



Draft Local Plan for **Buckinghamshire**

Regulation 19

Infrastructure and Community Facilities Topic Paper

July 2026



1. Introduction and Purpose

- 1.1. To support consultation at Regulation 19 (pre-submission) stage and into examination, Buckinghamshire Council has prepared a series of Topic Papers. These explain the evidence base underpinning the Local Plan and how that evidence has shaped emerging policy choices.
- 1.2. This Topic Paper provides an overview of how the need for community facilities and the infrastructure needed to support growth have informed the Local Plan requirements and assessment process, and how infrastructure will continue to be a vital aspect of how the Local Plan sites and policies are delivered.
- 1.3. Infrastructure is at the heart of the Local Plan. It is part of the strategic policies and the emphasis on securing infrastructure linked to new growth follows through into the wording of the Local Plan policies and recommended site allocations.
- 1.4. The Local Plan is accommodating a major increase in new housing and other development. In order to confirm the plan is deliverable the impact of this growth on key infrastructure in Buckinghamshire was assessed. This included: transport congestion; school place capacity; demand for health infrastructure; demand for additional water, energy and waste facilities; and impact on flood risk and drainage. This was carried out to ensure that:
 - infrastructure and services are available for existing and new residents, avoiding bottlenecks in infrastructure capacity;
 - Service and infrastructure providers can plan for the capacity and the investment that is needed; and
 - Developers pay for the infrastructure needs arising from their development as required under paragraphs 34 and 55 of the National Planning Policy Framework (NPPF), which cover infrastructure needs arising from new development and its funding.
- 1.5. This Topic paper also answers common questions about how infrastructure is delivered. These are:
 - What new schools, healthcare, community and other infrastructure is needed?
 - What is happening about congestion and transport?
 - How does the Council plan for water supply and wastewater?
 - How is the Council working with other infrastructure providers?
 - How much does the new infrastructure cost?
 - How costs for new infrastructure, as set out in the Infrastructure Delivery Plan (IDP), have been estimated?
 - Who pays for Local Plan related infrastructure?
 - How does the Council secure section 106 (s106) funding from developers?
 - How is infrastructure delivered
 - Does the Council have to bear any of the costs?
 - When will infrastructure be delivered?

- What are the risks to delivery and gaps in information?
- What happens if new infrastructure is needed but there are no projects or funds to deliver it?
- Will development be viable and deliver all the infrastructure requirements?
- How will infrastructure provision be mandated and monitored?

National Planning Policy Context

- 1.6. The National Planning Policy Framework (NPPF) sets the overarching requirements for infrastructure provision alongside planning for the growth in Local Plans. Infrastructure is a key component of the requirements for Local Plans to be positively prepared, justified, effective and consistent with national policy.
- 1.7. The evidence accompanying the Local Plan sets out the current infrastructure position and identifies what infrastructure will be required to meet the needs of new development. The Local Plan IDP clearly identifies the infrastructure needed and that it can be delivered alongside the proposed development, so that growth is realistic and capable of implementation.
- 1.8. The NPPF requires the Council to work with infrastructure providers to plan realistic and coordinated approaches to infrastructure delivery. The Planning Act 2008 and NPPF define a broad range of infrastructure types, including transport, flood defences, schools, medical facilities, recreation, and open space. The scope of the IDP reflects this broad definition through the infrastructure types set out in this report.
- 1.9. The Planning Practice Guidance (PPG) is also an important part of this picture. The assessment of infrastructure capacity is highlighted as is the importance of early engagement with providers. The PPG sets out that the potential infrastructure issues need to be understood and actions to mitigate impacts and provide new infrastructure are realistic. Also, that infrastructure requirements, costs and broad phasing considerations inform plan-making, viability assessments, and subsequent decision-taking regarding the deliverability of potential site allocations.
- 1.10. The IDP has been prepared in accordance with the NPPF and PPG. It has been informed by the extensive consultation with key infrastructure stakeholders, recommended as good practice to draw out infrastructure requirements to inform both Local Plan policies and site allocations.

2. What new schools, healthcare, community, and other infrastructure is needed?

- 2.1. In line with national policy, there is a clear expectation that where significant new development occurs, the need for new infrastructure and community facilities must be considered. Development will be required to provide new infrastructure guided by Local

Plan policies IN1, IN2 and SE1 and in line with the requirements in the Local Plan site allocations. The IDP includes a list of infrastructure projects, many of which are needed as a result of the new growth in the Local Plan. These are categorised into critical, essential, and desirable infrastructure to delineate their relative importance in terms of plan deliverability.

- 2.2. Table 1 summarises the headlines for Local Plan related infrastructure as defined in the IDP report paragraph 56 and set out in the IDP Schedule (Appendix 1 of the IDP).

What is needed	How many
New Primary schools	20
New Secondary schools	7
New Primary care (GP) facilities / expansion projects	16
Contributions towards acute and secondary healthcare projects	4 projects (and 5 longer term projects)
Waste and recycling projects	4 projects (including the Buckingham Household Waste project)
New community hubs, including space for police and other facilities at NESS sites	10 NESS sites with community facility provision as part of mixed-use development on the site
New indoor sports leisure provision	1 (to serve northern Buckinghamshire, location TBC)
Extensions to burial grounds	3
Library improvements	2
Contributions towards emergency service improvements	4 (at existing Fire Stations)
Transport projects including road improvements, bus service and infrastructure projects, rail improvement projects, walking and cycling improvements	422
Infrastructure requirements identified related to flood risk mitigation, new / upgraded water infrastructure, provision of green infrastructure (e.g. natural / semi natural green spaces), and community facility requirements are set out in the Strategic Flood Risk Assessment, Water Cycle Study, Green Infrastructure, and Community Facilities assessments for the Local Plan.	

Table 1 – List of key projects in the IDP Schedule

3. What is happening about congestion and transport?

- 3.1. The consideration of new and enhanced transport infrastructure; be that road improvements, rail and bus capacity, or the provision of more walking and cycling routes; is

a key part of the plan making process. As can be seen from Table 3 below transport infrastructure also forms the single biggest cost for developers.

- 3.2. The Council has an extensive amount of information on current and forecast transport and traffic movements to support the policies and site allocations in Local Plan. The level of growth has been tested using the Buckinghamshire Strategic Transport Model to assess the impacts of potential additional traffic on the road network. The potential impacts have then been assessed to see whether road, rail, bus, and other travel projects can mitigate the impacts, and, to ensure that opportunities are in place to support various travel choices.
- 3.3. Traffic modelling is a very detailed area of work that has been undertaken over several stages, and these are summarised in the Strategic Transport Assessment. The Transport Modelling and Mitigation modelling report (June 2026) concludes that while there will be additional traffic on the highway network and other travel demands as a result of the new trips arising from the allocated sites, this can be sufficiently mitigated and/or there is sufficient capacity within the transport network to accommodate these impacts. The planned transport mitigation is listed in the IDP Schedule.

4. How does the Council plan for water supply and wastewater?

- 4.1. Water supply, wastewater treatment capacity, and water quality have been assessed through the Water Cycle Study (WCS), which was prepared in consultation with the Environment Agency, Thames Water, Anglian Water and Buckinghamshire Council as Lead Local Flood Authority. The WCS considered the implications of planned growth for wastewater treatment works, sewerage networks, water supply infrastructure, and for the river and water catchments that would be affected by the increased demand from new population on drinking and wastewater.
- 4.2. The study identified that in some locations infrastructure upgrades, phasing arrangements or site-specific mitigation may be required before development can be fully accommodated. These include infrastructure at or near capacity in the following locations: Aylesbury; Buckingham (Maids Moreton); Chesham; Long Crendon; Princes Risborough; Slough; Stanbridgeford; and Steeple Claydon.
- 4.3. The WCS has informed Local Plan policies, site allocation requirements, and the Infrastructure Delivery Plan.
- 4.4. It should be noted that the Water Cycle Study was undertaken at a particular stage in plan preparation using the growth assumptions available at that time. In some cases, the scale, form, or configuration of development sites has subsequently changed as the Local Plan has evolved. Where this has occurred, the conclusions of the WCS should be read alongside the final site allocation policies and supporting infrastructure evidence.

- 4.5. Any site-specific infrastructure requirements will be reviewed and assessed in detail through the planning application process and through ongoing engagement with the relevant water companies and regulators. Water infrastructure upgrades are primarily funded by water companies, with costs ultimately recovered through a combination of developer charges, customer bills, borrowing, and investor funding, all within a framework regulated by Ofwat. Where growth generates additional demand, developers may be required to contribute towards network reinforcement through:
- Infrastructure charges
 - Requisition agreements
 - Connection charges
 - Site-specific works
- 4.6. Water and wastewater (sewerage) projects, together with gas and electricity utilities are not included in the IDP Infrastructure Schedule as, based on utility company responses, it has not been possible to identify Buckinghamshire specific projects, or costs.
- 4.7. The Water Cycle Study considers water company investment programmes which are in place to boost infrastructure capacity to 2030. Beyond this the Water Cycle Study sets out the growth and capacity available and upgrades needed beyond 2030. These upgrades are not funded through development directly but will be set out within the water companies' next Asset Management Plans, to be prepared for the next AMP periods. Developers are required to work with water companies at an early stage of preparing planning applications to understand the very latest capacity position.
- 4.8. At this stage of Local Plan preparation, the schemes identified in the Water Cycle Study may not necessarily be included in the current investment plans of the water companies. The two water companies operating in Buckinghamshire, Thames Water and Anglian Water, have published their investment and capital programme of works for their Asset Management Plan (AMP8), covering 2025-2030. Thames Water's published investment plans wastewater treatment costs for this area of Buckinghamshire are estimated at £1.1 billion.

5. How is the Council working with other infrastructure providers?

- 5.1. There are many organisations within Buckinghamshire, and whose catchments cover Buckinghamshire, who provide services or infrastructure for people living and working in the area. They are all important for the delivery of infrastructure to meet the requirements of new homes, jobs, and other development. This includes the Council itself, for example with its waste and recycling responsibilities, transport, public health, social care, and schools.

- 5.2. It also includes Town and Parish Councils who provide and maintain community facilities such as community halls, playing fields, burial grounds, and open space. There are also the utility companies who provide water, wastewater treatment, electricity, gas, and broadband.
- 5.3. The NHS has several Integrated Care Boards (ICBs) covering Buckinghamshire's primary health needs (including GP surgeries) together with the Buckinghamshire NHS Healthcare Trust (BHT) for secondary, acute and community care and Oxford NHS Healthcare Trust for mental health needs.
- 5.4. Emergency services, higher and further education, leisure, bus, and rail service providers are also part of this important picture.
- 5.5. The Council has engaged with these organisations in preparing the Local Plan and the record of this and the outcome forms part of the evidence base that underpins the Local Plan. Table 2 sets out how we have engaged various stakeholders during the technical studies which form the evidence base for the plan.
- 5.6. The work with infrastructure providers will continue towards and throughout the Local Plan examination process to support the Planning Inspector in assessing the suitability and deliverability of infrastructure needed. Specific advice may be needed, e.g. on how policies will operate in practice, and to assure that infrastructure projects in the IDP have reasonable prospects for delivery.
- 5.7. The suitability and deliverability of infrastructure will be considered further again, once detailed development proposals are available at the planning application stage. Partnership work with service and infrastructure providers will be essential to successful outcomes.

Study name	Stakeholders involved	How this has been used
Baseline Infrastructure Study	All 141 Town and Parish Councils 29 Parish Meetings 23 Infrastructure organisations consulted, including BHT and ICB	Comments fed into an assessment of the baseline infrastructure position for Buckinghamshire and which constraints were likely to affect growth
Infrastructure Delivery Plan (IDP)	60 Infrastructure organisations consulted (including contact with different departments within organisations) 34 organisations responded. 18 suggested infrastructure projects to respond to the Local Plan growth and 16 others provided other information on growth	Projects were included in the infrastructure delivery schedule and assessed as to whether they are critical, essential, or desirable and how they relate to planned growth (Appendix 1 to the IDP). All information considered in terms of potential constraints and opportunities for the Local Plan.

	pressures and infrastructure issues for the Local Plan	Information informed Local Plan policies and site allocations.
Strategic Flood Risk Assessment (SFRA)	Environment Agency, Thames Water and Anglian Water, and Buckinghamshire Council as Lead Local Flood Authority	Evidence showing areas of high flood risk which should be avoided and mitigations to address flood risk have informed policy development and the process of selecting site allocations in the Local Plan (sequential test).
Water Cycle Study (WCS)	Environment Agency, all Water Companies and Buckinghamshire Council as Lead Local Flood Authority	Evidence informed policies and site allocations in the Local Plan by providing information about the need to phase development within site allocations to align with wastewater capacity improvements and as background for the Local Plan policy on water quality NE1.
Community Facilities Study	All Town and Parish Councils	Feedback informed the level and quality of community facility provision referred to in the study.
Green Infrastructure Study	No direct consultation for this study as it used the Town and Parish Councils feedback on community facilities to inform the study	Feedback informed the Green Infrastructure Strategy, and policy NE7 in the Local Plan.
Transport Modelling	Transport stakeholder workshops to assess potential mitigations for the Local Plan transport modelling evidence	Comments informed the mitigations tested in the modelling and informed the development of policies TR1 and TR2 and site-specific policies for the strategic sites within the plan.

Table 2 - Infrastructure Stakeholders and the Local Plan

6. How much does the new infrastructure cost?

- 6.1. An estimate of infrastructure costs included in the Infrastructure Delivery Plan is circa:
- Transport infrastructure (includes highways, rail, active travel, and public transport): £4,972 million
 - Other non-transport infrastructure (includes education, primary and secondary health, police fire and rescue, burial grounds, libraries, community, sports and leisure, utilities, and waste management): at least £1,080 million
 - Water related infrastructure – not clear. Significantly less than £1,124 million

This totals **£6,052 million**, excluding the cost of water related Infrastructure. Table 3A gives a breakdown of these costs by infrastructure type.

- 6.2. Inevitably at this stage of the planning process there will be some uncertainty about the costs of future infrastructure. Cost estimates are invariably developed as they are estimated in more detail as projects develop and taking account of relevant information (e.g. market prices for fuel and labour, ground conditions, and detailed designs. Some cost estimates may have been provided as a floorspace formula or on a per dwelling basis, which do not give a specific overall cost figure, and may anyway vary when a planning application is submitted. Where no costs have been available and it has not been practical to make an estimate, these have been treated as a cost exclusion, i.e. the cost will be in addition to the currently estimated cost. Future construction inflation and market volatility will also impact costs.
- 6.3. In some cases, it may be difficult to assign a specific proportion of the costs of a major scheme to a specific site when the cumulative impact is generated by several sites within the locality, e.g. for road schemes. However, an estimate of the total cost of all projects for which a specific cost figure, range or estimate is available has been made and this is shown in Appendix 1 of the IDP: the Infrastructure Schedule.
- 6.4. In addition, Microsoft Copilot was used to cross check this calculation of cost estimates, and to make an estimate that includes allowance for unknown costs. This arrived at a similar assessment of costs and suggested that, making allowances for unknown costs (exclusions) it could be appropriate to increase the estimate of costs by three quarters, increasing the £1.08 billion figure to £1.9 billion.
- 6.5. There are other important caveats to the cost estimates as these do not include some costs that are covered by other technical studies, e.g. the Water Cycle Study and Strategic Flood Risk Assessment which will include water supply, wastewater treatment and flood prevention projects that are to be delivered by water companies, and flood risk projects expected to be funded and/or delivered by the Environment Agency.

Infrastructure Type	Estimated Cost
1. Transport:	£4,972.66m: Road - £2.3bn Rail – £1.2bn Bus & active travel links - £1.4bn
2. Education	At least £680.38m, incl. Special Educational Needs (primary & secondary)
3. Health: New Primary care (GP) facilities	

Acute and secondary healthcare projects	At least £105.3m At least £78.59m
4. Waste and recycling projects	£93.5m
5. New indoor sports and leisure provision	£55m
6. Fire Station improvements - contributions	£16m
7. Other community facilities (e.g. burial grounds, libraries, etc)	At least £5.5m
8. Other (including police)	£45.9m
Total	At least £6,052.49m

Table 3A Infrastructure costs by Type

- 6.6. The number and proportion of schemes expected to be funded in whole or in part by developers directly, or as financial contributions (section 106 contributions) is shown in Table 3B.

IDP schemes Funding sources	Number of Transport Schemes (% of total)	Number of Other IDP Schemes (% of total)
Funded or provided all or in part directly by developers (including s106 contributions but excluding CIL) (£5.8bn)	419 (99%)	70 (83%)
Not developer/s106 funded (£0.2bn)	3 (1%)	14 (17%)
Total	422 (100%)	84 (100%)

Table 3B IDP Project Funding Sources

Transport infrastructure

Roads	Rail	Bus and active travel links
204 projects Estimated overall cost £2.3bn	5 projects (including the East West Rail Aylesbury Link) Estimated overall cost £1.2bn	213 projects Estimated overall cost £1.4bn
Transport Overall estimated costs c£4.9bn 422 Transport Projects Of all these projects 12 highways schemes are of strategic importance as defined in the Strategic Transport Assessment for the Local Plan.		

Table 3C Transport Schemes in the IDP

- 7.1. The transport mitigation work, as explained in the Strategic Transport Assessment, identifies 12 key strategic highway schemes needed to support the Local Plan. These include:
- a. Eastern Aylesbury Link Road (south) (between A41 and Mike Griffin Way);
 - b. Southern Aylesbury Link Road (between A41 and A413);
 - c. South East Aylesbury Link Road (between A413 and B4443);
 - d. Southwestern Aylesbury Link Road (between A4010 and A418);
 - e. Northeast Aylesbury Link Road (NESS Site) (between A413 and A418);
 - f. Wing West Link Road (between Cublington Road and Stewkley Road);
 - g. Buckingham South Link Road (between the A413 to the A421);
 - h. Princes Risborough relief road (between Shoot acre Lane junction with A4010 and Grove Lane junction with A4010 via the NESS site);
 - i. Whaddon bypass (between Coddimore Lane and Nash Road);
 - j. Horton bypass (between B488 Horton Road / Station Road junction and B488 North via Land at Horton);
 - k. A421 capacity improvements (between Bottledump Roundabout and A421 / Coddimore Road / Whaddon Road roundabout).
 - l. Winslow Link Roads (between A413 Buckingham Road and Great Horwood Road; and between Great Horwood Road and Little Horwood Road)

Health Infrastructure

- 6.7. Health infrastructure needs are a very important local concern, reflecting the strain that local health services are already under in some areas. The number and type of health projects in the IDP are summarised in Table 4A.
- 6.8. All the primary healthcare projects are expected to be delivered by developers as direct provision or through section 106 contributions. The methodology for calculating contributions has been developed with the various healthcare stakeholders and is included in Appendix O to the Local Plan. For primary care, this methodology estimates that £2,050 is needed per new dwelling to address future primary healthcare needs associated with the development in the Local Plan. These requirements are also covered by Local Plan policy IN2.
- 6.9. Four of the acute / secondary projects in the IDP are also intended to be funded through the section 106 obligations. Together these cost about £84m. The Local Plan Appendix O also includes a methodology for estimating acute / secondary healthcare contributions. This methodology estimates that £1,093 is needed per new dwelling to address these acute / secondary healthcare needs associated with the development in the Local Plan.
- 6.10. There are also five longer term secondary / acute healthcare projects in the IDP. They are identified as potential future projects which meet a blend of needs arising from current healthcare needs and the growth associated with the Local Plan. One of the projects amounts to £0.7m in total but this is not all attributable to Local Plan growth. The other four projects have not been costed at this point.

Essential primary and secondary/ acute health	Desirable longer-term projects for acute / secondary health
No of projects and costs	No of projects and costs
22 primary care projects (18 are for on-site projects and 4 refer to financial contributions) Of the 18 projects the estimated overall cost is £105 - £125m (some projects are not costed) 4 acute/ secondary projects with a total project cost of about £84m.	5 longer term projects. One of these projects is costed at £0.7m, others are not yet costed.

Table 4A: Health infrastructure projects in the IDP

School infrastructure

- 6.11. Infrastructure requirements for new school places are a key part of the needs arising from the growth in the Local Plan. This relates to primary and secondary schools / school places. There are also requirements for Special Educational Needs provision at primary and secondary school levels. Table 4B summarises the projects which involve the delivery of entirely new primary and secondary schools and their likely section 106 costs. This forms the majority of the overall costs for schools reported in Table 3A and they are defined as essential infrastructure in the IDP Schedule Appendix 1.

Primary schools	Secondary Schools
No of projects and costs	No of projects and costs
20 new primary schools (for new school on a Local Plan site allocation) Of these projects the estimated overall cost is £471.29m. Plus • provision for Special Educational Needs and • financial contributions for expanding existing schools as part of section 106 agreements on all sites over 10 dwellings in accordance with Local Plan Policy IN2 Note that some of the school projects are not costed but the estimated build cost per pupil is £31,427.	8 new secondary schools (for a new school on a Local Plan site allocation) Of these projects the estimated overall cost is £183.88m. Plus • provision for Special Educational Needs and • financial contributions for expanding existing schools as part of section 106 agreements on all sites over 10 dwellings in accordance with Local Plan Policy IN2
Overall total S106 costs for schools at least £660.88m – being the major element of education costs in Table 3A (at least £680.38m)	

Table 4B – Summary of School Infrastructure requirements in IDP

8. How were costs calculated?

- 8.1. As mentioned, the total costs of infrastructure have been estimated, splitting out the costs into different categories:
- Transport infrastructure (includes highways, rail, active travel, and public transport)

- ‘Non transport’ infrastructure (includes education, primary and secondary health, police fire and rescue, burial grounds, libraries, community, sports and leisure, utilities, and waste management)
 - Water related infrastructure
- 8.2. Costs have been provided from different service and infrastructure providers and other sources (notably Atkins have estimated the cost of many of the transport schemes) and in a range of formats rather than just a monetary value (e.g. cost per sqm floorspace, cost per dwelling, and costs ranges or bands (e.g., high low medium). This naturally imposes limits on how accurate any estimate can be at this stage.
- 8.3. Where specific cost estimates have been available, these have been used to inform the IDP. Where cost ranges have been provided a mid-range figure has been used for the purpose of summing costs. Where costs are unknown, these have been treated as cost exclusions.
- 8.4. As mentioned, Microsoft Copilot was used to cross check the calculation of cost estimates for ‘Non transport infrastructure’ costs, and to make an estimate that includes allowance for unknown costs.

Water related infrastructure

- 8.5. The cost of water treatment and sewerage treatment costs were considered separately as part of the Water Cycle Study (WCS). While it has not been possible to arrive at a Buckinghamshire specific figure for the cost of necessary water supply and waste-water infrastructure. The same is true of flood prevention schemes. However, the cost of improving existing flooding problems is rarely a cost to or arising from planned development. The Strategic Flood Risk Assessment (SFRA) will help to ensure that Local Plan site allocations take account of the need to mitigate flood risk including the need to reduce the likelihood of increased risk.

Transport infrastructure costs

- 8.6. Atkins have provided an estimated construction cost for 308 of 422 transport schemes. The total of these 308 schemes which have an estimated cost is £3,299.42 million.
- 8.7. These costs were based on construction costs. To allow for a range of costs that are unknown, including survey and design costs, public consultation, professional fees, ‘stats’ (statutory undertakers plant and equipment) and utility costs, as well as risks and contingencies an uplift of 100% of the construction cost was applied to estimate the likely scheme cost at present day values, (i.e. if the estimated construction cost was £250k, the overall scheme cost was estimated as £500k). No allowances were made for land costs – in most cases land is expected to be in the developers’ control of part of the highway.
- 8.8. 114 schemes had construction costs that were expressed as a broad cost range or were simply high, low, medium. (£10m+, <£1m, and £1-10m). (One scheme had a specific £16m cost estimate provided by DfT/Network Rail). This has necessitated making some broad

assumptions to arrive at an estimate of costs. Throughout, where a range of costs has been provided a mid-range cost estimate based on the average has been used, (e.g. for £1-5m, the mid-range cost estimate is £3m or $(1+5)/2$). (It is recognised that this is higher than the arithmetic midpoint, but this makes a small allowance for unknown costs and potential cost escalation.) In some cases, no range has been provided but a figure of 'at least', or 'more than' has been provided, for example <£1m or >£1m. In each case, for simplicity and in this example a figure of £1m has been used.

- 8.9. Using this approach the cost of the 114 schemes for which an Atkins had not given a specific cost estimate, (and for which usually only a broad estimate or cost range was available) is estimated at £1673.24million.
- 8.10. These 114 schemes include five rail schemes for which only broad estimates or ranges of cost were available. Using the approach to estimating cost mentioned above the cost of these rail schemes is estimated at £1209.5million.
- 8.11. Taking these figures together (£3,299.42 million + £1673.24million) gives a total estimated transport infrastructure cost of £4,972.66 million. Given the assumptions outlined above this must be considered a conservative estimate.

'Non transport' other infrastructure

- 8.12. For non-transport costs there are fewer schemes listed but a higher proportion of these have been provided as a formula such as a unit cost or cost per sq.m. of facility to be required. At this stage it has not been possible to provide a more informed estimate of these costs and so these have been excluded. Inevitably this means that this cost is an underestimate.
- 8.13. Taking the same approach to estimating, a cost estimate has been made for other non-transport infrastructure of at least £1,080.17million (excluding water related infrastructure).
- 8.14. As a sense check Microsoft Copilot has been used to provide an independent estimate. This indicated:
- A low estimate (based on known specific costs): circa £703 million.
 - A mid-range is estimated at circa £1,100 million to £1,300 million. (This includes midpoint values where figures have been supplied as a cost range. Reasonable assumptions were made in relation to and partial or indicative costs for example in relation to formula-based costs, e.g. costs per pupil, costs per dwelling or sq.m. costs.)
 - An upper range estimate of £1.9 billion depending on final scope, delivery assumptions, and inclusion of currently uncoded projects.

- 8.15. This broadly supports the view that the Council's cost estimate of at least £1,080.17million is necessarily an underestimate.

9. Who pays for Local Plan related infrastructure?

- 9.1. Infrastructure will be funded from several sources. The majority of projects identified in the IDP Schedule will expect to have at least some of their costs covered from new development sites. These include funding from developers as financial contributions, or on-site provision of infrastructure within site allocations. At the planning application stage, the Council will consider the infrastructure impacts of proposals, including the review of proposed mitigations, their funding and delivery, and, where appropriate, site viability. This will include direct delivery of infrastructure on site – often secured by planning conditions – and/or financial contributions held by the Council towards the delivery of other infrastructure such as schools or open space.
- 9.2. Infrastructure requirements are based on site specific or other Local Plan policies and take account of consultee comments. These requirements are set out in planning obligations that are contained within section 106 agreements, which are binding legal agreements between the landowner/ developer and the Council. These are entered into before planning permission is granted to ensure the delivery of infrastructure. If it does not prove possible to reach agreement the council will consider refusing planning permission.
- 9.3. Where the council secures s106 funding for the delivery of off-site infrastructure the Planning and Environment Service monitors development progress and development 'triggers' (e.g. provision of funding for school places is triggered by the completion of one hundred homes) and invoices developers for the appropriate amount. This funding is then held, to be used on schemes delivered by the council, or passed to other service and infrastructure providers as appropriate (such as the ICB or bus operators) for them to deliver schemes or services.
- 9.4. Where s106 funding is received in instalments, often alongside stages of development, the Council will consider when funding is sufficient to permit design and feasibility work and scheme delivery. Delivery may only be at the point when all instalments have been received and, in some cases, where contributions from different developments have been received.
- 9.5. In some cases, developers may argue that their sites are not viable at planning application stage. Policy H03 of the Local Plan sets out the requirements which they would need to meet in demonstrating this. It includes requirements for open book financial viability assessments to be submitted for review by the Council. The Policy also covers the arrangements for the review of viability when schemes are being delivered. This would be part of planning obligations provisions for new infrastructure. This includes measures to claw back contributions if viability has changed.

- 9.6. Other funding sources include central government funding (e.g. Department for Transport, Department for Education and wider grants); local authority capital funding (such as for waste and recycling projects); NHS funding; police funding; transport and rail operator funded schemes (e.g. Network Rail, HS2, bus operators); and utilities/telecoms investment.
- 9.7. There may also be opportunities for wider partner or mixed funding arrangements. For example, bus service improvements could be delivered through a mixed funding approach combining developer contributions Council, central government funding (such as Department for Transport grants), and investment from bus operators, reflecting the fact that bus service enhancements may serve both new development and the wider community.
- 9.8. The council also raises funding through the Community Infrastructure Levy (CIL) which is a levy based on floorspace of new development. The use of CIL is directed by the CIL Regulations (2010 as amended) and should be used to deliver projects that support the development of the area. CIL already applies in parts of Buckinghamshire and a new CIL for north and central Buckinghamshire is proposed and expected to undergo public examination during 2026. How the Council spends its CIL is set out in the [Infrastructure Funding Statement](#) (IFS).
- 9.9. The Council does not provide CIL funding to external service and infrastructure providers, but town and parish Councils do receive a proportion of CIL funding (15%, or 25% with a made Neighbourhood Plan), and this may be used for local infrastructure priorities. These are not restricted to projects delivered directly by town and parish Councils.
- 9.10. The Local Plan's IDP does not specify or commit how CIL funding held by Buckinghamshire Council will be used – this is managed through the Council's budget setting as set out in the Medium-Term Financial Plan and the [Infrastructure Funding Statement](#). Both are updated annually.
- 9.11. Despite taking all reasonable opportunities to ensure that developers pay to mitigate the infrastructure impacts of developments, the Council itself will incur some costs as a result of the growth in the Local Plan. This will typically be the result of population growth increasing demand for Council services, for example for children's social care, environmental health, highway maintenance, and licencing. Although such costs are mitigated by additional Council tax this is unlikely to meet all relevant costs. There are no capital projects identified in the IDP related to these services, but the potential impact of Local Plan growth has been discussed widely across Council service areas.
- 9.12. There may also be more direct impacts on Council Services and the IDP refers to capital-funded infrastructure such as the waste and recycling projects. It is not always possible to link these to specific development sites (the same applies to other public services), and some projects are already in the Council's capital programme or are expected to be externally funded. While the Council secures significant contributions for education it may

need to forward fund some school places and recoup costs through S106 at a later stage to ensure that the new homes have reasonable access to school places.

10. Will development be viable and deliver all the infrastructure requirements?

- 10.1. The IDP and other infrastructure evidence has been considered in the assessment of whether the Local Plan itself, as well as its site allocations and policies are financially viable. This has been considered in the Local Plan Viability Appraisal which is published as part of the evidence based for the Local Plan.
- 10.2. The Council must show that the plan is deliverable and the infrastructure expectations, including affordable housing provision, are affordable (viable). The Viability Appraisal has assessed the capacity of the development proposals in the plan to fund the cost of associated infrastructure as well as all of the other policy requirements, on top of the usual the development and construction costs of building new homes with a proportion of affordable housing, requirements for some of the land to be used for open space and play areas, and places for people to work (which all entail a cost).
- 10.3. Given the large number and variation of development sites this work has considered a range of representative developments (different development 'typologies') alongside site specific appraisals of the twenty largest sites (note: several of these are not now being progressed following assessment).
- 10.4. This process has been informed by the projects listed in the IDP Schedule and how necessary these are (using the critical/essential/desirable categorisation) in relation to the planned growth.
- 10.5. Where initial findings have indicated that sites may not be viable with all potential policy requirements and infrastructure improvements, the Council has reviewed the scope to vary housing numbers up or down (to improve viability or to reduce the need for infrastructure); the criticality of infrastructure has been reviewed; and the scope for development to provide affordable housing while remaining viable has been considered.
- 10.6. From an early stage it has been apparent that the large-scale nature of the growth required to meet housing needs will result in the need for substantial investment in infrastructure. With other funding sources scarce (other those identified in the IDP Schedule) the Council has been careful to ensure that the planned growth can make a full contribution and mitigate its impacts on existing infrastructure.
- 10.7. This had led to some difficult choices. The Council has considered the likely additional cost of various policy measures and has been cautious in developing policies that will add to development costs, especially as national level changes (e.g. biodiversity and mitigation of

impacts on nature, as well as higher building standards) have unavoidably added to the costs of development.

- 10.8. This has meant that for example, and consistent with government guidance in the National Planning Policy Framework (NPPF), a policy requirement for new development to be net zero has not been put forward for inclusion in the Local Plan as it was clear that this would add significantly to development costs over and above the Future Homes Standard of environmental efficiency. This would reduce developers' ability to provide good quality development and the necessary infrastructure.
- 10.9. This testing also supported the development of policy HO2 on affordable housing provision. Despite the Local Housing Needs Assessment identifying a need for 40% of housing units to be affordable, early testing indicated that 40% would not be viable in whole of the county. Sites in the North and Central Planning Areas are therefore expected to deliver a minimum of 25% affordable housing and in some cases, it has been assumed that lower levels of affordable housing may be provided to ensure that developers can meet these costs without unacceptably undermining viability.

11. When will infrastructure be delivered?

- 11.1. It is vital that essential infrastructure is provided in a timely way to avoid overrunning existing services and affecting the experience of both new and existing residents. Different infrastructure may be required at different times, and service and infrastructure providers must plan and invest to ensure that capacity is available when needed.
- 11.2. Some infrastructure must be available from first occupation of new dwellings, e.g. highways and utility connections. The timing of some other infrastructure may be more flexible. For example, the need for school places often plays out over a period of years as families move into a development and grow.
- 11.3. It is recognised that the early delivery of infrastructure adds to the costs of development and it can be counter-productive to require infrastructure or contributions in advance of when they are needed, as the result is often that the overall funding for infrastructure and level of affordable housing provided may be reduced.
- 11.4. Central government has previously made funding available to help meet the costs of forward funding infrastructure, for example Housing Infrastructure Funding (HIF). There is not currently a successor programme to HIF. The Council is committed to pressing government for assistance to ensure that necessary infrastructure can be provided in a timely way to avoid potentially significant infrastructure bottlenecks. One example is Cheddington NESS site where significant highway improvements may be required to unlock the site, potentially making development viability challenging without government support.
- 11.5. Ensuring timely delivery of infrastructure is achieved in several ways. This includes:

1. Detailed stakeholder engagement work to ensure they are aware of the planned growth and the timing of specific development proposals, so service and infrastructure providers can align their investment and delivery strategies;
2. Setting out requirements, where these are known, within individual site allocations policies as well as the IDP Schedule (which indicates when infrastructure should be expected, if known);
3. Consideration of infrastructure impact as part of the pre application and Development Management process;
4. The imposition of planning conditions or planning obligations to trigger delivery at certain levels of development / occupation of a site; and
5. The monitoring of development and infrastructure delivery to inform future decisions on planning applications and on future infrastructure investment and delivery.
6. Policy HO3 has been incorporated into the plan to enable development viability to be reassessed at different stages of the development management process and so ensure that the required infrastructure can be funded and or delivered appropriately.

12. Risks to delivery and gaps in information

Risks

- 12.1. The Local Plan and underlying evidence base have been informed by an assessment of risk at every stage, and the timing and cost of infrastructure provision has been highlighted early on as a critical part of this. The Local Plan aims to ensure that new development is well served by infrastructure to create new sustainable communities.
- 12.2. Actions to mitigate risks concerning infrastructure delivery have been taken throughout the preparation of Local Plan evidence and policy development. This has involved early exploratory discussions with many infrastructure and service providers, such as the Thames Valley ICB, the Buckinghamshire NHS Healthcare Trust and the Council's School Places Planning Teams. The transport modelling has involved mitigation workshops with key stakeholders to secure the benefit from their expert advice.
- 12.3. There are projects in the IDP Schedule which are "must haves," i.e. they are integral to the delivery of development on a site, such as physical infrastructure to serve the site such as utilities and roads. If they cannot be delivered development may be delayed and/or found unacceptable at development management stage as it would be unable to address its impacts.

12.4. Water and Westcott

- 12.5. The Water Cycle Study was prepared using the site assumptions available at the time the assessment was undertaken. During plan preparation some allocations were refined and amended. For example, the proposed employment growth area at Westcott was subsequently revised compared to the area assessed within the Water Cycle Study. As a

result, the detailed conclusions relating to water and wastewater infrastructure at this location should be interpreted as applying to the site assumptions tested at the time of the study rather than the final allocation. This does not indicate that the site cannot be delivered, but that further detailed engagement with the relevant water and wastewater providers and site-specific assessment will be required at planning application stage to confirm infrastructure requirements and phasing arrangements.

Gaps

- 12.6. Appendix 2 of the IDP sets out the stakeholders who have contributed information and projects for the IDP.
- 12.7. Where there was no response, stakeholders were followed up, and other actions were taken to understand the missing information.
- 12.8. The utility companies were included within discussions on the IDP, although it has not generally been possible to list their specific projects in the IDP Schedule. These can be found in their respective asset management plans.
- 12.9. Engagement will be continued with them to help align Local Plan growth with their strategic planning processes and to support the staged process for the preparation of plans for utility improvements. As mentioned, there has been deep and extensive engagement with key infrastructure providers which has helped resolve any gaps, uncertainties and reach an agreed understanding on the level, cost, and delivery of infrastructure.

13. What happens if new infrastructure is needed but there are no projects or funds to deliver it?

- 13.1. The Council has carried out extensive engagement with infrastructure stakeholders to influence their plans and strategies for the future. For example, the utility providers have a duty to ensure water supply, wastewater treatment and energy supply and so will, through their regional planning processes take into account growth associated with the Local Plan and deliver projects to facilitate this.
- 13.2. The timing of utility provision may be an issue as this type of infrastructure can take a long time to plan and build. This is mitigated by the planned lead in time for new developments and is reflected in the assumptions that underpin the Local Plan about housing delivery rates and timescales. The Council will keep up the momentum on engagement with providers to ensure they are kept updated with progress on housing delivery so that the Local Plan site allocations are well served by critical infrastructure.
- 13.3. Infrastructure needs and requirements will also be assessed as part of the pre-planning application stage and as part of the Development Management process. More detailed information is typically available for assessment at those stages and in some cases, there may be mitigations or alternative mitigations to those listed in the IDP which can address the impacts of the development.

- 13.4. Ultimately the Council can refuse permission for new development if critical or essential infrastructure will not be provided. This would be in line with Local Plan policies IN1 and IN2. However, with early engagement on infrastructure matters and the IDP this outcome should be avoided.

14. How will infrastructure provision be monitored?

- 14.1. Delivery of infrastructure funded from section 106 planning obligations and Community Infrastructure Levy (CIL), as well as other developer and public funding secured, is monitored and recorded in the Council's annual Infrastructure Funding Statement. This provides an annual overview and transparency on infrastructure delivery and expenditure. However, this tends to omit information about infrastructure that is provided directly by developers on site, or via s278 highway agreements. The scope to record these so as to capture a fuller picture of infrastructure provision will need to be considered further.
- 14.2. The Council also monitors housing delivery. This also informs the assessment of five-year housing land supply, which is also published. Both documents are published at least annually. The Monitoring Framework (Appendix A to the Local Plan) shows how completions of new homes will be monitored in relation to the strategic housing target for the Local Plan (under Policy SP2).
- 14.3. Affordable housing contributions are also reported within the Council's annual Infrastructure Funding Statement.

15. Conclusions

- 15.1. The IDP and other Local Plan evidence on infrastructure and community facilities has been tested extensively and involved considerable work with stakeholders. The infrastructure impacts of the Local Plan are well understood, and those relevant to planned growth are well justified.
- 15.2. The IDP concludes that very significant infrastructure issues face Buckinghamshire to accommodate the planned growth and together with developer funded infrastructure, continued investment will be required in wider infrastructure networks and services to fully mitigate service and infrastructure pressures. Delivery of improvements in some utilities and public services may also depend on funding and decisions outside the scope of the planning system.
- 15.3. The IDP concludes that no overriding infrastructure barriers have been identified preventing the delivery of the Local Plan strategy, noting that this will be subject to further testing as part of the Development Management process. Challenges remain and continued coordination will be required; not least service and infrastructure providers need to reflect planned growth into their investment and delivery plans and ensure that plans are developed to deliver required infrastructure. This applies both to national and regional

utility companies that must coordinate multi-million-pound investment programmes, as well as more locally to providers such as the Integrated Care Board which must coordinate investment and feasibility with General Practices.

- 15.4. Overcoming these challenges will avoid infrastructure capacity bottlenecks that could otherwise constrain the delivery of planned growth and ensure that the scale and distribution of development proposed in the Local Plan can be supported by appropriate infrastructure, in accordance with national planning policy.
- 15.5. The Council is committed to playing its part in meeting these challenges, working with developers and with service and infrastructure providers and other stakeholders to highlight and address any challenges. It will ensure that further assessment of infrastructure needs takes place as part of the planning process so that decisions on planning applications are based on the best available data, and it will monitor and publish relevant information to ensure transparency on contributions and infrastructure delivered.