ED011 Strategic transport assessment
- ED030 Infrastructure baseline report

3. Appendix 2 – Supplementary Note on Link Road from A525 – A53

1. Introduction

- 1.1. This note has been prepared to assist the Inspector and provide further information regarding the principle and deliverability of the policy requirement for the provision of a Link Road from the A525 Keele Road to the A53 Whitmore Road. The draft site allocations at Keele University (KL13 & KL15), alongside site TB19 (Land South of Newcastle Golf Club) refers to the provision of a link road.
- 1.2. Historically, the Newcastle-under-Lyme Borough Council Local Plan considered site KL13 in the policy wording for the University (in policy E8: Keele University and Keele Science Park). This Plan was adopted in 2003. The submitted Final Draft Local Plan is supported by up-to-date evidence in the form of a Strategic Transport Assessment ("STA") prepared by consultants SWECO and involving a number of stakeholders in its development, including the County Council (SCC) as Highways Authority [ED011] and an infrastructure delivery plan [CD12] which has considered the infrastructure implications of the sites proposed in the Local Plan.
- 1.3. Policy wording refers to a 'link road' but it may be better described as a connecting access route providing access for all modes of transport and enhanced connectivity between Keele University, existing employment and residential areas, KL13, KL15, TB19, SP11, SP23, existing community facilities and proposed facilities such as a local centre and a new primary school, at site SP11.

2. Evidence Base and Need for the Link Road

- 2.1. The STA [ED011] considered the transport implications of the sites proposed in the Local Plan. The study utilises the North Staffordshire Multimodal (NSMM) transport model to analyse the transport impacts of the allocations proposed for development in the Local Plan. The study included 5 model runs, with varying combinations of sites, with model run 5 considering the allocations proposed at Regulation 19 of the Local Plan.
- 2.2. Model Run 4 in the STA included the reference case and core Local Plan sites and site KL15. This model run identified that there are capacity issues and congestion forecast in both directions of Keele Road, between the University and Gallowstree Lane Roundabout [ED011, para 8.5.2, pg 60]. As the model is multi-modal, the level of forecast congestion reflects car trips switching to existing bus service where that is attractive.

- 2.3. Model Run 5 in the STA was used to test the final suite of local plan and strategic sites. The STA identified a set of mitigation measures, including the need for a new link road between University Avenue/Barkers Wood Road to Whitmore Road. The link road was modelled as a 30mph 7.3m wide road connecting the A525 with the A53 to provide an additional route to distribute trips and relieve pressure on the A525. The details of the specification for the connecting route will be considered at the planning application stage adhering to key principles of supporting bus services and providing active travel infrastructure. Closely linked with the above a new circular bus service via Keele Road, the new access route and Whitmore Road, would be provided, serving Newcastle-under-Lyme bus station, existing residential and employment areas, Keele University, and KL15, KL13, TB19, and SP11 sites.
- 2.4. Table 1 (below) is taken from the STA [ED011, section 8.6.2, pg 67] and shows the modelled flows for Model Run 4 (KL15) and Model Run 5 (Final). It shows the computed volume over capacity (v/c) values for the link on Keele Road between the University and Gallowstree Lane roundabout. It can be seen that without mitigation, the v/c ranges between 101.0% and 138.0%. With mitigations, the v/c decreases and ranges between 91.6% and 111.0%

Table 1: Table from Section 8.6.2 of STA [ED011]

	AM		PM	
	Eastbound	Westbound	Eastbound	Westbound
KL15 Tot. Veh (PCU).	1835	1824	1790	1590
Final Tot. Veh (PCU).	1768	1552	1583	1443
Veh. Diff (PCU).	67	272	207	147
KL15 V/C	115.00%	114.00%	138.00%	101.00%
Final V/C	111.00%	96.60%	100.80%	91.60%
Diff. V/C	4.00%	17.40%	37.20%	9.40%

2.5. Table 2(below) shows the model flow on the link road for the one-hour peak modelled periods.

Table 2: Model Flow on the Proposed Link Road

	AM	РМ
Northbound	243	235
Southbound	81	194

- 2.6. The spread and distribution of traffic along radial routes supports the place making ambitions of the Local Plan. It facilitates travel between Whitmore Road and the surrounding area, and the University. The alternative would be to travel into Newcastle-under-Lyme Town Centre and back out again or use existing residential streets through Westlands.
- 2.7. First Potteries operate service 25 from Hanley to Stoke, Royal Stoke University Hospital, Newcastle-under-Lyme and Keele University. SCC's 2024 Bus Service Improvement Plan (BSIP) identifies this service as one of the busiest services in the county. At peak hours the service operates at a 10-minute frequency to Keele University, with off peak services generally every 15 minutes. The service uses double deck buses which are usually full to capacity with passengers having to stand on services leaving Newcastle-under-Lyme towards Keele University in the peak hours, in particular. Anecdotal evidence suggests passengers can often be left behind between Newcastle and Keele due to the lack of spare capacity on the service.
- 2.8. Additional bus capacity is required to support the developments to the west of Newcastle. Traffic congestion identified by the STA would also impact the existing and proposed bus services utilising A525 negatively affecting service operation and attractiveness to passengers. It makes sense for additional buses serving Keele University to utilise a different route to maximise direct bus access to the campus and employment area and avoid buses following one another along the A525.
- 2.9. The Keele University Bus Accessibility plan below shows the additional areas of Newcastle that could have direct bus access to the University if buses can access the site via A53.
- 2.10. Newcastle Town Deal is providing funding in 2025 for an additional bus rapid transit service that will connect Keele campus with the town centre. The project is of a defined duration and therefore there is no long-term certainty. If the service continued as a commercial route, it would also be

- negatively impacted by forecast traffic congestion on the A525. It is appropriate for the policies to require a minimum bus provision.
- 2.11. Connectivity for walking, wheeling and cycling would also be improved by provision of the access route. It would mean that areas of Newcastle would be within an acceptable walk and cycle distance such as TB19 and residential areas to the east of A53.
- 2.12. TRACC accessibility planning software has been utilised to produce 20-minute walking isochrones for proposed employment allocations of KL13 and KL15. The Walking Accessibility to Keele Employment Sites plan (figure 2) below shows the area that currently lies within a 20-minute walk time compared with the larger area that would have access with the new road and active travel infrastructure in place, including the off-road walking and cycling route between Keele and Westlands.

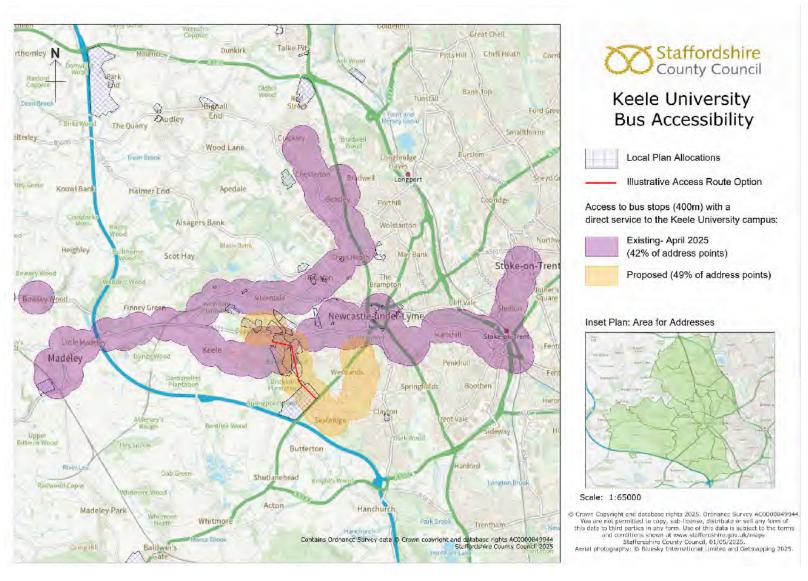


Figure 1: Keele University Bus Accessibility

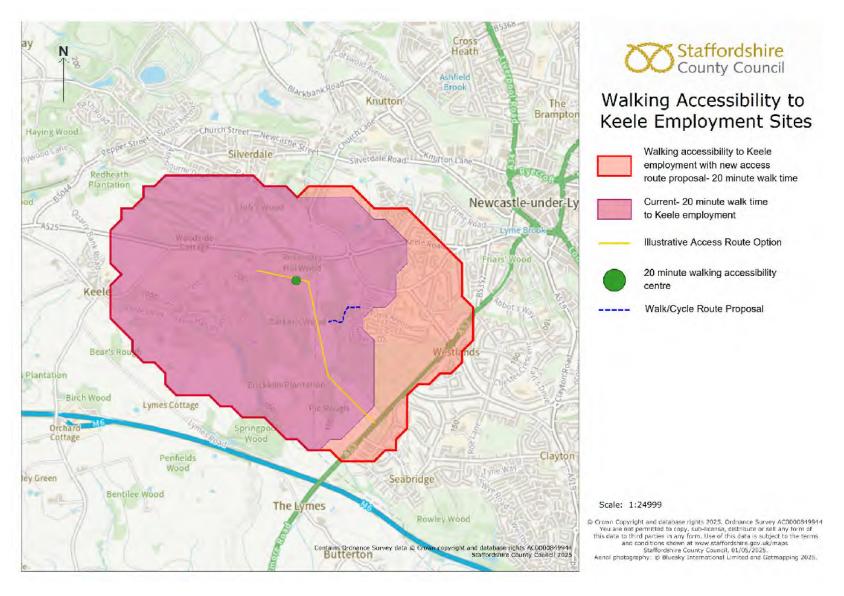


Figure 2: Walking Accessibility to Keele Employment Sites

3. Deliverability of the Link Road

- 3.1. The need for a link road and supporting circular bus service is reflected in the Council's Infrastructure Delivery Plan [CD12, pg 159, T23 & T24] which identifies that the provision of the road and associated public transport improvements are important in the short term and delivered by the site promotors, supported by developer contributions by a larger pool of site allocations included in the Local Plan. Staffordshire County Council are identified as a key delivery partner, and supportive of the transport mitigation identified as being required.
- 3.2. A number of sites in the Local Plan and as listed in the Infrastructure Delivery Plan [CD12, pg 159, T23 & T24] include policy wording to the effect of supporting the delivery of the transport infrastructure improvements identified, including: -

Table 3: Local Plan Sites with References to the Link Road

Local Plan Site Allocation	Policy Requirement
KL13	Criteria 3 and 5 support the provision of a new / enhanced bus service and the delivery of a link road and walking / cycling links from the A53 Whitmore Road to the A525 Keele Road.
KL15	Criteria 3 and 5 support the provision of a new / enhanced bus service and the delivery of a link road and walking / cycling links from the A53 Whitmore Road to the A525 Keele Road.
SP11	Criteria 16 requires financial contributions to highways improvements including to facilitate the distribution of traffic from the A525 to Whitmore Road
SP23	Criteria 15 requires financial contributions to highways improvements including to facilitate the distribution of traffic from the A525 to Whitmore Road
TB19	Criteria 11 requires the provision of a link road to facilitate a connection to the A525 Keele Road, working with Keele University and enhancement of existing Public Rights of Way and Green Infrastructure

3.3. Various options are available for the alignment of the route. The Newcastle Local Plan Transport Mitigation plan below (Figure 3) identifies route

- options in yellow. The modelling is robust in terms of benefits captured, as all options are either a similar length or shorter than the modelled route.
- 3.4. If the route necessitates an additional junction on A525 then this would be a roundabout. There is another example of two roundabouts on an A road with higher traffic flows in Staffordshire that operates satisfactorily.
- 3.5. The design will need to consider the high voltage pylons present but that is also a consideration for the layout of site KL15.
- 3.6. The modelling indicates that a priority junction on A53 is likely to operate satisfactorily.
- 3.7. The usage of roundabouts could allow greater flexibility in the horizontal design and provide access points to the individual plots.

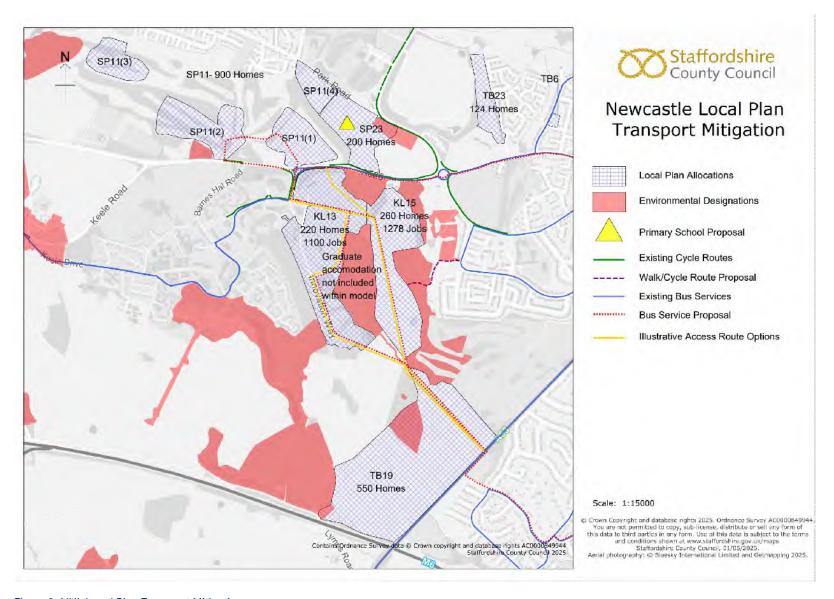


Figure 3: NUL Local Plan Transport Mitigation

4. Greenbelt polices

4.1. Keele University has requested amendments to the Greenbelt Policies to enable additional land in the locality to be considered for development in a future Local Plan. It is therefore even more important that the opportunity is taken to provide an additional access onto the campus.

5. Strategic Transport Assessment Clarifications

- 5.1. The NuL STA makes extensive use of link level volume over capacity analysis (V/C). This is a common metric of link level performance where the modelled flow volume is compared against the design maximum capacity as a ratio (volume divided by capacity) and usually expressed as a percentage. A V/C approaching 100% indicates the modelled flow is approaching the design capacity. However, as per DMRB (Design Manual for Roads and Bridges) a V/C greater than 85% will result in flow breakdown and delays. V/C may be greater than 100% where the forecast flow exceeds the design capacity of the link. For the NuL STA analysis, we have used the following bounds for flagging links where link level capacity constraint may occur,
 - Slight problem Volume / capacity between 80 90%
 - Moderate problem Volume / capacity between 90 100%
 - Severe problem Volume / capacity > 100%
- 5.2. V/C can also be compared between scenarios to highlight differences. Typically (unless a design change is modelled), capacity will remain constant so a plot of differences in V/C will be showing changes in modelled flow volume. This analysis will not show where link capacity constraints are encountered though is useful to identify links that have a significant change in their flow characteristics between scenarios. For the NuL STA, we have adopted the following categories for plotting change in V/C,
 - Green Volume / capacity change between 10 20%
 - Amber Volume / capacity change between 20 30%
 - Red Volume / capacity change > 30%

5.3. Since publication of the NuL STA, it has been identified that a number of plots had an incorrect legend. This affects the model run result plots that show junction delay. The red star indicating severe junction delay should be labelled "average delay > 180 secs". The error only impacts the labelling in the legend and does not affect the identification of junctions with delay. The correct legend is shown below (Figure 4) with the correct value highlighted in yellow

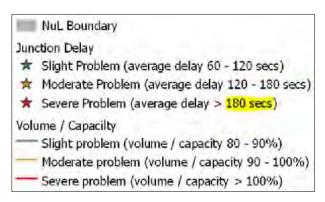


Figure 4: Legend Correction

- 5.4. The issue affects the following figures,
 - Figure 8-1: Scenario 1 2040 AM
 - Figure 8-2: Scenario 1 2040 PM
 - Figure 8-5: Scenario 2 2040 AM
 - Figure 8-6: Scenario 2 2040 PM
 - Figure 8-9: Scenario 3 2040 AM
 - Figure 8-10: Scenario 3 2040 PM
 - Figure 8-13: Scenario 4 2040 AM
 - Figure 8-14: Scenario 4 2040 PM
 - Figure 8-17: Scenario 5 2040 AM
 - Figure 8-18: Scenario 5 2040 PM