



Medway Infrastructure Delivery Plan (2022)

Table of Contents

1. Executive summary	2
2. Introduction.....	3
Local context	3
What is an infrastructure delivery plan?	4
Engagement with Infrastructure and Service Providers	5
3. Infrastructure delivery on Hoo	10
HIF funding.....	10
Approach to Developer Contributions on Hoo.....	11
4. Overview of Infrastructure in Medway	12
A Transport.....	12
B Education & Early Years	16
C Utilities & Waste	24
D Health & social care	42
E Community & cultural facilities	49
F Green & blue infrastructure	61
5. Approaches to Infrastructure Delivery in Medway	69
i) Infrastructure costings	69
ii) Funding.....	69
iii) Cross-boundary infrastructure	71
Appendix 1: Infrastructure delivery schedule (IDS).....	74
Appendix 2: Summary of engagement with infrastructure providers.....	77

1. Executive summary

The Infrastructure Delivery Plan (IDP) has been produced by Medway Council (the Council) to support planning in Medway. The IDP provides:

- A definition of infrastructure
- An analysis of present infrastructure capacity
- Background around infrastructure that has been delivered recently
- A programme of infrastructure that is needed for growth sustainably delivered

The IDP has been in development since 2016, reflecting each stage of local plan preparation in consultation with relevant partners and infrastructure providers. Parallel to this IDP, Medway Council is also progressing several area-based master plans and supporting neighbourhood planning across the borough to ensure local infrastructure requirements are considered in an inclusive way. Where appropriate, infrastructure proposals and projects identified through relevant area-based frameworks and community-led plans have been reflected in this IDP. The IDP is informed by organisational service plans and strategies, the Council's Corporate Plan and Capital Strategy, and the growth ambitions set out in Medway 2037 regeneration strategy and any future local plan. Where appropriate, it has built upon the information gathered through other infrastructure planning evidence base work and discussions.

The Government's National Planning Policy Framework (NPPF) requires all development plans to be prepared with the objective of contributing to the achievement of sustainable development, and to seek opportunities to meet the development and infrastructure needs in their area. Development plans are also expected to be shaped by early, proportionate, and effective engagement between plan-makers and other stakeholders, including with infrastructure providers and statutory consultees in the area. The development plan taken as a whole is expected to provide a spatial strategy that addresses relevant strategic priorities in the area, include adequate provision for infrastructure, and allocate sufficient sites for development, having considered cross-boundary needs/issues. All plan policies are expected to be supported by relevant, up-to-date, and proportionate evidence. Technical assessments of the transport network have identified several priority areas, such as the strategic links around the Medway Tunnel and key junctions where investment is needed to increase the capacity to meet growth needs from new development.

The need for new health and community infrastructure is also acute, with the pandemic highlighting the need for a new approach to primary care, as highlighted in the Government's White Paper. Similarly, new growth will require new schools and other services, as well as sports facilities and open spaces, and upgrades to existing sites. This IDP considers these requirements in the round and what funding sources are available to address infrastructure needs and constraints. The potential development of an expanded rural town at Hoo could generate significant requirements for new infrastructure of all kinds, including health, sports, and other community facilities, as well as schools, libraries, and youth centres, to be funded through developer contributions. Infrastructure has a key role to play in addressing climate change and its impacts, including through the provision of sustainable modes of transport, flood resilience and mitigation, and a wide range of other measures.

This IDP forms a key part of the evidence base for further updates to the Medway Guide to Developer Contributions, which is intended to secure greater community benefits in line with government requirements.

2. Introduction

Local context

Medway Council is a unitary authority with a population of 279,800¹, located in the southeast of England. The area is comprised of a major urban conurbation of five towns (Strood, Rochester, Chatham, Gillingham and Rainham) and a rural hinterland on edges comprising some large villages (Hoo St Werburgh, Cliffe Woods, Halling and Cuxton). The administrative county of Kent is to the south, east and west. To the north is the Thames Estuary. The river Medway bisects the authority separating the town of Strood, the rural areas of the Hoo Peninsula and Medway Valley from the other four towns.

Historically as a major urban area, Medway has been a major infrastructure hub for north Kent. Today it still maintains this status with major healthcare facilities, such as Medway Maritime Hospital, and a number of further and higher educational facilities based in the area providing a service to the surrounding authorities and wider afield.

The geographical location and historical growth of Medway has also meant that the area includes key transport links. There are rail and road connections with London and the rest of Kent via the M2 motorway and major local roads and rail lines, including HS1 and a freight line. The topography of the area presents challenges to the transport network, including the barrier of the River Medway (just two crossing points for local users) and a hilly hinterland to the south, rising up to over 175m. To the north is the Hoo Peninsula primarily composing of smaller villages, and industrial areas amongst areas of significant wildlife importance. To the south are the Medway Valley villages of Cuxton and Halling.

The population is relatively young in comparison to the UK average with fewer over 65-year-olds and more under 15-year-olds.² The median age of population is 38.1 years against 40.1 for the UK.³ Medway's demographics will shape the infrastructure that is required in coming years, not least because the demographic makeup of the area will impact the extent to which new homes are filled by local residents and their children, or new households from outside the area. Medway's population could reach over 350,000 by 2039 when accounting for new homes being built. With a potential increase of tens of thousands of new homes and residents in this time, there is a significant need for new infrastructure to be provided. But infrastructure provision is not only a matter of quantum - there are also qualitative issues relating to its existing capacity and provision level, as well as changes in service models and challenges in how infrastructure is funded and delivered by a wide range of public, private and third sector bodies. These issues are considered in detail in this IDP.

Medway faces significant infrastructure challenges due to its geographical position and historic growth. These pressures include:

- limited capacity and congestion on the road and rail networks due to the current travel patterns and limited crossings of the River Medway;
- increased potential of flood risk from the River Medway and the Thames Estuary, and surface water flooding exacerbated by climate change;
- pressures on healthcare and education brought about by ageing infrastructure, population growth and more complex needs from the population;

¹ ONS, Mid-year population estimate 2021 (June 2022)

² Ibid.

³ Medway Demography: Population 2021 (July 2021)

- a need to build a place that is fit and well connected for the future through digital infrastructure.

Infrastructure and services are critical to the delivery of sustainable growth. Local communities are concerned about the impact of new development on services, such as schools, health facilities and transport networks, and want reassurance that infrastructure will be upgraded in line with housing development. Pressures on infrastructure are often highly sensitive and prominent matters.

Infrastructure delivery is a key component of Medway's emerging local plan, and its timeliness and effective scale is vital to realising Medway's potential as a leading waterfront learning city and a place to be proud of. Outstanding infrastructure and services are critical to successful and sustainable growth, enabling those who live and work here to have an outstanding quality of life, alongside the homes and jobs that people need. The emerging local plan will seek to protect and enhance the area's distinctiveness, helping to promote and secure investment in the area's outstanding environment and heritage and helping to create a prosperous place, with advantages and opportunities for new and existing communities.

What is an infrastructure delivery plan?

Infrastructure is a broad term that can include many items. Medway Council has used the Planning Act 2008 as a basis to define infrastructure as this also provides the legislative framework for collecting developer contributions with which to pay for it. The definition includes: '*roads and transport facilities, flood defences, schools and educational facilities, medical facilities, sporting, and recreational facilities and open spaces*'.⁴ This has been supplemented using the relevant parts of the National Planning Policy Framework⁵ and Planning Practice Guidance⁶. The potential to address climate change and its effects is a crosscutting theme which impacts upon all of these categories of infrastructure provision including Transport, Education & early years, Utilities & waste, Health & social care, Community & cultural facilities, Green & blue infrastructure.

The Infrastructure Delivery Plan (IDP) is supported by the other planning tools and mechanisms that enable the delivery of infrastructure. National planning policy and guidance sets out that planning conditions and obligations should be used to enable the delivery of infrastructure.⁷ The level of obligations is set out by the Council in the Medway Council Guide to Developer Contributions & Obligations (2018). This document sets out the mechanisms and level of financial contributions that development proposals will be expected to provide to enable the delivery of infrastructure, to ensure the growth is acceptable in planning considerations. The document will be updated as part of Medway's emerging local plan.

The IDP is part of the evidence base being prepared to support the emerging Medway local plan. It provides information on the current capacity and quality of existing infrastructure and a plan of the physical infrastructure that will likely be required to support the delivery the local plan. The requirement for this analysis comes from national policy and guidance: the National Planning Policy Framework (NPPF) (paragraphs 16, 20 and 34) require local planning authorities to engage with

⁴ DLU, The Planning act 2008; Part II Community Infrastructure Levy (2008) 218

⁵ Paragraph 20, NPPF (2021)

⁶ Paragraph: 048 Reference ID: 61-048-20190315, Planning Practice Guidance (2019)

⁷ DLU, National Planning Policy Framework, Paragraphs: 55 - 57(2019)

infrastructure providers in preparing local plans, and to set out the infrastructure requirements and the level of contributions needed so that the local plan is deliverable as a result of having infrastructure in place to cope with the growth.⁸ The IDP requirements are then tested through the plan Viability Assessment, a process which contributes to the review of Medway's Developers Contributions Guide. Importantly, only infrastructure required in the first five years of the plan period must be shown to be deliverable as part of the requirement to ensure site allocations within this period are deliverable. Infrastructure in the latter part of the plan period is unlikely to have funding secured or clarity on its delivery due to the nature of infrastructure delivery and spending in England. As such, the role of the IDP is to make clear which infrastructure can be delivered to support the Local Plan, and that which may be delivered and could potentially support the Local Plan, taking a reasonable and proportionate view on the matter and accounting for national planning policy on infrastructure provision.

National Planning Practice Guidance supports this position, reinforcing the need for infrastructure planning to identify land for infrastructure and stresses early engagement with infrastructure providers. In addition, the guidance states that an audit of the existing assets should be undertaken, and the strategic infrastructure included that may cross boundaries. This will need wider engagement than just the infrastructure providers, and with developers, landowners, site promoters and service providers. This document has two parts:

- Part 1 is a narrative review of the existing and planned infrastructure identifying present capacity and future need based on planned and anticipated growth
- Part 2 (Appendix 1) is the Infrastructure Delivery Schedule (IDS), a table setting out the infrastructure interventions that are required for the plan. This includes costs, phasing, and priority.

The IDP is a 'living document' that should support the delivery of the local plan. The document is to be regularly reviewed. On an annual basis the IDP will be monitored as part of the Authority Monitoring Report process; this is a process to check the progress of the local plan and other key indicators in the authority.⁹ Then a full update every three years to coincide with the requirement to undertake a local plan review. The reasons for this are to maintain the accuracy and relevance of the document.

Some infrastructure providers do not plan to long term timescales and might only identify infrastructure requirements for the next five years. Others are reactive, rather than proactive, and only deal with infrastructure improvements/development once planning applications have been received. This may mean that information we would like to include does not exist. Medway Council has undertaken significant engagement with infrastructure providers both in the production of this IDP as well as throughout the process of preparing the emerging local plan. Where Infrastructure providers have been unable to provide detailed infrastructure proposals or requirements, it is assumed that these will be dealt with at planning application stage.

Engagement with Infrastructure and Service Providers

Discussions and meetings have taken place with a variety of infrastructure providers to gain an updated understanding of what infrastructure is needed. The formal stages of this engagement are detailed in Table 1 below. However, it is important to note that this table only highlights formal

⁸ Paragraphs: 16, 20 & 34, NPPF (2021)

⁹ The Town and Country Planning (Local Planning) (England) Regulations 2012 – regulation 34 - <http://www.legislation.gov.uk/uksi/2012/767/regulation/34/made>

engagement processes, and in many instances, there has been ongoing engagement with services regarding policy development and specific emerging site proposals, for example with NHS Kent and Medway Clinical Commissioning Group and associated organisations. Through several rounds of engagement, Medway Council has discussed specific infrastructure requirements of the proposed growth strategy and site allocations, any changes to infrastructure requirements and investment projects and proposals programmed to take place that could impact on the potential development allocations and their deliverability within specified timescales.

Further detailed engagement has been undertaken in the form of stakeholder engagement workshops around key development framework areas and evidence base documents, as well as continued engagement noted below. In particular, ongoing engagement workshops have been undertaken with Medway Council services such as education, green spaces, flood and smart infrastructure around the infrastructure needs and proposals being brought forward as part of the emerging local plan and other strategies.

Due to the uncertainties surrounding future infrastructure requirements, recognised in the NPPF 2021 at Footnote 37, this IDP is intended to be regularly updated in partnership with relevant agencies in order to reflect the fluid and constantly evolving nature of infrastructure planning. In order to gain a fuller understanding of the current and future level of infrastructure provision, relevant Council staff and external service providers were invited to submit detailed information in response to the following topics, having regard to the emerging draft development strategy and emerging local plan preferred allocations and housing trajectory:

- Present infrastructure capacity;
- Future infrastructure requirements to support growth (i.e. projects);
- Project delivery details (i.e. costs & phasing); and
- What are the relevant plans and programmes that inform your decision making?

To update the draft IDP at each stage, each infrastructure provider was contacted requesting their further engagement on the IDP. They were provided with a spreadsheet that outlined the allocations being considered for inclusion in the emerging local plan together with details for each of the potential sites including expected housing and/or employment yield within and beyond the plan period, broken down by each year of delivery. They were also provided with a relevant extract from the draft IDP schedule of infrastructure projects, and asked to:

- review the details and confirm whether the identified infrastructure projects remained current or provide updated details if the projects had progressed/further information was available;
- identify any additional infrastructure requirements or service delivery projects relating to the proposed draft allocations either on a site-specific basis or broader settlement context; and
- identify any infrastructure investment projects/proposals programmed to come forward during the emerging local plan period that would not necessarily be directly related to the proposed allocations,

In updating the IDP, some utility providers were able to provide a more detailed assessment of their respective networks to identify any gaps in infrastructure to support the planned growth or reinforcement works required to ensure supply to specific sites. It should be noted, however, that

precise utility requirements for individual allocations can only be determined through developers making a specific development enquiry to the utility provider.

Meetings have also been held with site developers/promoters of proposed allocations in the local plan, particularly on the Hoo Peninsula to discuss indicative delivery. Where site promoters have provided technical or other information related to infrastructure requirements this has been used to update the infrastructure schedule where appropriate. In addition to the above, the Council has undertaken several supporting evidence studies which review infrastructure information and requirements. These include matters related to transport and recreation and, where appropriate, they have informed the preparation of the IDP.

The Infrastructure Delivery Schedule sets out details of infrastructure projects, the lead bodies that would be involved in implementation, an overview of the risks and contingencies associated with each project and, where known, delivery timescales, costs, and potential sources of funding. The infrastructure schedule will inform the council's annual Infrastructure Funding Statement. In preparing the Statement, the identified infrastructure projects will be prioritised for the allocation of available developer contribution funding: this process is separate to the preparation of the IDP. Appendix 1 identifies the infrastructure needs that will underpin the implementation of the emerging local plan as a whole and in relation to individual housing and employment allocations, or cumulatively across several sites in the same area. The table below sets out consultation responses from various infrastructure providers at key stages of the local plan process.

There are also several government agencies which have a role in regulating the provision of infrastructure, including for example National Highways (the strategic road network), Sport England (sports facilities) and the Environment Agency (flood risk mitigation). Under the current planning system, Medway Council has a legal duty to cooperate with these agencies through its local plan process, and continuous engagement with them by Medway Council Officers has formed a significant part of the work undertaken to complete this IDP, ensuring that statutory requirements for the adequacy infrastructure provision can be met through proposed growth allocations in Medway's local plan

Table 1: Summary of formal engagement with infrastructure providers by stage of IDP preparation and IDP version. Note in some instances there has been continued informal engagement not captured here. See Appendix 2 for details.

Provider	Issues & Options 2016	Development Options 2017	Development Strategy 2018	IDP March 2019	IDP March 2020	IDP January 2021
Medway Council Early Years					x	x
Medway Council Schools Planning	x			x		x
Canterbury Christ Church						
University of Kent		x	x			
University of Greenwich						
The University of the Creative Arts		x	x			
Education & Skills Funding Authority		x	x			
Kent County Council BDUK	x	x	x			
Virgin Media						
BT Openreach					x	
Medway Council Youth Services						x
Medway Council Waste Services						x

UK Power Networks				X	X	
Southern Gas Networks			X	X	X	
National Grid	X	X				
Southern Water			X	X		
South East Water				X		
Ofwat						
Environment Agency		X	X	X		
Medway Council Flood & Drainage Team	X	X			X	X
Medway NHS Foundation Trust		X				
Medway Community Healthcare						X
NHS Property/NHS England/NHS Improvement		X				X
Kent and Medway CCG			X	X		X
Medway Public Health	X	X	X	X		
Public Health England	X	X				
Medway Council Social Care						X
Medway Council Integrated Transport						X
National Highways	X	X	X	X	X	X
Arriva			X			
Southeastern						
Network Rail						
Kent Police		X		X		
SE Coast Ambulance Service				X		
Kent Fire & Rescue						
Medway Council Sports Service						X
Medway Council Library Service						X
Sport England	X	X	X			
Medway Council Greenspaces Team						X

Information within the IDP has been gathered through an in-depth analysis of all relevant strategies and plans, as well as engagement with statutory and non-statutory consultees. This includes engagement with Duty to Cooperate partners and internal and external service providers. In some cases, it was not possible to obtain the most up-to-date information regarding particular infrastructure types. In January 2021, workshops were held with internal service providers. These workshops were structured around the strategic growth locations proposed in the Medway's 2019 SLAA and emerging local plan, as well as the current infrastructure needs and delivery patterns in Medway in recent years. The aim of this exercise was to assess the accuracy of our existing baseline, in addition to gathering new information on the future plans for each infrastructure type over the next 18 years. Information gathered during the workshops and subsequent follow-up was incorporated into the IDP.

It is acknowledged that supplementary plans and strategies are to be published in due course. It should therefore be noted that this IDP will be reviewed periodically to ensure that it reflects the most up-to date information available. The local plan does not seek to make up for historic deficits in infrastructure. However, there are instances where supporting growth might most effectively be

achieved through the upgrading of existing facilities. This could include, for example, extending existing schools or enhancing current services.

Not all housing and employment growth planned for individual sites will attract specific additional infrastructure requirements that can be addressed through the development of that site alone. In most cases, the infrastructure needs that have been identified reflect the cumulative impact of growth in a wider area e.g. based on growth through the strategic sites, smaller allocations and windfall sites that are used for planning purposes by the Council.

Many authorities are increasingly looking to co-locate their services to make the most of their existing assets. Driven in part by the rising costs associated with the lack of availability – and high cost – of land and floorspace, co-location is seen by some as a method of capturing multiple benefits for local communities. Co-location can take many forms. For example, schools are increasingly looking to raise revenue by hiring out sports pitches and other facilities outside of school hours to house local community group meetings.

The co-location of new residential development and schools – with considerable potential funding benefits – is an emerging proposition. The shift of GP services into consolidated primary healthcare hubs may yield a more equitable share of resources and facilities for a range of health providers, as well as offering a more diverse range of facility uses e.g. healthcare services, community centres and retail. Ultimately, decisions relating to the co-location of services are tied to changes made to financial arrangements and management structures. There may be some cases where these intricacies have been difficult to capture within this IDP.

Whilst it is important to be aware of the changeable components to service delivery, it is extremely difficult for an IDP to be definitive about what future service requirements may be. Therefore, it is important to note that variances in service needs will have significant impacts on future infrastructure requirements and associated costs. Furthermore climate change will undoubtedly impact upon future infrastructure requirements in ways that cannot be easily accounted for. Whether through shifts in the provision for and use of transport, impacts on utilities networks and broadband, or other areas of infrastructure such as green and blue infrastructure including flood risk mitigation, as well as Medway Council's own estate and buildings. Medway's Climate Change Action Plan, published in June 2021, addresses a number of these areas of work.

3. Infrastructure delivery on Hoo

HIF funding

In advance of publishing its draft local plan, Medway is progressing with the publication of a consultation draft of the Hoo Development Framework (HDF) including proposals for strategic growth on the Hoo Peninsula. £170m of government funding from the Housing Infrastructure Fund (HIF) has been secured to pay for vital transport and environmental infrastructure required to enable development. The scale of proposed growth in Medway requires significant investment in a range of new and expanded services and infrastructure. Planning for the timely and effective delivery of infrastructure is critical to our ambitions for Medway's successful growth. The Council needs to demonstrate how we can deliver sustainable development, with the quality and choice of services that makes Medway an attractive place for our communities.

Officers in the Planning and Regeneration teams continue to work constructively in coordinating the HDF and HIF programmes. The HIF programme is providing the initial investment in transport and environmental infrastructure to support strategic growth. However, the HIF funding is restricted to use for specific road and rail upgrades and strategic environmental management measures, and cannot be used to pay for the other infrastructure such as schools and other community facilities including new GP clinics, wider transport projects such as bus services, or community, economic, culture and leisure facilities, that will be essential for Hoo to grow from a village into a thriving rural town.

This Infrastructure Delivery Plan and the Hoo Development Framework are key documents to set out a comprehensive approach to enhancing services and infrastructure as part of planned growth. In planning for a rural town on the Hoo Peninsula, and wider Medway, significant upgrades to services are needed. This work, together with a Viability Assessment, will inform a revised Medway Guide to Developer Contributions and Obligations, as updated approach for Section 106 contributions. An indicative schedule of infrastructure requirements for Hoo is set out in the Infrastructure Delivery Schedule at Appendix 1B. This does not include the full range of services, including waste, open space and youth facilities that would be needed in line with the Council's Developer Contribution Guide, or contributions to strategic projects, such as major transport infrastructure. However, it considers the scale and range of infrastructure that would be required to support the potential development of c 10,000 new homes on the Hoo Peninsula.

The whole of Medway faces significant infrastructure challenges, as highlighted in section 2.

Specific pressures on the Hoo Peninsula include:

- The need for expanded roads capacity and wider transport options
- The need for new open spaces and sports facilities to support local people's health and wellbeing and to mitigate the impacts of recreation on designated sites in the area through management schemes and suitable alternatives
- The need for new and expanded schools to accommodate new children born and moving into the area
- The need for sustainable long term solutions to the NHS estate and services in the area
- The need to enhance and contribute to local community infrastructure and spaces
- New utilities infrastructure

Approach to Developer Contributions on Hoo

Under Medway's current Developer Contributions Guide, developers on Hoo would be requested to pay around £14,300 per dwelling in S106 contributions to deliver the necessary schools and other infrastructure, or in cases where new schools can be demonstrated to be required, up to £17,200 per dwelling. However, discussions with services alongside technical assessments undertaken as part of the local plan have shown that this will not be enough funding to pay for the required infrastructure, even when combined with HIF funding.

In advance of updated policy being adopted in the new Local Plan, Medway Council will seek to use a Framework S106 agreement approach to provide certainty to the local community and to developers that adequate infrastructure will be provided to support development and make it sustainable. This approach will provide a template legal agreement with developers that will be used as the basis for S106 negotiations. The agreement will be based on the infrastructure planning work that has been undertaken to support planning for development on Hoo, and will establish two lists:

Strategic Infrastructure – Infrastructure which will need to be funded by developers on a fair and equal basis which is proportionate to the development in question, and will not be subject to viability review.

Non-Strategic Infrastructure – site specific infrastructure the provision of which will be subject to viability review.

The framework S106 agreement provides that Part 1 will not be subject to viability review, but Part 2 may be, if necessary. This approach will also enable a number of other key areas of collaboration with developers to ensure the timely delivery of the necessary infrastructure, including forward funding arrangements and HIF recovery where deemed necessary. The costs of forward funding infrastructure have been included in the Infrastructure Delivery Schedule set out in the Appendix.

This will be an evolving position in advance of the local plan coming forwards, but the proposed public consultation on the Hoo Development Framework, as well as ongoing work on community infrastructure provision on Hoo being undertaken by the Council, provides an opportunity to provide more certainty around infrastructure provision for both developers and communities.

To implement this approach the intention is for Medway Council to bring forward an updated Developer Contributions SPD to allow for retrospective pooled S106 contributions (not Hoo specific). This will make reference to the existing adopted local plan and will go through the necessary statutory process.

4. Overview of Infrastructure in Medway

This section provides an overview of each strand of infrastructure. The following information is included:

- Lead agency/ies or organisation (who is responsible for the provision of the infrastructure?)
- Evidence base (the key plans and programmes determine why infrastructure is needed and its delivery mechanism)
- Context (existing provision, deficiencies, and planned infrastructure)
- Proposed infrastructure (based on the proposed local plan growth)
- Funding (what is the total cost of the projects and what are the options for funding?)

The information outlined above has been gathered over the course of the preceding regulation 18 consultations on the emerging Medway Local Plan and separate engagement with infrastructure providers.

The different infrastructure types have been split into themes and then analysed as set out above. Not every theme has identified a requirement for improved physical infrastructure at the present time. A lack of identification of projects does not mean that infrastructure or developer contributions are not required, but that decisions have not yet been taken as to how capacity will be enhanced to meet local plan growth requirements. In these circumstances, infrastructure contributions will be assessed at planning application stage.

A Transport

Connectivity

Medway benefits from strategic transport connectivity, as shown in the figure below. M2 junctions 2 and 4 provide direct access to the Strategic Road Network, with access to junction 3 immediately to the south of the administrative boundary. The Major Road Network, comprising the A2, A228, A278 and A289 spans the Medway area. The next major junctions and corridors include M2 junctions 1 and 5 and the A229 (Bluebell Hill).

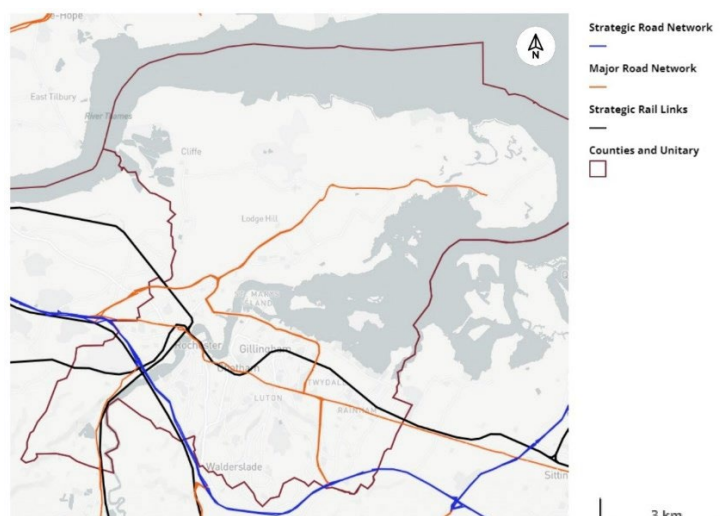


Figure 1: Major road and rail links

Source: TfSE ProjectView

Medway is served by seven railway stations providing main line, High Speed and ThamesLink services.

The Grain Branch continues to facilitate the import/export of aggregates, along with rail freight associated with the aviation fuel storage depot and Thamesport activity.

The following wharves and rail depots facilitate the importation of and distribution of minerals:

- Grain Terminal, Isle of Grain (wharf and rail depot)
- North Sea Terminal, Cliffe
- Euro Wharf, Frindsbury
- London Thamesport, Isle of Grain

Capacity

Road network

The capacity of the road network and the likely impacts of future development have been assessed in a traffic model. Medway Council commissioned a new traffic model in 2016. The model has been updated with planning consents since 2016 to take account of development in the pipeline.

The model base year is 2016. It covers the AM (08:00 to 09:00) and PM (17:00 to 18:00) peak hours, as well as an interpeak hour (13:00 to 14:00), which can be taken to be representative of the whole interpeak period (10:00 to 16:00).

Existing congestion hotspots have been identified through an assessment of volume to capacity ratios (V/C) of junctions.

Several junctions through the A2, A228 (through Cuxton and Halling) and A289 corridors, along with junctions on or close to M2 junctions 2 and 3, were operating over absolute capacity in the 2016 base year. Four Elms Roundabout was operating below absolute capacity in the evening peak.

Rail commuter services

Network Rail's 'Kent Route Study', published in 2018, provides a strategy for the rail network to 2024 and 2044. The study suggests that, by 2024, the level of demand will have a disproportionate impact on passengers travelling from Medway.

Medway's railway stations will be the first point on metro services to London Bridge and Victoria where up to 75% of seats will be taken. For High Speed 1 services, the first instance of standing will occur at Gillingham, with up to 60% of standing space used thereafter. Therefore, during particularly busy periods, or because of incidents impacting on services, passengers travelling from Medway are more likely to stand for longer than passengers travelling from any other station on these routes. These passengers are also likely to pay higher fares compared to people travelling from stations closer to London.

Bus services

Bus passenger trips per head in Medway are very low compared to similar sized areas. There is likely to be suppressed demand for travel by bus in Medway. However, analysis of commuting flows has revealed the high proportion of journeys within Medway by car/van. Locations where businesses are clustered in Medway provide ample car parking, while travel by bus may not be practical for commuters required to carry equipment and/or take a commercial vehicle home.

The most recent National Highway and Transport Public Satisfaction Survey found that satisfaction with the bus service in Medway is average overall. However, satisfaction is below national levels for fares, punctuality, accessibility and cleanliness.

The Bus Service Improvement Plan for Medway describes how the local transport authority will use an Enhanced Partnership with bus operators to achieve the aim and the objectives of the government's National Bus Strategy.

Remote and flexible working

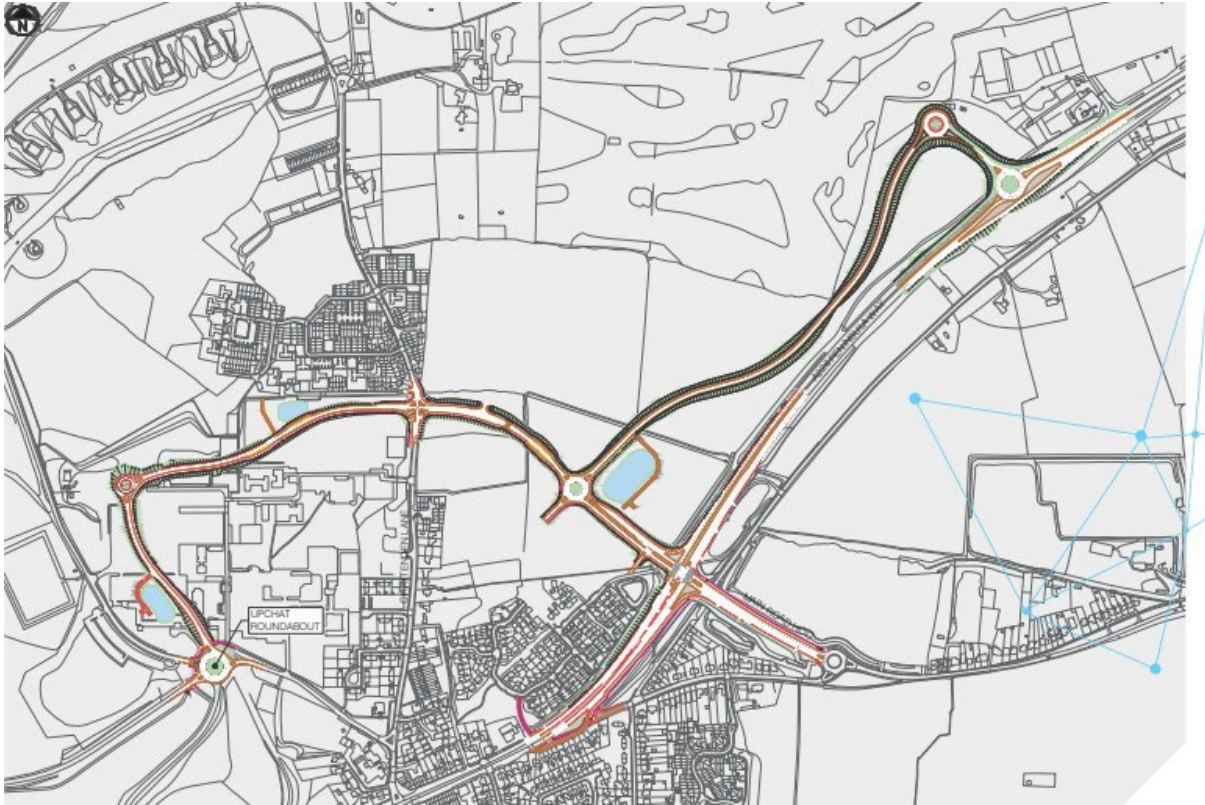
It is conceivable that the tendency to work flexibly or remotely could accelerate following the implementation of virtual meetings, etc. during the enforced 'lockdown' measures during the pandemic. This may bring about permanent changes in working arrangements and travel behaviour, which may in turn impact on transport capacity.

The number of overall trips fell from the start of lockdown, with public transport trips plummeting. Indeed, passenger numbers on buses and national rail dropped to around 10% and 8% of their pre-pandemic levels respectively. At the time of writing, however, rail journeys are 65% of pre-pandemic levels.

HIF Highways Mitigations

£86 million of government HIF funding will be used to make road improvements to facilitate new housing on the Hoo Peninsula. This will increase capacity at peak times and reduce local congestion and help to improve air quality. A new road is proposed to connect to the Wainscott bypass. Improvements are also planned to improve the roundabouts at Four Elms, Bells Lane, Sans Pereil and Ropers Lane. The figure below (June 2022) illustrates the current designs for some of the proposed road improvements on the Hoo Peninsula.

Applications for the highways (through submission of a planning application, and the making and subsequent seeking of confirmation for a Side Roads Order (SRO) and Compulsory Purchase Order (CPO) if required below) and rail interventions (a Transport and Works Act Order application) are anticipated to be submitted in February and March 2023 following approval. These applications will be supported by robust technical assessments developed (in the case of road and rail) through the Environmental Impact Assessment, Habitats Regulations Assessment, Water Framework Directive, and Transport Assessment process. Following submission of the applications the HIF team will continue to work closely with Homes England and stakeholders such as Network Rail Infrastructure Limited and the Ministry of Defence to enable partnership working for the delivery of the interventions.



Source: HIF Phase 2 Roads Update Upchat Roundabout to A228 Main Road, June 2022

Funding

S106 and S278 funding is to be used to improve the transport network, together with major investment secured by the Council, including the Housing Infrastructure Fund and from other government programmes.

Innovation Park Medway

The Local Development Order for Innovation Park Medway requires a Monitor and Management Mitigation Strategy. Medway Council has commissioned a specialist consultancy to produce the strategy in consultation with National Highways and Kent County Council.

B Education & Early Years

Education is split by age, but also post-16 years of age by qualification level being delivered. This section covers the following services:

- Early years
- Schools (primary, secondary & sixth form and SEN)
- Further education (including Adult Education)
- Higher education

Early years

Lead Agency	<ul style="list-style-type: none">• Medway Council
Evidence base	<ul style="list-style-type: none">• Medway Council, Childcare Sufficiency Assessment 2019 – 2020

Context

Early years provision refers to childcare and early learning for 0- to 4-year-olds. All children aged between three and four years old in England are entitled to 570 hours of funded early education per year (usually taken as 15 hours a week for 38 weeks of the year) with an approved childcare provider (some two-year-olds from families receiving some forms of support are also eligible – in Medway accounting for 44% in this age group). In September 2017 this provision increased to 30 hours per week for children aged 3 and 4 for eligible households.

At present this is regulated by Medway Council who have a responsibility to ensure the adequate provision of early years childcare, with services provided by a mixture of registered childminders, nurseries in schools, and independent nurseries.¹⁰ It does this by working with providers to manage supply and demand in the market, signposting providers to areas of emerging demand, business support to providers, and information sharing with partners to ensure demand is met.

It is important to note that there is only approximately one full time childcare place for every three children in the 0 to 4 age group in Medway (or approximately 1:2 for children 2,3 and 4, reflecting the choices made by parents in arranging their childcare, some of which may be informally through friends or family).

A total of 253 early year childcare facilities offering funded provision are located in Medway providing 6,444 full time places, including 118 childminders, 42 nursery classes in schools, and 106 independent providers. Predominantly these are clustered in Gillingham, Rainham, Hempstead, and Strood (see Figure 6 below).

¹⁰ Childcare Act 2006

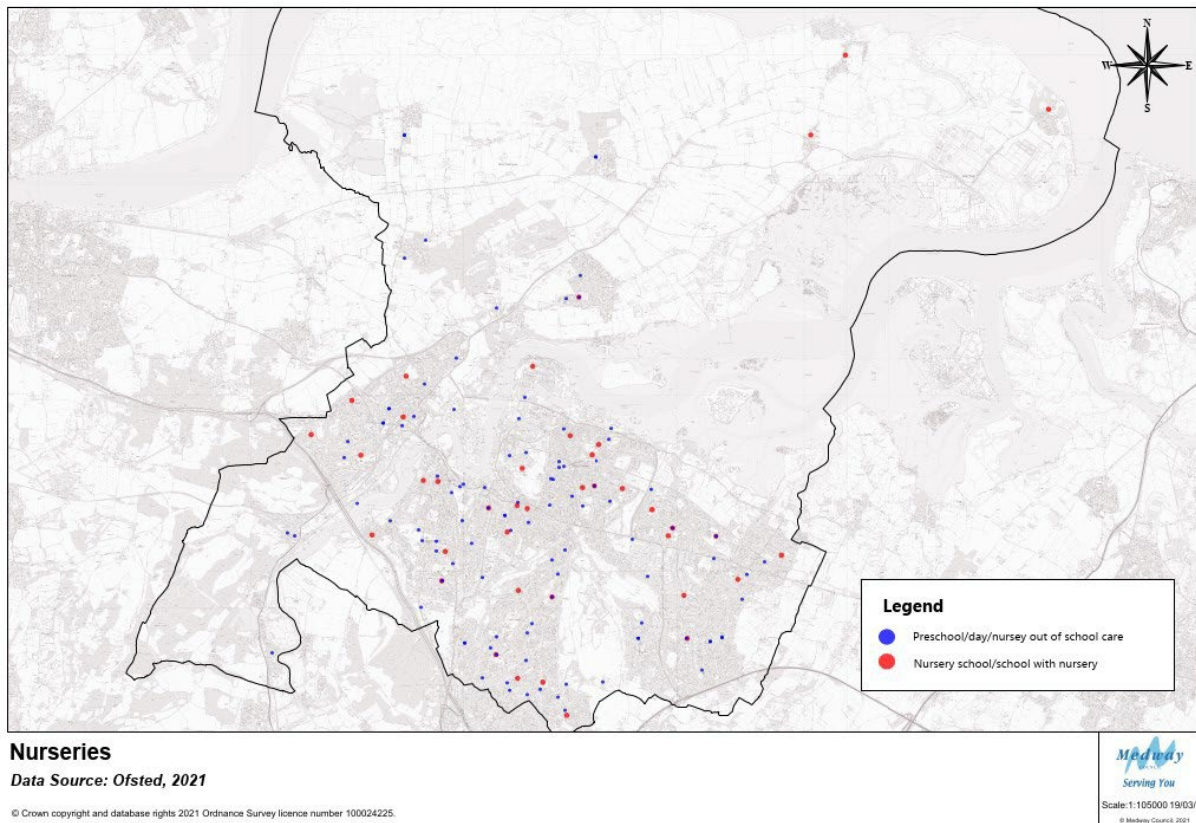


Figure 2: Map of childcare provision in Medway, Source: Ofsted

Quality & capacity review

After significant increases in the number of children aged 0-4 in Medway up to 2010, the number of children in this age group has stayed relatively stable around 18,000 since then. As of 2019-20, the time of the last sufficiency assessment, there were 819 full-time childcare vacancies across Medway. However, vacancy rates are a snapshot and often change rapidly. In some cases, providers may have a vacancy which is only available for a specific age group, or for a particular part time arrangement. In general, vacancy rates are higher in the autumn, when children move to school. New housing development makes forecasting the precise number of children in Medway over the local plan period challenging, however the focus will likely be on responding to localised areas of need to reduce the need for students to travel further to school and improving the quality of existing facilities.

All childcare providers must register with and be inspected by Ofsted, who give them an overall grade for the quality of their provision. In recent years, 97% of childminders, 94% of private and voluntary nurseries and 86% of nursery classes in schools in Medway have been rated as Good or Outstanding by Ofsted.

Proposed infrastructure

Medway Council is predicting a need for a maximum of 1,000 new early years places over the next 15 years. The need is to be met via a mixture of nurseries within schools and private enterprises. In particular, development on the Hoo Peninsula is likely to require additional space for nurseries to be provided. This may be provided on site by developers as part of commercial spaces under the new use class E or could be collocated with other schools.

Funding

The total funding required for the proposed projects outlined above is unknown.

The above projects will be delivered through a combination of funding from the following potential sources:

- S106 funding – potential for S106 funding to support provision of new commercial E-class spaces that can be used by private providers
- Private investment – investment in new facilities by private providers

Schools

Lead Agency	<ul style="list-style-type: none">• Medway Council
Evidence base	<ul style="list-style-type: none">• Medway Council Schools Capacity (January 2021)• School Place Planning Strategy 2018-2022

Context

Medway Council as a unitary authority is the local education authority and has a responsibility to plan for school places within Medway. Provision of places can be provided through the local education authority and private trusts (including free schools and academies). There are only two local authority-maintained schools with sixth forms in Medway – one secondary and a special school – and the Sixth Form Grant is passed straight to these schools.

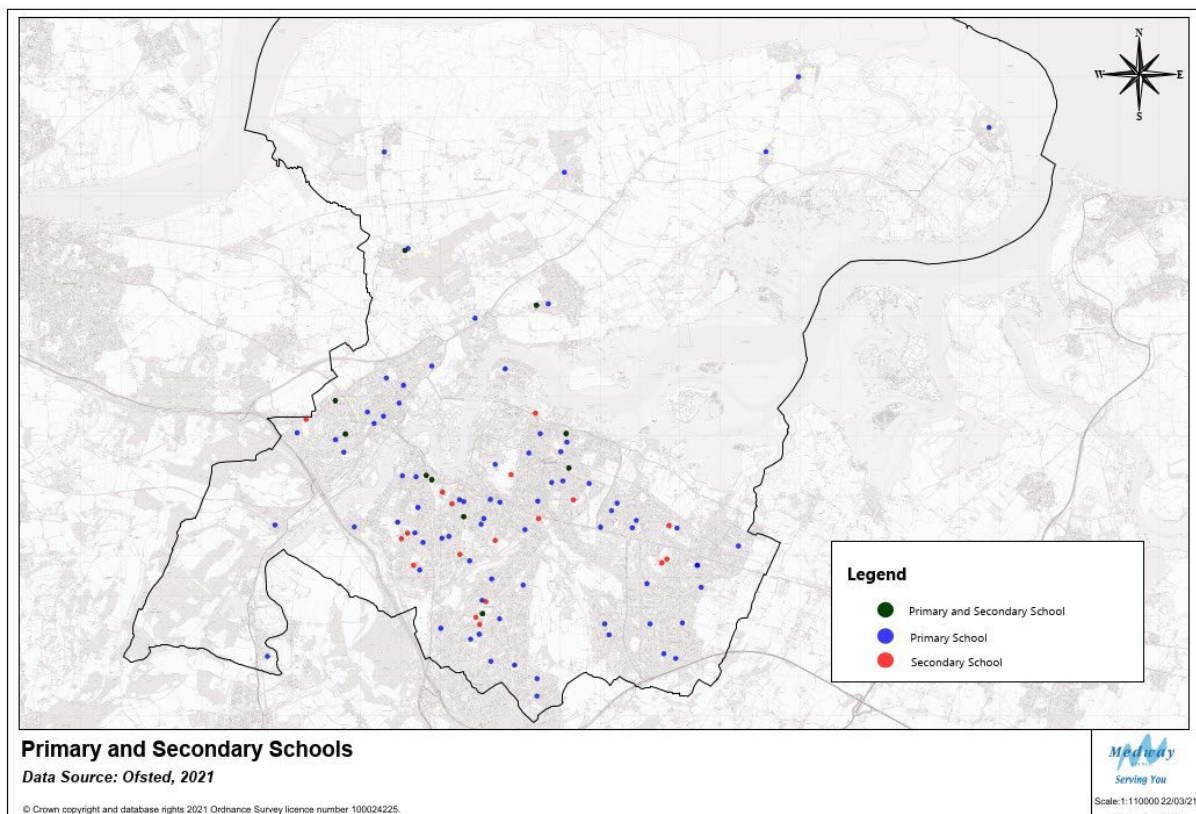


Figure 3: Map of primary and secondary schools in Medway, Source: Ofsted

Primary education – There are 76 primary schools in Medway, providing for a total of 26,475 places. As of 2019, there were 1,412 places available across Medway in primary schools or a 5% surplus in space.^[1]

Secondary education – There are 19 secondary schools in Medway, consisting of 6 Grammar and 13 comprehensive schools. A total of 80 spaces are available in Year 7 in Medway. (3793 Year 7 places, 3713 pupils, 2% surplus)

Other – Medway as the local education authority also has a responsibility to provide specialist education provision (SEN) for children with Special Educational Needs and Disabilities. In Medway there are 5 specialist schools, providing space for 1 primary, 3 secondary and 1 all-through school, but some other schools do also provide SEND facilities alongside mainstream teaching. Going forwards, Medway will commit a proportion of developer contributions collected towards education to enhance SEN provision in line with SEND needs and statutory requirements. Education and in particular the creation of a large number of places for children with SEND, is a significant part of Medway’s current capital programme.

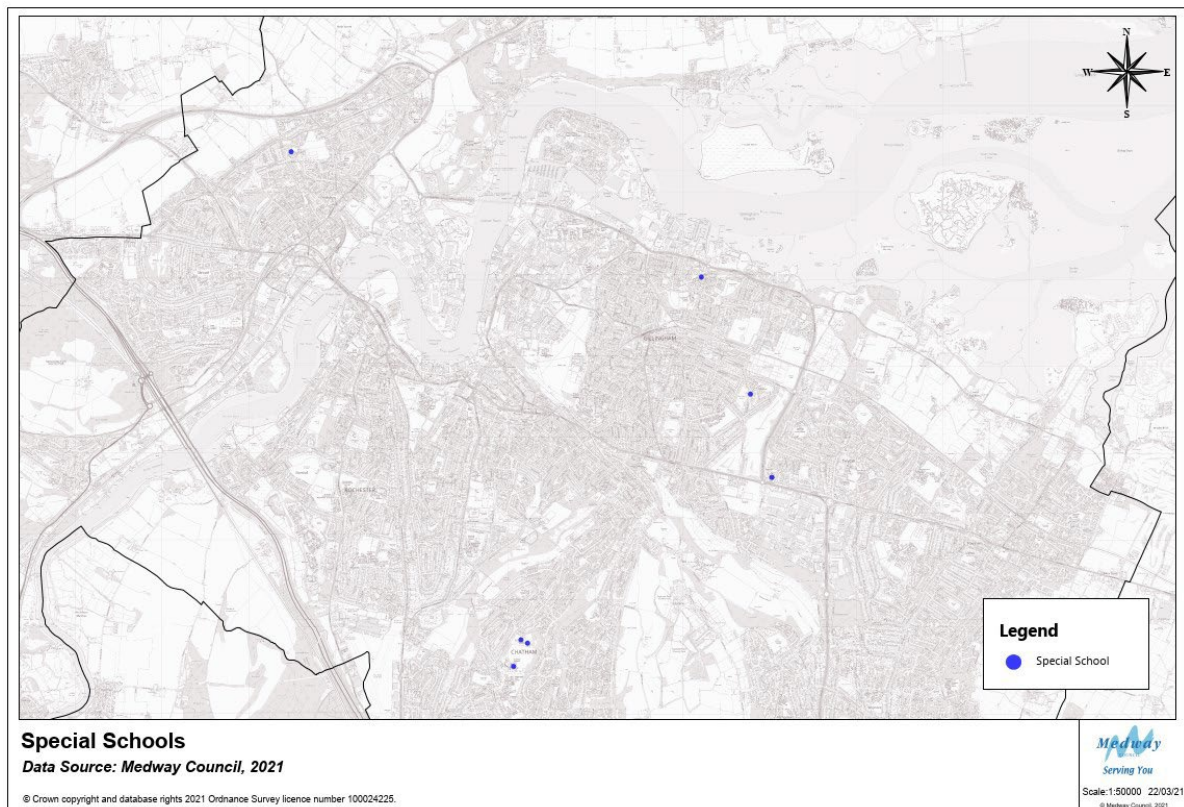


Figure 4: Map of SEND provision in Medway, Source: Medway Council

Quality & capacity review

There are generally sufficient primary and secondary places across Medway. However, there are pockets of under-capacity. There is a lack of primary school places in the west of the Hoo Peninsula, especially Hoo St Werburgh. The shortage of secondary spaces is limited and less easy to predict due to the lack of catchment areas for these schools. The quality of the build fabric of some schools is also

^[1] Medway Council, Schools Capacity (October 2019)

a concern. On the Hoo Peninsula specifically there is a need to improve some school buildings that are now dated – for example at Hundred of Hoo Academy.

Proposed infrastructure

Currently the Council has programmed in the development of 3 schools (1 2FE primary and 2 secondary) in order to accommodate the existing growth. The schools are to be located at Rochester Riverside (primary), Rainham and Strood (secondary). In relation to the longer-term requirements to meet the emerging local plan proposals and scale of anticipated growth in Medway over the plan period, the Council has identified the need for 9 further primary school expansions, 2 new primary schools and 2 new secondary schools over the plan period. This includes the need in the next five years for the Hundred of Hoo Primary school to expand by 1 FE, the relocation and expansion of both Chattenden and High Halstow Primary Schools by 1FE, and the expansion of Hoo St Werburgh by 1 FE. Large scale growth on the Hoo Peninsula would also require the delivery of two new primary schools totalling 4FE on the Hoo Peninsula within 10 years. Medway's education service has indicated that the current rates in the Developer Contributions guide do not cover the costs of delivering new schools. 1FE primary school expansions are also required in Chatham, Strood, Rainham North, and Gillingham in the next five years, and a new 6FE secondary school will likely be required to cover increased demand in Chatham, Rochester, and Gillingham.

The first additional new secondary school is felt appropriate to be located on the Hoo Peninsula and needs to be delivered in the first five years, taking into account the delivery of a new 6FE secondary school at Manor Farm, Strood by 2023, and the new secondary school at Moor Street Rainham which has been completed. 1FE Expansions of Walderslade Girls and Greenacre School by 2028 are also necessary to accommodate pupil growth in those areas.

In addition, there is a need for two new special schools (a primary and a secondary). The primary provision is close to the areas of potential growth. Whereas the secondary and SEN provision is more strategic in nature. The education services have stated that in future, 1.9% of developer contributions will be used to expand special school places. Medway has recently embarked upon a significant programme of investment in local SEND provision, as part of the plan to address the deficit against the High Needs Block of the DSG. This year the Council has allocated £2.5million to create 250 SEND places in mainstream settings, £4.2million to create additional secondary places at Bradfields and a further £12.0million expansion at Abbey Court, also for secondary age pupils. The planned 160 place expansion and relocation of the Inspire Free School on to the Cornwallis Avenue site, is still progressing and is expected to be open in 2023.

These calculations are based on the pupil population projection from the Medway Developer Contributions and Obligations Guide 2021 and the spatial distribution of growth anticipated in the emerging plan. The proposed expansions and new school development are outlined in Appendix 1 – Infrastructure Delivery Schedule.

Funding

The total funding required for the proposed projects outlined above is £129m. Guidance from the Department for Education on securing developer contributions for education highlights the role that local authority borrowing powers can play in providing up front funding of for education in relation

to S106¹¹. It states that “To support the delivery of strategic development at pace, you may need to forward-fund school provision within an urban extension or new settlement, using basic need funding or local authority borrowing if necessary and recouping these costs later through developer contributions secured by a planning obligation”. The above projects will be delivered through a combination of funding from the following sources:

- Developer Contributions
- Medway Council Capital Funding
- Government grant funding through Education Schools Funding Authority
- Private investment

Further education

Lead Agency	<ul style="list-style-type: none"> • Mid Kent College • Medway University Technical College • Medway Adult Education • Independent Training Providers
Evidence base	<ul style="list-style-type: none"> • Kent & Medway Area Review 2017 (further education), Department of Education

Context

Further education (FE) refers to any study after secondary education that is not part of higher education (that is an undergraduate or graduate degree). It includes both formal qualifications and occupational skills courses provided by both Colleges, Guilds and Adult Education Services, as well as apprenticeships and other forms of adult education. Some of these are managed by governing bodies and separate to Local Authorities, being separated from them by the Further and Higher Education Act 1992. Within Medway further education services come through a range of providers. Including: sixth forms and colleges, as well as independent providers. Specifically, there are 18 sixth forms and 2 further education colleges in Medway (UTC and Mid-Kent College). In 2009 Mid Kent College developed and opened a new campus at Chatham Maritime adjacent to the universities of Medway campuses costing £86 million.¹² This campus has c.3,000 students and provides level 2, 3 & 4 qualifications, and apprenticeships with specialisms in construction and engineering.¹³ Medway is also home to the Waterfront University Technical College. A University Technical College (UTC) is an educational institution for 14–19-year-olds that delivers core national curriculum subjects as well as some technical specialisms (e.g. engineering etc). The Waterfront UTC at the time of writing has a roll of 196 students. In April 2017, the government announced a host of apprenticeship reforms, based upon the introduction of a new apprenticeship levy. Large employers with a payroll of over 3 million are required to pay 0.5% of their payroll into a central fund called the apprenticeship levy. Levy paying organisations are able to draw down funds in order to pay for apprenticeship training, for either new or existing staff.

Quality and capacity review

Central to Medway’s plans for growth is an increase in high value employment supported by the matching local business demand and skills supply. This requires a skills base, enhanced by further education, that mirrors employer’s aspirations and demands.¹⁴ As a result of national trends in apprenticeships and university admissions, in recent years Medway has seen slightly lower trends in

¹¹ Department for Education, Securing developer contributions for education, November 2019, pp.7

¹² <https://www.midkent.ac.uk/about/>

¹³ Department for Education, Kent & Medway Area Review: College Annex (August 2017), p.4

¹⁴ Skills and Employability Plan for Medway 2035

apprenticeship starts¹⁵, however new forms of further education have been created such as T-Levels, currently provided by Mid Kent College. T-Levels have the potential to further develop the technical skills of Medway residents. Evidence from Locate in Kent (January 2018) indicates that the skills which companies find the hardest to source are related to work readiness – i.e. soft skills such as attitude and work ethic. Other priority skills gaps are Higher level and specialist IT/tech skills, engineering and technical skills, construction and engineering skills, and management and leadership skills. In January 2021 the Government set out further proposed reforms to post-16 technical education and training to support people to develop the skills needed to get good jobs and improve national productivity. This set out plans for a National Skills Fund from April 2021, in the context of the significant employment and skills challenges impacting particularly on young people as a result of the global pandemic.

Proposed infrastructure

The South East Local Enterprise Partnership (SELEP) has invested £22 million in skills capital funding across Kent and Medway to help assist development across the region (2015-17).¹⁶ From this funding three projects were identified for Mid Kent College, including an engineering skills growth hub at its Medway Campus. Medway Council is also currently delivering an innovative new adult learning, skills and employment hub through repurposing Britton Farm Mall, an underused Medway Council owned building, funded through SELEP. The hub will retrain, upskill, and support adults to access employment. State of the art digital facilities will improve digital skills and tackle digital exclusion, alongside providing the skills needed to access new high GVA jobs. The adult learning, skills and employment hub will be designed with flexible classroom space and state of the art digital equipment. A fully equipped training kitchen will be provided which will help meet a variety of community needs, from supporting business start-ups to reducing food waste and teaching life skills. No further specific infrastructure interventions have been identified through the local plan preparation process in regard to either the further education colleges or sixth forms. However, Medway continues to support this sector through the Medway 2037 Regeneration Strategy that seeks to improve employability. The methods to do this are through the retention of further and higher education talent in the area by supporting the development of new business space and also apprenticeship programmes.¹⁷

Funding

Any necessary infrastructure needed to support Medway's further education will be funded through a combination of funds. However, the delivery of further education services such as apprenticeships is expected to be undertaken as developer obligations rather than as developer contributions for Medway to provide these services itself. There are a great many ways that businesses in the development sector can provide opportunities and support relating to specific development sites, including through the submission of an employment and skills plan alongside major planning applications. This could set out relevant construction apprentices, local employment, work experience opportunities, and local procurement will be used to achieve Medway Council's employment and skills objectives. Any future projects will be delivered through a combination of funding from the following sources:

- Developer contributions
- Education and Skills Funding Agency
- SELEP funding
- Medway Council Capital Funding

¹⁵ <https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships>

¹⁶ <https://www.southeastlep.com/our-delivery/skills/>

¹⁷ Medway Council, Medway 2035 (2019), pp. 46-48

- National Skills fund

Higher education

Lead Agency	<ul style="list-style-type: none"> • University of Kent • University of Greenwich • Canterbury Christ Church University • University of Creative Arts
Evidence base	<ul style="list-style-type: none"> • University of Kent University Plan 2015-2020 • University of Greenwich Strategic Plan 2017-2022 • Canterbury Christchurch University Strategic Framework 2015-2020

Context

Higher education refers to education that results in a level 4 + qualification (HND, foundation degree, university degree or degree apprenticeship). These institutions are regulated by the Office of Students who seek to maintain standards.¹⁸ Overall, the number of students has grown by 15% in the UK over the last 10 years, alongside a 50% decrease in part time students, with many now choosing to study full time. This has helped to drive the estimated £150m per annum spend of students and educational institutions with local businesses and services in Medway, alongside 1,200 jobs. Medway is home to four universities (Canterbury Christ Church University, University of Kent, University of Creative Arts and University of Greenwich). Three of the four universities are located at Chatham Maritime (Canterbury Christ Church University, University of Kent, and University of Greenwich), with one separately located within Chatham (University of Creative Arts – which has announced the closure of its Medway Campus from 2023¹⁹). Three of the four universities are satellite campuses of Canterbury Christ Church University and University of Kent at Canterbury and University of Greenwich at Greenwich. In total there are approximately 12,000 students in Medway, alongside over 1,800 purpose-built student accommodation spaces.²⁰

Quality & capacity review

Through consultation a lack of space on Medway Maritime campus has been identified as a longer term issue by the universities located there. Specifically, there is a lack of space identified for start-up companies formed by graduates from the universities. Medway’s local plan will also seek to support the development of new purpose-built student accommodation where suitable, and Medway’s regeneration strategy Medway 2037 will seek to improve opportunities for graduate retention including through the provision of high quality employment spaces and opportunities. A 2015 study found that Kent and Medway retained 38% of its graduates, while some cities in other parts of England retain as many as half.

Proposed Infrastructure

Both Canterbury Christ Church University and University of Kent have building projects underway, however these are limited to sites in Canterbury rather than Medway. At present no need for expansion has been identified in Medway. However, the growth of the universities in Medway and

¹⁸ <https://www.officeforstudents.org.uk/>

¹⁹ <https://www.bbc.co.uk/news/uk-england-kent-57001439>

²⁰ Medway Council, Medway 2035 (2019), p.18

focus on the need to retain the graduate populations is generating a need for new sites adjacent or to the Medway campus for creation of start-up space. One such initiative is the new Chatham Docking Station currently proposed by the University of Kent. This £5.5m Institute of Cultural and Creative Industries will transform the Grade II-listed Police Section House – currently used as offices and overlooking The Historic Dockyard Chatham – into a new hub for the university by 2024.

Funding

As no further specific projects are yet to be identified no funding estimates can be provided.

The above projects will be delivered through a combination of funding from the following sources:

- Universities
- Public sector capital investment e.g. One Public Estate, Cultural Development Fund and Future High Street Fund

C Utilities & Waste

Utilities are services provided that enable the day-to-day function of a place. These include:

- gas
- electricity
- water supply
- wastewater
- waste
- smart infrastructure including telecommunications

Utility services are generally provided by private companies known as statutory undertakers and regulated by national bodies (Ofwat and Environment Agency) rather than at a local level – except municipal waste services. Waste services (collection and disposal) for residential properties are regulated by Medway Council and run under contract by Medway Norse.

Gas & Hydrogen

Lead Agency	Southern Gas Networks National Grid
Evidence base	<ul style="list-style-type: none"> • Southern Gas Network - Long Term Development Strategy (2018)

Context

Gas in the UK is transmitted across the national network and then distributed throughout a local network. The national network is currently managed and maintained by National Grid, albeit the company plans to sell the network in [2022](#), while the local network is split up into eight networks (Scotland, Northern, Northwest, West Midlands, East of England, North London, Southern, Wales and West) managed by four companies (SGN, NGN, Cadent Gas and Wales & West Utilities). The local distribution network is where the supply to development is sourced and so is what is needed to be analysed for the purposes of the local plan. Within Medway the local network is managed and

maintained by Southern Gas Networks. Aviation fuel is also imported, stored, and distributed from the Isle of Grain.

The Committee on Climate Change recommends that 80 to 90% of homes and all non-residential buildings must use low-carbon heat by 2050, and the Climate Change Act 2008 has set a legally binding commitment to reduce the UK's net CO₂ emissions to zero by 2050. The legislative framework for the planning system carries forward the UK commitment to tackling climate change. Research by Costain has found that the existing gas network may be able to carry hydrogen, initially hydrogen and natural gas may actually be mixed together, and separated prior to entering people's homes, ensuring that those with hydrogen boilers can use them while a transition takes place. The government and industry have committed to trialling a fully hydrogen town by 2030, supported by BEIS, and early trials in the village of Winlaton near Gateshead have begun this year. In Winlaton, 20% of the supply will be switched to hydrogen blended in with natural gas, with other trials ongoing, including in Fife. Currently, eight out of ten homes in the UK use gas boilers, while estimates suggest that 90% of the homes that will be in use by 2050, when the UK is meant to achieve net-zero, have already been built.

The Department for Business, Energy and Industrial Strategy recently published the UK Hydrogen Strategy which sets out the government's approach to developing a thriving low carbon hydrogen sector in the UK to meet its ambition for 5 gigawatts of low carbon hydrogen production capacity by 2030²¹. National Grid is currently working on 'Project Cavendish'²² on Medway's Isle of Grain together with a consortium of energy companies to look at the feasibility of developing hydrogen production capacity in this location^{23,24}. The report found that "The Isle of Grain (IoG) presents a technically feasible, commercially viable, strategic location to build and operate a hydrogen production facility which would be a key enabler to the UK meeting the Net Zero 2050 target." The report further recognises that this will involve increased investments and that CCS and hydrogen will require both capital funding and revenue support. By 2026 the aim is for the facility to be producing up to 700 megawatts of blue hydrogen and capturing and storing 1.2m tonnes of CO₂ a year. By 2030 the aim is to be producing 1.75 gigawatts of hydrogen and capturing and storing, offshore, 3m tonnes of CO₂ a year. While future regulatory proposals are as yet unclear, it is expected that by the middle of the decade, all domestic gas boilers will be 'hydrogen ready' meaning that they can be converted for use with hydrogen.

Quality & capacity review

Medway has one of just 26 liquefied natural gas (LNG) compressor stations in the country, which is located on the Isle of Grain. The Grain LNG terminal is the largest in Europe and eighth largest in the world, with plans for further expansion.²⁵ The terminal has a vast regasification capacity and a ship reloading facility to help meet high export demand. Global LNG supplies are expected to increase substantially, making this a competitive fuel source for various purposes. LNG is considered a vital part of the energy mix, given the reduction of domestic gas production.²⁶ The site occupies about 16

²¹ <https://www.gov.uk/government/publications/uk-hydrogen-strategy>

²² <https://www.projectcavendish.com/>

²³ <https://www.h2knowledgecentre.com/content/project379>

²⁴ <https://www.nationalgrid.com/stories/journey-to-net-zero-stories/making-plans-hydrogen-backbone-across-britain>

²⁵ <http://grainlng.com/>

²⁶ <https://www.ft.com/content/6fc45d4e-dfed-11e7-8f9f-de1c2175f5ce>

hectares, is approximately 2.4km west of Grain village. The terminal has facilities for unloading LNG from specially constructed ships. The LNG is stored in purpose-built tanks and is vaporised to form natural gas, which is supplied to consumers via one high pressure pipeline in the National Transmission System. The terminal also generates and handles natural gas for supply to lower pressure pipeline systems and this gas is odorised using a proprietary compound before supply to consumers.

National Grid Grain LNG Limited, a wholly owned subsidiary of National Grid, owns and operates the terminal, which was the country's first modern day LNG importation terminal. The terminal consists of a purpose-built LNG unloading jetty on the River Medway and a 4.5km cryogenic pipeline that connects the jetty to the storage tanks. The current annual capacity is 15 million tonnes of LNG – equivalent to 20% of UK gas demand, alongside 1m cubic metres of tank space²⁷. The Grain terminal capacity is booked until 2029/30, with no further primary capacity available until then.

Southern Gas Network has not reported any issues with present capacity on the network when reviewing sites proposed for allocation or that are presently coming forward for planning permission outside of the local plan. Only one long-term project has been identified as a result of the proposed spatial strategy. The proposal is for the reinforcement of gas infrastructure.

Proposed infrastructure

A consortium of companies involved in energy generation, infrastructure and design is proposing to support the Hydrogen Strategy through Project Cavendish on the Isle of Grain. This would contribute 700 megawatts of blue hydrogen and prevent 1.2m tonnes of CO₂ per year by 2026. This would increase to 1.75 gigawatts and 3m tonnes of CO₂ per year by 2030.²⁸ Land on the Isle of Grain is being promoted as an established industrial location with existing energy infrastructure, including Liquefied Natural Gas importation, gas and electricity transmission infrastructure, offshore wind power and potential offshore storage. The three gas power stations provide significant early anchor demand loads for hydrogen use. By 2026, the aim is to have a facility in place producing low-carbon (blue) hydrogen by reforming natural gas and capturing and storing CO₂ offshore. A CO₂ pipeline is proposed to run alongside the LNG pipelines running out to the LNG jetties before turning west towards Jetty No. 7.²⁹

This would establish the centre of a hydrogen hub for London and the South East, providing for 800 jobs during construction and 50 long-term jobs. The initial demand for hydrogen is expected to be power generation in the local area and blending into the national, regional, and local gas networks for domestic use. The project would seek other uses for hydrogen, such as transport and manufacturing.³⁰ The council will continue to engage with National Grid regarding Grain Business Park, which benefits from outline planning permission and trip credits. A refined trip budget would need to take account of the interaction between Grain Business Park and Project Cavendish.

No detailed interventions have been proposed at this stage by SGN for the gas network. These may emerge when the specific proposals for sites come forward in detailed planning applications rather than during the development of the draft local plan. The reason for this is that the detail of the required connections to site cannot presently be defined as layout has not yet been agreed. However,

²⁷ <http://www.grainlng.com/our-services/primary-capacity/>

²⁸ <https://www.projectcavendish.com/>

²⁹ Ibid

³⁰ Ibid

the government has indicated that from 2025 onwards, new environmental standards enacted through the building regulations will prevent new homes from being heated by gas boilers. This presents a significant challenge for development in Medway and on the Hoo Peninsula specifically.

Work is currently ongoing looking at alternative sources of energy to heat homes in the area, for example through ground or river water source heat pumps or hydrogen fuelled boilers (see other energy sources below). However, as businesses are one of the primary users of such technologies, there is a strong role for business energy customers to play in developing this infrastructure, with homes being a relatively minor element of such schemes. Local authorities also have a key role to play in making heat networks succeed. Their involvement, particularly in the development stages, can help realise the benefits of heat networks, while also delivering jobs and growth.

Funding

The total funding required for the proposed projects outlined above is unknown and will be assessed at planning application stage by statutory providers as part of new connections charges, or as part of a wider heat networks strategy if developed by Medway Council and partners. While future energy standards will be national requirements and therefore a requirement for developers to meet, the energy market may also play a role in future upgrades, as may government funding to pump prime this emerging market.

The above projects will be delivered through a combination of funding from the following sources:

- Southern Gas Networks Capital Funding
- Private investment
- BEIS support for heat networks, e.g. the [Heat Networks Delivery Unit](#)
- OFGEM Strategic Innovation Fund
- Net Zero Hydrogen Fund

Electricity

Lead Agency	UK Power Networks
Evidence base	<ul style="list-style-type: none"> • UK Power Networks - Long Term Development Statement (2018)

Context

The electricity network has three parts: production, transmission, and distribution. Production relates to power stations. Transmission refers to the high voltage connection between the power stations and substations operated by National Grid. Distribution is the lower voltage connections to residents and businesses operated different providers across the country; in Medway it is operated by UKPN. Figure 8 illustrates the structure of the UK electricity network.

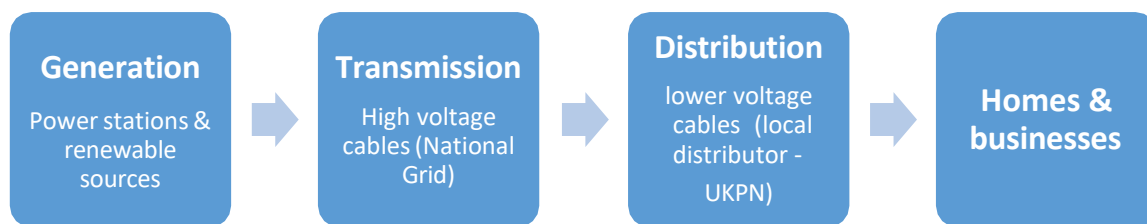


Figure 5: Overview of UK Electricity Network

Medway has a significant input into the electricity network on the production and transmission parts. Medway hosts two natural gas fired power stations: Damhead Creek and Isle of Grain, and formerly hosted a third. Together these have a combined installed capacity of 3GW.³¹ This represents almost half of the installed capacity for the South East region and 5 per cent of the UK.³² Damhead Creek has planning permission for a significant expansion in generating capacity. Various cables forming part of the national energy supply network also cross the Medway area, including the two-way electrical inter-connector (BritNed) linking Grain and the Netherlands.

Although significant this infrastructure is mainly a strategic issue based on the UK wide energy market. The local growth changes although important will not influence the need for this infrastructure and will not be considered in the IDP. Due to the significance of the infrastructure the local plan will need to address the issue through the safeguarding of land.

The local distribution network will be the focused for the IDP. Electrical supply is provided locally through access to substations. Within Medway there are 13 substations. These are located across the authority (figure 9) and operated by UK Power Networks. In discussion with the UKPN it has been indicated that there is sufficient capacity in the system to meet the needs of the proposed planned growth.

³¹ Department for Business, Energy & Industrial Strategy, Power Stations in the United Kingdom (operational at the end of May 2017)

³² Figures derived by analysing data for conventional forms of energy for the South East and England (i.e. coal, oil, natural gas, and nuclear power generation)



Figure 6: Map of Electricity Substations, Source: OFGEM

Quality & capacity review

Upon review of the long-term development statement for Medway no projects have been identified for development based on the growth proposals provided.³³ Similarly to gas infrastructure the electricity infrastructure provider is reticent to engage other than on the principle and overall capacity of the network until the proposed allocations proceed to applications for planning permission and a level of detail is achieved that will enable more accurate costings for the connections to the network. This reflects that UKPN is not regulated to carry out speculative upgrades to the network, but instead to respond to planning applications and ensure that developers meet the costs for any reinforcement necessary.

Proposed infrastructure

At present no specific interventions have been identified with the level of growth identified through the emerging spatial strategy. However, UKPN believes that the growth can be accommodated through the addition of site level infrastructure and there is no need for new substations. Required infrastructure can be assessed and delivered through the planning application process, as there are statutory requirements for developers to engage with providers, and for providers to ensure adequate provision based on cost recovery. On Hoo specifically, the presence of electricity generating infrastructure suggests that this will not threaten the deliverability of growth in the area.

³³ UK Power Networks, Long Term Development Statement (2018)

Funding

Improvements to the network are funded in two ways: either as upgrades to the existing distribution network, from maintenance, funded through electricity bills, or as new connections or reinforcement of existing infrastructure caused by new development are charged to the developers.³⁴

Delivery of new connections and upgrades in Medway is via UKPN, or an independent distribution network operator (IDNO). An IDNO is a smaller network within an existing distribution network generally serving new developments.³⁵

Although no new specific infrastructure has been identified UKPN has estimated that there will be a cost of the £15-20m to cover reinforcement to the network. Reinforcement may include connections and some upgrades to the existing network.

The above projects will be delivered through a combination of funding from the following sources:

- Customer recharge schemes
- OFGEM Strategic Innovation Fund

Other energy sources

Context

The Future Homes Standard will be a new energy efficiency standard for buildings that will be set out in building regulations by government in the coming years. The government has proposed to introduce this new suite of standards for a number of years, but the timescale has slipped considerably, and it is now due in 2025, with the final requirements still to be confirmed. The changes are intended to help the UK to achieve its net zero commitment by 2050, as the built environment currently contributes around 40% of carbon emissions. At present the future homes standard is expected to be brought into force from 2025 and is likely to require reductions in energy use in typical new build homes of between 20% and 30%. The intention is that homes will not be built with fossil fuel heating such as natural gas boilers but use other energy sources such as hydrogen or heat networks instead. Work on the full technical specification for the Future Homes Standard has been accelerated and will be consulted on in 2023. The government intends to introduce the necessary legislation in 2024, ahead of implementation in 2025.

Quality & capacity review

At present Medway does not benefit from other energy sources.

Proposed infrastructure

Medway Council appointed AECOM to carry out a Heat Network Delivery Unit (HNDU) Heat Mapping and Masterplanning study across Medway and it is part funded by HNDU. This study is the first in opportunity identification and development process for a potential district heating scheme and seeks to identify what is possible to achieve in the area, specifically focusing on the Hoo Peninsula, Strood Town Centre, Innovation Park Medway, and Rochester Town Centre. AECOM followed the HNDU methodology and CP1 guidance. This study considered energy demand and energy supply for each of the study areas. Existing and future energy demands were identified and estimated based on

³⁴ Ofgem - https://www.ofgem.gov.uk/sites/default/files/docs/2014/08/ofg538_web_how_to_leaflet_4_0.pdf

³⁵ Ofgem - <https://www.ofgem.gov.uk/electricity/distribution-networks/connections-and-competition/independent-distribution-network-operators>

available data and AECOM’s in-house data sets. Low carbon energy sources were identified with their potential supply capacity estimated. Key stakeholders for each study area were identified and contacted. AECOM held discussions with those who responded. Input from stakeholders was vital in developing a clear understanding of the commercial context for the stakeholders and its impact on potential heat network for that study area. Once this information was collected, technoeconomic modelling for 3 of the most promising study areas was carried out. This is a process of identifying the optimal scheme at this stage. It considers energy demand, energy supply, network routing, energy centre sizing, capital, and operating costs. A number of options are created for each network, this allows for comparison across technology, network route and scheme extent.

Funding

Government has recognised the challenges of funding new energy sources including heat networks. Proposals would either be expected to be cost neutral over their lifetime and/or funded with government support including loans from BEIS, for example the Heat Network Transformation Programme, Green Heat Network Fund (GNHF), and OFGEM Strategic Innovation Fund (SIF). AECOM’s assessment found that the illustrative projects would provide strong returns to developers when measured over a 40-year timescale, and therefore additional grant funding would simply increase the rate of return which could invalidate the case for grants.

Waste

Lead Agency	Medway Council Medway Norse
Evidence base	<ul style="list-style-type: none"> Medway Council, Municipal Waste Management Strategy 2005-2020 (2006)

Context

Waste is split between local authority collected waste (household & public) and commercial waste. The IDP will only focus on LACW waste as this is what Medway Council is responsible for as waste disposal authority (WDA) and waste collection authority (WCA) for household waste.³⁶ The provision, and hence management, of the household waste recycling centres is a statutory duty for the waste disposal authority of an area, of which Medway as a unitary authority holds this duty. The duty is imposed by section 51 Environmental Protection Act 1990 and requires the Council to make arrangements for HWRCs to be provided which are reasonably accessible to persons resident in its area. HWRCs must be available for the deposit of waste at all reasonable times.

³⁶ Environmental Protection Act (1990)

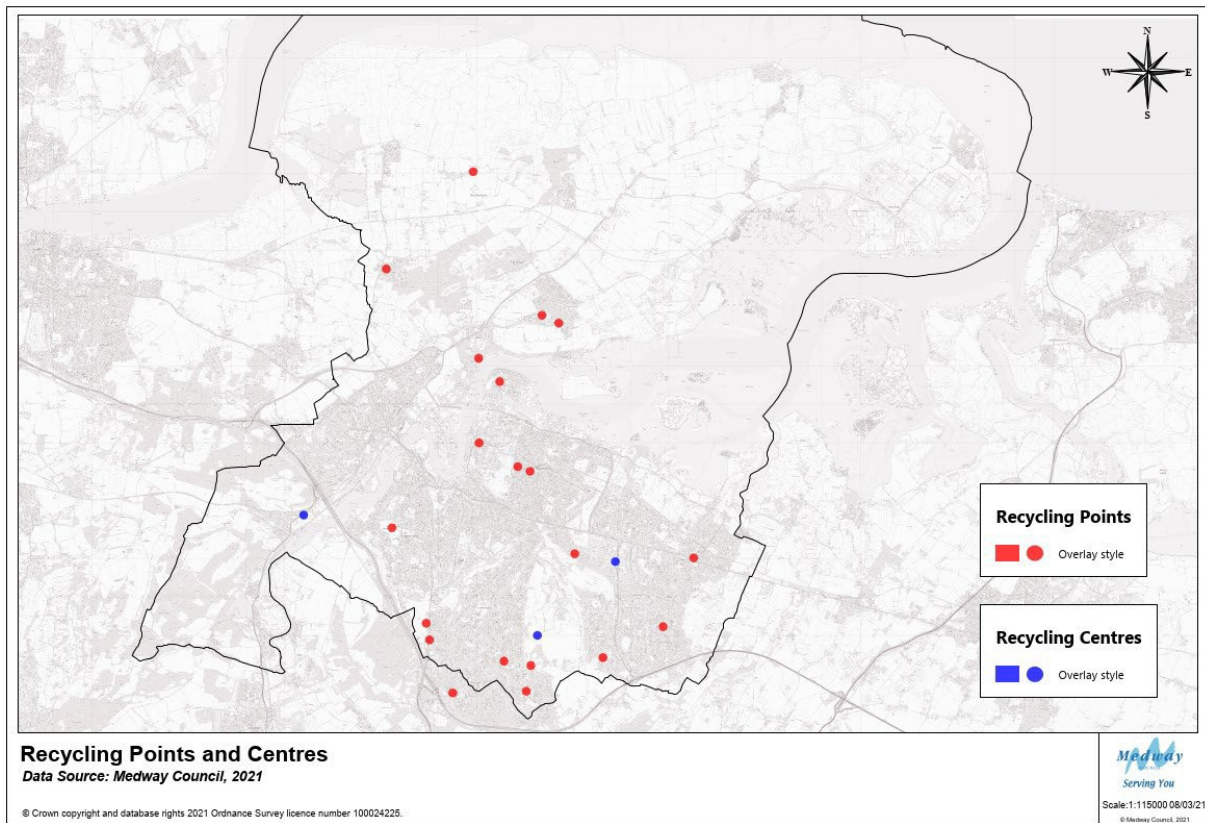


Figure 7: Map of Recycling Points and Centres, Source: Medway Council

Quality & capacity review

Presently there are three household waste recycling sites across Medway and five waste transfer stations. In addition to this there are two operational inert landfill sites with capacity.³⁷ Medway Council has two contracts in place with a private waste contractor for the transfer, haulage and disposal of kerbside recycling and residual waste. A new procurement exercise for a recyclate contract post Sept 2022 is currently underway. In recent years, the overall rate of waste which is recycled has stayed at around 43%. More broadly, Medway Council must meet its Landfill Directive 2020 reduction target to reach 35% of the 1995 baseline by 2020. Additionally, all mechanical street cleansing arisings are sent for reprocessing rather than landfill with 95% being recycled.

In total waste facilities in Medway have a capacity to process between 435,000 to 834,000 tonnes per annum of waste. The figure is for both public and private facilities in the authority. The most used HWRC was Cuxton HWRC that has capacity for 14,028 tonnes per annum of material. There are no HWRCs on the Hoo Peninsula, the nearest facility is in Cuxton, which is reported as difficult to access at times due to traffic congestion. Medway has undertaken a Waste Needs Assessment (2020) for the plan period assess capacity in the system over the plan period. The results of the WNA show that there is a shortfall in waste capacity of 291,339 tonnes by the mid 2030s, however there is no requirement for an additional waste transfer station.

During the Covid-19 lockdown and beyond, a significant increase in kerbside waste tonnages has been experienced.. This represents additional pressure, not just on disposal, but on transfer station and Refuse Collection Vehicle wear and tear. Additional pressure comes from the reductions in

³⁷ BPP Consulting, Medway Waste Needs Assessment 2020 (2020), p. 12

waste markets (for example the onward sale of waste textiles) meaning lower returns on recycled materials.

Residual waste collected in Medway is sent for energy recovery at SELCHP (South East London Combined Heat and Power) waste to energy facility in South London. Here the material is burned, and the hot gases produced during the combustion process pass through a boiler to heat water which is transformed into steam. This steam then powers a turbo generator which produces energy for the National Grid.

Proposed infrastructure

The significant proposed development on the Hoo Peninsula indicates the potential need for a new household waste facility in that area. However, no specific proposals for provision have been made. Any new proposals would have to be funded by Medway Council through capital funding and developer contributions. In the meanwhile, waste is dealt with by private companies on a regional basis, and there is always potential to move waste outside of Medway for processing to expand capacity, ensuring flexibility to accommodate new housing.

In addition to the above, Medway’s Waste team have been investigating potential sites that could become a new waste transfer station for Medway’ kerbside collected waste – enabling the reception and bulking of waste prior to its onward transfer to a reprocessing or disposal point. From an operational perspective however, emerging changes in the market that is resulting in higher standards being imposed on the quality of waste that will be accepted by downstream waste re-processors, increasing the costs of waste sorting for Medway Council due to the use of private contractors. However, at present no sites have been identified, and such a facility would require a minimum of three years to deliver.

Funding

The development of new infrastructure will be met through the Council’s capital budget and the use of developer contributions. It will be delivered by the Council’s waste disposal partner, which at present is Medway Norse. No estimate has been provided yet by Waste Services of proposed infrastructure. Where waste infrastructure is not available in Medway, waste is often moved to other areas for processing.

Water supply

Lead Agency	Southern Water South East Water
Evidence base	<ul style="list-style-type: none"> • Southern Water - Water Resources Management Plan 2020-70 • South East Water - Water Resources Management Plan 2020-2080

Context

Two water companies operate within Medway (Southern Water and South East Water). The majority of supply to the authority area is provided from Southern Water. South East Water only supply water to Halling in the south west corner of the authority.

Generally, the authority falls within an area of water stress.³⁸ This means that there is generally a lack of water provided through rainfall for the present and future household demand.³⁹

In Medway supply is split between groundwater and watercourse. The majority of the supply is from groundwater sources (75%), with the remainder coming from watercourses and external surface water sources (Bewl Water Reservoir). The urban areas of Medway including Rochester, Chatham, and Gillingham and Rainham are supplied with 100% groundwater, while the Hoo Peninsula is supplied with 56% river and reservoir water, and 44% groundwater⁴⁰.

The supply of and demand for water in Medway is not limited to the Borough's administrative boundaries and South East Water draws water from more than 250 boreholes, six rivers and six reservoirs, and treats water at 93 treatment works across its area. Water is also transferred by pipeline from Medway to Thanet, and from Medway to Hastings.

Quality & capacity review

Southern Water identifies a balanced supply until 2021/22 and then a deficit in supply following that, with the need to increase water supply by approximately 50% by 2030 across their entire operating area⁴¹ In Medway and surrounding areas specifically, they estimate that by 2028, a 1 in 200-year drought would create a deficit in supply. They hope to rectify this issue through a combination of educational programmes encouraging people to use less water and fixing leaks. South East Water does not identify any capacity issues with its network in Medway.

Given the extent of aquifers under the main urban areas in Medway strong controls are in place to limit the potential for groundwater pollution.

Proposed infrastructure

The Medway Swale Estuary is one of the most important natural wetlands in northern Europe and is designated as a Marine Conservation Zone (MCZ) with its mix of fresh and sea waters providing a fertile environment for wildlife, particularly invertebrates, fish, and birds. As a nationally rare clay river, the Beult is classified as a Site of Special Scientific Interest (SSSI) as it supports the habitats, plants, and animal species characteristic of this type of river. The majority of groundwater abstractions in the catchment are taken from the North Downs chalk which drains into the estuary and there are three reservoirs although much of the water from these reservoirs is exported for use outside of the catchment. Bewl Water, at the head of the River Teise, is a major water supply source for the upper catchment. It is filled mainly by water abstracted from the downstream river.

Southern Water has identified the need to raise the retained water level in Bewl Reservoir, in East Sussex, by 40 cm. This does not require the existing dam to be raised, but it will require some minor modifications around the edge of the reservoir. Southern Water also proposes an indirect potable water re-use scheme on the River Medway, and to increase the proportion of metered households across the area from 88% to 92%, as unmetered households use 24% more water⁴². These investments have been selected based on multi-criteria analysis by Southern Water, and have been subject to

³⁸ Environment Agency,

³⁹ Environment Agency & Natural Resources Wales, Water Stressed Areas – final classification (July 2013), p.3

⁴⁰ Southern Water - Water Resources Management Plan 2020-70

⁴¹ Southern Water – Business Plan 2020-25

⁴² Southern Water - Water Resources Management Plan 2020-70

environmental assessments including SEA, HRA and WFD. Southeast Water has not identified any specific interventions in Medway based on the proposed scale of growth.

Medway Council also seeks updated policies in the emerging local plan to limit development that would detrimentally impact on the Groundwater Source Protection Zone, covering much of the urban area of Medway, and principal aquifers.

Funding

Southern Water has identified the need to spend £90m, expressed in current values, over the next 50 years in their Eastern service area, which includes the majority of Medway, as well as other areas of Kent and Sussex such as Thanet and Hastings. However, the profile of this spend over this period has not yet been determined.

The total funding required for the proposed projects outlined above is estimated to be £90m (Note: this is in the period to 2070 and includes areas outside of Medway). However, with regards to individual schemes costs will need to be assessed at planning application stage by statutory providers. The above projects will be delivered through Investment by Statutory Providers including the Ofwat price review and new infrastructure charge and water Industry Act 1991

Wastewater

Lead Agency	Southern Water
Evidence base	<ul style="list-style-type: none"> • Southern Water Business Plan (2020-25) • Southern Water Drainage Action Plans – Whitewall Creek & Motney Hill • Kent Water for Sustainable Growth Study (Kent County Council, May 2017)

Context

Southern Water is the statutory wastewater undertaker for the whole of Medway. It operates two wastewater treatment works (WwTW) within the authority Whitewall Creek Wastewater Treatment Works at Upnor Road Rochester Kent, ME2 4UZ and the Motney Hill Sewage Treatment Works. Both WwTWs are proposed for U_IMP5 Improvement schemes in the AMP7 plan by Southern Water 2020-25.⁴³ The LPA area is served by a mixture of separated and combined sewers. Locations of significant combined system include Gillingham, Grain, and north Chatham.

Quality & capacity review

Southern Water has identified capacity issues at Whitewall Creek WWTW as part of the consultation on the proposed levels of growth in Medway (March 2019). This was supported by the Water for Sustainable Growth project undertaken with Kent County Council (2017). The study found that while Motney Hill would have a +5% flow permit capacity over this period, Whitewall Creek would have a -12% flow permit capacity based on planned growth, meaning that it would exceed its flow permit capacity.

⁴³ Southern Water DWMP Delivery Programme 2019

In April 2020, Southern Water also identified⁴⁴ potential sewage flow and treatment capacity issues in the Chatham and Strood Town Centres, Hoo St Werburgh and suburban Rainham related to potential planned growth. The need for investment in these drainage catchment areas is being addressed through Southern Water's emerging Level 2 Drainage and Wastewater Management Plan for Medway. This will provide further detail on any proposed interventions to accommodate local plan growth in this area.

In April 2020 Southern Water provided Medway Council with detailed analysis of network capacity opportunities and constraints in relation to proposed housing allocations⁴⁵ using a combination of WPS hydraulic risk scores, catchment level hydraulic risk scoring, and regional hydraulic risk scoring.

Increased waste discharge as a result of population and housing growth in the Medway local plan could result in deterioration in water quality simply through the increased volume of treated effluent (which will contain increased nutrient loading) or, where WwTWs are at or near capacity, in deterioration in the level of treatment that discharged effluent receives. Increased discharge of treated effluent to rivers that drain to the estuary could also affect water flows and sediment patterns within the area's designated sites.

Whitewall Creek WwTW has quality consent (permit) conditions for BOD and ammonia which needed to be modelled using load standstill to assess if tightening is required with future growth. The modelling assessment demonstrated that more stringent quality conditions would be required on the permit relating to ammonia and BOD to ensure no deterioration in WFD targets in the Medway estuary.

As this tightening is within the LCT there should be no impact on designated sites related to BOD or ammonia. In relation to ammonia and BOD, the changes required can be achieved with conventional treatment and hence a technical solution will be feasible. The Medway estuary currently has an overall waterbody status of 'Moderate', with the alternative objective to maintain 'Moderate' status by 2021. Its current overall status is limited to 'Moderate' due to the status of DIN (moderate) and surface water mitigation measures (Moderate or less). The current status for dissolved oxygen is 'Good'.

⁴⁴ Email from Southern Water to Medway Council dated 03/04/2020

⁴⁵ Email from Southern Water to Medway Council dated 03/04/2020

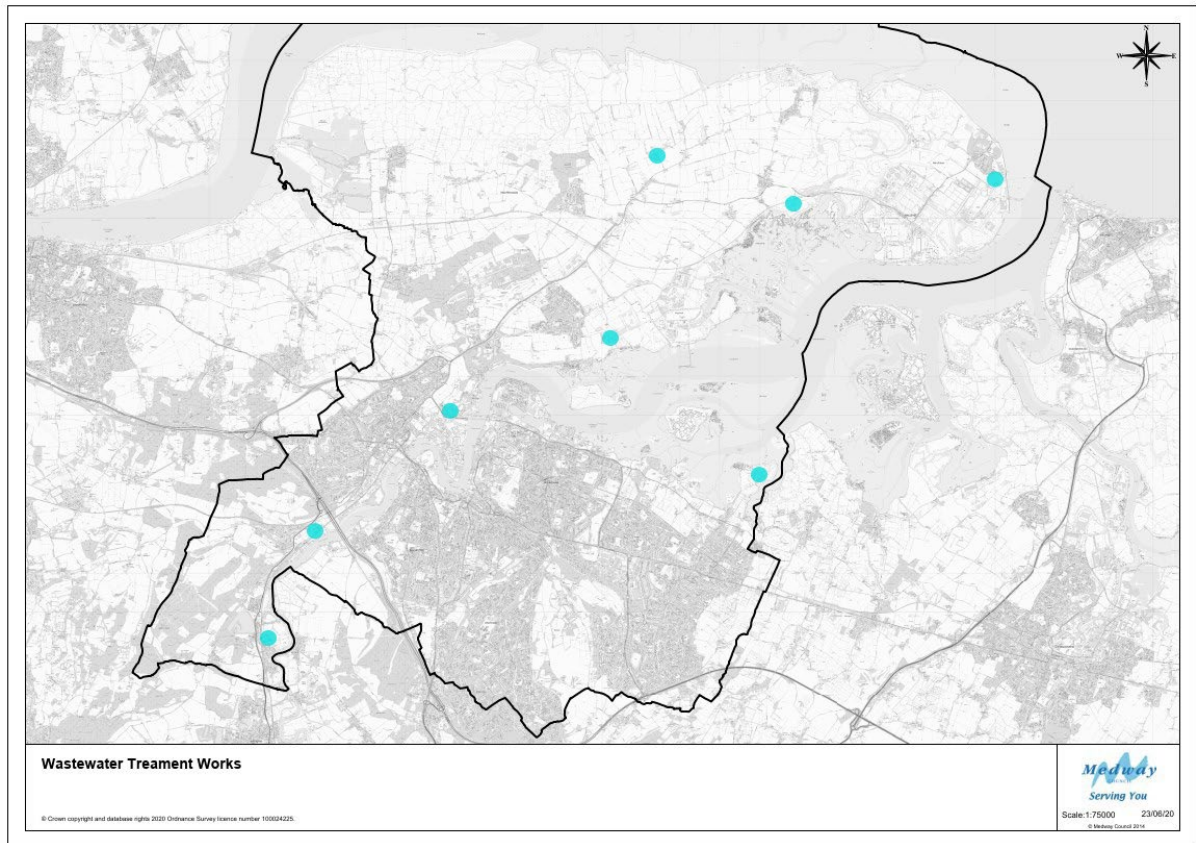


Figure 8: Map of Wastewater treatment works in Medway, Source: Medway Council

Proposed infrastructure

The growth planned for Medway over the plan period has been identified by Southern Water as requiring an upgrade to Whitewall Creek WwTW, to be funded through statutory charges. No timing or cost estimates have so far been confirmed for this upgrade.

Funding

As of 1st April 2018, all off site water and wastewater network reinforcement works necessary as a result of new development will be delivered by the relevant statutory undertaker. Local reinforcement works will be funded by the Infrastructure Charge (a fixed charge for water and wastewater for each new property connected). Strategic water and wastewater infrastructure requirements will be funded through water companies' 5-year cycle investment programmes, known as Asset Management Plans (AMP). Funding upgrades in Medway are likely to be taken through the next AMP cycle covering 2025 - 2030. The timing of development may need to be phased in line with the delivery of the WwTW upgrade. Further detailed requirements for additional water and wastewater infrastructure will be determined at the time of individual planning applications, or, with larger regeneration allocations, in pre-application discussions with the service providers. Water providers will require an element of certainty of an application coming to fruition before they will commit to any changes to their infrastructure provision. Southern Water has not identified any present costings for the projects above as this will have to be done when the project has planning permission due to the present internal planning structures in the business.

The above projects will be delivered through a combination of funding from Investment by Statutory Providers including the Ofwat price review and new infrastructure charge and water Industry Act 1991.

Smart infrastructure

Lead Agency	<p>Mobile:</p> <ul style="list-style-type: none"> • O2, EE, Vodafone & Three <p>Broadband:</p> <ul style="list-style-type: none"> • BT Openreach • City Fibre • Virgin Media
Evidence base	<ul style="list-style-type: none"> • Ofcom: Connected Nations Update Report 2020

Context

Medway’s Smart City Strategy is currently emerging in line with the Council’s corporate ambition to be the leading Smart City in the South East of England by 2037. This ambition also relates to the council’s medium-term objectives, Medway 2037 regeneration agenda and Culture and Tourism strategies. It is important to recognise this aspiration to better understand how infrastructure investment can support ‘Smart City’ ambitions. New street lighting and other highway infrastructure, CCTV cameras, new buildings and electric vehicles could all carry the technology required.

Digital and smart infrastructure includes a wide variety of aspects from communications to smart technology⁴⁶ - in other words, infrastructure that responds intelligently to changes in its environment and user demands to achieve an improved performance.

Telecommunications such as broadband and mobile phones in particular are intrinsic to how we now live and work, particularly in the context of recent changes to working patterns as a result of the Covid-19 pandemic. Access to fast broadband and telephone services are essential for business, learning and communities, and provision of high-speed broadband services is a key component of a successful economy. The council seeks to establish Medway as a well-connected smart city that offers a competitive base for businesses and excellent telecommunications services for residents.

Quality & capacity review

Data suggests that Medway has relatively strong broadband coverage, 98% of houses being able to get superfast broadband.⁴⁷ This covers most of the area of Medway with pockets of unavailability within the rural areas. Openreach has confirmed that there are no capacity issues in the existing network during consultation in April 2020. However, in 2019, ONS data shows that 9.7% of Medway residents had not accessed the internet in the last 3 months or never used it at all, higher than the national average of 9.1%.

In June 2021, Medway was still experiencing low levels of full fibre (FTTP and FTTH) coverage at around 7.7%, compared to the national average of 24%⁴⁸. To combat this, CityFibre are in the process of deploying full fibre in Medway to over 90,000 premises⁴⁹, investing some £42 million in the area to futureproof gigabit connectivity. There are plans to expand the full fibre rollout to Strood, the Hoo

⁴⁶ Royal Academy of Engineering, Smart Infrastructure: the future (2012), p.3

⁴⁷ Think Broadband Statistics - <https://labs.thinkbroadband.com/local/E06000035>

⁴⁸ Think Broadband Statistics, June 2021

⁴⁹ CityFibre - <https://www.cityfibre.com/news/cityfibre-kick-starts-medways-full-fibre-future/>

Peninsula, Cuxton and Halling in Phase 2; but City Fibre have not given an indication as to when these works will not commence – likely after Phase 1 has completed in 2024.

Mobile phone connections are provided by EE, Vodafone, O2 and Three.⁵⁰ Ofcom data suggests that mobile phone coverage in Medway is universal.⁵¹ Issues of coverage arise depending on individual networks. The parts of the authority with poor coverage are the rural areas on the Hoo Peninsula. A map of Medway’s telecommunications masts can be downloaded [here](#). Alongside the Kent Broadband Team, Medway Council officers plan to hold regular meetings with BDUK and mobile phone providers to encourage further 5G small cell deployment in Medway, to unlock future potential for residents and businesses.

Proposed Infrastructure

The Government has announced a new £5Bn Rural Gigabit Connectivity Programme⁵². This fund is intended to deliver nationwide gigabit connectivity in locations unlikely to benefit from commercial investment. The government’s ambition to deliver this by 2025, building on the recommendations set out in the 2018 Future Telecoms Infrastructure Review⁵³.

The £5Bn will focus on upgrading those hardest to reach areas with the highest proportion of premises without access to superfast broadband first, continuing to reduce barriers to deployment.

The council anticipates baser and booster stations will be required as 5G technology is rolled out in Medway than for the current 3G and 4G networks and will aim to work with the telecommunications industry to agree suitable provision and shared guidance. Notably, the government is introducing new permitted development rights for 5G masts, which could have an impact on their location and provision in the area going forwards.

Funding

Plans for telecommunications/broadband provision in new developments are generated early on in the process and are outlined during the planning application stage. Most potential locations identified for growth in Medway are within areas with a good broadband and mobile phone signal coverage. However, there are some specific growth locations on the Hoo Peninsula that suffer from a poor connection and will need significant investment.

Future developments will be expected to provide their own infrastructure connections to the network as part of a policy requirement set out in the local plan and in line with Ofcom guidance on duct capacity.⁵⁴ However upgrades to the strategic network to facilitate these connections will be expected to take place through the market. However, Openreach has made a commitment to build FTTP infrastructure into any new housing development in the UK that has more than 250 premises, free of charge⁵⁵ with a joint funding option available to smaller developments under this threshold, with

⁵⁰ Ofcom, Mobile Coverage Checker - <https://checker.ofcom.org.uk/mobile-coverage>

⁵¹ Ofcom, Connected Nations Report (Sept. 2018) - <https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-2018/interactive-report>

⁵² DCMS, Rural Gigabit Connectivity
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/973961/RGC_Key_Information_Document_August_2020_V2.pdf

⁵³ DCMS, 2018 Future Telecoms Infrastructure Review
<https://www.gov.uk/government/publications/future-telecoms-infrastructure-review>

⁵⁴ <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-industry-guidance/newbuild-investment#17>

⁵⁵ <https://newsroom.bt.com/openreach-announces-ultrafast-fibre-plans-for-gillingham-kent/>

connection charges in the range of £500 per dwelling, or more on small sites under 20 dwellings or which are located more than 4.5 kilometres from Openreach’s existing fibre. Any additional connection charges are likely to generate a return for development and therefore should be considered under site abnormalities for the purposes of viability.

Due to the proposed future infrastructure projects proposed and method of delivery by providers the funding will come directly from developers and so no estimated costs can be provided.

The above projects will be delivered through a combination of funding from the following sources:

- Developer funding (build costs)
- Internet and mobile phone provider funding
- Government Funding Programmes

Electric vehicle charging

Context

The Kent & Medway Energy & Low Emissions Strategy (KMELES) has identified that the transition to zero emission vehicles (e.g. electric and hydrogen) is a key action to deliver net-zero targets. Current projected estimates suggest that there could be a range of between approximately 70,000 and 130,000 EVs in Medway by the end of 2037⁵⁶, subject to levels of uptake, reflecting the government's commitment to end sales of diesel and petrol cars by 2030.

Quality & capacity review

To enable this transition and incentivise a greater uptake in electric vehicle (EV) ownership across the area, Medway Council has a strategic role to assess and address residential and business demand for local EV charging infrastructure; with an Ultra Low Emission Vehicle (ULEV) Strategy in development. More than 600 private electric vehicle charging points have been secured as part of the planning process in Medway already, these include developments such as at Rochester Riverside, Berengrave Nursery - Rainham, Kitchener Barracks - Chatham and developments on the Hoo Peninsula. This will continue in future, with the default position being that electric vehicle charging points are required in all on and off-street parking spaces in new developments in Medway where viable.

Proposed Infrastructure

Public sector land also has the potential to provide multiple locations where EV chargers could be installed individually or as EV charging hubs and this has the potential to provide an additional revenue income stream for the Council. The Kent & Medway Electric Vehicle District Network project aims to deliver a consistent Kent & Medway county-wide public EVCP network across a potential 150 public car park locations throughout the county, including approximately 34 in Medway, subject to procurement and other approvals. Using District owned car parks, this will create “charging hubs” - bringing together multiple Local Authority partners to secure a consistent and high value solution for public and business use.

⁵⁶ <https://democracy.medway.gov.uk/mgconvert2pdf.aspx?id=55357>

Funding

The Council will not be required to provide any funding for this opportunity. The project will operate under a Concessionary Contract over a period of 12-years, reducing the risk for the Council, whilst providing a revenue share from the use of the EVCPs. The specific terms will be agreed following the procurement activity to select a chosen EVCP Supplier. A long-term partnership is sought to incentivise suppliers to invest in the network and to ensure continuity of supplier for the years ahead. Further investment in private charging infrastructure in new development will be delivered under developer obligations and has been tested for viability, and in addition the Government has recently consulted on proposals to alter existing residential and non-residential buildings regulations to include electric vehicle infrastructure requirements⁵⁷. Further information on Medway's ambitions for Electric Vehicles is available in the [Medway Council EV District Network briefing paper April 2021](#).

⁵⁷ <https://www.gov.uk/government/consultations/electric-vehicle-chargepoints-in-residential-and-non-residential-buildings>

D Health & social care

Healthcare services in Medway are split into three sections: Public Health, primary and secondary/tertiary healthcare. All three work together to improve the health and wellbeing the residents of Medway.

Lead Agencies and organisations	<ul style="list-style-type: none"> • Kent and Medway Clinical Commissioning Group/ICS including Primary Care Networks • Medway NHS Foundation Trust (Maritime Hospital) • Medway Community Health Foundation Trust • South East Coast Ambulance Service • Kent and Medway NHS and Social Care Partnership Trust • Medway Council Public Health • Medway Council Adult & Social Care • NHS England & NHS Improvement (National bodies)
Evidence base	<ul style="list-style-type: none"> • Medway Adult Social Care Strategy (2016-20) • KCC, NHS & Medway Council, STP, Transforming health & social care in Kent & Medway (2016) • NHS Estates Strategy 2015-20 • Kent and Medway CCG Primary Care Estates Plan 2021 • Medway CCG Operational Plan 2017-19 • Medway CCG GP Forward View (2016) • NHS Five Year Forward View (2014), • Medway NHS Foundation Trust, Clinical Strategy 2019-22 (2017) • Medway Foundation Trust, People Strategy 2019-22 (2017) • Medway Foundation Trust, Quality Strategy 2019- 22 (2017) • Medway Health & Wellbeing Strategy 2018-23 (2018) • Medway Pharmaceutical Needs Assessment (2018)

Public Health is regulated and supported by the Local Authority, while primary and secondary health care and some social care falls under the remit of NHS England and are organised locally by the NHS Kent & Medway Clinical Commissioning Group, alongside a wide range of other NHS organisations such as Community Health Partnerships who manage Medway’s four Healthy Living Centres at Lordswood, Rochester, Gillingham and Rainham, as well as the Medway NHS Foundation Trust, and Kent and Medway NHS Social Care Partnership Trust. Public health in Medway is delivered through the commissioning of services.

This means that there is limited physical infrastructure required and as a result public health has not been considered in the IDP. However, they do provide information and education to help change behaviours that may require a developer contribution on certain forms of development. As of April 2020, Kent and Medway Clinical Commissioning Group was responsible for commissioning the majority of health services in Medway; Public Health (Medway Council) is also responsible for commissioning a range of services. From July 2022 this has been replaced by a new statutory body known as an Integrated Care Board (ICB) in line with government’s proposed White Paper, which may take on further delegated commissioning for services such as dentistry and pharmacy.

In contrast secondary and primary healthcare may require physical infrastructure interventions through the provision of facilities due to the need for expanded services brought about by growth.

Some healthcare facilities such as hospital may also meet health needs outside of Medway. Primary care refers to initial contact healthcare services (GPs, pharmacies, dentists, and opticians). In Medway there are 72 GP practices, 58 pharmacies, 35 dentists and 21 opticians. Secondary care refers to acute healthcare services (i.e. hospitals). Whilst these are not considered in detail here, Medway Foundation Trust which runs Medway Maritime Hospital has indicated that significant additional bed capacity will be required in the next five years at their current site to accommodate local plan growth, likely costing £75m and requiring funding from the Department of Health and Social Care. Over the longer term, a new hospital site is likely required in Medway or Swale. The impact on the Covid-19 pandemic on health infrastructure and services has been significant, and due to significant changes to the health system, there is particular uncertainty around the future of health provision in Medway.

Primary care

Context

Local health and care services are provided by a wide range of health professionals including GPs, nurses, dentists, pharmacists, and opticians. In addition, a number of voluntary and community organisations in Medway also provide specific services or contribute to local health and care provision. For the purposes of this section of the IDP, only GP practices have been considered as the CCG has not been able to provide further information on community pharmacy, dental and optometry service needs and proposals. Further detailed information on the requirement for GP estates is contained within Kent and Medway CCG's August 2021 Primary Care Estates Strategy⁵⁸.

Kent and Medway CCG covers 1.8m people, and is currently responsible for commissioning both primary and secondary healthcare facilities in Medway, via the Medway and Swale Integrated Care Partnership (ICP), chaired by Medway Council Chief Executive Neil Davies, covering over 400,000 people, which oversees 9 individual Primary Care Networks consisting of groups of general practices working together, and in partnership with community, mental health, social care, pharmacy, hospital and voluntary services in, to offer more personalised, coordinated health and social care. Of the nine primary care networks in Medway and Swale (made up of 57 GP practice groups), Medway contains 6 networks, each serving between 30-50,000 patients: Gillingham South, Medway Central, Medway Peninsula, Medway South, Medway Rainham and Rochester. The CCG is also currently responsible for commissioning pharmacy services, in line with the Medway Pharmaceutical Needs Assessment 2022, prepared by the Medway Public Health service.

The NHS Long-Term plan sets out an ambition for all GP practices to come together with neighbouring and associated practices in 'Primary Care Networks' (PCN) to meet the needs of local populations, with national guidance enabling groups of practices coming together locally in partnership with community services, social care and other providers of health and care services around the needs of local patients. As part of a PCN, GPs will be able to recruit multi-disciplinary teams, including pharmacists, physiotherapists, paramedics, physician associates and social prescribing support workers, freeing up family doctors to focus on the sickest patients. It is expected that the capability and capacity of PCNs will build over the next five years to deliver fully integrated community-based care that meets the needs of our local populations. They will have a single contract covering all health providers in Medway including Healthwatch Kent and Healthwatch Medway, Kent and Medway NHS and Social Care Partnership Trust, Kent Community Health NHS

⁵⁸https://www.kentandmedwayccg.nhs.uk/application/files/4116/2886/2453/PCCC_agenda_and_papers_19_August_2021.pdf

Foundation Trust, Kent Local medical Committee, Medway Community Healthcare, Medway NHS Foundation Trust, Medway Voluntary Action, South East Coast Ambulance Service, and Virgin Care.

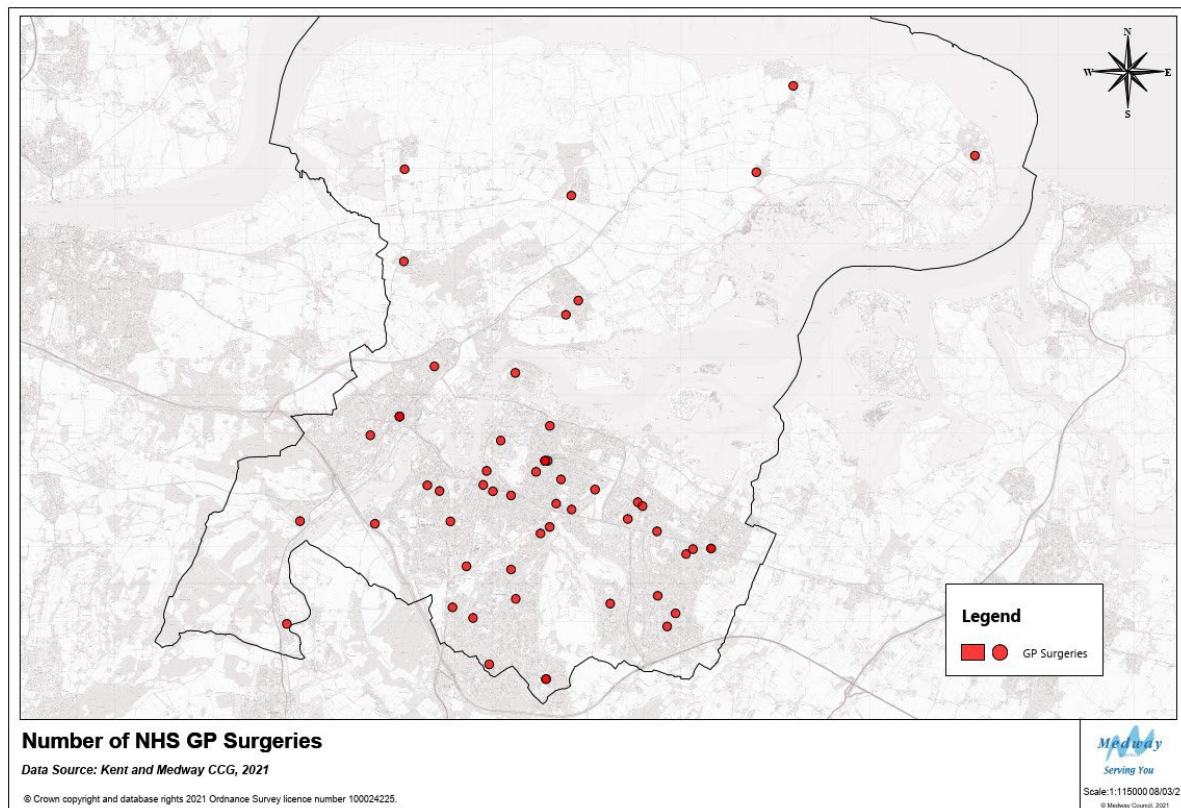


Figure 9: Map of GP Surgeries in Medway, March 2021, Source: Kent and Medway CCG

Quality & capacity review

In Medway there are significant pressures on all healthcare services due to high demand and a limited supply of adequately qualified professionals. Kent and Medway CCG had just 39 FTE GPs per 100,000 patients, compared with a national average of 46 per 100,000, ranking in the bottom 6% of local authorities on this measure.⁵⁹ While GP to patient ratio is not necessarily the best measure of the quality and capacity of primary care services, for example due to the contribution of nurse practitioners, this metric does coincide with local and wider concerns around the quality of primary care services in Medway in particular which predate the merger into the Kent and Medway CCG in 2020. Medway’s 2017 Village Infrastructure Audit found that a number of villages had specific issues with waiting lists for GP visits.

However, as a result of the Covid-19 pandemic, projects such as the Improved Access to GP Hubs project, which enables evening and weekend GP appointments through new Primary Care Hubs located within Healthy Living Centres, are affected. Kent and Medway CCG are currently undertaking a review of the purpose of these hubs in light of the pandemic which could have implications for future service delivery models in Medway, alongside a wider review of primary care including the new Medway and Swale Local Care Plan, which will set out the CCGs strategic approach to improving access and care for patients⁶⁰.

⁵⁹ [NHS Digital, General Practice Workforce](#) June 2021

⁶⁰ <https://democracy.medway.gov.uk/mgconvert2pdf.aspx?id=59586>

Medway has good pharmaceutical provision, with 58 community pharmacies and eight dispensing practices. The Needs Assessment found that 92% of Medway residents live within a 15-minute walk of a pharmaceutical service, and 99% within a 15-minute journey by public transport⁶¹. The document did not identify specific requirements for upgrades to pharmacy services in Medway in the next five years, however, it states that large housing developments of 1,000 houses or more will result in the Pharmaceutical Needs Assessment in those areas needing to be reassessed both for access to pharmaceutical services and as to whether the area has changed from Controlled to Non-controlled. The document identified the need for Medway Council to liaise with charities such as wHoo Cares to improve access to pharmacies on the Hoo Peninsula.

Proposed infrastructure

At present, a new Healthy Living Centres is planned in Chatham and funding secured, as well as a number of smaller expansions and relocations of existing practices referred to in the Estates strategy referenced above. More significantly, new government funding streams now enable additional staff to be hired by Primary Care Networks rather than by GPs directly, bringing community healthcare and nurses into GP practices for the first time. Medway Council and NHS Kent and Medway CCG are working also together to propose a third medical facility comprising up to 3,650 sqm of space (indicative) including 1,200 sqm of primary care space and the potential for diagnostic services to be located on the Hoo Peninsula to serve the growth planned in that location. However this is likely to be a long-term aspiration based on a significant increase in practice list size resulting from large scale growth, and will be subject to NHS England prioritisation and approval processes. In the shorter term, temporary provision or expansion of existing facilities may be feasible in line with CCG requirements. For example, 4,000 additional patients could potentially support in the region of 350m² of primary care space to meet NHS requirements, which could be triggered with the occupation of approximately 2,200 new homes, should such provision attract a suitable GP practice under the General Medical Contract.

The potential to collocate GP services alongside other services including pharmacies or diagnostics is noted, and the Government's Health and Social Care Act points in the longer term to greater collaboration in commissioning health services, including between local authorities and NHS bodies. It is understood that NHS England is willing in principle to discuss co-location with other public services and potential temporary use of other public-sector buildings (and vice versa). Any co-location would require the normal building and operational standards for NHS buildings to be met, including the Department for Health and Social Care's [DH health building notes](#). However, co-commissioning, and indeed the provision of new capital schemes and facilities for the NHS is complex, with significant challenges in providing new facilities, due to restrictions on NHS capital including S106, and the specifications and requirements of central, regional, and local organisations. As part of the NHS Long Term Plan, a review by Professor Sir Mike Richardson which was published by NHS England in October 2020, set out the need for a new model of radical investment and reform of diagnostic services in England to tackle health inequalities in light of ongoing challenges resulting from the Covid pandemic, which could lead to the development of dedicated new facilities⁶², typically within the existing NHS Estate, and separate from existing hospitals. Plans are currently being developed for Kent and Medway, however no details are yet available of proposed provision. The objective of these hubs will enable expanded access to blood tests in the community so that people can give samples close to their homes, at least six days a week, without having to go to hospital.

⁶¹ Medway Pharmaceutical Needs Assessment 2018 - https://www.medway.gov.uk/downloads/file/2212/appendix_d_travel_time_analysis

⁶² <https://www.england.nhs.uk/wp-content/uploads/2020/11/diagnostics-recovery-and-renewal-independent-review-of-diagnostic-services-for-nhs-england-2.pdf>

It should also be noted however that more broadly, the approach taken by the two national property arms of the NHS (NHS Property Services and Community Health Partnerships) which advise the CCGs, is that they would not generally build a surgery just for the new residents of a proposed development. They are seeking much larger practices that follow the hub model and such provision can rarely be justified through S106 contributions or in terms of the large amount of land that would be sought to develop a hub from a single development. In order to develop hubs, the preferred approach would be to relocate an existing practice or merge a number of practices into a new facility that, with the wider growth planned, will eventually become a hub facility or a larger GP Practice that works at scale. There is the ongoing concern for the potential necessity to provide temporary health provision to bridge the gap between the first residents taking up occupation and the final health facility being open. This coupled with the existing pressures on GPs in the surrounding communities is concerning and requires consideration.

A Health Impact Assessment will be undertaken by Medway Council and/or partners to further understand the specific requirements for the area, and the intention is for developers to provide Health Facilities Strategies alongside planning applications for development. The provision of services to address health needs are complex however, as the impact matters such as workforce requirements, technology infrastructure and advanced technology accessibility for the community, changes in service model provision, prevention and self-care can be significant, particularly in the context of a growing population.

Going forwards, the provision of healthcare infrastructure will need to respond to changing demographics that affect Medway along with the rest of the country as well as changes to the way that the NHS functions and care is delivered. Between 2020 and 2038, the proportion of the population in Medway over the age of 65 is projected to increase from 16% to 20%. In line with the recommendations of the Richards Review, new models of health and care will be required, including the significant expansion of the existing NHS footprint to accommodate additional diagnostic capacity. For example the review recommends a doubling of CT scanning capacity in the next five years to match other developed countries, and this will likely require new floorspace, thereby changing the amount of floorspace required by the NHS per head of population. This could lead to fundamental shifts in the delivery of healthcare services in Medway, including on the Hoo Peninsula. Considering the significant medium-term shifts in the NHS as a result of the recent White Paper, Medway Council will work closely with the Kent and Medway CCG to adopt a flexible monitor and manage strategy for health provision on Hoo, with future healthcare provision likely to be determined by what is best suited to the CCG at the point of delivery. This approach is in accordance with national planning policy for strategic growth locations delivered over decades.

Funding

Historically in Medway planning obligations have been secured by organisations responsible for commissioning primary care with a focus on general practice infrastructure due to the direct impact population growth has on a practice list size and premises requirements. Healthcare contributions are expected to support the expansion and improvement of existing facilities, although some developments may be so significant as to warrant a new health facility in the development area. In the past, national restrictions on NHS capital spending meant that developer/commissioner contributions could only account for a portion of total funding for any given facility – however it is understood that this restriction has been lifted in the February 2020 update to the GP contract agreement 2020/21 – 2023, although this may only apply to non-GP floorspace.⁶³

⁶³ <https://www.england.nhs.uk/wp-content/uploads/2020/03/update-to-the-gp-contract-agreement-v2-updated.pdf>, see pp.58

The CCG has an agreed process to securing Section 106 developer contributions⁶⁴. Under this process the CCG will assess the impact on local practices whose catchment covers the development to inform a response to a planning application. Where practices are affected by a large strategic development, the CCG also engages directly with the practices. Historically, the focus on securing developer contributions has been on GP infrastructure due to the direct impact population growth has on practice list sizes and premises requirements. But the CCG will also, where there is scope to do so, seek to agree with the LPA the use of developer contributions funding for other uses such as equipment and IT and digital improvements. The CCG will either identify one or more named practices as the expected recipient of the funding for improvements or extensions to existing premises or alternatively where a strategic solution is required, detail the requirement for new premises either to replace existing GP premises or provide additional capacity.

Contributions are modelled using the HUDU approach, which has been set up to assist in the infrastructure development for health and is widely used nationally. The model takes full account of the demographics of the existing population, and the future predicted population growth. Using standard NHS cost and floor space requirements for the various facilities, the model is able to quantify the impact in terms of physical space and subsequent cost and estimate a cost per dwelling based on the future expansion of the population.

The total funding required for the proposed projects outlined above is estimated to be at least £30m, and likely more. The NHS will continue to engage with developers to secure appropriate contributions to meet health infrastructure needs, as will Medway Council. It must however be recognised that CCGs do not have delegated authority regarding capital funding for general practice. s106 contributions secured by CCGs should therefore be passed from the LPA to NHS England and Improvement (NHSE&I) local team before being transferred to the CCG for agreed projects. For premises projects an agreed process to demonstrate eligibility with Premises Cost Directions (2013) must also be followed. Where premises are provided directly by developers this would not be the case.

The above projects will be delivered through a combination of funding from the following sources:

- Department for Health and Social Care Funding
- S106 funding

Social care

Adult Social Care is about providing adults with support and advice to help them lead happy and healthy lives. It is about helping individuals to live independently and support those that support others. There are a range of services available to help people in their day-to-day activities whether it is a large change such as moving home or a small change that can have a big impact. This could be for personal care (such as eating, washing, or getting dressed) or for domestic routines (such as cleaning or going to the shops). Medway Council does not own or operate its own residential or domiciliary care facilities for social care, although it does own and operate a respite service for adults with learning disabilities, Birling Avenue, and a Supported Living service, Flight. Adult Social Care is principally governed by the Care Act 2014 and the Health and Social Care Act 2012. The Care Act moved the focus of care provision from one of providing defined services, to one of 'meeting needs', giving authorities more flexibility and scope to work collaboratively with other services to fulfil these

⁶⁴ Kent and Medway CCG 'Section 106 and CIL Principles and Process - General Practice (June 2021) (see pages 70 to 84 of PCC Committee meeting on 17 June 2021)

duties. Social Care is a means tested service, and so some people will be required to pay for some or all of their care or support needs, this can include housing costs depending on the type of accommodation they are living in.

Quality & capacity Review

Medway, like other parts of England, has the challenge of balancing significantly increasing demand, the need to improve quality of care and improve access all within the financial constraints of taxpayer affordability. Medway's Joint Health and Wellbeing Strategy sets out that over the next five years, the number of people aged over 65 years will increase by over 4,000 (10%) and the number aged over 85 years will increase by 900 (18%). The number of people in Medway aged 65 and over with dementia is expected to increase by over 80% between 2010 and 2030, in line with the national trend. Many older people prefer to stay in their own home for as long as they can and to do so they may need additional support. There have also been increasing numbers of older people who need specialist accommodation that combines support, care, and housing provision. This ageing of the population is forecast to result in a substantial increase in costs to the health and social care system. These demographic changes and the steady overall growth in the population will put pressure on existing services. The increases in particularly vulnerable groups: very old people living alone, with long-term limiting illness and needing high levels of care, older people with dementia, and older people with learning disabilities will add to the pressure for additional care requirements. However, the evidence does also suggest that there will be a less significant increase in the numbers of younger vulnerable adults, although their needs may be more complex. Medway Council provides support to over 2,700 adult residents with care and support needs.

Setting aside the issue of care services, which would not qualify as infrastructure for the purposes of plan making or S106 contributions, the Local Housing Needs Assessment, 2021 sets out the level of need for housing with care. People who need care and support are more likely to be low incomes than working age, able-bodied residents, and are also less likely to be able to access private sector rented accommodation, partly due to cost, partly to accessibility, and partly due to security of tenure. Consequently, housing that is both affordable and accessible is crucial to their wellbeing. Specialist housing, such as Extra Care and Supported Living schemes, may be required for individuals who are not able to live independently in the community without support, but there are also many people of all ages and abilities who can and wish to if the right kind of housing is available for them.

Proposed infrastructure

Medway's Adult Social Care Strategy 2021-2025 demonstrates the need for considerable investment in older persons nursing and extra care accommodation as well as supported accommodation for clients with learning disabilities. It is currently assumed funding will be provided by the private sector and voluntary organisations as service providers, as well as through central government and NHS funding. At present, there is no proposed adult social care infrastructure being brought forward with the emerging Medway local plan. The main priority is to transform Local Care through the integration of primary, community, mental health and social care and re-orientate some elements of traditional acute hospital care into the community, this allows residents to receive joined-up care that considers the individual holistically. However, there is an opportunity at planning application stage to discuss whether developments can contribute to meeting adult social care needs through the provision of affordable and/or specialist housing types

E Community & cultural facilities

Cultural infrastructure includes a wide range of buildings and spaces which are at the heart of Medway’s diverse communities, including community facilities such as village halls and youth centres, as well as creative production spaces, from individual artists’ studios and rehearsal rooms, to spaces for major events and film studios, alongside heritage centres, museums, performance spaces and libraries, all of which help to make Medway a great place to live and visit. The Covid 19 pandemic, for many people, reinforced the importance of community, and although it has been a challenging time for many community-run organisations and spaces.

Community and cultural facilities are crucial to Medway’s vision for regeneration in Medway 2037. Importantly however, culture is often expressed only in the sense of the physical infrastructure, but culture can also include heritage, food, the night-time economy, creative interventions in the public realm and the creative industries, reflecting Medway’s diversity. In a normal year the Council’s Events and Festivals team directly produce one of the largest free outdoor events and festivals programmes in the country providing over 30 days of events reaching over 300,000 residents and visitors. Whilst developing cultural infrastructure is important, culture is about the people who make and enjoy it. Medway’s Cultural Strategy, published in December 2020, provides more detail on Medway’s cultural ambitions. By 2030 Medway will be internationally recognised for its creativity and culture, exemplifying the positive impacts on everyone’s lives. Diverse, collaborative and engaged, we will celebrate the strength and creativity of all our residents.

Medway currently operates 15 libraries alongside a mobile library, with close to one million books borrowed in 2019/20, as well as 139 village halls and community centres, although most of these are run by charities rather than Medway Council. In total there are over 300 community, religious and cultural facilities in Medway, of which more than half are non-denominational - more than one for everyone 1,000 people living in the area, and this does not include many informal cultural facilities or infrastructure. This social infrastructure is wide reaching in terms of its benefits, providing for the health, welfare social, educational, spiritual, leisure and recreational needs of the community.

Cultural infrastructure

Lead Organisations	<ul style="list-style-type: none"> • Medway Council • Universities @ Medway • Thames Estuary Production Corridor • Thames Estuary Growth Board • Chatham Historic Dockyard • English Heritage • Historic England • Arts Council England • Developers • Creative industry partners • Creative Medway partners
Evidence base	<ul style="list-style-type: none"> • Medway’s Cultural Strategy 2020 to 2030 • Creative Industries Federation • Creative Industries Council • Medway Skills and Employability Plan • Thames Estuary action plan

	<ul style="list-style-type: none"> • Thames Estuary Production Corridor: The Case for Investment • Creative Industries Council: Toolkit for Cities and Regions • Nesta: The Geography of Creativity • Mapping the UK's creative clusters • UK Core Cities Cultural Enquiry -
--	---

Context

Cultural infrastructure includes facilities such as heritage attractions, museums, galleries, and visitor centres, as well as public art, creative workspaces, venues, performance spaces, libraries, public spaces, school (halls, gyms), theatres, artist studios. This social infrastructure is wide reaching in terms of its benefits, providing for the health, welfare social, educational, spiritual, leisure and recreational needs of the community. Furthermore, the most recent Cambridge Economic impact study for Medway using visitor figures from 2019 showed a significant growth in tourism up until the beginning of Covid. The total visitor spend in 2019 was £358 million compared to £333 million in 2017. It is estimated that there were approx. 5 million trips to Medway in 2019 and that there are 7,000 tourism related jobs in Medway.

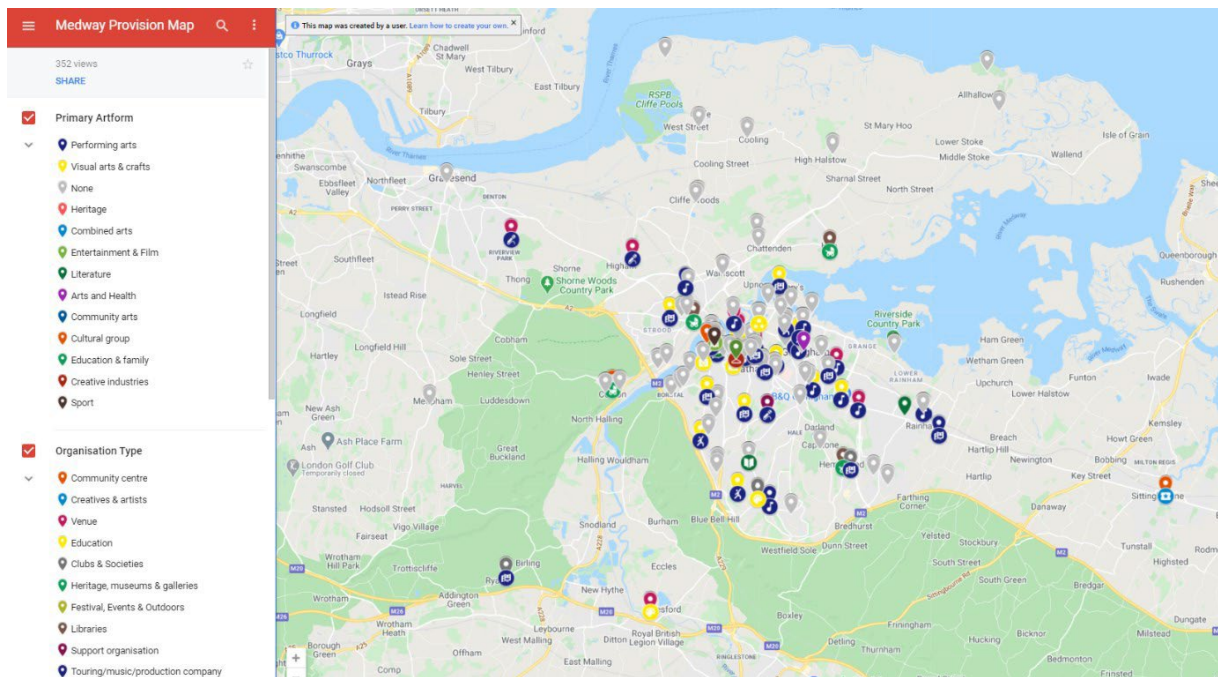
Cultural infrastructure enables residents to participate in community life while connecting people with others in their local area. Medway has adopted a new Medway-wide ten-year cultural strategy.

Medway's Cultural Strategy is owned by a Medway-wide partnership that has shared goals, mutual respect, and strategic leadership at its core. This partnership and its governance clearly set out the ways in which cultural investment can support the transformation of services for children and young people, regeneration, the local economy, social well-being, and health.

Creative Medway was established to deliver the strategy by bringing together a broad group of stakeholders interested in culture and creativity from across Medway. Creative Medway is driven by five working groups representing the themes of the strategy: Connectivity, Shared Ambition, Space and Places, Creative People and Community Engagement. These working groups are supported by the Creative Medway Compact a group that brings together twelve professionals representing the creative, education, health and wellbeing, business, voluntary organisations, and the local authority sectors.

Quality & capacity review

As part of the process of producing Medway's Cultural Strategy 2020, provisional mapping across Medway identifies strong potential, but a potential that needs to be supported to grow and connect. The cultural provision in Medway – as offered by both venues and organisations – was mapped according to the geographical location generated by the full postcodes of their current bases. An interactive map can be accessed through the following hyperlink, on which it is possible to identify each of the organisations and venues represented: [Medway Provision Map \(see below\)](#).



This work highlighted two main issues - the current spread of the cultural landscape in Medway is predominantly an uncoordinated spread of mainly small and often unsubsidised activities. It shows an abundance of potential which needs to be supported to grow and interconnect as it needs and wants. Furthermore, the gaps in the mapping, both of individuals and organisations which came forward as part of the Strategy development and of individuals and organization who were mentioned but didn't make contact, highlight the starkness of the likely undercount of any estimate of the size of the sector. It is clear that a fuller mapping of the sector is needed as part of the delivery of the Strategy. The research also found that Medway is an area where arts engagement has tended to be somewhat lower than the national average, with only 57.4% of people in Medway having engaged in or attended an arts event according to the 2016/17 Active People survey, as compared with the then England average figure of 60.3%.

Medway needs more spaces where people can collaborate to design, test, scale and engage with imaginative and enterprising ideas together - the area particularly lacks affordable spaces for the creative sector. Culture is very vulnerable to rises in land values following urban regeneration. Managing and supporting these valuable, but fragile, communities is challenging, but crucial. Creative spaces need to be recognised as assets of social, economic and community value, not just temporary solutions, and they also need a wide geography to broaden engagement. Culture can create a vibrant, diverse night-time economy, and plays a vital role in reclaiming underused in-between spaces and filling in-between times. Access to late-night public transport and other issues can be addressed by looking to provide wider geographical provision as much as by developing improved transportation to move audiences.

Proposed infrastructure

Medway Council is currently working with Creative Estuary, University of Kent, and Chatham Historic Dockyard Trust to deliver The Docking Station. This £9m Institute of Cultural and Creative Industries will transform the Grade II-listed Police Section House overlooking The Historic Dockyard Chatham into a new creative hub for the university by 2024. Bringing together industry with local creative practitioners, students, academics and young people, the building will feature state-of-the art digital facilities, flexible co-working spaces and an immersive, interactive performance and gallery space for both research and presentation of projects. Detailed design and feasibility studies are underway,

and the project will drive innovation and collaborative research and fuel the growth of the Medway creative economy through experimentation, skills, and product development, research, and partnerships. It will also inspire young people to choose creative and cultural studies in Medway and help bridge the gap between academia and business progression for graduates, enabling them to find creative work in the area. This is linked to the wider Thames Estuary Production Corridor project together with the South East Creative Economy Network, a South East Local Enterprise Partnership initiative alongside the Greater London authority and partners which looks at the 100,000 people and 16,000 creative businesses in the Thames Estuary and aims to increase the number of jobs in this sector, as research suggests creative industry SMEs are 20% more productive than the average. There is also the potential for further creative workspace uses to be brought into Chatham Dockyard.

The partnership has ambitions to extend the reach of The Docking Station onto Chatham High Street and connecting to The Brook Theatre using funding from the £9.5 million secured through the Future High Streets fund to grow flexible, affordable co-working and managed workspace for the creative sector that complements the existing performance and rehearsal space to drive innovation and creative collaboration. The Future High Streets fund could also be used to develop a creative Innovation Hub Medway delivering a creative and collaborative workspace in the town centre to support the development of Chatham's creative sector, and restoring and redeveloping the vacant St John's Church into a conference and coworking hub to meet growing demand, alongside other vacant spaces in Chatham

A further £1.6m funding has been secured from Historic England's High Streets Heritage Action Zones scheme which aims to find new ways to champion and revive historic high streets for example through re-using heritage buildings such as the historic Featherstone building, enabling the area to become a cultural and creative hub. Alongside, Theatre 31, based in Medway, has received £1m from central government's Youth Performance Partnership Fund administered by Arts Council England (ACE).

Medway Council is leading on the development of Innovation Park Medway, a digital creative technology park at Rochester Airport, where an innovative new planning tool known as a Local Development Order has been used to develop a masterplan to simplify planning for 100,000 sqm of business space in the North Kent Enterprise Zone including tax reliefs and government support.

Medway Council is also leading on the redevelopment and refurbishment of Chatham Waterfront and Mountbatten house, both of which have the potential to create high quality new outdoor events spaces and public art installations. Further work is also ongoing in the Chatham Maritime area looking at events venues and other possible cultural infrastructure in the area.

On the Hoo Peninsula, there are significant opportunities to develop creative and flexible community and workspaces, alongside spaces for outdoor events and a large-scale creative production hub as part of Medway Council's Hoo Development Framework and a future Cultural Masterplan for Hoo.

Funding

- Developer contributions
- Medway Council capital funding
- SELEP
- Government funding e.g. through, Levelling up and Shared Prosperity Fund
- Charitable funding e.g. Heritage Lottery Fund
- Private investment

Heritage

Context

Medway Council owns a significant number of heritage assets, which help to increase the knowledge, understanding and appreciation of the area's history, and act as a backdrop for the Council's cultural and events offer. In addition to historic buildings under direct ownership, the Council is also responsible for the care and maintenance of other cultural and heritage assets within Medway, not least the Elizabethan defences at Upnor Castle, but also surviving elements of the original city wall around Rochester. The Council's most significant heritage buildings – Rochester Castle, Temple Manor and Upnor Castle – are maintained through a local management agreement with English Heritage, under which essential maintenance work is commissioned by the Council, but the cost shared 50/50 with English Heritage.

Quality & capacity review

Recent upgrades have included £2m National Lottery Heritage funded development project Fort Amherst and Chatham Lines Command of the Heights. At Rochester Castle, a new canopy has been installed over walkways in partnership with English Heritage, as is a programme of wall inspections and remedial works. Plans for major improvements to the keep and castle grounds have been in progress throughout the year, working towards 2027 which marks the 900th anniversary of the building of the keep.

The Guildhall Museum is an Arts Council England National Portfolio Organisation working in partnership with the Historic Dockyard Chatham and the museum services of Canterbury and Tunbridge Wells. This funds the museum to employ a visitor experience officer and undertake increased research into our visitors in order to make improvements to the visitor experience. A new interpretation plan has been developed for the museum which includes phased plans to improve the museum. A new conditions survey has been undertaken on the Charles Dickens writers Chalet with a report and action plan currently being developed. The heritage team will work with local timber specialists to cost a phased programme of repairs with the long-term aim being to enable visitors back into the chalet.

The £470,000 restoration programme for the Corn Exchange has included essential health and safety works to glazing in the Queen's Hall, the redecoration of each public room and facilities, as well as a beautiful new piece of art from local artist Luna Zsigo in the foyer. The programme has ensured that the building has retained its historic features whilst also balancing the demands of a contemporary audience with new audio visual and Wi-Fi provision.

Proposed infrastructure

There are ambitions to create an interpretation centre at Rochester Castle in the long term. The current capital programme also includes £500k over a five-year period to fund conservation work at Rochester Castle, however a recent survey by external consultants identified a total of £1.5m of restoration works in the longer term.

Funding

Medway has received English Heritage grants combined with capital receipts to fund recent major conservation and development works to Rochester Castle, Temple Manor, Upnor Castle, Guildhall Museums, and the Corn Exchange. For example, Other central government funding sources such as the Future High Streets fund may also be used to reinforce the cultural infrastructure in an around Chatham High Street.

Community hubs & libraries

Lead Organisation	<ul style="list-style-type: none"> Medway Council
Evidence base	<ul style="list-style-type: none"> Medway Community Hubs and Libraries five-year business plan (forthcoming) Arts Council England – National support agency for libraries Libraries Connected – Independent national Sector Support Organisation

Context

The Community Hubs and Library service are the responsibility of Medway Council, it has a statutory duty to provide them as per the 1964 Public Libraries and Museums Act. In Medway there are 6 Community Hubs and 9 Libraries and two mobile Libraries. These are spread across the authority. A number of these facilities also offer enhanced community hub services.

Medway's Community Hubs and Libraries have a selection of services where you can browse, borrow and reserve our books, return books, use the [click and collect](#) service for books, DVD's caddy liners, dog waste bags, radar keys and electricity cards,, collect recycling bags, use our public computers and access free Wi-Fi, use a photocopier and scanner.

Medway's [Community Hubs](#) offers an expansion of library services, providing face-to-face contact for a variety of enquiries about council and partner services, including making payments, purchasing parking vouchers, and access to information and support. The Community Hubs are based at: Chatham, Gillingham, Rochester, Strood, Wigmore and Twydall.

The digital library supports many 'From Home' services including E-book, magazines, newspapers and comics, access to heritage, local history, and ancestry materials.

Alongside this the Community Hubs and Libraries are a hive of activities and events from the annual Wigmore Lectures to regular Baby Bounce and Rhyme sessions to Knit & Natter groups, to school visits and hosting hundreds of events.

User interactions with Medway Libraries over the past five years (Source: MC)

Year	Loans	Visits	Event attendees	Enquiries	Total interactions
2015-16	932,244	1,133,811	59,287	200,544	2,325,886
2016-17	934,575	1,151,215	57,000	214,545	2,357,335
2017-18*	930,393	1,062,403	65,308	217,085	2,275,189
2018-19	965,857	1,062,778	71,325	268,337	2,368,297
2019-20**	952,295	989,445	65,568	362,598	2,369,906

*Downturn in 2017/18 book issues and visitors due to the closure of Thomas Aveling Library.

**Covid-19 significantly impacted on March 2020

These valued community assets are offer an accessible, helpful, reliable, and welcoming environment to residents. They are important shared community spaces, services and activities support residents, learning, health and well-being and creativity, helping resident feel safe and supported which can help to address issues of loneliness and social isolation.

Quality & capacity review

On average the Community Hubs and Libraries across Medway received 1.02 million visits per year.⁶⁵ In recent years the number of visits has fallen very slightly. The busiest library in Medway is Rochester with 899,006 visits over the past 5 years. Medway recently invested in enhancing facilities at the Wigmore Community Hub, and funding was also received from the National Lottery Awards for All in 2019 to extend the opening hours of libraries at Walderslade, Chatham and Aylesford including a café and run additional activity sessions for local people. The project aimed reduce isolation and improve the well-being of their local community.

Proposed interventions

With the significant growth proposed on the Hoo Peninsula it has been identified that the provision in this location will need to be upgraded in order to cope with the increased demand in service. It is envisaged that any such upgrade will be through the co-location of several council services into a hub complex to be able to make best use of land and resources. The increased demand for a community hub and library services within the rest of Medway is envisaged to be provided via upgrades and extensions to existing assets, funded through developer contributions. Further growth around Lords Wood, Rainham and Walderslade Hook Meadow libraries will also be expected to contribute to enhancing the services they provide.

Funding

Funding for the upgrade and delivery of new services will come through developer contributions from developments. Contributions will be sought for a variety of community facilities. Community facilities can be provided by many different types of community groups, community centres, village halls, churches and other places of worship, local associations etc. When major planning applications are received, community facilities of all types in that particular area will be reviewed and contributions requested for the most appropriate to the development.

Community centres & village halls

Lead Organisation	<ul style="list-style-type: none">• Medway Council• Parish Councils• Medway Voluntary Action
Evidence base	<ul style="list-style-type: none">• Medway Village Infrastructure Audit (2017 and 2020)• Medway Urban Facilities Survey• Medway Voluntary Action, Strategic Plan 2013-16 (2013)

Context

Community facilities are an integral part of the community in Medway. They provide locations for activities, social events and in some cases services to be delivered. In rural areas this space is usually provided through a village hall, often run by one of Medway's 11 Parish councils, while in the urban areas these spaces may encompass a wide range of both religious and non-denominational spaces. Medway Council carried out a Village Infrastructure Assessment (VIA) in 2016 and published a Medway Urban Community Facilities Survey Report in 2018 to identify the level of provision and quality of those

⁶⁵ This is an average of the last 5 years 2015/16 to 2019/20

assets. In total Medway has 139 village halls and community centres. Geographically the majority of specific community spaces, such as village halls are located on the Hoo Peninsula. In the urban area there are community spaces provided by private or charitable enterprises.

Quality & capacity review

The VIA (2020) identified there to be a gap in provision at Cuxton, with no existing village hall facility. In addition, the facilities at the Cliffe & Cliffe Woods are in a poor condition and need to be upgraded. Many other halls have capacity and quality issues which could be addressed through capital investment, resulting from the age of the buildings including in Cliffe, Cliffe Woods, Cuxton, Grain, Halling, Hoo St Werburgh and Upper and Lower Upnor, with facilities including new community centres, youth facilities, sports facilities and cash withdrawal facilities all listed as priorities in surveys. Neighbourhood plans in Medway will also help to identify community infrastructure priorities in future. It is important that community facilities are well connected to other community facilities, public transport services, open space, recreation facilities, and employment and education opportunities, and that spaces are multifunctional to suit a range of needs.

Proposed infrastructure

At present there are no proposed additional community centres or village halls, however the ambition is for community space to be collocated with other uses such as health and leisure centres where appropriate.

Funding

Developer contributions allow for the provision of neighbourhood facilities to the local community to meet service deficiencies exacerbated by the new developments, including community buildings to meet a wide range of needs across all sections of the community. The contributions can also allow for community provision of youth facilities within new or existing facilities including provision for sport and games development. The total funding required for the proposed projects outlined above is unknown but will be delivered through S106 funding.

Youth centres & facilities

Lead Agency	<ul style="list-style-type: none"> Medway Council Youth Service
Evidence base	<ul style="list-style-type: none"> Discussion with Medway Council Youth Service

Context

Local authorities have a statutory duty under the Education Act 1996 to secure sufficient educational and recreational leisure time activities and facilities for young people aged 13 to 19, and those with learning difficulties to age 24. In revised statutory guidance introduced in 2012, the Act also placed new responsibilities on local authorities to ascertain young people’s views on positive activities; publicise positive activities; and consider alternative providers.

Quality & capacity review

The Medway Youth service provides clubs and activities for children and young people ages 8 and 19 (up to 25 years old for young people with a disability). It aims to support young people in Medway to

meet their full potential, including through the Duke of Edinburgh’s Aware programme, from four permanent locations in Chatham in the Pentagon Centre, Gillingham, Parkwood and Strood, as well as numerous other facilities such as community centres and schools and other council and parish council managed facilities across Medway. The service also delivers programmes on the Hoo Peninsula, and currently uses Hoo library, Grain football club and a portable building in Allhallows. However, many youth services are also provided privately, and some of these, like other businesses, have been threatened by the pandemic. Even prior to the pandemic, the viability of commercial youth activities services was challenging – for example the Arethusa Venture Centre in Upnor closed in 2019 due to reduced demand. St Mary’s Amateur Boxing Club was upgraded using a combination of funding from different sources.

Proposed infrastructure

Upon discussion with the Youth Service no specific projects have been identified as to the provision of new physical assets, although there is an ambition for new facilities for the youth service to be collocated with development on Hoo as they do not currently have suitable facilities on the peninsula, currently working out a range of community facilities, many of which are portable or not purpose built. At present, the strategic aim of the service is to upgrade the existing assets and focus on the provision of new staff and activities. It will continue to collect S106 contributions for small projects that arise.

Funding

- Developer contributions
- Private investment
- Levelling up/Shared Prosperity Fund

Indoor sport & leisure

Lead Agency	<ul style="list-style-type: none"> • Medway Council Sports Team • Commercial providers • Voluntary organisations
Evidence base	<ul style="list-style-type: none"> • Medway Playing Pitch Strategy and Needs Assessment (2019) • Medway Sports Facility Strategy & Action Plan (2017)

Context

Medway has a wide range of sports facilities that are provided in a range of different ways, some directly by the Council, others by private enterprise. Medway Council manages 4 sports centres across the authority which together received more than 2 million visits per year - Hoo Sports Centre, Medway Park, Splashes Sports Centre, Strood Sports Centre, plus the Strand Leisure Centre. These centres have a community function as well as enabling residents to improve their health and wellbeing. Medway has a participation rate of 18.3% of adults doing 150 minutes or equivalent of moderate or higher intensity activity per week, higher than the national average of 17.5%. In total these centres provide a range of facilities (sports halls, swimming pools, athletics tracks, sports pitches, and gym suites). Medway is also home to leisure facilities of regional importance due to their rarity. For instance, the Gillingham Ice Rink and Capstone Valley dry ski slope. In 2021 Medway Council announced that Splashes Leisure Centre would be demolished and rebuilt to provide a new, modern swimming pool and gym on the same site.

Quality & capacity review

Medway Council Sports Centres generate £3.5m income and attracts 1.5m visitors per year. In 2017 Medway Council undertook a Sports Facility Strategy & Action Plan to review existing assets (public and private) and set out a future strategy for sports provision in the authority. The strategy found there to be deficits in capacity of swimming pools, sports halls and new health and fitness suites.⁶⁶ At the time of the assessment in 2017, had a supply of 10.9m² of water space per 1,000 of population. This figure is lower than the figures for England and the South East Region and is also lower than all but one of the other local authorities included within this analysis. Similarly, Medway had a supply of 4.18 sports halls per 10,000 residents, slightly lower than neighbouring authorities.

Football demand and provision has been steady in recent years, while cricket provision has been particularly good. Rugby Pitches are relatively high quality, as is Hockey provision, for which there is additional demand. The Medway Playing Pitch Strategy also identified good bowls and tennis provision – 10 bowling greens and 69 outdoor tennis courts. It has also identified a detailed set of improvements that can be made to existing open space and leisure facilities in Medway. Going forwards, there is likely to be an overlap in terms of green infrastructure and open space and leisure, particularly in terms of the funding available, as a result of new requirements from Government for biodiversity net gain. This is discussed in more detail in the green infrastructure section below.

The strategy also recommended changes to the sports centres across Medway. Splashes Sports Centre, the Strand Leisure facility and Hoo Sports Centre are recommended for full redevelopment. Medway Park should be upgraded and expanded, while no changes to Strood Sports Centre were recommended.⁶⁷

Proposed infrastructure

The growth proposed across Medway will lead to a significant impact on the number of users across Medway, especially on the Hoo Peninsula. As a result, Medway Council is proposing new sports provision on the peninsula in the form of a new sports centre.. There is also the potential a new gym facility and the redevelopment of Splashes in Rainham described above, the refurbishment of Medway Park to increase its capacity as the premier facility within Medway.⁶⁸ Going forwards, sports infrastructure will also need to adapt to changing population demographics, for example by providing accessible facilities for older residents, as well as the concentration of younger residents often found in new developments.

Medway's emerging local plan will specify new standards for outdoor formal sport and open space provision, including an increased require for non-equipped play areas, often for older children, such as Multi-Use Games Areas (MUGAs), and skateparks, reflecting recent updates to the Fields in Trust Standard. MUGAs in particular allow for high intensities of use, and the Fields in Trust guidance shows that quantity guidelines may be appropriate to relax in such instances.

Medway Council has also completed the development of a new 3G floodlit football artificial turf pitch and changing pavilion at Watling Street Playing Fields serving Anchorians FC. The Football Foundation has awarded Medway a grant of £885k for the initial single-site pitch development at Watling Street

⁶⁶ The Sports Consultancy, Medway Council: Sports Facility Strategy and Action Plan (November 2017), pp.85-88

⁶⁷ The Sports Consultancy, Medway Council: Sports Facility Strategy and Action Plan (November 2017), pp.77-78

⁶⁸ The Sports Consultancy, Medway Council: Sports Facility Strategy and Action Plan (November 2017), p.81

Playing Fields, subject to match funding of £400k from Medway Council. A further £35k has been committed by Anchorians Football Club. The total project costs for the construction of the artificial pitch and changing pavilion, including professional fees is £1.32m. Watling Park Football Centre, which also includes changing facilities due to be completed later this year, will be maintained by the council alongside Anchorians Football Club and is open from 10am to 10pm on weekdays and between 10am and 8pm at weekends. The pitch is floodlit for evening use. Medway Council will continue to look for further opportunities to increase 3G pitch provision to respond to demand.

Funding

The total additional funding required for the proposed projects outlined above is £30m.

The above projects will be delivered through a combination of funding from the following sources:

- Developer contributions
- Sport England
- Medway Council capital programme
- Statutory agencies and providers
- Private investment
- Government programmes, eg, Levelling up/Shared Prosperity Fund

Cemeteries & crematoria

Lead Organisation	<ul style="list-style-type: none"> • Medway Council Bereavement Service • Parish Councils • Parochial church council
Evidence base	<ul style="list-style-type: none"> • Discussions with Medway Council Bereavement Service

Context

The Medway Crematorium has served the people of Medway and the surrounding areas since 1959. It is owned and managed by Medway Council, and the council is committed to maintaining and improving the facilities to make sure they benefit everyone who visits. Medway Council also runs four cemeteries directly, all of which are suitable for burials, cremated remains and memorials, including Maidstone Road Chatham, Woodlands Road Gillingham, Maidstone Road Rochester, and Cuxton Road Strood.

Many of Medway’s 11 parish councils also own and manage burial grounds, alongside local churches, although many may not continue to provide services. In total, Medway contains 48 cemeteries, but these include war memorials and churchyards which may no longer provide additional plots.

Quality & capacity review

Upon discussions with the Bereavement Service at Medway Council no issues of capacity have been raised. However, the 2019 Village Infrastructure Audit found that parish councils such as Allhallows and Cuxton describe the facilities as being in poor condition, while burial facilities at Cliffe are described as inadequate.

Proposed interventions

The service has suggested that there is capacity in the present system in the meantime to meet the needs of the service and no new infrastructure is required.

Funding

It is expected that any projects which develop during the plan period will be funded by Medway Council Capital Funding.

F Green & blue infrastructure

Green and blue infrastructure refers to ecological and natural assets, which are as important as other forms of social infrastructure for ensuring the wellbeing of Medway’s residents and addressing the impacts of climate change in Medway. Natural England defines green infrastructure as strategically planned and delivered network comprising the broadest range of high-quality green spaces and other environmental features including mitigation of harmful impacts on environmental assets through visitor engagement, infrastructure improvements, codes of conduct, interpretation/signage, and monitoring. This approach is closely linked to the Government’s ongoing proposals for biodiversity net gain to be integrated into the planning system, alongside proposals in the Environment Act.

Open spaces

Lead Agency	<ul style="list-style-type: none">• Medway Council
Evidence base	<ul style="list-style-type: none">• Medway Playing Pitch Strategy (2018)• Medway Open Space Study (2012)• Medway Green & Blue Infrastructure Strategy (2021)

Context

Medway has a large and diverse green spaces estate measuring 1,900ha, equivalent in area to 13 Hyde Parks, including 148 urban parks, 22 major parks, and 3 Country Parks, as well as many playing fields, play areas, and allotments.⁶⁹ These are linked with an extensive public rights of way network as well as other types of informal pathways and informal recreation routes. In addition large parts of the authority area make up protected ecological habitats – roughly 1/3 of the land mass is SPA or Ramsar wetland.⁷⁰ In total, 84% of Medway’s land area is not developed, comprising agriculture, forest, recreation spaces and residential gardens.⁷¹ Medway’s emerging local plan will set out open space standards for new developments, in March 2019, the Government announced that new developments must deliver an overall increase in biodiversity. Following a consultation, the Chancellor confirmed in the 2019 Spring Statement that the Government will use the Environment Bill to mandate ‘biodiversity net gain’. This has the potential to significantly change Medway Council’s ability to deliver new and improved green and blue infrastructure.

Quality & capacity review

Medway Council wants residents to enjoy greater access to clean, green spaces and have a great place to grow up, live and work and recognise our role as custodians of these shared spaces. New data from Google Maps published by the ONS in April 2021 shows that the use of parks and public green spaces was up significantly on previous years in 2020. In Medway, the data shows that in Spring 2020, use of parks and public green spaces was up 22% compared with the month of January, and up 70% in July and August, taking into account normal seasonal fluctuations.

⁶⁹ Medway Medium Term Financial Strategy 2020-2023

⁷⁰ The Natural Capital Place, Medway Green & Blue Infrastructure Vision (June 2019), p.7

⁷¹ DLU Land Use Statistics England 2020

Medway contains a range of habitats including Grazing marsh pasture on the Hoo Peninsula, particularly north of Cliffe and the Isle of Grain, a network of ditches, streams and areas of reed support a wide variety of wildlife including highly protected water voles; Medway and Thames estuaries, important foreshore habitats including mudflats and saltmarsh host many species and are internationally important. Chalk grassland – areas of flower-rich chalk grassland remain, both in the Kent Downs Area of Outstanding Natural Beauty and with the urban area. Around 4% of Medway is ancient woodland, with internationally important beech and yew woodland on the downs above Halling.

Eight of Medway’s parks have been awarded Green Flag Awards (October 2021). These awards recognise that a park is in good condition and maintained to a high standard

The table below outlines the latest available information on the quantum of open space provision in Medway, drawing on the PPG17 study 2012. This highlights the existing differentials in open space provision (in hectares) in each sub-area, with more urban parts of Medway having significantly lower levels of open space than more rural areas.

It is however important to recognise that on-site provision of new open space within developments may not be practical or viable, typically in town centres. Medway’s emerging viability assessment and the town centre masterplans – have indicated that development viability can be marginal in town centres including with regard to open space requirements.

Table 2: Open space provision in Medway by open space sub area

Area	Allotments	Outdoor Sport including playing pitches, tennis courts, bowling greens and STPs	Play space	Natural and semi natural	Parks and Gardens	Amenity
Chatham	5.91	20.72	2.15	120.27	76.71	48.91
Gillingham	9.51	17.23	3.96	63.14	16.62	45.50
Rainham	3.25	3.00	1.39	26.61	73.42	7.14
Rochester	3.15	15.82	0.47	37.04	6.96	22.14
Strood & Rural	7.74	19.44	2.81	584.43	7.72	74.80
Total	29.56	76.21	10.78	831.49	181.43	198.49

Proposed interventions

Medway’s green and blue corridors are priority areas to improve biodiversity. The corridors are expansive. They link designated nature conservation sites, areas of good quality habitat and Local Wildlife Sites and reserves. They are based on the Biodiversity Opportunity Areas identified by the Kent Nature Partnership and include important links identified in many past Medway strategies.

They include areas of Medway Council owned land, where improvements can be made for nature. Priorities will vary in different locations depending on the location, circumstances and project concerned.

New development has been found to disturb the birdlife of the North Kent Marshes Special Protection Area (SPA) and Ramsar sites (areas of conserved wetland). To overcome this, [The Strategic Access Management and Monitoring Strategy \(SAMMS\)](#) prepared for the North Kent Environmental Planning Group by Footprint Ecology set out a strategy for resolving the additional disturbances to the area's wintering and migrating birds. Mitigation activities are carried out by Bird Wise, otherwise known as the Kent Strategic Access Management and Monitoring Scheme (SAMMS) Board, a partnership of local authorities, developers, and environmental organisations. Contributions to Birdwise represent one form of investment in green infrastructure in Medway. Other forms of green infrastructure development and enhancement include tree and other new planting, sustainable urban drainage schemes which function as both green infrastructure and flood and water management systems.

In November 2019 Medway Council was successful in securing HIF funding for strategic infrastructure. Part of the funding is to be provided for environmental improvements on the Hoo Peninsula – a strategic environmental scheme that will provide for a new community parkland and other strategic greenspaces enhancements. The Hoo Peninsula supports large areas of protected habitat and many key and rare species. HIF SEMS is a programme of work providing new habitats to join up existing habitats and create more space for wildlife to thrive. The over-arching programme title is 'Hoo Community Parklands' and will see the creation of 4 new sites – Cockham Community Parkland, Hoo Wetlands Reserve, Deangate Community Parkland and Lodge Hill Countryside Site – and the improvement of several Public Rights of Way across Hoo. It will comprise more than 50 hectares of public open space which showcases the Peninsula's landscapes, nurtures existing habitats, and creates new ones. It will also include extensive visitor facilities such as space for picnics, play and woodland trails, as well as a network for routes for walkers and cyclists, parking, and toilets

The population growth in and around Hoo associated with the new housing will see more people walking, exercising and enjoying wildlife and views. If unmanaged and uncatered for, this positive activity would see additional pressures being placed on wildlife and their habitats. The Hoo Community Parklands programme will work to minimise the impact on habitats of increased users. The on-going management and maintenance of these sites will be funded through developer contributions. In addition, The Hoo Development Framework draft masterplan indicates that around 130ha of new open spaces will be provided across developments on the Peninsula, aligned with the emerging local plan open space policy. Other developments in Medway will also be expected to provide adequate open space according to this standard, or where this would render development unviable, to provide adequate alternatives or funds to offsite provision and enhancement in line with the Developer Contributions Guide.

A further major crosscutting intervention is the purchase of a new vehicle depot site for Medway Norse, Medway Council's commercial services partnership. This is a crucial piece of infrastructure as the depot houses vehicles used by the service for greenspaces, facilities, and waste collection, as well as special education needs transport vehicles.

Funding

Capital investment in Medway's green spaces is required to ensure that residents and visitors have access to safe equipment and facilities designed to meet the increasingly diverse range of user

needs. For example, Capital investment in Medway’s play areas is required to ensure that residents and visitors have access to safe play equipment designed to meet the increasingly diverse range of user needs. This supports the council’s priority of “Healthy and Active Communities” along with Medway’s aspiration to become a Child-Friendly City. Improvements to play facilities are estimated to require a minimum of £250,000 per annum. This figure is in excess of the available green spaces budget. Capital improvements are not limited to play either and a range of improvements projects designed to enhance access, provide better car parking facilities and to protect council assets from the impact of climate change are also required, again far in excess of the current funding available.

Under the HIF programme, an environmental management scheme for the Hoo Peninsula is currently being developed to provide for new open spaces in the area. In other parts of Medway, the green spaces team collects developer contributions where on site provision is not possible and uses these to strategically enhance existing green spaces and their biodiversity. Any future changes to legislation requiring that developments deliver biodiversity net gain will be paid for by developers as part of development costs and could have a very significant positive impact on the delivery of green infrastructure in Medway. The Government’s impact assessment⁷² suggests an average cost in the region of £20,000 per hectare.

Where on-site provision of new open spaces is demonstrably not practical or viable – such as in town centres – equivalent provision or the enhancement of existing open space will be required off-site. This may comprise alternative forms of provision as part of public realm improvements, e.g. outdoor gyms, and tree planting. This will ideally be in proximity to the new development, consistent with the Fields in Trust benchmarks for accessibility with an understanding that there is likely to be a willingness to travel further to access playing pitches, allotments, community gardens and urban farms.

The total funding required for the proposed projects outlined above is £14m, with the potential for an additional ‘endowment’ to safeguard the management of the SEMS schemes on the Hoo Peninsula in perpetuity.

The above projects will be delivered through a combination of funding from the following sources:

- HIF funding
- S106 funding
- Developer build costs to ensure biodiversity net gain and adequate open space provision based on local plan standards

Flood risk & drainage

Lead Agency	<ul style="list-style-type: none"> • Medway Council • Environment Agency
Evidence base	<ul style="list-style-type: none"> • Medway Estuary and Swale Flood and Coastal Risk Management Strategy • Medway Strategic Flood Risk Assessment (2020)

⁷² <https://www.gov.uk/government/consultations/biodiversity-net-gain-updating-planning-requirements>

Context

The Flood and Water Management Act 2010 designates local planning authorities are also the lead local flood authority for the area. The Council, as a Lead Local Flood Authority, is responsible for leading in managing local flood risks from surface water, groundwater and ordinary (smaller) watercourses. The Council is also the Coastal Protection Authority for a limited area between Grain and Allhallows on the Hoo Peninsula. The Department for Environment, Food and Rural Affairs (Defra) is the lead Government department on flood policy and provides funding for flood and coastal erosion risk management projects, predominantly through the Environment Agency. There are several different authorities involved in managing flood risk in England, including: Environment Agency; regional flood and coastal committees; lead local flood authorities; local authorities; and internal drainage boards. Importantly, all powers relating to flooding and land drainage are permissive, so the various bodies involved do not have a duty to act. Landowners have the main responsibility for safeguarding their land and property against flooding. Between 2015 and 2020 Medway spent £8.11m on flood defences within its boundaries, with this funded through government spend⁷³. 48.9% of the 1,107 flood defence assets in Medway in 2019 were maintained by the Environment Agency directly.

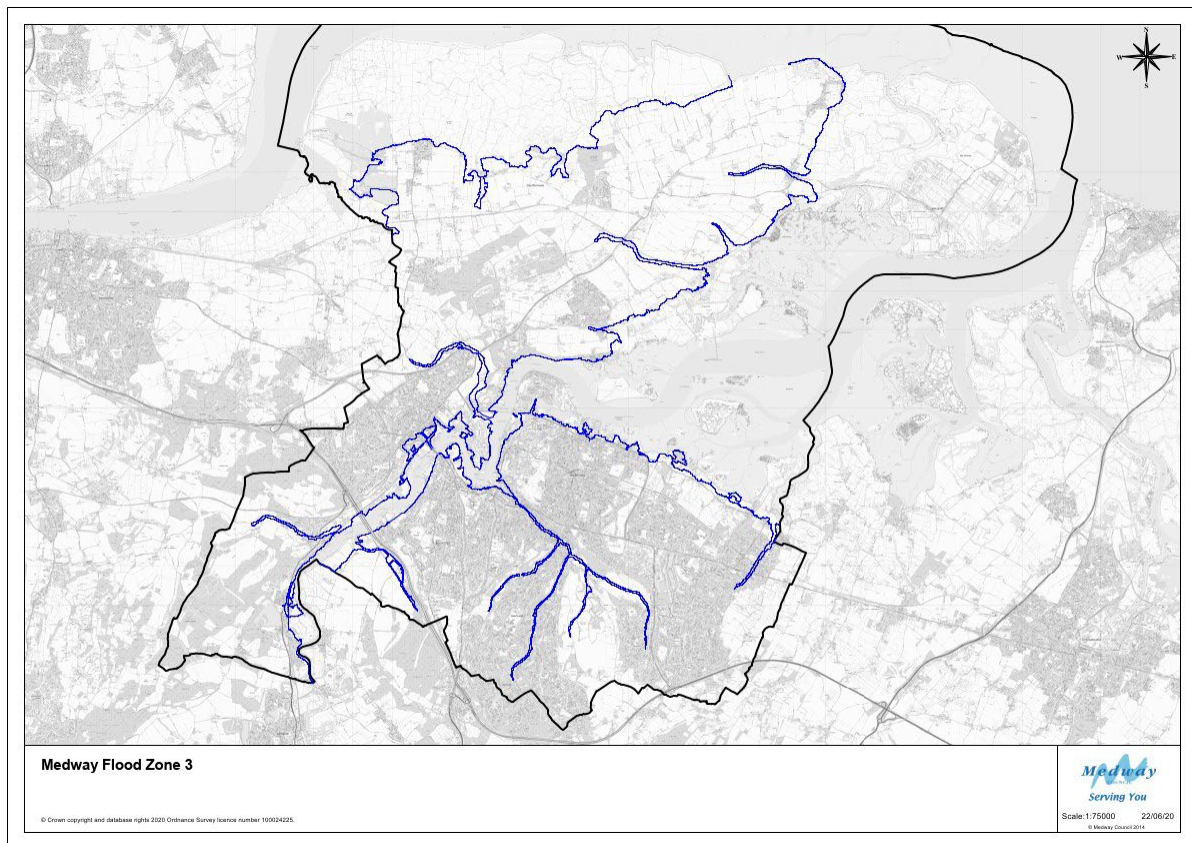


Figure 10: Medway Flood Zone 3

Quality & capacity review

Medway is prone to both fluvial, tidal, and surface water flood due to its position at the mouth of the river Medway where the river flows into the Thames estuary. Due to this location Medway has an

⁷³ <https://www.nao.org.uk/other/managing-flood-risk-a-data-visualisation/>

extensive network of flood defences and flood prevention systems. As a lead local flood authority, Medway Council is responsible for the management of local flood risk. Local flood risk refers to the risk of flooding from surface water, ground water and ditches and streams (called 'ordinary watercourses'). The Council also owns and is responsible for several areas of river frontage within Medway, some of which serve to protect against flood risk. These include Chatham Waterfront, Rochester Riverside and Strood Riverside. The Medway Surface Water Management Plan estimated that 999 properties in Strood, Rochester, Chatham and Gillingham are at risk from flooding. Recently, this has been pronounced in Lower Stoke, High Halstow and Cliffe Woods which have experienced significant foul and surface water drainage issues in early January 2021, as well as historically. If climate change increases rainfall intensity by 40% as estimated by the Environment Agency which will only increase the risk of flooding in these and other areas of Medway.

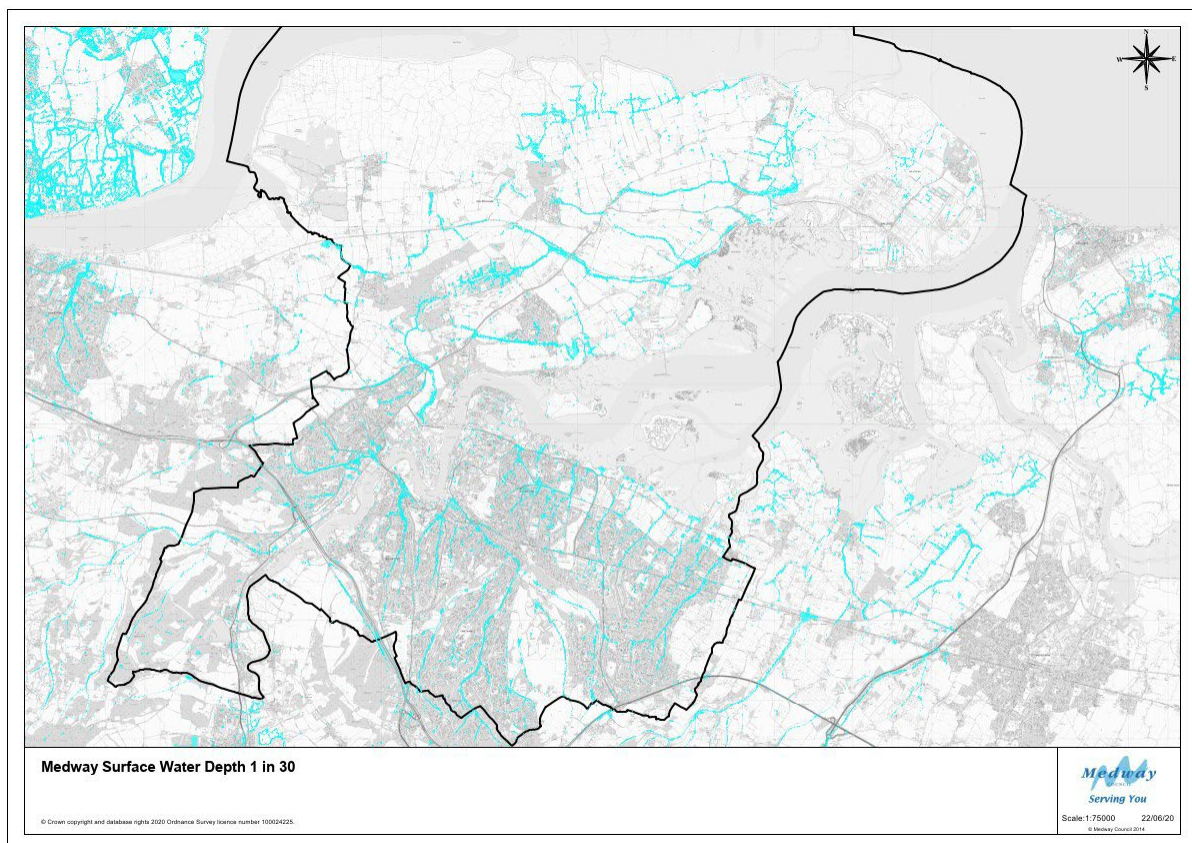


Figure 21: Medway Surface Water Depth 1 in 30

Proposed interventions

Future plans for flood risk mitigation will follow the Environment Agency's Medway Estuary and Swale Strategy (MEASS) and Medway's Strategic Flood Risk Assessment. Medway has been identified by the Environment Agency as an area with a significant risk of surface water flooding. Any potential development sites should make reference to MEASS and SFRA and where sites would benefit from flood defence works, a contribution for the site and/or wider strategic area may be requested.

The MEASS identifies a number of 'Benefit Areas' in Medway which could require future funding to address flood risk. However, the list is not definitive in the sense that in practice, the necessity of flood defences will depend on the nature and scale of development coming forwards. For example, where less sensitive uses are designed to be located a ground level, this could reduce the need for flood risk

mitigation measures and therefore the cost of the infrastructure. This will be assessed at planning application stage through an individual site/planning application specific Flood Risk Assessment, particularly as the benefit areas within the MEASS do not correspond to specific sites, and therefore the balance of costs will need to be distributed between sites according to the benefit derived from the flood mitigations in question.

Furthermore, climate change could lead to new weather patterns which increase this risk, as well as the risk of water shortages going forwards. As such, Medway Council is committed to ensuring that development has only positive impact on flood risk management in the area and will seek appropriate mitigations and measures. In 2016 Medway Council undertook a Surface water Management Plan. It identified key areas at risk of surface water flooding and actions. Strood, Rochester, Chatham, Gillingham, Lower & Middle Stoke and Hoo St Werburgh were identified as areas of high risk from surface water flooding.⁷⁴ A future update to the Medway Surface Water Management Plan will provide more detail including design options for a number of potential approaches, including Sustainable Drainage Systems (SuDs) to addressing surface water management in key areas of Medway.

Southern Water's internal 2019 Drainage Area Plans for Motney Hill and Whitewall Creek also assessed the risks of trunk sewer surcharges during periods of severe rainfall (thereby affecting water quality in the estuary) against growth in the local plan, using detailed site level data on housing allocations. These plans incorporate all schemes to manage expected growth in the catchment area to 2040 by increasing the size of existing sewers and providing new attenuation storage. Where growth is proposed outside of this proposed headroom, comments will be provided via the planning application process.

Funding

Medway Council was awarded £3.5m funding from the government's Local Growth Fund to enable flood defence works on the former Civic Centre site in Strood, which were completed in 2019/20. However, Medway continues to face significant flood risk, and has been identified by the Environment Agency as an area with a significant risk of surface water flooding. A further £4.5m has been secured through S106 funding for upgrades to the river wall at Rochester Riverside, and further investment has been made in flood defence works at Strood. Indicative estimates from the MEASS suggest the need for around £71.5m in flood defence works within Medway over the plan period – however not all of this is required up front from external funders (including beneficiaries and developers). Some of this amount, around £12.7m, relates to the whole lifecycle costs (i.e. including management and maintenance costs) of the flood risk interventions that have been scoped as part of the MEASS. These contributions reflect high level, albeit conservative, estimates of costs using the current EA partnership funding model which takes into account Outcome Measures around the vulnerability and number of floodable receptors, and are subject to change over longer periods.

However, the funding of flood risk mitigation and defence work is complex, involving [partnership funding](#) which brings together public and private sector funding including from local communities, businesses developers and councils who might benefit from the reduction in flood risk, suggesting the need for funding in the order of £58.8m from third party beneficiaries over the plan period. Some funding is also available from the Environment Agency through bidding processes, through a form of cost benefit analysis which takes into account the benefits accorded to existing properties adjacent to any new scheme. A 2020 report from the National Audit Office found that around 20% of

⁷⁴ Medway Council, Medway Surface Water Management Plan (2016) p.3-1

total funding across England for flood defences came from partnership funding, although 90% of this additional funding (around £530m between 2015 and 2021) came from local authorities themselves or other public sector bodies⁷⁵. The government's ministerial policy statement of July 2020 announced that it will consult on changes to the partnership funding policy, but there are no details on when the review will be completed⁷⁶.

The total funding required for the proposed projects outlined above is currently unknown. Key interventions required depend on site specific flood risk assessments at planning stage, in absence of proposals / site layouts. For some sites there is only a small frontage in Flood Zone 3, and therefore if development was progressed sequentially, it would negate the need to contribute/build a defence if not benefitting from or requiring a defence. The above projects will be delivered through a combination of funding from the following sources:

- Developer contributions
- Government funding e.g. from the Environment Agency
- Medway Council capital programme
- Statutory agencies and providers
- Private investment
- Levelling up/Shared Prosperity Fund

⁷⁵ <https://www.nao.org.uk/wp-content/uploads/2020/11/Managing-flood-risk.pdf>

⁷⁶ <https://www.gov.uk/government/publications/flood-and-coastal-erosion-risk-management-policy-statement-progress-updates>

5. Approaches to Infrastructure Delivery in Medway

i) Infrastructure costings

National planning policy is clear that local plans must be viable (economically deliverable) and set out the level of contribution needed from development.⁷⁷ However, the requirements of infrastructure and policy should not be burdensome to the extent that they undermine the plan. Medway Council has worked with infrastructure providers and council services to develop the best available estimates of infrastructure costings and proposed delivery timescales including where appropriate cost allowances for consultancy fees and contingency in line with best practice, however these are indicative and subject to detailed cost and delivery estimates in line with NPPF guidance in relation to the delivery of large scale developments extending beyond the plan period. It should be noted that build costs have historically been subject to inflation above the rate of consumer price or other measures, and any delays to infrastructure delivery can then impact upon their cost. Care should therefore be taken when collecting funding up front, as delivery in future may have a higher cost than expected.

ii) Funding

Developer contributions are an important means of meeting the costs of increased demand on services and infrastructure arising from new development. Medway, like many areas, is experiencing infrastructure pressures and seeking effective use of developer contributions to help secure the operational capacity of services. However, infrastructure can be funded through a range of sources and funding from different sources can sometimes be mixed. Developer contributions are one source of funding, as are capital contributions by Medway Council. However, there are a range of other external funding opportunities from Central Government and other sources such as the South East Local Enterprise Partnership. Examples include the Housing Infrastructure Fund, Department for Transport funding and Environment Agency funding. Many infrastructure upgrades such as those to the water and power networks, can be funded through market processes, meaning that utilities customers pay for infrastructure upgrades through higher subscription charges, for example the OFWAT price review mechanism.

Developer contributions/S106 funding

The impacts of development need to be mitigated through developer contributions, such as Section 106 agreements, unilateral undertakings, and Community Infrastructure Levy (CIL) payments. This is recognised as an integral consideration to securing sustainable development, addressing the additional needs for services arising from the development.

Medway Council currently uses S106 Agreements to collect developer contributions. Its policy is set out in the Developer Contributions Guide, 2018. A S106 agreement takes account of the impact of the development on local infrastructure.

Government funding including HIF

Central government funding also contributes towards the delivery of infrastructure projects within Medway. Funding of £170m through the Housing Infrastructure Fund has been successfully secured by Medway Council for major infrastructure on the Hoo Peninsula. The funding will help with

⁷⁷ DLU, National Planning Policy Framework, paragraph 34 (2019), p. 11

Medway's vision to create new opportunities for homes and growth in this major regeneration area within the Thames Gateway.

In addition to £170m of Housing infrastructure funding already secured, Medway has in the past few years secured over £130m in central government infrastructure funding including around £60m from the Department for Education to complete two new secondary schools, £16.8m in Local Growth Funding £15.5m DHSC funding, £11m Growing Places Fund, £9.5m Future High Streets funding, £8.1m DEFRA Investment Plan funding, £6.5m Shared Ownership and Affordable Homes Programme 2016-21 (up to September 2019 only and distributed to housing associations), £5.5m Getting Building Funding, a share of the £4.3m DCMS Cultural Development Fund and £2.5m ESIF funds, £5m DfT Challenge Funding, £1.8m Heritage Lottery funding, £1.6m High Streets Heritage Action Zone funding, £1.2m Active Travel Fund, £1m ACE Youth Performance Partnership Fund. Whilst Medway Council receives core funding for some infrastructure such as highways, these one-off funding packages for the council and partners can often assist in providing capital investment to respond to population growth. Such funding packages are expected to continue going forwards.

These could be drawn from a number of different government funding sources. Investment from EU Structural Funds will continue to be spent by local areas until 2023. The government has launched the new UK Shared Prosperity Fund in 2022, which will operate throughout the UK and play a part in uniting and levelling up the whole country. In addition the government provided funding in 2021-22 through the UK Community Renewal Fund.

Homes England is working on a number of sites across Medway to bring forward for development and could choose to fund infrastructure directly in relation to these sites. Some infrastructure providers also have direct schemes to improve and develop their services. Network Rail has invested in the Station Regeneration and improvement plan, which has benefitted stations in Medway.

Medway Council capital programme

Medway Council, as an infrastructure provider, can provide a certain level of capital funding towards infrastructure and regeneration projects including through prudential borrowing where appropriate. This can also be used to support forward funding of infrastructure where recovery is possible from development at the appropriate time. However, given budget pressures on Local Government, investments will be prioritised and set out in Council plans.

Statutory agencies and providers

Infrastructure providers and the statutory agencies are responsible for meeting their statutory obligations and responding to growth through their own funding sources. They can plan for infrastructure provision through investment plans, which take into account the Council's plans for development.

Private investment

Some infrastructure is provided by private companies, for example early years provision, and capital investment in these services forms part of their business operations. Similarly, landowners may have some responsibility for infrastructure investments on their land, for example riparian owner where there is a watercourse within or adjacent to the boundaries of their property and a watercourse includes a river, stream, or ditch.

iii) Cross-boundary infrastructure

Not all infrastructure problems occur at a local district level and sometimes they require solutions that cross local authority boundaries including funding collected by one authority being transferred to another to account for the services and infrastructure being used by residents. As a reflection of this the Council has prepared this plan in partnership with neighbouring LPAs and service providers. Formal Duty to Cooperate Activity is recorded as part of the local plan process, while there is also the potential for bespoke Statements of Common Ground with neighbouring authorities and infrastructure providers where necessary. Below are listed the strategic infrastructure projects that need to be undertaken for the plan to be successful. Medway Council will continue to engage in Duty to Cooperate discussions and research as the plan progresses. The table below outlines some of the key projects planned to deliver strategic infrastructure.

Infrastructure Area	Project Name	Impact on Medway
Transport	Lower Thames Crossing	Specific impacts are not yet clearly understood, pending the final submission of a DCO. However, a number of key routes in and around Medway are likely to be significantly impacted.
	M2 Junction 5 improvements	Impact on traffic flow along the M2 and A2 and the potential increase in capacity of the highway.
	Proposed development at Lidsing	Development at Lidsing on the border with Medway could have key impacts on its transport network that may require mitigation.
	Proposed development at Three Crutches	Development at Three Crutches on the border with Medway could have key impacts on its transport network that may require mitigation.
	Sheerness Port – Steelworks Redevelopment	The port redevelopment will increase capacity and allow further diversification of use. The recent masterplan indicates that investment will be directed to Sheerness Port.
	Potential Crossrail extension to Dartford and Gravesend	Quicker and more numerous services to London

Health	Kent & Medway CCG Estates Strategy	The provision of healthcare will change to be more focused on larger community practices doing more and hospitals focusing on specialist treatments within Kent and Medway.
Utilities	Aylesford Water Re-Use Scheme 2022	Increased capacity within River Medway through water re-use scheme.
Telecommunications	Broadband Delivery UK – Kent and Medway	Over 95% of properties across Kent and Medway can now access a superfast broadband service of at least 24mbps. Details of current programmes are set out in BDUK’s Corporate Plan.
Further Education	Kent Medical School	Opened in September 2020, Kent, and Medway Medical School (KMMS) is a medical school based in Canterbury, Kent. It is jointly run by the University of Kent and Canterbury Christ Church University and offers around 100 places per year. Funding for KMMS was announced in March 2017 following a competition to allocate 1500 new medical training posts across England,[2] and the first 100 students enrolled in 2020. Brighton and Sussex Medical School acts as a partner institution. KMMS offers five-year undergraduate programmes, with a focus on specialties currently under-represented in Kent and Medway.
Environment	North Kent Strategic Access Management and Monitoring Scheme	Strategic programme (Birdwise) to mitigate risk of damage to SPAs and Ramsar sites on Thames, Medway, and Swale estuaries from increased visitors as population grows.
	Thames Estuary 2100	Programme of work by the Environment Agency to manage tidal flood risk in the Thames Estuary.
Other	Ebbsfleet Garden City and London Resort (status unknown)	The impacts of both the projects are to be considered as further details emerge and are clarified. These are Duty to Cooperate issues that are to be progressed through dialogue with the relevant parties.

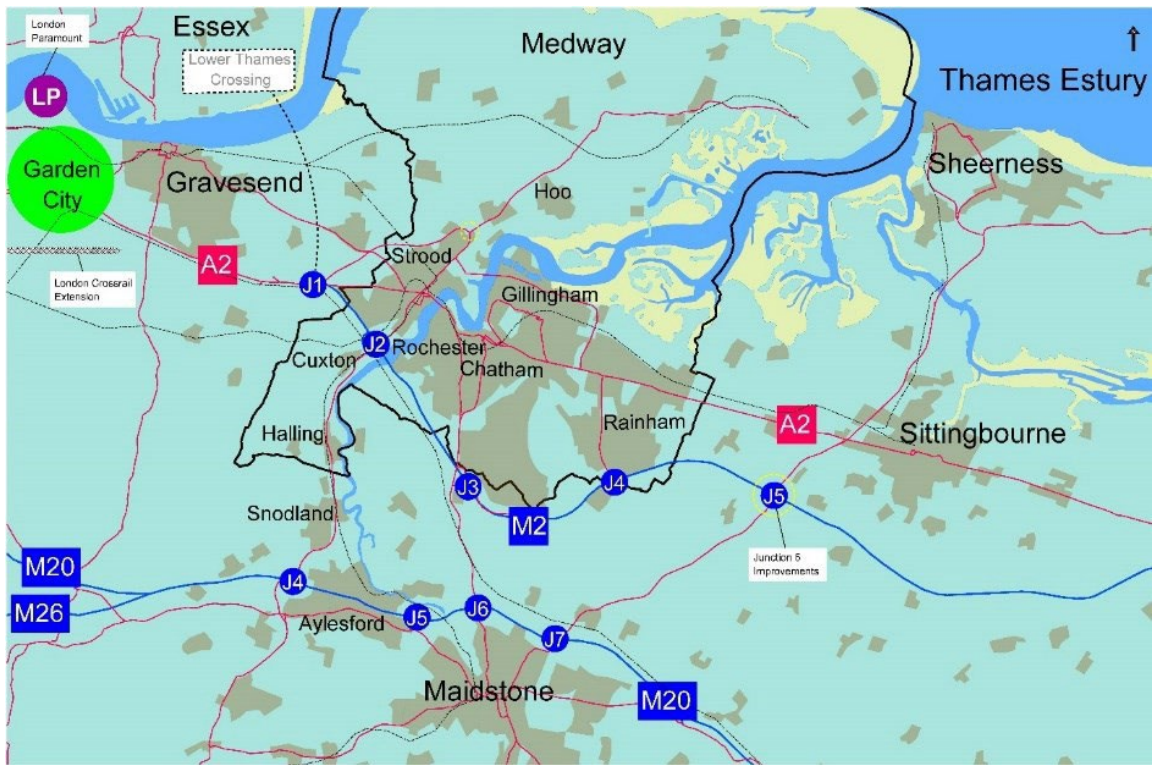


Figure 32: Map of potential cross boundary infrastructure projects affecting Medway

Appendix 1: Infrastructure delivery schedule (IDS)

Appendix 1: Infrastructure delivery schedule (IDS)

An IDS is a timetable of projects identified over the plan period that will aid delivery of the local plan. Existing projects or those that refer to routine maintenance or are not needed as a result of the growth identified are not included. It sets out costs, responsible bodies, and timeframes. It is to help the LPA to monitor infrastructure delivery and manage conversations with both developers and infrastructure delivery partners.

The IDS will be monitored annually as part of the Authority Monitoring Report (AMR) process. The process to do this is via contacting services to check that the details inputted into the table are still accurate. Such monitoring will enable the Council to make sure that infrastructure needed is delivered and to aid if there are delays in delivery.

For clarity, please see below further explanation of the IDS:

- Project description – what is the infrastructure project
- Location – whereabouts is the project to be located
- Type of project (strategic or local) – will the project benefit the whole of Medway (strategic) or is it to mitigate a specific site (local)
- Timeframe – when is the project to be delivered. Several 5-year phasing blocks have been used to allow for flexibility
- Delivery body – who is responsible for bring the project forward and leading on its development
- Estimated cost – How much will the project be.
- Funding source – where will the money come from for the project and how will this be distributed
- Funding secured – has any money already been allocated for the project

APPENDIX 1A: MEDWAY INFRASTRUCTURE DELIVERY SCHEDULE

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
Transport - Highways								
MRN A289 Yokosuka Way / Lower Rainham Road	Medway wide	Strategic	2026	Medway Council	£194,264	Section 106	£0	Critical
MRN Bowaters Roundabout	Medway wide	Strategic	2026	Medway Council	£2,288,230	Section 106	£0	Critical
MRN A2/ Moor Park Close	Medway wide	Strategic	2026	Medway Council	£112,035	Section 106	£0	Critical
MRN A2/ Otterham Quay Lane Junction	Medway wide	Strategic	2026	Medway Council	£189,979	Section 106	£0	Critical
MRN A2 Commercial Road / High Street / Station Road	Medway wide	Strategic	2026	Medway Council	£215,293	Section 106	£0	Critical
A2 Commercial Road / A228 Knight Road	Medway wide	Strategic	2026	Medway Council	£224,964	Section 106	£0	Critical
A228 Frindsbury Road / Wykeham Street	Medway wide	Strategic	2026	Medway Council	£3,014,224	Section 106	£0	Critical
A228 Frindsbury Road / Gun Lane	Medway wide	Strategic		Medway Council		Section 106	£0	Critical
B2002 Station Road	Medway Wide	Strategic	2026	Medway Council	£28,149	Section 106	£0	Critical
MRN Pier Road/ Gillingham Junction	Medway wide	Strategic	2037	Medway Council	£21,587,489	Section 106	£0	Critical
MRN A2 Star Hill / High Street / Victoria Street	Medway wide	Strategic	2037	Medway Council	£20,769	Section 106	£0	Critical
A231 The Brook / Slicketts Hill	Medway wide	Strategic	2037	Medway Council	£65,126	Section 106	£0	Critical
Medway Bridge - Rochester - Chatham cycle route	Medway wide	Strategic	2026	Medway Council	£409,860	Section 106	£0	Critical
SRN M2 J2 and Roman Way / A228 scheme	Medway wide	Strategic	2037	Highways England	£14,248,500	Section 106	£0	Critical
SRN M2 Junction 3 (Includes Taddington, Lord Lees & Bridgewood Roundabout) Contribution Analysis	Medway Wide	Strategic	TBD	Highways England	£1,450,000	Section 106	£0	Critical
SRN M2 J4	Medway Wide	Strategic	TBD	Highways England	£2,000,000	Section 106	£0	Critical
Hoo Peninsula Relief Road and Junction Improvements	Hoo Peninsula	Local	0-5 years	Medway Council	£85,698,383	Homes England (HIF)	£85,698,383	Critical
SRN M2 J5 - A249 Stockbury	Medway wide	Strategic	0-5 years	Highways England	TBD	National Highways	£100,000,000	Critical
Strood to M2 connection-connecting Knight Road to M2 – Strood TC Masterplan	Strood	Strategic	11-15 years	Medway Council	TBD	TBD	£0	Essential
Medway Tunnel Capital Funding Years 1-5	Medway wide	Strategic	0-5 years	Medway Council	£4,972,000	National Highways	£4,972,000	Critical
Medway Tunnel Revenue Funding Years 1-5	Medway Wide	Strategic	0-5 years	Medway Council	£6,900,000	Section 106/External Funding	£0	Critical
Medway Tunnel Capital Funding Years 6-17	Medway wide	Strategic	6-10 years	Medway Council	TBD	Section 106/External Funding	£0	Critical
Medway Tunnel Revenue Funding Years 6-17	Medway wide	Strategic	6-10 years	Medway Council	TBD	Section 106/External Funding	£0	Critical
Transport - Other								

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
Hoo Passenger Railway Station	Hoo Peninsula	Strategic	0-5 years	Network Rail	£63,941,482	Homes England (HIF)	£63,941,482	Critical
Hoo bridleway creation	Hoo Peninsula	Local	TBD	Medway Council	TBD	Section 106	£0	Essential
Shared-use Bridge (for walkers/cyclists/riders)	Hoo Peninsula	Local	0-5 years	Medway Council	TBD	Section 106	£0	Essential
A228 Four Elms Hill Emergency Active Travel Fund Tranche 2	Hoo Peninsula	Local	0-5 years	Medway Council	£937,000	Active Travel Fund Tranche 2	£937,000	Essential
Transport - Public Realm								
Innovation Park Medway	Medway wide	Strategic	0-5 years	Medway Council	£45,800,000	SELEP and borrowing.	£45,800,000	Essential
Future High Street Fund Chatham Town Centre	Chatham	Strategic	0-5 years	Medway Council	£9,497,720	Future High Streets Fund	£9,497,720	Essential
Chatham Town Centre Place-making and Public Realm Package	Chatham	Local	0-5 years	Medway Council	£5,129,000	Local Growth Fund	£5,129,000	Essential
Strood Town Centre Journey Time and Accessibility Enhancements	Strood	Local	0-5 years	Medway Council	£9,870,000	Local Growth Fund	£9,870,000	Essential
Gillingham High Street Public Realm Improvements	Gillingham	Local	0-5 years	Medway Council	£7,190,000	Getting Britain Building/ MDC	£7,190,000	Essential
Chatham Docks to Gillingham Station connection (Old Rail Line)	Gillingham	Local	TBD	TBD	£14,000,000	Levelling -Up Fund/TBD	£0	Essential
Strood Linear Park/River Front Public Space	Strood	Local	TBD	TBD	TBD	TBD	£0	Essential
Education - Early Years and Primary								
New 2 FE Primary School at Rochester Riverside	Rochester	Local	2023	TBD	N/A	Section 106/External Funding	Yes	Critical
Expansion by 1 FE Primary School at Hundred of Hoo School (including land)	Hoo Peninsula	Local	2022	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE and relocated Primary School at High Halstow Primary School	Hoo Peninsula	Local	2024	TBD	£6,000,000	Section 106/External Funding	£0	Critical
2 ha land for new High Halstow primary school at benchmark land value of £375,000/ha	Hoo Peninsula	Local	2024	TBD	£750,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE and relocated Primary School at Chattenden (including land)	Hoo Peninsula	Local	2024	TBD	£6,000,000	Section 106/External Funding	£0	Critical
2 ha land for new Chattenden primary school at benchmark land value of £375,000/ha	Hoo Peninsula	Local	2024	TBD	£750,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Hoo St Werburgh Primary School (including land)	Hoo Peninsula	Local	2025	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Greenvale Primary	Chatham	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Temple Mill Primary School	Strood	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at All Faiths Primary	Chatham	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at New Road Primary	Strood	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Critical

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
New 3 FE Primary School at North of Priory Rd, Strood	Strood	Local	2028	TBD	£6,000,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Cliffe Woods (including land)	Hoo Peninsula	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Allhallows Primary School (including land)	Hoo Peninsula	Local	2032	TBD	£1,875,000	Section 106/External Funding	£0	Critical
New 2 FE Primary School at South of A228, Hoo St Werburgh 1	Hoo Peninsula	Local	2029	TBD	£6,000,000	Section 106/External Funding	£0	Critical
2 ha land for primary school at benchmark land value of £375,000/ha	Hoo Peninsula	Local	2029	TBD	£750,000	Section 106/External Funding	£0	Critical
1000 early years places at nurseries attached to school, new or expanded separate private nurseries.	Hoo Peninsula	Local	2030	TBD	TBD	Section 106/External Funding	£0	Critical
New 3 FE Primary School at South of A228, Hoo St Werburgh 2	Hoo Peninsula	Local	2032	TBD	£6,000,000	Section 106/External Funding	£0	Critical
2 ha land for primary school at benchmark land value of £375,000/ha	Hoo Peninsula	Local	2032	TBD	£750,000	Section 106/External Funding	£0	Critical
Expansion by 1 FE Primary School at Halling Primary School	Halling	Local	2035	TBD	£2,500,000	Section 106/External Funding	£0	Critical
Education - Secondary								
New 6FE Secondary School at Moor St, Rainham	Rainham	Local	2023	TBD	N/A	Education Funding Agency	Section 106	Essential
New 6FE Secondary School at Manor Farm, Strood	Strood	Local	2023	TBD	N/A	Education Funding Agency	Section 106	Essential
1 FE Expansion of Walderslade Girls	Walderslade	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Essential
1 FE Expansion of Greenacre School	Chatham	Local	2028	TBD	£2,500,000	Section 106/External Funding	£0	Essential
New 8 FE Secondary School including 500 place sixth form provision South of A228, Hoo St Werburgh	Hoo Peninsula	Local	2025	TBD	£35,000,000	Section 106/External Funding	£0	Essential
10.6 ha land for secondary school at benchmark land value of £375,000/ha	Hoo Peninsula	Local	2028	TBD	£3,975,000	Section 106/External Funding	£0	Essential
Education - Other								
Cornwallis Avenue, Gilling - 160 SEN places	Gillingham	Strategic	2023	TBD	N/A	Department for Education	Yes	Critical
New 100 places special school primary ASD	Medway wide	Strategic	2025	TBD	£15,000,000	Section 106/External Funding	£0	Essential
New 100 place special school secondary ASD	Medway wide	Strategic	2028	TBD	£15,000,000	Section 106/External Funding	£0	essential
Utilities & Waste								
Reinforcement to the gas infrastructure - SLAA Sites- 0647, 1251a/b/c, z4.	Hoo Peninsula	Local	0-5 years	SGN	N/A	N/A	N/A	Critical
Sewerage network infrastructure	Medway wide	Local	Ongoing	Southern Water	N/A	Developer/Southern Water	N/A	Essential
Wastewater treatment infrastructure	Medway wide	Strategic	11-15 years	Southern Water	N/A	Southern Water	N/A	Essential
Reinforcement of the electricity network	Medway wide	Strategic	Ongoing	UKPN	£20,000,000	Developer/UKPN	£0	Critical
Hoo Smart Infrastructure	Hoo Peninsula	Local	TBD	TBD	TBD	Section 106/External Funding	£0	Desirable

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
Hoo Waste Infrastructure	Hoo Peninsula	TBD	TBD	TBD	TBD	Section 106/External Funding	£0	Critical
Medway City Fibre	Medway wide	Strategic	0-5 years	TBD	£40,000,000	Internet Service Providers	£40,000,000	Critical
Waste services contribution	Medway Wide	Local	Ongoing	TBD	£5,000,000	Section 106	£0	Critical
Health & social care								
New Healthy Living Centre Chatham	Chatham	Local	0-5 years	Medway CCG	TBD	TBD	£8,000,000	Critical
New Healthy Living Centre Strood	Strood	Local	0-5 years	Medway CCG	TBD	TBD	£6,000,000	Essential
New Healthy Living Centre-Peninsula (or equivalent)of circa 3,650 sqm include minimum 1200 sqm of primary care space	Hoo Peninsula	Local	6-10 years	Medway CCG	TBD	TBD	£0	Critical
1 ha land for new healthy living centre at benchmark land value of £375,000/ha	Hoo Peninsula	Local	6-10 years	Medway CCG	TBD	Section 106/DHS C	£0	Critical
Reconfiguration of Walter Brice Centre	Hoo Peninsula	Local	0-5 years	Medway CCG	£500,000	Section 106/DHS C	£500,000	Essential
0.5 ha land for reconfiguration of Walter Brice Centre/Expansion of Elms Medical Practice	Hoo Peninsula	Local	6-10 years	Medway CCG	TBD	Section 106/DHS C	£0	Essential
New GP premises at Capstone	Hoo Peninsula	Local	0-5 years	Medway CCG	TBD	TBD	£0	Essential
New GP premises at Temple Waterfront	Strood	Local	0-5 years	Medway CCG	TBD	TBD	£0	Essential
Improvement/expansion to Medway GP practices	Medway wide	Strategic	Ongoing	Medway CCG	TBD	TBD	£0	Essential
Reconfiguration of community health buildings	Medway wide	Strategic	0-5 years	Medway CCG	TBD	TBD	£0	Essential
Urgent Care Treatment Centre	Gillingham	Strategic	0-5 years	Medway Foundation Trust	£1,000,000	TBD	£1,000,000	Critical
The Smoking Advice Centre-Chatham	Chatham	Strategic	Ongoing	Medway Council	TBD	TBD	£0	Essential
South East Coast Ambulance Service – Medway Make Ready Centre	Gillingham	Strategic	0-5 years	South East Coast Ambulance Service	£6,500,000	TBD	£6,500,000	Critical
Pharmacies	Medway wide	Strategic	Ongoing	NHS England	TBD	TBD	£0	Essential
Optometry	Medway wide	Strategic	Ongoing	NHS England	TBD	TBD	£0	Essential
Dental	Medway wide	Strategic	Ongoing	NHS England	TBD	TBD	£0	Essential
Hoo Peninsula Ambulance Community Response Post	Hoo Peninsula	Strategic	TBD	SECamb	TBD	TBD	£0	Critical
Medway Foundation Trust - Additional Bed Capacity	Medway wide	Strategic	3 – 15 years	Medway CCG	£75,000,000	TBD	£0	TBD
Medway Foundation Trust - Diagnostic Services	Medway and Swale	Strategic	1 – 5 years	Medway CCG	£10,000,000	TBD	£0	TBD
Medway Foundation Trust - Second site	Medway and Swale	Strategic	6 – 15 years	Medway CCG	TBD	TBD	£0	TBD
Community and cultural facilities								
New Hoo St Werburgh Sports Centre upgrade or redevelopment	Medway wide	Local	TBD	Medway Council	TBD	Section 106/External Funding	£0	Critical

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
Upgrades to Hoo Library and other community facilities	Hoo Peninsula	Local	TBD	Medway Council	TBD	TBD	TBD	TBD
A Visitor Centre close to Vicarage Lane, Hoo Flats	Hoo Peninsula	Local	TBD	Medway Council	TBD	Section 106/External Funding	£0	Essential
City of Culture Community & Arts Facilities	Medway wide	Strategic	TBD	Medway Council	TBD	TBD	TBD	TBD
Hoo cultural and heritage funding including wayfinding	Hoo Peninsula		TBD	Medway Council	TBD	Section 106 or Heritage Lottery Fund	TBD	TBD
Green & Blue infrastructure								
Hoo Strategic Environmental Management Scheme	Hoo Peninsula	Local	Ongoing	Medway Council	£14,350,000	Homes England (HIF)	£14,350,000	Critical
Bird disturbance mitigation - Strategic Access Management and Monitoring Scheme (Birdwise) & SAMMS+	Within 6km of sites	Strategic	Ongoing	Medway Council/North Kent Birdwise	£7,074,519	Section 106	£7,074,519	Critical
Rochester Riverside Flood Defense Wall	Hoo Peninsula	Local	Ongoing	Medway Council	£4,500,000	Medway Council	£4,500,000	Critical
Strood Civic Centre - Flood Mitigation	Strood	Local	Ongoing	Medway Council	£12,000,000	Medway Council	£12,000,000	Critical
MEASS Benefit Area 1.2 Kingsnorth	Hoo Peninsula	Local	Ongoing	EA and/or partners	£22,054,000	EA, third party beneficiaries, S106 and developer obligations	£2,295,000	Essential
MEASS Benefit Area 2.1 Medway Towns - Lower Upnor to Medway Bridge	Strood	Local	Ongoing	EA and/or partners	£20,534,000	EA, third party beneficiaries, S106 and developer obligations	£2,916,000	Essential
MEASS Benefit Area 2.2 Medway Towns-Medway Bridge to West St Mary's Island	Chatham	Local	Ongoing	EA and/or partners	£5,417,000	EA, third party beneficiaries, S106 and developer obligations	£977,000	Essential
MEASS Benefit Area 2.3 Medway Towns - St Mary's Island to the Strand	St Mary's Island	Local	Ongoing	EA and/or partners	£16,124,000	EA, third party beneficiaries, S106 and developer obligations	£5,341,000	Essential
MEASS Benefit Area 3.2 Upper Medway - North Halling to Snodland	Halling	Local	Ongoing	EA and/or partners	£1,725,000	EA, third party beneficiaries, S106 and developer obligations	£489,000	Critical

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
MEASS Benefit Area 4.1 Medway marshes -The Strand to west Motney Hill	Gilling ham	Local	Ongoing	EA and/or partners	£4,846,000	EA, third party beneficiaries, S106 and developer obligations	£624,000	Essential
MEASS Benefit Area Medway Marshes East of Upchurch to east of Lower Halstow	Hoo Peninsula	Local	Ongoing	EA and/or partners	£814,000	EA, third party beneficiaries, S106 and developer obligations	£66,000	Essential
TE2100 Isle of Grain	Hoo Peninsula	Strategic and local.	6-10 years	EA	£14,000,000	EA	£0	Essential
IPM - off site Net Gain payment	Gilling ham	Local	0-5 years	Medway Council & Kent Wildlife Trust	£805,440	Section 106	£0	Critical
National and regional trails	Medway Wide	Strategic	6-10 years	Developer/ Medway Council	£15,000	Section 106	£0	Essential
Continuous riverside walk from Aylesford to Rochester	Rochester	Strategic and local	6-10 years	Developer/ Medway Council	£70,000	Section 106	£0	Essential
PROW footpath RS101	Hoo Peninsula	Local	6-10 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
PROW footpath RS99	Hoo Peninsula	Local	6-10 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
PROW footpath RS109 Ropers Green Lane	Hoo Peninsula	Local	6-10 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Prow Footpath GB47	Gillingham	Local	6-10 years	Developer/ Medway Council	£20,000	Section 106	£0	Essential
Step Free Prow access	Medway Wide	Local and strategic	TBD	Developer/ Medway Council	TBD	Section 106		Essential
Open space - general: Where development sites are unable to fully mitigate their quantitative impact on open space provision through provision of on-site open space, this may exacerbate existing deficiencies for certain open space typologies in some areas. The Council will look for opportunities to address these deficiencies, including increased public accessibility to open green spaces.	Medway wide	Strategic	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Open space - general:	Hoo Peninsula	Local	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Parks & Gardens: In addition to open space secured through allocations in the Local Plan, on site parks & gardens will be sought through residential developments where this can be accommodated within the site. Where the full needs cannot be accommodated on site,	Medway wide	Local	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
financial contributions towards improvements at existing facilities will be sought for any residual deficit in provision where appropriate. All sub areas, particularly Strood Rural								
Allotments: In addition to open space secured through allocations in the Local Plan, on site allotment provision will be sought through residential developments where this can be accommodated within the site. Where the full needs cannot be accommodated on site, financial contributions towards improvements at existing facilities will be sought for any residual deficit in provision where appropriate. Currently, all of Medway's allotment sites have waiting lists and this needs to be addressed to meet future demand, particularly Rochester and Rainham	Medway wide	Local	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Play: In addition to open space secured through allocations in the Local Plan, on site play provision will be sought through residential developments where this can be accommodated within the site. Where the full needs cannot be accommodated on site, financial contributions towards improvements at existing facilities will be sought for any residual deficit in provision where appropriate	Medway wide	Strategic	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Youth: In addition to open space secured through allocations in the Local Plan, on site youth provision will be sought through residential developments where this can be accommodated within the site. Where the full needs cannot be accommodated on site, financial contributions towards improvements at existing facilities will be sought for any residual deficit in provision where appropriate, particularly in Rural areas such as Hoo Peninsula and Rainham	Medway wide	Strategic	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Natural Greenspace: In addition to open space secured through allocations in the Local Plan, on site natural greenspace will be sought through residential developments where this can be accommodated	Medway wide	Strategic	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
within the site. Where the full needs cannot be accommodated on site, financial contributions towards improvements at existing facilities will be sought for any residual deficit in provision where appropriate - particularly Gillingham and Rainham sub-areas								
Destination site - Riverside Country Park: Increase in visitor numbers requires improvement and expansion of visitor facilities at the two country parks in Medway. Required improves at RCP includes extending the car park, visitor/education centre, café and bird hides	Rainham	Local	11-15 years	Medway Council/ Medway Norse	£4,000,000	Section 106\	In part	Essential
Destination site - Capstone Farm Country Park: Increase in visitor numbers requires improvement and expansion of visitor facilities at the two country parks in Medway. Required improvements at CFCP include car parking, widening access road to upper car parks, visitor/education centre, café and play area	Chatham	Local	11-15 years	Medway Council/ Medway Norse	£4,000,000	Section 106	In part	Essential
Community Tree Nursery - Links to emerging Tree Strategy & Climate Change to increase trees in Medway. Nursery would encourage community use by local schools and increase volunteer participation	TBD	Strategic	11-15 years	Medway Council/ Medway Norse	£250,000	Section 106 + External funding	£0	Desirable
Football - increase artificial pitch (3G) provision in Medway. Ideally, this could be done through Community Use Agreements for new school sites	Hoo Peninsula	Strategic	11-15 years	Developer/ Medway Council	TBD	Section 106	£0	Essential
Football - improve facilities such as pavilions - particularly Beechings Cross, Luton Rec, Hempstead Rec, Kingsfrith, Knights Place, Hook Meadow, Cliffe Woods Rec	Medway wide	Local	11-15 years	Medway Council & Medway Norse	TBD	Section 106 + External funding	£0	Essential
Football - enhance drainage of pitches to increase pitch capacity - particularly Beechings Cross, Borstal Rec, Hempstead Rec, Kingsfrith, Knights Place, Cliffe Woods Rec	Medway wide	Strategic	11-15 years	Medway Council & Medway Norse	TBD	Section 106 + External funding	£0	Essential
Football - address demand for projected growth which will result in shortfall of adult and youth (11v11) pitches - All sub areas, particularly Chatham (youth 11v11) and Gillingham (adult)	Medway wide	Local	11-15 years	Developer & Medway Council	TBD	Section 106	£0	Essential
Cricket - work with key stakeholders to invest in changing facilities	Medway Wide	Local	11-15 years	TBD	TBD	TBD	£0	Essential
Cricket - work with key stakeholders to invest in non-turf pitch provision to	Medway Wide	Local	11-15 years	TBD	TBD	TBD	£0	Essential

Project Description	Location	Type of project (strategic or local)	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level
meet growing demand								
Hockey - ensure long-term Community Use Agreements are in place, especially at education sites to further develop hockey within Medway. This will allow for great club growth and facility development	Medway wide	Strategic	11-15 years	TBD	TBD	TBD	£0	Essential
Rugby - invest in further floodlight provision in educational and council sites to increase training capacity	Medway wide	Strategic	11-15 years	TBD	TBD	Section 106 + External funding	£0	Essential
Rugby - improve drainage at all rugby sites	Medway wide	Strategic	11-15 years	TBD	TBD	Section 106 + External funding	£0	Essential
Tennis - invest in community tennis programmes to encourage participation	Medway wide	Strategic	11-15 years	Medway Council & Medway Norse	TBD	External funding	£0	Essential
Tennis - invest and enhance in current facilities	Medway Wide	Strategic	11-15 years	Medway Council & Medway Norse	TBD	Section 106 + External Funding	In part	Essential
Tennis - installation of additional sites to meet additional demand where is the lack of current provision. This could be done through Community Use Agreements for new school Sites	Medway wide	Local	11-15 years	TBD	TBD	Section 106	£0	Essential
Tennis - consider investing in floodlights at some current facilities	Medway wide	Local	11-15 years	TBD	TBD	Section 106 + External funding	£0	Essential

Total Infrastructure Cost	£719, 433, 426
Funding Already Identified	£445, 602, 104
Funding Remaining to be Identified*	4732, 831, 322

*Whilst it is acknowledged that a funding gap currently exists, the Council's initial viability assessment work identifies that necessary contributions will be able to secured through section 106 obligations to meet this gap. These contributions, alongside the Council's work with national partners agencies, will ensure that this funding gap is met.

APPENDIX 1 B – HOO INFRASTRUCTURE DELIVERY SCHEDULE

Project Description	Location	Timeframe	Delivery body	Estimated cost	Potential Funding Source	Funding identified	Priority level – Tier 1 Strategic, Tier 2 Site Specific
Transport - Highways							
Hoo Peninsula Relief Road and Junction Improvements (including land)	Hoo Peninsula	0-5 years	Medway Council	£85,698,383	Homes England (HIF)	£85,698,383	HIF
Transport - Other							
Hoo Passenger Railway Station (including land)	Hoo Peninsula	0-5 years	Network Rail	£63,941,482	Homes England (HIF)	£63,941,482	HIF
Shared-use Bridge (for walkers/cyclists/horse)	Hoo Peninsula	0-5 years	Developer/Medway Council	TBD	Section 106	£0	Tier 1
A228 Four Elms Hill Active Travel Fund Tranche 2	Hoo Peninsula	0-5 years	Medway Council	£937,000	Active Travel Fund Tranche 2	£937,000	Active Travel Fund Tranche 2
Education - Early Years and Primary							
1000 early years places at nurseries attached to school, new or expanded separate private nurseries.	Hoo Peninsula	2030	TBD	TBD	Section 106/External funding	£0	Tier 1
Expansion by 1 FE Primary School at Hundred of Hoo School (including land)	Hoo Peninsula	2022	TBD	£2,500,000	Section 106/External funding	£0	Tier 1
Expansion by 1 FE and relocated Primary School at High Halstow Primary School	Hoo Peninsula	2024	TBD	£6,000,000	Section 106/External funding	£0	Tier 1
2 ha land for new High Halstow primary school at benchmark land value of £375,000/ha	Hoo Peninsula	2024	TBD	£750,000	Section 106/External funding	£0	Tier 1
Expansion by 1 FE and relocated Primary School at Chattenden (including land)	Hoo Peninsula	2024	TBD	£6,000,000	Section 106/External funding	£0	Tier 1
2 ha land for new Chattenden primary school at benchmark land value of £375,000/ha	Hoo Peninsula	2024	TBD	£750,000	Section 106/External funding	£0	Tier 1
Expansion by 1 FE Primary School at Hoo St Werburgh Primary School (including land)	Hoo Peninsula	2025	TBD	£2,500,000	Section 106/External funding	£0	Tier 1
Expansion by 1 FE Primary School at Cliffe Woods (including land)	Hoo Peninsula	2028	TBD	£2,500,000	Section 106/External funding	£0	Tier 1
Expansion by 1 FE Primary School at Allhallows Primary School (including land)	Hoo Peninsula	2032	TBD	£1,875,000	Section 106/External funding	£0	Tier 1
New 2 FE Primary School at South of A228, Hoo St Werburgh 1 including 30 parking spaces	Hoo Peninsula	2029	TBD	£6,000,000	Section 106/External funding	£0	Tier 1
2 ha land for primary school at benchmark land value of £375,000/ha	Hoo Peninsula	2029	TBD	£750,000	Section 106/External funding	£0	Tier 1
New 2 FE Primary School at South of A228, Hoo St Werburgh 2 including 30 parking spaces	Hoo Peninsula	2032	TBD	£6,000,000	Section 106/External funding	£0	Tier 1
2 ha land for primary school at benchmark land value of £375,000/ha	Hoo Peninsula	2032	TBD	£750,000	Section 106/External funding	£0	Tier 1
Education - Secondary							
New 6FE Secondary School at Manor Farm, Strood (including land)	Strood	2023	TBD	N/A	Education Funding Agency	N/A	Tier 1
New 8 FE Secondary School including 500 place sixth form provision South of A228, Hoo St Werburgh including minimum 100 parking spaces	Hoo Peninsula	2025	TBD	£35,000,000	Section 106/External funding	£0	Tier 1
10.6 ha land for secondary school at benchmark land value of £375,000/ha	Hoo Peninsula	2028	TBD	£3,975,000	Section 106/External funding	£0	Tier 1
Utilities & Waste							
Reinforcement to the gas infrastructure – SLAA Sites- 0647, 1251a/b/c, z4.	Hoo Peninsula	0-5 years	SGN	N/A	N/A	N/A	Tier 1
Hoo Smart Infrastructure	Hoo Peninsula	TBD	TBD	TBD	Section 106/External funding	£0	Tier 2
Hoo Waste Infrastructure	Hoo Peninsula	TBD	TBD	TBD	Section 106/External funding	£0	Tier 1
Health & social care							
New Healthy Living Centre-Peninsula (or equivalent) of circa 3,650 sqm include minimum 1200 sqm of primary care space and 180 parking spaces	Hoo Peninsula	6-10 years	Medway CCG	TBD	Section 106/DHSC	£0	Tier 2
1 ha land for new healthy living centre at benchmark land value of £375,000/ha	Hoo Peninsula	6-10 years	Medway CCG	TBD	Section 106/DHSC	£0	Tier 2
Reconfiguration of Walter Brice Centre	Hoo Peninsula	0-5 years	Medway CCG	£500,000	Section 106 (Committed)	£500,000	
0.32 ha land for reconfiguration of Walter Brice Centre/Expansion of Elms Medical Practice	Hoo Peninsula	6-10 years	Medway CCG	TBD	Section 106/DHSC	£0	Tier 1
Hoo Peninsula Ambulance Community Response Post (including land)	Hoo Peninsula	TBD	SECAmb	TBD	Section 106/DHSC	£0	Tier 2
Community and cultural facilities							
New Hoo St Werburgh Sports Centre redevelopment of circa 6,500 sqm including colocated sports pitches and 300 parking spaces	Hoo Peninsula	TBD	Medway Council	TBD	Section 106/External funding	£0	Tier 1
2 ha land for new Hoo St Werburgh Sports Centre	Hoo Peninsula	TBD	Medway Council	TBD	Section 106/External funding	£0	Tier 1
Upgrades to Hoo Library and other community facilities eg village hall (including land)	Hoo Peninsula	TBD	Developer/Medway Council/Parish Council	TBD	TBD	TBD	Tier 2
Hoo cultural and heritage funding (including wayfinding)	Hoo Peninsula	TBD	Developer/Medway Council/Parish Council	TBD	Section 106 or Heritage Lottery Fund	TBD	Tier 2
Green & Blue infrastructure							
Hoo Strategic Environmental Management Scheme	Hoo Peninsula	Ongoing	Medway Council	£14,350,000	Homes England (HIF)	£14,350,000	HIF
Hoo SEMS endowment	Hoo Peninsula	Ongoing	Medway Council	TBD	Section 106	£0	Tier 1

SAMMS+ and Birdwise	Within 6km of sites	Ongoing	Medway Council/North Kent Birdwise	£5,119,800	Section 106	£5,119,800	Tier 1
Hoo bridleway creation	Hoo Peninsula	TBD	Medway Council	TBD	Section 106	£0	Tier 2
PROW footpath RS101	Hoo Peninsula	6-10 years	Developer/Medway Council	TBD	Section 106	£0	Tier 2
PROW footpath RS99	Hoo Peninsula	6-10 years	Developer/Medway Council	TBD	Section 106	£0	Tier 2
PROW footpath RS109 Ropers Green Lane	Hoo Peninsula	6-10 years	Developer/Medway Council	TBD	Section 106	£0	Tier 2
Land and build costs for open space to meet policy space standards	Hoo Peninsula	11-15 years	Developer/Medway Council	TBD	Section 106	£0	Tier 2
Football - increase artificial pitch (3G) provision in Medway. Ideally, this could be done through Community Use Agreements for new school sites	Hoo Peninsula	11-15 years	Developer/Medway Council	TBD	Section 106/External funding	£0	Tier 2
Open space - Multi-use games area or skate park/bike track	Hoo Peninsula	11-15 years	Developer/Medway Council	TBD	Section 106/External funding	£0	Tier 2

Hoo Total Infrastructure Cost	£245, 896, 665
Funding Already Identified	£170,546,665
Funding Remaining to be Identified*	£75,350,000

*Whilst it is acknowledged that a funding gap currently exists, the Council's initial viability assessment work identifies that necessary contributions will be able to secured through section 106 obligations to meet this gap. These contributions, alongside the Council's work with national partners agencies, will ensure that this funding gap is met.

Appendix 2: Summary of engagement with infrastructure providers

Appendix 2: Summary of engagement with infrastructure providers

Consultation January – September 2021

Since the 2020 update, Medway Council has undertaken targeted engagement, primarily with internal service providers and with the NHS. This is on the basis that the majority of infrastructure contributions collected by Medway Council and therefore within its direct control are spent directly within the council. Utilities and other infrastructure matters controlled by private sector interests were not identified as significant constraints on growth at Regulation 18 and later stages of consultation. Targeted engagement included a large number of meetings, particularly focused on different parts of the wider NHS family, including the CCG and Foundation Trust, as well as participation in a number of work groups helping to inform health estates strategies and decisions, reflecting local priorities and needs.

Infrastructure body	Response received	Key issues raised
Medway Council Regeneration Service	Yes	Funding requirements for HIF enhancements
Medway Council Education Service	Yes	Phasing of new school provision on Hoo peninsula in line with housing growth, forward funding requirements
Medway Council Social Care Service	Yes	None
Medway Council Leisure Service	Yes	Demolition and redevelopment of Hoo sports centre and associated costs
Medway Council Libraries Service	Yes	Potential for colocation
Medway Council Flood Risk Officer	Yes	SFRA
Medway Council Integrated Transport Service	Yes	None
Medway Council Greenspaces Service	Yes	None
Medway Council Smart Infrastructure Officer	Yes	Need to ensure cost of connection charges factored into viability assessment.
Medway Council Youth Services	Yes	Potential for colocation
Medway Council Cultural Services	Yes	Potential for colocation, wayfinding, and public art
Medway Council Employment Service	Yes	Potential use of developer contributions
NHS Kent and Medway CCG, NHS Medway Foundation Trust etc	Yes	Need for expansion of existing hospital and ambition for new facility, potential for new healthy living centre on the Hoo peninsula to align with new community diagnostic hub priorities from central government, other health infrastructure requirements, process, and approach to collecting developer contributions. Kent and Medway CCG Primary Care Estates Strategy.
Southern Water	Yes	Development of Drainage and Wastewater Management Plan for the area, need for potential upgrades to wastewater treatment and water supply considered low risk and accommodated within customer recharge schemes.

Consultation March 2020

In 2020 Medway Council sent out a request for information to support its Infrastructure Delivery Plan that will sit alongside the local plan. Medway sent a proforma to a number of key infrastructure providers, requesting further information on infrastructure projects, timeframes for which projects are expected to be delivered, estimated costs and information on funding sources. This information is necessary to understand the nature and anticipated costs of delivering the infrastructure needed to make the local plan successful. Medway Council also sent a plan illustrating the proposed growth pattern across Medway (indicating new allocations and unimplemented planning permissions) and an excel file that provided details of the scale of growth and phasing of sites highlighted in the plan. The following 12 agencies responded to the consultation:

Infrastructure body	Response received	Key issues raised
Arriva Busses	Yes	No specific additions or changes identified
Environment Agency	Yes	Highlighted Thames Estuary 100 plans and proposals.
National Highways	Yes	Highlighted ongoing work for local plan and related capacity upgrades.
Medway council Early Years	Yes	Provided evidence of excess capacity.
Medway council Flood and Drainage	Yes	Provided advice in relation to production of detailed mitigation information
Medway Council Education Services	Yes	Detailed response providing evidence of capacity and demand in each school place planning area
NHS Pharmacy Services	No	
Open Reach	Yes	Highlighted the need for continued engagement.
South East Coast Ambulance Service NHS Foundation Trust	Yes	Discussion held regarding funding for ambulance upgrades, now completed.
Southern Gas	Yes	Outlined that capacity exists and no further projects are planned.
Southern Water	Yes	Provided detailed hydraulic modelling of sites but no cost estimates for works.
UKPN	Yes	Highlighted the need for developers to contribute to network reinforcements.

IDP Consultation March 2019

On 8th March 2019, Medway Council sent out a request for information to support its Infrastructure Delivery Plan that will sit alongside the local plan. Medway sent a proforma to a number of key infrastructure providers, requesting further information on infrastructure projects, timeframes for which projects are expected to be delivered, estimated costs and information on funding sources. This information is necessary to understand the nature and anticipated costs of delivering the infrastructure needed to make the local plan successful. A reminder email was sent on 2nd April 2019 to request further information from those services that had not yet responded. Medway Council also sent a plan illustrating the proposed growth pattern across Medway (indicating new allocations and unimplemented planning permissions) and an excel file that provided details of the scale of growth and phasing of sites highlighted in the plan. These were sent to the following 20 infrastructure providers:

Infrastructure body	Response received	Key issues raised
Southern Water	Yes	Identified issue at Whitewall Creek, but will not stop development
South East Water	Yes	No issues identified
Southern Gas Networks	Yes	Local gas issues identified for Kingsnorth expansion
UK Power Network	Yes	No issues identified
Environment Agency	Yes	Flood defence projects in the life of the plan identified for: Kingsnorth, Grain, Strood, Rochester, St Mary's Island, Riverside Country Park & Halling
Medway Education Team	Yes	Various school expansions and new developments across Medway identified for both Primary and secondary education
Medway CCG	Yes	New healthy living centres in: Strood, Peninsula and Chatham New doctors' surgeries: Temple waterfront and Capstone valley Other areas need various improvements
Medway NHS Foundation Trust	No	
KCC Highways	No	
Medway Library Service	No	
Medway Public Health Service	Yes	Expansion of healthy living pharmacy network
South East Coast Ambulance Service	Yes	Ambulance community response post Hoo Peninsula
Kent Police	Yes	No issues raised
Kent Fire & Rescue	No	
Medway Waste Services	No	
Medway Bereavement Services	No	
Arriva	No	
Network Rail	No	
National Highways	Yes	Cannot currently support the local plan due to the lack of modelling work.
Southeastern	No	