

**Greater  
Norwich Local  
Plan  
Infrastructure  
Needs Report  
2020**

# Contents

1. Introduction.....	1
1.1 Purpose of the document.....	1
1.2 National Planning Policy, Guidance and Legislation .....	1
1.3 Relevant Local Infrastructure Plans and Strategies .....	2
1.4 Growth in the Local Plan .....	4
2. Transport.....	9
2.1 Pedestrians and Cyclists .....	9
2.2 Rail .....	10
2.3 Public Transport .....	11
2.4 Road .....	11
3. Utilities .....	14
3.1 Water and Flooding.....	14
3.2 Power .....	15
3.3 Digital .....	17
4. Education.....	18
5. Health Care.....	22
6. Emergency Services .....	27
6.1 Police.....	27
6.2 Fire and Rescue .....	28
7. Community, Sport and Leisure Facilities.....	29
7.1 Libraries.....	29
7.2 Community centres .....	30
7.3 Sports and leisure.....	30
8 Green Infrastructure.....	33
9. Waste Management .....	36
10. Summary of Infrastructure Requirements .....	38
10.1 Transport.....	38
10.2 Utilities .....	38
10.3 Education .....	38

10.4 Health Care.....	38
10.5 Emergency Services.....	39
10.6 Community, Sport and Leisure Facilities .....	39
10.7 Green Infrastructure .....	40
10.7 Waste Management.....	40

# 1. Introduction

## 1.1 Purpose of the document

The emerging Greater Norwich Local Plan (GNLP) will be the planning strategy and site allocations plan to provide for growth from 2018 to 2038 in the three districts of Broadland, Norwich and South Norfolk. The districts are working in partnership to produce the GNLP, along with Norfolk County Council and the Broads Authority, through the Greater Norwich Development Partnership.

The provision of new and improved infrastructure is essential to ensure the growth planned through the GNLP is sustainable. Infrastructure includes a wide range of facilities and services including schools, medical facilities, community facilities, open space, roads, railways, cycle paths and flood defences.

This report is a review of the infrastructure requirements to provide for the growth planned through the GNLP. It informs the content of the plan as a whole, most specifically policy 4 on strategic infrastructure, appendix 1 which provides additional detail to support policy 4, and site allocation policies which include any site-specific infrastructure requirements.

To assist and provide context for the above, the report sets out an overview of existing infrastructure in the area by type, along with timings, costs and sources of funding for infrastructure improvements required to serve the planned growth.

## 1.2 National Planning Policy, Guidance and Legislation

### *1.2.1 National Planning Policy Framework*

The National Planning Policy Framework states that local plans should make sufficient provision for infrastructure requirements including transport, waste management, water supply, flood risk, and the provision of energy in addition to the provision of community facilities such as libraries, schools and other cultural infrastructure (paragraph 20).

It goes on to state that to achieve sustainable development the planning system should identify and coordinate the provision of infrastructure. Effective and on-going joint working should help to determine where additional infrastructure is necessary, and whether development needs that cannot be met wholly within a particular plan area could be met elsewhere.

### *1.2.2 Community Infrastructure Levy*

The Community Infrastructure Levy (CIL) was introduced in 2010 through the Community Infrastructure Levy Regulations 2010. The CIL allows local authorities to charge a tariff, at a locally set rate, on many types of new development.

The Greater Norwich authorities adopted CIL charging between 2013 and 2014 with a variation of CIL charging rates across each local planning authority area<sup>1</sup>.

In the 2020 consultation for the 'Planning for the Future' white paper, the Government propose a wholesale revision to developer contributions, stating: *'The Community Infrastructure Levy and the current system of planning obligations will be reformed as a nationally-set value-based flat rate charge ('the Infrastructure Levy'). A single rate or varied rates could be set. We will aim for the new Levy to raise more revenue than under the current system of developer contributions, and deliver at least as much – if not more – on-site affordable housing as at present. This reform will enable us to sweep away months of negotiation of Section 106 agreements and the need to consider site viability. We will deliver more of the infrastructure existing and new communities require by capturing a greater share of the uplift in land value that comes with development'*. At the time of writing this proposed change has not been passed into legislation. The Government expects that the necessary legislation could take two years to complete.

The emerging GNLP anticipates likely future changes to funding regimes by referring in its Delivery Statement to *"pooled use of the Community Infrastructure Levy, or any successor source of infrastructure payment"*. The policies of the emerging strategy as a whole consequently allow for the use of infrastructure payments from development, be they from CIL or any replacement.

### 1.3 Relevant Local Infrastructure Plans and Strategies

The following infrastructure plans and strategies have been used to support the creation of this report.

#### 1.3.1 *New Anglia Integrated Transport Strategy*

The Strategy looks ahead to the 2040s focussing on the actions we need to take over the next three to five years to help secure the foundations for long-term success. It is a dynamic and living blueprint to guide the work and investment into transport by many interested partners.

#### 1.3.2 *Highways England A47 Corridor Improvement Plan*

Over £300 million was committed to A47 improvements for the five-year period 2015-2020, through Road Investment Strategy 1 (RIS1). In Norfolk, this was for dualling from Easton to North Tuddenham and Blofield to Burlingham, and junction improvements in Great Yarmouth and at the A11/A47 Thickthorn junction, Norwich. These measures are now expected to be delivered in the early 2020s. Government announced the programme for the

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<sup>1</sup> Greater Norwich CIL Charging Schedule - <http://www.greaternorwichgrowth.org.uk/planning/cil/>

second Road Investment Strategy period, from 2020 to 2025, in 2019, but no further projects in Norfolk were included.

#### [1.3.3 Norfolk Strategic Infrastructure Delivery Plan](#)

The strategic infrastructure delivery plan pulls together information on the key infrastructure needed to deliver economic growth in Norfolk. It is a working document that will be reviewed on a regular basis as information becomes available and projects progress through to delivery. The plan will help Norfolk County Council and partners to co-ordinate implementation, prioritise activity and respond to any funding opportunities.

#### [1.3.4 Norfolk Strategic Planning Framework](#)

All planning authorities in Norfolk have agreed to prepare a combined strategic framework planning document. This provides the overarching framework for planning issues across the county with an emphasis on strategic land use issues with cross boundary implications. The document forms part of the process to demonstrate compliance with the Duty to Cooperate (Localism Act 2011). It relates to the period 2012 to 2036 and will inform the preparation of local plans produced by individual planning authorities during this period. The framework includes strategic guidance in relation to housing, economic growth, infrastructure provision and environmental considerations, including in future an agreed approach to Habitats Regulation Assessment. The latest version of the planning framework was agreed in June 2019.

#### [1.3.5 Local Transport Plan](#)

Norfolk's third Local Transport Plan 2011-26 details Norfolk County Council's strategy and policy framework for delivery up to 2026. It is used as a guide for transport investment and considered by other agencies when determining planning or delivery decisions. Its six priorities are: maintaining and managing the highway network, delivering sustainable growth, enhancing strategic connections, reducing emissions, improving road safety and improving accessibility. This plan is in the process of being reviewed. The refreshed plan will be adopted in spring 2021.

#### [1.3.6 Norfolk Rail Prospectus](#)

The Rail Prospectus sets out Norfolk County Council's requirements for rail. Norfolk County Council uses the prospectus in its dealings with government, train companies, Network Rail and other stakeholders to get the best for the people of Norfolk. The prospectus is being updated. The refreshed prospectus will be adopted in spring 2021 and will include longer term requirements to 2029 and beyond.

#### [1.3.7 Transport for Norwich](#)

Transport for Norwich is a programme of work to improve accessibility by all forms of transport in and around the city. The aim is to encourage the use of more sustainable forms of transport, such as public transport, cycling and walking, while also improving the capacity of the road network. It's also designed to stabilise traffic levels and as a result improve air quality around the city. An important part of this new infrastructure is to prepare the area for planned growth by connecting new and existing communities to centres of employment.

This plan is in the process of being reviewed. The refreshed plan will be adopted in summer 2021.

#### [1.3.8 Greater Norwich Infrastructure Plan](#)

The Greater Norwich Infrastructure Plan (GNIP) helps coordinate and manage the delivery of strategic infrastructure to support growth, a high quality of life and an enhanced natural environment in the Greater Norwich Area. It informs prioritisation of investment and delivery covering all infrastructure thematic groups. It is not an exhaustive list and is a living document, updated annually to reflect the latest information.

#### [1.3.9 Greater Norwich Joint Five-Year Infrastructure Investment Plan](#)

Once accepted, the GNIP informs the prioritisation of new strategic projects within this annual plan which programmes CIL allocations against forecast CIL income for the next five years. The projects accepted into this plan are allocated CIL funding because they are considered to be a priority for delivery to assist in achieving the economic growth targets as set out in the Joint Core Strategy (JCS) and the Greater Norwich City Deal.

#### [1.3.10 Market Town Network Improvement Strategies](#)

Many of Norfolk's market towns and larger villages have a considerable amount of planned housing and employment growth identified through the relevant local plans. There are 10 adopted [market town strategies](#) adopted by Norfolk County Council between 2019 and 2020. The adopted strategies for the Greater Norwich area are: Diss, Aylsham, Wroxham and Hoveton and Wymondham. These strategies identify the most effective transport improvements to support future planned growth and help address transport issues such as congestion, enhancements to safety and access to public transport. An action plan on how we will take forward the schemes identified in the Network Improvement Strategies is being developed to help guide investment of infrastructure in Norfolk's market towns.

### **1.4 Growth in the Local Plan**

#### [1.4.1 Housing](#)

The Government updated the standard methodology for identifying [local housing need](#) in 2019 based on 2014 based household projections. The formula gives an annualised need of 2,027 homes per annum for the Greater Norwich area. Using this version of the standard methodology for calculating housing need, and re-basing the figures to 2018, suggests that the housing need to 2038 is 40,541 homes.

Since the publication of the revised standard methodology in 2019, the Government has carried out two further consultations in 2020 which propose staged changes to the standard methodology for calculating local housing need. From August to October 2020 the Government consulted on the 'Changes to the current planning system' and the 'Planning for the future' white paper.

Further to this, the 2018-based household projections have been produced by the ONS which also indicate an increased housing need in the plan area. Whilst the temporary

method of calculation was confirmed in December 2020 as still being based on 2014 based household projections, the direction of travel from central government is clearly an expectation that local plans will need to plan for higher numbers of homes.

Alongside this, it is also prudent to provide for general uncertainty (such as delayed or slow delivery, and fallout of permissions).

As such the GNLP has included a significant buffer (22%) to accommodate this expected increased growth proposing a total housing figure of around 49,500 over the plan period.

With the existing commitment of 31,398 homes at April 2020 new sites have therefore been identified for around 10,700 homes.

Figures 1 and 2 and Table 1 set out past completion rates and projected completions based on the existing planning strategy, the JCS. A housing delivery trajectory for the emerging GNLP is in appendix 6 of the strategy document. Taking account of delivery in 2019 and 2020, the annual target set by the emerging GNLP to provide for the housing need from 2018 to 2038 of 40,541 is 1,961 homes, somewhat lower than the JCS target.

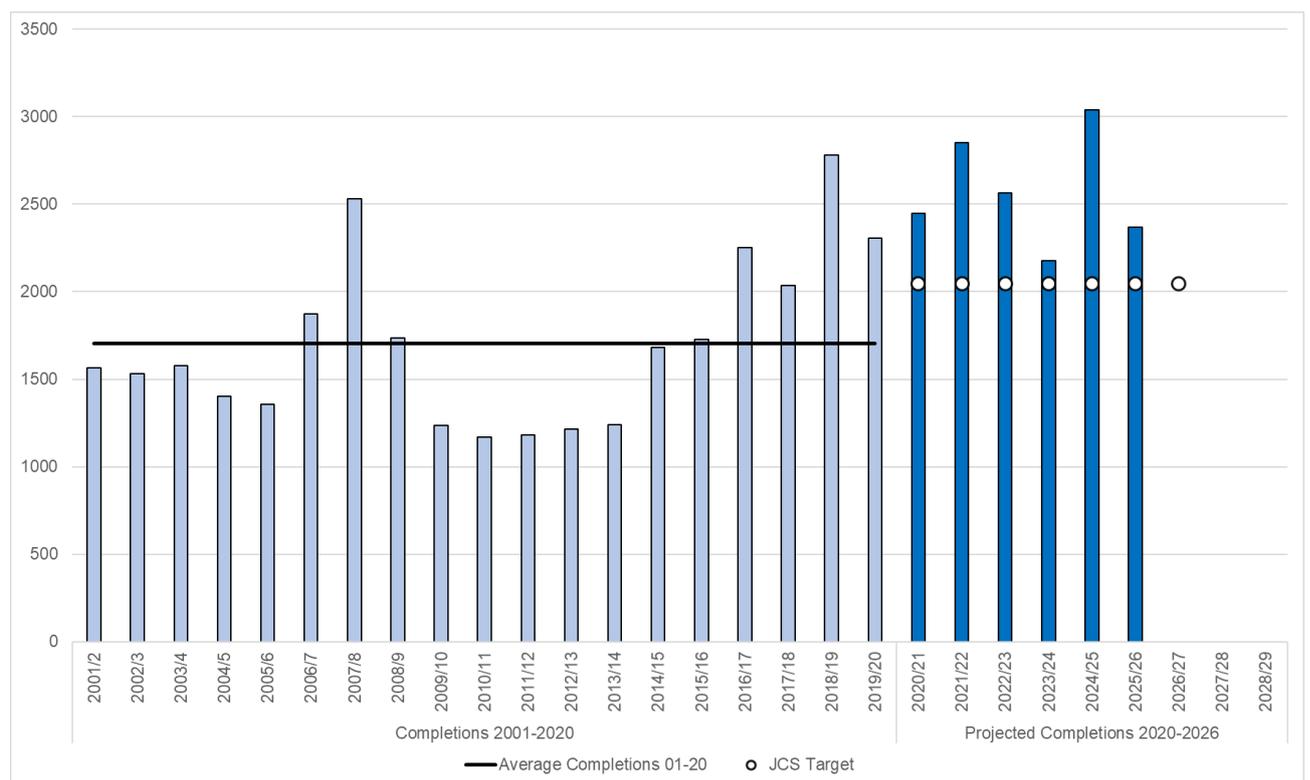


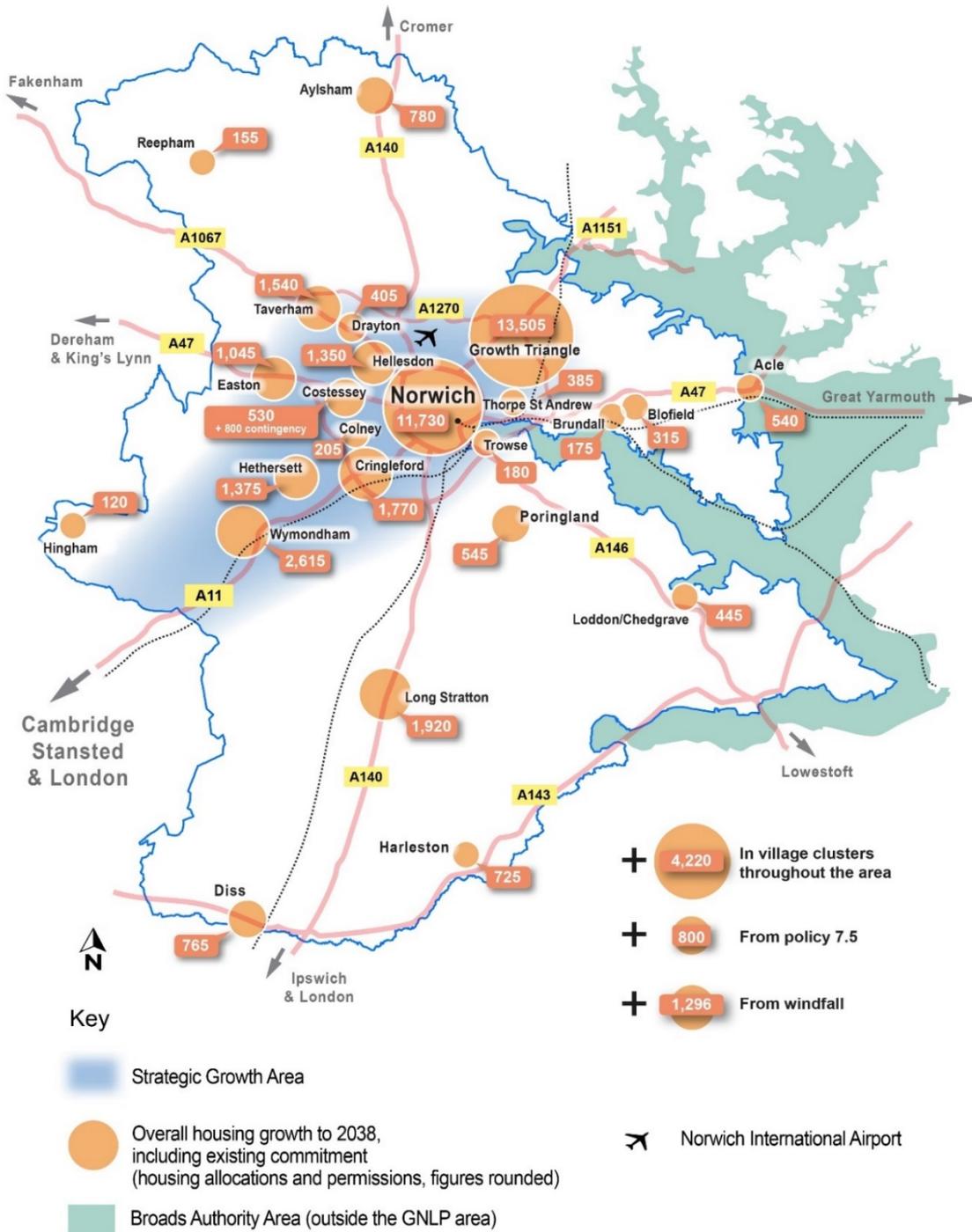
Figure 1 Greater Norwich Housing Completions and Trajectory

Graph showing the number of houses completed from 2001 to 2020 compared to the annual target set out in the JCS.

Table 1 The proposed strategy for the distribution of growth in Greater Norwich

Area		Existing deliverable commitment (including uplift and delivery 2018/19 and 2019/20)	New allocations	Total minimum deliverable housing commitment 2018 - 2038
<b>Norwich urban area</b>		26,019	6,672	32,691
<b>The main towns of Wymondham, Aylsham, Diss (with part of Roydon), Harleston and Long Stratton</b>		5,151	1,655	6,806
<b>The key service centres of Acle, Blofield, Brundall, Hethersett, Hingham, Loddon / Chedgrave, Poringland / Framingham Earl, Reepham and Wroxham</b>		2,984	695	3,679
<i>Village clusters (see appendix 5 details of the clusters)</i>	<b>In the remaining parts of Broadland (see policy 7.4 and the GNLP Sites Plan for specific sites)</b>	1,146	Up to 482	4,220
	<b>In South Norfolk (see policy 7.4 and the South Norfolk Village Clusters Housing Site Allocations Local Plan for specific allocations)</b>	1,392	A minimum of 1,200	
<b>Allocations Total</b>		36,692	10,704	47,396
<b>Homes delivered though policy 7.5</b>		NA		800
<b>Windfall allowance</b>		NA		1,296
<b>Overall Total</b>				49,492

# Housing Growth Locations



© Crown Copyright and database right 2019.  
 Broadland District Council - 100022319  
 Norwich City Council - 100019747  
 South Norfolk District Council - 100019483

Figure 2 Greater Norwich Indicative Housing Growth Locations

#### *1.4.2 Economic Growth*

Evidence suggests that the Greater Norwich economy has grown by around 20,000 jobs since 2008 (the JCS base date) and 30,000 since 2011 (the low point after the recession).

Greater Norwich is worth over £10 billion (Gross GVA 2013 prices) to the UK's economy with key sectors which include; life sciences and biotech; advanced manufacturing and engineering; agriculture, argitech and food & drink; ICT, technology creative and digital; visitor, economy, tourism and culture; and financial, services and insurance.

Since 2011 the Greater Norwich area has supported an average job growth per year of 3,300<sup>2</sup> jobs per year. The population projections for the Greater Norwich area show an increasing population, to meet the requirement of an increasing population there will be a minimum requirement for an additional 22,000 new jobs. Local evidence has shown that the total amount of allocated and permitted employment land is more than sufficient to provide for expected and promoted growth. There may be a local need for some new small-scale allocations to provide for jobs growth in towns and villages, providing local job opportunities and supporting a vibrant rural economy.

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<sup>2</sup> EELGA Jobs Growth Data 2011-2018

## 2. Transport

Future housing growth in the Greater Norwich area will increase the numbers of people using the transport network in Greater Norwich. It is likely that travel patterns will be affected by long-term changes caused by the Covid-19 pandemic. These changes will be considered in future planning alongside other factors.

### 2.1 Pedestrians and Cyclists

#### 2.1.1 Overview

The Walking and Cycling Strategy for Norfolk published in 2016 sets out Norfolk County Council's vision for cycling and walking including the aims that by 2025:

- More people walk and cycle to get to places of work and education;
- Walking and cycling are normal activities for most people;
- Routes are direct, convenient and pleasant.

The strategy sets out the aim to increase the modal share of cycling and walking to 10% of all journeys by 2025 and 25% by 2025. In Norwich cycling makes up 9% of commuter journeys, with walking making up 24%. This strategy is in the process of being refreshed.

Norwich's Cycle Network consists of five radial and two orbital pedalways and has been developed since the spring of 2012. Because built-up areas generally have pavements, the walking network is less well defined. However, there is a wide range of infrastructure and routes including a core area within the city centre that benefits from large areas of pedestrianised zones.

The pedalways network extends through the Norwich urban area, intersecting in the city centre at St Andrews Plain and connecting hubs such as public transport interchanges, employment centres, the universities, major growth locations and the city centre, while the gaps are filled in by neighbourhood routes that connect to schools and local shops.

Recently the network has benefited from funding as part of the Department for Transport (DfT) Cycling City Ambition Grant. This funding has seen £14.1 million invested in the network since 2013 across two phases. The first phase focused on the pink pedalway between Norfolk & Norwich University Hospital and UEA to Heartsease and Broadland and the second phase on two pedalways, the yellow pedalway between Norwich International Airport and Lakenham and the blue pedalway from Sprowston to Wymondham. As a result, a 65.6 % increase in cycling has been seen at sites that received the first round of funding focused on the Pink Pedalway and a 51.7% increase has been seen at sites that received the second phase of funding focused on the Blue and Yellow Pedalways.

#### 2.1.2 Needs

To look at the needs of the pedestrian and cycling network to support the future planned growth in the area, a Local Cycling and Walking Infrastructure plan (LCWIP) is currently being developed for Norwich. LCWIPs provide a strategic approach to identifying cycling and walking improvements required at the local level and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle by

developing and expanding the current cycling and walking zones and network. The outputs of this work include:

- a network plan for walking and cycling which identifies preferred routes and core zones for further development;
- a prioritised programme of infrastructure improvements for future investment;
- a report setting out the underlying analysis carried out, which provides a narrative which supports the identified improvements and network.

### *2.1.3 Costs and Funding*

The total costs for the improvements suggested in the LCWIP for Norwich, and the refreshed walking and cycling strategy, are currently unknown as many of the projects are not at an advanced stage of planning. However, as these projects will be completed in partnership with Norfolk County Council as the local Highways Authority, the outputs of the LCWIP and strategy should allow for the identification of cycling and walking infrastructure improvements for future investment in the short, medium and long term. As many of the projects set out in the work will help reduce the impact of new developments planned in the Local Plan, they could therefore benefit from CIL funding.

## **2.2 Rail**

### *2.2.1 Overview*

Rail provision in the Greater Norwich consists of the following routes:

- Norwich to London Liverpool Street;
- Norwich to Cambridge and Stansted;
- Norwich to Ely, Peterborough, the Midlands and the North (this service will, shortly, terminate at Nottingham rather than continue through to Liverpool);
- Norwich to Sheringham;
- Norwich to Great Yarmouth and Lowestoft.

The following stations are in the Greater Norwich area: Norwich; Salhouse; Brundall Gardens; Brundall; Buckenham, Cantley; Reedham; Haddiscoe; Lingwood; Acle; Diss; Wymondham and Spooner Row.

### *2.2.2 Needs*

The Norfolk Rail Prospectus 2013 identifies several improvements to infrastructure and services on the rail routes. This is currently being reviewed.

### *2.2.3 Costs and Funding*

Funding for rail improvements will come from government and be delivered by Network Rail and the current franchise operator. There has been a significant investment in the rail network and the introduction of new trains across the Greater Anglia franchise (i.e. all services except Norwich-Peterborough) along with the delivery of Norwich to London in 90-minute services, which commenced in May 2019. Government is in the process of a major review of rail franchising that will likely lead to a different process by which it procures rail services.

## **2.3 Public Transport**

### *2.3.1 Overview*

Within the Greater Norwich area most bus services, including the Park and Ride services, are commercially operated. There is a good network of routes serving the city. Many rural areas, however, are not well-served by bus. The network largely comprises radial routes along the main road corridors focussed on Norwich, but also serving the market towns and larger villages.

### *2.3.2 Needs*

Further measures to improve bus services include an enhancement of the infrastructure provision within the city centre. This includes measures to help buses in congested parts of the network and an improvement to waiting facilities for passengers. Further investment in the bus fleet is required in order to provide cleaner-emission vehicles. Additional services in rural areas, where provision is not at the same level as that serving Norwich, would help people access vital jobs and services.

### *2.3.3 Costs and Funding*

Significant investment has been secured from Government's Transforming Cities fund, which will see £59 million being invested in a range of measures including delivering travel times for bus passengers on the most popular routes. The funding is made up of £32 million from the Transforming Cities Fund, £18 million from First Eastern Counties for investment in its fleet and local services, and £9 million from local councils and private contributions.

Provision of additional services would largely be down to bus operators.

## **2.4 Road**

### *2.4.1 Overview*

The A11 and A47 are both part of the strategic road network managed by Highways England. The A11 runs from Norwich to the A14 and M11, providing links to Cambridge, the Midlands, London and the south. The A47 links to Great Yarmouth and Lowestoft, and to the A1 at Peterborough, providing routes to the Midlands and the north.

The A11 is fully dualled and the A47 is a mixture of single and dual carriageway. Highways England are committed to dualling the A47 Easton to North Tuddenham and Blofield to North Burlingham and junction improvements to the Thickthorn roundabout and in Great Yarmouth.

Government identified a new tier of the most important local authority-managed A roads, the Major Road Network (MRN). In the Greater Norwich area this comprises the A1270, A143, A140 and A146. These are mostly single carriageway standard routes.

The A1270 (the Broadland Northway) was constructed to the north of Norwich connecting the A47 east of Postwick to the A1067 Fakenham Road north of Taverham. Norfolk County Council is working to complete this route by constructing the Norwich Western Link to the

A47 west of Norwich. There is also ongoing work to complete the Broadland Growth Triangle Link Road.

The A140 Long Stratton Bypass is a Norfolk County Council priority and work is progressing on the scheme. This has been included in the programme for MRN schemes by government.

A network of A, B and more minor roads connects the market towns to each other. Much of the rural road network is made up of low-standard, quiet country lanes.

Funding for roads improvements can come from a variety of sources including Highways England Roads Investment Strategies, MRN, Local Majors, Transforming Cities Fund, UK Shared Prosperity Fund, Norfolk County Council and developers.

#### *2.4.2 Needs*

A major improvement at Thickthorn junction to address existing and future congestion problems has been included in the Highways England A47 corridor improvement programme. Committed developments in Cringleford and Hethersett are expected to increase traffic demand at Thickthorn junction and the A11/Round House Way junction significantly. The scheme will help relieve congestion at Thickthorn junction by providing 2 new free flowing link roads that will connect the A47 with the A11. The new roads will re-route traffic away from the junction and flow under 3 new underpasses.

The dualling of the A47 between Blofield and North Burlingham has been included in the Highways England A47 corridor improvement programme. Highways England have identified that the Blofield to North Burlingham stretch of the A47 was currently operating at 108% of 2011 capacity. These issues are only likely to be increased by further planned growth and Highways England have proposed a new dual carriageway with two junctions.

The road between North Tuddenham and Easton is not adequate to cope with the high volume of traffic. There is a clear and demonstrable need to increase capacity along the route. Highways England have included improvements in the A47 corridor programme providing a new dual carriageway to the south and north of the existing road and two junctions.

#### *2.4.3 Costs and Funding*

The Thickthorn junction scheme construction period start date is estimated to be January-March 2022-23. The Blofield to North Burlingham improvements are estimated to cost £50-£100 million with a construction period start date of January-March 2022-23. And the North Tuddenham to Easton improvements are estimated to cost £100-£250 million with a construction period start date of January-March 2022-23. The funding for these schemes has been secured through RIS1.

An outline business case is being prepared for the A140 Long Stratton Bypass and is due to be submitted to the DfT in 2021. This is being carried out by an expert consultant to support the MRN Funding announcement in summer 2019. The scheme is estimated to cost £37.44 million with funding coming from a variety of sources including government MRN funding, CIL and developer funding. If successful, this would allow construction to start in July 2023 with opening in 2024.

The Norwich Western Link is required to connect the Broadland Northway at Taverham to the A47 west of Norwich. Scheme development work has commenced with consultation carried out on four route options. The preferred route announcement was made in July 2019. The next phase of scheme development will see the Outline Business Case submitted to government in early 2021. Norfolk County Council is working to the following timetable:

- Early 2021: Contractor appointed
- Mid-2021: Pre-planning application public consultation
- 2023: Start of work on site
- Late 2025: Road completed and open to traffic.

The total cost of delivering the Norwich Western Link, including inflation, is estimated at £160 million.

## 3. Utilities

### 3.1 Water and Flooding

#### 3.1.1 Overview

Anglian Water (AW) provides water and water recycling infrastructure for the Greater Norwich area. Long term plans, which are regularly updated to inform Anglian Water's investment, are in place for both water supply and recycling.

Water supply in Greater Norwich is from local groundwater sources and from a river intake from the Wensum. There has been significant recent investment in the river intake to protect water quality in this internationally designated chalk river habitat.

Water recycling is provided at Whitlingham Water Recycling Centre (WRC) for the Norwich catchment and at a number of smaller WRCs.

There is no strategic flood risk infrastructure in the area, though some local mitigation is in place. The great majority of growth planned through the GNLP avoids areas at risk of flood.

#### 3.1.2 Needs

AW's Water Resources Management Plan<sup>3</sup> does not identify a need for additional water supply infrastructure to serve growth in Greater Norwich to 2038. AW investment is focussed on water efficiency measures, smart metering and leakage reduction. Investment is also planned to transfer water from the Norwich and the Broads water resource zone (WRZ) to the neighbouring Happisburgh and Norfolk Rural North WRZs.

The overall strategy is to maintain water supply throughout the AW area, which covers much of eastern England, to promote demand management and leakage reduction, along with a strategic grid to serve other parts of East Anglia and Lincolnshire.

To address the growth needs in Greater Norwich, AW<sup>4</sup> identifies the Yare Valley Sewer as one of the two strategic sewer investment requirements. Increasing drainage capacity through Sustainable Drainage Systems (SuDS) and upsizing of sewers within the Whitlingham catchment is also a priority in AW's Water Recycling Long Term Plan.

Investment to address growth needs for Acle, Aylsham, Belaugh and WRCs and increased drainage capacity and Combined Sewer Overflow investigations and improvements in the Wymondham catchment are planned through AW's Water Recycling Long Term Plan. These are to improve capacity and protect water quality. Improved flow monitoring is also planned for a number of sewer catchments.

As per the Level 1 Strategic Flood Risk Assessment (SFRA), the majority of development in the GNLP has been planned to avoid areas of flooding. Any flood risk mitigation required e.g. for brownfield development sites close to the River Wensum in Norwich, have been

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<sup>3</sup> [AW Water Resources Management Plan 2019](#)

<sup>4</sup> [AW Water Recycling Long Term Plan \(2019\)](#)

identified through the ongoing Level 2 SFRA, included in site allocation policies and come forward as part of specific developments.

SuDS will be required through the GNLP to address risk of surface water flooding and which provide wider environmental benefits.

A Water Cycle Study is in production to provide further information on these issues.

### *3.1.3 Costs and Funding*

Funding for water infrastructure and water recycling infrastructure improvements is provided through a standard charge levied by AW on all new homes. This is used to fund water supply and foul sewerage network improvements. Developers are also required to fund water efficiency/re-use measures and on-site Sustainable Drainage Systems and flood risk mitigation.

## **3.2 Power**

### *3.2.1 Overview*

The Greater Norwich Energy Infrastructure Study (March 2019) (GNEIS) concludes that:

*Growth across Greater Norwich imposes a significant challenge to some of the existing energy infrastructure, without major upgrades to existing infrastructure at significant cost the planned levels of development will not be possible in some areas. Particular capacity concerns are highlighted at substations at Sprowston, Peachman Way (Broadland Business Park), Earlham and Cringleford, serving a significant proportion of the growth planned for through this plan.*

The study states that regulatory barriers to the network operators investing in new energy infrastructure can cause delays to providing increased energy capacity. The study therefore makes a range of planning policy recommendations for the GNLP to minimise energy demand and to reduce the carbon intensity of energy supplies, encouraging the use of local and sustainable energy sources, including linking to local energy networks where possible.

However, there are some locations which are currently most suitable for additional development:

- South-east and southern Norwich - particularly where load has been freed up by reductions in industrial usage;
- Areas in the east of South Norfolk district, supplied by Ilketshall Grid.

### *3.2.2 Needs*

A 33kV cable from Boundary Park Primary to Earlham Grid 33kV reinforcement and Bramford-Norwich - 132kV reconfiguration were delivered in 2018/19.

The GNEIS concludes that the following substations require upgrades and/or the use of measures to off-set the need for reinforcement (such as demand side responses and energy storage (batteries)):

*Table 2 Substations in the Greater Norwich Area*

<b>Substation (132/33kV)</b>	<b>Affected Development Sites</b>
Sprowston Primary	Beeston Park Home Farm Sprowston Land off Salhouse Road Land south of Green Lane East Land south of Green Lane West Land south of Salhouse Road Rackheath White House Farm
Peachman Way Primary	Broadland Gate Brook Farm Land east of Broadland Business Park Land north of Broadland Business Park
Earlham Grid Local A/B	Costessey GN Food enterprise zone Longwater / Easton Norwich Research Park Three Score
Cringleford Primary	Cringleford Hethersett

### *3.2.3 Costs and Funding*

The GNEIS states that the traditional solution to grid constraints is to upgrade the local network connection at the substation and in the local infrastructure. However, the capital costs to do this is between £2.5 million and £10 million, depending on the scale of the development. It is also likely to take several years before the work can be undertaken.

The GNEIS also states that there are ways to avoid or reduce the costs of improved network connection. Each site will be different, dependent on what activity will be undertaken on the site and the local vicinity. However, the following alternative approaches should be considered for all sites affected by grid constraints:

- Semi-islanded approaches utilising on-site generation and smart energy management solutions can enable development in constrained areas. Semi-islanded development sites including high levels of on-site, renewable or low carbon generation and batteries can be designed such that local benefits can be maximised while also having a positive effect on local electricity networks.
- Work with the distribution network operator to offer demand side response services, where on-site generation could be turned up or load reduced in response

to network signals, can help balance supply and demand more locally and assist system operators to deal with local constraint issues, so at times of network stress.

- Investment in infrastructure on these sites should be delivered through an Energy Services Company model, which can then provide a steady revenue stream for those involved.

### **3.3 Digital**

#### *3.3.1 Overview*

Better Broadband for Norfolk is using public subsidy to implement broadband infrastructure capable of providing access to Superfast broadband (24Mbps+) in areas which are not economically viable for broadband infrastructure providers. 95% of Norfolk properties now have access to broadband download speeds of at least 24Mbps.

However, to apply public subsidy, state aid requires that the premises which qualify for subsidy are identified prior to letting a contract for the provision of broadband infrastructure. This means developments created after a Better Broadband for Norfolk contract is let cannot be covered.

The key message on fixed line broadband is therefore that developers must ensure this infrastructure is provided for new developments. As long as developers register new sites with [Openreach](#), it will provide Fibre to the premises infrastructure. Currently this is for developments of 20 units or more. It is very important that sites are registered as early as possible, ideally before works begin.

Developments which are close to [Virgin Media's existing infrastructure](#) may be able to link to existing infrastructure.

## 4. Education

### 4.1 Overview

Across Greater Norwich there are currently:

- **Norwich:** 34 Primary Phase Schools and 8 Secondary Phase Schools
- **South Norfolk:** 63 Primary Phase Schools and 9 Secondary Phase Schools
- **Broadland:** 52 Primary Phase Schools and 7 Secondary Phase Schools

There is a mix of community maintained, church and academies, with 49% of schools now an academy (at September 2020). Of these schools, 17% in Broadland, 11% in Norwich and 31% in South Norfolk are full based on their last 2-year intake at reception and future expected intake.

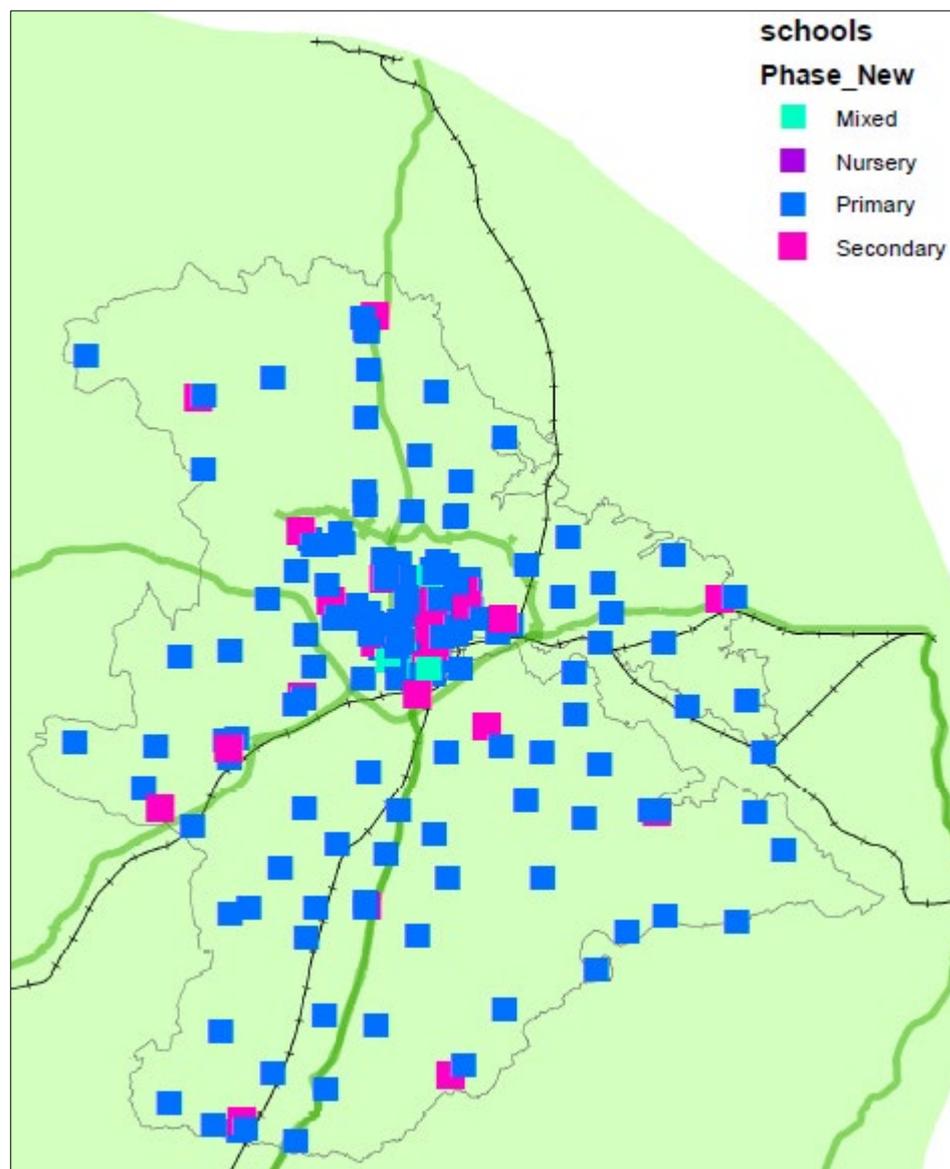


Figure 3 Location of schools in the Greater Norwich area

### 4.1.2 New Schools

As of September 2020, Norfolk County Council have the following schools either in the process of being built or plans are in place for building over the next 2-3 years:

- Cringleford new primary school – 420 place primary school situated within the new development of 1200+ new homes in Cringleford. A site has been identified and plans for the new school are in progress. The indicative earliest opening is in September 2023.
- Wymondham College prep school – a new 420 place free school situated on the Wymondham College campus. This school opened in September 2020 but due to delays in planning they are using existing buildings at the college for the children. The new building is planned to be formally opened for September 2021.
- Costessey Ormiston Victory Academy – expansion from Autumn 2021.
- Sprowston Academy – expansion from Autumn 2021.
- Blofield – relocation and expansion of the existing primary school – the earliest anticipated opening date is September 2023.

Other new schools are planned across the Greater Norwich area once housing and pupil numbers suggest that existing schools in the area are no longer able to accommodate local children. These are:

- Wymondham Silfield – a 420 place primary school.
- Poringland – a new school in response to considerable housing development in the area. A site search investigation has been commissioned.
- Salhouse Road, Sprowston – a site has been safeguarded for a new 420 place school within new housing development.
- Hellesdon – a new 420 place primary school within new development on the former golf course.
- Beeston Park, North Norwich – sites for 2 x 420 place schools within the proposed new housing development.
- Growth triangle – a new secondary school in response to proposed housing.
- Rackheath – 2 x 420 new primary phase schools.
- Land north and south of Smee Lane, Norwich – a planned new 420 place primary school in response to growth.
- Long Stratton – a new 420 place primary school building in response to strategic growth in the village.

## 4.2 Needs

### 4.2.1 Primary

Across the 3 districts there are a total of 149 primary phase schools of which 128 admit a reception intake (the remainder are junior schools). Of these schools, 40 have had only 1 or 2 spare places at reception over the past 2 years. The challenge for Norfolk County Council is to ensure that where new schools are planned in areas of growth, they are open at the

appropriate time, so all children have access to a school place locally. Several variables can impact on these plans such as securing a new school site and building a new school in a timely way to ensure sufficient school places, but also to ensure enough children live in an area so that the new school will be viable and existing schools in the area will not be negatively impacted for school places. For the September 2019 and 2020 intakes, the need for school places has been particularly challenging in pockets of growth mainly due to some new housing developments producing far more primary age children than originally anticipated.

#### 4.2.2 Secondary

7 secondary schools provide places for Broadland district. 4 of these schools are larger and have over 1,000 children on roll plus a 6<sup>th</sup> form. Reepham is a smaller school which has a 6<sup>th</sup> form and both Aylsham and Acle do not provide 6<sup>th</sup> form places. Children who live in both Aylsham and Acle will need to access their further education either in Norwich or other schools which provide this. 6 of these schools are showing pressure for places apart from Acle. Some pressure is the result of parental preference rather than local children and NCC's policy is to provide new places for local children when needed and not necessarily for preference patterns.

Norwich has 8 secondary phase schools including the University Technical College, a Roman Catholic school (Notre Dame) and a free school (Jane Austen). The remaining 5 schools are City of Norwich School, City Academy and Hewett Academy in South Norwich and Open and Sewell Park Academy in North Norwich. Both areas in Norwich have some surplus places in one or more schools. It is expected that these places will eventually fill over time as larger cohorts move through the primary system into secondary education.

South Norfolk has 9 secondary schools in total with 3 larger schools – Wymondham, Hethersett and Ormiston Victory in Costessey capable of a capacity of over 1,000 children. Hobart in Loddon and Long Stratton High often struggle with lower numbers of children.

#### 4.2.3 Pupil Place Planning

Broadland, Norwich and South Norfolk tend to attract families with more children compared with other areas of the Norfolk. Norfolk County Council operate their pupil forecasting model using a multiplier of 28.1 primary age children per 100 new homes. This figure is calculated using evidence of completed new housing developments across the whole county, but we are aware that this number can fluctuate across districts, type and size of development and areas where there are popular schools both at primary and secondary phases. It is important that local variations are considered when planning school places particularly where a new school or expansion of an existing school is planned.

#### *4.3 Costs and Funding*

The costs to build a new primary phase school can vary depending on the layout of the site, whether it has a nursery or not, ground conditions and the availability of services.

In general, the cost to build a new 2 form entry (420 place) school is in the region of £8 million.

As Greater Norwich charges CIL, only land can be secured through an S106 agreement. NCC currently receives £2 million per annum from CIL towards specified school expansion projects. This contribution does not cover the full cost of school expansions in Greater Norwich and Norfolk County Council uses Basic Need and other central Government grants to fully fund these projects with agreement that any shortfall as a last resort is underwritten by Norfolk County Council funding.

## 5. Health Care

### 5.1 Overview

The consequences of the demographic and economic changes that are expected over the next 20 years cannot be predicted with certainty but forward planning for healthcare services is a high priority. The Greater Norwich area has its own Health Infrastructure Delivery Plan, which is to be further developed in 2021-22.

A newly formed operating plan for 2021-22 will manage the development of individual PLACE/ Primary Care Networks (PCNs) estate strategies, a complete investment pipeline and a full sustainability and transformation partnership (STP) estate strategy. A number of data gathering exercises, demand and capacity reviews and the formation of a system clinical strategy will form the direction of this work. **Once complete the STP/ integrated care system (ICS) estates programme will be able to highlight its estates and infrastructure requirements and its strategy moving forwards.**

#### 5.1.1 Health Partners in Greater Norwich

There are 6 partners in the Greater Norwich area, which cooperate through the STP. These are:

- NHS Norfolk and Waveney Clinical Commissioning Group;
- Norfolk and Norwich University Hospital NHS Foundation Trust;
- Norfolk Community Health and Care NHS Trust;
- Norfolk and Suffolk NHS Foundation Trust;
- East of England Ambulance Service NHS Trust;
- East Coast Community Healthcare CIC.

In addition to these, the following three trusts have limited services within the area, but the core of their services fall under different STPs:

- Cambridge Community Service NHS Trust (a small number of sites);
- Cambridgeshire and Peterborough NHS Foundation Trust (a single site);
- Hertfordshire Partnership University NHS Foundation Trust (a single site).

### 5.2 Needs

#### 5.2.1 Primary Care

Primary care is the first point of contact with the health system for patients and provides the principal point of contact for continuing care for patients, with referrals to specialists when necessary. All general practice (GP) surgeries are primary care, along with community pharmacists and optometrists. There are 68 GP Surgeries spread across Greater Norwich with 43 of these being main surgeries and 25 branch surgeries. There are over 462,000 patients registered with these surgeries. Contractual arrangements are dealt with by a series of PCNs across Norwich, Broadland and South Norfolk.

The below diagram demonstrates the 17 primary care networks, including those covering the Greater Norwich area.

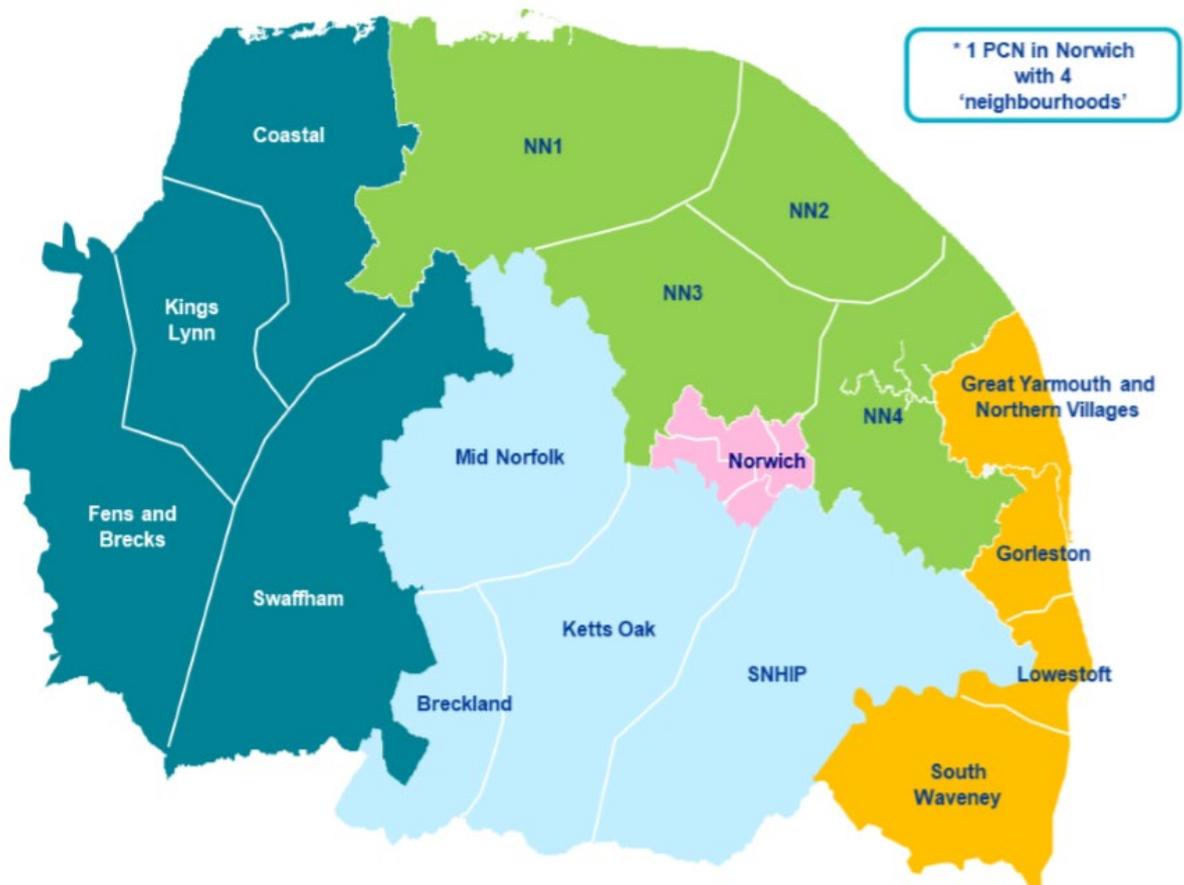


Figure 4 Map Displaying the Primary Care Networks Covering Norfolk

### 5.2.2 Hospital

There is one acute hospital that serves Greater Norwich, the Norfolk and Norwich University Hospital NHS Foundation Trust (NNUH). The main hospital is based at Colney on the outskirts of Norwich. Other services are delivered from a number of other locations.

The hospital, in line with the NHS Long Term Plan and the STP Delivery Plan, is currently undergoing a period of transformation. There are current known capacity issues at the hospital with a lack of space at the main site in Colney. In line with the shift to care in the community, the hospital engaged a consultant to produce an estates strategy and masterplan for the hospital to consider which services can be moved into the community, thus freeing up expensive acute space for other services which need to expand and remain on the acute site. This strategy and masterplan was completed in draft format in February 2020 and will impact on the infrastructure requirements included in this infrastructure plan. Therefore, only the current knowns are included below, and this section will need updating at the annual refresh in 2021-22, once the hospital's strategy and masterplan is complete.

#### Upcoming and completed projects

- Current road network has a bottleneck - Colney Lane roundabout, which is located at the entrance road to the hospital, is the only blue light access.
- Additional Bed Capacity - New 90 bed capacity added September 2020
- Additional Interventional Radiology Unit with 4 new treatment rooms added September 2020.
- Diagnostic Capacity. There are currently 2 x MRI mobiles and 1 x CT mobile outside the hospital to meet the current patient demand. There is also an aged asset replacement programme which adds an additional CT 6 in March 2021. A new DAC OBC is in progress.
- Electrical Infrastructure – A plan to upgrade the current electrical infrastructure is required in 2021. The current 5.4 Mva is close to full capacity and will impact new additional projects for master planning.
- Data Centre – Current constraints and limited resilience on existing data centre capacity.

### 5.2.3 Mental Health

Mental health services in the Greater Norwich area are provided by Norfolk and Suffolk NHS Foundation Trust. The trust provides a range of mental health services, including:

- Acute services for adults of all ages, including home treatment and crisis resolution;
- Psychiatric liaison services in partnership with Norfolk and Suffolk's general health hospitals;
- Assessment services, whereby patients are either self-referred or referred via GPs or other professionals;
- A comprehensive range of community based mental health services for children, adults of working age and adults in later life;

- Local inpatient mental health facilities for adults of all ages including psychiatric intensive care units, specialised wards for older people with dementia and a children's inpatient unit;
- Wellbeing services to complement mainstream mental health services, including support for mild to moderate mental health problems such as anxiety, stress and low mood;
- Access to psychological therapies, focussing on reducing mental ill health and strengthening community wellbeing.

The mental health trust, in line with the NHS Long Term Plan and the STP Delivery Plan, is currently undergoing a period of transformation. In line with the shift to care in the community, the mental health trust is expected to shift service delivery to wrap around primary care networks.

Norfolk and Suffolk Foundation Trust's (NSFT) existing provision at Hellesdon is constrained due to a number of the buildings on site, including clinical and administrative areas, being old and no longer fit for purpose.

NSFT's remaining accommodation in Norwich, including the Julian Hospital, has large capacity constraints in regard to not enough car parking on site. The existing provision is all included in the review being carried out as part of the NSFT estates strategy.

#### 5.2.4 Community Services

Community services in the Greater Norwich area are provided by Norfolk Community Health and Care NHS Trust. The trust provides a range of community services, including:

- Inpatient services provided at community hospital sites for specialist rehabilitation services, including but not limited to neurological and stroke rehabilitation;
- Clinic services for outpatients including but not limited to leg ulcer, diabetes, respiratory and cardiac conditions, occupational therapy and physiotherapy;
- Community nursing in patients' own homes for those who need health care at home.

The development of community service assets is supported by an Estate Masterplan for the development of core sites. Investment in new buildings remains a high priority, with emphasis placed on clear assessment of capacity and demand, achievement of efficiency and management of travel impacts on local communities. Clinical spaces remain constrained by condition or capacity, and future growth requires development of new or renewed resource, and increased throughput arising from scheduling clinical activity. Emphasis for access to clinical services is placed on enabling parking for community service patients and visitors, facilitating staff access and commuting, and minimising impacts arising on local communities from off-site parking.

#### 5.3 Costs and Funding

When fully developed, in early 2021-22, the STP/ICS will share its investment pipeline. This will highlight a prioritised list of investment proposals and requirements for the healthcare

estate and infrastructure across Greater Norwich. It will identify by scheme; proposal detail, priority ranking, proposed funding routes, costs and timelines.

### 5.3.1 Potential funding sources

- **Planning Obligations (CIL/S106)** – Funding to mitigate the impact of developments and/or help deliver infrastructure to support the development of an area.
- **Third Party Development** – Repayment or lease only, where the third party owns the building. It is possible for local authorities to be third party developers for healthcare facilities.
- **Public Private Partnerships** – The LIFT company operating across the Greater Norwich area is Norlife. Norlife operate in conjunction with Community Health Partnerships (CHP) to deliver estate, with CHP as the Head Tenant.
- **NHS England improvement grant** – This is available on a 34% / 66% basis with NHS England providing 66% of the funding and the practice supplying 34%. In order to access any funding, the practice has to submit a bid which is then assessed on a competitive basis alongside all other improvement grant bids regionally (Midlands and East).
- **Department of Health loan** – Funding on a loan basis, although funds are limited and often constrained.
- **Practice & Trust funds** – The practice or Trust can fund, or part fund, any reconfigurations, extensions or new builds themselves.
- **Disposals** – Healthcare is encouraged to dispose of surplus estate in order to generate funds for infrastructure projects.
- **Strategic Estates Partnership/Joint Venture** – It is possible to set up a Strategic Estates Partnership or a Joint Venture with a private sector partner in order to deliver estate and infrastructure requirements.
- **NHSPS Capital** – use of Landlord capital and reinvestment of disposal proceeds.
- **STP Capital** – The STP manages a system wide infrastructure investment pipeline, with high priority projects submitted for national capital wave funding.
- **One Public Estate (OPE)** – Healthcare is eligible to be included in OPE projects through a national bidding process by the Norfolk OPE team.

## 6. Emergency Services

### 6.1 Police

#### 6.1.1 Overview

Greater Norwich is policed by Norfolk Constabulary. Within Greater Norwich, during the three-year period up to 30 June 2019 police officers dealt with 85,455 incidents and 27,416 crimes on average per annum.

Across Greater Norwich there are ten police stations situated in the following areas:

- Acle;
- Taverham;
- Earlham;
- Norwich City Centre;
- Sprowston;
- Tuckswood;
- Diss;
- Harleston;
- Long Stratton;
- Wymondham.

#### 6.1.2 Needs

At present the following ratio exists in the Greater Norwich area:

*Table 3 Police Officer Ratios*

Type of Staff	Ratio (Officer / Population)
Police Officers	1:1,056
Response Officers	1:1,468
Beat managers	1:6,400
Support Staff / Detectives	1:16,385

Cumulatively based on the population of Greater Norwich of 409,608 (based on 2018 mid-year population estimate), the staff to population ratio, based on the current staff ratio, is estimated in table 4 below. For Norfolk Constabulary to be able to accommodate the proposed growth and the potential subsequent increase in crime there will need to be improvements to police infrastructure.

The population of Greater Norwich is expected to increase by 61,000 people by 2038 (ONS, 2018) and estimate to 2031 to 25,000, there is an increase staffing requirement across Greater Norwich as outlined in table 4.

*Table 4 Police Constabulary Staffing Levels*

	Current Staffing Level	Increased Staffing Level (officers)	
		2031	2036
<b>Police Officers</b>	<b>387</b>	<b>411</b>	<b>425</b>

<b>Response Officers</b>	<b>279</b>	<b>296</b>	<b>306</b>
<b>Beat Managers</b>	<b>64</b>	<b>68</b>	<b>70</b>
<b>Support Staff/Detectives</b>	<b>25</b>	<b>27</b>	<b>28</b>

### 6.1.3 Costs and Funding

No physical infrastructure has been identified as being required as a result of the proposed growth the police service have highlighted the need for additional staff. To have enough officers by 2038 the service needs:

- 38 police officers;
- 27 response officers;
- 6 beat managers;
- 3 support staff/detectives.

Norfolk Constabulary is funded by Home Office grant and Council Tax.

### 6.2 Fire and Rescue

The proposed level of changes in housing provision can be met within the Norfolk Fire and Rescue Service delivery infrastructure.

Hydrants will be needed as per existing standing arrangements (one fire hydrant for every 50 dwellings). However, the final number of hydrants required will need to be assessed on a case by case basis when the mix, type of housing and layout is made clear as in a residential area no building should be more than 150m from a fire hydrant.

Fire hydrants may also be sought in respect of commercial development. Hydrants should be provided within 90m of an entry point to the building and not more than 90m apart. The exact number of hydrants required will need to be assessed on a site by site basis taking into account the mix and type of commercial uses proposed.

Given that the provision of any new fire hydrants required will in most cases be on-site, Norfolk County Council would expect that they are delivered through a planning condition.

## 7. Community, Sport and Leisure Facilities

### 7.1 Libraries

#### 7.1.1 Overview

There are libraries located at: Aylsham, Reepham, Wroxham, Acle, Blofield, Brundall, Hellesdon, Taverham, Poringland, Long Stratton, Loddon, Harleston, Diss, Wymondham, Hethersett, Hingham, Costessey, Tuckswood, Mile Cross, Earlham, West Earlham, Plumstead Road, St Williams Way and Sprowston plus the Norfolk and Norwich Millennium Library.

Additional capacity may be provided through remodelling and extending buildings and services to improve their functionality, so they can support greater footfall, respond to changing community needs or accommodate additional services.

#### 7.1.2 Needs

Based on guidance published by the (now defunct) Museums, Libraries and Archives Council, a standard of 30 square metres of library floorspace per 1,000 people is used as a proxy estimate for the additional library provision to accommodate new developments. But in practice, the provision of additional library capacity may not be through the construction of additional floorspace, i.e. the extension of library buildings.

In the majority of cases, the introduction of Open Library technology has provided the additional library capacity to enable the service to respond to additional demand

The Greater Norwich housing growth locations show an impact to the north east of Norwich centred around Rackheath, with an estimate of some 13,500 dwellings. This has previously been identified as an area that will require additional library facilities due to the scale and size of the development. It was previously recognised that the delivery of a library service from a multi-functional hub was important in this area.

The benefits of doing this include:

- Efficiency in the use of assets and reducing costs through bringing services together in one place;
- Supporting a more local and devolved approach to service delivery;
- Promoting community involvement;
- Providing services in a more accessible and seamless manner for residents, including making it easier to signpost to other sources of support.

To make this happen the library service would need an appropriate site as part of the development.

#### 7.1.3 Costs and Funding

The library element of the multi-functional hub will require the following (based on the guidance published by the Museums, Libraries and Archives Council):

It is recommended that 30 square metres of library floor space per 1,000 people is provided. Therefore, based on an anticipated growth of 13,500 dwellings and an increased population

of circa (c.) 26,000 people, this would equate to 780 square metres of library space. We would anticipate, however, that this is over provision bearing in mind other facilities in the locality and we suggest this is reduced to 390 square metres with an anticipated building cost of c. £1.5 million (based on a regional cost modelling £/m<sup>2</sup> of £3,840 - £4,260).

## **7.2 Community centres**

### *7.2.1 Overview*

Across Greater Norwich there are 30 community centres of which Norwich City Council owns 15.

These community centres provide spaces for activities such as parent and toddler groups, parties, community events and exercise classes.

In Broadland and South Norfolk most of these community centres are managed and maintained by parish and town councils. Many of the centres in Norwich are run by charities to which the council lease or licence the building on peppercorn rents. The parish and town councils are responsible for a large degree of maintenance costs which is not supported by CIL, those that are subject to community asset transfer are fully repaired and maintained by the tenants.

### *7.2.3 Needs*

Strategically there are three facilities that are planned in the Greater Norwich Growth Triangle at: Beeston Park, North Rackheath and at the Brook Farm development.

### *7.2.4 Costs and Funding*

Outside of Norwich, community facilities are of a smaller scale such as village halls and are generally maintained by parish and town councils. The maintenance of these building is mostly funded by CIL payments as parish and town councils receive 15% of CIL payments, from developments in the area, and if the area is covered by a 'made' neighbourhood plan the parish or town council receives 25% of the CIL payments in the area.

## **7.3 Sports and leisure**

### *7.3.1 Overview*

In Greater Norwich there is a mixed economy of sport and leisure facilities, owned, operated and managed by a wide range of organisations. Those either owned, leased or operated by Greater Norwich partners include the following:

- The Norman Centre, Norwich;
- Riverside Leisure Centre (operated by Places Leisure), Norwich;
- Diss Leisure Centre;
- Framingham Earl Community Sports Centre;
- Long Stratton Leisure Centre;
- Wymondham Leisure Centre;
- Kett's Park, Wymondham.

Broadland District Council do not own or operate any sport and leisure facilities.

The facilities provided at leisure centres vary from facility to facility, but can include fitness suites, studios, sports halls and artificial grass pitches. Riverside (Norwich), Wymondham and Diss have the main swimming pools in the area.

Other leisure centres/facilities within the Greater Norwich area include:

- Bob Carter Centre, Drayton;
- Sprowston Sports Hall & Swimming Pool;
- Recreation Road Sports Centre, Norwich;
- Sportspark, Norwich;
- The Nest, Horsford;
- The FDC, Bowthorpe;
- Wensum Sports Centre;
- Easton Sports and Conference Centre.

The private sector also provides numerous facilities across the Greater Norwich area, including Bannatynes, David Lloyd and the Gym Group.

### 7.3.2 Needs

The Greater Norwich Sports Facility Strategy 2015 sets out the following demand increases for sports halls and swimming:

*Table 5 Sports Facility Demand to 2026 in Greater Norwich*

Facility	Demand 2026 (increase)	Demand 2028
Sports Hall	18,875 (1,393)	Await refreshed strategy
Swimming	26,890 (2,063)	

### Sports Halls

The demand for sports halls in Greater Norwich is expected to be met through protecting the existing supply and supporting improvements at these sites. In Norwich, Broadland and South Norfolk, the majority of these sports halls (20 of 29) are provided on school sites (Greater Norwich Sports Facilities Strategy, 2015).

### Swimming Pools

The demand for swimming pools in Greater Norwich is expected to be met through protecting the existing supply and supporting improvements at these sites. Again, across all local authorities, the majority of these swimming pools (10 of 17) are provided on school sites, although the number will have decreased since then, as pressure on school budgets has intensified (Greater Norwich Sports Facilities Strategy, 2015).

Wymondham Leisure Centre and Long Stratton Leisure centre have both been improved to increase the quality and size of the facilities, with major refurbishment carried out in 2016 and 2019 respectively. The Greater Norwich Sports Facilities Strategy (2015) has suggested that improvements are required to Diss Leisure Centre to meet the demand and requirements of the users. A One Public Estate feasibility study into potential new sites was commissioned by South Norfolk Council in 2020.

### 7.3.4 Costs and Funding

The funding requirement for improvements to sports facilities in Greater Norwich will vary depending on what is deemed to be required. The next iteration of the Greater Norwich Sports Facilities Strategy is currently being reviewed so future requirements are unknown. If there is a requirement for improvement these, costs may partially be covered by developer contributions, collected through CIL.

An example of the cost as set out by Sports England (2018) are set out in table 6.

*Table 6 Sports England Sports Facility Costs*

<b>Facility Type/Details</b>	<b>Area (m<sup>2</sup>)</b>	<b>Capital Cost (£)</b>
Sports Hall with 4 Courts (34.5 x 20)	1,532	2,410,000
Swimming Pool with 6 Lane 25m Pool (25 x 12.5)	1,543	4,935,000
Sports Centres with 6 lane (25m) pool, 4 court halls, 100 station health and fitness gym plus 2 studios	3,553	8,880,000

## 8 Green Infrastructure

Figure 5 identifies strategic Green Infrastructure corridors that can be used to target delivery of work and help to mitigate the impacts of development on sensitive sites, particularly those with Natura 2000 designations (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)).

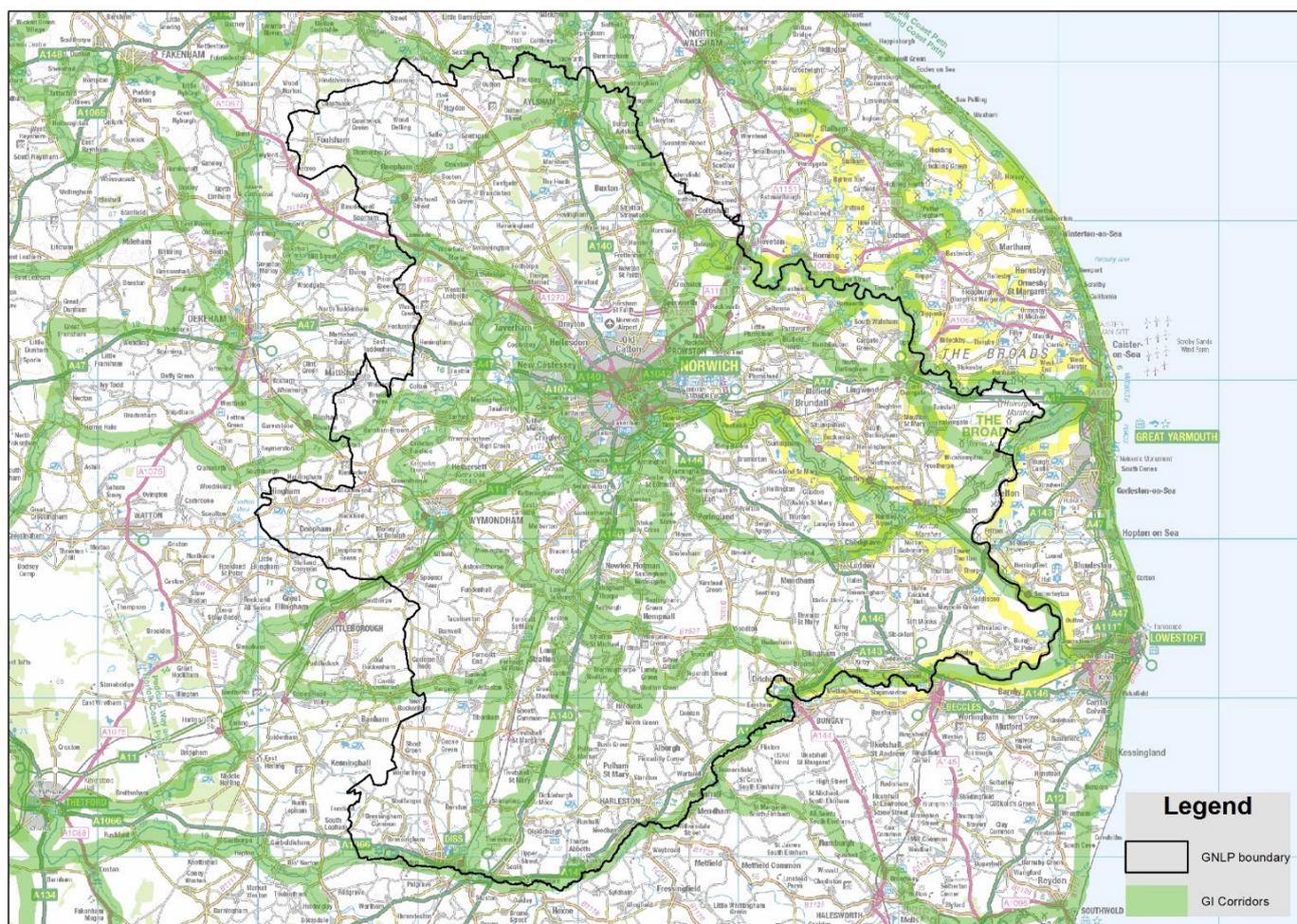


Figure 5 Green Infrastructure Corridors in Greater Norwich

### 8.1 Overview

Green Infrastructure is the provision of multi-functional green spaces to meet a wide range of social, economic and environmental needs. The most comprehensive green infrastructure evidence for the Greater Norwich area is the Greater Norwich Green Infrastructure Strategy 2007, which was prepared as an evidence document for the JCS for Broadland, Norwich and South Norfolk 2014<sup>5</sup> and has since guided planning policies and the long-term delivery of a the network. This identifies green infrastructure as:

*“The multi-functional network of ‘greenspaces’ and inter-connecting green corridors in urban areas, the countryside in and around towns and rural settlements, and in the wider countryside. Green infrastructure is a natural life support system providing benefits for*

<sup>5</sup> <https://www.greaternorwichgrowth.org.uk/planning/joint-core-strategy/>

*people and wildlife. It encompasses 'natural greenspaces' (colonised by plants and animals and dominated by natural processes) and man-made 'managed greenspaces' (urban parks and designed historic landscapes), as well as their many connections (footpaths, cycle ways, green corridors and waterways). The provision of publicly accessible natural greenspace is a vital component in securing benefits for communities where this can be balanced with the needs of private landowners and biodiversity conservation objectives."*<sup>6</sup>

The Greater Norwich Green Infrastructure Study (December 2020) has been produced to provide updates on the existing GI, biodiversity and designated Historic Environment assets for proposed housing allocations. It gives general comments about opportunities for potential enhancements of GI related to these based on existing data.

Greater Norwich is set to see significant development. Through the development of additional housing in the Greater Norwich area, there will be increased demand for green spaces. Planning strategically for Green Infrastructure ensures that green assets are managed and delivered in a coordinated and integrated manner; helping to ensure that green and open spaces are delivered to support anticipated housing and employment growth.

Greater Norwich already contains significant green infrastructure networks. To the east of the Greater Norwich area lies the largest green infrastructure corridor, the Broads National Park, which includes many of the county's Natura 2000 sites<sup>7</sup>.

## 8.2 Needs

The Greater Norwich Green Infrastructure strategy 2007 sets out six core green infrastructure planning and management principles:

- Safeguard and protect valuable green infrastructure resources;
- Integrate green infrastructure into development schemes and existing developments;
- Secure new and enhanced green infrastructure before development proceeds where there is a clear need for provision;
- Enhance green infrastructure where of low quality, in decline or requiring investment to realise its potential to meet future demands;
- Mitigate potential adverse effects of development, new land uses and climate change;
- Create new green infrastructure where there is an identified deficit, or growth is planned, and additional provision or compensatory measures are needed.

### 8.2.1 Biodiversity Net Gain

The Government's development of 'Biodiversity Net Gain' is an approach which aims to leave the natural environment in a measurably better state than beforehand. Biodiversity

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<sup>6</sup> <https://www.greaternorwichgrowth.org.uk/dmsdocument/201>

<sup>7</sup> Natura 2000 is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. It stretches across all 27 EU countries, both on land and at sea. [https://ec.europa.eu/environment/nature/natura2000/index\\_en.htm](https://ec.europa.eu/environment/nature/natura2000/index_en.htm)

Net Gain currently forms part of the Government's Environment Bill<sup>8</sup>. Accordingly, at least a 10% gain from development is a mandatory requirement set out in GNLP strategy policy 3.

Green infrastructure initiatives should aim to work towards bringing back and enhancing wildlife, particularly to areas that aren't necessarily accessible to the public. These areas can then be continuously enhanced and protected as mitigation for development that has had an impact on the local natural environment. Therefore, there is the opportunity to link green infrastructure projects with biodiversity net gain projects associated with development proposals in the future.

### 8.2.2 Access to green spaces

There is increasing demand for adequate and appropriate provision of public access points, routes and services. This should be met by managing the existing access network and developing improvements to the current provision.

The benefits to improving accessibility to green spaces include:

- Sustainable tourism and economic growth in rural areas;
- Better understanding of the natural landscape and cultural heritage;
- Better access to facilities to enjoy angling, cycling, walking, water sports;
- Less reliance on public transport and private cars.

### 8.3 Costs and Funding

The Green Infrastructure projects that have confirmation of CIL funding for the 2021/22 period in the Five-Year Infrastructure Investment Plan 2021-2026<sup>9</sup> are:

- Bure Valley Path: Access, and Recreational Enhancement: This scheme includes an A140 crossing, communications and marketing to promote the Bure Valley path and surrounding areas, and the creation of six circular walks. This project will receive £259,124 of CIL funding.
- Kett's Heights: This project includes the delivery of improved access to the site, improvements to the walls and infrastructure, and the creation of new habitat. This project will receive £312,000 of CIL funding.

Furthermore, the following projects have been prioritised for future funding in the Greater Norwich Infrastructure Plan 2020<sup>10</sup>:

- Green Loop – Broadland Way and Marriott's Way;
- River Yare Crossing;
- Yare Valley;
- River Wensum;
- The Norwich Riverside Walk;
- North West Woodlands Country Park;
- Burlingham Country Park.

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<sup>8</sup> <https://publications.parliament.uk/pa/bills/cbill/58-01/0220/200220.pdf>

<sup>9</sup> <https://www.greaternorwichgrowth.org.uk/dmsdocument/2673>

<sup>10</sup> <https://www.greaternorwichgrowth.org.uk/delivery/greater-norwich-infrastructure-plan/>

In addition, the Norfolk Green Infrastructure and Recreational Impact Assessment Mitigation Strategy is currently in production. Once this is finalised, it will identify potential opportunities for green infrastructure and will inform future projects.

## 9. Waste Management

### 9.1 Overview

There are seven recycling centres in the Greater Norwich Area run under two contracts on behalf of Norfolk County Council. Norfolk County Council has a duty to provide places for residents to dispose of household waste under the Environmental Protection Act. The current recycling centre are located at:

- Mile Cross, Norwich;
- Mayton Wood, Broadland;
- Strumpshaw, Broadland;
- Bergh Apton, South Norfolk;
- Morningthorpe, South Norfolk;
- Ketteringham, South Norfolk;
- Wymondham, South Norfolk.

Residual waste from the Greater Norwich area is currently directed for disposal under the existing contract, which expires in 2021. Transfer Stations and disposal points for residual waste are operated by third party contractors.

### 9.2 Needs

Norfolk County Council prepared a Recycling Centre Strategy in 2015, which considered the impact of housing growth on the service. Housing growth impacts recycling centres through increased visitor numbers and associated visitor traffic numbers and a potential increase in waste throughput requiring additional site servicing. The sites in the plan area identified in 2015 as likely to be most affected by housing growth included Mayton Wood and Wymondham. Additionally, a new site is required for Norwich to replace the current provision at the end of the contract. The new site will be designed to accommodate forecast housing growth.

Norfolk County Council has approved a capital programme for recycling centre improvements, including:

- Replacing the current Mile Cross Recycling Centre with the new Norwich North Recycling Centre (new site due to open in September 2021);
- Relocating the site at Ketteringham to the new Norwich South recycling centre located on part of the Harford Park and Ride site (new site due to open autumn 2021);
- Replacing the Wymondham recycling centre (by 2022);
- Expanding the site at Morningthorpe (by 2022);
- Work is programmed to extend the Strumpshaw Recycling Centre.

The capacity of these new and extended sites will be designed to accommodate forecasted growth.

### *9.3 Costs and Funding*

Funding for recycling centre improvements has been allocated by Norfolk County Council for the replacement sites for Mile Cross, Ketteringham and Wymondham and the extension of Strumpshaw and Morningthorpe recycling centres.

If required, contributions may be sought to deal with the cumulative impact of a series of both small and large developments.

## 10. Summary of Infrastructure Requirements

### 10.1 Transport

#### 10.1.1 Pedestrian and Cyclists

Awaiting the findings of the LCWIP which is currently being developed.

#### 10.1.2 Rail

Awaiting findings of the Norfolk Rail Prospectus, which is currently being reviewed.

#### 10.1.3 Public Transport

Funding has been secured for improvements from the Transforming Cities Fund and other sources.

#### 10.1.4 Road

Three major road schemes have secured funding for delivery:

- Thickthorn junction improvements;
- A47 between Blofield and North Burlingham Dualling;
- North Tuddenham and Easton Dualling.

Delivery of the Norwich Western Link (NWL), Long Stratton by-pass and Growth Triangle are being progressed.

### 10.2 Utilities

#### 10.2.1 Water

Anglian Water's Water Recycling Long Term Plan plans for growth to 2045 planning for the increased capacity at the Acle, Aylsham, Belaugh water recycling centres.

#### 10.2.2 Energy

Infrastructure requirements are dependent on the constraints at each site.

#### 10.2.3 Digital

Broadband connectivity must be provided by developers on all new sites of over 20 dwellings.

### 10.3 Education

Norfolk County Council have five schools (one new primary school, one free school, one primary school relocations and two high school expansions) either in the process of being built or plans are in place for building over the next 2-3 years. Other new schools are planned across the Greater Norwich area once housing and pupil numbers suggest that existing schools in the area are no longer able to accommodate local children. These currently include eight new primary schools and one new secondary school.

### 10.4 Health Care

#### 10.4.1 Primary Care

There are currently two options to increase capacity as required around the north and north-west of Norwich:

1. New build at Broadland Hub within or close to planned development at Beeston Park.

2. No new build, increased numbers spread amongst existing practices.

The selected option will be confirmed.

#### 10.4.2 Hospital

The NHS Long Term Plan and the STP Delivery Plan will address building capacity and facilities (including increased diagnostic capacity, electrical infrastructure improvements, increased data centre capacity) and parking issues. Any arising planning applications will be assessed on their merits.

#### 10.4.3 Mental Health

In line with the shift to care in the community, the mental health trust is expected to shift services to wrap around primary care networks. Existing clinical and administrative provision at Hellesdon is not fit for purpose. This area of the site is going through a disposal process for housing. The NSFT's remaining accommodation in Norwich has constraints, including parking at the Julian Hospital. There is no spare capacity in primary care for mental health services in Diss and this may need to be reviewed. The above is included in the NSFT estates strategy review to be addressed as by the GNLP as and when appropriate.

#### 10.4.4 Community Services

Clinical rooms are required at: Norwich Community Hospital; NNUH; Thorpe and Wymondham Health Centres (estimated cost c. £200,000).

### 10.5 Emergency Services

#### 10.5.1 Police

At this time no physical infrastructure has been identified as being required as a result of the proposed growth the police service have highlighted the need for additional staff. To have enough officers by 2036 the service needs:

- 38 police officers
- 27 response officers
- 6 beat managers
- 3 support staff/detectives

#### 10.5.2 Fire Service

Required infrastructure met within the Rescue Service delivery infrastructure.

### 10.6 Community, Sport and Leisure Facilities

#### 10.6.1 Library

The Greater Norwich housing growth locations show an impact to the north east of the Norwich city boundary centred around Rackheath. This has previously been identified as an area that will require additional library facilities due to the scale and size of the development, this infrastructure cost is estimated to be c. £1.5 million.

#### 10.6.2 Community Centres

Infrastructure requirements covered by CIL funding as allocated to the parish and town councils.

### **10.6.3 Sports and Leisure**

Awaiting findings of the Greater Norwich Sports Facilities Strategy, which is currently being reviewed.

### **10.7 Green Infrastructure**

CIL funding has been allocated for two projects and a further seven projects has been prioritised for further CIL funding.

### **10.7 Waste Management**

The following recycling centres will be in use by 2022 and the capacity of these new and extended sites will be designed to accommodate forecasted growth:

- Norwich North Recycling Centre (site due to open in September 2021);
- Norwich South Recycling Centre (site due to open autumn 2021);
- Replacement of the Wymondham recycling centre (by 2022);
- Expansion of the site at Morningthorpe (by 2022);
- Work is programmed to extend the Strumpshaw Recycling Centre.