



Newcastle-under-Lyme Topic Paper



Infrastructure Baseline Report

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Executive Summary

Infrastructure is integral to supporting Newcastle-under-Lyme's places & people. If identified needs within the Local Plan are to be met, the Council (& Central Government more generally) is clear that the infrastructure needed to support growth over the coming decades must also be provided alongside it, in the right place and at the right time.

In essence, the Baseline demonstrates that infrastructure requirements related to future development will both influence, and be influenced by:

- decisions on how much new development will be located where,
- the ability of existing infrastructure to cope with additional demands, and
- the desirability, practicality and viability of making any new provision needed.

Focussing on areas of infrastructure including transport, education, health and utilities, as well as highlighting aspects of digital infrastructure and the wider climate change emergency, this Baseline should be seen as a snapshot of the understood situation as at October 2021, and the first step in the process of engaging with infrastructure providers & planning for infrastructure delivery.

In a number of instances, whilst some initial discussions have taken place to date with service providers, the Baseline relies on existing published material (which it is acknowledged may cover broader geographies & different timeframes) in order to set the context and it is anticipated that there will be gaps in information available and/or presented at this stage and that there may be more up to date information not yet in the public domain that is not included. Furthermore, it should not be seen as a statement of Council policy and is not intended to determine where development may or may not be appropriate.

All infrastructure providers are encouraged to engage with the Local Plan preparation process at the earliest opportunity in order that full and up to date information can be taken into account. There will also need to be detailed examinations at both strategic and site specific levels in order to identify infrastructure requirements as the preparation of the new Local Plan progresses.

Following the Local Plan Issues and Strategic Options consultation, we will identify in a draft Infrastructure Delivery Plan (IDP), any essential additional infrastructure required to support the development proposed in the Publication Draft Local Plan. The final IDP will be published alongside and in support of the Submission Draft Local Plan and will include a schedule of specific infrastructure projects. These projects will be costed, and sources of funding identified where possible.

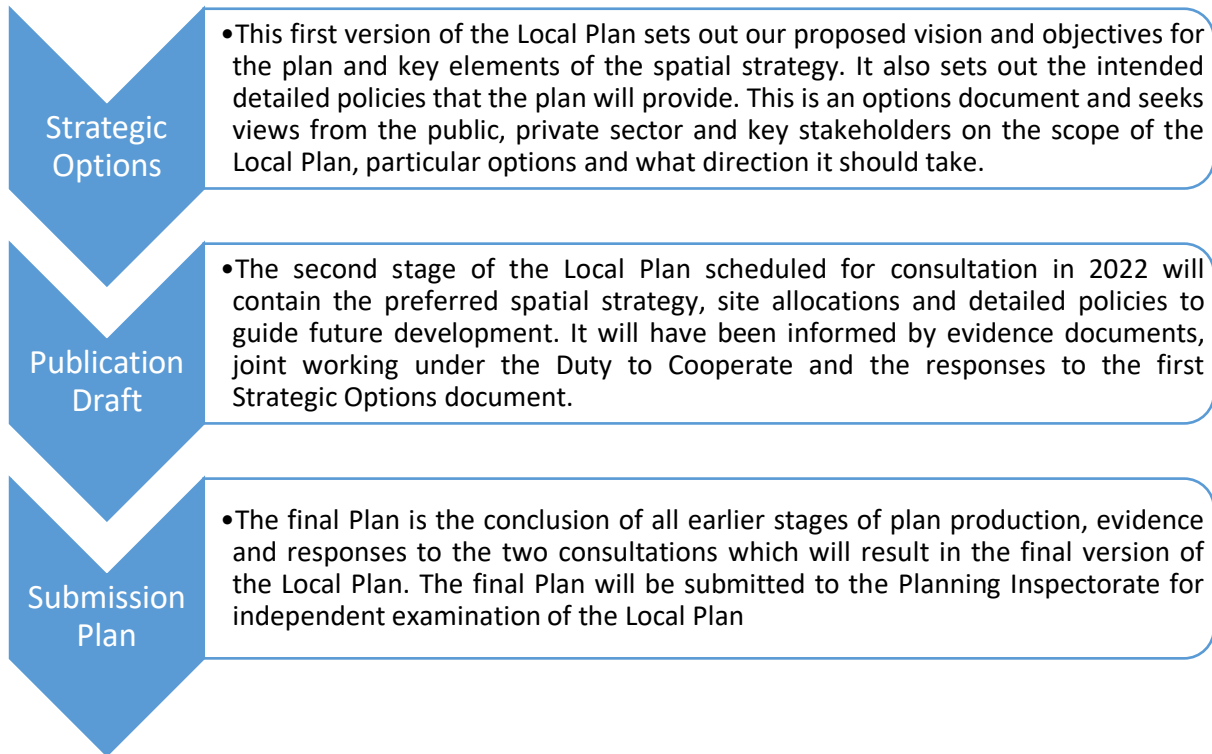
Introduction

Background

- 1.1. This Baseline Infrastructure report is the first stage in the identification of and provision for Newcastle-under-Lyme's infrastructure needs arising out of planned growth in the Borough over the next 20 years and beyond. It has been produced as part of the process of preparing the new Local Plan.
- 1.2. The Local Plan will guide future development and land use in the Borough to 2040. It will set out where development is likely to take place, what factors will be taken into account when planning applications for development are submitted, and what types of areas, facilities and services need to be protected and/or improved in the Borough. It will therefore have a major influence on how the area is likely to change in the future.
- 1.3. The Local Plan is still in its early stages of preparation and the Council wants to ensure that communities in Newcastle-under-Lyme have every possible opportunity to get involved in planning for the Borough's future and to influence the content of the Local Plan before the subsequent formal stages of Local Plan preparation are reached. This is particularly important because there will be a need established in due course for growth in aspects such as the numbers of homes in the Borough over the next two decades.
- 1.4. The Local Plan will not, however, be just about homes. For our communities to be successful, people and businesses need a range of other facilities and services – the infrastructure that supports Newcastle-under-Lyme's places and people. If the eventual identified needs are to be met, the Council is clear that the infrastructure needed to support this growth must also be provided alongside it, in the right place and at the right time.
- 1.5. As part of the preparation of the new Local Plan, therefore, the Council will work with infrastructure providers and other stakeholders to ensure that the infrastructure requirements arising out of proposed levels of growth are identified and can be met, including through the development process.
- 1.6. This document includes an overview of key aspects of the infrastructure Baseline as it exists at the moment, acknowledging future plans where they are known. It also provides a means of engaging with all those with an interest in infrastructure provision in order to facilitate the delivery of well-planned sustainable development meeting the needs of existing and new communities in the Borough.
- 1.7. This approach has been adopted because at this early stage of Local Plan preparation, the scale of growth for which the new Local Plan will need to provide has not been identified, nor has the way in which it is proposed to be spread across the Borough. This 'spatial distribution' of new development – e.g. whether (and how many) new homes, jobs and other development will be located is one of the central questions being raised in the Issues and Strategic Options consultation.

1.8. Following the Local Plan Issues and Strategic Options consultation, we will identify in a draft Infrastructure Delivery Plan (IDP), any essential additional infrastructure required to support the development proposed in the Publication Draft Local Plan. The final IDP will be published alongside and in support of the Submission Draft Local Plan and will include a schedule of specific infrastructure projects. These projects will be costed, and sources of funding identified where possible.

Figure 1: The three main stages of Local Plan production that the Infrastructure evidence base will align to



What is Infrastructure?

1.9. Infrastructure is any service or facility that supports the Borough's places and people and can be categorised into three main groups:

- Physical: hard pieces of infrastructure that are required for many activities in order for communities to function e.g. transport, utilities & water
- Social assets: infrastructure to thrive & establish e.g. education & health
- Green: infrastructure to provide areas with biodiversity, recreation and enjoyment e.g. parks/open spaces, trees, outdoor sport and leisure, public realm improvements

1.10. Responsibility for the provision and management of infrastructure lies with a variety of statutory and non-statutory bodies, some of which are regulated by Central Government. The planning, funding and implementation mechanisms which apply to each also vary

significantly, including in terms of timeframes, the level at which decisions are made and implemented (i.e. national, regional, local, site specific) and whether implementation is commissioned and undertaken by these bodies themselves or as part of the development process.

- 1.11. Aligning, influencing and controlling these processes as appropriate in order to ensure the timely provision of infrastructure to meet the needs of new development and the people living, working and otherwise comprising the Borough's communities is crucial. The identification of infrastructure needs and the sharing of information with key stakeholders at an early stage is a key factor in achieving this.
- 1.12. In essence, infrastructure requirements related to future development will both influence, and be influenced by:
- decisions on how much new development will be located where,
 - the ability of existing infrastructure to cope with additional demands, and
 - the desirability, practicality and viability of making any new provision needed.

How will it be funded?

- 1.13. In many cases, the private sector will be able to invest and provide the infrastructure needed to support and enable development to take place. Developers will contribute towards the provision of new infrastructure (e.g. open space) and improvements to existing provision (e.g. a new road layout) to meet the additional demands created through new development. In other cases, infrastructure will need planning in a coordinated way between public and private partners, particularly where multiple agencies are involved.
- 1.14. At the same time, it is critical that any infrastructure expectations do not disincentivise development to such an extent that it becomes unviable, thus inhibiting Newcastle-under-Lyme's growth opportunities. This challenge is particularly acute in those parts of Newcastle-under-Lyme where land and property values are low and profit margins on development are small or even non-existent. In some parts of the Borough, the private sector will not be able to meet all of the infrastructure/policy requirements which are ultimately set out in the Local Plan. In such cases, an appropriate balance will need to be struck between competing interests and demands.

Purpose and Aims

- 1.15. The Baseline is considered as a first step in the process of engaging with infrastructure providers & planning for infrastructure delivery, and in a number of instances relies on existing published material in order to set the context. It is anticipated that there will be gaps in information available and/or presented at this stage and that there may be more up to date information not yet in the public domain that is not included. Furthermore, it should not be seen as a statement of Council policy and is not intended to determine where development may or may not be appropriate.

- 1.16. All infrastructure providers are encouraged to engage with the Local Plan preparation process at the earliest opportunity in order that full and up to date information can be taken into account. There will also need to be detailed examinations at both strategic and site specific levels in order to identify infrastructure requirements as the preparation of the new Local Plan progresses.
- 1.17. The Council will continue to work with infrastructure providers to understand their investment plans in respect of existing and planned provision. Many infrastructure delivery agencies have three to five year delivery timeframes reflected in their own infrastructure plans and funding regimes, and all have much shorter forecasting and planning timescales than the 20 year time-span of the Local Plan.
- 1.18. It is also important to recognise that Infrastructure provision changes as new funding programmes are developed and priorities are rescheduled. This means there will be an on-going challenge to continue partnership working with these providers, including ongoing involvement in formulating their delivery plans. Once the Council's preferred spatial strategy begins to emerge, this will help our infrastructure partners to formulate their service and investment plans.
- 1.19. As highlighted earlier, a subsequent document (an Infrastructure Delivery Plan) will be produced which will identify the infrastructure, as noted by the Council and other service providers, as being needed to support the delivery of the areas and sites in the Local Plan. That document will explain the approach the Council has taken to identifying infrastructure, how it will be delivered, and an assessment of the potential opportunities and risks associated with doing so. As such the IDP should, once produced, be seen as a 'living document' and will be updated and monitored over time, particularly as more detail and information on site specific proposals emerge.
- 1.20. This work also needs to be seen in the context of the wider Local Plan evidence base. In particular data on open space, green infrastructure & flood risk are or will be significant contributory factors in the debate around on & off site infrastructure provision. The Rural Hierarchy of Centres Topic Paper also presents information on service provision and infrastructure within particular localities. Collectively, this and the other information collated by & on behalf of the authority will be used to determine the most appropriate locations for growth. Information on wider areas of strategic infrastructure such as emergency service, library & community & youth service provision can also be reviewed within Staffordshire County Council's Strategic Infrastructure Plan – refer to Section 2 below for more details of this document.

Policy Context

- 1.21. Infrastructure is beneficial to growth/development and should be planned and coordinated across administrative boundaries.
- 1.22. Key drivers behind infrastructure spending in the global economy include rapid population growth, new technologies, climate change and changing and more flexible

lifestyles. These trends will place significant demands on Newcastle-under-Lyme's infrastructure over the coming decades.

- 1.23. The government attaches great importance to ensuring that sufficient infrastructure is in place in the right locations at the right time to support investment and growth. The context for the Baseline is provided by the National Planning Policy Framework (NPPF, amended 2021). Achieving sustainable development is at the core of the NPPF. It states, at Paragraph 8, for example, that this includes *'identifying and coordinating the provision of infrastructure'* and *'supporting strong, vibrant and healthy communities... with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being.'*
- 1.24. The NPPF goes on to state, at Paragraph 20, that: *'Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for:*
- a) housing (including affordable housing), employment, retail, leisure and other commercial development;*
 - b) infrastructure for transport, telecommunications, security, waste management, water supply, waste water, 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'.*
- 1.25. The National Infrastructure Delivery Plan (2016 -2021) sets out the government's position for infrastructure delivery. It commits the Government to invest over £100 billion by 2020-21 alongside private sector investment, in communications, energy, flooding, science and research, transport, waste and water.
- 1.26. Central Government has also published a long-term strategy called Industrial Strategy – Building a Britain Fit for the Future (November 2017) which aims to create an economy that boosts productivity and earning power throughout the UK. Under that vision, there are five foundations: one of which is *'Infrastructure – a major upgrade to the UK's infrastructure'*.
- 1.27. In July 2018 the first *'National Infrastructure Assessment'* was published. This sets out a long-term strategy for the UK's economic infrastructure from 2020 to 2050. It includes a number of recommendations to Government that could be implemented within the life of the Plan period covered by the Local Plan. These include:
- Full fibre broadband by 2033.
 - Half of the UK's power to be provided by renewables by 2030.
 - Three quarters of plastic packaging to be recycled by 2030.
 - Preparing for 100 per cent electric vehicle sales by 2030.
- 1.28. Other recommendations include:

- £43 billion of stable long-term transport funding for regional cities.
- Ensuring resilience to extreme drought.
- A national standard of flood resilience for all communities by 2050.

1.29. The implication is that the Government, along with service providers and regulating bodies, need to begin delivering the necessary programmes to put the above in place.

1.30. Government guidance makes it clear that infrastructure provision must not threaten the viability of development. Where infrastructure provision is uncertain, the consequences (including possible contingency arrangements and alternative strategies) should be addressed.

1.31. Improving economic and transport links between northern cities and towns is a key component of establishing a powerful 'Northern Powerhouse' capable of competing with London and the south east. The emerging 'Levelling Up' agenda and the newly created Government department established to oversee its inception and delivery will also have implications for this area of work.

Sustainable Environment

- 2.1. Through its Sustainable Environment Strategy, the Borough Council is dedicated to ensuring a sustainable future that leads to improvements within our communities and we will continue to strive to reduce our own impact on the environment in everything we do. This document is available to view at:

<https://moderngov.newcastle-staffs.gov.uk/documents/s34209/Sustainable%20Environment%20Strategy%20v3.pdf>

- 2.2. In order to translate the Council's ambitions in respect of the environment, the Sustainable Environment Strategy will be the vehicle for helping the Council achieve its aims of caring for and enhancing our natural environment and to adapt and mitigate the effects of climate change. The focus of the strategy is on delivering those actions that we know will achieve a positive impact and importantly, where we know we have the greatest control and influence to turn our plans into actions for the benefit of the Borough.

- 2.3. Plans are being developed in two complimentary works streams. The first is to fundamentally and comprehensively review the Council's own activities and services and incorporate actions into the Action Plan that make a significant contribution to this Strategy and achieves a net carbon neutral position for the Council's activities and operations by 2030. The second is to work with partners across the Borough and Staffordshire to work together on Borough wide actions that will help achieve agreed targets.

- 2.4. The Strategy identifies four priority outcomes and how we will deliver our aims. The four priority outcomes are:

- To reduce our reliance on fossil fuels
- To reduce carbon emissions
- To minimise waste and increase recycling
- To offset carbon emissions

- 2.5. The Sustainable Environment Strategy outlines the first phase of our commitments and future direction of travel for the Council, but it is by no means the end of the work needed. The Strategy acknowledges that this is only the beginning of the journey and further work is required to develop the optimum range of activities in the Action Plan in the future, on an ongoing and flexible basis

- 2.6. To improve the local environment and mitigate the effects of climate change will require changing the way we do things, looking at our own services and ways of working and taking direct action wherever possible, as well as encouraging, supporting and enabling others to do the same.

- 2.7. It is fully recognised that the Council needs to work with its partners to be able to deliver some of our aims and to enable and support others in delivering their priorities for change. The Council is already working with partners and other Staffordshire Districts, Boroughs and the Staffordshire County Council through the Leaders and Chief Executives Group to

identify areas of potential joint working that will benefit the Borough and County as a whole.

- 2.8. In addition the Council has worked with Keele University to secure funding to work with the Centre for Alternative Technology, and Carbon Literacy Project, to facilitate joint working between the Staffordshire councils. The programme of work involved a 2 day workshop with multiple representatives from all Staffordshire councils to explore learning, synergies, and potential future joint projects, and a number of days of consultancy support from the Centre for Alternative Technology to help drive the identified projects forwards.
- 2.9. It is also recognised that the pace of change related to climate change and policy direction is fast as well as the pace of development of technology and best available techniques to support these changes. This strategy will therefore be fully reviewed annually to ensure that our ambitions and actions are aligned to emerging local, national and global policy and to refresh the Action Plan as necessary to take advantage of opportunities as they arise
- 2.10. The Government has very recently announced its 10 Point Plan which is aimed at eradicating the UK's contribution to climate change by 2050, which has been enshrined into law as part of the net-zero emissions target. A budget of £12bn. has been agreed to transition the UK into net carbon neutrality and the plan includes a wide range of actions that includes green energy production and use, energy efficient buildings, carbon capture and the natural environment.
- 2.11. The Council has similarly aligned its target date for net-zero to 2050 with that of Government & neighbouring authorities and to reflect the importance of ensuring that it is achievable and credible.

Key achievements to date of the Sustainable Environment Strategy: As at September 2021

- 2.12. *Renewable Energy* – solar panels have been installed on part of the Knutton Depot roof and are generating electricity which is used at the site.
- 2.13. *Urban Tree Planting* – An Urban Tree Planting Policy has been adopted by Cabinet and a project plan has been prepared.
- 2.14. *Policy* - The Staffordshire Climate Change Adaptation & Mitigation Report has been finalised and key policy recommendations will inform policies in the Local Plan to ensure that new development will seek to mitigate the impact on climate change.

<https://www.newcastle-staffs.gov.uk/planning-policy/local-plan-evidence-base/3>

- 2.15. *Partnerships* - The Council has begun working collaboratively with Keele University to explore new energy efficient schemes such as district network heating.
- 2.16. *Sustainable Procurement* - The Council has modified its Invitation to Tender (Open Procedure) Part 2 Questionnaire to include the questions linked to provider's carbon

reduction plan and officers will monitor and report on responses received as part of any future procurements.

- 2.17. *Transport* – The Councils Environmental Health van fleet has been replaced with electric vehicles and charging stations have been installed at Knutton Lane Depot.
- 2.18. *Transport* - A 'pilot' of a Government funded E-Scooters scheme in collaboration with Staffordshire County Council has been undertaken for a period of 12 months within the Town Centre, ending in September.
- 2.19. *Air Quality* – Cabinet have agreed to progress the eco-bus gate option for the A53 to final business case stage in order to achieve reductions in traffic pollution.
- 2.20. *Air Quality* - As part of the new recycling service, the Council has invested in Routesmart, allowing route optimisation with the new waste service. It is envisaged that once the new service has been embedded and all routes optimised; fuel and emissions reduction will materialise.
- 2.21. *Fossil fuels* - Clough Hall Park Pavilion moving to an all-electric solution (from gas/LPHW system) under ATDF/Parks funding.
- 2.22. *Carbon Reduction* – The Council has switched to a renewable green energy tariff for its electric consumption.
- 2.23. *Carbon Reduction* - A new Building Energy Management System has been installed at our main Leisure Centre Jubilee 2.

Key Projects Being Planned

- 2.24. *Renewable Energy* - Feasibility Study for a solar renewable energy farm on land owned by the Borough Council at Keele.
- 2.25. *Urban Tree Planting* - Suitable sites are being sought for the first phase of tree planting over the coming winter and early spring period. There will be linkages to the national The Woodland Trusts Plant a Tree for the Jubilee project to Celebrate The Queen's Platinum Jubilee in 2022 by being part of The Queen's Green Canopy. Funding will need to be identified for this project which may be a combination of Borough Council and external funding.
- 2.26. *Partnerships* – work collaboratively with the newly established cross county Joint Sustainability Board, with the intention to develop and recommend a joint environmental sustainability strategy for Staffordshire and Stoke on Trent.
- 2.27. *Renewable energy* - To explore the feasibility of installing a 30kw array of solar thermal-PV hybrid at south facing roofs of NULBC central Depot. (subject to any potential re-location plans).

- 2.28. *Fossil Fuels* – The Council is planning to switch to a green energy tariff for its gas consumption in 2022.
- 2.29. *Transport* – Work with Staffordshire County Council on its Local Cycling and Walking Infrastructure Plan (LCWIP) 2020-2030 which establishes a programme of improvements for pedestrians and cyclists to include better access and improved cycle routes for the residents of the Borough.
- 2.30. *Transport* - A consortium bid, funded by Low Emission Taxi Infrastructure Scheme, has approved eight rapid electric vehicle charging points to be installed within the Borough on local authority owned car parks and will be rolled out.
- 2.31. *Transport* – Promote the Council's Green Travel Plan, to reduce Co2 from employee commuting, such as encouraging Car Sharing, Cycle Loans, and Annual Bus Travel Card for its employees as well as ongoing agile and home working.

Digital Infrastructure

- 3.1. The roll-out of superfast broadband in the UK has primarily been led by private providers. The Government's policy is to support the roll-out of superfast broadband to those areas not reached by private investment. To do so, the UK Government has been providing funding to local bodies in England through the Superfast Broadband Programme. The programme is managed by Broadband Delivery UK (BDUK), part of the Department of Digital, Culture, Media and Sport (DCMS).
- 3.2. The £32m Superfast Staffordshire Programme is a partnership between Staffordshire County Council, BDUK, BT and Openreach. As at October 2021, approximately 83,400 premises have gained access to superfast broadband (>24Mbps) services as a result. Coverage of services has increased from 65% (2013) to 96.86%* (October 2021) providing access to superfast broadband to approximately 400,000 premises across the county.
- 3.3. Within Newcastle-under-Lyme, the data as at October 2021 is as follows:
 - Superfast >24Mbps 97.82%
 - Superfast >30Mbps 97.07%
 - Gigabit capable ($\geq 1,000$ Mbps) 69.62%
 - Full fibre ($\geq 1,000$ Mbps) 14.21%
- 3.4. Recently the programme has delivered the full fibre (gigabit capable) solution. Staffordshire currently has 54.18% gigabit capable coverage, of which 20.42% is delivered through a full fibre network.
- 3.5. The headline figures for the "Take up" of superfast services that have been provided by the programme are currently 74.44%, way beyond the 20% originally envisaged.
- 3.6. The Superfast Staffordshire contracts have concluded their fibre deployment phase having delivered all their contractual commitments. The programme team are currently working with over 70 rural communities to access the UK Gigabit Voucher Scheme, part of Project Gigabit.
- 3.7. Project Gigabit is a DCMS (Department of Digital, Culture, Media & Sport) funded programme to provide access to gigabit capable services (1,000Mbps) where it will not be delivered by the network operators. Commercial operators are expected to deliver full fibre services to 80% of the premises, at an estimated cost of £30bn, with the remaining 20% (approx. 6 million premises) requiring a significant public intervention (£5bn) to address this market failure.
- 3.8. The Superfast Staffordshire Programme team are working with DCMS helping to shape the programme through the ADEPT Digital Connectivity Group. DCMS, through BDUK intend to run the procurements centrally to fund the provision of gigabit capable services across the UK, to address the "final 20%".

- 3.9. The Government's Future Telecoms Infrastructure Review highlights the aim to ensure that 15 million premises across the UK are connected to a gigabit capable service by 2025, with coverage across all parts of the country by 2033. Full-fibre (next generation 'Fibre to the Premises') is faster, more reliable, and more affordable than the existing copper-based network. It is estimated that the rollout of full-fibre to all circa 30 million premises across the UK will cost in the region of £30bn. It is expected that the delivery of full-fibre will be fully commercially viable for around 80% of premises, with the remaining 20% requiring some level of public subsidy.
- 3.10. As Staffordshire seeks to become a county with 100% coverage of superfast broadband, it is essential that all new developments are constructed with a gigabit capable service. Access to broadband is a vital component of infrastructure in today's world. It is key to growing a sustainable local economy, supporting education and home working, and is increasingly vital for accessing essential services such as banking, utilities and access to public services. Superfast Staffordshire are working with Local Planning Authorities and Developers to ensure that new developments are 'future-proofed' by installing direct fibre access. In addition, the Government through its Future Telecoms Infrastructure Review are proposing new legislation to ensure all new build developments where appropriate are connected with full fibre.
- 3.11. Recently DCMS have published their Project Gigabit Summer 2021 update advising of the timelines for the rollout across the nation. Staffordshire has been identified as part of Phase 2a and will start the formal procurement process immediately. The expected timeline is as follows: -
- Open Market Review published and open for 1 month (Aug 2021)
 - Open Market Review analysis (Oct 21)
 - Public Review published and open for 1 month (Nov 21)
 - Public Review analysis (Jan 22)
 - Invitation to Tender published (May 2022)
 - Contract commencement (Apr 2023)
- 3.12. Preliminary analysis of the data available for Staffordshire indicates that there could be approximately 76,300 premises requiring a publicly funded intervention, which has been estimated to be £72m - £123m. The Open Market Review process is designed to identify the premises requiring this assistance and thus determine the intervention area. The OMR was launched in Staffordshire on the 12th August 2021 and ran for one month.
- 3.13. This means that households and businesses reliant on the central procurements for the provision of the gigabit capable services are likely to benefit from late 2023 through to 2026. To this end any community wishing to accelerate their deployment can utilise the UK Gigabit Voucher Scheme up until 6 weeks before the issuing of the Invitation to Tender, when the voucher scheme will be suspended.
- 3.14. The Community Fibre Partnership Support Fund was developed by the Superfast Staffordshire programme team during 2016 to complement the Community Fibre Partnership (CFP) initiative, where communities can get a quotation from Openreach for

the fibre upgrade work. The Superfast Staffordshire team pioneered a 50:50 co-funding approach to help communities benefit from the full fibre upgrades.

- 3.15. DCMS have since launched UK Gigabit Voucher Scheme worth £3,500 for SME businesses and £1,500 per residential premise that can be used to support the CFP process, replacing the support fund offered through the Staffordshire programme. This is an excellent example of communities “doing it for themselves”, with some assistance from the Superfast Staffordshire programme team.
- 3.16. In September 2020 the County Council approved a £1m “top-up” scheme to complement the UK Gigabit Voucher Scheme. Eligible premises with access to services less than 30Mbps can benefit from a “top-up” voucher worth up to £2,000 where the cost of provision exceed the national voucher values. To date 20 communities across Staffordshire have benefited from the scheme.
- 3.17. Universal Service Obligation (USO) for broadband is a UK-wide measure intended as a “safety net” providing a legal right to ensure broadband is delivered to those premises that don’t have access to a decent and affordable connection. An estimated 5,500 premises across Staffordshire may be eligible for the USO. Consumers and businesses have been able to request connections since March 2020.
- 3.18. Shared Rural Network (SRN) looks to transform mobile coverage, countrywide and was developed by the UK’s four Mobile Network Operators (MNO) with support from Government to address "not spots" and "partial not-spots" generally found in the rural areas. Partial not spots will be addressed by the MNO's sharing masts. The not spots will require £1bn (50:50 Commercial: Government) to address these areas along with the provision of additional masts. The programme will make 4G mobile broadband available to 95% of the UK. The operators expect this will extend mobile coverage to an additional 280,000 premises and for people in cars on an additional 16,000km of the UK’s roads, boosting productivity and investment in rural areas. This is crucial alongside 5G developments.
- 3.19. Digital Infrastructure Strategic Framework (DISF): The County Council is developing a digital infrastructure framework for Staffordshire, bringing together the various elements of the digital infrastructure agenda, it will seek to ensure a coherent approach to connectivity planning over the coming years. The ambition is that “Staffordshire will be a county with access to 100% gigabit connectivity by 2030”. The 4 key objectives will help to deliver the ambition are as follows: -
1. To enable and accelerate delivery of gigabit capable technologies and infrastructure to provide full access.
 2. To maximise the opportunities and benefits of 5G across Staffordshire – within Newcastle under Lyme 5G coverage is supplied by EE, O2, Vodafone & 3.
 3. To enable rural and digitally isolated communities where market intervention has failed.
 4. To enable the growth of the digital economy in Staffordshire.

- 3.20. As previously stated, the provision of many of these connectivity services are expected to be delivered by the commercial operators without the need for public subsidy. However, the scale of the engineering challenge is considerable, and it has been identified by central government that local authorities have a vital role to play in the delivery of these ambitions. To this end Staffordshire is committed to developing a “red carpet” approach, building on best practise to encourage connectivity investment across the county at the earliest opportunity.
- 3.21. The ambition is to make Staffordshire an attractive proposition for commercial investment to ensure the efficient and expedient roll out of the various services. In the meantime, work will continue with communities, government, and commercial operators alike to ensure that no one is left behind.

Newcastle under Lyme Town Investment Plan

- 3.22. The success of the Town Investment Plan (TIP) is the most recent confirmation of the Government’s confidence in Newcastle-under-Lyme Borough Council’s aspirational Town Deal proposals which, so far, have seen more than £50 million invested in unprecedented regeneration programmes for Newcastle and Kidsgrove.
- 3.23. The TIP sets out in three key objectives, with projects aligned to them, how the Town Deal funding will be spent, what it will achieve and also how the £23.6 million will bring in other investment to the area. For digital infrastructure this includes:
- Objective One: Open up growth opportunities through enhanced physical and digital connectivity aligned with clean and sustainable economic development.
 - Smart Newcastle Digital Connectivity new digital infrastructure will give better access to services, employment and other digital services for residents and businesses.
 - A new Digital Society Institute will help improve digital skills for our communities and will provide grow-on space for businesses, building on the Smart Newcastle Digital Connectivity Project. It will also provide space for SMEs to improve skill levels including areas such as digital skills, data analytics and artificial intelligence. The centre will bring together the assets of Keele University, and the Newcastle and Stafford Colleges Group, and will complement the proposed town centre-based “Institute of Technology” as well as the “Living Lab” in Keele’s new IC7 Innovation centre. Construction is now underway on the latest Innovation Centre on Keele University’s Science and Innovation Park, which is set to open in 2022.
 - All existing bus shelters will be upgraded to become SMART and solar powered, use real time passenger information (RTPI), have USB charging points and LED shelter lights, all powered by a solar panel.
 - A new Electric Charging Infrastructure across the borough will support the transition to electric vehicles by 2030, and help address air quality issues in transport corridors.

Community & Leisure

Libraries

- 4.1. The Public Libraries and Museums Act 1964, states that local authorities in England have a statutory duty to provide a 'comprehensive and efficient' library service for all people working, living or studying full-time in the area who want to make use of it.
- 4.2. *"Libraries are vital community hubs – bringing people together and giving them access to the services and support they need to help them live better"*.
- 4.3. Libraries contribute to the following outcomes and should therefore be integral to all public service strategies:
 - increased reading and literacy
 - improved digital access and literacy
 - cultural and creative enrichment
 - helping everyone achieve their full potential
 - healthier and happier lives
 - greater prosperity
 - stronger, more resilient communities
- 4.4. Against declining user numbers and issues, in line with national trends, Staffordshire County Council has implemented digital/technological solutions and introduced a Community Managed Library model to deliver savings and ensure that the service remains relevant and accessible.
- 4.5. Indications within the Staffordshire & Stoke Strategic Infrastructure Plan suggests that population growth would theoretically necessitate addition library provision within Newcastle-under-Lyme. However, across the Staffordshire Library Service, the priority is to ensure a modern flexible library offer and to not necessarily increase the number of library buildings unless there is a revenue budget to support the effective delivery of the library offer.
- 4.6. Within Newcastle-under-Lyme, the following library facilities can be found (refer also to Figure 2 below):
 - Audley Library - run by volunteers
 - Kidsgrove Library
 - Church Lane, Knutton
 - Loggerheads Library
 - Newcastle Library
 - Keele University Library
 - Silverdale Library - run by volunteers

- Talke Pits Springhead Library

Mobile Library Services:

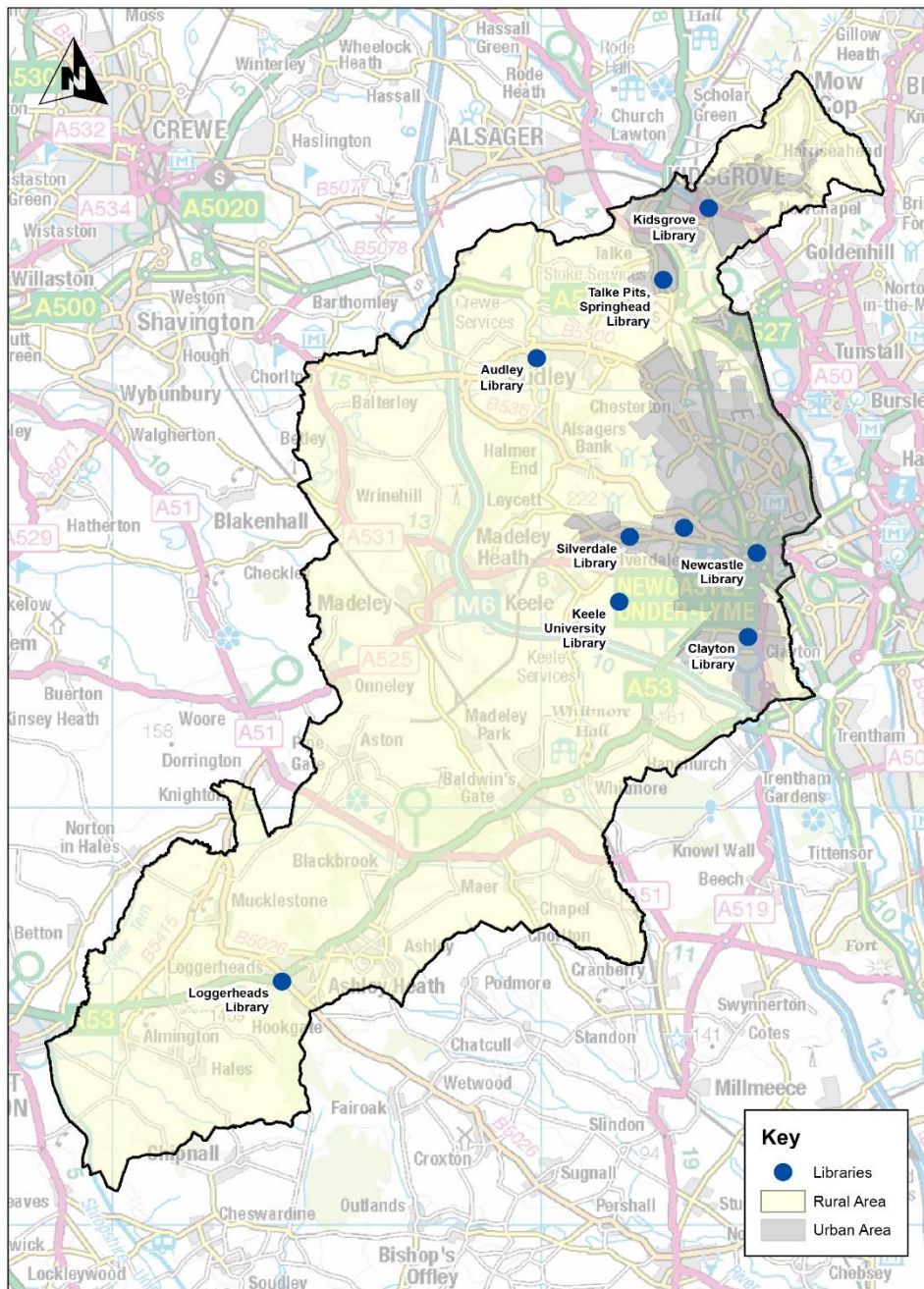
- Baldwins Gate (Village Hall)
- Chesterton (St Chad's Primary)
- Betley (Church Lane)
- Wolstanton (Working Men's Club, Bradwell Methodist Church & Marsh Hall Community Centre)

- 4.7. It is important to recognise the overall decline in the traditional use of library services, which is seen both locally and nationally, and the changing nature in which people access information and learning. Wi-Fi and power sockets for customer use within library buildings are essential to enable and widen access to online information and digital resources. Increasingly library customers access the library offer remotely which requires continued investment in digital technology and online resources.
- 4.8. Possibilities exist therefore to deliver library services which meet users' requirements against budgetary constraints such as through the innovative shared use of multi-functional spaces and online platforms.

Leisure

- 4.9. The forthcoming work on the Newcastle-under-Lyme Newcastle-under-Lyme Open Space and Green Infrastructure Strategy will provide greater detail and analysis to aid understanding of the relative provision of the various localities within the Borough. Nonetheless, for the purposes of this Baseline, it is useful to identify some of the outdoor & indoor sports facilities that are available for various activities within the Borough:
- Football: Woolstanton Marsh – 2 pitches, Chester Road, Kidsgrove – 1 senior pitch. A 3G pitch at the Kings CE Academy has also been recently opened thanks to funding from the Kidsgrove Town Deal & the Borough Council.
 - Rugby: Clough Hall – 1 pitch & Lyme Valley – 1 pitch
 - Bowling Greens: Chesterton Green – 1 green, Wolstanton Park – 2 greens, Westlands Sports Ground – 2 greens, Queen Elizabeth Park, 1 green
 - Tennis Courts: Wolstanton Park & Westlands Sports Ground
 - Fishing Pools: Places to fish (if you are a member of the angling clubs) include Madeley Pool, Bateswood Pool at Halmerend, Kidsgrove (various), Cheviot Place
 - Leisure & Sport Centres: Jubilee 2 includes swimming, gym & group exercises and climbing & Clayton Sports Centre includes badminton courts

Figure 2: Libraries in Newcastle-under-Lyme



Strategic Infrastructure

Staffordshire & Stoke on Trent Strategic Infrastructure Plan 2018-2038

- 5.1. To better understand the scale of the infrastructure challenge, Staffordshire County Council commissioned AECOM (a major infrastructure consulting firm) to prepare a Strategic Infrastructure Plan (SIP) for the county and Stoke-on-Trent City Council unitary authority area. A major catalyst for this being that a strategic overview of growth distribution and infrastructure provision was felt to be lacking, and this document sought to provide that strategic overview for Staffordshire & Stoke-on-Trent to understand the infrastructure needs for the period 2018-2038.
- 5.2. The value of such work is significant as there is a fundamental need for a joint approach on infrastructure planning and funding. This has been identified as a priority within the context of Government's encouragement for Local Planning Authorities to come together formally and informally to address strategic planning and infrastructure issues.
- 5.3. In reviewing this document, It is important to recognise that the SIP provides a high level, Staffordshire wide 'snap-shot' reflecting the position in 2018, but does not drill down into local infrastructure issues within each area in detail. Furthermore, it reflects an overview of growth patterns and the infrastructure needed to support such growth, which may not align with the approaches determined going forward as the Local Plan progresses. As such, it is not intended to supersede or replace local studies. Similarly, it is acknowledged that the time horizon of the document does not fit perfectly with that of the Local Plan (2020-2040).
- 5.4. It does however provide an important starting point in beginning to paint a strategic picture of the price of, and risks to growth. It also further serves to emphasise that within and above the statutory Duty to Cooperate, continued dialogue and close collaboration between local authorities and infrastructure providers is essential to ensure infrastructure planning and delivery is adequate to meet growing demand.
- 5.5. This document is available to view at:

<https://www.newcastle-staffs.gov.uk/planning-policy/local-plan-evidence-base>

Infrastructure Planning

- 5.6. As referred to in the SIP, the Midlands Connect Strategy illustrates some of the regional transport projects that will have a direct impact or benefit to Staffordshire & Stoke-on-Trent. The following are in some cases regional, but in other cases nationally significant infrastructure projects in Staffordshire & Stoke-on-Trent and adjoining areas:
 - High Speed 2 railway
 - M6 Smart Motorway
 - A38 improvements
 - M54 to M6 link road
 - Midlands Rail Hub

- Midlands Motorway
- A5 corridor improvements
- A500 / A50 improvements
- Creation of a new Major Roads Network

Strategic Employment Developments

5.7. Planned employment growth in the surrounding area is also likely to affect growth in Staffordshire. These sites include:

- Drakelow Park, Derbyshire
- Crewe HS2 Hub
- Land south east of M42 J10
- Birch Coppice, Tamworth
- Peddimore, Sutton Coldfield

Identified Growth Sites

5.8. The SIP highlights some of the key sites for employment growth which will support the expansion of the Staffordshire & Stoke-on-Trent economy up to 2038. This includes a number of sites identified by partners in Staffordshire as strategic priorities to aid economic development, and which could be supported by growth funding streams. For those Local Authorities in Staffordshire that share an administrative border with the Borough, the following schemes are therefore important to recognise:

- Stafford (2 schemes): Meaford & Redhill
- Staffordshire Moorlands (2): Blythe Vale & Tunstall Road, Biddulph
- Stoke-on-Trent (4): Chatterley, Whitfield, Etruria Valley Phase 3b, East & West Precincts and former Hanley Bus Depot, Smithfield

5.9. As referred to in the Issues & Strategic Options consultation, the West Midlands Strategic Employment Sites Study (2021) presents a high level overview on the scarcity and availability of strategic employment land across the region, and also considers sites (including those within the Borough) that could address a possible shortfall in employment land for a larger than local need.

Forthcoming developments

5.10. West Midlands Interchange is a Strategic Rail Freight Interchange with warehousing and wider development planned for South Staffordshire. The interchange, west of Junction 12 of the M6, provides a connection to the West Coast Main Line, a key rail freight route, to serve the West Midlands, the Black Country, Staffordshire, Birmingham, the northern M6 corridor and parts of Warwickshire. The Interchange will provide up to 743,200 square metres of rail-linked warehousing for the region's logistics industry and create up to 8,550 direct jobs. Phase 1 of construction is anticipated to begin in the second half of 2022.

- 5.11. Staffordshire and Stoke-on-Trent continues to be an attractive location for the logistics industry, and managing the impacts of freight within the county will be vital, such as through routing and improvements to, and provision of, new parking facilities for heavy goods vehicles where appropriate.

Strategic Infrastructure Needs & Requirements:

Transport - Roads: Current Situation

- 6.1. The SIP states that Staffordshire has excellent national road connections providing for local and strategic north-south and east-west movements. Strategic highway routes, which are managed and maintained by Highways England, include the M6, M54, A50, A5, A38, A449 and A500, and facilitate strategic and local inter-urban connections for commuting, business travel, freight, and leisure journeys whilst providing strategic links to key urban centres. These routes are supplemented by the Major Road Network (MRN) which covers the busiest and most economically important 'A' roads in the county which are the responsibility of Staffordshire County Council and Stoke-on-Trent City Council.
- 6.2. The A50 provides the strategic east-west route for traffic in the north of the county routing from Crewe to M1 J24A for Nottingham in the east. This route acts as a bypass for Uttoxeter and Derby. Opportunities for smarter running along the A50/A500 and A38 corridors are currently being considered as part of the work of Midlands Connect.
- 6.3. In terms of the local highway network, the priorities relate to the management of peak hour traffic demand on the major routes which serve the main urban centres of Stoke-on-Trent Burton-on-Trent, Stafford, Tamworth, Lichfield, Newcastle and Cannock.
- 6.4. Staffordshire County Council and Stoke-on-Trent City Council are partners with Midlands Connect, a pillar of the Midlands Engine, who develop and recommend strategic transport projects which will deliver the greatest economic and social benefits for the Midlands Region. Midlands Connect is the Sub-National Transport Body for the Midlands and are currently conducting studies of the A50 / A500, A5, A38, A42, M42, and Midlands Motorway Hub looking at improvements to accelerate growth and protect network resilience.
- 6.5. By 2040, Highways England aims to have transformed the busiest sections of the Strategic Road Network (SRN) to deliver a freer-flowing network which is safe, serviceable and supports economic growth. Over 100 major schemes worth £11.3 billion have been completed or are currently under construction as part of the first road investment period (RIS1: 2015/16 to 2020/1). This includes the £87.5m M6 Junction 10a to 13 Smart Motorway scheme in Staffordshire which was successfully delivered in 2016 and the M6 Junction 13 to 15 Smart Motorway scheme is currently under construction.

Transport - Roads: Existing Infrastructure Capacity and Issues

- 6.6. A number of key existing and future issues have been identified within Staffordshire & Stoke-on-Trent that impact the highway network and may restrict future growth opportunities:
- Significant congestion issues exist along the A50 & A500 corridors. These routes, along with the A34, provide diversionary routes during incidents on the M6 which further exacerbates queuing, delays and poor journey time reliability, particularly at peak times.
 - Closely spaced junctions and non-standard merges coupled with high volumes of traffic affects safety on the A500.
 - The A50/ A500 alignment through Stoke-on-Trent limits scope for capacity upgrades.
 - Congestion and safety issues exist in the main urban centres where several major routes converge. Development pressures including additional car parks serving developments around the town centres are exacerbating the situation. There are congestion and reliability issues on the M6 between and at J15 and J16 which serve North Staffordshire.
 - During the construction of HS2, construction traffic may impact on the operation of the road network in Staffordshire, although Staffordshire County Council is working with HS2 Ltd to manage this and minimise the impact.
 - Significant congestion issues exist along a number of major and principal local routes through Stoke-on-Trent, namely the A34, A50, A52 & A53.
 - According to DEFRA, there are 15 designated Air Quality Management Areas (AQMAs) in Staffordshire and one encompassing the whole city of Stoke-on-Trent.

Transport - Roads: Future Requirement to Meet Growth

- 6.7. Continued investment in the Strategic Road Network by Highways England will benefit Staffordshire and Stoke-on-Trent with the continuation of the Smart Motorway programme to increase capacity on the M6. Highways England's aspiration is for a Smart Motorway spine linking London and Manchester via Birmingham. The current gaps include M6 J21a-26 (north of Staffordshire).
- 6.8. The need for a link between the M54 and the M6 was identified in the 2014 Road Investment Strategy (RIS) to relieve congestion on the A460, A449 and A5. The preferred option was announced in 2018 (and a planning application submitted in 2020) which includes a dual carriageway link between M54 J1 and M6 J11 and associated improvements.
- 6.9. The Midlands Connect studies for the A50 / A500 and A5 have already begun to consider how congestion issues can be addressed and growth supported along these key corridors. The case for investment and opportunities to deliver transport interventions to accelerate growth in the region are being explored. This will lead to preferred investment priorities along these routes which will likely need to be delivered to fully realise the growth potential of Staffordshire & Stoke-on-Trent.

Transport – Rail: Current Situation

- 6.10. Staffordshire & Stoke-on-Trent are uniquely placed at the heart of the national rail network with access to large economic centres in the North West, Midlands and South East which are connected by the West Coast Mainline. (WCML).
- 6.11. Rail passenger numbers have doubled, and the volume of rail freight has increased by 70% across the UK rail network in the last two decades and further growth is forecast. Consequently, there is demand for greater capacity on all rail lines across Staffordshire & Stoke-on-Trent, especially on commuter services. The two busiest railway stations are Stoke-on-Trent and Stafford.
- 6.12. The government is supporting a significant rail modernisation programme which includes the construction of HS2. Network Rail invested over £38bn in the five years to 2019 (Control Period 5) on new rolling stock and modernisation including remodelling and a new flyover north of Stafford at Norton Bridge and the electrification and line speed increase of the Chase Line.

Transport - Rail: Existing Infrastructure Capacity and Issues

- 6.13. Rail connectivity in Staffordshire is currently delivered through a comprehensive rail network and a number of different franchises.
- 6.14. The West Coast Main Line is 700 miles in length from London Euston to Glasgow via Birmingham providing fast services from a number of Staffordshire stations to London. It is one of the busiest freight routes in Europe and part of the Trans-European Transport Network (TEN-T) route, carrying 40% of all UK rail freight traffic. There are at least 14 train operator companies using this line.
- 6.15. Cross Country operate services from the South Coast, Reading, and Birmingham to Manchester calling at Stafford and Stoke-on-Trent.
- 6.16. The Crewe to Derby Line which runs via Stoke-on-Trent and Uttoxeter currently suffers from overcrowding.
- 6.17. Stations in the south of the county provide rail links to Birmingham city centre within a 20-40 minute journey time whilst in the north of the county are within a 40 minute journey time of Manchester Piccadilly allowing for relatively short commuter journeys. Network Rail's Market Study for Regional Urban Centres (October 2013) suggests growth of between 24% and 114% for travel into Birmingham and Manchester by 2043 indicating the ongoing importance of these routes.
- 6.18. Much of the rail network is either already at or approaching full capacity during peak times as a result of high commuter demand and due to Staffordshire's close proximity to a number of major cities for employment, leisure and retail trips. The primary challenges

facing Staffordshire's rail network are outlined within the Staffordshire Rail Strategy (2016). These include:

- Cost, frequency and reliability issues throughout the county.
- Connectivity issues between rail stations and their surrounding areas including poor accessibility via sustainable transport options.
- The single line section of track to the north of Stoke-on-Trent between Alsager and Crewe limits the frequency of services between Crewe and Stoke on Trent and presents a significant challenge in the context of HS2. Capacity issues also limit service improvements to/from the North.
- Poor accessibility to Stoke-on-Trent station which is separated from the city centre by the rail line and ring road. The station also has an issue with regards to platform capacity. There is an aspiration to deliver an interchange hub by developing the land to the rear of station and to facilitate the reuse of vacant station buildings and the upper floors of the Grade II* Listed Station Building.
- The frequency of services between Crewe and Derby and lack of direct connections on some lines and to the East Midlands.
- A lack of capacity and poor quality parking facilities at a number of train stations.
- Access to Manchester Airport is poor with no direct services and access to Birmingham Airport varies across Staffordshire.
- All stations in Staffordshire are currently classified by Network Rail as category C or below which is widely recognised as falling short of average satisfaction levels. A lack of investment by Network Rail means, many stations have become increasingly dependent upon the National Stations Improvement Programme (NSIP) and Access for All Funding to deliver improvements.

Transport - Rail: Future Requirements to Meet Growth

- 6.19. There are six Train Operating Companies (TOCs) running services in Staffordshire and Stoke-on-Trent currently and these will continue to be refranchised up to 2038 depending on future policy changes. Three franchises that have been announced in recent years include the East Midlands (Crewe – Derby Line), the West Midlands and Northern (Stoke-on-Trent – Manchester) franchises.
- 6.20. Network Rail's West Midlands and Chilterns Route Study identified 3,300 extra seats on key commuter routes and 2,900 extra seats on long distance services by 2024. Longer trains have already been introduced on the Crewe to London Euston service and extra capacity is being delivered through new rolling stock as part of the new franchises. There may be a requirement in the future to extend the platforms at a number of stations within Staffordshire and Stoke-on-Trent to enable longer trains to call at these locations. The current satisfaction levels and likely continued increases in patronage also clearly indicate a need to upgrade a number of stations throughout the county.
- 6.21. High Speed Two (HS2) services will pass through Staffordshire when Phase 1 is operational. HS2 services will stop at Stafford Station and will improve journey times and connectivity to London and Birmingham. Phase 2b will provide further improvements in journey times and capacity from Stafford to London, Birmingham and the North West, while

releasing capacity on West Coast Main Line services for other Staffordshire & Stoke-on-Trent stations.

Transport – Public Transport: Current Situation

- 6.22. Bus services connect the main towns in Staffordshire & Stoke-on-Trent and provide cross-boundary links with neighbouring authorities and towns. Whilst bus services have declined in recent years, they continue to provide vital connections between people, services and places of work and enable people to make more sustainable travel choices.
- 6.23. Staffordshire & Stoke-on-Trent's bus network is operated by several private operators including Arriva Midlands, the main operator in Staffordshire, First Potteries, operating 70% of services in Stoke-on-Trent, D & G, and National Express West Midlands who are significantly increasing their presence in the county. Diamond Bus, Stagecoach and Select Buses also operate services on selected routes.
- 6.24. Key public transport issues include congestion and unreliable journey times, limited frequency of services and falling bus patronage levels affecting commercial viability. In order to reduce per capita road transport emissions, Staffordshire County Council wish to improve walking, cycling and bus facilities, and are promoting their use to encourage a modal shift away from car use.

Transport – Public Transport: Existing Infrastructure Capacity and Issues

- 6.25. Bus policy and infrastructure investment is considered in the District Integrated Transport Strategies. The main issues currently facing the Councils, operators and passengers include:
- Declining patronage levels. Since 2009/10, patronage in Staffordshire and Stoke-on-Trent has declined by 25% and 33% respectively.
 - Unreliable journey times are a county wide issue resulting from congestion and a lack of bus priority infrastructure.
 - Ongoing cuts to low demand services due to funding cuts and low passenger revenue.
- 6.26. Staffordshire County Council continues to work in partnership with bus operators with the aim of increasing passengers on commercial services. This includes providing suitable roadside stops within 350m of new residential developments and, where necessary, the delivery of traffic management measures to help improve the operation of bus services. To encourage bus use, a number of town centres across Staffordshire are delivering Local Town Packages to improve the public realm and facilities at bus stations and bus stops.
- 6.27. In addition, there are plans to give buses priority over other traffic on key bus routes in Stafford and Stoke-on-Trent. This will build on the successful delivery of other schemes including £10m of new public realm improvements in Stoke-on-Trent, a £4.8m Cycle Stoke project and £15m City Centre Bus Station.

- 6.28. Bus operators are continuing to invest in modern vehicles with lower emissions, GPS and contactless technology for ticketing and real time information systems. To maximise the accuracy of this data, bus stations and bus stops on key routes are being upgraded to include Real Time Passenger Information systems.

Transport – Public Transport: Future Requirement to Meet Growth

- 6.29. Improvements are planned to increase service provision and make bus travel more attractive, so it can better compete with other modes. These include:
- Upgrade of rail and bus interchanges to provide Real Time Passenger Information, bus priority, public realm improvements, pedestrian/ cycle connectivity, increased service frequency and passenger capacity.
 - Improved connectivity to serve new and expanding employment areas.
- 6.30. It will also be important to collaborate with private bus operators to encourage the roll out of more environmentally friendly buses, alongside the wider provision of electric charging points and associated infrastructure, to minimise the impact of travel.

Transport - Active Modes: Current Situation

- 6.31. Staffordshire has a network of over 2,500 miles of Public Rights of Way (PROW) and recreational routes. Several long-distance routes pass through the county including the Staffordshire Way and the Heart of England Way, as well as a range of shorter trails based around the county's Country Parks and recreational parks. The overall quality of the network available for walking, cycling and horse riding is good.
- 6.32. The county's cycle routes comprise a mix of advisory on road, traffic free routes and shared footways. In recent years, an increased demand for recreational cycle routes in rural areas and commuter routes in urban areas has encouraged the building and maintenance of more off-road cycleways, greenways and bike trails. The canal network is extensive, with two major canals and several branch canals which once served Staffordshire's collieries, ironworks and potteries and are now a key leisure destinations for canal boat and outdoor enthusiasts.

Transport – Active Modes: Existing Infrastructure Capacity and Issues

- 6.33. Sustrans is continuing to develop the National Cycle Network (NCN) which currently stretches 14,000 miles across the UK and is continuing to grow. In Staffordshire it includes routes which connect with local canal tow paths including the Caldon Canal, the Shropshire Union Canal and the Staffordshire and Worcestershire Canal.
- 6.34. There are a number of key cycling routes across Staffordshire including:
- National Route 5 between Birmingham and Lichfield, and between Stafford and Stoke-on-Trent.

- NCN 550 – Etruria to Cheddleton
 - NCN 555 – Stoke – Kidsgrove via Trent & Mersey Canal
- 6.35. Staffordshire & Stoke-on-Trent’s canal network is increasing in length as major restoration projects make use of infrastructure built over 200 years ago. The Trent and Mersey Canal connects Stoke-on-Trent with Tamworth and the Staffordshire and Worcester Canal links Great Haywood with Wolverhampton. These two canals are a key link for journeys between the River Severn and the Manchester Ship Canal and the respective towpaths are popular pedestrian and cycle routes.
- 6.36. Despite recent investment the following issues remain a challenge for active modes of travel:
- Cycle routes comprise a mix of advisory on road, traffic free routes and shared footways which are not always well integrated.
 - A lack of wayfinding or overprovision of signage can be confusing for pedestrians and cyclists.
 - Personal security is a key issue on some active travel routes particularly recreational routes which provide a commuting function, such as canal towpaths which are generally poorly lit/ unlit.

Transport – Active Travel: Future Requirement to Meet Growth

- 6.37. Staffordshire County Council has prepared a Local Cycling and Walking Investment Plan (LCWIP 2021-2031) which identifies and objectively prioritises walking and cycling investment in the county. Stoke-on-Trent City Council are also preparing a LCWIP and will work with Staffordshire County Council in the North Staffordshire conurbation to ensure a network wide strategy. The strategy aims to increase walking and cycling activity by improving safety, providing for greater mobility and creating better environments for sustainable modes.
- 6.38. Corridor based surfacing improvements are due to be rolled out on selected routes and former rail lines have been identified as an opportunity to increase greenway provision. Sustrans have acknowledged that the National Cycle Network within Staffordshire and Stoke-on-Trent requires investment.

Staffordshire Local Transport Plan 2011-2026

- 6.39. Alongside consideration of the Strategic Infrastructure Plan, a complementary & related document on the issue of transport is the Staffordshire Local Transport Plan which is available to view at:

<https://www.staffordshire.gov.uk/transport/transportplanning/localtransportplan/home.aspx>

- 6.40. This document sets out the County Council’s proposals for transport provision in the county, including walking, cycling, public transport, car based travel and freight, together with the management and maintenance of local roads and footways.

- 6.41. Significantly for the Borough, it also highlights the issue of carbon dioxide emissions and the designation of Air Quality Management Areas.
- 6.42. Newcastle's strategic location at the important junction between the roads running north from London to Carlisle and west to Chester has ensured that transport has played a major part in its growth. In addition to these historical routes, modern trunk roads also pass through the Borough. These include the M6, which is currently one of the most heavily trafficked and congested roads in the country along with the A500, which is a major route linking many areas of Newcastle-under-Lyme and Stoke on Trent with junctions 15 and 16 of the M6. Both of these junctions are adjacent to the Borough boundary and thus contribute to the traffic congestion in the area.
- 6.43. A number of main roads converge on the two main towns in the Borough, notably Newcastle-under-Lyme and Kidsgrove. The A34, A52, A525, A527 and the A53 pass through Newcastle and the A50, A5011 and A34 pass through Kidsgrove. Traffic on these roads is a significant source of air pollutants affecting the air quality of the Borough
- 6.44. Air Quality Management Areas (AQMA) are currently in force in four areas (Newcastle & Kidsgrove town centres, Little Madeley & the Maybank, Wolstanton & Porthill area) of the Borough due to past exceedances of the nitrogen dioxide annual mean objective, principally at the façade of residential premises adjacent to busy congested roads. Air Quality Action Plans (AQAP) for each AQMA and the Borough are now in place. Development of these AQAP's involved input from a number of different sectors including Highways England, neighbouring local authorities, planning, highways, and Public Health at Staffordshire County Council.
- 6.45. The AQAPs address the different ways in which levels of pollution can be reduced by managing traffic more efficiently, and encouraging walking, cycling, and the use of public transport across the Borough. Since declaring the AQMA's no new major sources of emissions have been identified.
- 6.46. As stated in the 2020 Newcastle under Lyme Air Quality Annual Status Report, overall Nitrogen dioxide levels in the Borough are falling, with the majority of monitoring sites showing annual mean concentrations below the annual mean objective. This indicates that the strategies currently in place are already helping to reduce the NO₂ concentration within these areas of the Borough.
- 6.47. It is, however, acknowledged that work needs to be done to ensure that any further developments, and changes to the road networks across the Borough do not lead to an increase in the annual NO₂ concentration above the annual mean objective of 40µg/m³ as well as bringing exceeding locations below this objective.
- 6.48. The priorities for the local authority in addressing air quality are therefore centred on ways in which:
- The amount of traffic on the road can be reduced.

- Assessing and improving emissions from the vehicles using the roads within the Borough
- Road traffic can be better managed to reduced stop-start, idling and congestion.
- Traffic light signalling systems can be improved to enable a more fluid movement of traffic, particularly around the Town Centre ring road.
- Residents can be encouraged to take up other forms of transport, including public transport, cycling and walking.
- Securing the retrofit of 25 buses to the latest EURO emissions standard.
- Work on producing a plan to reduce exceedances of the NO2 annual mean EU Limit Value to bring forward compliance in the shortest possible time. This work is being overseen by LAQM Annual Status Report 2020 via the Joint Air Quality Unit within DEFRA and is subject to final approval from the relevant government minister.

6.49. Further information about the AQMA's and Action Plan can be found at:

<https://www.newcastle-staffs.gov.uk/all-services/environment/environmental-protection/air-quality-newcastle-under-lyme>

Traffic Congestion in Newcastle-under-Lyme: North Staffordshire Multi-Modal (NSMM) Transport Model

NB: The following information relates to modelling work undertaken for the now defunct Joint Local Plan – with the original presentation to officers at Newcastle-under-Lyme Borough Council on 24 January 2018 summarising the key assumptions made and findings. Appropriate care & professional judgement should be used in the interpretation, analysis and reporting of the information provided.

6.50. A traffic modelling exercise on behalf of the Council has been undertaken using the NSMM transport model to show where there are existing and predicted congestion problems on the North Staffordshire highway network (for context, refer to Figure xx which illustrates the Borough's strategic road network). Other additional modelling work currently being undertaken (which will replace the outcomes referred to below) will inform the Local Plan in terms of both identifying the location of potential development sites and also transport improvements required to facilitate the delivery of key sites.

6.51. Information (refer to Appendix A) as been produced showing the locations of where roads are approaching or over capacity and where junctions experience significant delays. This also serves to inform the debate as to congestion problems and solutions. The base-year of the NSMM transport model of 2015 (the outputs of which are still considered a good representation of more recent traffic problems for a pre-Covid situation) and the time horizon to 2033 of the now defunct joint Local Plan were chosen as comparative points to produce information for both AM and PM peak-hours.

6.52. It is also important to note that the 2033 situation only included traffic generated by committed developments, i.e. those developments which had planning permission or were in the consent process, and did not take account of any proposed allocations. The only transport improvements included in the 2033 scenario are the Etruria Valley Link Road Project and the associated widening of the A500 between Porthill and Wolstanton. AM

peak-hour represents the 8-9 time period and the PM peak-hour represents the 5-6 time period. However, it should be recognised that both peak-hours extend for up to 2hrs during each of the peak-periods.

6.53. Banding of the congestion problems was identified on the following basis:

- Junction problems are based on average vehicle delay. Banding based on previous studies and is correlated to existing problems.
- Link problems are based on volume to capacity ratios. The capacity is based on the theoretical capacity of the road based on the standard and type of road. Obviously, the actual capacity will vary subject to local conditions and interactions with other junctions and roads.

6.54. It is emphasised that locations of the problems identified are the source of congestion problems and not where congestion or queuing is experienced. The problems identified result in queues and delays on the adjacent highway network, which are made worse where different sources of congestion problems interact with each other. Therefore, careful consideration needs to be given to the sources of the problems and how they will affect the operation of the adjacent road network.

6.55. The findings indicate that the AM and PM peak-hour results are generally very consistent, albeit for example, link capacity issues generally occur in the opposite directions of travel between the AM and PM peak-hours. These may be subject to further refinements and should not therefore be disseminated. Please also note that appropriate care and professional judgement should be used in the interpretation, analysis and reporting of the information provided on the location of congestion problems. For example, some locations identified may be affected by the structure of the NSMM transport model (e.g. the location of zone centroid connectors) and in reality may not actually be the precise location of congestion problems.

6.56. For 2015:

- Significant parts of the A500 trunk road are already approaching or above capacity.
- Junctions 15 and 16 of the M6 are the source of significant delays.
- A number of key junctions along the A34 experience noticeable delays.
- Key links and junctions along the A53 (between Newcastle Town Centre and the A500) are already approaching or above capacity.
- Some key links and junctions on the southern approaches to Newcastle Town Centre are already approaching or above capacity.
- A number of key junctions in Kidsgrove Town Centre experience significant delays.

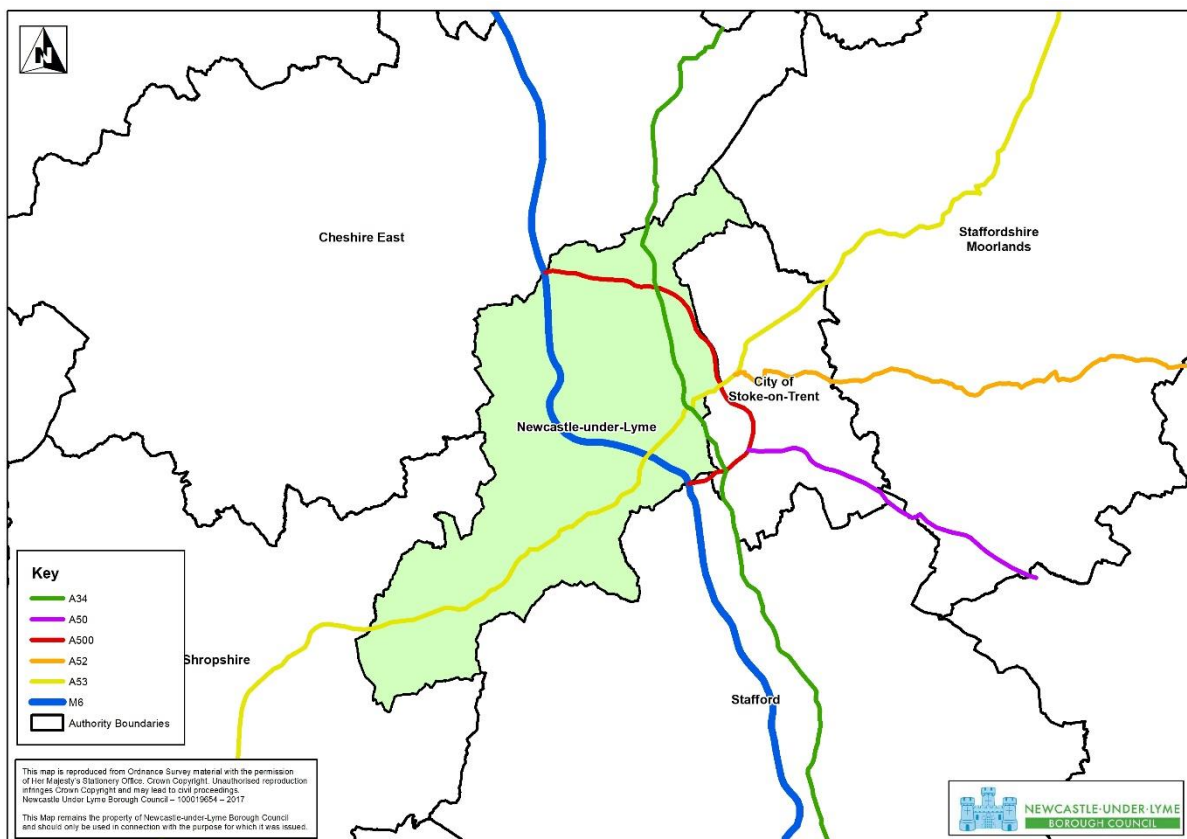
6.57. For 2033:

- Even with just committed development traffic then obviously the aforementioned traffic problems will get worse.

- However, Etruria Valley Link Road does mitigate some of the problems on the A500 between Porthill and Etruria and also at the A500/A53 Etruria Road grade-separated roundabout.

6.58. In summary, once the new outputs of the NSMM transport model are produced, they will be integral to identifying, assessing and designing appropriate transport improvements to deliver the Local Plan. The model will also be key to securing appropriate funding for these improvements. Retaining constructive working relations with National Highways and consideration of being involved in Midlands Connect will also be important. It should be noted that although there will be potential solutions to a lot of the predicted congestion problems, especially, in the context of unlocking particular development sites, there will not be solutions for all of the problems identified. Therefore, it is important that improvements to sustainable transport are also identified and promoted to complement any highway improvements.

Figure 3: Newcastle-under-Lyme’s Strategic Road Network



Staffordshire County Council Local Cycling and Walking Infrastructure Plan (LCWIP) 2021

6.59. The County Council considers that the LCWIP (produced in response to the Government’s Cycling & Walking Investment Strategy) will provide many benefits, most importantly the provision of a route based, robust and objective led method for prioritising investment in cycling and walking in the short, medium and long term. This will be pivotal in

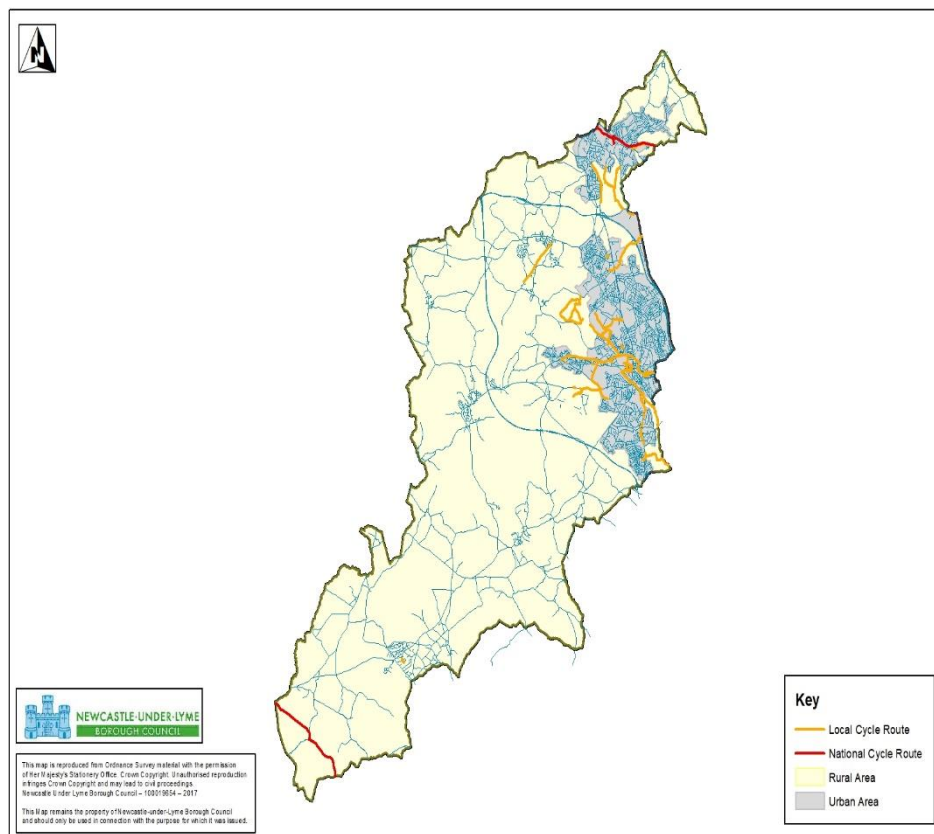
helping the County Council to continue to make the case for future walking and cycling funding.

6.60. It focuses on identifying where the County Council should be targeting its investment in infrastructure within the compact urban areas of Burton upon Trent, Cannock, Lichfield, Newcastle-under-Lyme, Stafford and Tamworth. These six main urban areas comprise compact settlements of a size that can support journey distances that can be easily made by walking and cycling. The LCWIP encourages more people to walk and cycle and become more physically active thereby improving the health and wellbeing of Staffordshire's residents.

6.61. Eighty percent of Staffordshire is countryside and there are over 4,510km of Public Rights of Ways (PRoWs), with almost every community being connected to at least one PRoW. Staffordshire County Council has a statutory duty to protect and assert the rights of the public to use and enjoy the network. The PRoW network provides great opportunities for physical activity and improved mental health and wellbeing. The most well-used PRoW routes, classed as A routes, include promoted trails across and within Staffordshire, including the Newcastle Way.

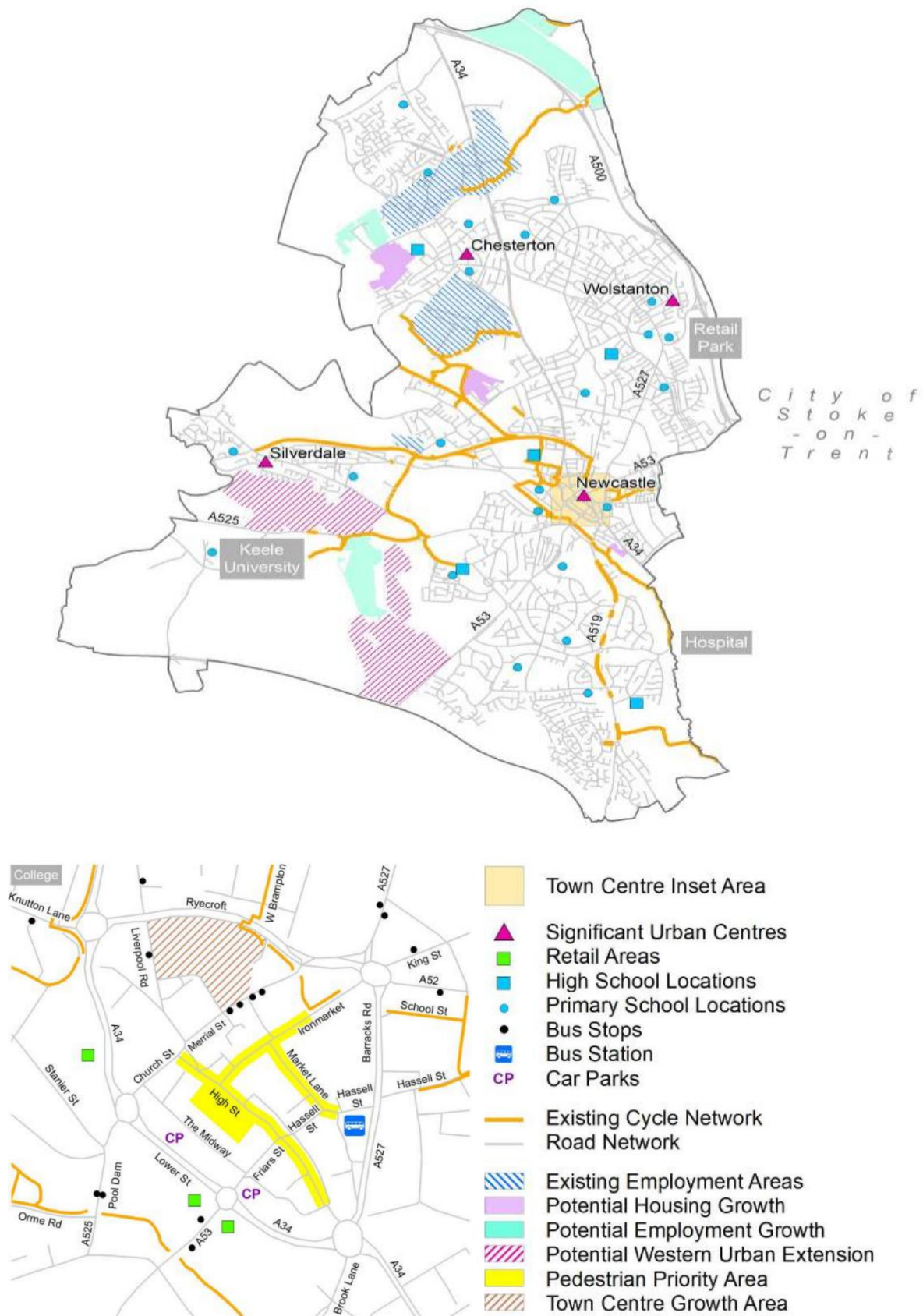
6.62. For Newcastle-under-Lyme, the LCWIP highlights that its priority cycle network may be the most challenging to improve as large sections are on heavily trafficked A roads. Similarly, the walking audit of town centre routes (excluding pedestrian priority areas) revealed that Newcastle-under-Lyme was the lowest performing, with this attributed to the ring road.

Figure 4: Local & National Cycle Routes in Newcastle-under-Lyme



- 6.63. Newcastle-under-Lyme urban area & its key attractions are shown below in Figure 5.
- 6.64. The detailed cycling & walking audits for Newcastle-under-Lyme can be viewed by referring to Appendices C & E available at:
<https://www.staffordshire.gov.uk/Transport/transportplanning/Walking-and-cycling.aspx>
- 6.65. Walking and cycling investment in Newcastle-under-Lyme has focused on key radial cycle routes and upgrading the public realm within the town. Improvements have also been made to routes within the Lyme Valley and along the Greenway (National Cycle Network route 551).
- 6.66. The majority of the priority cycle routes in Newcastle are on heavily trafficked 'A' roads with large roundabouts to negotiate, for example the A34 dual carriageway, A525 and A53. Sections of the A34 have no existing footways and crossing facilities on the ring road are dominated by subways with no cycling facilities. At certain locations, the required carriageway width is available to construct new cycle facilities, although often the only option is to consider quieter parallel routes that can be less direct. There are constraints on these routes, such as property boundaries and on-street parking.
- 6.67. Cycling and walking investment needs to build on the improvements already made in the town and support the funding that is expected to emerge through the Town Deal and Future High Street Funds, promoting economic growth and supporting the growing student population. Enhancing walking and cycling connectivity to Stoke-on-Trent is also a priority.
- 6.68. There may also be opportunities to consider the potential for betterment to the walking and cycling network associated with the development of HS2. Identified schemes include Swynnerton to Newcastle-under-Lyme, via Beech – creation of a footway and cycleway to the north of Swynnerton along the road diversion that will replace Stab Lane and Tittensor Road, including sufficient width on the overbridge. This will tie into the A51 and on to bridleways and Bottom Lane and will require an underpass, enhancing connectivity to Newcastle-under-Lyme.

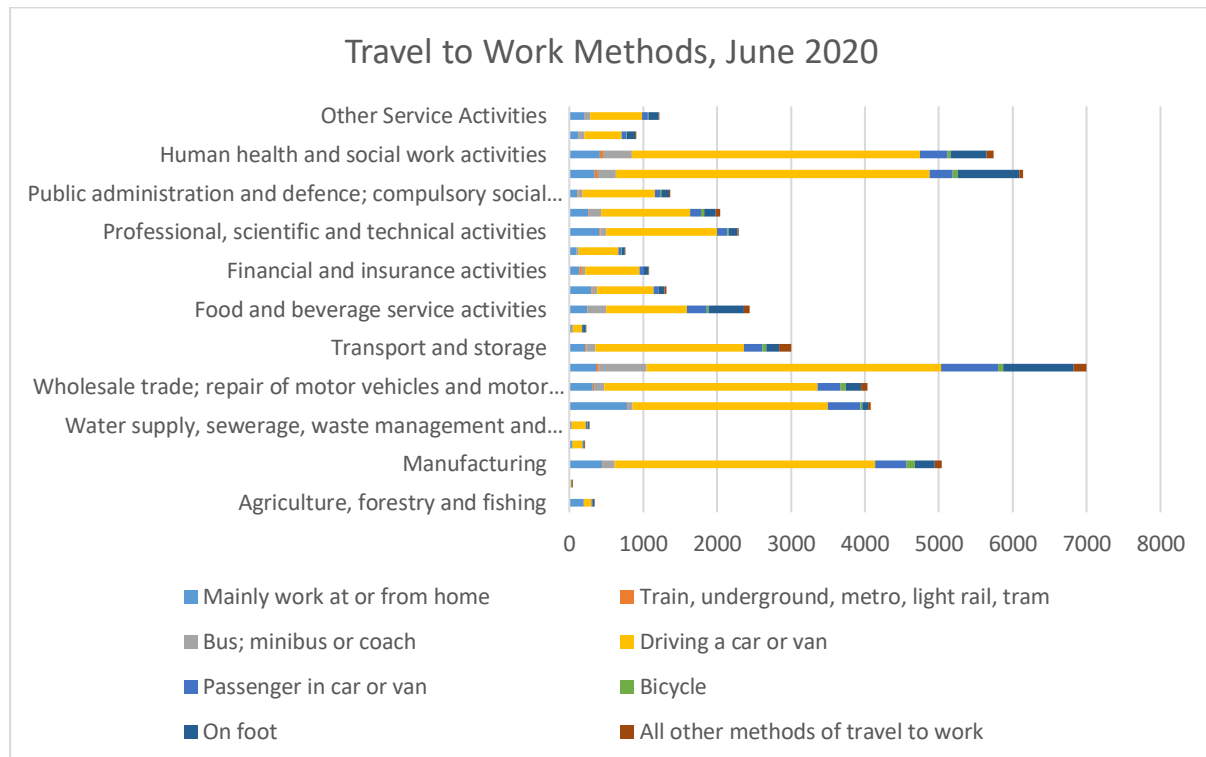
Figure 5: Newcastle-under-Lyme Urban Area Key Attractions Source: Staffordshire LCWIP



Further Newcastle-under-Lyme Transport information

6.69. Other data that is worthy of mention includes the 2020 Office for National Statistics Travel to Work Methods information which shows that the main form of transport used to travel to work is the private car. In Figure 6 below, this method can be seen dominating all industries. A very small number of people chose to travel by bus or rail, bicycle or by foot.

Figure 6: Travel to work methods in Newcastle-under Lyme – Source: ONS



6.70. Kidsgrove Rail Station has seen footfall increase enormously over the past decade, registering 235,000 entries and exits in 2018/19, up from 141,000 in 2010/11 (See Figure 7 below). This is an increase of 67% and is significantly higher than the average growth for both Staffordshire (47%) and the UK (43%). Growth in usage has been driven by the introduction of direct and improved links to Manchester, Stoke, Birmingham and London in addition to a much-improved performance of trains on the North Staffordshire Line between Crewe and Derby. As a result, the Station no longer meets the standards expected by passengers and does not compare favourably to other local stations. The plans for a new station building (forming part of the Town Deal Regeneration Fund projects for Kidsgrove) will ensure that it meets the needs of passengers and the local community together with any future service enhancements and in the longer term, the plan for a HS2 Hub at Crewe. The wider rail network in Newcastle-under-Lyme and its surrounding areas can be seen by referring to Figure 8 below

Figure 7: Kidsgrove Rail Station Passenger Usage

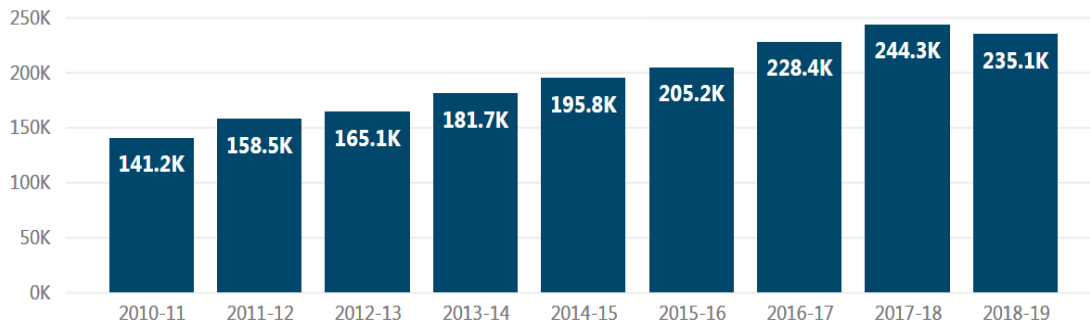
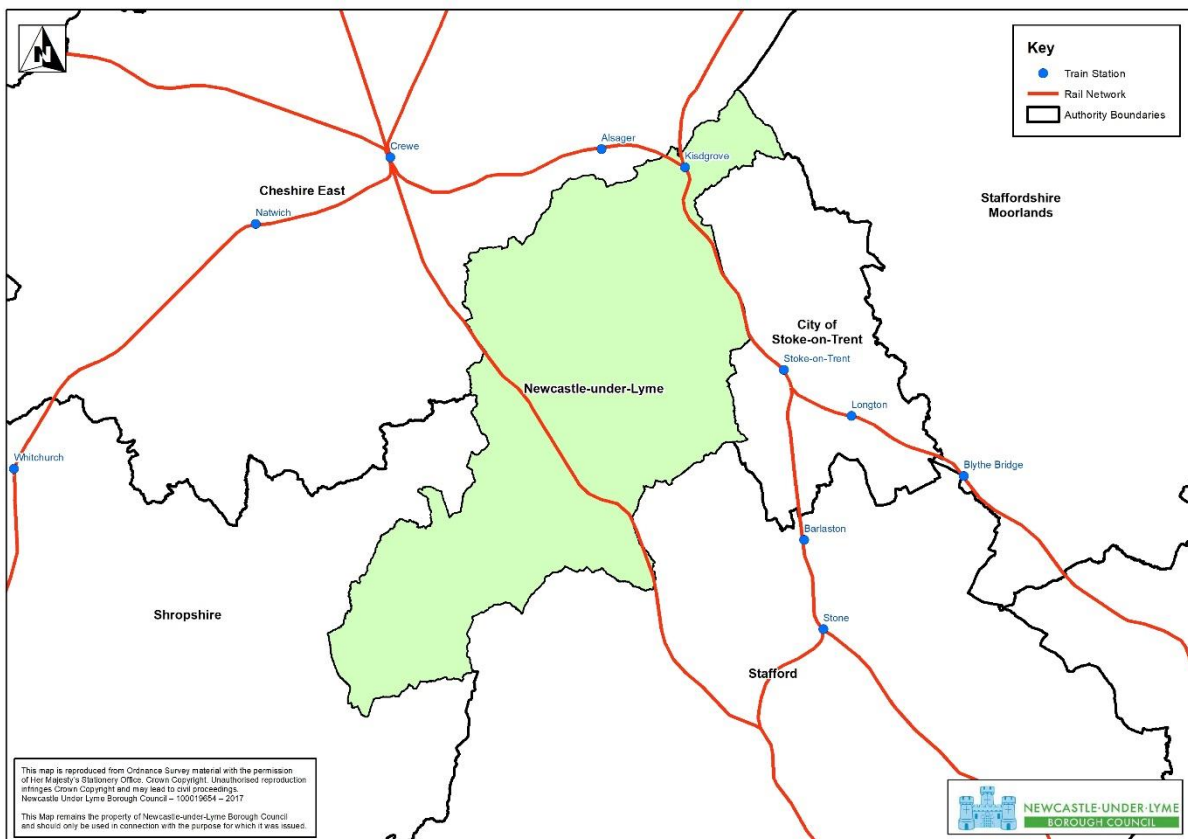


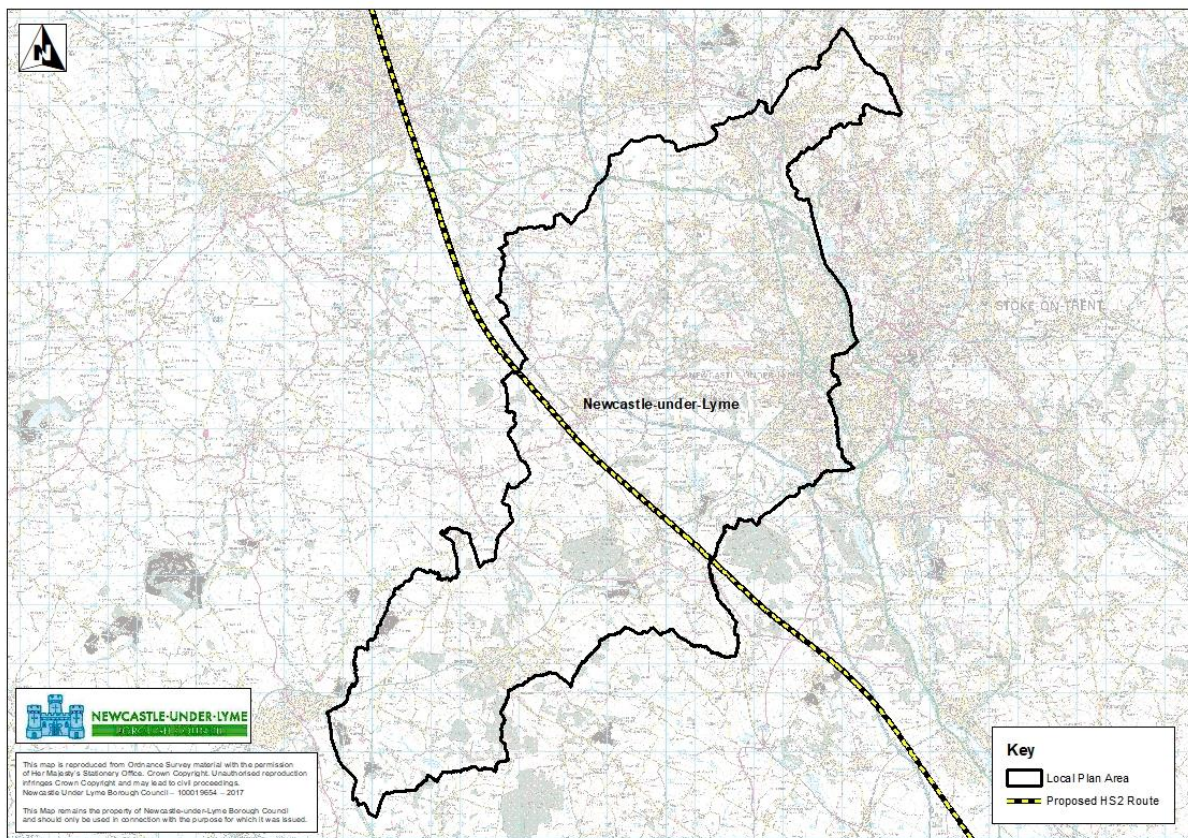
Figure 8: Rail network & train stations in Newcastle –under-Lyme & surrounding areas



6.71. In 2016, the Department for Transport (DfT) announced that a HS2 service will come through Newcastle-under-Lyme, upon the construction of the Phase 2A leg of the project, which is the left side of the “Y” network. The construction of Phase 1, the London to West Midlands stage, is aimed to be finished by 2026, with Phase 2, the West Midlands to Leeds and Manchester leg, scheduled to be completed by 2033.

6.72. The current proposal from the Department for Transport and HS2 LTD is that one of the two Manchester Piccadilly to London Euston Avanti West Coast trains will be replaced with a HS2 classic compatible service. This classic compatible service is currently scheduled to terminate at Macclesfield station, however, the Authority wishes to see this service extend onto Manchester.

Figure 9: HS2 Route through Newcastle-under-Lyme



6.73. Newcastle-Under-Lyme Bus Station is located in Newcastle-Under-Lyme town centre. The station is served by 53 local services, most of which are run by First Potteries Ltd and D&G bus. The main bus operator between Stoke-on-Trent and Newcastle-Under-Lyme is First Potteries. Two thirds of residents live within 350m of a bus stop with a half-hourly service between 8am and 6pm Monday to Friday. However, there are still residents who struggle with access to services. Accessible public transport is therefore key to sustainable development in the Borough.

6.74. There are 65 flexible transport operators in Newcastle-under-Lyme. Shopmobility and Mobility as a Service (MaaS) operator services, such as Uber, which is part of the ensemble of transport choices available to people in plan area.

6.75. Details on car charging points within the Borough can be found by referring to the Department for Transport website (see link below) which reveals as at 1 July 2021, there were 40 total public charging devices, 22 rapid public charging devices which collectively equates to 30.9 charging devices per 100,000 population.

<https://maps.dft.gov.uk/ev-charging-map/index.html>

6.76. The largest car parks in Newcastle-under-Lyme are (please note the redevelopment proposals at Ryecroft include a new multi-storey car park with an anticipated capacity of

450 spaces & a scheduled opening date in late 2022. The closure of the Midway car park will then take place in the short-term post the opening of the Ryecroft facility) :

Wolstanton Retail Park	1010 Spaces
NHS Royal Stoke	1100 Spaces
Midway	655 Spaces
Ryecroft	214 Spaces
King Street	170 Spaces
Goose Street	113 Spaces

Education – Early Years & Childcare: Current Situation

- 7.1. The availability of good quality childcare provision is essential for a number of reasons. It helps to ensure children have access to high quality support that contributes to early development, providing a basis for attainment at the Early Years Foundation Stage and throughout school. Childcare is also essential to allow parents the opportunity to access work, which in turn help to increase family incomes. Access to flexible, high quality and funded childcare is particularly important for lone parents and low income families who otherwise may have found access to employment unaffordable.
- 7.2. The profile of childcare provision across the UK has become increasingly complex in recent years, providing greater choice and flexibility for parents. Provision is offered within school settings as well as private, voluntary and independent providers (e.g. childminders). Parents have the choice of where and how to use their free childcare entitlement which could include the use of full-time, part-time or wrap-around care. Schools are responsible for their own admissions, competing with private sector providers, and can choose to offer free full time or part time places.
- 7.3. Staffordshire supports and benefits from a mixed economy of early years provision providing choice and flexibility to varying needs and requirements of families in the county.
- 7.4. Staffordshire’s Childcare Sufficiency Report (2021) states that 90+% of childcare providers who have been inspected by Ofsted are rated as good or outstanding, a figure which has increased in recent years. The Sufficiency report also concludes that there are currently sufficient childcare places in Staffordshire to meet demand. It does, however, highlight the need for continuous monitoring and development to ensure this remains the case particularly in light of the challenges of the pandemic. .
- 7.5. Data provided by Staffordshire County Council shows that as at Summer 2020, a total of 4,999 places for two year olds are available across the County, with 1614 vacancies. The vast majority of places are available at day nurseries. A total of 12,298 childcare places for 3-4 year olds are currently provided across Staffordshire while 3946 vacancies currently exist. Comparable data & reporting is also presented by Stoke City Council.

Education - Early Years & Childcare: Future Planning

- 7.6. The availability of childcare places is challenged by the ‘hourly rate’ paid to providers for free childcare places and the costs of offering these places. This could impact on the sector’s ability to grow and respond to future changes in demand. The availability of childcare places is particularly challenged in areas of deprivation where the market rate for a childcare place is lower, reducing provider’s ability to ‘cross subsidise’ places.
- 7.7. The future profile of childcare places will be influenced by changes in government policy regarding the hourly rate and the entitlement to free places. Any new entitlements may mean the Councils require capital funding to support an increase in the sector’s capacity over the short term.

Education - Early Years & Childcare: Future Requirements to Meet Growth

- 7.8. It is a statutory requirement for the County Council to provide childcare places for all three year olds. Staffordshire County Council's Planning Obligations Policy outlines benchmarks for the number of nursery pupils arising from a new residential development. Where the development falls within an area identified as being full in terms of early years provision, a contribution towards provision for early years is sought by the County Council.

Education – Primary & Secondary: Current Situation & Provision

- 7.9. Government policy in England over the last twenty years has created a more diverse and complex system of education provision and accountabilities. Hundreds of new multi academy trusts (MATs) have been created and given greater control over the academies in their trusts. Regional Schools Commissioners (RSCs), on behalf of the Secretary of State for Education, are responsible for approving academy applications from schools and for converting schools judged as 'inadequate' into academies. In addition, RSCs are responsible for approving the opening of all new 'free schools', which are brand new academies set up by MATs, charities, teachers or parents to respond to the need for new schools in their communities, particularly in response to new housing.
- 7.10. Regulatory changes have also changed the way funding to schools is distributed, resulting in increased control for academy trusts, governing bodies and central government and, in turn, a reduced role for Local Education Authorities. Nevertheless, as the Local Education Authority, Staffordshire County Council and Stoke-on-Trent City Council continue to support the provision of excellent education for all children of compulsory school age and retain significant responsibility.
- 7.11. Staffordshire wants every one of the county's 400 schools to be rated as 'good' or 'outstanding' by Ofsted and for the county to be near the top of the performance table of our statistical neighbours. It's Education and Skills Strategy drives a shared leadership approach involving providers, partners and stakeholders from across the education and skills landscape. Stoke-on-Trent's Strategic Plan outlines a similar aspiration. It seeks a step change in educational attainment so that every young person has access to a school rated 'good' or better.
- 7.12. Both the primary & secondary education estate in Stoke-on-Trent has undergone rationalisation due to a period of surplus stock during the 1990s and opportunities to renew the school estate via public finance initiative and Building Schools for the Future. A programme of capital investment to create additional primary & secondary places is being delivered in areas of growth across Staffordshire, through the expansion of existing schools and the opening of a new primary & secondary free school. Less than 10% of the total primary spaces across Staffordshire remain unused, with a lower surplus figure within Stoke-on-Trent. For secondary provision, the figures for surplus places are higher in both areas, with Staffordshire again having the highest figure.

Education – Primary & Secondary: Future Requirements to Meet Growth

- 7.13. Figures calculated by Staffordshire County Council will be used to estimate the total number of primary & secondary school places required to meet the planned housing growth across the Local Plan period and beyond.

Education: Summary of Primary & Secondary Education across Newcastle-under-Lyme

NB: The information presented is a reflection of that received from Staffordshire County Council in August & September 2021 and is subject to the caveats highlighted below in para 4.14

- 7.14. To aid preparation of the Infrastructure Baseline, Staffordshire County Council in September 2021 provided a high level position statement (the following paragraphs under this heading reflecting the statement) to the Council which it is fully acknowledged is an initial aid to help inform the preparation of the Local Plan, but is not intended to be utilised in development management decision making. Furthermore, it is recognised that this information represents a specific point in time and that the position can alter if a school has a good/bad OFSTED report, they change their admission numbers, demographic changes etc. Also, once the County Council get a better understanding of the Borough's directions and scale of growth they can begin to refine their position to reflect this and prepare a more detailed local infrastructure assessment.
- 7.15. Staffordshire County Council has a statutory duty to ensure that there are sufficient school places to meet the needs of the population. The School Organisation Team (SOT) acts on behalf of the Local Authority to carry out this duty and to ensure that resources are used efficiently.
- 7.16. The Borough of Newcastle is made up of two distinct areas for the purpose of school place planning: 1) Newcastle and 2) Kidsgrove. These areas are broken down into smaller planning areas and are used to plan the number of school places required. These smaller planning areas have been grouped based on the geographical location of schools, and by assessing pupil movement between schools and catchment areas.
- 7.17. A two-tier education system, with Primary (4-11 years) and Secondary (11-16/18 years) schools, operates throughout the Borough. Sixth form provision is offered on site at two secondary schools within the district and is mainly accessible at Newcastle College, with the Kings High School, Kidsgrove also providing this offer. As at September 2020, Newcastle has 30 primary schools, 1 infant school, 1 junior school, 7 secondary schools and Kidsgrove has 9 primary schools & 2 secondary schools.

Existing Education Infrastructure

- 7.18. A high-level overview of each planning areas capacity has been completed by Staffordshire County Council on the Borough's urban and rural areas and this is shown on

the following maps (Figures 10-14) for each phase of education and includes school place planning areas.

- 7.19. These reveal that there is room for growth at a lot of schools across Newcastle and Kidsgrove using existing education infrastructure, which means there may be no requirement for additional accommodation or request for S106 education contributions. Please note that St. John Fisher Catholic College is denoted by a blue star on the maps owing to it being a faith based school and it not serving a particular catchment area.
- 7.20. The maps (Figures 10– 14) are colour coded and state the range of how many dwellings could be delivered at primary phase and secondary phase using the school's current capacity.

Urban areas – Newcastle Town & Kidsgrove

- 7.21. In summary there are more places available than numbers of children residing across both phases of education in Newcastle Town and Kidsgrove i.e. there is spare capacity. Births have fallen and currently low numbers of housing are being built to generate more children, therefore the number of available school places are forecasted to increase in some areas over the next five years.

Cross border pupil movement

- 7.22. As Newcastle and Kidsgrove has borders with areas including Stoke, Cheshire East and Shropshire, there is significant pupil movement between these administrative areas.
- 7.23. Outward migration in Kidsgrove across both phases of education remains a challenge. Cheshire East is a net importer of children from Kidsgrove, there are currently 209 pupils in primary and 312 pupils in secondary choosing to be educated in Cheshire East, only 40 and 21 respectively coming in from Cheshire East, which equates to a net outflow of 169 and 291 respectively.
- 7.24. There are a similar number of pupils coming into Kidsgrove from Stoke as are going out Kidsgrove from Stoke.
- 7.25. Cross border movement between Newcastle Town and Stoke is slightly different. There are high numbers leaving Newcastle at both phases of education going into Stoke to be educated, but in comparison there are higher numbers of pupils from Stoke coming into Newcastle Town. At primary there are 277 pupils coming in from Stoke to Newcastle Town and 219 going out of Newcastle to Stoke. At secondary there are 529 pupils coming in from Stoke to Newcastle Town and 338 going out of Newcastle to Stoke. (not including sixth form).
- 7.26. Migration in and out of Shropshire is mainly around the Newcastle Rural area. There are slightly higher numbers of pupils coming in from Shropshire at primary and secondary than are going to Shropshire from Newcastle. The numbers are small compared to the Stoke and Cheshire East numbers.

Rural Newcastle – Madeley Catchment

- 7.27. Staffordshire County Council are in the early stages of a planned expansion at Madeley which should be completed by September 2023, to mitigate the dwellings in the catchment currently with planning approval. Ongoing discussions are taking place with the Academy, with capacity at the school limited due to site constraints. An opportunity to secure land adjacent to the school has been presented and discussions have taken place with the landowner. This is, however, a challenging situation as there are currently no funds available to purchase the land or to be able to develop the land for the children to use.
- 7.28. The academy has indicated during discussions that they feel that they would require the land adjacent to the school to be acquired before further expansion could be considered. The current site without the detached playing field is undersized for the number of pupils at the school.

Rural Newcastle – Sir Thomas Boughy Catchment

- 7.29. There are more places available than numbers of children residing in this catchment across both phases of education. Births have fallen and as there is no housing being built to generate more children the number of available school places are forecasted to increase over the next five years.

Newcastle under Lyme and Kidsgrove Urban Area

- 7.30. Primary: All of the seven primary areas are able to accommodate additional dwellings without the need for additional infrastructure. All seven areas can deliver a minimum 250 dwellings, five areas are able to deliver 750 dwellings or more and two areas between 250-499 dwellings.
- 7.31. Secondary: Nearly all secondary areas are able to deliver over 750 dwellings without the need for expansion. However, Chesterton Community Sports College, using its existing accommodation can deliver up to 749 dwellings, of which the 67 dwellings with planning approval on Watermills Road and the proposed 330 dwellings awaiting planning approval at Apedale Road would need to be deducted from that delivery total. The school are able to expand beyond this number of dwellings requesting S106 education contributions to mitigate the additional pupils expected from housing.

Newcastle under Lyme Rural Area

- 7.32. Primary: The rural areas especially Newcastle 3 primary area is more challenging, there is one school area that can deliver 750 dwellings or more (St Johns at Keele) , two areas are unable to deliver any housing (Betley CofE (VC)/St Mary's CE (A) Mucklestone), one area that can deliver 250- 500 houses (Baldwins Gate CE (VC)) and a further two catchments up to 250 dwellings (The Meadows/Sir John Offley CE (VC) & Hugo Meynell CE (VC) . Newcastle 4 is split into 3 primary catchment areas; Wood Lane and The Richard Heathcote are currently unable to deliver any housing however the Ravensmead catchment could deliver up to 750 dwellings.
- 7.33. Secondary: Sir Thomas Boughy is able to deliver over 750 dwellings. Madeley High School currently can deliver up to 300 dwellings.

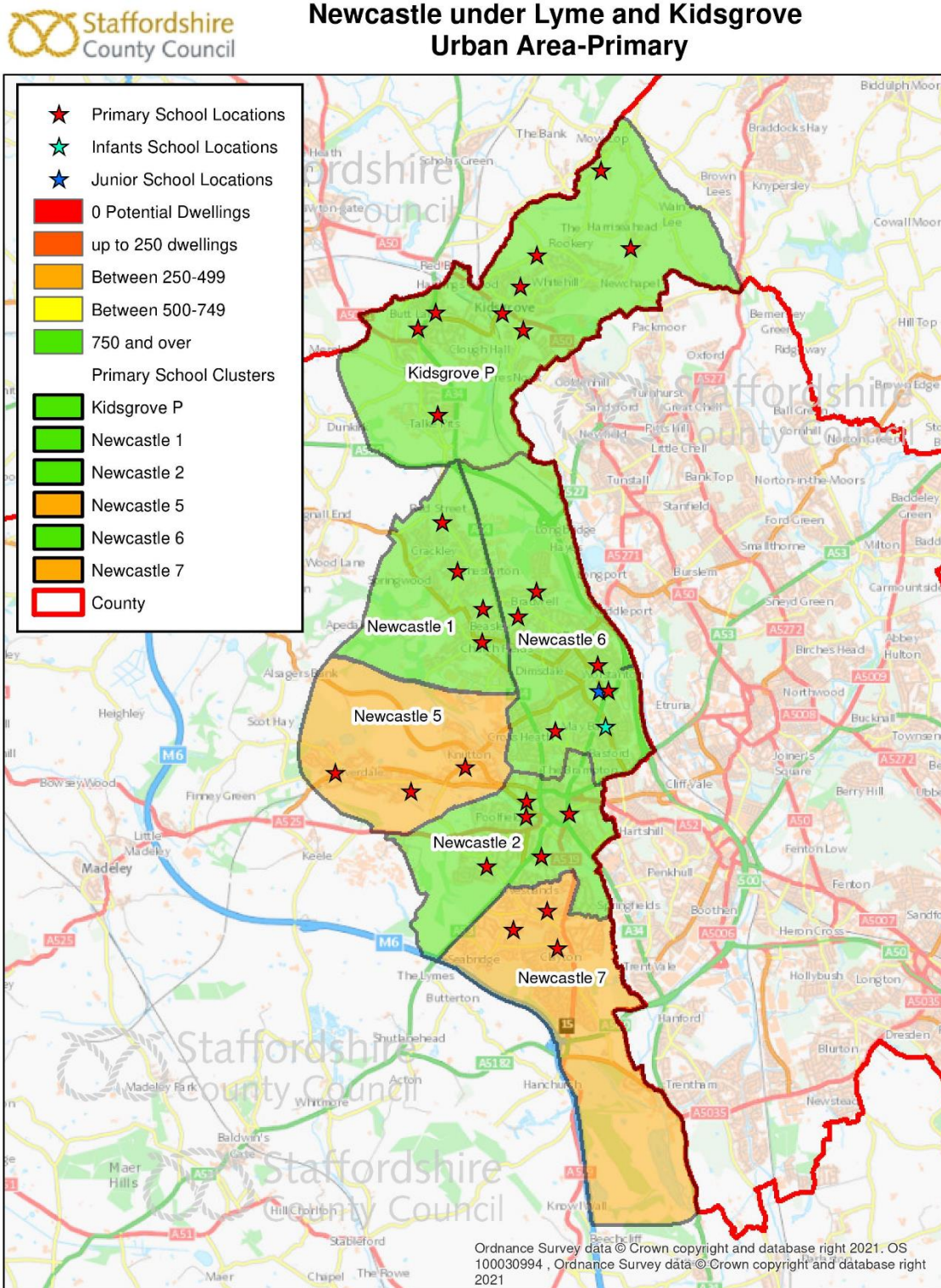
Additional Education Infrastructure

- 7.34. There are further opportunities for expansion of school sites in some areas which could be explored further if there was a requirement to do so if accommodation was needed above the available current capacity.
- 7.35. An initial desktop analysis (not publicly available) has been completed by Staffordshire County Council for all school sites in Newcastle Borough in terms of potential expansion within their existing site boundary using the Department for Education Area Guidelines for Mainstream Schools Building Bulletin 103 (2014).

Other considerations

- 7.36. It should be noted that the growth capacity numbers referred to above & in Figures 10-14 do not include additional Nursery provision, additional SEND provision and home to school transport costs. Information presented in the Strategic Infrastructure Plan do however reveal the relatively low vacancy rates for early years & childcare provision (ages 2, 3 & 4) in Newcastle-under-Lyme when compared to other Local Authorities in Staffordshire.
- 7.37. Indicatively, a development or a cluster of small developments of 750 dwellings may trigger the need for a new primary school and 5000 dwellings for a new secondary school. A 0.5Form of Entry (FE) (equivalent to 15 places per year group) expansion to an existing school would require a development of at least 330 dwellings. Site attributes, development costs, scope for school expansion in the longer term and home to school transport costs will also be significant considerations.
- 7.38. Any proposals for growth along the border of Staffordshire will need joint working and agreement with neighbouring authorities on the likely impact on education infrastructure and the possible solutions if required.
- 7.39. Liaison will continue to take place between Newcastle-under-Lyme Borough Council and Staffordshire County Council to ensure there is adequate provision for education infrastructure as a consequence of development.

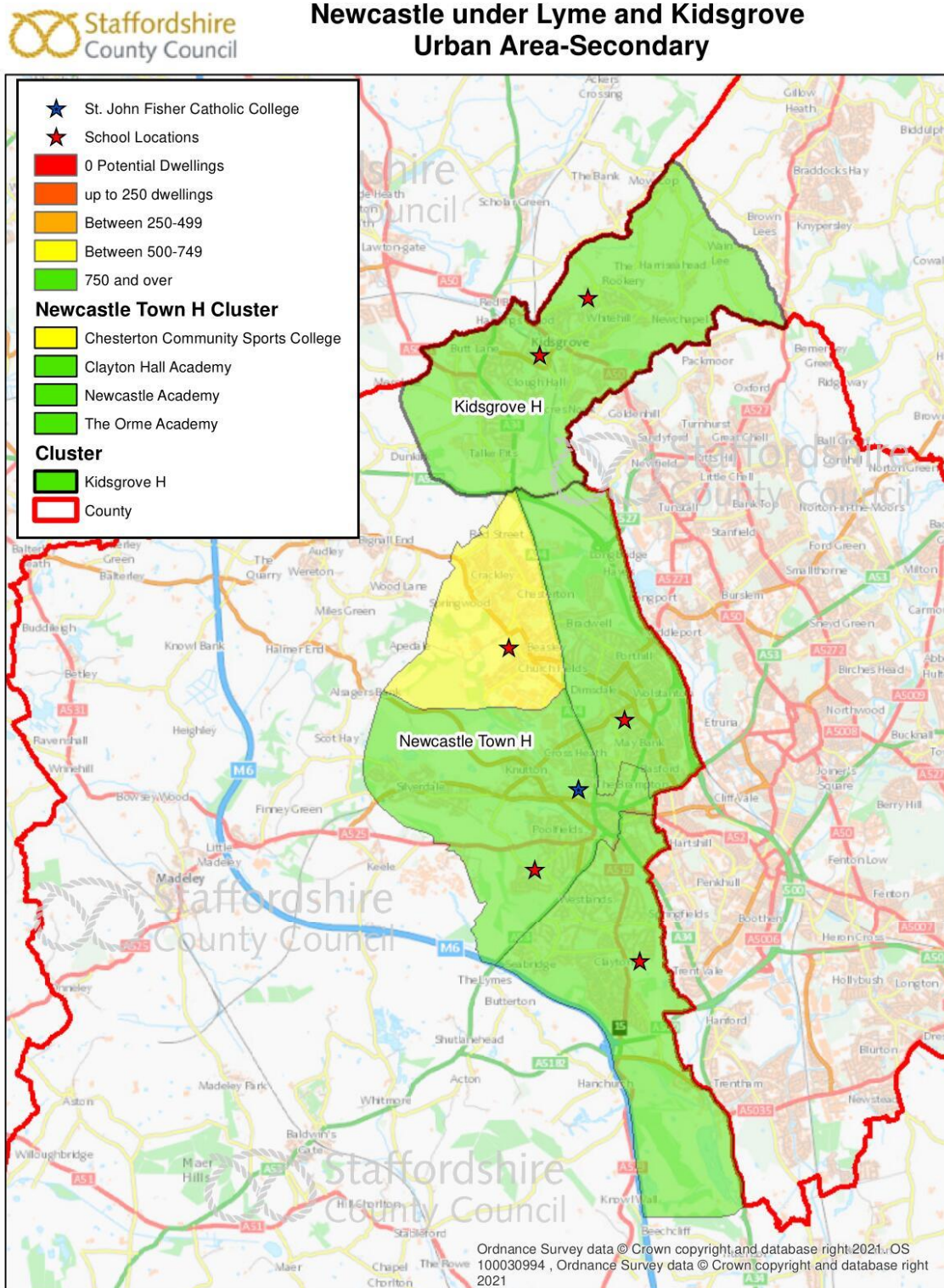
Figure 10: Source Staffordshire County Council



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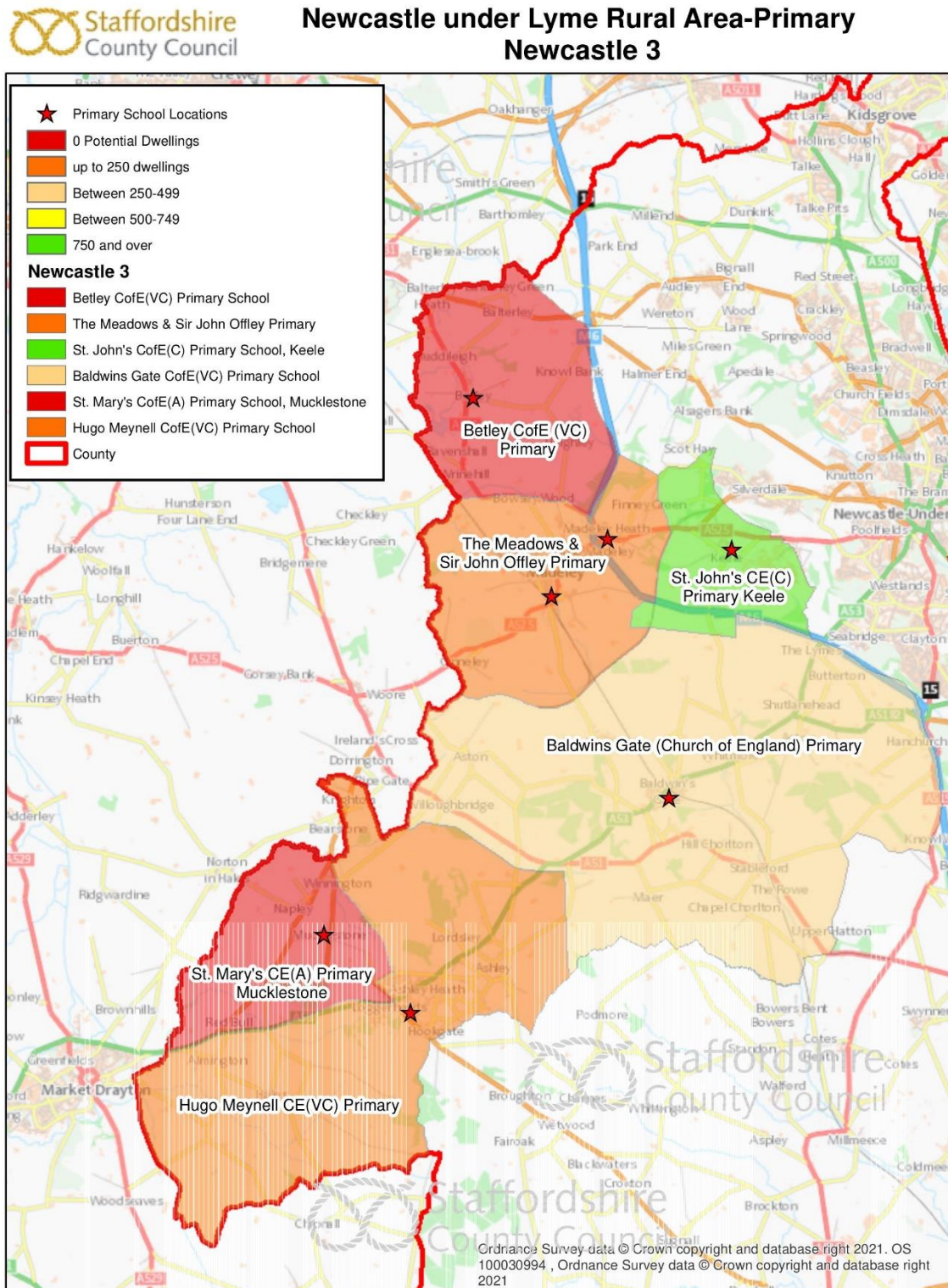
Figure 11: Source Staffordshire County Council



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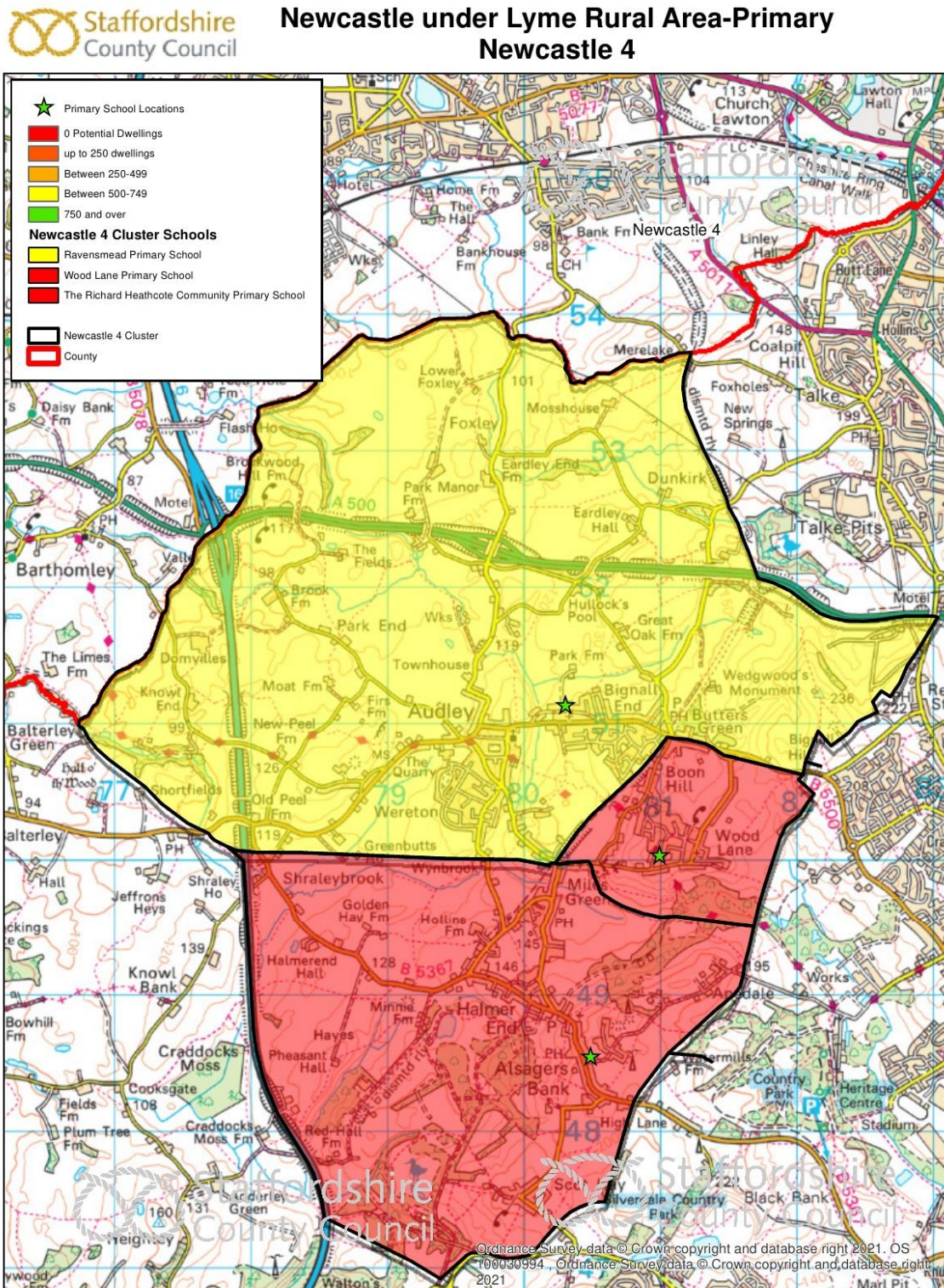
Figure 12: Source Staffordshire County Council



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Figure 13: Source Staffordshire County Council



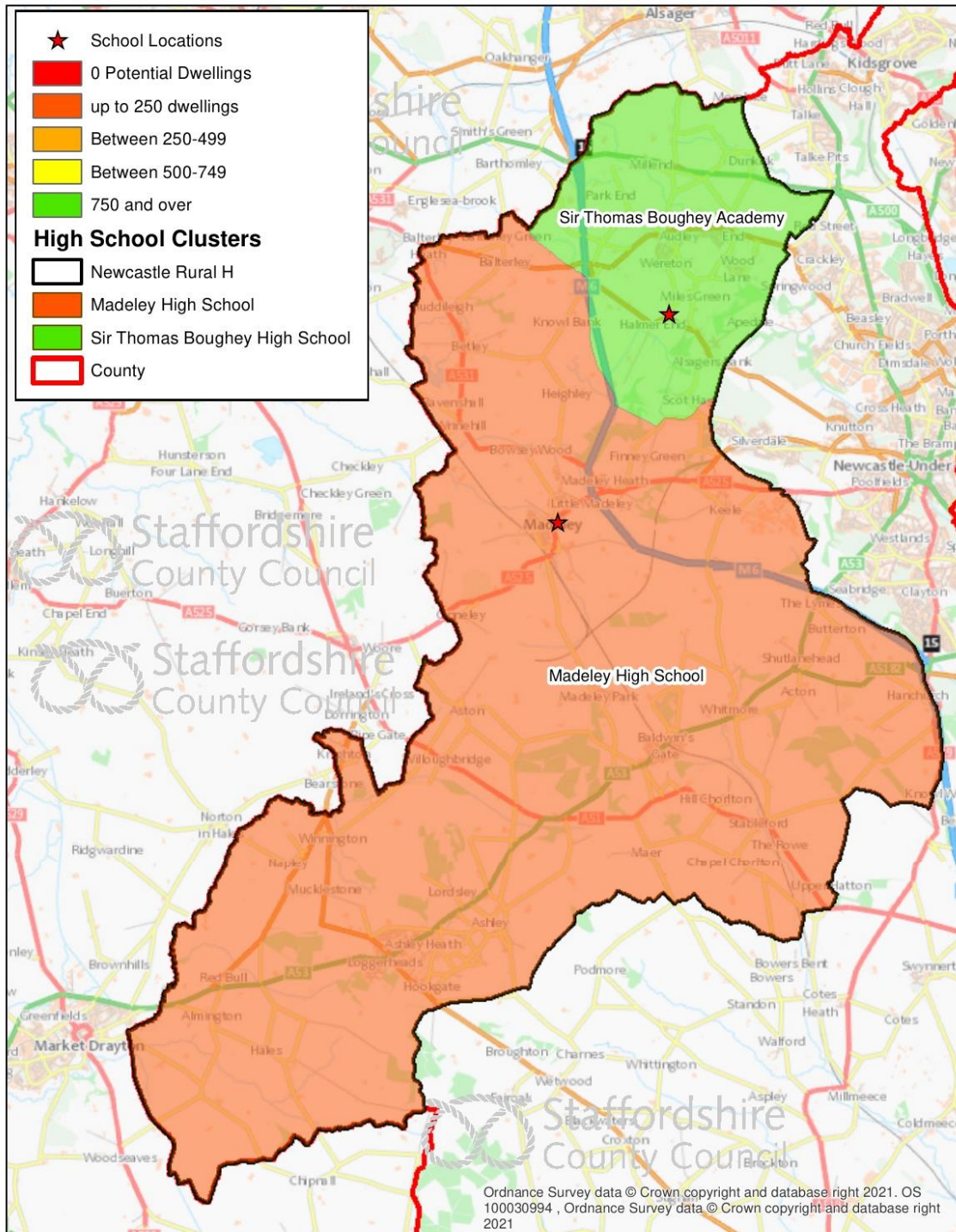
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Figure 14: Source Staffordshire County Council



Newcastle under Lyme Rural Area - Secondary



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Education – Further Education: Current Situation

- 7.40. There are ten Further Education (FE) campuses across Staffordshire & Stoke-on-Trent, operated by five providers: Burton & South Derbyshire College, Buxton & Leek College, Newcastle and Stafford Colleges Group, South Staffordshire College, and Stoke-on-Trent College. These campuses are located across all of the districts & Boroughs in Staffordshire & Stoke-on-Trent.
- 7.41. In addition, there are 50 secondary schools providing sixth form education. This includes 49 operated by the Councils and one free school.
- 7.42. There are nine Higher Education (HE) campuses across Staffordshire & Stoke-on-Trent, run by five providers. Staffordshire University and Keele University are the two largest Higher Education providers and Staffordshire University also delivers courses in partnership with local colleges across the county.
- 7.43. A decision is to be made imminently by Central Government's Department for Education on funding proposals for an Institute of Technology that will train thousands of people for high tech jobs across Staffordshire. Based in the Newcastle area, this will meet the demand for skilled workers in fields such as green technologies, artificial intelligence and advanced manufacturing.
- 7.44. Newcastle and Stafford Colleges Group is leading the project, alongside Keele University, Burton and South Derbyshire College and Stoke-on-Trent-based training provider Axia Solutions. The consortium also includes employers Siemens, Moog Aircraft Group and Fujitsu UK, who could send some of their workers onto courses there. If approved, the Institute is expected to open in 2023/4 and will have 1,500 students by its fifth year of operation.

Education – Further Education: Existing Infrastructure Capacity and Issues

- 7.45. There have been a number of capital investments across FE and HE institutes in recent years and further ambitious projects are in the pipeline subject to securing sufficient match funding.
- 7.46. The Stoke-on-Trent and Staffordshire Local Enterprise Partnership alongside private investment has supported £18m capital projects through the Advanced Manufacturing & Engineering Hub and the Skills Equipment Fund. The Advanced Manufacturing & Engineering Hub provides world-class vocational environments in the manufacturing & engineering sector and has been developed over two phases through £13.3m of LEP and private investment.
- 7.47. The £5m LEP funded Skills Equipment Fund (SEF) has funded seven projects with FE, HE and private sector employers across Staffordshire and Stoke-on-Trent to purchase state of the art equipment to enable the delivery of high quality and high level training programmes to support the growth in Stoke-on-Trent and Staffordshire's priority economic sectors.

- 7.48. Newcastle & Stafford College Group is planning the build of a £23m Skills & Innovation Centre at its Stafford campus. The Centre will house Engineering, Hybrid Plant and Motor Vehicle Maintenance, Computing and Construction Skills. The project will safeguard and enable growth to the existing provision currently housed at a leased site earmarked for redevelopment as part of the HS2/Stafford Gateway initiative. The project will provide much needed training in high-value infrastructure skills necessary to support the ambitious growth and job creation plans within the locality including HS2, significant housing projects and rapid developments in hybrid technology.
- 7.49. Stoke-on-Trent College has refurbished its existing library on its Cauldon campus to create a Creative & Cultural Hub to provide rehearsal spaces, studio and recording facilities and a performance venue.
- 7.50. Staffordshire University has constructed a £17m Apprenticeships & Digital Skills Hub at its Leek Road campus in Stoke-on-Trent. The project will support the training of thousands of Apprentices in digital skills and will provide flexible state of the art technology enabled space and specialist equipment to support engagement with local companies. The University has also very recently opened £40m catalyst building to house the Apprenticeships & Digital Skills Hub, a new library, social learning spaces and a restaurant and café.

Higher Education Provision in Newcastle-under-Lyme

- 7.51. Keele University is planning a number of capital projects including £45m state-of-the-art sports and science facilities including new laboratories and teaching spaces on its campus, a £18m Smart Innovation Hub to house its management school and incubated companies and a £13m SMART Energy Network Demonstrator (SEND). The SEND will be the first facility in Europe for at-scale living laboratory research, development and demonstration of new smart energy technologies and services in partnership with business and industry. The project will create a decentralised energy system, providing Keele University with the infrastructure to monitor and manage its energy across the campus – the largest in the UK.
- 7.52. The University are in the process of producing an Estates Strategy & Masterplan setting out how the campus should develop over the next 10 years. The masterplan framework will offer flexibility in responding to the challenges and opportunities that the next decade will bring in maintaining and enhancing services and facilities and delivering development strategies and site specific schemes across the campus.

NB: The following reflects information and dialogue with representatives of the Clinical Commissioning Group that has been received & undertaken during 2021, with the map detailing GP Practice Sites in Newcastle-under-Lyme correct as at July 2021.

- 8.1. Health services in England are led by NHS England, operating five regional teams that commission healthcare services and provide professional services to the health sector. NHS Midlands and East support the commissioning of services in the West Midlands in partnership with Clinical Commissioning Groups (CCGs) and Acute Trusts.
- 8.2. Clinical Commissioning Groups were established via the Health and Social Care Act 2012 and changed the way that primary care services are planned and organised. CCGs commission most of the hospital and community NHS services including most hospital care, rehabilitative care, urgent and emergency care, most community health services and mental health and learning disability services.
- 8.3. The following six Clinical Commissioning Groups cover Staffordshire and Stoke-on-Trent:
 - Cannock Chase CCG
 - East Staffordshire CCG
 - North Staffordshire CCG
 - South East Staffordshire and Seisdon Peninsula CCG
 - Stafford and Surrounds CCG
 - Stoke-on-Trent CCG
- 8.4. For both health and social care the focus is on prevention and care provision outside of hospitals/ the health estate where possible. ‘Together We’re Better’ is the Sustainability and Transformation Partnership (STP) for Staffordshire and Stoke-on-Trent, with the Staffordshire and Stoke Sustainability Transformation Plan (2016) highlighting a number of issues that are driving demand for services:
 - Poor current health and wellbeing of the population with particularly high prevalence of obesity and diabetes across the county and hotspots of high smoking rates.
 - The ageing and growing population generating increased demand for all areas of the health service.
 - Current culture and behaviours of citizens exacerbate demand as they attend A&E more frequently than peers, and the risk averse culture of staff does not counter this.
 - A significant proportion of patients with common mental health conditions.
 - Urgent care activity at both acute trusts is higher than peers for A&E attendances and readmission rates. High demand is due to the poor primary and community infrastructure, the current system configuration and the culture and behaviours of citizens.
- 8.5. A key part of Public Health England’s Strategy 2020-2025 is to promote place-based approaches to health care delivery and support the process of integrating services locally, including through the devolution of powers. This will include moving some services away

from secondary care and into primary care to be delivered at the community level. This approach will take pressure away from the acute hospital, deliver services more locally offering better access and to reduce costs. Early indications are that a number of Urgent Treatment Centres and new Integrated Care Hubs will be delivered across Staffordshire.

- 8.6. The NHS has prepared a note on provide an overview of the process of establishing the need for, developing, approving and funding for new, primary care, built infrastructure in England.
- 8.7. In January 2019, NHS England published The NHS Long Term Plan (LTP) and the Five-Year Framework for GP contract reform. They established the ambitions for the next ten years to improve the quality of patient care and health outcomes, and to deliver more co-ordinated and joined up primary and community care. The Five-Year Framework described the introduction of Primary Care Networks (PCNs) as the foundation of Integrated Care Systems (ICSs).
- 8.8. Now established, PCNs are groups of one or more GP practices that serve a population of 30,000 to 50,000 patients. It is at this level that a strategic view of primary care delivery is developed, and the corresponding estate requirement identified. ICSs (which will replace STPs in April 2021) will provide the strategic oversight at a regional level and will be able to identify where developments could support integrated working across health and social care partners. By April 2022, ICSs will become statutory bodies.
- 8.9. The decision to invest in primary care estate is only ever driven by clinical reasons, be this a requirement to replace poor quality accommodation, or to respond to an increasing or changing population in the immediate catchment area of a practice or group of practices.
- 8.10. New, substantial housing developments will increase the population in a small geographical area. The type of housing in that development will dictate the likely demographic of that population in terms of age, socioeconomics etc, which will give an indication of the level of demand this will create for primary care services. The NHS in England uses a formula to establish the amount of clinical accommodation required to serve a local population based on the number of people and the anticipated access rate. Should a practice apply for new clinical capacity either as a new build, an extension or a refurbishment, this formula will be applied.
- 8.11. There is a great deal of planning and diligence that needs to be undertaken before any investment in new primary care estate can be made. This is a process that can take several years from the identification of a requirement to the doors to a new facility opening.
- 8.12. A strong case must be made to prove out the requirement and secure the required NHS approvals before any design and development activity can even commence.
- 8.13. The Estates Strategy is reviewed annually. An indicative timescale for the NHS business case approval process would be:
 - Strategic Outline Case: 3 months to approval
 - Outline Business Case: 6 months to approval

- Final Business Case: 6 months – 12 months dependent on approving body
- Contract agreement: 2 months
- Construction: Project dependent, but a minimum of 12 months to 2 years is usual

8.14. It is also important to recognise that the NHS are currently working with all Local Authorities in Staffordshire to build up an evidence base about health care needs which can inform policy development in the Local Plan. For information, the current provision of GP surgeries within the Borough is illustrated in Figure 16 below. The data presented (Table 4.7) in the Strategic Infrastructure Plan suggests that as at the time of its production (2018), there was a surplus of primary healthcare capacity in the Borough.

Figure 15: Primary Care Development Process

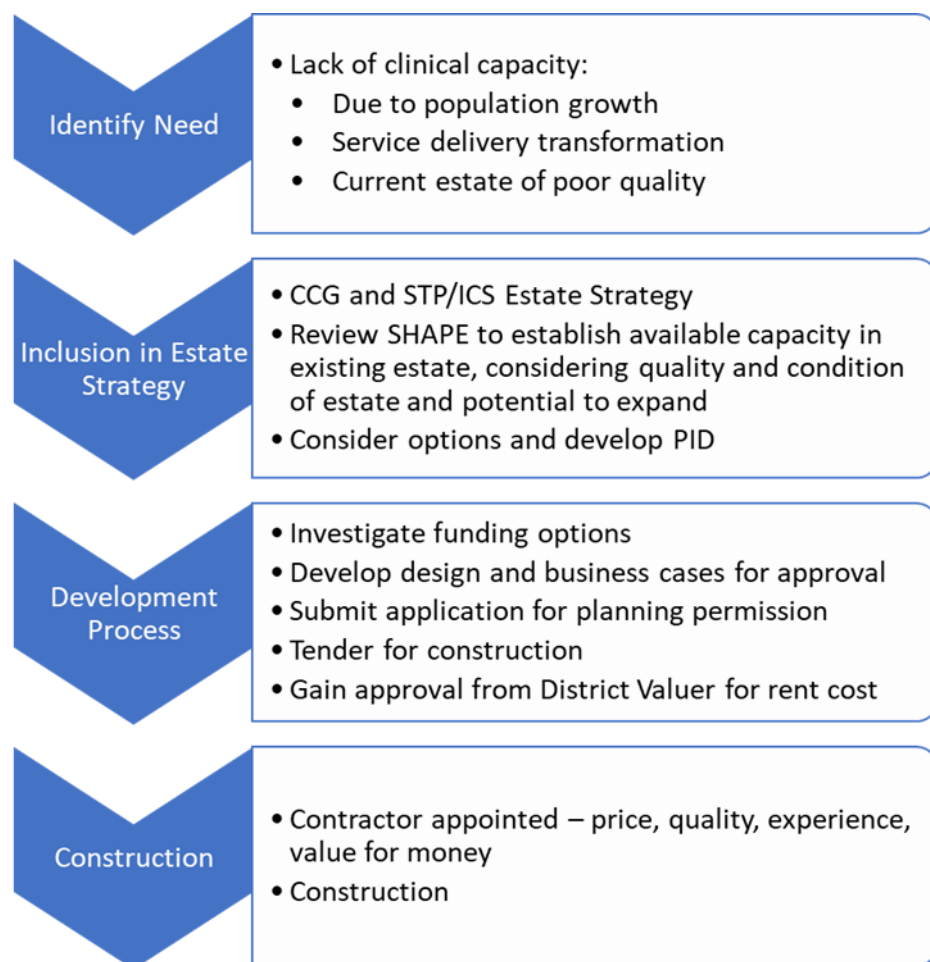
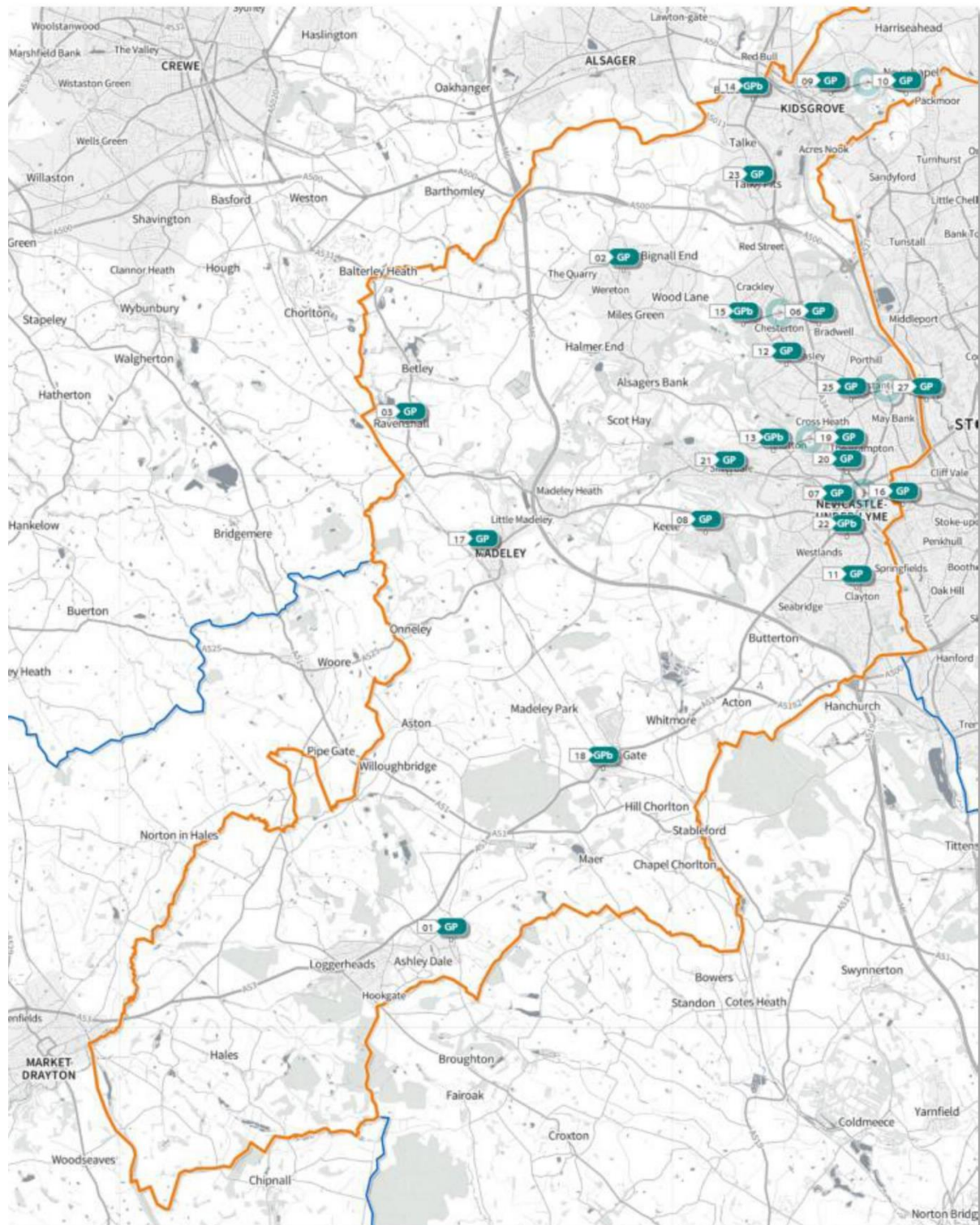


Figure 16: GP Practice Sites in Newcastle-under-Lyme – Source: Clinical Commissioning Group



Health & Social Care – Hospitals & Mental Health: Current Situation

- 8.15. There are a significant number of organisations providing acute hospital, community and mental health services in Staffordshire & Stoke-on-Trent, which include Foundation Trusts, NHS Trusts and social enterprises. The majority of these services are commissioned locally by CCGs with some more specialist services under the responsibility of NHS England. Acute health trusts provide secondary care and more specialised services, in which acute trusts are commissioned by CCGs.
- 8.16. Hospital provision in Staffordshire & Stoke-on-Trent is provided by the Midlands Partnership NHS Foundation Trust, the University Hospitals of North Midlands NHS Trust, University Hospitals of Derby and Burton NHS Foundation Trust, the North Staffordshire Combined Healthcare NHS Trust, and the Royal Wolverhampton NHS Trust.
- Midlands Partnership NHS Foundation Trust provides physical and mental health, learning disability and adult social care services across Staffordshire & Stoke-on-Trent, as well as Shropshire. Hospitals operated by the Trust include the Cheadle & Leek Moorlands Hospitals in Staffordshire Moorlands, the Haywood & Longston Castle Hospitals in Stoke-on-Trent & St George's Hospital in Stafford.
 - The University Hospitals of North Midlands NHS Trust has two sites: Royal Stoke University Hospital, located in Stoke-on-Trent, and County Hospital, located in Stafford.
 - The North Staffordshire Combined Healthcare Trust provides patient centred mental health, specialist learning disability and related services for people of all ages. They run the Harplands Hospital in Stoke-on-Trent as well as smaller inpatient units and rehabilitation centres.

Health & Social Care – Adult Social Care: Current Situation

- 8.17. The Department of Health and Social Care is responsible for adult social care policy in England, with the Care Quality Commission the independent regulator of adult social care services to ensure people are provided with safe, effective, compassionate, high-quality care.
- 8.18. In England, adult social care is either paid for publicly or privately, or provided voluntarily. Local authorities provide publicly funded care. They have a legal duty to provide care to those who pass centrally set needs and means tests. For those who pass these tests, local authorities commission or directly deliver services.

- 8.19. Pressures on adult social care budgets have increased in recent years, owing to increased demands for care (with a growing, ageing population resulting in more adults with long-term and multiple health conditions and disabilities living longer), reductions in overall funding for local government and the increased cost of care.
- 8.20. As a result, conditions in the adult social care sector suggest an increasingly fragile provider market, growing unmet need, further strain on informal carers, less investment in prevention, continued pressure on an already overstretched care workforce, and a decreased ability of social care to help mitigate demand pressures on the NHS.
- 8.21. Expenditure on adult social care is at the discretion of local authorities in order to meet different levels of need though some additional sources of adult social care funding have been introduced in recent years including the Adult Social Care Precept which is a levy added to Council tax bills.
- 8.22. In Staffordshire, the Council is spending a record amount on social care owing to the aforementioned conditions facing the sector. There is a critical need for the implementation of a sustainable funding arrangement for care services in order for the County to meet the continuing long term needs of the population. The issue of funding for adult social care services is a significant issue at both the Staffordshire and national scales.
- 8.23. Stoke-on-Trent is seeing similar pressures on its adult social care services. Over recent years it has made significant financial savings and undergone a shift toward more services commissioned from the independent sector, becoming more of a facilitator than a provider of care.
- 8.24. It should be noted that local demand for care services will vary based on the overall size of the population and specific population care needs, the affordability, quality and location of existing services. This is covered in more detail within Staffordshire County Council's market position statements and associated intelligence documents. Newcastle-under-Lyme currently has significant provision for extra care facilities, residential care homes & nursing homes, but it is anticipated that during the Local Plan period additional units within each of these sectors will be required.

Utilities: Energy – Electricity: Current Situation

- 9.1. In the UK, National Grid owns, operates and maintains the UK's 400 kV and 275 kV national transmission network. The system then connects to local networks owned by distribution companies.
- 9.2. In Staffordshire & Stoke-on-Trent electricity is supplied via National Grid infrastructure by Western Power Distribution, however demand is measured on a regional basis, not a site specific basis. The networks assets include over 90,000km of overhead lines and 134,000km of underground cables.
- 9.3. Western Power operates the local electricity network at three voltage levels; 133kV, 33kV and 11kV. This is distributed via National Grid network cables; electricity is then distributed around the county via substations.
- 9.4. Details on Western Powers Capacity Map which details Newcastle-under-Lyme local authority area is available to view at:

<https://www.westernpower.co.uk/our-network/network-capacity-map-application>

NB: The Western Power data detailed below is correct as at October 2021

- 9.5. This network capacity map provides an indication of the networks capability to connect large-scale developments to major substations. For Newcastle-under-Lyme, it reveals the following information:
 - The two Newcastle substations (33/11kv & 132/11kv) which cover a large part of the main urban area of the Borough are classified as amber & green respectively in terms of demand head room
 - The substation at Hookgate (33/11kv) which covers the south-western part of the Borough, including Loggerheads, is classified as green in terms of demand head room
 - The substations at Talke (33/11kv) & at Goldenhill Bank (33/11kv) cover much of the northern parts of the Borough, such as Kidsgrove, are classified as amber in terms of demand head room
 - The substation at Scot Hay (33/11kv) covering western areas of the Borough including Madeley is classified as amber in terms of demand head room
 - The substation at Hill Chorlton (33/11kv) covers part of the south of the Borough including Baldwin's Gate and is classified as red in terms of demand head room
 - A substation located within the Cheshire East Administrative Area (Bearstone 33/11kv) but serving part of the south-west of the Borough, is classified as green in terms of demand head room
- 9.6. It is also important to recognise that the Western Power data is provided as an indication only and is not intended to be relied upon. Data is taken from the six monthly updated WPD Long Term Development Statement (LTDS) and supplemented with regularly updated quotation statistics. Furthermore, connections to the substations with an overall RED classification are still possible, however there might be a requirement for significant network reinforcement to overcome the impact on the network constraints.

- 9.7. There are eight grid 132kV substations serving Staffordshire & Stoke-on-Trent, located at Bushbury, Burslem, Boothen, Stafford, Stagefields Lichfield, Cannock and Burntwood. Each of these is connected to a number of substations (132/33kV) for local distribution via underground and overhead network. There are five of these 132/33kV grid substations at Whitfield, Newcastle, Meaford C, Ketley and Bushbury. The 33kV in turn supports six Primary substations (33/11kV) across Staffordshire at Ketlye, Whitfield, Longton, Meaford C, Rugeley and Bushbury.
- 9.8. From primary substation level the 11kV overhead and underground network supports larger industrial applications and feeds distribution substations, transforming voltage down for local network distribution serving domestic and smaller industrial connections.
- 9.9. Looking further ahead to 2025 and 2030, more reinforcement is likely to be required including additional Super Grid Transformers (SGTs) and new Grid Supply Points (GSP) in some scenarios.

Utilities: Energy – Gas: Current Situation

NB: Details of pipe infrastructure reflect information provided by Cadent Gas in March 2021

- 9.10. National Grid owns, operates and maintains gas infrastructure across the UK. National Grid does not supply gas but provides the conveyance system via a National Transmission System (NTS). The gas supplier in Staffordshire & Stoke-on-Trent is Cadent Gas.
- 9.11. National Grid is also responsible for operating the entire NTS, which transports gas from supply points to the Gas Distribution Networks (GDNs). The GDNs are further split into Local Distribution Zones. National Grid has a duty to extend or improve the NTS, where necessary, to ensure an adequate and effective network for the transportation of gas. Reinforcement projects for Local Distribution Zones (LDZ) are planned on a reactive basis.
- 9.12. Two high pressure gas lines supply the area which broadly run along a route from the west of Tamworth heading north-west between Lichfield and Burton and then running to the north of Stafford. Low pressure pipe lines then supply local areas with gas.
- 9.13. Peak demand is predicted to fall over the next seven years; however consultation will be required to ensure infrastructure has capacity to deal with localised increases from future development.

Utilities: Energy – Gas: Future Requirement to Meet Growth

- 9.14. Cadent Gas has not publicised any other proposals for new gas infrastructure in Staffordshire & Stoke-on-Trent. Therefore there are no known planned gas infrastructure works in Staffordshire & Stoke-on-Trent. However, based on the potential population

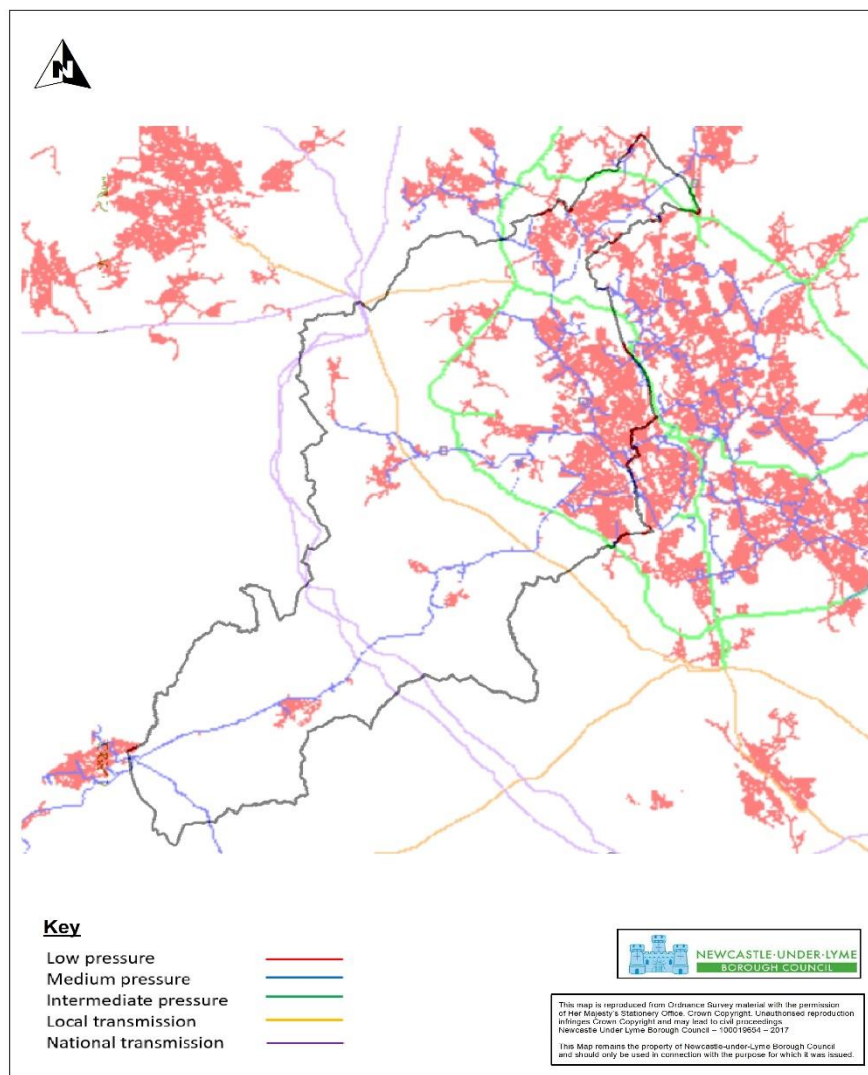
growth, it is anticipated that demand will increase and reinforcement works may be required.

9.15. Cadent's general approach to gas provision in responding to anticipated built development states that they have a formal process for connections to ensure the market is fair and transparent. The first customer to submit and accept a connections quotation receives the gas reservation.

9.16. Further dialogue will take place that establish indicative guides on spare capacity. As an example Network X has capacity for 200 homes near Y pipeline, but with the understanding a warning would be added by Cadent saying this would be void the next day as an alternative customer could have taken that spare capacity on the same day. Similarly, if any investment decision is made with indicative results it would not be Cadent's responsibility if the connection offer is different, once a formal submission is sent.

9.17. Gas pipe infrastructure in Newcastle-under-Lyme and the surrounding area is illustrated within Figure 17

Figure 17: Gas Pipe Infrastructure



Utilities: Energy – Renewables: Current Situation

- 9.18. Distribution and supply of electricity in Staffordshire & Stoke-on-Trent is managed by UK National Grid and Western Power Distribution. Renewable energy development will depend largely on the policies and strategies of the Districts, Boroughs, City and County Councils and future national energy policy.
- 9.19. In line with local and national policy, renewable energy is encouraged in developments to reduce the dependence on fossil fuels and moving towards more sustainable resources. There are a number of potential sources of renewable energy across Staffordshire & Stoke-on-Trent including biomass, anaerobic digestion, landfill gas, Energy-from-Waste (EfW) incineration, solar photovoltaics and onshore wind. There are a number of additional facilities currently under construction or with planning approval with considerable capacity.

Utilities - Water Supply: Current Situation

- 9.20. There are currently two water supply companies serving Staffordshire & Stoke-on-Trent, Severn Trent Water and South Staffordshire Water
- 9.21. These companies have produced Water Resource Management Plans (WRMP) to cover the next 25 years. These plans detail the strategies being implemented by Severn Trent Water and South Staffordshire Water to meet customer demand over the next AMP (Asset Management Plan) cycle, AMP 7, and beyond, accommodate the potential increase in demand from new development and manage the existing supply of water whilst accounting for future changes due to climate change. Plans are updated every five years.
- 9.22. Severn Trent Water supply an area of 21,000km across the Midlands and Mid-Wales providing clean water to 7.9 million people. The area is divided into fifteen water resource zones (WRZ's) which vary greatly in size. The Local Plan area is covered by the North Stafford Water Resource Zone.
- 9.23. Within the WRMP, future challenges to water supply have been identified including:
- Sustainable abstraction and preventing environmental deterioration – the WRMP continues the programme of restoring sustainable abstraction and, as a result abstraction reduction is required over the next 10 years for some sources. The Water Framework “no-deterioration” objective will potentially result in a further reduction of current deployable outputs being replaced.
 - Climate change and uncertainty – Severn Trent Water’s modelling is based upon IKCP09 datasets which all required a reduction in deployable output.
 - Meeting future growth – In order to meet the demand from population growth, it is planned that it will be offset using mitigation methods such as reducing leakage.
- 9.24. It is important to ensure that there are sufficient water resources in the area to cover the increase in demand without the risk of shortages in the future during periods of

high demand and without causing a negative impact on the waterbodies from which water is abstracted. The WRMP further focuses on:

- The availability of water resources and future pressures which may impact upon the supply element of the supply / demand balance
- The allowance within those plans for housing and population growth and its impact upon the demand side of the supply and demand balance.

9.25. Assessments show that, without further investment, the WRZ will face a supply/ demand shortfall over the next 25 years and therefore Severn Trent have developed a number of proposals to address and prevent the deficits. These include:

- Leakage: Approximately 23% of total water is lost to leaks annually. Between 2020 and 2025, Severn Trent Water aim to reduce leakage by 15%
- Water efficient activities: This involves water demand management through providing free/ subsidised products to increase efficiency. Severn Trent Water also provide fee/ subsidised products to increase efficiency checks which result in customers saving water, energy and money. Through this programme, it is estimated that water usage will reduce by 19 MI/d through AMP7 (2020 – 25).
- Increasing water meters - Severn Trent Plan to change their approach to water meters, whereby the current reactive programme becomes proactive resulting in an increased household meter coverage, Estimates suggest that full meter coverage would reduce demand by up to 80 ML/d. As the North Staffordshire WRZ is one of the areas with the greatest supply and demand deficit, it would be one of the first areas adopting this approach.

Utilities - Water Supply: Severn Trent Water Existing Infrastructure Capacity and Issues

9.26. As part of a 2010 to 2020 initiative, Severn Trent have reduced leakage by 72 megalitres per day (MI/d) and reduced water consumption by 45 MI/d by means of a water efficiency programme.

9.27. As outlined in the WRMP (2019), the population in the region supplied by Severn Trent, is likely to increase by an additional 1.13 million people over the next 25 years. Meanwhile, water resources are predicted to become scarcer. Severn Trent has identified climate change as having the potential to cause loss of deployable output in the long term.

9.28. As stated above, it is predicted that in the absence of future investment, Severn Trent will experience supply/demand shortfalls in the North Staffordshire, Nottinghamshire and Strategic Grid Water Resource Zones (WRZs). WRZs are defined as the largest possible zone in which customers share the same risk of a resource shortfall.

Utilities - Water Supply: Severn Trent Water Infrastructure Required to Support Growth

- 9.29. One fundamental outcome of the Water Framework Directive is to prevent future deterioration of the environment. Severn Trent has estimated that to meet this directive, up to 159 MI/d may have to be replaced. To restore sustainable abstraction, Severn Trent estimates that over the next decade, abstractions from a number of sources must be reduced by up to 69 MI/d.
- 9.30. The WRMP outlines Severn Trent's approach to managing and mitigating water supply risk through strategic investment in new/alternative supply sources to replace those that are, or are likely to become, unsustainable and mitigate against the impacts of abstractions through local environmental protection measures. New supply schemes recommended in the area of study include: improving water treatment works outputs at North Staffordshire Site L (located in the Peak District, within the North Staffordshire WRZ) during periods of low raw water, as well as enhanced treatment and sustainable abstractions at the Peckforton Group boreholes.
- 9.31. Severn Trent also seeks to reduce water demand and increase water efficiency, expanding approaches currently in place.
- 9.32. Between 2020 and 2025, Severn Trent's aim is to reduce leakage volumes by a further 66 MI/d (15%), with a view to accommodating increased demand and uncertainty due to climate change. This is in line with Ofwat's expectation of a minimum of 15% leakage reduction by 2025.

Utilities – Waste Water

- 9.33. Severn Trent Water and United Utilities are responsible for waste water within the Staffordshire & Stoke-on-Trent area.
- 9.34. Sewerage undertakers have a duty under Section 94 of the Water Industry Act 1991 to provide sewerage and treat wastewater arising from new domestic development. Both Severn Trent Water and United Utilities are required to prepare a five-yearly Strategic Business Plan which set out the investment for the next Asset Management Plan (AMP) period. Typically, the investment plans are committed to provide new or upgraded sewerage capacity to support future growth.
- 9.35. Waste Water assets are managed on a 5 year Asset Management Plan (AMP) period and are regulated by the Water Services Regulation Authority (Ofwat). AMP periods are linked to regular price reviews, allowing for the combined regulation of price, investment and service delivery.
- 9.36. Sewerage undertakers must consider the growth demand for wastewater services when preparing their five-yearly Strategic Business Plans which set out investment for the next Asset Management Plan (AMP). Typically, investment is committed to provide new or upgraded sewerage capacity to support allocated growth with a high certainty of being delivered. Additional sewerage capacity to service windfall sites, smaller infill development or to connect a site to the sewerage network across third party land is normally funded via developer contributions, as third party arrangements between the developer and utility provider.







- 9.37. Severn Trent are due to publish their Drainage and Water Management Plan in 2022/23. Initial findings of this work will feed into the process of producing the Local Plan.
- 9.38. Local Plans, Water Resource Management Plans (WRMPs) and AMPs should inform each other, allowing for an indication as to the quantum of development, the impacts on existing infrastructure and associated capacity constraints.

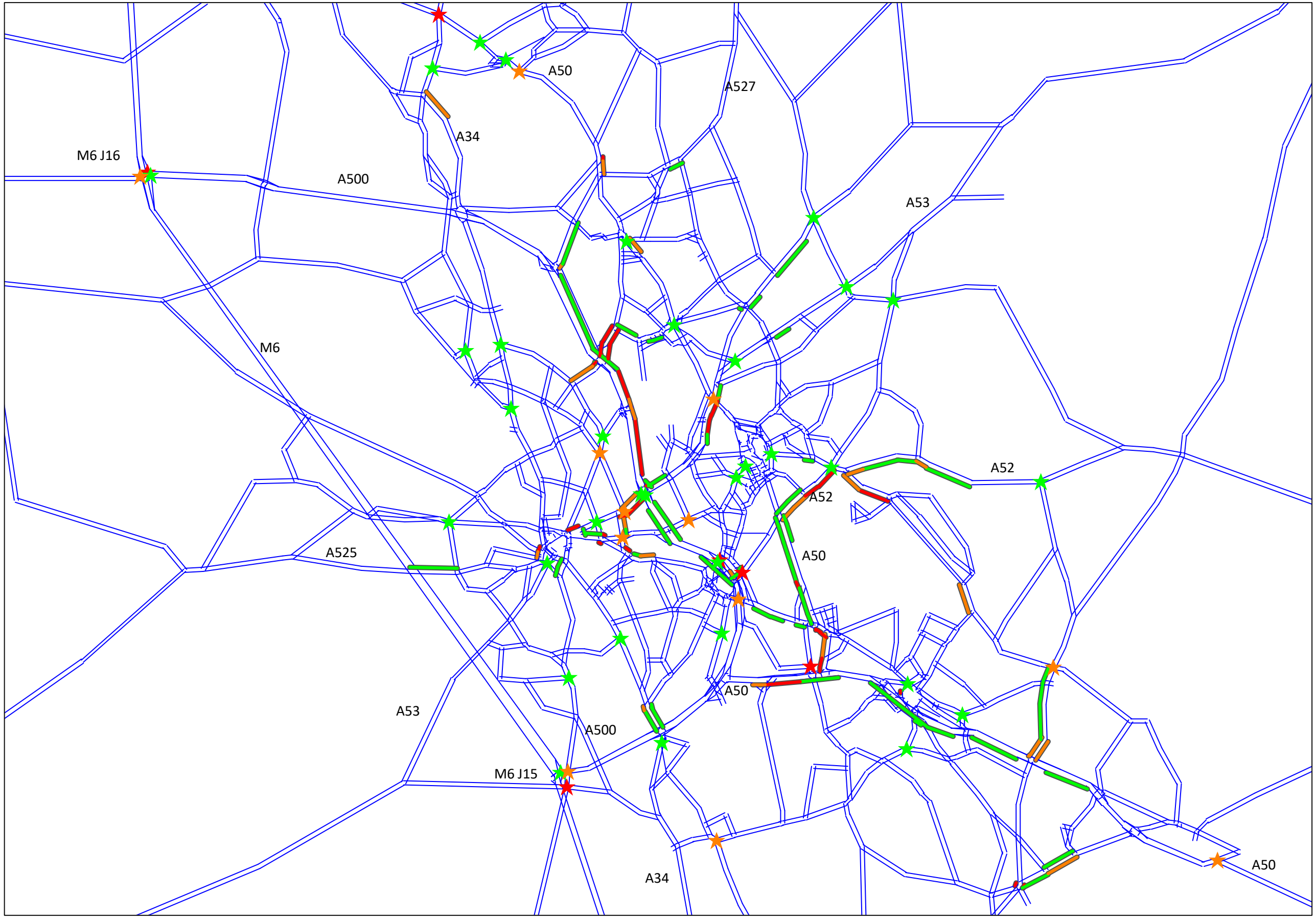
Utilities – Waste Water: Infrastructure Required to Support Growth

- 9.39. Significant enhancement to waste water infrastructure is required in order to support growth. Wider infrastructure upgrades and capital schemes are often associated with scheme development, in addition to the requirement for connections to existing systems (many of which require pumping). Across Staffordshire & Stoke-on-Trent, many required upgrades are constrained by environmental considerations and sensitivities,
- 9.40. It should be noted that for the majority of Waste Water Treatment Works (WwTWs), Severn Trent Water does not have concerns regarding capacity enhancements. However, enhancements are reliant upon additional consents being granted by the Environment Agency and water quality targets being retained. Development will also require implementation of demand management techniques to accommodate increasing demand and the effects of climate change.
- 9.41. The Water Cycle Study (published in January 2020) presents a series of RAG (red, amber, green) scores for Waste Water flow capacity, with potential infrastructure and/or treatment upgrades which may be required as a consequence of growth for Betley WwTW (under the auspices of United Utilities), Baldwin's Gate WwTW (which itself has been the subject of recent upgrades which will increase capacity headroom) & Strongford WwTW (both Severn Trent).
- 9.42. Severn Trent Water have started to identify schemes as part of their recently commenced business plan (AMP 7), with the following schemes identified from 2020 onward:
- Strongford Sewage treatment works has a quality upgrade project to meet new phosphorus and BOD (Biological Oxygen Demand) limits by December 2024.
 - Loggerheads Sanatorium Sewage treatment works and Loggerheads Village Sewage treatment works) have quality upgrade investments to meet multiple new effluent limits by December 2024.
 - Birches Head Tank and Combined Sewer Overflow. This will look to reduce spills from the asset to the local watercourse.
 - Silverdale Road Sewage Pumping Station has a planned improvement project in AMP7. This will look to improve the operational arrangement of the asset.

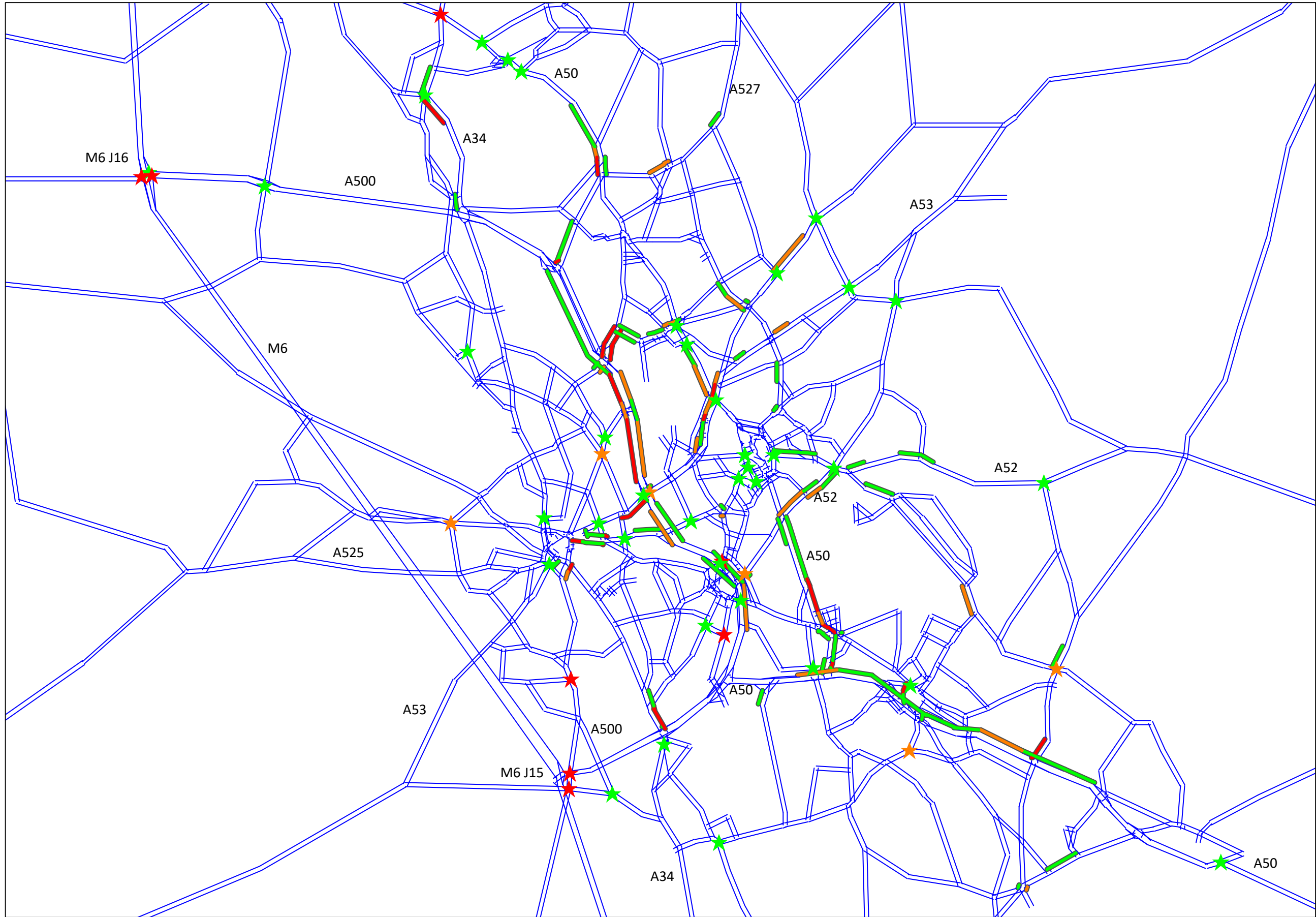
Appendix A

2015 and 2033 Reference Case AM and PM Peak-Hour Congestion Problems

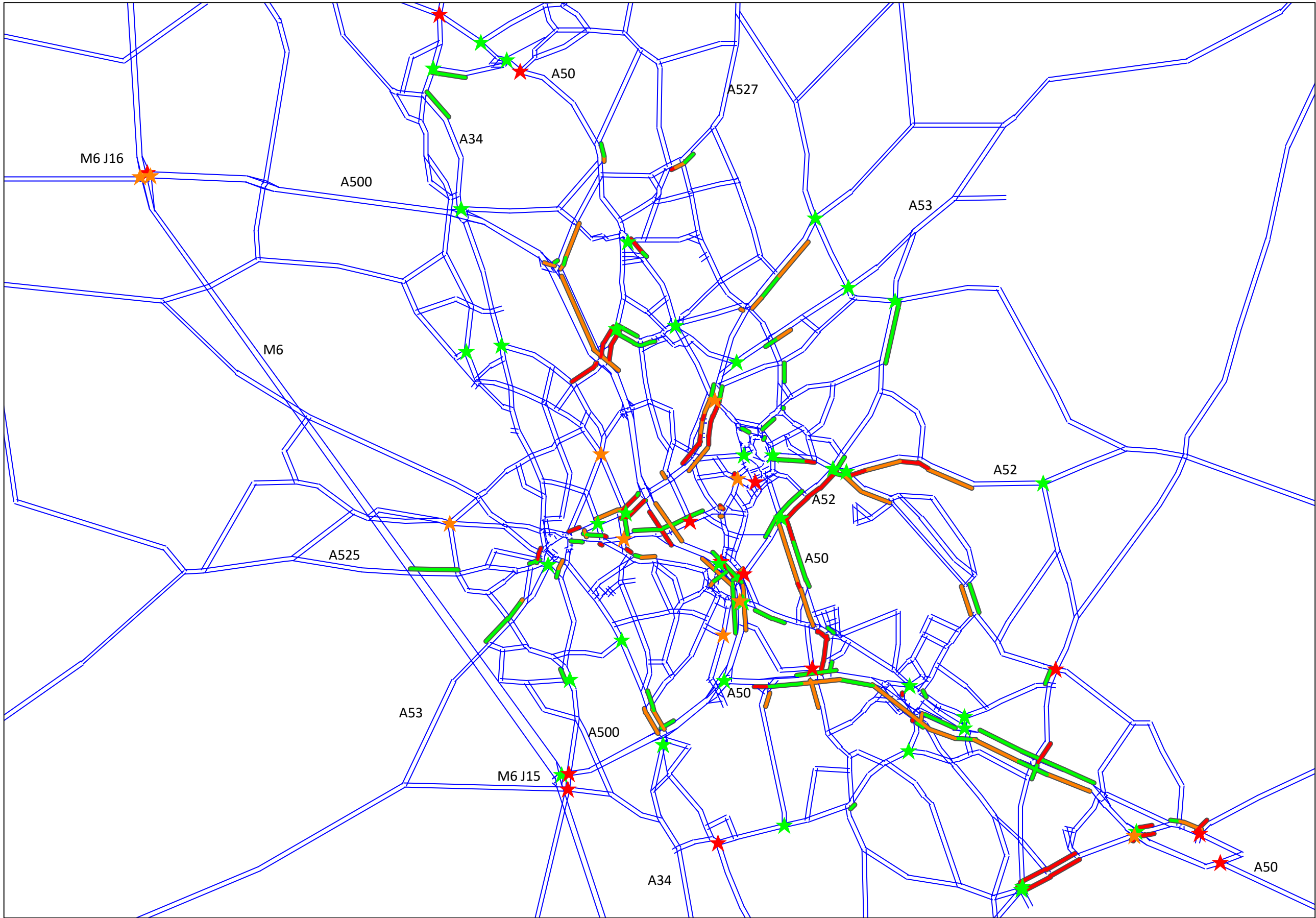
<u>KEY</u>	
<u>Junction problems - average junction delay</u>	
	Slight problem (average delay 20 - 40 secs)
	Moderate problem (average delay 40 - 60 secs)
	Severe problem (average delay > 60 secs)
<u>Link problems - volume / capacity of link</u>	
	Slight problem (volume / capacity 81 - 90%)
	Moderate problem (volume / capacity 91 - 100%)
	Severe problem (volume / capacity > 100%)



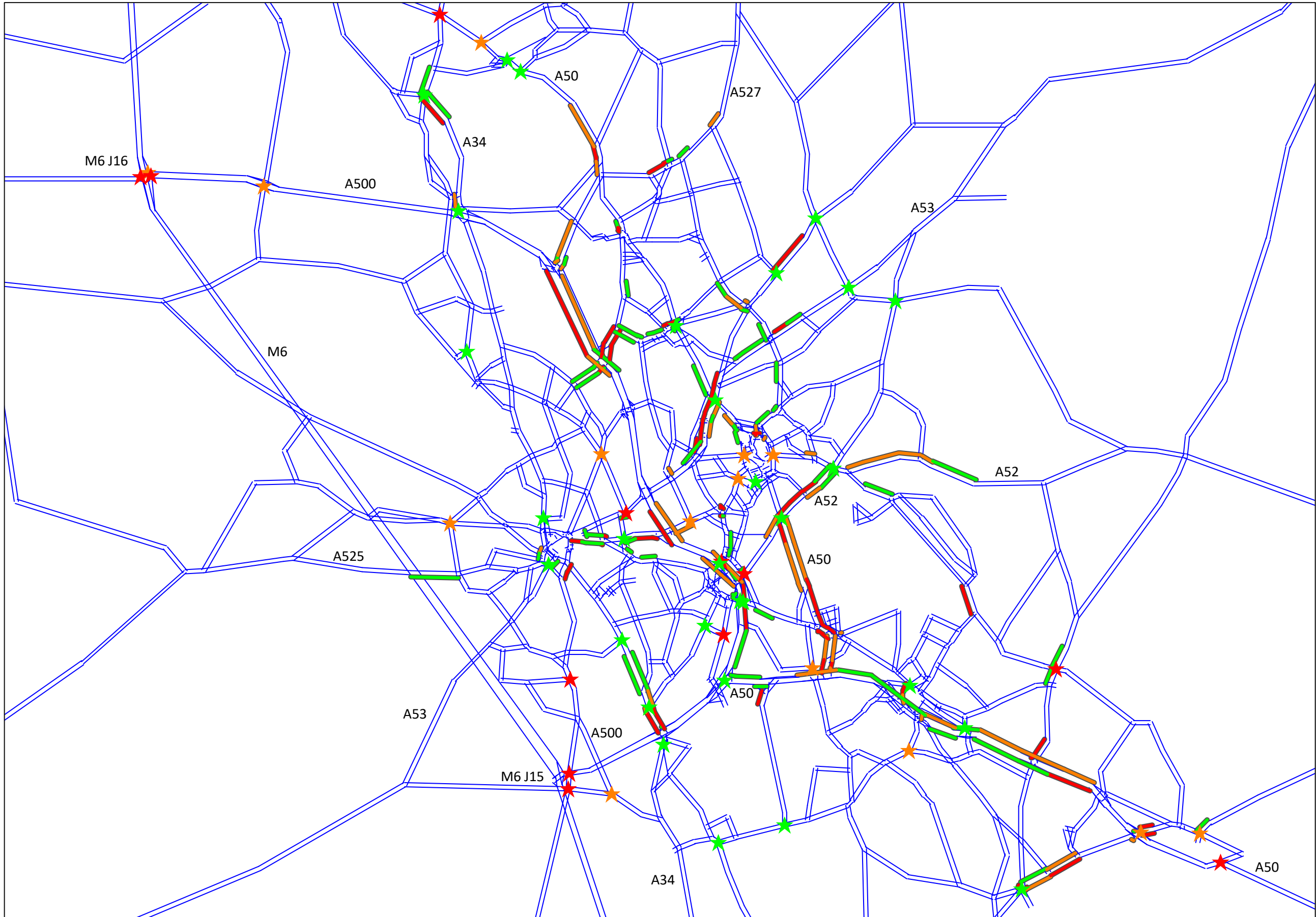
2015 AM Peak-Hour



2015 PM Peak-Hour



2033 Reference Case AM Peak-Hour



2033 Reference Case PM Peak-Hour