



# RAF MILDENHALL VISIONING STUDY FINAL DRAFT

PREPARED FOR

**FOREST HEATH DISTRICT COUNCIL  
WEST SUFFOLK COUNCIL**  
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**COMMERCIALLY SENSITIVE AND  
CONFIDENTIAL**



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# 1. EXECUTIVE SUMMARY

## 1.1 The Vision

The following Vision has been agreed with the project stakeholders:

*“Forest Heath District Council (FHDC) and its partners have started intensive engagement across Government, including the Defence Infrastructure Organisation (DIO)/Homes & Communities Agency (HCA), to build consensus around a sustainable social, environmental and economic plan. Mildenhall is to be transformed into a successful mixed use, sustainable community. Royal Air Force (RAF) Mildenhall and appropriate expansion land outside the wire will grow comfortably alongside the existing communities which will benefit from improved and integrated services and public realm whilst retaining their own identities.*

*Mildenhall will have a thriving business community that leverages the locational, physical and sectoral strengths of the site and the region. There will be room for existing local businesses to grow and we will pursue opportunities to attract inward investment in aviation and to secure occupiers attracted by the region’s existing clusters (such as agri-tech). Companies will be attracted by the region’s strengths in tourism and hospitality, its proximity - and separation - from Cambridge and the area’s exceptional quality of life.*

*The enlarged community will have access to a range of affordable, quality housing in a range of tenures that compliments the existing stock. The number and type of new houses will be appropriate in order to meet local needs and we will work with stakeholders to explore the opportunity for new and emerging delivery models including custom build, a range of retirement living including care homes and Starter Homes. With access to jobs, as well as new social and leisure facilities including formal and informal open space, Mildenhall will be a distinctive and aspirational place to live, work, bring up a family and retire.*

*Ours is an optimistic and ambitious vision. There will be challenges to overcome: the condition of the site; the capacity of existing services and infrastructure to accommodate new development; the economic impacts as the United States Air Force (USAF) Visiting Forces shift to RAF Lakenheath; and the investment that is needed to attract, and risk-share with, new catalytic occupiers will need to be addressed. We propose to set up a governance structure that sets the standard for future communities facing similar opportunities. We will use this structure to work collaboratively with stakeholders from across government and the private sector to find the best solutions to the challenges of delivering this vision.”*

## 1.2 The Need

### **RAF Mildenhall: The Story So Far**

RAF Mildenhall is currently an operational airbase located on the edge of Mildenhall in West Suffolk. Previously used as an RAF station, the site now hosts the USAF.

In January 2015 the US Department of Defense (USDOD) confirmed that American Forces will withdraw from RAF Mildenhall from 2022. At the same time, the USDOD announced that RAF Lakenheath is to expand with new F-35A jets and additional personnel and that it would be investing a minimum of \$120 million (£80 million) in infrastructure construction at RAF Lakenheath to support the F-35A. FHDC has been notified by the DIO that a Strategic Defence and Security Review (SDSR 16) decision on the future

of RAF Mildenhall will be made by 2018. This decision will clarify, through the military Footprint Strategy, whether there is an ongoing use of RAF Mildenhall by the British Armed Forces for all or part of the site.

In advance of SDSR16, the DIO has confirmed that it expects that there will be no future operational use by the RAF and that any ongoing need would be for the British Army. The DIO anticipates that under either a 'whole closure' or 'partial closure' scenario, any surplus estate would transfer to the HCA.

FHDC has started an intensive engagement across government, including the DIO/HCA, to build consensus around a sustainable social, environmental and economic plan.

Cushman & Wakefield has been appointed to undertake a site baseline and feasibility study in order to test a range of options for different land uses, provide external 'challenge' and commercial market-facing insight to ensure that the aspirations are deliverable and support the creation of our vision for the regeneration of RAF Mildenhall.

### **The Scale of the Ambition**

The scale of RAF Mildenhall is significant, extending to some 440 hectares, both in absolute terms and also in the context of other site closures nationally. Achieving the full potential of RAF Mildenhall is a long term project, the impact of which will be a positive legacy for many future generations. The scale of the opportunity in comparison to the existing geography and economy of the area makes this a complex project that will require significant financial and other resources in order to unlock the site's full potential.

### **Local priorities and FHDC objectives for RAF Mildenhall**

FHDC has undertaken significant public engagement which has revealed:

- Opportunity to create a new identity for RAF Mildenhall; avoid the site being mothballed
- Need for certainty, consistent announcements and proper engagement, not press speculation
- Complete the visioning and planning work in advance; learn from previous case studies
- All options to be assessed for viability; strong support for continued aviation use if this is viable
- Economic strength of Cambridge is an opportunity and a threat; new uses must address impacts on infrastructure and public services
- Any new housing must be affordable with a range of tenures; avoid being a commuter town and retain separation of Beck Row, Mildenhall and West Row
- Use the redevelopment to address the lack of health and retail facilities in Mildenhall

Building on the public engagement, FHDC has developed a series of principles that should guide future development of RAF Mildenhall:

- Support the strategic frameworks for FHDC, Suffolk County Council, the Local Enterprise Partnerships and One Public Estate (OPE)
- Resolve any gaps or issues with local infrastructure
- Create new jobs to mitigate the impact of jobs lost as a result of the closure
- Take into consideration expansion to RAF Lakenheath
- Bring a significant return of investment from the A11 upgrade
- Sustainable use of the site which brings long term benefits to West Suffolk

These principles are reflected in the legacy objectives which have guided the assessment of options:

- Delivery of FHDC's 'principles'
- Minimise adverse impacts of closure
- Create new employment opportunities
- Integrate development into existing communities

### **Key Stakeholders**

FHDC are working with the DIO and the HCA as well as wider government stakeholders through OPE principles. Through these stakeholders FHDC aims to create a positive legacy for RAF Mildenhall by creating an opportunity that makes both a positive contribution to local and regional communities.

### **Policy**

Planning policy in relation to the site is relatively open and will need to be developed as any masterplan comes forward over time. Infrastructure provision and the need to keep the existing settlements surrounding RAF Mildenhall as distinct entities are likely to be key determinants of policy.

### **The need for intervention**

There are several factors that create a significant need for public sector intervention:

- Need for clarity over future use
- Scale of the site
- The likely need for support to optimise the continued use of the site for aviation
- Need to pursue alternative uses that have strategic fit with the legacy objectives
- Viability and land value capture
- New uses will constrain the existing infrastructure
- Investing for the long term
- The build up at RAF Lakenheath
- Safeguarding local businesses



## 1.3 The Lessons

### Precedent Case Studies

The following themes have been identified from the nine case studies assessed to draw on best practice and lessons learned on the planning, governance and delivery of sites of a similar scale and complexity:

#### *Infrastructure and Accessibility*

There is a strong correlation between connectivity (accessibility by road/rail/air and data connectivity) and property market activity, occupier demand and values. Northstowe is a good demonstration project given the proposed improved access to A14 and a road linking the site to the Guided Busway. Coltishall has had less fundamental change, partly because it is in a relatively isolated location to the North of Norwich. RAF Finningley is succeeding as a commercial airport (Robin Hood Airport), albeit struggling to fully justify upfront conversion expenditure, because it has a large passenger/consumer catchment.

#### *Anchor Uses*

Large scale military and industrial sites lack market 'presence' because of their former uses and as they are often in poorly functioning property locations. Establishing occupier demand at scale requires investment to promote the location and to attract 'anchor' uses and occupiers to establish focus and profile. Alconbury demonstrated that Enterprise Zones can help. The effect of anchor occupiers is apparent at Discovery Park where Pfizer's decision to retain some presence helped establish a supply chain from which other occupiers could benefit.

#### *Governance and Delivery*

Governance has been identified across many of the case studies as being critical. At British Aerospace (BAE) Hatfield there were clear lines across stakeholders including the local MP. At Whitehill and Bordon, Discovery Park and Shell Haven, clear governance was seen as critical. It is interesting to note that at two of the case studies the participants said, even though governance was an ingredient of their success, they would in hindsight have brought in an even clearer governance structure earlier.

#### *Creating a Vision*

Any commercial organisation committing to the site will want to be certain that what is being offered will be delivered. Stakeholders (e.g. HCA/FHDC) will need to be seen as being 'on board' to deliver the Vision before occupiers take risks with their business. The redevelopment of the BAE Hatfield site was successful partly due to the early stage masterplan, visioning and public engagement. Alconbury is seeing dividends of sticking to its task of attracting mid tech occupiers. Conversely, the lack of clear vision at Manston contributed to its failure as an airport.

#### *Early Project Planning*

Sites with the scale and complexity of Mildenhall require careful and early business planning. Shell Haven's success was partly due to early financial appraisals and market analysis to develop the exit plan as well as a detailed Technical Pack to support international marketing. The development of Whitehill and Bordon is showing that with effective planning and analysis of market demands and constraints a viable vision can be achieved, together with the benefit of quantifying the added value of upfront investment to create a strong business case.

## 1.4 The Opportunity

### Land Use Options – Market Assessment

A range of potential land uses options has been assessed with the following conclusions:

#### *Aviation*

A range of potentially viable aviation uses have been identified. A detailed business plan is required, together with exploratory discussions with operators. In anticipation of a positive result it is recommended that the airfield and supporting infrastructure is protected and that an area of 200 acres is protected for aerospace activity.

#### *Offices*

Potential for some spin-off from Cambridge's market but, despite economic and population growth in East Anglia, there is no existing office/business cluster around Mildenhall and this sector would require significant public sector intervention.

#### *Industrial and Logistics*

Whilst there may be some demand from local firms for the hangar space at modest rents, there is limited potential for large scale, national occupiers without substantial improvements to the strategic national road infrastructure.

#### *Retail and Leisure*

Ancillary retail to support other uses is likely to be viable but given the location, catchment area and accessibility – as well as established centres at Bury St Edmunds and Cambridge – significant demand is unlikely.

#### *Housing*

Housing demand is present within the current Forest Heath market with land supply traditionally keeping pace with demand. However, a larger scale development would require additional employment to underpin demand as well as creating a sustainable development. Our assessment is that a predominantly residential development would be a sub-optimum outcome if it was at the expense of creating a balanced mix of uses including high skilled employment.

#### *Innovation*

Any potential to build off the success of Cambridge's science parks would likely require an anchor in this location - typically this would be a university or research facility.

#### *Agri-tech*

Agri-tech could be an appropriate use but would need to complement the existing offer in the region and have a clear strategy as it is not a standalone sector.

#### *Emerging Sectors*

Renewable energy generation offers some potential to boost employment and there are limited site constraints to restrict them. No known institutional demand or Foreign Direct Investment requirement in the area.

### Shortlisted Scenarios

The research revealed three scenarios with potential for viability testing, each are capable of being modelled with a 'whole release' and a 'partial release' sensitivity (only Scenario 3 has been modelled



on this basis in order to check that aviation use could still be delivered on this site – we consider that other scenarios can more easily be reduced in scale).

- Scenario 1: residential led development, utilising the northern portion of the site for housing with ancillary retail and the south east for industrial.
- Scenario 2: employment led development with a significant quantum of business space and industrial use. The business space is focussed to the north of the site, with industrial to the south. The scenario includes a reduced residential quantum.
- Scenario 3: aviation led development, assuming part retention of the runway and associated terminal for use as a recreational airfield. What land remains is assumed to be an industrial based business park with renewable energy provision. Scenario 3A: As above but assuming a partial release.

Having regard to the objectives, we have assessed a scenario that includes the three main land uses from Scenarios 1-3 as a preferred mix of uses as follows:

- Scenario 4: A hybrid scenario that has aviation to the north, employment adjoining the existing industrial estate, housing on the south and south west of the site (and on the expansion land and around the Mildenhall Hub) and a regional Heathland Country Park separating the new housing from West Row.

All scenarios envisage the Mildenhall Hub to the west of the existing town on the expansion land and housing development on the expansion land (outside DIO red line).

## **Viability**

The key conclusions from the viability assessment are:

- No scenario shows significant positive surplus and are therefore all indicated to be unviable without public sector intervention.
- The aviation and employment led scenarios generate the highest GVA, a key driver for the local communities and the agreed objectives.
- A scenario with significant residential will improve viability relative to the business space and aviation options which have a lower return on investment.
- Significant infrastructure costs create a large front loaded viability constraint for all scenarios and increase finance costs.
- It is not unusual for major schemes such as this to be prima facie unviable at this stage, especially where significant infrastructure cost are required.
- Costs and assumptions will be iterated as more information becomes available; schemes will be optimised e.g. by changing mix and phasing; viability can be used to reduce planning costs (most typically, the National Planning Policy Framework allows for lower levels of affordable housing to be delivered to improve viability) etc.
- The lack of viability doesn't mean that the schemes will not be delivered but it does point to public sector intervention being critical.
- Part of the ask of government is to work together to address how viability can be improved.

- A partial release and partial occupation by the British Army could be successful but this would depend on the quantum and basis of the military need. On our 'partial release' scenario the British Army would require approximately half of the site, most likely to the north, and would require: single living accommodation; service family accommodation; garages and technical (former hangers) accommodation; welfare and catering accommodation; and office and headquarter accommodation.
- In the partial release scenario we have assumed that the continued (civilian) aviation use of the site would require the airfield, supporting infrastructure and an area of 200 acres to be protected for aerospace activity.

We will collaborate with the DIO and Front Line Commands to apportion land uses that enable civilian and military uses to work alongside each other.

### **Delivery Options**

The three main delivery options have been assessed:

#### *HCA led delivery*

As it currently stands, the DIO intend to transfer ownership to the HCA. In this scenario, the type and form of development will be driven to a significant degree by the needs/requirements of the HCA in terms of both the outputs of development (housing and job numbers) but also its financial requirements and attitude to property risk. It would be important under this scenario that FHDC engages early with the HCA and establishes an effective governance arrangement in order that FHDC has real and sustained influence.

#### *HCA/FHDC joint delivery*

The HCA and FHDC (and other local partners) would become fully aligned either through a properly constituted governance structure at one extreme or a shared interest in the land at the other. This could be a joint enterprise or more likely for governance reasons FHDC could take ownership of part of the site such as the initial land needed to create a viable early employment hub.

#### *Locally led delivery*

In this scenario, FHDC and its local partners would seek to intervene more directly by taking a direct stake in the land, either alongside the HCA or on its own. This would give FHDC more control but would also increase the risk. Our assessment is that a joint HCA/FHDC led approach is optimal because it shares risk, embeds a collaborative and joint approach to delivering a shared vision and increases capacity.

### **Funding Sources**

Given the scale of the site and the long time period which is anticipated in order to bring it to fruition, a variety of funding sources will be required. Equally, public sector upfront investment/funding is critical to the successful delivery of a comprehensive scheme to provide the environment where private sector partners have the confidence to invest in later phases.

The scale of investment required is unlikely to mean that direct local authority funding (e.g. through prudential borrowing) of early infrastructure works is desirable or achievable. The initial sources of funding which are most likely to be effective, deliverable and leverage private sector investment are those from bodies such as the HCA (through its investment in infrastructure provision on large sites to

facilitate development), the emerging devolution deal for the area, Growing Places Fund and Tax Incremental Financing.

In terms of the payback for this upfront funding, the mechanisms available as part of Enterprise Zones provide a strong template for sites of this scale. Mechanisms such as Supplementary Planning Documents (to enforce shared infrastructure funding from private developers) are not likely to be appropriate for this site and the payback from New Homes Bonus is insufficient.

### **Public Sector Response**

The public sector has a critical role in delivering the Vision in order that an appropriate strategic framework can be established prior to development:

- Coordination
- Vision and innovation
- Strong governance and public: private partnerships
- Technical challenges
- Funding and financial mechanisms
- Community and stakeholder involvement
- Timescales

It is envisaged that the governance structure will involve a collaborative approach with key public sector parties such as Forest Heath District Council, West Suffolk Council, the DIO, the HCA, the LEPs, the Cabinet Office and potentially Her Majesty's Treasury.

## **1.5 The Asks of Government**

### **A Shared Vision**

- The public sector needs to speak with one voice to unite and put the legacy objectives at the heart of future planning for RAF Mildenhall
- A residential led commuter town is not the default option and we must avoid mothballing the site
- Government needs to be seen as being 'on board' to deliver the vision.
- We recommend funding is made available for promoting the site and the wider area
- Discussions with potential key aviation partners should be coordinated across the public sector

### **Clear and Effective Decision Making**

- A strong governance structure needs to be established.
- Government to accelerate and clarify decisions about the timing of the USVF withdrawal and any future British military requirement
- A partial occupation by the British Army could be successful but we need urgent discussions to understand the quantum, nature and longevity of any presence. We are ready to collaborate

with the DIO and Front Line Commands to apportion land uses that enable civilian and military uses.

- The airfield, supporting infrastructure and an area of 200 acres should be protected for aerospace

### **Infrastructure Interventions**

- Pump-priming infrastructure by the public sector
- Government to make available capacity funding to assess the costs of infrastructure and to develop business cases which demonstrate the return on this investment
- Government to provide a funding package to be repaid from sale proceeds of the land when it becomes developed to meet the costs of the required improvements to infrastructure and services to facilitate new development
- In the event that there is a British military use for the site we ask that the costs of strengthening infrastructure is met by Government
- Minimum site closure standards to be applied before the site is transferred from the military or a dowry fund should be established to meet the costs.

### **OPE Principles and devolution**

- RAF Mildenhall represents an excellent opportunity to drive forward West Suffolk's OPE Programme by contributing to the ambitious place – shaping project for the town and surrounding area through co-ordinating activities using the public sector asset base.
- The devolution agenda in Suffolk can use RAFM as a flagship to show how sustainable economic growth and homes and the provision of infrastructure can be planned and delivered on a major scale in the region.
- In the event that the British Army have a requirement for part (or all) of the site, it needs to be recognised that this will be a very different presence to an RAF or USVF presence. We therefore ask that in this scenario there is appropriate military community integration planning and funding made available.
- We want to work with the HCA to ensure that they are not 'penalised' either financially or in how it accounts for the housing targets that will transfer with the land from the DIO in the event that our vision means it delivers less housing in order to deliver more employment.

### **Delivery Approach**

- We ask that the public sector should take a pro-active role in maintaining the site in single ownership in the near term after closure, and taking the role of a 'master developer' to provide project leadership and manage the planning, consultation and strategic infrastructure stages of the development.
- There are various models of public sector ownership which we want to explore with the DIO and the HCA but a partnership between central government such as DIO and HCA and local partners including FHDC could provide a strong combination of land ownership, funding resources, delivery expertise and local knowledge and buy-in.

- A coordinated public sector delivery response will ensure that development at RAF Mildenhall comes forward holistically, employment uses are seen as a real priority rather than a planning condition to release the next phase of housing and that local needs can be delivered – for example by ensuring that skill training is delivered in line with the build-out of new employment space or delivering demonstration housing projects that ensure the elderly can continue to live independently, safely and sociably.
- This would likely be followed by a series of deals with private sector developers and occupiers to take forward phases in partnership with the public sector owners.
- We ask that we work together across government to address how viability can be improved to deliver better returns to the public purse as well as improving the prospects of creating new jobs.
- We would like capacity funding to pursue a business plan for the aviation uses described in this prospectus and to support discussions with potential operators.
- We want to explore with government the benefits of designations such as Enterprise Zones, Housing Zones and development corporations and to support delivery of the Vision.
- Aside from the delivery of new infrastructure and accommodation on the site there is a requirement for advanced skills training to support new employment.

## 2. INTRODUCTION

### 2.1 RAF Mildenhall: The Story So Far

Royal Airforce (RAF) Mildenhall is an operational airbase located on the edge of Mildenhall in West Suffolk and close to the borders of Cambridgeshire and Norfolk. The site is extensive, covering some 440 hectares (ha) (1,087 acres).

Previously used as an RAF station, the site now hosts the United States Air Forces in Europe (USAFE) and forms a significant part of the United States Visiting Forces (USVF) presence in West Suffolk<sup>1</sup>. The USVF across both bases at RAF Mildenhall and RAF Lakenheath is estimated to account for 15,400 jobs and contribute £690 million (m) Gross Value Added (GVA) into the West Suffolk economy. RAF Mildenhall itself supports employment for over 500 local people and requires 6,900 workers to live off base (a mix of US military, US civilians and UK staff).<sup>2</sup>

In January 2015 the US Department of Defense (USDOD) confirmed that American Forces will withdraw from RAF Mildenhall by 2022. At RAF Lakenheath there will be the new deployment of F-35A jets in 2020, this will see some deployment shifted from RAF Mildenhall to RAF Lakenheath (Westsuffolk.gov).

Forest Heath District Council (FHDC) has been notified by the Defence Infrastructure Organisation (DIO) that a Strategic Defence Review (SDR16) decision as to the future of RAF Mildenhall will be made by 2018. This decision will clarify whether there is an ongoing use of RAF Mildenhall by the British Armed Forces and, if so, whether this will incorporate the whole or part of the site. In advance of SDR16, the DIO has confirmed that it expects that there will be no future operational use by the RAF and that any ongoing need would most likely therefore be for the British Army. The DIO also anticipates that under either a 'whole closure' or 'partial closure' scenario, any surplus estate would be transferred to the Homes and Communities Agency (HCA).

Although the precise nature and scale of the closure remains uncertain, what is clear is that the 80 year continued presence of the RAF/USAFE will soon be ending. Despite the obvious impacts that this closure could have on the local economy, FHDC is determined that it will create a positive legacy for RAF Mildenhall in order that the site can contribute to the local and regional economy and reduce the impacts of whole or partial closure. The biggest fear among the local community is that the base is mothballed with no attempt at regeneration. There are also concerns that the site is developed as a sterile commuter town without appropriate and accessible employment opportunities.

FHDC has started an intensive process of engagement across government, including the DIO and the HCA to build consensus around a sustainable social, environmental and economic plan for the site. Progress to date includes:

- FHDC has commissioned a study assessing the impacts of Understanding the impacts of USVF in West Suffolk and neighbouring districts<sup>2</sup>.
- The government has established the Mildenhall, Alconbury and Molesworth (MAM) Working Group, chaired by Matthew Hancock MP (West Suffolk) with a remit to minimise the impacts from the closure of the three American airbases.
- West Suffolk Council (which incorporates both FHDC and St Edmundsbury Council) and its partners set out the desire for a proactive approach to the regeneration of RAF Mildenhall within

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<sup>1</sup> Source: RAF Mildenhall and RAF Lakenheath

<sup>2</sup> Source: SQW 'Understanding the impacts of United States Visiting Forces in West Suffolk and neighbouring districts'

the Mildenhall Place-Shaping Project Services & Assets Delivery Plan (SADP) submitted under One Public Estate (OPE) Phase 3 in 2015. The SADP was successful and the partnership was awarded capacity funding.

- FHDC has engaged locally with stakeholders including businesses, community representatives, partner organisations and the West Suffolk Property Board.
- Initial discussions have been held with the DIO and the HCA with the intention that future proposals and announcements for RAF Mildenhall can be aligned with West Suffolk Council's agenda for a broad and collaborative response so that the tremendous opportunities of RAF Mildenhall are not lost.

This report builds upon this previous work and forms the research and analysis on which the accompanying Vision and Prospectus is based.

## 2.2 Scope of Report

### 2.2.1 Building on the Momentum

Cushman & Wakefield's (C&W) role is to undertake a site baseline and feasibility study in order to test a range of options for different land uses, provide external 'challenge' and commercial market-facing insight to ensure that the aspirations are deliverable and support the creation of a vision for the regeneration of RAF Mildenhall.

C&W has undertaken an examination of the potential development options for RAF Mildenhall in line with FHDC principles to guide this assessment:

- Support the strategic frameworks for FHDC, Suffolk County Council, the Local Enterprise Partnerships (LEPs) and OPE.
- Resolve any gaps or issues with local infrastructure as identified by the Forest Heath Local Plan.
- Create new jobs to mitigate the impact of jobs lost as a result of the closure of RAF Mildenhall.
- Take into consideration expansion to RAF Lakenheath as part of the deployment of two F-35A squadrons.
- Attract new investment, preferably from outside the current economic area, that will supplement, support or replace existing businesses. Thereby creating construction employment, sustainable new jobs, wealth generation for the population and public bodies, and future growth opportunities.
- Bring a significant return of investment from the A11 upgrade.
- Sustainable use of the site which brings long term benefits to West Suffolk.

C&W has formed an approach based on the FHDC legacy aims and objectives. C&W's approach recognises that the regeneration of RAF Mildenhall can provide a substantial and positive legacy that provides sustainable economic growth and employment opportunities, new housing and significant social and community benefits to West Suffolk and the surrounding sub-region.

Greater detail on the C&W's scope of work and methodology can be seen in Appendix 1.



### **2.2.2 Data Sources and Limitations**

We have relied upon the accuracy of reports that are listed in Appendix 1. This report is subject to limitations which can also be found at Appendix 1.

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## 3. SECURING A POSITIVE LEGACY

### 3.1 The scale of the ambition

If the opportunity is embraced collaboratively - initially across government and subsequently through positive engagement with the market - the redevelopment of RAF Mildenhall has the potential to significantly improve the social, economic and physical landscape of Mildenhall and the wider area.

Achieving the full potential of RAF Mildenhall is a long term project, the impact of which will be a positive legacy for many future generations. The scale of the opportunity in comparison to the existing geography and economy of the area makes this a complex project that will require significant financial and other resources in order to unlock the site's full potential:

- Coordinating national and local government strategies and resources.
- Agreeing a clear and compelling Vision.
- Drawing on the public sector to establish an appropriate strategic framework prior to development.
- Involving the private sector downstream to maximise the capacity to deliver the ambitious and significant development programme.
- Overcoming the technical challenges that large former military bases can bring.
- Using appropriate innovative funding and financial mechanisms to optimise delivery and viability.
- Community and stakeholder involvement.

### 3.2 Local priorities and FHDC objectives for RAF Mildenhall

C&W recognises that the local priority at RAF Mildenhall is to manage the opportunity and mitigate any impacts of the base closure on the local economy; RAF Mildenhall is not a site in isolation but is part of a wider community and any development at the site should address this wider area. FHDC outline in their RAF Mildenhall Baseline Study Vision Brief (April, 2016), a number of crucial issues that need to be considered and addressed within the potential development schemes (outlined in Section 2.1).

The Steering Group has identified that creating new employment opportunities and the correct integration into new development into existing communities is key in creating an economically sustainable site. The Steering Group also highlighted that in order for integration and sustainable development to be achieved, the creation of a commuter settlement' would not be appropriate or meet the primary objectives of the FHDC. The relationship of any development of the site with the existing settlements and land uses in Mildenhall, West Row and Beck Row is critical and the continued separation and distinctiveness of these locations is to be supported.

### 3.3 Key stakeholders

FHDC is working with the DIO and HCA as well as wider government stakeholders, following OPE principles. Through these stakeholders FHDC aims to help secure a positive legacy for RAF Mildenhall by creating an opportunity that makes a positive contribution to local and regional communities.

### 3.3.1 Defence Infrastructure Organisation (DIO)

FHDC aims to collaborate with the DIO in creating a positive legacy for RAF Mildenhall. There are some grounds for optimism that the DIO and FHDC can become aligned to the extent that one of the DIO's objectives is to engage with local authorities and communities in order to mitigate the impact of closures. It needs to be recognised however that the DIO's primary focus for its surplus real estate is to **maximise sale proceeds** (having regard to wider policy and site conditions) and to deliver its targets in relation to the **release of land for housing**. A transfer to the HCA enables the DIO to 'score' its housing targets for that particular site. Early engagement with the DIO is therefore critical so that these two objectives are moderated against FHDC's objectives which point to a more balanced, mixed use redevelopment which might be at the expense of housing numbers. Given the DIO's clear objectives, the discussion may need to be broadened to other parts of government in order to help the DIO support FHDC without impacting on it delivering on its own targets – a form of 'hypothecation' ought to be possible if government takes a broad, joined up approach.

### 3.3.2 Homes and Communities Agency (HCA)

The HCA aims to increase the supply of new affordable and market housing as well as having its own targets set by government on the release of surplus public sector land for housing. The HCA works with local authorities to help achieve maximum economic impact from its interventions and ensure that where possible investment aligns with local ambitions. As with the DIO, it needs to be recognised that the HCA's targets on housing numbers are closely monitored by government and are designed to influence the outcomes of sites that it controls – put simply, the HCA needs to deliver on the housing numbers and it has no commercial land targets. At face value this could skew the approach by the HCA towards a housing led scheme, particularly as it will effectively 'inherit' any DIO housing targets for RAF Mildenhall at the point of transfer. It is then incentivised by government to prepare sites for sale with a viable planning allocation or permission. These housing targets heavily influence the HCA but in practice they can be a very collaborative partner as has been borne out by some of the reference case studies. The HCA and its legacy organisations 'get' the value of sustainable, mixed use developments and indeed have been heavily involved in the thought leadership of creating balanced new communities with sustainable levels of employment. Again, it is therefore essential that there is constructive early engagement with the HCA, supported by discussions across government, so that the HCA understands FHDC's ambitions are broader than housing and that new employment is a critical objective. There may be some practical ways of supporting the HCA to deliver on its other targets such as safeguarding some land for the development of Starter Homes.

### 3.3.3 One Public Estate/Cabinet Office

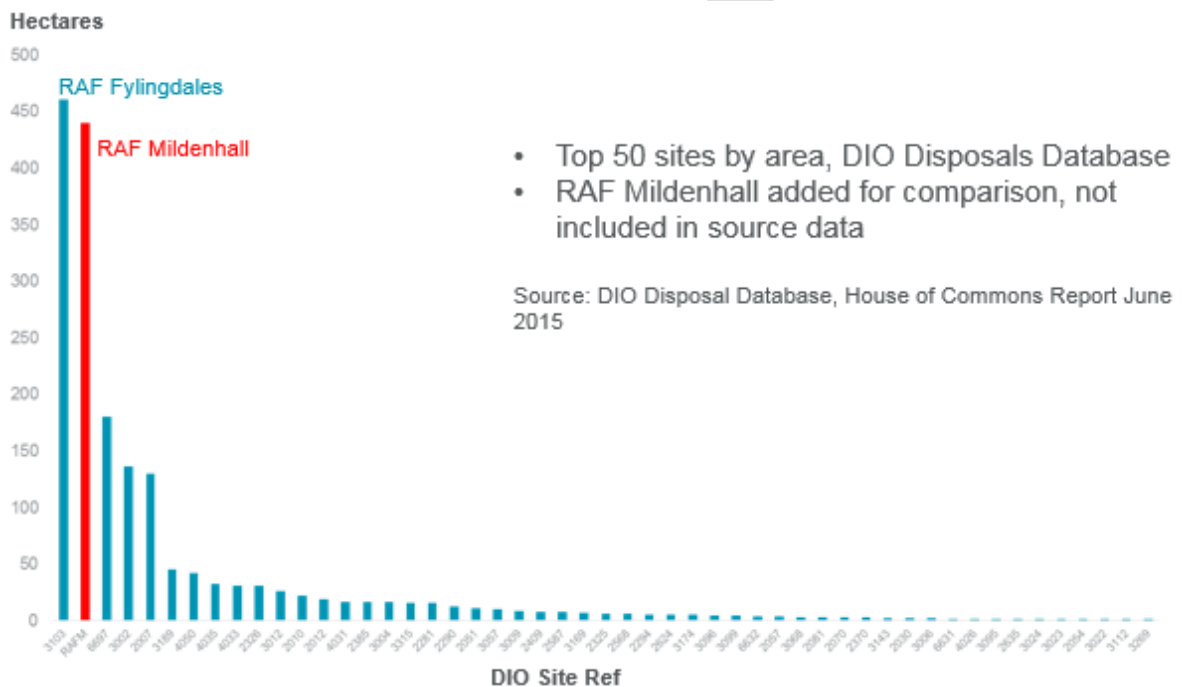
OPE is an initiative delivered in partnership by the Cabinet Office Government Property Unit (GPU) and the Local Government Association (LGA). It provides practical and technical support and capacity funding to councils to deliver property-focused programmes in collaboration with central government and public sector partners. FHDC, working as part of the West Suffolk Property Board secured OPE capacity funding for the Mildenhall Hub public services centre and this was expanded to the wider Mildenhall Place Shaping Programme including RAF Mildenhall. The RAF Mildenhall site provides an good opportunity to utilise the OPE partnership and contacts to champion the site as a sustainable extension of the town and to bring central government and local public sector partners together to share assets, resources and expertise to support the project delivery. The GPU is part of the West Suffolk OPE governance arrangements and it would be helpful to include them in the RAF Mildenhall project governance when this is established. One of the purposes of OPE is to support local partners and use government influence to overcome challenges and unlock public sector sites to enable economic growth and releasing RAF Mildenhall for development is a good test of this.

## 4. SITE BASELINE

### 4.1 Scale, Location and Catchment

RAF Mildenhall is located on the North-West edge of the town of Mildenhall. The scale of RAF Mildenhall is significant, extending to some 440 ha, both in absolute terms and also in the context of other site closures nationally. The site is equivalent to the second largest DIO disposal when compared to its 2015 disposal programme.<sup>3</sup>

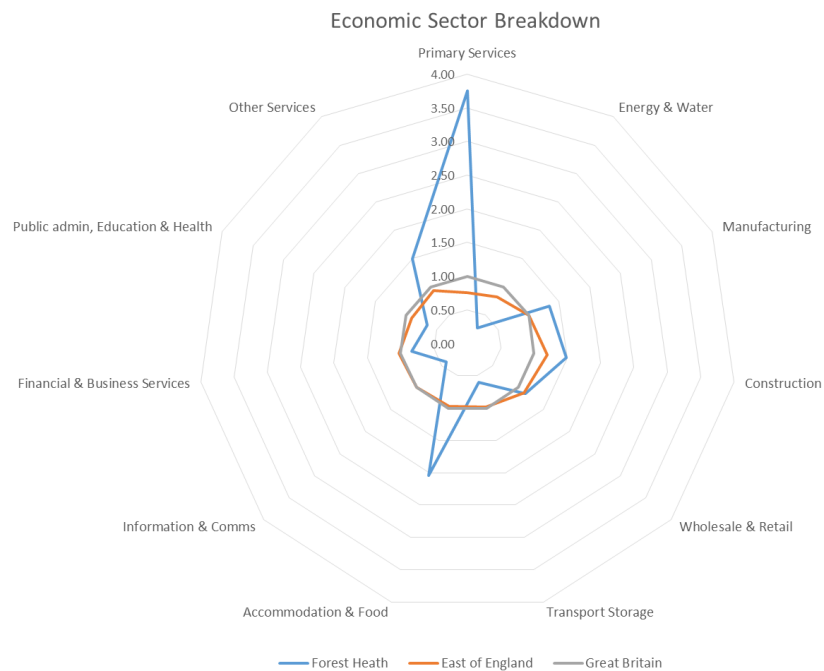
Figure 1 Scale of Opportunity (DIO)



The potential of the site to attract a diverse range of employment opportunities needs to recognise the current economic strengths of the area in order that opportunities for clustering and agglomeration can be addressed. Figure 2 illustrates the share of the market (by job numbers), which as a whole, differing sectors occupy based against the figures for Great Britain and the East of England. Great Britain shows an almost perfect circle with a spread across all services. This is also the East for the East of England with a slight pull towards construction and Wholesale and Retail. The economic profile for Forest Heath shows particular strength in the Primary Service sector (e.g. agriculture and farming) and the Accommodation & Food sector (e.g. hotels, holiday centres and restaurants). This economic profile is clearly significantly influenced by the relatively rural location and the site's proximity to the horse racing industry at Newmarket and holiday centre at Center Parcs. Overall, the analysis shows that Forest Heath has almost four times the amount of Primary Services jobs compared to the rest of Great Britain, with Accommodation and Food almost two times that of wider Great Britain.

<sup>3</sup> Source: DIO Disposal Database, House of Commons Report June 2015. RAF Mildenhall added for comparison, not included in source data

Figure 2 – Economic Sector Breakdown for Forest Heath District (by Sector employment)



The northern boundary of the site forms part of Beck Row village and is adjacent to the A1101. Within RAF Mildenhall the North-West of the site comprises the majority of the existing housing stock and associated community uses. The rest of the site comprises the runway, airfield and operational buildings whilst the area surrounding the site is predominately rural and agricultural in use with small village settlements.

## 4.2 Infrastructure

### 4.2.1 Current Site

[Information awaited on the existing assets from FHDC/ RAF will be used to supplement this section.]

The site currently encompasses<sup>4</sup>:

- 146,000 square metres (sq m) of military warehouses including munitions storage.
- 41, 100 sq m of military admin/offices.
- 109 units for married family units (SFA, Serviced Family Accommodation).
- 631 dormitory units (SLA, Single Living Accommodation).
- 80 temporary lodging facilities.

<sup>4</sup> Source, SQW 2016

- 228 visiting officer quarters.

The site currently employs 700 local people, with 2,000 off-base homes situated within the local housing market (RAF Mildenhall Baseline Study Vision). The site also includes a number of ancillary uses such as libraries, leisure facilities (cinema, food outlets, bars, banks and supermarkets (SQW, 2016)).

USVF data indicates that RAF Mildenhall and RAF Lakenheath accounted for 10,000 jobs in 2015 including those who work on the air bases in a temporary capacity (FHDC, 2016). Additional on base facilities include healthcare and leisure with significant spending outside the base using local firms and businesses, accounting for £14,000,000 to £17,000,000 each year (FHDC, 2016).

#### 4.2.2 Future projections

In order to understand the impact of the potential development scenarios a traffic study has been commissioned by FHDC to identify the highways and impact of any development scenarios on infrastructure.

AECOM are currently undertaking a Site Allocations Traffic Study. Within this they are currently considering the impacts on current developments at a number of location;

- 1) A14/A142 (A14 Junction 37);
- 2) A14/A11/A1304 (A14 Junction 38);
- 3) A11/A1101 Mildenhall Road/A1065 Brandon Road (A11 Fiveways);
- 4) A1101 Kingsway/A1101 North Terrace/B1102 High Street;
- 5) A1101 Kingsway/Brandon Road /A1101 Bury Road;
- 6) Immediate surrounding villages of Beck Row, West Row, Eriswell, Worlington and Barton Mills.

This has been formed on the back of AECOM's Transport study conducted for FHDC (2009), further built on with a Technical Note in 2016. The Technical Note aims to identify the potential impacts of the emerging proposals for broad locations of housing provision (covering the Highways Assessment Section from the 2009 wider report).

In relation to Mildenhall, the report suggest that there is likely to be an increase in traffic (both to and from the town), passing through the Fiveways roundabout junction (AECOM, 2016). The 'Mildenhall Mixed and Residential Land Use Development, Traffic Assessment' identifies that congestion is anticipated at a number of junctions across Mildenhall town centre. The study advises that, for those junctions where there is predicted to be a rise in traffic, a more detailed assessment and subsequent mitigation plan should be developed (AECOM, 2016).

The study also considered a number of neighbouring areas where growth was predicted. With these locations (such as Red Lodge, Lakenheath and Brandon) being in close proximity to Mildenhall, traffic increases in these area are likely to have a wider impact and increase traffic within Mildenhall. In conjunction with this, AECOM also considered growth within neighbouring East Cambridgeshire due to the potential cumulative impacts on the A142 and A14 corridors (AECOM, 2016). AECOM suggest that the result of this assessment highlights the need for joint working between the two authorities to understand and develop an appropriate package of mitigation (AECOM, 2016).

C&W has requested information from the DIO on site infrastructure. Current infrastructure provision indicates that areas of the site which sit closest to Beck Row (to the North) and Mildenhall (to the East) are likely to have greatest connectivity.

### 4.3 Aviation Infrastructure

[Information awaited on the existing assets from the DIO]

The RAF base at Mildenhall currently consists of a 2,810 metre runway with no slot or surface access problems but some requirement for infrastructure investment. Navigation technology is in place and no obstacles are apparent.

The site also comprises a number of key operational buildings including a control tower, office facilities and residential accommodation. In additions to these there are a number of buildings used for healthcare facilities and training.

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## 5. POLICY STATUS

### 5.1 National

#### 5.1.1 National Planning Policy Framework (NPPF)

Local planning authorities are under a statutory duty to prepare development plans for their administrative area based upon adequate and up to date evidence about the economic, social and environmental characteristics and prospects of the area. Legislation also requires that regard is to be had to the development plan when determining planning applications; and that decisions shall be made in accordance with the plan, unless material considerations indicate otherwise.

The NPPF (or 'the Framework') sets out the national planning policies which must be taken into account in the preparation of local and neighbourhood plans. It states that the presumption in favour of sustainable development lies at the heart of national policy and that for plan making this means:

- Local planning authorities should positively seek opportunities to meet the development needs of their area;
- Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:
  - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
  - Specific policies in this Framework indicate development should be restricted

Local planning authorities also have a duty to cooperate on planning issues that cross administrative boundaries to ensure that strategic priorities are properly co-ordinated and clearly reflected in individual Local Plans. Joint working should enable local planning authorities to work together to meet development requirements which cannot wholly be met within their own areas. Such joint working should take account of different geographic areas, including travel-to-work areas.

In order to demonstrate that a local plan is sound, it will need to be based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development. Sufficient justification will be required to show the plan adopts the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence and that it can effectively be delivered over its plan period based on effective joint working on cross-boundary strategic priorities.

### 5.2 Local

#### 5.2.1 Local Planning Policy (West Suffolk Council – FHDC)

FHDC is the local planning authority for Mildenhall. The current development plan for the district consists of the following:

- **Core Strategy:** adopted in May 2010, the Core Strategy provides the overall vision for Forest Heath up until 2026, with housing projections up to 2031.
- **Joint Development Management Policies Document:** adopted in February 2015, the Joint Development Management Policies document contains policies which form an important tool for the day-to-day determination of planning applications across the District.

- **Saved Policies:** those saved policies from Forest Heath Local Plan of 1995 will remain in force until superseded by the adoption of new plans.
- **FHDC Local Plan Policies Map 2015:** this shows those areas where different policies are applicable. The map will be revised as each Local Plan document is adopted.

The adopted Policies Map shows Mildenhall Airfield as falling within the open countryside and without other policy designation other than a small area at the north-western end of the runway being allocated as a 'local wildlife site'.

Forest Heath Local Plan of 1995 'saved' policies are those from the old local plan which remain up to date and which have not been replaced by either the Core Strategy or the Development Management DPD. It includes provision for an initial development of 100 dwellings to meet the accommodation needs of the two USAF airfields (Policy 3.6).

The provision of a northern relief road around Mildenhall is supported (cross reference with policy CS12) and the proposed route is safeguarded (Policy 6.2).

The Core Strategy defines Mildenhall as a market town and the strategy is for 4.5ha of employment land to be created between 2006 and 2026. Housing land will be allocated for a minimum of 260 dwellings on brownfield land between 2010 and 2031. FHDC will also work with partners to implement transport schemes to relieve adverse impacts of traffic from the A1101 on Mildenhall (Policy CS1).

Proposals for a further 1000 dwellings as a greenfield urban extension in Mildenhall were quashed by Court Order in April 2011. Consequently a single issue review is underway to determine the distribution of new housing across the district with the preferred options consultation concluding in July 2016 (see more below).

Policy CS12 addresses strategic transport improvements which includes a scheme to relieve the adverse impact of traffic in Mildenhall. There are no details for this scheme included in the plan.

The Joint Development Management Policies Document is a Local Plan document for both FHDC and St Edmundsbury Borough Council used in the day to day determination of planning applications. It does not contain any strategic policies on the location of development but focusses on the matters to be taken into account when assessing development proposals.

It states that Masterplans will be required for proposals on land allocated in Local Plans and the Sites Allocations DPD, where a Concept Statement has been prepared, and also for any sites which by virtue of size, location or proposed mix of uses is justified by the Local Planning Authority to require a masterplanning approach (Policy DM3). Alternatively, development briefs maybe required for large sites (Policy DM4). Areas designated as countryside will be protected from unsuitable development (Policy DM5).

Development which would have an adverse impact on protected species will not be permitted unless there is no alternative and measures have been undertaken reduce disturbance to a minimum and either maintain the protected species population on site or provide adequate alternative habitats to sustain at least current levels of population (Policy DM11).

The re-use or replacement of buildings in the countryside is permitted for employment, tourist, recreational, community and residential use (Policy DM33). The policy does not however appear to contemplate a site of the scale of Mildenhall Airfield; Local Planning Policy (West Suffolk Council – FHDC).

## 5.2.2 Emerging Local Policy

The **Core Strategy Single Issue Review** identifies Mildenhall as a sustainable location for new development but notes the constraints on development in the town:

- The special protection area for birds situated to the east of the settlement means there is very little scope for development in this direction without first demonstrating mitigation measures within the SPA and its buffers;
- Aircraft noise from the operational airbase constrains development to the north;
- The historic character of the central area;
- The level of flood risk associated with land to the south of the town.

The potential closure of Mildenhall airbase is noted but due to the uncertainty over the deliverability of the site and the timescale, it is not possible for this site to be put forward for development in the current local plan review. Consequently the review seeks to meet housing needs on other sites in the area.

Two development options are proposed. Option 1 proposes higher growth at Mildenhall, Red Lodge and the primary villages whilst Option 2 proposes higher growth at Newmarket. Table 1 sets out the comparative housing growth at Mildenhall for the two options. It shows that in both cases substantial new housing is proposed at Mildenhall as there is already a good range of key services and facilities.

**Table 1 – Comparative Housing Growth at Mildenhall under two options**

Option	Existing Commitments and Completions	Additional Provision	Total	% Distribution
1	177	1350	1527	22%
2	177	1150	1327	19%

The SHMAA confirms that Mildenhall lies within the Cambridge sub-region strategic housing market area and just beyond the Cambridge Travel to Work area. We note that Cambridge has the fastest expanding Travel to Work Area between 2001 and 2011 (source: Cambridge Centre for Housing and Planning Research June 2016).

**The Site Allocations Local Plan** identifies which sites should be developed, in order to achieve the visions and objectives of the Core Strategy, (including the outcomes of the Single Issue Review to Policy CS7). The preferred Options consultation concluded at the beginning of July 2016 and was based upon growth strategy Option 1.

The document acknowledges the environmental constraints affecting Mildenhall including the Special Protection Area to the east and land liable to flood to the south. It is noted that higher growth in Mildenhall could only be considered if it can be demonstrated that there are no adverse effects of the development on the integrity of the SPA through the Habitats Regulations Assessment process but that during the 2015 consultation, no evidence was presented to suggest that the SPA constraints could be overcome to allow a higher level of development.

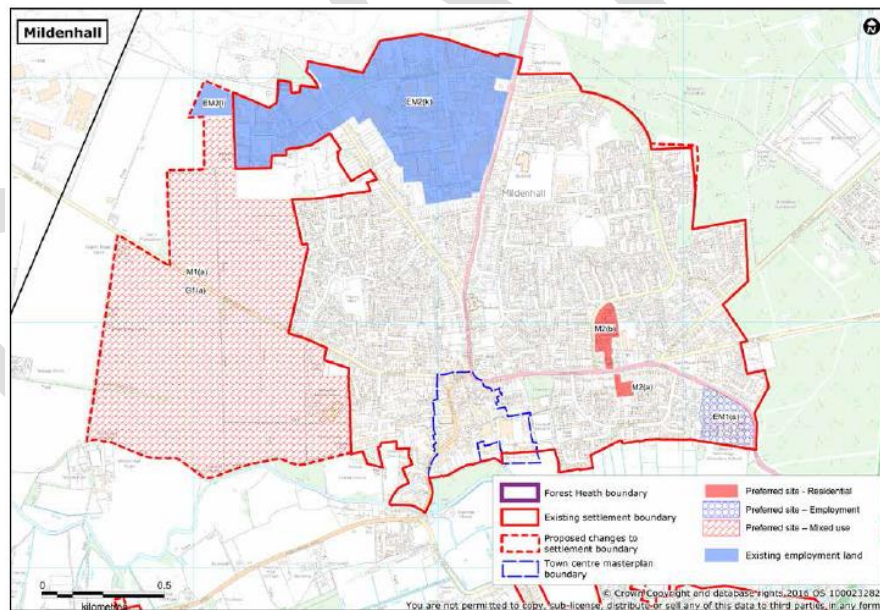
The Site Allocations document focusses growth on land to the west of the town (site M1a) which extends to 95 ha and is proposed for mixed use comprising 1,250 dwellings, 2.6 ha of employment and

the 'Mildenhall Hub', a partnership initiative to rationalise and improve the public estate in the town which could potentially result in the co-location of public services comprising:

- Council offices;
- Mildenhall College Academy;
- Pre-school;
- Leisure facilities (indoor and outdoor);
- Health centre;
- Library;
- Police Station;
- Fire Station;
- Primary School.

Figure 3 is taken from the preferred options document and shows the strategic location of proposed new development sites. One of the objectives of the strategy is to avoid coalescence with surrounding settlements such as Barton Mills, Worlington, West Row, Beck Row and Holywell Row.

**Figure 3 – Strategic Location of Proposed new Development Sites**



The Core Strategy sets out the spatial vision for Mildenhall. As part of this vision, Mildenhall will have a vibrant town centre with a broad range of shops and services meeting the needs of the wider catchment. New development will have enhanced the appearance, character and function of the town and aided regeneration, whilst ensuring the needs of the community are met. The town's historic, cultural and archaeological assets will be enhanced and exploited to promote tourism. Additional housing, including provision which meets the needs of local people will have been provided, together with employment development. Mildenhall Industrial Estate will be expanded to meet employment

demand with associated infrastructure put in place to accommodate this growth. Additional recreational, open space and community services and facilities will be provided to serve local needs.

Mildenhall is defined within the Core Strategy as a Market Town.

New employment land will be allocated for new development (approx. 4.5 ha) in Mildenhall between 2006 and 2026.

Any proposals within the adopted constraint zones will require a project level Habitats Regulations Assessment.

FHDC will work with Suffolk County Council and other partners to implement transport schemes to relieve the adverse impacts of traffic resulting from new development and the growth of the general Suffolk and Norfolk economy from the A1101 road on Mildenhall.

## 5.3 Site Specific

### 5.3.1 Forest Heath District

The District is located in the County of Suffolk although in housing market terms it is part of the Cambridge sub-region.

The District covers an area of over 37,398 ha (144 square miles) with two strategic national routes passing through it: the A11 from London to Norwich and the A14 from the Midlands to Ipswich and the East Coast Ports.

The District comprises both parts of Thetford Forest and the heath lands of Breckland. It is principally a rural area but with some distinctive market towns (Newmarket, Mildenhall and Brandon). The area also contains a number of key service centres, primary villages, secondary villages and small settlements. Overall the population has experienced a steady increase over the last three decades and one fifth of the population is made up of United States Air Force in Europe (USAFE) personnel and their families.

It is one of fifteen districts making up the Greater Cambridgeshire Greater Peterborough LEP.

The District has a relatively wide-ranging commuter area, including East Cambridgeshire, King's Lynn and West Norfolk, Breckland and St Edmundsbury. With an armed forces base a significant element of commuting is determined by the location of housing for military personnel. All surrounding Districts have wards contributing between 5% and 25% of their employed residents to work in the Mildenhall area. Mildenhall is one of the few towns outside of Cambridgeshire to attract a significant number of commuters.

The Cambridge sub-region is one of nine identified housing sub-regions across the East of England. Sub-regional housing market areas geographical areas defined by household demand and preferences for housing. They reflect the key functional linkages between places where people live and work. Housing market areas can be identified by assessing patterns in the relationship between housing demand and supply across different locations.

There is a 6.9 year supply of housing land including a 5% buffer. This methodology is consistent with that used by St Edmundsbury Borough Council, an approach considered appropriate by the Inspector following the examination of the Vision 2031 Local Plan. A 20% buffer is not considered appropriate as there has been a good record of provision in the past 10 years.



Figure 4 - Local Authority Boundaries



### 5.3.2 Site Specific Land Use Constraints

There are no site specific planning policies contained within the development plan or the emerging planning policies. There are however a number of other designations which affect the site.

Flood risk:

- The site predominantly falls within Flood Zone 1 where flooding is very unlikely and there is less than a 0.1% (1 in 1000) chance of flooding occurring each year.
- A small section of the site at the north-western corner is located within Flood Zones 2 and 3. Areas within Flood Zone 2 are likely to be affected by a major flood, with up to a 0.1% (1 in 1000) chance of occurring each year. Areas situated within Flood Zone 3 could be affected by flooding with a 1% (1 in 100) or greater chance of flooding each year.

Ecology designations:

- The western part of the airfield falls within the 400 metre buffer zone from Breckland Special Protection Area (SPA). Only development which will not adversely affect the integrity of the SPA is permitted within the buffer zone.
- A County Wildlife Site (CWS) is located to the West of the site, just North of the runway. CWS's are recognised by national planning policy as serving an important role in meeting overall biodiversity targets. Whilst CWS's are not protected by legislation their importance is recognised by local authorities when considering planning applications.
- There is an area of coniferous woodland to the western edge of the site adjoining the CWS. Priority Woodland Habitat areas are located adjacent to the northern and southern boundaries of the site.

Heritage:

- A scheduled monument (Mildenhall Roman Site) is located within approximately 150 metres of the site to the West. A scheduled Roman villa is also located to the North of the site.
- A number of listed buildings are located within the immediate vicinity, the closest being a Grade-II listed building located near the northern boundary.
- High potential for Roman and Medieval archaeological remains and other important heritage assets of archaeological interest.
- Historic England Eastern cannot be definitive about the site but whether there is anything that would be listed is a relatively high bar. The small domed building is considered to be the most likely candidate for listing.

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## 6. PRECEDENT CASE STUDIES

There have been a variety of recent RAF base conversions across the UK, with a number of these in Suffolk and the surrounding counties. These case studies offer a number of key lessons for RAF Mildenhall that need to be considered when looking at the commercial viability of the site and the potential use classes. There are a number of former military bases sites in close proximity to Mildenhall which have been subject to development plans - such as Northstowe, Alconbury and Coltishall. Whilst these sites are all located in close proximity geographically to RAF Mildenhall there have been a variety of different uses and this has resulted in different success rates linked to key themes. The following themes have been identified from the nine case studies assessed to draw on best practice and lessons learned on the planning, governance and delivery of sites of a similar scale and complexity:

### *Infrastructure and Accessibility*

There is a strong correlation between connectivity (accessibility by road/rail/air and data connectivity) and property market activity, occupier demand and values. Northstowe is a good demonstration project with proposed improved access to A14 and a road linking the site to the Guided Busway. Coltishall has had less fundamental change, partly because it is in a relatively isolated location to the North of Norwich. RAF Finningley is succeeding as a commercial airport (Robin Hood Airport), albeit struggling to fully justify upfront conversion expenditure, because it has a large passenger/consumer catchment.

### *Anchor Uses*

Large scale military and industrial sites lack market 'presence' because of former uses and often as they are in poorly functioning property locations. Establishing occupier demand at scale requires investment to promote the location and to attract 'anchor' uses and occupiers to establish focus and profile. Alconbury demonstrated that EZs can help. The effect of anchor occupiers was apparent at Discovery Park where Pfizer's decision to retain some presence helped establish a supply chain from which other occupiers could benefit.

### *Governance and Delivery*

Governance has been identified across many of the case studies as being critical. At British Aerospace (BAE) Hatfield there were clear lines across stakeholders including the local MP. At Whitehill and Bordon, Discovery Park and Shell Haven, clear governance was seen as critical. It is interesting to note that at two of the case studies the participants said, even though governance was an ingredient of their success, they would in hindsight have brought in an even clearer governance structure earlier.

### *Creating a Vision*

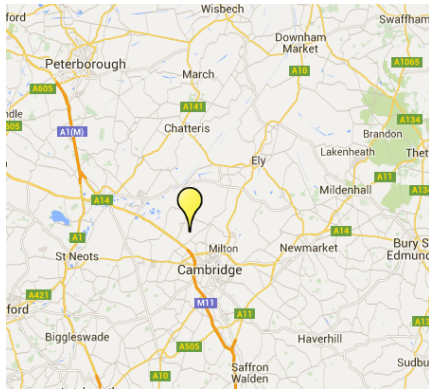
Any commercial organisation committing to the site will want to be certain that what is being offered will be delivered. Stakeholders (e.g. HCA/FHDC) will need to be seen as being 'on board' to deliver the Vision before occupiers take risks with their business. The redevelopment of the BAE Hatfield site was successful partly due to the early stage masterplan, visioning and public engagement. Alconbury is seeing dividends of sticking to its task of attracting mid tech occupiers. Conversely, the lack of clear vision at Manston contributed to its failure as an airport.

### *Early Project Planning*

Sites with the scale and complexity of Mildenhall require careful and early business planning. Shell Haven's success was partly due to early financial appraisals and market analysis to develop the exit plan as well as a detailed Technical Pack to support international marketing. The development of Whitehill and Bordon is showing that with effective planning and analysis of market demands and constraints a viable vision can be achieved, together with the benefit of quantifying the added value of upfront investment to create a strong business case.

These and further case studies are analysed in greater detail below. Appendix 3 provides a review of major strategic sites in Suffolk and Cambridgeshire and relates them to RAF Mildenhall. The purpose of this is to illustrate the challenges of the site compared to its peers and show the sort of conditions which will typically lead to improved viability.

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## RAF Oakington Barracks (Northstowe)

SITE LOCATION: CAMBRIDGE

SITE AREA: C.300 ACRES

STAKEHOLDERS: GALLAGHER ESTATES, HCA

### Summary:

- Largest new town since Milton Keynes
- 10,000 new homes
- Awarded EZ status

### History/ Challenges

- RAF base until 1993 when it became an army barracks.
- In 2000 the site was leased to the Home Office and used as an immigration reception centre until 2010.
- Currently a new town is being development under the name of Northstowe.
- Site needed clearing in order to be developed.

### Constraints

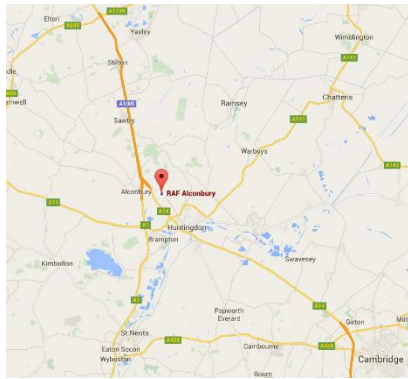
- Progress was slowed by market conditions and reportedly by a potential takeover of Gallagher Estates in the early stages of Phase one.
- Highways concerns in linking the new town to the existing road system was expensive initial infrastructure for the project. (Linking with upgraded A14). This limited infrastructure capped development housing development until it was completed.
- The speed at which house builders were operating.

### What was the outcome?

- Site is being promoted jointly by HCA and Gallagher as the two main landowners through a co-operation agreement.
- Site is being developed by a number of house builders.
- Currently the phase one development (including EZ) is underway for 1,500 homes.
- £30m contribution to provide community infrastructure in phase one.
- There 92 homes currently developed on site by Bloor homes.
- Outline permission for Phase 2 is under consultation.

### Key Lessons and Relevance to Mildenhall

- Access to good transport links is critical to development – the guided busway into Cambridge is now up and running.
- Even with a long term plan for transport infrastructure upgrades, achieving a quick pace of development is challenging.
- Consideration of Section 106 payments and appropriate road improvements will be needed for any large scale developments to address the wider highways impact.
- Fronting of community services to early phases of a development can improve viability.
- Strong community support and accessibility of information can help in delivery of a more suitable and supported design.



## RAF Alconbury (Alconbury Weald)

SITE LOCATION: HUNTS, CAMBRIDGE

SITE AREA: C. 1,420 ACRES

STAKEHOLDERS: URBAN AND CIVIC

### Summary:

- **5,000 new homes**
- **Awarded EZ status**
- **Situated on the junction connecting the A14 and A1**
- **Scheduled for closure by USAFE by 2020**

### History/ Challenges

- RAF base opened in 1938.
- USAFE ran.
- Runway and associated buildings returned to MoD control in 1995.

### Constraints

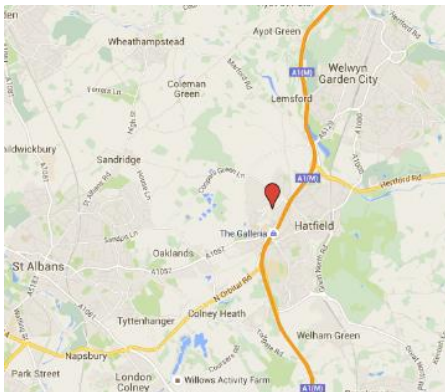
- Alconbury initially failed to successfully secure a commercial anchor tenant with a strong presence.
- The site has begun to attract significant new occupiers.

### What was the outcome?

- Mixed use development with community and service provision.
- Emphasis on EZ as a source of employment.
- Well connected to major road networks capable of attracting large business, with the added benefit of plans for a railway
- Attraction of highly skilled manufacturing, engineering and research companies such as, the University of Cambridge, ARM, Xaar.
- Currently 500 plots let on site. (House builders include Redrow, Hopkins Homes, Morris Homes and Small & Medium Enterprise (SME) house builders.)
- Trying to deliver 700 acres of green space.
- Large air base site scheduled for closure next to new Alconbury Weald with opportunity to expand development.
- There are currently a number of innovative companies on the site with IKO and MMUK due to move in shortly.

### Key Lessons and Relevance to Mildenhall

- Securing a commercial anchor tenant can speed development. Holding out for specific types of occupiers can take time. Packaging up and marketing to core sectors is critical.
- Significant time required to carry out effective site clearance and remove reinforced military buildings.
- The delivery of homes on a faster timescale can be achieved by diversifying building investors. This also helps to promote varying housing styles.
- Key transport links helps promote EZ.
- Other lessons include the importance of effective site clearance and the importance of site infrastructure.



## British Aerospace Airfield

SITE LOCATION: HATFIELD

SITE AREA: C. 800 ACRES

STAKEHOLDERS: WELWYN AND HATFIELD BOROUGH COUNCIL, UNIVERSITY OF HERTFORDSHIRE AND HCA.

### Summary:

- Large scale successful redevelopment of former aerodrome
- Maintaining of plane hangar in redevelopment
- Importance of the long term vision in developing a strategy
- Located between Welwyn and St Albans

### History/Challenges

- The site had accommodated private aircraft and an aircraft factory.
- 1978 merger resulted in BAE ownership of site for design and production of commercial aircraft.
- Redeveloped in the 1990's after BAE left.
- Initial idea for the space was large scale box industrial units. This lacked vision for the future.

### What was the Problem?

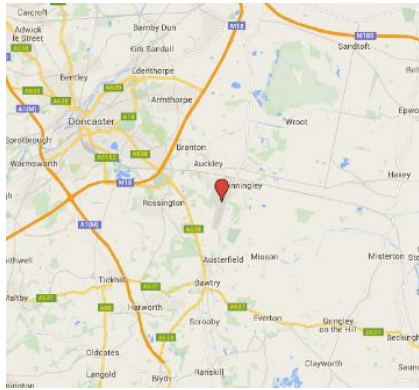
- WHBC and BAE agreed due to the size of the site a master plan was needed.
- This was in order to create the correct legacy for the site and mitigate the impacts from the site closure.
- The University of Hertfordshire was a key strategic partner who looked to form links with the site if there was re-development to a hospital. This fell through and created issues for their future vision.
- The vision changed to focus around mixed use.
- But there were issues over listed buildings and limited transport links.
- There were lots of stakeholders involved and the vision to 4-5 years to create.

### What was the outcome?

- Taking time to create the vision has resulted in successful delivery providing a Country Park acting as a buffer between Welwyn and Hatfield.
- The site has attracted large multi-national firms such as Ocado.
- A key strategic partner was The University of Hertfordshire.
- Only buildings maintained were the listed aircraft hangar (now a David Lloyd leisure centre).
- The site now employs 15,000 to 16,000 employees.
- 3,000,000 sq. ft. of developed business space
- 600,000 sq. ft. left to develop.
- University of Hertfordshire campus and accommodation.
- Sustainable School was developed with the County Council.
- 2,046 Homes comprising a mix of tenures.
- Shopping Centre.
- Large Leisure Centre.

### Key Lesson and Relevance to Mildenhall

- Key lesson is that creating the correct vision takes times and that not every stakeholders can achieve their vision for the site.
- But it is important to have the community and stakeholders on board in order to achieve a successful vision.
- Proper governance is needed to achieve a realistic vision and delivery.
- Importance of an existing property market base to build upon.



## RAF Finningley (Robin Hood Airport)

SITE LOCATION: SOUTH YORKSHIRE

SITE AREA: C.250 ACRES

STAKEHOLDERS: PEEL HOLDINGS

### Summary:

- Redeveloped into commercial airport
- Opened 2005
- Cost of £26m to redevelop

### History/ Challenges

- Home to Royal Flying Corps during World War II.
- During the Cold War it housed nuclear armed Vulcan bombers.
- Decommissioned in 1996 as part of defence cuts.

### Constraints

- Infrastructure upgrades were required.
- No immediate significant competitor airports but a dynamic and fluid position in terms of commercial demand.

### What was the outcome?

- Low cost air travel and rising passenger numbers increased the feasibility of the project.
- Building of new terminal and associated infrastructure to accommodate modern airport's needs.

### Key Lessons and Relevance to Mildenhall

- A large population base is key in developing a commercial, passenger airport.
- The positive climate for development of an airport (at the time of development) was crucial to success and justification of large expenditure in redevelopment.





## Pfizer Sandwich (Discovery Park)

SITE LOCATION: KENT

SITE AREA: C. 534 ACRES

STAKEHOLDERS: DISCOVERY PARK LTD

### Summary:

- Former site of Pfizer UK research laboratories.
- EZ status experiencing reduced rates.

### History/ Challenges

- Former Pfizer site announced for closure in 2011 within 18-24 months.
- Site largely equipped with scientific and research infrastructure.
- Purchased by Discovery Park Limited who repurposed buildings towards business and technology based industries.
- Large loss of highly skilled employees when Pfizer left the site.

### What was the outcome?

- Repurposed research and business centre.
- Well-equipped facilities offering high speed fiber internet to businesses.
- 650 Pfizer employees remained on park as part of the deal.
- Science and technology based industries prevalent on site.
- Amenity provisioning used as attraction for businesses to site.

### Constraints

- Loss of skilled labour within the area when Pfizer vacated the site given the lack of other similar employment opportunities in the area.
- Need to reinstate large amounts of space to similar types of industries
- The need to securing EZ status to attract business.

### Key Lessons and Relevance to Mildenhall

- Joined up, urgent response across government – set up Task force that reported its proposals to the Secretary of State for Business, Innovation and Skills with weekly updates.
- The impact of large scale relocation of any industrial can have a dramatic effect on the local employment market and result in a shortage of skilled labour. With any base closure the impact of this needs to be assessed and minimised.
- Retaining an element of the historical anchor on the site is critical to build confidence and attract occupiers.
- The existing use of any developments is potentially beneficial if repurposed to similar types of industry.





## RAF Coltishall

SITE LOCATION: NORFOLK

SITE AREA: C. 600 ACRES

STAKEHOLDERS: NORFOLK COUNTY COUNCIL

### Summary:

- Gained EZ status on 1 April 2016
- Numerous employment-generating uses
- Scottow Moor Solar Park

### History/ Challenges

- Redundant RAF base.
- Purchased from the Ministry of Justice by Norfolk County Council for £4.1m in 2013.

### Constraints

- Isolated location with a limited existing local market.
- The site stood empty for 6 years.

### What was the outcome?

- External consultants appointed to provide advice on marketing strategies and redevelopment potential of site going forward.
- Awarded EZ status on 1 April 2016 from New Anglia LEP.
- The site was converted into Scottow Enterprise Park encompassing light industrial uses, a large solar park and a cycle track; there has been limited conversion or re-development of existing buildings.

### Key Lessons and Relevance to Mildenhall

- Access and site location form important factors in determining use. This site although remote is located close to the A140 and within the Norwich hinterland.
- Determining the market is key as need to identify the level and scope of development.
- Here minimal development has occurred with many buildings being let in their original form.



## Whitehill & Borden

SITE LOCATION: HAMPSHIRE

SITE AREA: C. 250 ACRES

STAKEHOLDERS: EAST HAMPSHIRE DISTRICT COUNCIL, HAMPSHIRE COUNTY COUONCIL, DIO, HCA ENTERPRISE M3 LEP

### Summary:

- 250 ha of land to be released
- DIO engaged with the local authority – it acted independently and was commercially driven but was keen to know the local authority’s ‘wants and needs’

### History/ Challenges

- The site was originally the Army’s Defence School of Electronic Engineering.
- The base has been located in Whitehill and Borden for 100 years.
- The relocation released 250 ha of land including 150 ha of open space.

### Constraints

- Main road (A325) bisected site and separated from existing town centre.
- Existing town centre is not strong.
- Site is derelict with substantial amounts of large buildings, not all realistically capable of interim or permanent re-use.

### What was the outcome?

- The current proposal for the site is for 3,350 new homes, 5,500 new jobs, a new town centre and new schools. The protection of 150 ha of mature open space to be given public access after years of being ‘behind the wire’.

### Key Lessons and Relevance to Mildenhall

- Uncertainty over closure announcement (whole/part and timing) impacted speed of public sector response; once decision was made a phased closure was more manageable but upfront Section 106 (S106) negotiations would have been optimal. Important to establish effective relationship with the DIO and the HCA early.
- Clear governance through a Delivery Board was critical. In hindsight, the local authority would have wanted even clearer governance earlier.
- The DIO engaged the local authority in the disposal process including the development brief and procurement stages.
- Quantifying the added value of upfront investment helped to create a strong business case.
- The local authority’s preference for employment uses was challenged by viability constraints.
- ‘Scheme Promotor’ employed by the local authority but acting autonomously and fully resourced.
- Important to show evidence of delivery on the ground as early as possible.
- Developed a funding pipeline to de-risk infrastructure and influence government funding decisions.
- Created “Regen Co” to sell regeneration services to other local authorities.



## Manston Airport

SITE LOCATION: KENT

SITE AREA: C. 38 ACRES

STAKEHOLDERS: THANET DISTRICT COUNCIL

### Summary:

**Failed re-use of the site as a commercial airport focused on cargo and aircraft recycling**

### History/ Challenges

- Formerly RAF Manston.
- 6<sup>th</sup> May 2014 it was announced that the base would close.
- When the base closed, 144 jobs were lost.
- RiverOak put forward an initial plan to re-open the airport with a focus on cargo and aircraft recycling.
- This partnership between RiverOak and Thanet District Council was unsuccessful.
- Thanet District Council is now seeking partners to indemnify them for a compulsory purchase of the airport.
- There has been significant local campaigning to retain some form of aviation use on the site.

### Constraints

- A lack of investors/partners in order for a compulsory purchase to be put together.
- Physical isolation from major population nodes in the South East of England.

### What was the outcome?

- Thanet District Council carried out a soft marketing exercise to find a partner.
- A Prior Information Notice looking for expressions of public interest was published in January 2016.
- Since then there have been 5 interested parties that have applied, from which, three submissions have been chosen.
- Stone Hill Park submitted a formal planning application for redevelopment in May 2016.
- Thanet District Council has been told that an appeal hearing for planning consent will not go ahead and instead an enquiry will be carried out.
- Simultaneously RiverOak (who want to re-establish the site as an airport) has applied for a Development Consent Order on the basis of the airport being a project of “national significance”.

### Key Lessons and Relevance to Mildenhall

- Marston demonstrates the importance of having a clear vision for any site.
- It also demonstrates the importance of fully understanding the potential of the site and the wider economic and commercial drivers.
- Manston has caused significant local concern and shows the importance of garnering support for any vision from key stakeholders and the public.



## Shell Haven

SITE LOCATION: STANFORD LE HOPE, ESSEX

SITE AREA: C. 1,500 ACRES

STAKEHOLDERS: SHELL PLC, THURROCK COUNCIL, PORT OF LONDON AUTHORITY, DUBAI PORTS WORLD, NETWORK RAIL

### Summary:

- 643 ha
- Complex disposal from surplus site
- Safeguard critical retained operations
- Effective stakeholder engagement
- Non-standard property

### History/ Challenges

- Managing complex disposal of one of the UK's largest brownfield sites.
- Shell needed a market solution for a former refinery whilst safeguarding some operations.

### Constraints

- The disposal process needed to ensure disposal of the surplus land, transfer of environmental liability, continuation of some operations and co-ordination between the sales process and site decommissioning. The optimum solution required an international market perspective.

### What was the outcome?

- A major redundant brownfield site is being returned to sustainable future use.
- Significant improvements to local and national infrastructure and 10,000 jobs expected to be created.
- Remediation costs were minimised by being undertaken as part of development work and designed to actual next uses.

### Key Lessons and Relevance to Mildenhall

- Multi-disciplinary team developed detailed financial appraisal/cashflow projection; market analysis/intelligence to develop the exit plan; market context to brownfield and environmental challenges; Technical Pack to support international marketing
- Effective stakeholder engagement (including with local councilors and the MP) was important given the potential impact of closure on the local economy - Shell's willingness to seek a workable long term solution was a positive driver of planning policy.
- The approach of securing a long term development partner meant that total receipts to the landowner significantly exceeded the sum that would have been secured from an early outright sale.

## 7. SECTOR ANALYSIS – MARKET ASSESSMENT OF LAND USE AND AVIATION OPTIONS

### 7.1 Land Use Options – Market Assessment

#### 7.1.1 Overarching comments

Section 7 analyses and assesses the property market potential of various land uses from the perspective of market demand and the potential for land use to be viable from a standard, property market perspective. Clearly there are additional benefits that arise from some uses which are not captured in a standard property market assessment (high level GVA analysis seeks to address this and is covered in Section 8). The scale of RAF Mildenhall means that it is highly unlikely that a single land use is going to utilise the full area.

Therefore, whilst the assessment relates to the potential for individual uses, a mix of uses at different scales is likely to provide the most optimal solution; the exception to this is if the runway is to stay and the focus of the site continues to be aviation.

Whilst a mix of uses is likely, given the need for the site to establish a dominant position as an employment base by generating demand, an ‘anchor use’ or catalytic occupier is likely to be required in the early stages of development. This does not imply that the ‘anchor use’ will be the only, or indeed the largest, land user but it will be the focus and create a ‘brand’ for the redeveloped site.

#### 7.1.2 Commercial

##### Economic Base

The economy surrounding Mildenhall is particularly focused towards the Primary Services and Accommodation & Food sectors.

Primary Services predominantly link to agriculture and farming which is unsurprising given the location of Mildenhall in a predominately agricultural area with a large hinterland. The number employed directly in Primary Services is also boosted by the influence of Newmarket which is in close proximity to the site creating a large base of employment around the horse racing industry.

Accommodation & Food is the second largest employer in the area and this has some links to the Primary Services sector; some producers attract tourist interest which has led to growing numbers in recent years as shrinking profits in solely agriculture have led farms to diversify and expand. This has led to a growing tourist industry and accounts for high levels of accommodation provision. These numbers are also likely to be skewed given the proximity to Center Parcs, which is a key employer in the District.

##### Offices

Across the UK, despite uncertainty in Q1 2016 demand has been relatively stable; whilst London demand was strong South East office take up was down although pre-let activity remains strong. Yields have remained broadly stable across the office sector (C&W Office Market Snapshot, Q1 2016) but investment activity has eased in the wake of the Brexit decision and remains uncertain.

There is limited existing demand for traditional office space within the Mildenhall area with few major existing occupiers and no obvious economic cluster or drivers for significant office space demand; this suggests that any scheme will need to create its own market.

There have been a number of EZ announced in 2015/16, including the Cambridge Compass EZ which incorporates five separate sites around Cambridge and includes the Haverhill Research Park. An existing EZ is in place at Alconbury near Huntingdon; this is a significant distance from Mildenhall and in much stronger strategic position (at the A14/ A1 (M) junction) so there appears to be limited potential to link the sites within an enlarged EZ.

Given the assumed IT infrastructure at the site, C&W has considered the possibility of call centres as a viable commercial use. Whilst this is a strong market in the UK the clusters of call centre tend to be away from the South East and Eastern Regions where land costs are highest. The viability on the long run of this sector has been brought into question with a report conducted by 'Contact Babel' which analyses the market from 2016 to 2020, finding that outbound calling activity has declined considerably from 2004 and rising inbound interaction are via email. We consider the potential for this sector at the site to be low.

If commercial office space was successfully delivered at Mildenhall, it could provide skilled employment opportunities, minimising the negative employment impact of the base closure. This would require public sector support which would likely help mitigate planning risk, subject to overcoming viability challenges and infrastructure requirements that would be present.

In planning terms, commercial office space would likely be welcomed as a use class and therefore draw medium to low planning risk overall. A likely constraint however would be in relation to implementation and feasibility, e.g. traffic impact risks.

Aside from likely significant infrastructure requirements (to provide access given the existing position where a large number of staff reside on site), an employment led development would face the challenge of drawing in investment and demand from occupiers. Given that demand for any significant office based use in the area is undemonstrated, the pre-requisite for an office scheme would be having a strong anchor tenant which could provide a catalyst for other occupiers and give credibility to the site.

The potential of the site to become a diverse employment area is constrained by the lack of a significant existing market and therefore building on the economic strengths of the area will be critical. Figure 2 illustrates the economic profile of the area now and illustrates the strength in 'Primary Service' (e.g. agriculture and farming) and the 'Accommodation & Food' (e.g. hotels, holiday centres and restaurants) sectors.

### **Public Sector Intervention**

West Suffolk Council aspires to attract occupiers with a greater innovation and development focus in tandem with the more traditional sectors. This is being achieved through a number of mechanism with continued support of infrastructure growth along the A11 corridor and wider support from two LEPs. The New Anglia LEP (set up in 2015) is promoting this agenda and has set out a Strategic Economic Plan in which they aim to support the growth of 95,000 new jobs and 10,000 new businesses by 2026; thus driving up employment and lowering the productivity gap between the New Anglia LEP area and the wider UK by 2026. The Greater Cambridge Greater Peterborough (GCGP) LEP is focused on driving forward sustainable growth for the region creating linkages between local businesses, education providers, third parties and the public sector. GCGP looks to focus on Mildenhall, Alconbury and Molesworth to help assist future development and create a positive impact on the economy in the long term.

The LEPs have developed a clear focus for which sectors they consider would support growth and innovation within West Suffolk. For the New Anglia LEP these include advanced manufacturing, agri-



tech, life sciences across the food and health sectors, ICT and offshore energy sectors. These areas have been selected by New Anglia LEP based on their existing presence in the area:

- Existing ICT presence linking with Adastral Park and manifestations in Norwich and Ipswich.
- Food and health - existing network at Norwich Research Park.
- Offshore energy given existing wind/solar farms.

In terms of more prevalent existing sectors, the New Anglia LEP recognises that given the breadth and depth of agricultural firms in the area, agri-tech could be a viable option offering the opportunity to create a centre or cluster of research and innovation.

The focus of GCGP typically requires linkages with educational institutions or other existing firms. Furthermore regardless of which sector is selected and developed the LEPs recognise the importance of public sector procurement/ engagement in order to stimulate innovation and promote the strengths of the area in the UK and internationally. Newmarket and District Chamber of Commerce note that RAF Mildenhall present an opportunity to create a business hub and act as a magnet for the wider area (Briefing Note, 2016).

### **Industrial**

C&W's research suggest that across the UK industrial property market there has been an ease in occupier activity in Q1 2016 given several factors including a slowdown in the global export economy and Brexit uncertainties.

Despite some uncertainty in the market, broadly speculative development is on the rise, especially across the South East, Midlands and North West, as developers look away from the traditional hubs of the M1 and M6 corridors.

Pent up demand for prime buildings continues, with the strongest growth expected in non-grade A markets (C&W Industrial Property Times UK Industrial, Q1 2016).

If industrial space was successfully delivered at RAF Mildenhall then it could generate significant employment opportunities and reduce the impact of the base closure on local employment (however, the skill requirements of the respective employment opportunities may differ). The planning risk associated with a small scale industrial led proposal would be relatively low considering the potential to link to the existing Mildenhall Industrial Estate to the North of the town centre which has approximately 20 occupiers currently.

Potential demand is demonstrated in part by a local timber merchant taking 120,000 square feet (sq ft) at the Galaxy Warehouse (July 2015), demand for industrial space in the immediate area is strong with some growth potential. Specifically, two local agents have commented on the relative shortage of industrial space in the wider region and the area's potential:

- Bidwells reports "...a severe shortage of available large warehouses in the Eastern Region".
- Carter Jonas reports "Mildenhall's location in close proximity to the A11 makes it a great location and central to the Eastern Region. Accessibility has also been greatly improved now that the A11 is fully dualled".

Whilst the dualling of the A11 has improved accessibility, there are still significant infrastructure constraints on the site including the relatively narrow existing roads linking to the A11 and the potential limitation on heavy goods traffic through Mildenhall. FHDC is seeking to address these by identifying improvements to the A11 around Mildenhall as a key target.



Industrial led development would likely have lower infrastructure, planning and upfront investment requirements on the site (although, off site requirements maybe significant) compared to residential or commercial uses. Industrial markets are typically less multifaceted than commercial/office markets; forecasting demand is relatively straight forward, lowering the viability risk of an industrial led scheme.

The highest risk to the sites' potential to provide for the local industrial market is transport constraints, limited aggregate demand and growing competition from other sites. That said, C&W's consideration is that these risks are relatively low for Mildenhall.

### **Construction Industry**

The economic data in Figure 2 shows the construction industry to be a leading economic sector in THE District. Discussion with the New Anglia LEP has highlighted that though the construction sector in Forest Heath is comparatively large in regional and national terms, it is by no means excessive especially when compared to other local authorities across the region.

The research from the New Anglia LEP highlights that "smaller local economies, especially of a rural nature, tend to have a strong construction sector, which is mainly focused on small, locally focused construction provision (i.e. local tradesman providing local services)". Further to this, the GCGP has also been investing in the construction industry through working with the Construction Industry Training Board (CITB).

The impact on this sector from the closure of RAF Mildenhall is hard to assess but the New Anglia LEP suggests that local tradesman from within the District may have found work on the respective airbases. With greater number of forces at RAF Lakenheath there is likely to be demand for construction services with a short term shift in employment.

#### **7.1.3 Retail and Leisure**

##### **Retail Centre**

Across the UK volumes of retail sales grew year-on-year by 5.2% in January 2016 despite consumer confidence being impacted by Brexit and the Eurozone crisis.

On the whole occupier demand increased led by primarily food and clothing retailers. Within the UK 188,000 sq m of new shopping space was delivered onto the market in 2015. This trend is expected to continue. Whilst investor appetite is strong for primary centres it has waned for secondary locations (C&W Retail Market Snapshot, Q1 2016).

When successful, a retail led scheme has the potential to generate significant financial returns as well as employment opportunities. In terms of new hubs outside of a town centre where a retail led anchor scheme has been successful, this is best illustrated by Bicester Village retail outlet, which, despite a location away from any existing hub, has been very successful in attracting significant demand from occupiers.

The creation of a major retail destination could minimise the impact of the closure and would also generate additional employment (however, the skill requirements of the respective employment opportunities may differ).

Creating a retail destination would require both significant upfront capital investment and confidence in the locations potential to draw catchment given local market dynamics and the presence of competition from competitor towns/ cities. A major space occupier/ anchor would likely be an essential catalyst required for this kind of scheme.

Planning would be challenging along with limited current market demand as a result of the close proximity of Bury St Edmunds and Cambridge, both of which have large retail centres and a strong existing market and catchment capture. We understand that there are also plans afoot to improve the retail offer in Newmarket as well.

When effective, retail centres can result in high returns on investment and stimulate economic wealth to the immediate and wider local area.

C&W consider that a Bicester Village style outlet centre is unlikely to be viable given the lack of visibility to a major road and potential concerns over the limited size and strength of the catchment. The nearest major outlet centre to Mildenhall is Braintree which is an institutional standard scheme of significant scale; a more realistic scale of scheme for this location is represented by the Spalding outlet scheme in Lincolnshire which has a smaller catchment and less convenient location.

### **Hotels**

Whilst hotel use would provide new employment and reduce the impact of the base closure, we have not identified a market of any significance in this regard. The provision of hotels is likely to be linked to the potential of the site for other uses (e.g. tourist attractions).

### **Conference Centres**

In order for conference centres to be viable there typically needs to be the presence of associated activity which offers a strong platform for new businesses. Thus, employment uses would directly link with the conference centre. Likely sources of demand can be broadly divided into two categories:

- Facilities linking to another occupier: this includes building off the back of another occupier on the site for example a science park to offer facilities such as car parking, hotel accommodation for attendees, temporary flexible office space, recreation facilities etc. The potential for this development is limited to the needs of employees and customers of the new anchor. This is the most typical model of development for out of town centre conference facilities.
- Use of an exhibition centre as a focal point to build the prestige of a location and catalyse further development. This targets potential users of the exhibition facility to locate within the same development (business use), or to become a focal point for community social activity (leisure use). This gives the site a more permanent industrial base, with UK examples including: Torquay, where the exhibition centre is combined with a housing development, providing a community area; and the Aberdeen Exhibition and Conference Centre which is adjacent to out-of-town business park development focused on the oil and gas industry and hi-tech engineering.

Demand for the former is led by user-numbers at the anchor occupier's facility (a market which is subject to significant fluctuations) whilst the latter is determined by local economic conditions, positive growth forecasts and availability of suitable space in the vicinity.

There are a limited number of conferences centre's within close proximity of RAF Mildenhall with the largest centre being at Center Parcs. This has a large conference centre; 'The Venue' accommodates a range of events and team building activities and caters for up to 450 delegates with flexible meeting spaces. In addition to this they offer a range of leisure facilities and team building activities.

There are also a number of centres in Cambridge linked to the university and accommodating a range of conference sizes. Overall, we consider that the capacity for a conference centres at RAF Mildenhall is linked to any potential anchor occupier as we are not able to identify unsated demand in this area for additional conference facilities (particularly given the range of facilities in and around Cambridge).

Clearly, this is dependent on a suitable anchor tenant that demands this type of space in addition to their other facilities.

### **Leisure and Tourism**

The Forest Heath Local Development Plan 2010 to 2015 shows that key sectors of employment within the local leisure economy include horse racing, industrial, agriculture, food processing and warehouse industries.

28% of local residents are currently employed in the leisure industry of which 20% relates to horse racing (Newmarket). Located in nearby Elveden and forming part of Thetford Forest Park, Center Parcs is the most significant local leisure employer.

Further to this, the Forest Heath and St Edmundsbury Local Plan (Joint Development Management Policies Document 2015), states the current interest of both local authorities in expanding tourism and tourist related leisure as a key generator of employment and a revenue driver for the area.

There is a particular focus from FHDC in developing sustainable tourism. Agriculture accounts for a high proportion of local employment, therefore 'farm diversification' may present an opportunity to allow insurance of long term viability and provide rural employment, building on the existing workforce skill set. However, the typical focus of this diversification (farm shops, leisure, recreation, tourism, sporting uses and equestrian facilities) is more attributable to individual farms as opposed to major strategic sites such as RAF Mildenhall.

Pre-existing amenity value is an important attractor for leisure schemes in non-urban environments; the site's suitability is limited by its flat and un-dynamic topography with no particularly obvious point of interest.

The point of interest would need to be generated by the occupier and use as opposed to being something which is already there and can be built on. Potential forms of leisure which have significant land requirements include theme parks, holiday destinations, reservoir/ lakes, race track, safari parks and adventure farms. We consider that these options require a greater degree of pre-existing amenity value or a more strategic position in terms of the relationship to major population centres.

This restriction can be overcome where sites have access to significant population centres and easy road access. For instance, Paramount are currently promoting a sizeable new theme park near Dartford/Gravesend which has limited amenity value but is strategically placed close to the M25 and Ebbsfleet railway station with easy access from the London conurbation.

A leisure based approach may benefit from the existing market demand drawing from leisure customers of Center Parcs, Bury St Edmunds and wider Cambridgeshire but would need a concept which played to the sites' strengths; in relation to Center Parcs, this tends to internalise its consumer base which limits the spill over effect and ancillary uses.

With regards to planning, a new leisure facility is likely to be viewed favourably given the regenerative nature of leisure development and would boost employment and create a draw to the area.

### **Sports Based Leisure**

The Sporting Village concept is relatively new to the UK, with only a few private developers active in this sector. Most existing sports facilities (such as leisure centres and sports pitches) within the UK are funded by or subject to a partnership with the Local Authority and with an emphasis on:

- Physical and economic regeneration in areas with high levels of multiple deprivations

- Providing a focus and acting as a catalyst for other development
- Public sector realising the value of a land asset through the “enabling” development

Most major developments of sports pitches with associated community facilities are brought forward with the Local Authority having a major input into the development, often as land owners.

Due to funding cuts since 2010 and limited Private Finance Initiative (PFI) opportunities, strategically analysing the inputs of both the public and private sectors is critical in order to achieve a viable entity.

We are not aware of any active large scale occupier requirements but an example of such a use is St Georges Park in Staffordshire. This is the English Football Association’s (FA) national football centre and is set out on a 330 acre site near Burton upon Trent. The FA bought the site for £2m in 2001 although it wasn’t developed until 2012. The location driver for the FA was a central position within the country (and suitable ground conditions). The site has commercial uses including two hotels.

Proposed/ delivered sites include:

- Basildon Sporting Village
- Belle Vue Sports Village, East Manchester
- Surrey Canal Sporting Village, London
- Cambridge Sporting Village

In relation to the Cambridge proposal, this is backed by Grosvenor Developments, the Universities Superannuation Scheme and Trumpington Meadows Land. This is awaiting the submission of planning but includes significant residential content (which ensures viability and enables the funding of other uses):

- Grass pitches
- Sports Hub comprising community and leisure uses
- An indoor artificial 3G sports pitch
- Outdoor floodlit cycling centre
- 5 fenced and floodlit all-weather artificial 3G turf pitches
- 2 fenced and floodlit sand-based/dressed artificial turf pitches
- Residential development of 520 dwellings

### **Amenity and Social Infrastructure**

Whilst being favourable in terms of market demand as there is a shortage of social infrastructure across the country, this is unlikely to promote sustainable new employment opportunities or to create land value.

Therefore, whilst this may form an element of the proposal it is unlikely to be the main driver for redevelopment.

#### **7.1.4 Public Sector-Led Occupations**

C&W has explored the possibility of the site providing a future location for local or national public sector led occupations. As such, the following ‘occupational sectors’ have been considered:

- Local Civic Hub

- Regional Office Hub
- Local Health – Primary Care
- Regional Health – Acute
- Education
- Science & Innovation

### **Local Civic Hub**

Plans for a local civic hub are already progressing in relation to a public sector controlled site in Mildenhall town centre.

The 'Mildenhall Hub' (the Hub) is a partnership project that was successfully awarded a place on the Government's One Public Estate (OPE) programme in 2013. The Hub will provide a catalyst for the consolidation of a range of public organisations within Mildenhall under 'one roof' in order to improve public access, service delivery and efficiency. The vision for the Hub is that it could contain the headquarters of FHDC (and office space for its shared West Suffolk workforce) and a base for staff from Suffolk County Council, CAB, the NHS and the DWP, and also provide Suffolk Constabulary's and Suffolk Fire Service's facilities in the town. It could also combine all of the town's post-11 education (and some of its primary and preschool provision) with modern and spacious leisure and sports facilities. In future phases, linked to the future growth of the town and surrounding area, it will offer the scope to expand and integrate health provision with other public services, directly addressing Suffolk's health and wellbeing priorities. As well as saving taxpayers' money, the proposed co-location of different agencies at the Hub will also open up exciting new opportunities for joint working, particularly around training and skills.

Works to the Hub are due to commence in late 2017. The Hub will, therefore, be fully operational before the closure of RAF Mildenhall. The design of the Hub is taking into account the growth in demand for public services that will arise from future population concentrations arising from a redevelopment of the RAF Mildenhall site.

### **Regional Government Hubs**

At the time of writing, a 're-design' of the government's central civil estate is progressing through the creation of Regional Hubs.

Following the November 2015 Spending Review, in early 2016, the Cabinet Office outlined plans to significantly reduce the size of the government estate over the next decade. The GPU's "State of the Estate" report suggests that the total number of buildings occupied will fall from 800 to under 200 by 2023 and departments will be expected to share office space within 18-22 multi-departmental hubs across the UK. The exact locations of the regional "hubs" are yet to be announced but will be close to good public transport links. The programme will enable "flexible, smarter and mobile working" enabling a reduction of civil servant space requirements per person from 8 sq m to less than 6 sq m.

In spite of the Cabinet Office proposal, HM Revenue & Customs (HMRC) had already announced its plan to close all 170 of its offices across the country and establish 13 new regional tax centres under the Building our Future programme. The new regional centres will reportedly accommodate between 1,200 and 7,500 staff each and be supported by four specialist offices. The majority of the proposed estate re-alignment and modernisation will occur over a 5 year period. The hub locations have yet to be confirmed, though HMRC has confirmed coverage as follows: London, South East and East of England (Stratford and Croydon); East Midlands (Nottingham); West Midlands (Birmingham); North East (Newcastle); North West (Manchester and Liverpool); Yorkshire and the Humber (Leeds); Wales

(Cardiff); Northern Ireland (Belfast); Scotland (Glasgow and Edinburgh) and South West (Bristol). East Anglia is not a preferred location for HMRC.

### **Local Health – Primary Care**

C&W has engaged with NHS England and the CCG to discuss GP and primary care requirements and any opportunities related to the potential future development of RAF Mildenhall. As stated above, the Mildenhall Hub is providing an opportunity to integrate health provision alongside with other public services and a small surgery is likely to be relocated within the new facility. The redevelopment of RAF Mildenhall will undoubtedly give rise to additional primary healthcare facilities. As a general rule, for every 1,750 patients some 120 sq m of additional GP/community health care space is required, though this will be influenced in part by the government's move towards a 7-day week. As an indication, 5,000 new homes will lead to a requirement for a decent sized practice (assuming 2.3 new patients per household). Overall, however, future primary care requirements will not be of a significant enough scale to influence the overall characteristics of a redevelopment of the site.

### **Regional Health - Acute**

West Suffolk Hospital is located within a 45 acre site on the edge of Bury St Edmunds, 18 miles to the South East of RAF Mildenhall and a 30 minute drive. The Hospital has c. 430 beds open at any one time and serves a population of around 275,000 within an area of approximately 600 square miles. C&W contacted the Trust with a view to understanding its future operational requirements and estate strategy and whether RAF Mildenhall may represent a future opportunity.

The Trust is committed to providing an ongoing presence within Bury St Edmunds. However, as the current site is over 40 years old, with increasing backlog maintenance and design life issues, a Strategic Outline Case is being produced to seek approval to the re-provision of a new facility as part of a health campus at Westley. If approvals are forthcoming within the next 5 years, a new Hospital is unlikely to be fully functioning until 2030, though delivery would be phased. In the meantime, significant health uses as part of a future redevelopment of the RAF Mildenhall site are considered to be highly unlikely.

We consider that Academic Health Science Partnerships are unlikely to be an option for RAF Mildenhall given that they do not have their own funding and rely on NHS and university partnerships. As per earlier commentary, we see limited potential for Hospital use on the site or large scale educational uses apart from those linked to the aviation sector.

### **Education**

C&W's research suggests that in the case of RAF Mildenhall, large scale education uses have limited potential. In order for large scale education to present a viable option, it would need to build on the back of an existing specialisms/skill set in terms of the local economy.

The crux of the location choice for major education providers is links to employers and a specific cluster around which a foci can be created. For instance, whilst we understand that the University of Suffolk has a number of campuses across the County, the driver of the location for additional centres (from them specifically or other organisations) is likely to focus on the ability to partner with others as opposed to geographical requirements.

Given RAF Mildenhall's current link to aviation the most obvious potential is for an educational base centred on aviation – building on the existing site anchor/hub is likely to prove the most deliverable educational option. Aviation is a specialist field and therefore creating a new standalone education hub for this would be challenging, it would be more feasible to link with an existing institution creating a new offering. Educational facilities currently focusing in aviation include:

- Norwich Aviation Academy - a collaboration between City College, the University of East Anglia (UEA) and KLM engineering.



- Aviation firms such as Marshall whom have their own in house training.
- Newcastle Aviation Academy - a study for all "air side" services linking local colleges and the local authority.
- Kingston University is a world leading centre for aviation with a number of satellite centre around the UK.

We are now aware of any current, major requirements for new campus/ relocations from the region's universities at Cambridge and Norwich. In relation to schools, we are not aware of any national initiatives relevant for this area and future requirements are considered to be limited to serving the growth in the residential community.

In terms of the potential aviation educational opportunity at the site:

- Given the current use of RAF Mildenhall there may be the opportunity to utilise the site (especially the runway and other aviation facilities); given the USAFE presence at the base there may also be the opportunity to create links with US educational institutions focusing on aviation.
- This is supported by Newmarket and District Chamber of Commerce who suggest that there is potential to develop an aircraft legacy on the site by building a centre of excellence for specialist aviation support. Their briefing note further suggest this could form part of a larger hub attract wider business uses.

### **Science and Innovation**

National Science – the site could lend itself to major science initiatives (e.g. spaceport, CERN type facility). We are not aware of any proposals at the moment. The potential for the spaceport is within the aviation sector commentary.

Innovation/ science parks – there is limited potential given the distance from the M11 corridor and Cambridge (no innovation/science park of scale has been delivered at such a distance to Cambridge). If a facility could be found to be viable and deliverable, it would operate at a number of levels:

- Major innovation campus/ research institute e.g. satellite of the agri-tech/ food science/ life science clusters at Norwich and Cambridge.
- Innovation use related to aerospace.
- General Science Park.
- Smaller innovation centres integrated into employment site.
- Extending the 2 multi-site EZs in the area to include Mildenhall using their technology themes – Cambridge Compass EZ and Space to Innovate, New Anglia EZ. Or getting a new dedicated EZ for Mildenhall with a technology theme.

Predominantly due to science park take up, Cambridge's total take up in 2015 amounted to 1.1m sq ft. It is considered that large scale parks will continue to draw occupiers in the future as the park expands. This, alongside the diminishing supply of built office space, and resultant 'steep rises in rents (expected to climb to £31.50 by the end of 2016) may change the profile of the central zones, with incumbent occupiers having to re-locate', thereby pushing potential demand higher for complementary parks further from Cambridge. Supporting this, bodies such as the Cambridge Compass EZ look to draw benefits and employment out of Cambridge and re-distribute across the wider sub-region. Some success in this regard is now evident in Ely.



Major science campuses need an anchor in order to establish front end demand, this would typically suit a university, research organisation or science based large business. Smaller scale innovation could be grown more organically if the site benefits from EZ status.

Further afield to the District, the clear leading existing employment anchor in the wider sub-region is Cambridge University and the science cluster which has emerged around its periphery.

Specific commercial developments outside Cambridge City Centre include Cambridge Science Park which has established a symbiotic relationship with the City Centre. Cambridge Science Park is unique, with far reaching ties to knowledge and educational functions in the UK and Europe, therefore tapping into demand from niche sectors beyond the scope of the pre-existing commercial market of Cambridge. It establishes and stimulates demand in the wider area and exists synergistically with the pre-existing Cambridge market. Other science parks in the vicinity include Babraham Campus located South of Cambridge close to the A11 focusing on basic cell and molecular biology and Chesterford Research Park located South of Cambridge in a relatively remote location but with access to the M11 focused on life sciences and pharmaceuticals.

Cambridge's polycentric nature (in terms of employment areas) may present an opportunity for Mildenhall to link to existing nodal commercial centres such as the science park and other local enterprise centres in the wider area.

However, given the significant distance to Cambridge, we consider that in order to further stimulate demand and benefit from the existing network of commercial centres, Mildenhall would likely need to engage with alternative occupier markets which are not already represented in the wider Suffolk and Cambridgeshire area in order to establish a point of difference.

This sort of development is likely to require significant public sector support to become established and returns on investment would likely be back loaded. In order to be viable and potentially secure long term high returns, an anchor would likely be required in order to attract a blend of occupiers and to establish an early differentiator.

In order to achieve any of these commercial uses RAF Mildenhall would require continued political support in the form of infrastructure and finance. With the regional infrastructure focus currently predominately focused along on the Cambridge-Stansted corridor (with other focuses around major centre such as Ely), there would need to be a shift in addressing the wider infrastructure needs in West Suffolk to increase viability in the long term for RAF Mildenhall (Briefing Note, 2016).

### **7.1.5 Housing**

#### **Market Housing**

The housing market in Mildenhall and the wider District is relatively slow when compared with the wider Suffolk area. Research on Cambridge and the wider market shows that in March 2016, the District had the lowest number of sales in the wider Suffolk and Cambridgeshire regions over the last 12 months (Cambridge FHDC Update, 2016). In terms of actual sales completions, the District recorded 57% in this period - one of the highest in the Cambridge sub-region (Housing Market Bulletin, May 2016). Part of the reason for this difference is fluctuations in Total Sales Volumes; the Land Registry data shows continuing fluctuations in total sales volumes for the District from 2014 to 2016. Average house prices across the District have remained relatively static with a small increase on January 2014 levels to May 2016 (£161, 000 up to £196, 000) based on Land Registry data. The Land Registry data shows that Mildenhall achieved an overall unit price of £172,000 compared to £175,000 in Beckrow, £158,000 in Lakenheath and £218,000 at Red Lodge.

Whilst there is local demand and the Mildenhall housing market is relatively strong, long term and large scale development will require additional draws in order to generate a deeper level of demand and achieve scale and a viable development. The District offers greater affordability than many other areas in the Cambridge sub-region.

New economic drivers in the area, such as greater employment opportunities or improved transport links to Cambridge could attract buyers priced out of Cambridge which has witnessed recent high price growth (over the first 3 months of 2016 this reached 4.2%). After London, Cambridge has the highest average house price at £491,000 versus a £275,000 UK average. This offers an opportunity for Mildenhall to capture demand from this market as rising prices in Cambridge push demand into hitherto more peripheral locations such as Mildenhall, thus supporting wider regeneration.

*Forest Heath District and Mildenhall demand projections*

The average household size in West Suffolk is 2.3 people (Forest Heath District) or 2.4 people (St Edmundsbury) whilst the average for England average is 2.4 people (Census, 2011).

Between 2001 and 2011, the number of households in the District increased by 4.1% and in St Edmundsbury by 8.5%, compared to an England and Wales average of 3.4% (Census 2011).

The Strategic Housing Market Assessment (SHMA) identified the full, objectively assessed housing need in the District (between 2011 and 2031) is 6,800 dwellings (equates to 340 per annum (pa)). This figure is based on demographic analysis and includes market and affordable housing needs. C&W’s experience is that 340 unit’s pa is relatively high for a secondary market location. These forecasts do not consider the full and objective need, and due to this, the figures do not directly link with the NPPF in establishing an overarching housing requirement figure. The current Market Signals and Objectively Assessed Housing Need (OAN) paper suggest that previously land supply has kept pace with demand but this could be contested given the relatively high rental levels from the USAFE base skewing the market. The latest household projections published by DCLG in February 2015 forecast an increase in the District of 5,900 households in the period 2011-2031. This falls in line with the wider East of England Forecast model – 2014 research forecasts demand for an additional 5,200 homes from 2011 to 2031.

The DCLG review highlights that the current OAN 6,800 dwellings target with 27% affordable housing only produces 1,836 affordable units when the need is 2,638. The review suggests that FHDC could consider lifting the provisional target above 6,800 dwellings (Market Signals and OAN, 2016). The SHMA supports the 6,800 figure, suggesting that whilst the current market position appears to point to a much lower requirement, the figures are derived from the Office for National Statistic (ONS) population projections and therefore can only provide the starting point for estimating housing need (West Suffolk Council, 2014).

*Forest Heath District and Mildenhall supply projections*

FHDC (West Suffolk Housing Appendix A and FHDC update 2016) is targeting the delivery of 10,100 dwellings between 2011 and 2031. To put this in perspective, the 2012 to 2013 period saw 364 homes built compared to the circa 500 unit’s pa which this target reflects.

**Table 2 - Identified FHDC Population, Jobs and Dwellings projections to 2031 (from 2011)**

Population	Jobs	Dwellings	Ratio of new jobs to dwellings
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15,042	5,200	6,800	0.8
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### Emerging Residential Sectors (Private Rental Sector, Custom Build, Retirement, Extra Care)

There is limited information available on emerging residential sectors. West Suffolk Housing Strategy Appendix A – states a priority for West Suffolk is to support the provision of specialist housing. In relation to retirement and Extra Care housing:

- West Suffolk Housing Strategy Appendix A – states smaller units are demanded as the need for housing that supports the elderly increases.
- By 2031 over 25% of West Suffolk’s population will be over the age of 65.

### Affordable Housing

Forest Heath District Housing Strategies 2008-14 states that 831 new affordable homes were delivered, representing an investment of around £60m by the registered provider partners, the HCA and private developers.

FHDC Core Strategy CS9 suggested 30% affordable on schemes of 10 plus units.

The residual affordable need (2,638) is 39% of the residual market need (5,300).

This indicates that the Single Issue Review needs to plan to provide a residual affordable need of 2,350 homes, at a residual rate of 131 dwellings pa. Based on past delivery rates, this is not likely to be achievable and far exceeds the level required by policy CS9.

There is therefore continued need for affordable housing and as such it is likely to be viewed favourably in terms of planning. Whilst the market demand for affordable housing is high it does not produce high land value and so a trade-off is needed between value uplift and meeting the affordable targets.

### Summary

Housing demand is present within the current Forest Heath market with land supply traditionally keeping pace with demand. However, a larger scale development would require reliance on additional employment creation and stronger infrastructure links to regional employment hubs.

A significant housing element of any re-development at RAF Mildenhall is likely to be one logical step given the exiting residential centres at Beck Row and Mildenhall allowing for expansion. Housing could be favourable in planning terms if the requisite infrastructure could be shown to be capable of being put in place. It is likely to produce the highest land values but development at scale (i.e. a new settlement) will require significant pump-priming and interventions to increase demand profile.

Residential development will not generate much additional employment in the long run or reduce the impact economically to the area from RAF Mildenhall closing unless a wider mix of uses is developed.

Overall whilst there is limited evidence for the requirement for emerging residential sectors. There is clearly a demand for elderly appropriate accommodation.

Incremental residential development to complement the existing settlements of Mildenhall, West Row and Beck Row is feasible although delivery trajectories are likely to be limited.

An ambitious and transformational residential scheme at this site could follow the example of former airfields such as Northstowe in acting as the basis for a significant new development forming linkages

with the existing centre within Mildenhall whilst also creating a hub for additional facilities and commercial space. The success and potential for such a development would be driven in part by:

- Transport links/ accessibility to key job markets (e.g. Cambridge)
- Employment opportunities to offer highly skilled jobs.
- A commercially and socially viable centre to support the growing community.

### **7.1.6 Emerging Sectors and Institutional Sectors**

#### **Energy generation and sustainable industries**

In the last 20 years, energy generation and sustainable industries have been a popular initiative from the perspective of public sector support; however, in recent years, the government has reduced the support for solar farms, where solar arrays are ground mounted on either agricultural or brownfield land. They have removed subsidy support for solar farms larger than 5 megawatts and have significantly reduced the support available for stand-alone projects through the removal of Feed In Tariff (FIT's) accreditation. They have also limited the Common Agricultural Policy (CAP) funding to solar farms on agricultural land.

There have been a number of RAF site conversion to solar farms due to their locations in East Anglia typically being flat with constrained demand for other uses. For example:

- RAF Stradishall was purchased by Santander and is one of the UK's biggest solar farms (2013).
- RAF Coltishall in Norfolk was converted into £50m solar farm providing power for 10,000 homes. This is a 600 acre site which was bought by the local council in order to increase employment and attract enterprise. It also has some agricultural use with sheep grazing under the panels.

Further to this, as part of the diversification of agriculture and growth in technology, businesses in the area can benefit from using renewable energy such as biomass which forms part of agricultural diversification with the specific growth of fuel crops.

These initiatives are likely to provide a small quantum of employment and are subject to limited site constraints. However, depending on the type of renewable energy used they do present some planning risk and may not be favourable with local residents. This is especially the case for wind farms. Further to this, they may limit land value, as little uplift in value is usually seen.

At RAF Mildenhall, given the expansive and relatively flat land away from major residential development as well as the existing infrastructure provision, energy generation is a possible land use which could be developed without major subsidies. The main challenge is with regards to solar power infrastructure. In order for solar power to be viable there would need to be sufficient infrastructure to allow for energy supply to an end user or conversion of power to the National Grid.

Other alternative uses could include Biomass power; this is a viable option given the large expanse of land being located away from residential populations. This would allow for the growth and processing of Biomass crops. If this was to be created the power station could act as an anchor tenant attracting other firms and educational institutions seeking the ability to cluster.

Further to this given the large oil storage tanks already located at the site there is further potential for fuel storage. But this would need to be in tandem with fuel demanding uses but the much of the infrastructure is already in place.

### Foreign Direct Investment (FDI)

UK Trade & Investment (UKTI) acts as a facilitator for Foreign Direct Investment (FDI) in the UK. It is not a site promotion agency but targets various sectors (with 8 strategic focuses) of investment and assists in finding locations which match their requirements. As such, the consideration of the potential of the site for FDI is based on how well it meets the requirements of key sectors (which are covered within this report). A particular focus of many investors is access to skills and a pool of potential employees; this points towards an emphasis on the need to build on the existing strengths of RAF Mildenhall in terms of the aviation sector.

### Agri-tech and Science Parks

Significant support from the UK government exists in order to improve the competitiveness of the agri-tech sector and a £160m UK Strategy for Agricultural Technologies

Agri-tech is not a quantifiable sector with a known demand profile but rather, a group of enabling technologies linked to agriculture; these enabling technologies link IT, engineering, crop breeding, software development and testing, allowing for greater efficiency and knowledge sharing.

There is a relationship between the UK science base and the UK agri-tech sector. Areas of strength within the UK agri-tech sector include:

- Diagnostics
- Genetics
- Disease management
- Nutrition
- Use of technological applications
- Emerging areas including:
  - Hydroponics
  - Aquaculture
  - Precision agriculture

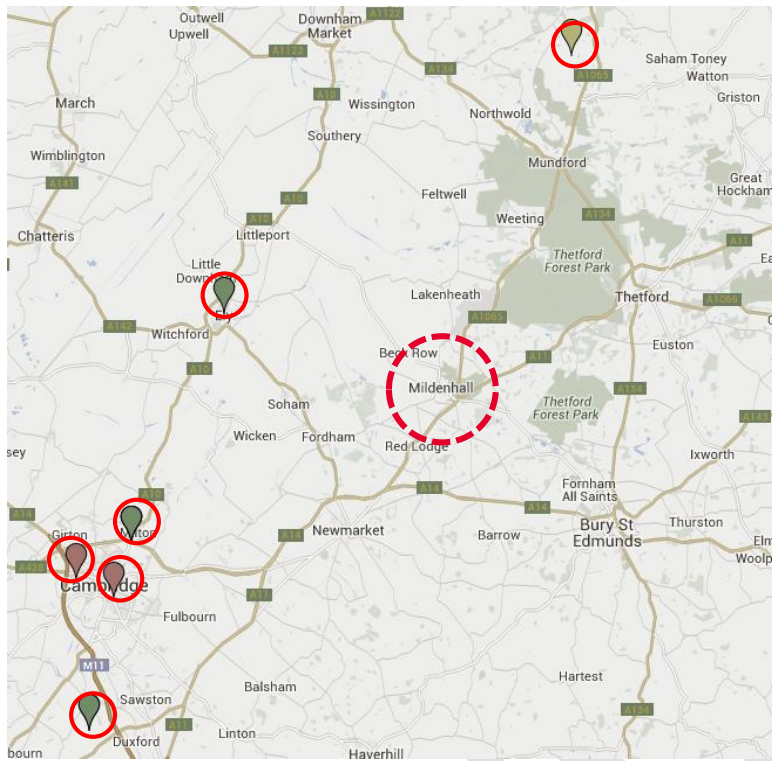
In terms of government support there is currently a £70m agri-tech catalyst fund to help new agricultural technologies get to market quicker. £90m has also been reserved for investment in Centres for Agricultural Innovation.

The agri-tech catalyst will fund proposals relating to:

- Primary crop and livestock production, including aquaculture.
- Non-food uses of crops including ornamentals (for example, for biomass).
- Food security and nutrition challenges in international development.
- Challenges in downstream food processing, provided the solution lies in primary production.



Figure 5 - agri-tech catalyst fund map of existing projects



The following firms are represented on Figure 5:

- Alpha BioPesticides Limited – (insecticide innovations centre)
- Isomerase Therapeutics Limited (crop protection compound tech)
- Tecarhneat Engineering Ltd (Seed UV treatment research)
- ECOspray Ltd – (Potatoes pesticide tech)
- Cambivac Limited (Swine Vaccine research)
- KWS UK Ltd (barley fungal disease innovation)

In the 2015 Autumn Statement, the Chancellor announced that the government is investing £68m in three new Centres for Agricultural Innovation. Existing examples of agri-tech centres tend to cluster near innovation and centres such as science parks. Farmland in proximity to skilled knowledge base and education centres may therefore provide the optimum location for new agri-tech centres.

Suffolk already has two Food EZs (for Babergh and Mid-Suffolk), which were awarded £50,000 each in order to be established. These zones benefit from simplified planning rules and the ability to forge closer links with the whole supply chain. As such, these zones are considered as a pathway to attracting new businesses and jobs to the area and, in turn, boosting a thriving tourism sector and ensuring vibrant market towns. The awarding of these two zones within Suffolk are in themselves a strong indication that this area is considered a good location for economic growth within the Agricultural Industry. The initiative behind Food EZs is to reduce financial pressures on farming businesses and stimulate growth in the sector; several additional food EZ's are planned in Suffolk.

Whilst they may be potential to create links with existing institutions such as the Norwich Research Park (which combines four world-renowned research institutions, all of which engage in agri-tech,

supported by the research at the UEA and the Norfolk and Norwich University Hospital) the opportunity is considered to be limited given the lack of an anchor occupier/ use to build from.

From C&W's discussion with Agri-tech East it is apparent that there are a number of sites that have been allocated as sites for agri-tech innovation, include Smithson Hill near Cambridge.

Science parks can link closely with the agri-tech sector but offer a wider base for firms including bio-tech start-ups and established pharmaceutical firms. This market has established a strong base around Cambridge, creating links with educational and research institutions.

Science park development typically requires a large anchor tenant set within the locality. A significant challenge for Mildenhall is the distance from Cambridge, as the majority of life sciences tend to be located south of the city towards Addenbrooks Hospital and the research centres. These centres also require specific fit-outs with spaces like laboratories incurring higher build costs and as they are tailored to the occupier making the space less flexible.

In contrast to life sciences technology based firms tend to focus towards the North West of Cambridge. These firms occupy more flexible space. Examples of case studies where agri-tech and science parks have been developed:

- **Colworth Park** is a science park encompassing a number of different firms. The main tenant (and anchor) is Unilever. Unilever has been at Colworth Park for 60 years and their presence has helped to create a centre for innovation and research. Colworth Park also benefits from a strong geographical location close to the A6 between Northampton, Cambridge and Bedford providing good access and a large employment base.
- **GlaxoSmithKline (GSK)** moved to their Stevenage site in the late 1990's. The site was previously used for water analysis and testing as well as a small industrial site. GSK moved to the site as they required a large parcel of secure land. The current site is in close proximity to the A1(M), M11 and M25 allowing for good road access. The site sits within what is often referred to as the 'Golden triangle' - many pharmaceutical firms and bio-tech firms aim to be located in the triangle between London, Oxford and Cambridge as these are areas of key research and innovation. The Stevenage site has since attracted other occupiers such as bio-tech starts ups who are drawn to the site by the large anchor tenant.
- **Smithson Hill** is backed by a member of the farming community and is spearheaded by a lead grower. This area incorporates firms for research but also space to test technologies an innovation. Providing partial proof and workshops as well as conferences and training events such as the agri-trade events.

Another agri-tech centre is the National Institute of Agricultural Botany (NIAB), situated to the North of Cambridge close to the villages of Histon and Impington between the M11, A10 and A14. The NIAB is a major international centre for plant research, crop evaluation and agronomy. The site is internationally recognised as a centre for innovation and aims to provide independent science-based research and information to support, develop and promote agriculture and horticulture (NIAB, 2016). The aim of the NIAB is to directly support the agricultural industry in order to supply food and renewable resources.

The site in Cambridge currently employs over 220 people and covers a number of core areas including, genetics and breeding, varieties and seeds, crops and agronomy and crop trials. Whilst the centre is in a relatively rural location to allow for crop trials and scientific research it is still within close proximity to Cambridge and major road networks. This centre shows the ability to exist without a current hub to act as a catalyst but is located in close proximity to Cambridge and the science research and urban centre; a centre like this will be difficult to achieve at RAF Mildenhall given its relatively isolated location.



## Prisons

Prison populations continue to rise across the UK and therefore there is demand for new prisons. Whilst offering employment and reducing the impact of the closure of Mildenhall a prison is likely to be unpopular with residents and stakeholders. It is unlikely to generate particularly high land values but typically leads to high construction costs.

### 7.1.7 Do Minimum

#### Agriculture

The average price of English farmland fell by 3% in the first three months of 2016, according to the latest results of the Knight Frank Farmland Index. However, the average value of farmland is still almost £8,000 per acre, some 180% higher than it was 10 years ago.

If the base was to be turned back to purely agricultural land employment would be generated albeit at a low rate.

This would be broadly unaffected in planning terms, however this does not fit with the wider FHDC ambition for the area in terms of promoting economic growth. Despite rises in agricultural land values, this presents the lowest land value option in the long term when compared to other use classes.

Productivity for agriculture maybe a challenge as the land has not be used for crop production for some time. In order for the land to maximise its commercial value there may need to be tests to improve the soil quality. Furthermore, before the land could be used for food production there would have to be environmental and soil quality check to assess the impact from aviation use such as the previous oil spills.

#### Open Storage

Open Storage has a potential market given the location in close proximity to the A11 and existing Industrial Park.

Open storage would be a viable option given the extensive hard standing around the site. This has been finished to a high standard for the current use and could provide good storage space. However, this will do little to minimise the impact of the USAFE base closing and will offer very limited employment opportunities.

This is also a low revenue driver and will not produce a high land value therefore it is likely to be unfavourable from a planning perspective. Whilst the site in its current form is suitable for open storage, in order for the site to be viable in the long term additional infrastructure would be required to accommodate vehicle access.

This is also likely to be an unpopular strategy given the eyesore it would present but could provide immediate land value (although limiting long term revenue generation).

## 7.2 Aviation Options

### 7.2.1 Summary of Aviation Activity Conclusions and Facilities Requirements

As with all regional airports, Mildenhall will only be viable if it has a range of activities both aeronautical and non-aeronautical.

- Passenger operations: passenger traffic at Norwich has stabilised at around 0.5m passengers and this figure is indicative of the scale of ambition for Mildenhall airport. An initial analysis of the Civil Aviation Authority (CAA) detailed catchment data indicates potential in the area of 600,000 annual passengers for Mildenhall in today's market and 750,000 in 2023 if the market grows at the Department for Transport (DfT) high UK passenger traffic forecast growth rate of

2.6%. Given 'standard' airport operating costs and revenues this is unlikely to support a viable business on its own but more detailed analysis is required of this and the required capex. Stansted now has critical mass and is under-utilised with lots of capacity available. We have also undertaken a very 'high level' analysis of Mildenhall under 'best case' conditions that indicate traffic potential could be higher.

- **Cargo services:** the basic economic drivers of cargo do not indicate strong potential. RAF Mildenhall is highly unlikely to develop the long haul passenger services that carry air freight 'belly hold'. The region's 'integrators' such as Fedex have enough capacity and better road access from Stansted. The type of cargo that could be connected to the airport via a rail link could not be flown economically as it is generally heavy, bulky and 'low yield'. Also, the logistics of connecting train times and access to cargo's final destination at the other end of the rail route makes it highly unpopular with the freight forwarders. Stansted has significant cargo capacity underutilised. East Midlands airport offers a large cargo hub with DHL (UK) using as their main base
- **Maintenance:** the region is not close to the UK's Maintenance, Repair & Overhaul (MRO) clusters apart from Marshalls and KLM Engineering at Norwich that is a major narrow body MRO centre. There could be some limited activity supporting specific Marshall's programmes (although they have not given any indication this is the case) and supporting smaller aircraft types. It would be prudent to allow for maintenance areas. This is questioned by Newmarket and District Chamber of Commerce, they suggest that RAF Mildenhall has some potential as a 'base' maintenance facility but the economics of this are extremely challenging as it leaves little land for wider development and could reduce viability (Briefing Note, 2016).
- **Composites:** this sub-sector of maintenance is relatively immature in the UK and has significant growth potential as all future aircraft programmes will be largely composite-based. The region has several firms that are developing in this area. A case can be made for the detailed evaluation of a composite-focused aerospace centre.
- **De-manufacturing:** there is a long term problem of de-manufacturing aircraft that have high composites content. This is a business area for which a case could possibly be made subject to a detailed feasibility analysis.
- **General Aviation (GA):** the 'GA' areas of business aviation, private flying, training, helicopters, microlights and other activity have all been reviewed in terms of long term market development and Mildenhall potential. There is little potential for Mildenhall in all these areas apart from business aviation. If Cambridge becomes constrained then there would be a strong case for relocating the Textron service centre to Mildenhall.
- The conclusion is that a more detailed business plan is required for the airport taking into account the capital expenditure, operating expenditure and revenues of all the business streams. In anticipation of a positive result it is recommended that the airfield and supporting infrastructure is protected and that an area of 200 acres is protected for aerospace activity. The 200 acres doesn't have to be contiguous, however, there are restrictions in height of buildings close to the runway and protecting the long term flexibility of the site (such as the building of a parallel taxiway that might be needed in the very long term best case for passenger operations) requires some contingency.

## **7.2.2 Passenger airport**

### **Summary of the Opportunity**

Mildenhall offers a 2,810 metre runway with no slot or surface access problems but some requirement for infrastructure investment. Navigation technology is in place and no obstacles are apparent although it is uncertain if 24 hour operations are possible. It is close to the population and industrial centres of Cambridge and Norwich

There are competing airports for commercial aviation at Norwich, Cambridge and Stansted and all have capacity to expand albeit with operational constraints and there is probably limited market appetite from airlines for a 'greenfield site' development of passenger operations unless it can offer extremely competitive pricing. There is usually limited attraction to some UK 'base carriers' as 'splitting operations' would make Mildenhall unpalatable to airlines based already at airports serving the region.

It is extremely challenging to develop a 'military conversion' passenger airport; a good example is Robin Hood Airport Doncaster-Sheffield (formerly RAF Finningley) that has a much larger catchment in terms of population but initially struggled to build traffic (although its recent performance has been more encouraging)

### The Regional Air Market

The East Anglia air passenger market amounted to 6m passengers in 2014 of whom 90% used airports outside the region, principally Stansted. The other main airports were Gatwick, Luton and Norwich of which the latter had 8% of the market.

**Table 3 - Passengers in 2014 with Surface Origin and Destination in Norfolk, Suffolk and Cambridgeshire by Airport Used**

PASSENGERS IN 2014 WITH SURFACE ORIGIN AND DESTINATION IN NORFOLK, SUFFOLK AND CAMBRIDGESHIRE BY AIRPORT USED		
Airport	Passengers	% Total
Stansted	2,568	42
Heathrow	1,267	21
Gatwick	986	16
Luton	571	9
Norwich	460	8
Birmingham	58	1
London City	55	1
East Midlands	49	1
Other	30	0
Total	6,044	100

Source: CAA Surveys all passengers with 'Surface Origin and Destination' in East Anglia (assume all Norwich passengers for East Anglia).

The main twenty destinations are shown in the Table 4. They are almost all short haul destinations and 'southern sunspots' with two long haul 'leisure focused' points, New York and Dubai. The main local airport, Norwich, has direct services to the top two points of Amsterdam and Edinburgh and the main two holiday destinations of Alicante and Malaga. Long haul services are operated from Heathrow and Gatwick and it is likely that long haul services will re-start from Stansted in the future.

Table 4 - Top Twenty Routes 2014 for East Anglia Passengers

TOP TWENTY ROUTES 2014 FOR EAST ANGLIA PASSENGERS				
Destination	Other Airport	Norwich	Total	% of Total
Amsterdam	115,650	137,380	253,030	4.3
Edinburgh	95,994	28,460	124,454	2.1
Dublin	123,880		123,880	2.1
Malaga	116,815		116,815	2.0
Palma	97,337	28,584	115,921	2.0
Tenerife	97,219	16,554	103,773	1.8
New York JFK	102,958		102,958	1.7
Dubai	101,395		101,395	1.7
Alicante	99,720		99,720	1.7
Madrid	98,434		98,434	1.7
Geneva	84,517		84,517	1.4
Barcelona	82,857		82,857	1.4
Aberdeen	21,427	60,162	81,589	1.4
Belfast International	78,906		78,906	1.3
Lisbon	67,384		67,384	1.1
Berlin	64,115		64,115	1.1
Naples	61,778		61,778	1.0
Glasgow	61,291		61,291	1.0
Faro	60,988		60,988	1.0
Arrecife	57,921		57,921	1.0

Source: CAA Surveys all passengers with 'Surface Origin and Destination' in East Anglia (assume all Norwich passengers for East Anglia).

The geographic dispersion of passengers leans heavily towards the main population centres; the top 10 are shown Table 5. These account for just under 75% of the region's total and the Cambridgeshire district accounts for 28% of the region's passengers, excluding those flying from Norwich (8% of the region's total).

A basic test of the gravitation of passengers to airports based on their access times and an assumed service level suggests that an airport in the Mildenhall area would attract around 5-10% of the region's total or some 300-600,000 passengers at 2014 traffic levels and 360-750,000 at forecast 2023 traffic levels. This suggests that it might be difficult to make a strong business case for a new airport on the basis of only revenues from passengers.

Table 5 - East Anglia Passengers by Main District of Surface Origin and Destination

EAST ANGLIA PASSENGERS BY MAIN DISTRICT OF SURFACE ORIGIN AND DESTINATION		
District	2014 Pa (000)	%
Cambridge	1,544,837	27.67
Norwich	588,336	10.54
Peterborough	454,822	8.15
Huntingdonshire	373,482	6.69
Ipswich	300,558	5.38
South Cambridgeshire	246,462	4.41
St. Edmundsbury	239,402	4.29
King's Lynn and West Norfolk	227,595	4.08
Suffolk Coastal	181,720	3.25
Forest Heath	163,467	2.93

Source: CAA

### Existing Airports in the Region

There are three local airports serving East Anglia – Norwich, Cambridge and Stansted and their journey distances to the main population centres of East Anglia are shown in Table 5 with Mildenhall also included for comparative purposes. No airport has a clear distance advantage to the main population centres of the widely dispersed East Anglian market.

Table 5 - Drive Distances (Miles) to Airports Serving East Anglia

DRIVE DISTANCES (MILES) TO AIRPORTS SERVING EAST ANGLIA					
Airfield	Population	Mildenhall	Norwich	Cambridge	Stansted
Peterborough	135,000	57.6	76.8	37.7	61.7
Norwich	134,857	43		64	84.1
Cambridge	125,000	23.6	64		31.6
Kings Lynn	43,000				

Source: Infrata/AA

Norwich International Airport (NIA) has annual passengers of 460,000 and its main routes are shown in Table 4. Its' main route is to Amsterdam where a large number of passengers will connect onto flights across the world. It also has flights to Edinburgh and Aberdeen, mainly oil company traffic, and a number of leisure destinations. Around 25% of Norwich's passengers are on helicopter services to the oil rigs.

It has a 1,841 metre runway which means that services beyond Europe are not possible or are payload constrained. Its operating hours are 06:00-22:30 and it has 1 passenger terminal, 1 cargo terminal, and 8 aircraft stands. Its growth is also dependent on the Northern Distributor Road, which will relieve congestion and provide strategic connections between the A47/A11 and NIA. This road has already been included in the government's funding programme and is proceeding through the Nationally Significant Infrastructure Projects (NSIP) process that is well under way.

Cambridge Airport has a 1,865 metre runway and is 3km from the city and its operating hours are 08:00-18:00 with more on request. It has 1 passenger terminal, 1 cargo terminal and 3 aircraft stands. The development of air service from there has not been successful, largely due to the resurgence of Stansted, and it has under 10,000 annual passengers. Cambridge is also home to Marshalls Aerospace with a very significant aviation cluster.

Stansted Airport has a 3,048 metre runway capable of handling B747-8/A380, the highest standard of navigation and 24-hour operations. Passenger traffic there dipped significantly after 2001 but has regrown back to around 22m passengers with over 150 destinations. It has significant cargo operations with services by FedEx Express, Royal Mail, and TNT Airway. Its cargo facilities include a bonded warehouse, very large/heavy cargo, express/courier centre and new sheds (14,000 sq m). It has cargo handling agents: Aviance UK Cargo, Servisair-Stansted.

### **Best Case Conditions**

There are a number of future conditions that might impact on the traffic potential of the airport:

- If the population of Cambridge was to double over the next 10 years to 250,000 and the populations of other towns in the region were also to rise substantially in the near future.
- Norwich airport were to fail commercially and subsequently close down.
- Marshalls were to relocate their Cambridge-based operations to Mildenhall while using their existing land for much-needed city-centre housing in Cambridge.
- Necessary road and rail infrastructure on the A11 corridor (and an A14-A11 link) were to be upgraded to make access times to Mildenhall significantly quicker and easier?

The full evaluation of these factors are beyond the scope of this report. However, in general the following comments are possible.

*Assuming that faster population and therefore economic growth lead to regional air demand growing 50% faster than the DfT UK average gives an annual growth rate of 3.9% and a regional total market using all airports of 11.1m by 2030. If Mildenhall performed at a high level of regional airport expectations it may take 15% of this, or some 1.7m. If Norwich grew at the higher national level it could be expected to have some 900,000 passengers by that time. The higher traffic projection for Mildenhall at this time would be around 2.5m passengers if Norwich closed, Cambridge did not have passenger operations, the economy and population grew rapidly and there are significant surface transport developments. This is an extremely 'high-level' projection and requires supporting by detailed analysis of CAA, population, economic and airline data.*

### **7.2.3 Cargo airport**

#### **Summary of the opportunity**

The major drivers that affect Mildenhall are described below but, in summary, Mildenhall could not offer enough that is likely to be new or ground breaking to penetrate this market:

- Cargo requires long runway, good surface access, 24 hour operations and land for terminal development. Most cargo is trucked to major cargo centres or is flown 'belly hold' on passenger services
- 'Integrator' cargo business developed at specialist airports – requires access to motorways, proximity to population centres, no slot congestion and 24 hour operations. A good example is the DHL operation at East Midlands airport.
- 'Low yield, low density' cargo such as aggregates and industrial produce that is carried by rail is highly unlikely to be flown due to the cost and logistics.
- Air cargo is attracted to growth sectors such as hi-tech industries, pharmaceuticals, automotive parts etc. East Anglia may be focusing on these types of industries which require access to air services and overseas markets.

### **The Cargo Market and Mildenhall**

With or without additional runway capacity at London Heathrow (LHR), the forwarders who control 98% of general cargo will utilise belly or freighter capacity at either regional or European airports by using, as part of their logistics, trucking services. This is not seen within the industry as a negative, in fact in some instances it can be a positive.

Freight forwarders in the UK have concentrated their activities in and around LHR, investing in both warehousing and handling facilities at their consolidation centres. Airfreight is collected from all over the UK and trucked to these consolidation centres where it is then aggregated by destination into unit loads that attract an advantageous airfreight rate from the airline.

This concentration of activity (in volume terms) at their LHR bases enables the freight forwarders to negotiate extremely competitive rates with airlines and in turn allows them to influence the supply of capacity. Although most freight forwarders have developed branch offices in UK regions, the focus of their business remains centred on the London hubs where economies of scale allow more cost effective operations.

Airfreight from around the regions including East Anglia, is delivered by the freight forwarder into its own or other consolidation centres at LHR and then built into Unit Load Devices (ULDs). The complete ULDs are then delivered into airline handling facilities at LHR and in turn trucked, at the airline's own expense, to the airport of final departure which may be outside of the London hub and could very well be within mainland Europe. This process by the airline encourages the freight forwarder to deliver critical mass to London hubs and continental hubs such as Amsterdam and hence promotes consolidation activities. Scheduled airlines are driven by the passenger demand for a given route and it has been advantageous for them to develop a concentration of activities through a principal airport.

It is not unknown for airfreight destined or originating in the regions to travel to LHR for consolidation by the freight forwarder only to be returned to Stansted for a long haul flight. The principal reasons for such a process by the freight forwarder is to obtain a lower airfreight rate on the basis of both critical mass and the airlines' willingness to accept the airfreight from the forwarder at their LHR hub.

Freight forwarders with a LHR hub and full handling facilities can therefore maximise revenues while the cost of the trucking in many cases is absorbed into the rate by the airline. There will be a high percentage of cargo unloaded or loaded onto regional flights that may have the origins or imports



destined outside of East Anglia. This is mainly because of the airlines maximising the capacity they have in the UK market.

Trucking is a major part of the UK airfreight industry and most airlines provide road haulage services between the regions and the major London and continental airports to feed their own scheduled services. Some are based on dedicated scheduled trailer departures; others operate on a shared user basis. Approximately 400 to 500 trucks operate on a daily basis, moving airfreight to/from the major airports on dedicated 'inter-airport' services in the UK. Major players include Saints Transport, Swissport Cargo, Dnata, and British Airways, all of whom operate daily scheduled services between most major regional airports.

The express cargo market in the UK has different needs and requires a different structure to the general air cargo market. The express service generally collects cargo from the shipper's premises and delivers the cargo directly to the shipper's customer within an agreed time period, known as "door-to-door time definite delivery service". To achieve this level of service, these companies operate from a central location a "hub". The cargo is collected then delivered by the express company, usually to a local depot or "spoke" or local airport. In the case of the East Anglia this would be Stansted airport, before being despatched by air to the express company's hub. At the hub the cargo is re-sorted and re-forwarded by air to a local airport or "spoke" close to the shipment's destination, where it is then delivered to the shipper's customer. These companies are said to operate a "hub-and-spoke distribution system".

Express operators have specific operational requirements. Generally they require unrestricted flying hours (particularly at night-time), efficient ground handling facilities on the ramp and sufficient warehouse space to accommodate the sorting and distribution of the air cargo. Location, infrastructure, and connections to main road networks also strongly influence an express operator's choice of airport. East Anglia is well served with Federal Express from Stansted and the other integrators at LHR.

#### **7.2.4 Maintenance Repair and Overhaul (MRO)**

##### **Summary of the Opportunity**

There is a proven ability of airports in the region to develop this activity with a major Maintenance, Repair and Overhaul (MRO) centre at Cambridge (Marshalls) and there is an emerging civil aviation cluster based around NIA where the key businesses, KLM UK Engineering and Air Livery, supported by the UEA and Norwich University Technical College are looking to develop an aviation skills academy. The 'Greater Norwich City Deal' also includes scope for interventions to strengthen this cluster. There is also a key cluster at RAF Marham for maintenance of military fighter aircraft. Also, RAF Woodbridge and RAF Wattisham are home to specialist military engineering units.

The 'North East Quadrant' of Norwich supports advanced manufacturing and the energy sector (including low carbon). This quadrant includes NIA with its associated employment areas, a complex of existing business parks centred on Broadland Business Park, and the Rackheath ecotown proposal.

The Newmarket and District Chamber of Commerce suggest there is an opportunity for a building of business around avionics, metal working, engine component overhaul linking into the 'off-airport' market utilising the aviation legacy but without requiring access by aircraft (Briefing Note, 2016).

There are a number of interesting specific opportunities for Mildenhall that have been summarised below:

- **Marshalls:** probably no plans to expand in UK outside Cambridge although it is worth exploring smaller types of aircraft of specific military opportunities with them. Marshalls has previously considered relocating from their existing Cambridge site (which has significant residential potential) and it is not clear what their current appetite is for such a switch. FHDC consider that

Marshalls are interested because of discussions with Cambridge City Council over the future of Cambridge Airport (which is subject to housing pressure) - Mildenhall is the obvious back-up and Marshalls need to know how much of the airport is available.

- **Major maintenance and composites:** it would be difficult to attract a major overhaul company as their expansion is mainly in lower wage countries in Eastern Europe and Asia. However, the ability to handle highly technical composite sections may prove useful. Expertise in new technologies and specialist areas such as cabin interiors could also be an area of focus.
- **Modifications and cargo conversions:** increasing growth opportunity requiring land/hangars, labour, runway, usually accompanying existing maintenance activity. Large number of modifications expected in market that could put strain on supply especially for C-130 and cargo conversions. Development underway at Marshalls, worth exploring potential especially regarding C-130 programme. These are usually larger aircraft and Mildenhall's long runway could be an advantage.
- **Military:** there is a substantial amount of military work already undertaken in the region. It is unlikely to form an 'anchor tenant' but could be a valuable ancillary work stream.
- **Smaller aircraft:** these require local service centres e.g. such as Cirrus at Sywell and present an opportunity although a detailed examination of this market is required to find a specific manufacturer opportunity.
- **Engine overhaul:** this is centred on a small number of competent centres. Requires skilled labour, land, runway, surface access. Development underway at Marshalls, limited potential but worth exploring.
- **Components overhaul:** are usually based around large existing maintenance centres. There is sufficient supply at Stansted and Cambridge.
- **Parts stockists:** require land for facilities and access to large maintenance centre and there is expected to be sufficient supply at Stansted and Cambridge.
- **Aircraft de-manufacturing;** this requires specialist skills requiring runway, land, low cost labour, and surface access. Requires runway, surface access, labour, and land for buildings. Worth exploring potential but more research is required within the sector. KLM UK Engineering has composite/ advanced composite capability and decommissioning activities for Boeing 737's, Airbus A320's, Fokker 70/100 and BAe146/Avro RJ's at Norwich. Our view is that the long runway, the availability of land and closer access to the motorway network make Mildenhall an excellent long term development option.

### Overview of MRO Sector Developments That Affect Mildenhall

MRO is an area where demand is likely to grow and is a key capability in the UK aerospace sector with services including the increased use of composites and advanced materials – the Airbus A350XWB and Boeing 787 aircraft typically have a composite material content reaching 50% by aircraft weight.

New technologies are also being developed including the increased use of electrical power as opposed to hydraulics and pneumatics, in aircraft such as the Boeing 787 Introduction of health monitoring, diagnostic and prognostic technologies – e.g. Rolls Royce use real-time Engine Health Monitoring to track the health of engines worldwide. A further area of development is the enhanced cabin environment and interiors, such as cabin lighting, noise reduction, improved air quality, in-flight connectivity, cabin Wi-Fi, and inflight entertainment systems on the A380 and B787.

## The UK MRO Industry and Regional Clusters

There are 1,305 companies actively trading and involved with the provision of MRO services in the UK, segmented further by their category and size. They include:

- 195 large companies that comprise 15% of the total population of 1,305; they account for the most significant portion of the MRO activities.
- 970 SMEs comprising 75% of the total MRO company population (966 small plus 10 medium sized).

The majority of the companies are located in the southern half of the UK with clusters in Scotland located along a line running from Glasgow to Edinburgh as well as Aberdeen and Inverness along the north east coastline, supporting the UK's North Sea oil industry operations. In Northern Ireland they are clustered around Belfast and Londonderry. In England there are main clusters around Newcastle upon Tyne, Blackpool, Liverpool and Manchester. Further South they are mainly clustered around Cheltenham, Cardiff and Bristol, Bournemouth, Southampton, Brighton and around London.

**Figure 6 - Location of Major MRO in England & Wales**



Source: BIS

The presence of Marshalls is somewhat anomalous with the majority of aerospace being located elsewhere in the country. This has implications for the availability of labour and the supply chain. It should be noted that KLM UK Engineering has EASA Part 145/147 approval at Norwich.

There is a slightly different picture when military facilities are considered. There are fewer locations and no pronounced geographic clusters.

**Figure 7 - Location of MoD Part 145 MRO Companies**

Source: BIS

The evidence of the locational analysis of MRO appears to be that there is a limited case for the development of heavy civil maintenance at Mildenhall although composites, described below, may offer a launch pad for this sector with further growth potential in areas such as cabin interiors and modifications.

### **Potential spillover from Marshalls**

There is no indication at present that Marshalls Aerospace currently has any interest in Mildenhall and the company has stated publicly that it has no interest in acquiring it. Marshalls sold its automated fabrication and paint plant at Mildenhall to engineering manufacturer Tinsley Special Products; the 6.5 acre site had been working on a MoD contract for Marshall Land Systems, which the company won in 2005. The contract was to manufacture and fit more than 6,600 specialist loadbeds to vehicle chassis supplied by MAN Trucks, for delivery to the British Army.

Mildenhall provides Marshalls with a long term opportunity to establish a separate maintenance operation. As mentioned, there are a large number of modifications expected in market that could put strain on supply especially for C-130 and cargo conversions. Development underway at Marshalls is worth exploring, especially regarding C-130 programme activity in the future (in the event it wins major foreign maintenance contracts).

### **Composites**

In aerospace, the growing demand for lower emissions, aligned with advances in composite construction techniques, has led to a significant increase in the use of composites in civil aircraft in the last few years. This is from a base of around 10-15% of the structural weight to 25% for the Airbus A380 and 50% for the Boeing 787 and the Airbus A350 XWB. Further advances in design and technology are likely to push this figure higher for the next generation narrow body aircraft.

Based on the market data available, the UK industry for composites is currently worth £1 billion annually in terms of finished parts and this could increase significantly as the production of composite components for the new Airbus A350 XWB and the Bombardier CSeries aircraft begins in the UK plus products for the for the Eurofighter/Typhoon, Joint Strike Fighter and A400M which will contain a significant amount of composite materials.

There are a number of regional centres of composite excellence and it is a dispersed business with no clearly dominant area:

- Filton (Bristol): the Composite Structure Development Centre at Airbus UK focuses on the technological development of large wing structures, including low-cost, high volume technologies for the wider structural applications of composite materials.
- North West Composite Centre: this will establish a Composites Certification and Evaluation Facility with funding from the Northwest Development Agency, University of Manchester and industry.
- South Yorkshire: the Advanced Manufacturing Research Centre, was created through a partnership between the University of Sheffield and Boeing. It works on the production of small structures containing components made from different materials, as well as drilling, machining and joining composite materials.
- Scotland: Spirit AeroSystems has recently opened a new multi-million pound Composite Development Centre focusing on design, product development and manufacture of future aircraft wing structures.

East Anglia has already developed a significant composite industry with major aerospace participation:

- Hexcel: a world leader in carbon fibre and composite materials for commercial and defence aircraft, helicopters, engines, satellites and launchers, Hexcel is also a specialist in lightweight composite components including engineered core parts, HexMC® components and complete structures.
- AIM Altitude is creating a Centre of Excellence for composites, in Waterbeach, Cambridge. Part of the AIM Altitude aircraft interiors group,
- Huntsman Advanced Materials is a leading global chemical solutions provider with a long heritage of pioneering technologically advanced epoxy, acrylic and polyurethane-based polymer products.

Regarding universities that have teaching strengths, the following is illustrative of the breadth of capability in this area:

- Bath University
- Bolton University
- Bristol University
- Cranfield University
- Glyndwr University
- Imperial College London
- Loughborough University
- Manchester University
- Nottingham University
- Plymouth University
- Queen Mary, University of London

- Sheffield University
- Surrey University
- Strathclyde University
- University of Ulster

Within the research domain a number of research groups will be active in this area. The most likely universities will be the research intensives as well as a few others where applied research and technology is key, e.g. Cambridge, Oxford, University College London, Queen Mary, Imperial, Cranfield, Manchester, Sheffield, Nottingham, Bristol, Edinburgh, Glasgow, Southampton, Queen's, Cardiff, Loughborough, Brunel, Strathclyde, Surrey, Plymouth.

#### **Other MRO sub-sectors**

There are a number of other sub-sectors that normally only develop to support major maintenance facility:

- Engine overhaul: highly unlikely to be developed outside of major maintenance centre. Engine business is becoming highly centralised and commoditised.
- Modifications: large number of older aircraft being modified and converted, for example ex-passenger 767 becoming freighters, this activity is moving to lower labour cost countries
- Components overhaul: usually ancillary activity to major maintenance centre
- Parts stockist: usually ancillary activity to major maintenance centre
- Aircraft de-manufacturing: could present an opportunity with a requirement for land and technicians. Many aircraft contain valuable metals and carbon structures and demand is growing as a result of their assets and end-of-life environmental management policies that European manufacturers are now having to consider overall environmental management standards and responsibilities.



## 7.2.5 General Aviation

### Summary of the Opportunity

- Business aviation: Mildenhall has a runway of length 2,800 metres, well more than the normally required 2,500 metres. Land is available for a service centre - Cambridge has Textron service centre and Marshalls are expanding in the area of business aviation.
- Private flying/flying clubs: the market needs runway, land for hangars, service centre, club buildings, support services. There is existing activity at Cambridge and other smaller airfields. This market is in long term decline.
- Helicopters: market needs access to main business market, hangars, and support services. Development underway at Marshalls, limited potential and market. North Sea is adequately served from Norwich.
- Training centre: market needs runway, land for buildings. Market in general long term decline.
- Microlights: market needs take off strip, hangar, and support centre. Supplied from numerous local airfields
- Other activity: police, surveying, agricultural. Market requires 800 metre runway, hangar, support services. Norwich, Cambridge and smaller local airfields serve this market.

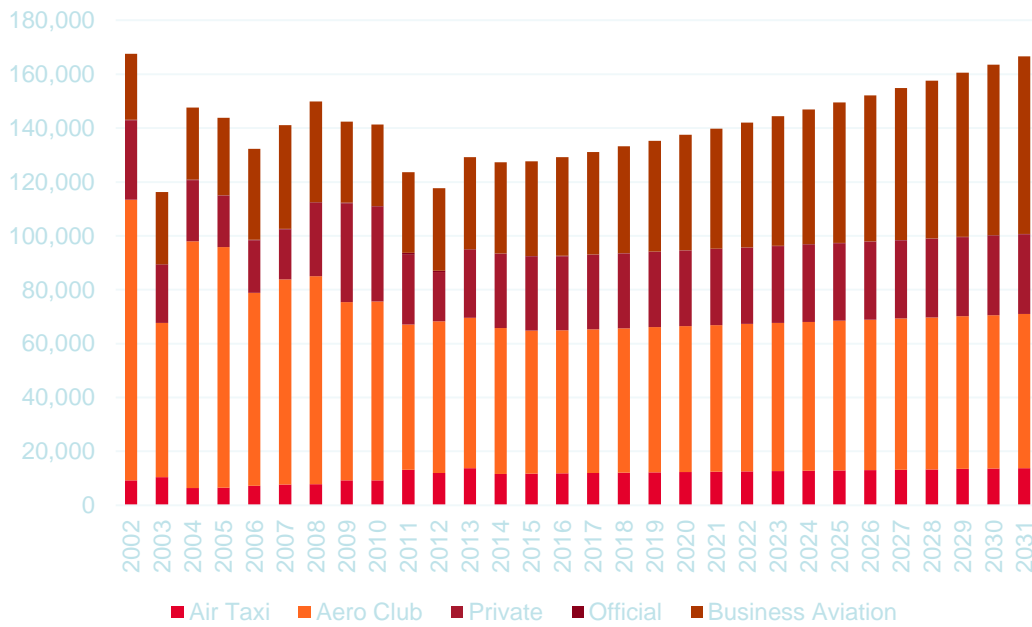
National demand for business and general aviation has been in general decline over the last 10 years. There has been stagnation and even decline in the number of aircraft on the UK register but this has slowed over the last three years

The chart below shows South East and Midlands business aviation movements since 2002. There has been a steady and significant decline since the peak in 2002. The decline has been most marked in the 'aero club' category with the others remaining generally constraint.

Aero club is most commonly private flying with aircraft owned by individuals or small groups. The decline is generally a reflection of increased costs and declining disposable incomes due largely to rapidly increasing housing costs.



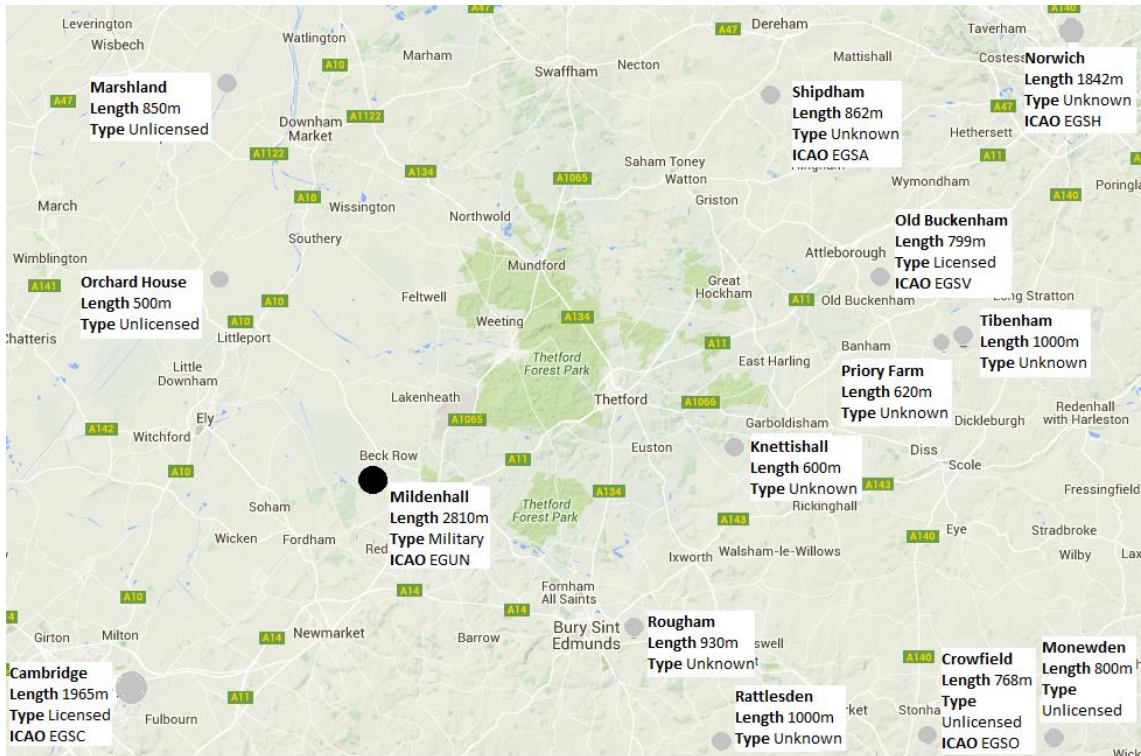
Figure 8 - UK South and East General Aviation Development (Reporting Airports Only)



Source: CAA

The trend is less pronounced in the other categories of business, air taxi and official which have seen a less significant drop as there is a less direct relationship with disposable income and the region is well served with local airfields. The map shows airports and airfields within 50 miles of Mildenhall with 14 general aviation airfields and 2 airports offering scheduled flights. Cranfield and Luton are also important to this market, the former is slightly further than 50 miles but has a relatively short access time.

Figure 9 - Airports and Airfields within 50 Miles of Mildenhall (excluding military)



Source: *Infrata*

### Business Aviation: Market Drivers and Trends

Business aviation includes air taxi operations, in which clients charter whole aircraft, and corporate operations in which a company owns and operates its own aircraft using professional pilots.

After the financial crash of 2008 there was a sharp drop in the UK of business aviation activity – both in the number of registered aircraft and flights taken. More recent data suggests there has been a strengthening recovery. Based on average economic growth of 1.8% per year the business jet manufacturer Bombardier forecasts a fleet compound annual growth rate of 7.0% until 2024. It expects that Europe will remain the second largest market for business jet deliveries. Europe is forecast to receive 1,525 deliveries valued at \$50 billion. Medium and Large category aircraft will account for almost 70% of deliveries.

The UK is the third largest business jet market in Europe. There are 300 business jets and 93 turboprop corporate aircraft registered in the UK (2012 figures). The majority of the fleet is located in the South East of the UK; London is served by 14 airports for private aviation and most business aviation flights are from the London airports to France and Switzerland.

Over the last few years a number of financial models have been developed to bring down the cost of corporate flying. There are increasingly affordable charter flight deals, competitive fractional ownership schemes - where customers buy a percentage of an aircraft which entitles them to a fixed number of flight hours a year - and new jet-card services, where a customer also buys hours in the air but without any ownership costs. These have contributed to the flattening of the downward curve of business flying and to promote growth in the long term.

In its 2014 market forecast, Honeywell Aerospace (a major manufacturer of engines for business jets) predicted 75% of all expenditure on business jets to 2024 will be on larger-cabin aircraft classes “ranging from super midsize through ultra-long-range and business liner,” according to company predictions. In the UK, large business jet registrations have been growing in recent years while other class of business jet have been stable.

**Table 6 - UK general/business aviation aircraft registrations by aircraft weight**

UK GENERAL/BUSINESS AVIATION AIRCRAFT REGISTRATION BY AIRCRAFT WEIGHT			
Year	5,701 – 15,000 kg	15,001 – 50,000 kg	Over 50,000 kg
2015	190	260	806
2014	200	272	791
2013	212	289	761
2012	219	293	755
2011	228	297	742
2010	253	306	742
2009	256	292	766
2008	270	270	760
2007	258	257	760
2006	253	272	712
2005	254	256	679
2004	254	271	662
2003	254	264	644
2002	267	307	645
2001	276	296	624
2000	262	288	592

**Source: General Aviation Manufacturers Association**

While the busiest routes for all types of business aviation flights (jets, piston and turboprops) are internal flights, most business aviation flights, measured by movements a day, are between airports in the South East of the UK and continental Europe. Four of the most popular business aviation destinations from the UK are served from Luton and it is possible that some of this market could also be served from another airport such as Mildenhall as the passengers are likely to reside in or have destinations on the east and northeast sides of London.

**Table 7 - Major UK Business Aviation Routes**

MAJOR UK BUSINESS AND AVIATION ROUTES		
Departure airport	Destination Airport	Movements a day
London Luton	Paris Le Bourget	3.5
Bristol Filton	Paris Le Bourget	3.2
Isle of Man	East Midlands	2.9

MAJOR UK BUSINESS AND AVIATION ROUTES		
Departure airport	Destination Airport	Movements a day
Farnborough	Paris Le Bourget	2.8
London Luton	Nice	2.8
Farnborough	Geneva	2.7
Farnborough	Barrow	2.5
London Luton	Geneva	2.4
Farnborough	Nice	2.4
London Luton	Moscow	2.4
Guernsey	Jersey	2.1
London Luton	Farnborough	1.8
London City	Paris Le Bourget	1.7

Source: Eurocontrol

Most of the other airfields that serve the region provide the full range of facilities for business aviation.

- LHR: Limited availability for business aviation. Even for private jet users going through LHR's dedicated private jet terminal (FBO), operated by Signature Flight Support, delays are often experienced in the air and on the ground and business aviation is being discouraged and priced out by high landing fees.
- Luton: UK's busiest private airport and one of the top 5 in Europe but Luton is becoming severely constrained and business aviation is likely to be 'squeezed out'.
- Stansted: offers a choice of five private jet terminals (FBOs); 24 hour access; and good transport links. However, in the long term business aviation will find it increasingly hard to find runway slots.
- Cranfield: its runway can accommodate all sizes of private jet and, with no runway slots and airside access for cars, it offers flexibility and high levels of privacy

The wider London and South East market is also served by Gatwick, London City, Southend, Northolt, Biggin Hill, Farnborough, Blackbushe and Fairoaks.

Mildenhall has no operational constraints due to its runway length of 2,810 metres. This means that all business jets can use the airfield at maximum take-off weight (MTOW). Mildenhall has potentially excellent facilities that could provide a strong "pull factor" for the business aviation community that may be growing in the regional economy. However, Mildenhall is not close enough to national major centres of business and this may limit its growth.

There is likely to be an increased overall market in London and the South East England with growth expected to revert to its pre-recession 3% pa partly driven by some diversion from constrained scheduled services for the business market.

### Helicopters: Market Size and Trends

In 2014 there were 1,232 helicopters with British "G" registrations, 18% below the peak of 1,495 in 2009. The UK recession has hit the lower end of the market the most and in only the larger 5,701 to

15,000 kilogramme (kg) weight range has there been a gradual increase every year for the last ten, and a big jump from last year's figure of 95 to 110 this year.

The larger helicopters cover most of the offshore North Sea fleet largely served out of Norwich. The UK is a major centre for training and operating offshore helicopters and the operating group Douglas-Westwood forecasts \$24 billion in expenditure on offshore helicopter services between 2014 and 2018; a 57% increase in comparison to the preceding five-year period. 5

The bulk of the UK market is in the 751-5,700 kg range - a broad industry categorisation that covers everything from single piston helicopters like the Enstrom range through to the Sikorsky S76. The number of helicopters in the UK peaked in 2008 and has been in steady decline since then. Table 8 shows the development of registrations.

**Table 8 - Annual UK Helicopter Registrations**

ANNUAL UK HELICOPTER REGISTRATIONS												
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Registration	1,238	1,314	1,386	1,490	1,495	1,428	1,364	1,299	1,260	1,232	1,231	1,258
% growth	-	6.14	5.48	7.50	0.34	-4.48	-4.48	-4.77	-3.00	-2.22	-0.08	2.19

Source: CAA

Demand for North Sea helicopter pilots plus the continuing demand for high-end executive helicopter services has meant the demand for commercial helicopter pilots in the UK has remained more stable than in other European countries, though recreational pilot demand has fallen. Total helicopter movements from the region are expected to be approximately 5,000 pa and have declined over the last five years and there are significant helicopter opportunities at most of the other regional airfields. Also, the long term trend is likely to be downwards due to the need for greater efficiency in the UK North Sea oil and gas sector.

### Fixed Wing Training

There are three types of flying school within the UK GA sector:

- The large multinational businesses such as CAE Oxford, training pilots for commercial air transport operations.
- Large UK based schools such as Aeros which offer a range of training courses across the aviation sector.
- Small local flying schools at small general aviation airfields.

While the larger schools are benefitting from an upturn in recruitment by low-cost and network airlines, smaller flying schools in the UK are coming under pressure from a number of areas. Costs – insurance, fuel, maintenance – remain relatively high and demand remains suppressed by the stagnant disposable income of its customer base. Most pilots are self-financing from the start: the General Aviation Awareness Council claims that 60–70% of professional pilots have self-financed their flight training at GA schools.

<sup>5</sup>(<http://www.douglas-westwood.com/shop/shop>).

Many flying training schools are economically unviable – instructors are normally paid by the flying hour – and exist only through the passion of their owners. There is also the continuing pressure on UK flying schools from centres based in other parts of the world, such as Florida and South Africa, which offer intense, short term and cost-efficient syllabuses and parts of the world not impacted by poor weather conditions found in northern Europe. The UK is a relatively expensive place to acquire a commercial pilot's licence and likely to become more expensive in the future. However, demand for pilots in the commercial sector will continue to be high and the 2014 Boeing Pilot and Technician Outlook projects that 533,000 new commercial airline pilots and 584,000 new maintenance technicians will be needed to fly and maintain the world fleet over the next 20 years.

New European Aviation Safety Agency (EASA) regulations are also being proposed so that national PPLs become European licences, requiring flight schools to upgrade facilities from national registered training facility (RTF) status to international Approved Training Organisation (ATO). To help mitigate these issues many of the smaller flying schools are replacing their Cessna 152s and 172 with motorised gliders, reducing costs of owning and flying aircraft and the hours student pilots will need to qualify for a licence – and then upgrading their licence after qualification.

The recent recovery in the European airline sector and demand for new pilots from low fare airlines has ensured that demand for commercial (professional) licences has remained relatively stable over the last few years but private pilots have declined to fall in number.

**Table 9 - Pilot licences issued by the CAA**

PILOT LICENCES ISSUED BY THE CAA				
Year	Private	% growth	Professional	% growth
2015-2016	2,944	- 45	2,305	0
2014-2015	5,308	-13	2,294	-42
2013-2014	6,123	125	3,966	32
2012-2013	2,716	- 5	3,015	- 5
2011-2012	2,845	14	3,175	30
2010-2011	2,486	- 3	2,438	- 7
2009-2010	2,552	- 10	2,611	-10
2008-2009	2,828	- 4	2,908	- 4
2007-2008	2,960	- 2	3,015	13
2006-2007	3,030	- 8	2,679	1
2005-2006	3,277	3	2,659	11
2004-2005	3,190	-14	2,400	-14

Source: CAA

East Anglia has a wide range of airfields and flying schools of all types. Cambridge has become a significant training centre for students wishing to acquire commercial a pilot's licence and accepts



students from around the world. The area benefits from being close to major urban centres in the region and London, plus having more unrestricted airspace for training operations.

### Microlights

A microlight is an aeroplane, capable of flight in the same way as any other. It is restricted to 2 seats, it must weigh around 265kg at most and it must be able to fly at low speed.

There are three main types of microlight; the 3-axis (or fixed wing) type which looks more like a conventional aeroplane, the flexwing type which consists of a delta wing similar to a hang glider with a 'trike' unit suspended underneath it and powered parachutes which have a ram air canopy below which is suspended a wheeled power unit often similar to the flexwing type. All three of these types require a pilot's licence to fly in the UK.

According to industry data, the number of microlight pilots in the UK peaked in 2008 and has not yet recovered from the years of the crisis – still not reaching the number of registered pilots recorded in 2004. However, this data may understate the market as very large numbers of microlight flights are not recorded.

It is a market which is primarily driven by the amount of disposable income available. In the UK training to fly a microlight will cost £3,000-4,500. The National Private Pilot's Licence (NPPL) is a UK specific pilot's licence developed in 2002. It is not an internationally recognised licence and does not automatically entitle the holder to fly aircraft in other countries.

The NPPL may include in it aircraft Class Ratings that allow the holder to fly specific classes of aircraft, such as microlights. The Microlight Class Rating can be issued with either of two options. The options are Without Operational Limitations or With Operational Limitations.

**Table 10 - UK Microlight Flying**

UK MICROLIGHT FLYING		
Year	Microlights	% growth
2014	3,998	-0.77
2013	4,029	-0.44
2012	4,045	0.05
2011	4,043	-0.69
2010	4,071	-6.95
2009	4,375	-1.62
2008	4,447	1.25
2007	4,392	3.24
2006	4,254	3.30
2005	4,118	1.18
2004	4,070	

Source: General Aviation Manufacturers Association

Many other regional airfields provide microlight facilities. However, microlights can also operate from smaller grass strip airfields.

### 7.2.6 Other

Beyond aviation, the UK space industry currently has a strong presence in small rocket production, Mildenhall may present the opportunity for testing and launching of these rockets. The government has identified a number of strategic sites across the UK for a spaceport, with existing companies located in North London and Hertfordshire.

This was considered at RAF St Mawgan, Cornwall; in 2015 the government reviewed the potential for the base to be the first UK national space port. This opportunity was suspended but the government has now allocated sites with potential for this activity.

## 7.3 Strategic fit

### 7.3.1 Sector location and investment criteria

In 2009 the overall population of Suffolk was 715,700 with the majority of future predicted growth to be driven by economic migration (Suffolk County Council, 2011). This is supported by a strong economy, Suffolk County in 2008 reported a GVA of £12,603,000, a 28% increase on the previous 5 years (Suffolk County Council, 2008). As a result of a stable economy businesses have also developed with survival rates for businesses in 2011 being 81% over 2 years (BDUK, 2011). Property values in Suffolk have risen from 2013 to 2015 and specifically from an average of £195,000 in January 2015 to £215,000 in April 2016.

Suffolk is projected to continue this growth; in 2009 Suffolk County Council produced the Western Suffolk Land Review, the aim of this report was to support the emerging core strategy for the wider Western Suffolk region including Mid- Suffolk, St Edmundsbury and Forest Heath.

In 2009 when the study was carried out the commercial market in West Suffolk was as follows:

- Overall focus is in industrial uses with some office stock.
- Industrial stock is especially present around Mildenhall serving the printing and metal works.

The economic sub-region of Western Suffolk demonstrates a number of distinct economic influences in different parts such as:

- Felixstowe A14 Corridor
- Ipswich markets (1<sup>st</sup> and 2<sup>nd</sup>)
- A140 Corridor
- Bury St Edmunds
- Newmarket
- Cambridge

In the 2009 study, employment clusters were shown to be centred around mid-Suffolk North, mid Suffolk West and mid Suffolk South; this is largely as a result of the existing transport links by road, whilst rail access is largely poor. Local road access supports employment growth in sites such as those within the District. The South of the District has significantly stronger links, indicating that this area could support greater future growth and employment (Western Suffolk Employment Land Review, 2009).

Greater employment is likely to be needed given the population trends and predictions for the County. The Populations Profile of Suffolk County Report (2012) highlights future population change in Suffolk

and the shift in demographics based on the Office of National Statistics subnational population projections.

The latest population predictions are based on the most recent 2011 census data incorporating future trends around births, deaths and migration based on 2010 subnational population projections. These population projections for 2021 can be seen in Figure 10.

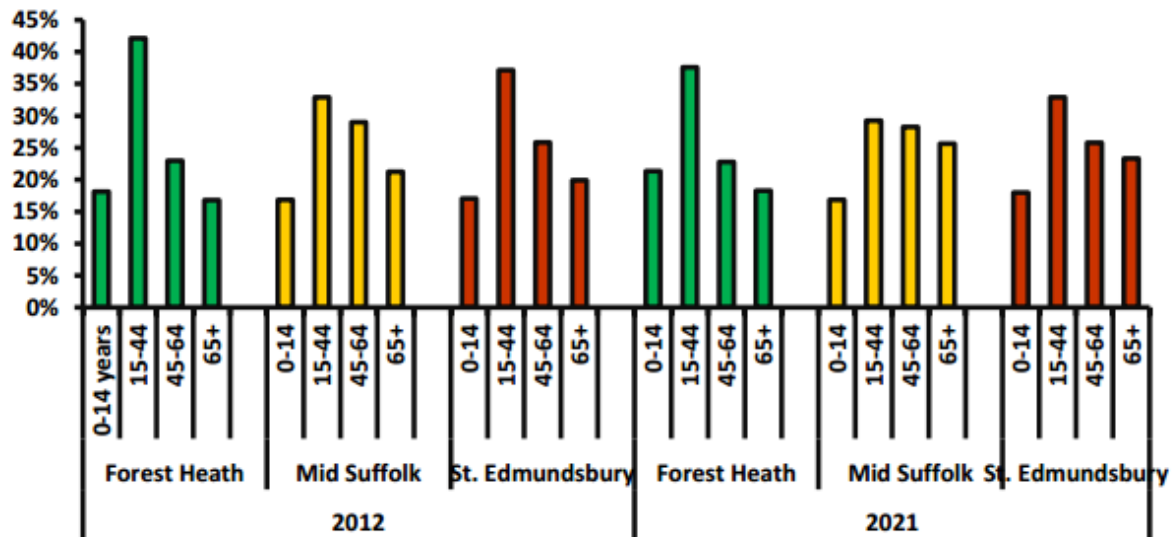
**Figure 10 - Projected Population Projections from 2012 to 2021**

Area	Estimated population			% change	
	2001	2012	2021	2001-12	2012-21
Babergh	83538	87917	91251	5.2%	3.8%
Forest Heath	56145	60735	68405	8.2%	12.6%
Ipswich	117156	134466	142893	14.8%	6.3%
Mid Suffolk	87015	97611	106957	12.2%	9.6%
St. Edmundsbury	98323	111610	116851	13.5%	4.7%
Suffolk Coastal	115239	124323	137095	7.9%	10.3%
Waveney	112497	115670	121402	2.8%	5.0%
<b>Suffolk County</b>	<b>669913</b>	<b>732332</b>	<b>784855</b>	<b>9.3%</b>	<b>7.2%</b>

Source Population Profile of Suffolk County (2012)

This data can be future divided into projections based on broad age groups as seen in Figure 11.

**Figure 11 - Distribution of estimated and projected population by broad age group for the Local Authority districts in West and Central Suffolk 2012-2021**



Source Population Profile of Suffolk County (2012)

Figure 11 indicates that by 2021 the population across Suffolk will have become older (as per the wider UK trend). The District maintains high percentages in age ranges 15-44 and 45-64. The people in these age ranges are typically economically active and this therefore supports the wider Suffolk evidence of job growth being needed in order to support the growing population.

Rising population supports the rising need for greater employment opportunities. In order to forecast the spread of employment growth and allow for analysis per sector the Western Suffolk Employment Land review analysed Oxford Economic data from 2001 to 2021. This analysis provide an approximation of the divisions of employment between the differing local authorities across the Western Suffolk sub-region.

Table 11 is based on the projections for the East of England and shows the Western Suffolk sub-region forecasts for job growth based on Regional Spatial Strategies (RSS).

**Table 11 – RSS Job Split for Western Suffolk**

	<b>Job 2001</b>	<b>Number</b>	<b>Job 2021</b>	<b>Number</b>	<b>Change (%)</b>	<b>% of Job Growth</b>
Mid Suffolk	42,295		42,002		-293	-1.5
St Edmundsbury	55,503		69,721		14,218	72.8
Forest Heath	28,830		34,407		5,577	28.6
<b>Total</b>	<b>126,628</b>		<b>146,130</b>		<b>19,502</b>	<b>100</b>

Source: Oxford Economics/GVA Grimley 2006

The information in Table 11 can then be further broken down into regionally specific data. This allows for examination of employment increases, using the baseline economic forecast from RSS and the broad sector growth. This indicates that the District is forecast to see a 27% growth in jobs of the total growth across the West Suffolk region.

Within the District, total employment was forecast to grow by 25% from 2006 to 2026. Major growth sectors identified by Suffolk County Council were financial and other business services as well as retail/hotels and construction. Employment is projected to fall in areas such as manufacturing, mining/utilities, with a smaller decline predicted for agriculture. These sectors are broad generalisations and do not shows the different areas within the overall sectors.

Further examination and refinement of data within the Western Suffolk Land Review led to the identification of areas which are projected to have the greatest amount of growth. Across Mid Suffolk future growth is predicted to be seen in high-tech manufacturing, forestry and related services, mining and quarrying, supporting and auxiliary transport activities.

Growth in the District is strongly linked to the horse racing industry and wider impacts from Newmarket. The recreational and cultural sector has demonstrated strong growth since 1998 (Western Suffolk Employment Land Review, 2009). Recreation and leisure is clearly a sector with a strong future in the District with a number of ancillary activities attracted to the region.

Other sectors that are forecast to perform well include the hotels and restaurants sector, traditional B-Class sectors such as manufacturing and the other service activities sector. The research shows that employment in office space is significantly below the numbers employed in Non-B-Class sectors, although it is projected to increase in the years up to 2026. Whilst employment levels in warehousing are set to remain broadly steady (Western Suffolk Employment Land Review, 2009).

These predictions fall broadly in line with the current Economic Data Breakdown (NOMIS, 2015/2016), which shows the major employment sectors in 2015/16 to focus around Primary Services, Manufacturing, Construction and Accommodation & Food. With regards to manufacturing, in recent years several firms have re-located and expanded in the District boosted by the New Anglia LEP Fund.

These are further supported by existing firms such as Witton Chemical Company who have been located in Mildenhall since 1974 and newer firms such as Electronic Metalwork Services.

The West Suffolk Land Review suggest that development and focus in Research & Development sector growth is likely to be strong across the Greater Cambridge sub-region (potentially feeding into the District). The review further identifies that Mildenhall and Newmarket offer strong potential as sites for Hi-Tech Product Development and Manufacturing Campuses. However, the District is not highlighted as an area where non-university led Research & Development is likely to prosper, but given the growing prices within Cambridge and the strong links and accessibility this may shift moving forwards (although we would note the qualitative restrictions of the site potential as highlighted in Section 7.1).

In some instances, the Western Suffolk Employment Land Review is contradictory to FHDC. The Forest Heath Annual Monitoring Report for 2013/14 and 2015/16 highlighted their predictions for employment growth. With regards to employment, the District is aiming to achieve the figures stated in their Core Strategy of 7,300 additional jobs by 2026 (Annual Monitoring Report 2015/16). This is predicted to be met through the provision of employment in land, tourism, leisure, retail and the rural economy (Annual Monitoring Report 2015/16).

Both forecast for the County and FHDC support the growth in the rural economy and leisure. This is unsurprising given the focus of the region on agriculture and associated activities and the close proximity to Newmarket.

### **7.3.2 Mildenhall 'base case' growth scenario**

West Suffolk is set to benefit from large scale infrastructure investment as the A11 corridor is expanded and efforts continue to provide the county with high speed broadband.

The A11 expansion is a crucial strategic infrastructure investment allowing for a greater volume of traffic and access across the county. In 2015 the A11 Growth Corridor Feasibility Study was commissioned, this study looked to encompass the three districts of South Norfolk, Breckland and Forest Heath. The aim behind this union was to help facilitate development which stretches beyond the A11 expansion in order to aid the establishment of a new location for economic investment activity. Newmarket and District Chamber of Commerce highlight that this expansion presents a substantial opportunity for growth (Briefing Note, 2016). The A11 strategy focuses on developing new technology related employment, rebalancing the economy of the region and helping to secure the future for the area (A11 Growth Corridor Feasibility Study, 2015). This aim was set in order to capitalise on the significant infrastructure investment and make the A11 corridor a recognized location for investment activity to boost the Cambridge sub-region.

In order to facilitate this growth off the back of the A11 expansion, the study suggest a number of sectors for expansion such as engineering especially advanced manufacturing and agri-tech whilst also building on the existing Cambridge knowledge base around life sciences and research. This includes linking with existing sites such as Norfolk Research Park, Thetford Enterprise Park and Newmarket Business Park. The study suggests across the three areas 8,700 net additional jobs could be created and space for 200,000 new homes (A11 Growth Corridor Feasibility Study, 2015).

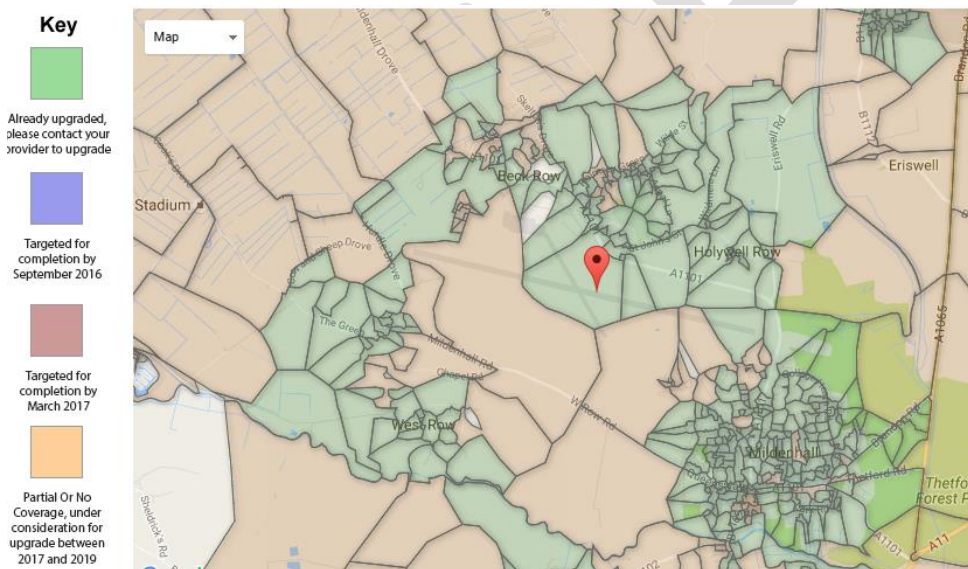
Mildenhall is likely to benefit from the A11 expansion with greater access to east coast ports and Cambridge. Any additional regeneration and growth is also likely to benefit Mildenhall offering an opportunity for greater linkages between existing centres and increasing attractiveness of the area for firms given the greater accessibility.



Supporting this is the initiative aiming to provide Suffolk with greater access to high speed broadband. In order for any centre to be established high speed broadband would be required. ‘Better Broadband to Suffolk’ is an initiative aiming to facilitate the spread of high speed broadband to homes and businesses. The program is funded by Suffolk County Council as well as the Department for Culture, Media and Sport and BT (Better Broadband to Suffolk, 2016). In 2011 when the initiative was launched the average broadband speed was 5Mbps with significant variation in actual speeds. Since the initiative there has been wide spread replacement with fibre based solutions creating greater speeds. Following the successful delivery of Phase 1, plans for Phase 2 have been developed and this will be launched in the next few years, with an additional £30m of funding. This initiative is not only helping existing firms but creating greater economic stability in the region. Suffolk Local Broadband Plan suggest that the initiative will assist with greater retention of small businesses, whilst making the region increasingly attractive to businesses looking to relocate (Better Broadband to Suffolk, 2011).

In order to deliver broadband to the rest of Suffolk, Better Broadband to Suffolk has signed a second contract with BT to ensure continuing upgrades and delivery of superior broadband to 2019. This scheme will ultimately aid delivery of super-fast broadband to 95% of the area. Figure 12 illustrates that parts of the RAF Mildenhall site have already been connected to super-fast broadband with other parts still with partial or no coverage (upgrades under consideration between 2017 and 2019).

**Figure 12 - Broadband Availability Mildenhall (Better Broadband Suffolk).**



### 7.3.3 Future sector trends

Table 12 summaries the potential for each property sector in terms of the typical requirements of the occupier market, a forecast for the wider macro potential/ opportunity offered by the site in 2025 and then consideration of the potential interventions required to bring forward these sectors.



Table 12 – Sector Requirements/Occupiers/Interventions by Sector

MILDENHALL PROJECTIONS			
Sector	What drives the occupier market	Mildenhall 2025 and beyond	Potential and interventions required
<b>Commercial</b>			
Offices, business and incubator space	<ul style="list-style-type: none"> <li>Ability to cluster.</li> <li>Accessibility and good public transport links.</li> <li>'Hub' to attract firms and create a destination location.</li> <li>Skilled workforce within close proximity.</li> </ul>	<ul style="list-style-type: none"> <li>Limited existing demand.</li> <li>Future demand for finance and other business services is predicted to increase by 73% between 2006 and 2026 within Forest Heath (GVA, 2009).</li> <li>Office floor space need of 340,000 sq ft in Forest Heath from 2006 to 2026 (GVA, 2009).</li> <li>Economic and population growth in East Anglia but no natural cluster here or anchor occupier without public sector intervention.</li> </ul>	<ul style="list-style-type: none"> <li>Proximity to Cambridge and the science clusters located here presents the most obvious and tangible opportunity to attract occupiers and create a cluster.</li> <li>A catalyst in terms of sector specific focus and anchor occupier is needed.</li> <li>Significant public sector support is likely to be required in order to establish a market and 'pump prime' development.</li> <li>IT/ communications infrastructure would require improvement – depending on scale, some road upgrades.</li> </ul>
Industrial, logistics	<ul style="list-style-type: none"> <li>Accessibility to trunk road network.</li> <li>Cleared site with space for expansion and nearby uses which don't constrain development.</li> <li>Relatively flat topography.</li> <li>Potential for 24 hour operation.</li> <li>Flexibility on building design/ height/ specification.</li> <li>Access to power supplies and potential to upgrade.</li> </ul>	<ul style="list-style-type: none"> <li>24% increase in employment in distribution between 2006 and 2026 in Forest Heath.</li> <li>Advanced manufacturing across Mid-Suffolk and South Norfolk accounts for 8,400 employees (A11 Growth Corridor Feasibility Report, 2015).</li> <li>Rise in employment in Forest Heath to 11,700 by 2031.</li> <li>Mildenhall offers a flat and cleared site.</li> <li>Local agents suggest that demand is present although typically local occupiers require relatively small units.</li> <li>Proximity to the A11 but the roads approaching the site are narrow and not suitable for HGV's</li> <li>The site is in relatively close proximity to residential areas and 24 hour access may not be suitable on all of the site.</li> <li>In a relatively poor macro location for distribution hubs.</li> <li>FHDC forecast growth in high-tech manufacturing employment capacity.</li> <li>Development could tie in with the existing small industrial site adjacent to RAF Mildenhall.</li> </ul>	<ul style="list-style-type: none"> <li>Whilst demand is present for industrial space at Mildenhall, this is on a relatively small scale and is often providing space for local firms.</li> <li>Limited potential for large scale, national occupiers given site access constraints.</li> <li>Road infrastructure upgrades are likely to be required for a development of any scale in order to minimise road impacts on the town of Mildenhall.</li> <li>There is some potential to build on the existing manufacturing base to provide space for high-tech specialist suppliers.</li> <li>This may benefit from A11 expansion.</li> </ul>

**Retail and Leisure**

<p><b>Retail centre, retail boxes, retail outlet, permeant brand expo</b></p>	<ul style="list-style-type: none"> <li>• Scale and the ability to create a destination.</li> <li>• Large catchment area.</li> <li>• Good road accessibility.</li> <li>• Accessibility and good public transport links.</li> </ul>	<ul style="list-style-type: none"> <li>• The location of Mildenhall limits its catchment area and accessibility.</li> <li>• Established centres in close proximity at Bury St Edmunds and Cambridge.</li> <li>• Limited connectivity for outlet centre.</li> <li>• As the population grows the employment in this sector is predicted to grow by 35% by 2026 in Forest Heath (GVA, 2009).</li> </ul>	<ul style="list-style-type: none"> <li>• Retail outlet centres (e.g. Bicester Village) can come forward in relatively isolated locations but catchment is unlikely to be strong enough.</li> <li>• An anchor/sector driver is required in order to deliver brand expo space.</li> </ul>
<p><b>Commercial leisure, sports</b></p>	<ul style="list-style-type: none"> <li>• Large catchment area and access to population.</li> <li>• Good accessibility from road.</li> </ul>	<ul style="list-style-type: none"> <li>• Mildenhall has suitable topography for field based sports etc.</li> <li>• A regional, as opposed to national, catchment area.</li> <li>• 'Need' is predicted to grow given the proximity to Newmarket and the horse racing Industry (Western Suffolk Employment Land Review, 2009).</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number of occupiers for significant space in relation to these uses.</li> <li>• Current trends are predicted to continue e.g. influence from Newmarket.</li> <li>• Potential for FHDC to promote the site to major sports bodies etc. could be pursued.</li> </ul>
<p><b>Hotel, conference centre</b></p>	<ul style="list-style-type: none"> <li>• Existing established business space in close proximity.</li> <li>• Existing tourist draw/ site of interest.</li> <li>• Good transport links.</li> </ul>	<ul style="list-style-type: none"> <li>• 35% growth anticipated in hotels and retail demand in the District towards 2026 (GVA, 2009).</li> <li>• Limited attractions for occupiers unless a hub exists.</li> </ul>	<ul style="list-style-type: none"> <li>• The provision of hotels is only likely to be necessary if linked to other uses on the site (i.e. tourist facilities/ business centre).</li> </ul>
<p><b>Tourism related leisure</b></p>	<ul style="list-style-type: none"> <li>• Large catchment area.</li> <li>• Ability to draw people from large population centres.</li> <li>• Good accessibility from road, rail, air.</li> <li>• A unique selling point or point/ points of interest.</li> </ul>	<ul style="list-style-type: none"> <li>• Site is located away from major urban conurbations.</li> <li>• The site is flat with no obvious features that can be used to create a consumer/ tourist draw in this location.</li> <li>• Limited points of interest in close proximity to RAF Mildenhall.</li> <li>• Leisure is already a large employer in the District (employing 28% of local residents).</li> </ul>	<ul style="list-style-type: none"> <li>• Some potential to build on the existing networks and catchments.</li> <li>• Site typography and location limits potential.</li> </ul>

**Education, Science and Innovation**

<p><b>Education</b></p>	<ul style="list-style-type: none"> <li>• Pupil demand and catchment area.</li> <li>• Away from other educational centres.</li> <li>• Good accessibility.</li> </ul>	<ul style="list-style-type: none"> <li>• There is currently no known major requirement for new campuses/relation of any departments from Norwich or Cambridge universities.</li> <li>• There are no major school initiatives for this area.</li> <li>• Given the current use as an RAF base there may be some capacity to create a hub focused around aviation.</li> </ul>	<ul style="list-style-type: none"> <li>• Can act as a major and critical anchor if an occupier can be found.</li> <li>• FHDC to liaise with local universities and engage in sector specific targeting (likely to be the most effective and sustainable).</li> <li>• IT/communications infrastructure would require improvement.</li> <li>• Aviation hub encompassing training and technology would offer an opportunity to build on the existing skill set.</li> </ul>
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<p>Science and Innovation</p>	<ul style="list-style-type: none"> <li>Existing base or anchor.</li> <li>Good transport links.</li> <li>Space to cluster and create a 'hub' or accommodate a large firm.</li> <li>Highly skilled work force or the ability to attract skilled labour.</li> </ul>	<ul style="list-style-type: none"> <li>RAF Mildenhall presents some opportunity to link with existing science parks in the Cambridge area.</li> <li>The M11 corridor (and particularly the Cambridge area) is strong for these uses but firms typically want closer access and proximity to Cambridge (than the RAF Mildenhall site can provide for).</li> <li>RAF Mildenhall is in a strong agricultural area which may give the opportunity to link into sectors/ area which are tangential.</li> </ul>	<ul style="list-style-type: none"> <li>There is some potential for science parks in this location in the long term although the distance from Cambridge is a limiting factor.</li> <li>An anchor is essential - typically this would be an educational or research facility.</li> <li>Uses within the agri-tech sector may be appropriate although significant public sector intervention is likely to be required given the location and lack of an existing hub to leverage off.</li> </ul>
<p><b>Housing</b></p>			
<p>Market Housing</p>	<ul style="list-style-type: none"> <li>Good accessibility and a wide catchment area.</li> <li>Underlying demand.</li> <li>Located close to existing and emerging centres of employment/commerce.</li> <li>Intertwined with services such as hospitals, schools or rail links.</li> </ul>	<ul style="list-style-type: none"> <li>Potential for development given rising prices in the wider region.</li> <li>Actual net dwelling completions from 2011 to 2015 were 1,123 units (Forest Heath Assessment of Five Year Supply of Housing Land, 2015).</li> <li>The SHMA assessed the housing need in the District to be 7,000 homes between 2011 and 2031.</li> <li>The Core Strategy Policy adopted by Forest Heath indicates that from 2011 to 2031 there are 5,300 additional homes required.</li> </ul>	<ul style="list-style-type: none"> <li>The SHMA identifies long term housing need and demographic changes and the population growth anticipated in East Anglia show long term demand.</li> <li>Sustainable transport links are critical to ensure that residential is more than commuter housing and it is plugged into the wider economy and can begin to dovetail with non-residential uses.</li> </ul>
<p>Emerging residential sectors – PRS, Custom Build, Retirement, Extra Care</p>	<ul style="list-style-type: none"> <li>Good accessibility.</li> <li>Demand for other forms of housing beside traditional accommodation.</li> <li>Located close to existing commercial centres or emerging commercial centres.</li> <li>Located in close proximity to services such as hospitals, schools or rail links.</li> </ul>	<ul style="list-style-type: none"> <li>West Suffolk has an ageing population, with 25% of the population projected to be over 60 by 2031.</li> <li>Limited PRS potential in the area, although national trend towards renting as opposed to home ownership will still be reflected in the area.</li> <li>Potential for Custom Build housing given relatively low land costs.</li> </ul>	<ul style="list-style-type: none"> <li>Research has been commissioned.</li> <li>Opportunity for specialist housing aimed at retirees.</li> <li>Intervention likely to be required to support other emerging sectors such as PRS.</li> <li>Different tenures can help support wider, mixed use elements of major developments.</li> </ul>
<p><b>Aviation</b></p>			
<p>Commercial air transport – passenger</p>	<ul style="list-style-type: none"> <li>Availability of runway slots and terminal.</li> <li>Accessibility and good public transport links.</li> <li>Large catchment.</li> <li>Good accessibility from road, rail.</li> <li>Low costs for airlines.</li> </ul>	<ul style="list-style-type: none"> <li>Existing airports may 'flatline' due to lack of capacity.</li> <li>Congestion at London airports may make alternatives attractive.</li> <li>Some opportunity for regional air development but may be limited due to small catchment.</li> <li>Airlines may be reluctant to invest in new routes from new airport.</li> </ul>	<ul style="list-style-type: none"> <li>Road access requires improvement.</li> <li>Commitment in regional plans to explore opportunity.</li> <li>Investment required to upgrade to commercial airport.</li> </ul>

<p>Commercial air transport – cargo</p>	<ul style="list-style-type: none"> <li>• ‘General’ cargo flown on scheduled long haul ‘belly hold.</li> <li>• Freight forwarders extreme reluctance to develop new airports away from cargo cluster.</li> <li>• ‘Integrators’ need to be close to large population centres and motorway network.</li> <li>• 24 hour operations essential for cargo especially integrators.</li> <li>• Virtually no trans-shipment between rail and air; different types of cargo.</li> </ul>	<ul style="list-style-type: none"> <li>• Little potential for long haul scheduled flights which implies similar prospects for general cargo.</li> <li>• Integrators well-developed at Stansted.</li> </ul>	<ul style="list-style-type: none"> <li>• Little potential for cargo development.</li> </ul>
<p>General aviation – business, flight training, emergency service aviation, agricultural aviation, aerial survey</p>	<ul style="list-style-type: none"> <li>• Availability of runway slots and terminal.</li> <li>• Accessibility and good public transport links.</li> <li>• Large catchment.</li> <li>• Good accessibility from road, rail.</li> <li>• Low costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to develop air service centre.</li> <li>• Dependent upon ambition of Cambridge in this market.</li> <li>• Some activity may be diverted from other, smaller airfields in the region as larger airfield can offer better facilities.</li> <li>• Cost will also be a deciding factor.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Deep survey of market needs required to establish user levels.</li> <li>• Cost-benefit analysis of providing GA facilities – fuel, handling, servicing, hangarage.</li> <li>• Protect flying rights post departure of USAFE.</li> </ul>
<p>General aviation – recreational and leisure</p>	<ul style="list-style-type: none"> <li>• Availability of runway slots and terminal.</li> <li>• Accessibility and good public transport links.</li> <li>• Large catchment.</li> <li>• Good accessibility from road, rail.</li> <li>• Low costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential to develop air service centre.</li> <li>• Dependent upon ambition of Cambridge in this market.</li> <li>• Some activity may be diverted from other, smaller airfields in the region as larger airfield can offer better facilities.</li> <li>• Cost will also be a deciding factor.</li> </ul>	<ul style="list-style-type: none"> <li>• Deep survey of market needs required to establish user levels.</li> <li>• Cost-benefit analysis of providing GA facilities – fuel, handling, servicing, hangarage.</li> <li>• Private flying is often a very thin margin activity and has significant community impact due to noise and height of flying.</li> </ul>
<p>Maintenance, repair, overhaul</p>	<ul style="list-style-type: none"> <li>• Availability of runway slots and terminal.</li> <li>• Accessibility and good public transport links.</li> <li>• Availability of investors such as Marshall.</li> <li>• Good accessibility from road, rail.</li> <li>• Availability of land.</li> <li>• Supply chain: labour, components, partner companies.</li> </ul>	<ul style="list-style-type: none"> <li>• Large tracts of land available.</li> <li>• Marshall may require more or separate facilities.</li> <li>• Mildenhall builds on growing regional expertise in composites.</li> <li>• Mildenhall develops as aircraft de-manufacturing facility.</li> <li>• Some overspill military activity from RAF Lakenheath.</li> </ul>	<ul style="list-style-type: none"> <li>• Active development of supply chain.</li> <li>• Develop connections to Norwich aviation academy and Marshalls.</li> <li>• Develop connections to regional composites industry.</li> <li>• Support continued flying at Mildenhall.</li> <li>• Build aerospace marketing capability.</li> </ul>

Emerging Sectors

## RAF Mildenhall

<p><b>Energy Generation</b> – solar, wind, waste to energy</p>	<ul style="list-style-type: none"> <li>• Large parcels of open land.</li> <li>• Away from residential areas.</li> <li>• Reasonable accessibility.</li> <li>• Good site access for vehicles and machinery.</li> </ul>	<ul style="list-style-type: none"> <li>• The site at Mildenhall meets all of these criteria.</li> <li>• Economics and need for subsidy likely to have changed – position of regional power infrastructure will be important determinant.</li> </ul>	<ul style="list-style-type: none"> <li>• These initiatives offer some limited potential to boost employment and there are limited site constraints that affect them.</li> <li>• Some planning risk and do not offer the best potential when considering maximising land value.</li> </ul>
<p><b>Sustainable industries manufacturing e.g. turbines</b></p>	<ul style="list-style-type: none"> <li>• Large parcels of land for factories and high tech industry.</li> <li>• Good accessibility.</li> <li>• Good site access for vehicles and machinery.</li> <li>• Access to upgraded power.</li> </ul>	<ul style="list-style-type: none"> <li>• The site at Mildenhall meets the majority of these criteria.</li> <li>• Limited quantum of demand.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited scale potential.</li> <li>• In connection with other agricultural enterprise, technology or research hub there may be some ability to cluster if an anchor operator can be found.</li> </ul>
<p><b>Agri-tech</b></p>	<ul style="list-style-type: none"> <li>• Some existing agricultural expertise and base or food enterprise initiative.</li> <li>• Ability to cluster and create a 'Hub' to attract firms and create a destination location.</li> <li>• Skilled workforce within close proximity.</li> </ul>	<ul style="list-style-type: none"> <li>• In 2013 across Mid-Suffolk 21% of firms could be classified as being involved in agri-tech.</li> <li>• Breckland, Forest Heath and South Norfolk are forecast to see 6% growth in agri-tech by 2031 (A11 Growth Corridor Feasibility Report, 2015).</li> <li>• Employment in this sector across Breckland, Forest Heath and South Norfolk is predicted to rise 40% by 2031 (A11 Growth Corridor Feasibility Report, 2015).</li> <li>• Given the strong relationship between the UK science base and agricultural sector this area of study is in growing demand.</li> <li>• Suffolk has two food EZs.</li> <li>• There are currently a number of agri-tech businesses in the area surrounding Mildenhall.</li> </ul>	<ul style="list-style-type: none"> <li>• If an agri-tech cluster of businesses can be developed, this could act as an anchor for other firms creating the 'hub' that is needed for commercial space to be viable.</li> <li>• Challenges may be present given the location and proximity to other uses.</li> <li>• Need to engage with Agri-tech East and undertake a comprehensive assessment of the conditions required to make the site attractive to occupiers/parties in this sector.</li> </ul>
<p><b>Foreign Direct Investment (FDI)</b></p>	<ul style="list-style-type: none"> <li>• Opportunity to invest in projects and assets.</li> <li>• Often focused around technology, enterprise or suitable development and the major 8 sectors identified by UKTI.</li> </ul>	<ul style="list-style-type: none"> <li>• The scale of the site will be sufficient (even if partly developed for other uses) to be attractive to investor seeking a significant land holding.</li> <li>• No clear view at present as to long term FDI requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• A focus on the 8 key sectors identified by UKTI to establish and promote an anchor use at RAF Mildenhall is likely to require public sector backing, including UKTI in relation to any FDI.</li> </ul>
<p><b>Institutional e.g. health, prisons, other civic</b></p>	<ul style="list-style-type: none"> <li>• Large land areas.</li> <li>• Away from residential area (prison).</li> <li>• Low cost.</li> </ul>	<ul style="list-style-type: none"> <li>• Demand is limited for health services given the other services in close proximity.</li> <li>• Demand is present for prisons as the populations rise across the UK.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited potential.</li> </ul>

### Do minimum

<p><b>Agricultural</b></p>	<ul style="list-style-type: none"> <li>• Large amounts of open land with minimal contamination.</li> <li>• Good access for machinery.</li> <li>• Limited/no impact from previous uses fuel lines etc.</li> <li>• Good soil quality accredited by the Soil Association.</li> <li>• Is the land in an NVZ</li> </ul>	<ul style="list-style-type: none"> <li>• 8.4% Decline in agricultural employment to 2031 across Breckland, Forest Heath and South Norfolk (A11 Growth Corridor Feasibility Report, 2015).</li> <li>• Mildenhall is located in a Ground water NVZ Area and surface water NVZ Area which makes farming the land more complex.</li> <li>• Further to this, productivity for agriculture maybe a challenge as land has not been</li> </ul>	<ul style="list-style-type: none"> <li>• In order to maximise value there would need to be test and examination of the soil to asses any impact from aviation use.</li> <li>• Agricultural land has a relatively low land value when considering the long term value and other potential use classes.</li> </ul>
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	(Nitrate Vulnerable Zone) this affects use, limits viability and increases costs	used for crop production for some time.	
Open Storage	<ul style="list-style-type: none"> <li>• Good road networks to the site in order to accommodate large vehicles.</li> <li>• Good accessibility with large amounts of open space.</li> <li>• Limited surrounding uses to minimise disturbance.</li> </ul>	<ul style="list-style-type: none"> <li>• Open storage has potential given the market location and the close proximity to the A11.</li> </ul>	<ul style="list-style-type: none"> <li>• There is clear potential for open storage however it does not offer very good returns in the long run for land value when compared with other use classes.</li> <li>• Challenges for this type of space include disruption to residents and the lack of suitable road networks close to the site. The site has large areas of hard standing and therefore this could be utilised for storage space.</li> </ul>

### 7.3.4 Evaluation criteria

Table 13 demonstrates C&W's evaluation criteria. Each use was analysed against a number of key criteria these include:

- Integrating new development into the existing communities
- Planning
- Market demand
- Land value
- Site preparation and remediation costs
- Residual liabilities
- Infrastructure requirements
- Site suitability/competitive advantage
- Delivery timetable and risks
- Opportunity
- Sector/theme

These criteria were then graded 1 to 6 (colour coded green to red) based on 1 being 'significantly flawed' and 6 being 'exceptional fit with criteria'.



Table 13 – Land Use Options

Sector/ Theme	Opportunity	Legacy Objectives			Delivery Criteria							
		Minimising adverse impacts of closure	Creating new employment opportunities	Integrating new development into existing communities	Planning	Market demand	Land value	Site Preparation/ Remediation Cost	Residual liabilities	Infrastructure requirements	Site suitability/ competitive advantage	Delivery timetable and risks
Commercial	Offices, business space, business incubation	5	5	3	5	2	2	4	3	4	2	2
	Industrial, logistics	3	4	3	4	4	3	4	3	3	4	4
Retail and Leisure	Retail centre, retail boxes, retail outlet, permanent brand expo	3	4	2	2	2	4	3	3	2	2	2
	Commercial leisure, sports	3	4	3	4	3	3	2	2	3	4	3
	Hotel, conference centre	3	4	3	3	2	3	3	3	3	2	2
	Tourism related leisure	3	3	3	4	3	3	2	2	3	3	3
	Amenity/ social infrastructure	2	1	5	5	5	1	4	3	5	5	4
Education, science and innovation	Education	5	5	4	4	2	2	4	3	3	2	2
	Science, innovation	5	5	4	5	3	2	4	3	3	3	2
Housing	Market housing	4	3	4	3	4	6	2	2	2	4	3
	Emerging residential sectors – PRS, Custom Build, Retirement, Extra Care	4	3	4	3	4	5	2	2	2	4	2
	Affordable housing	4	3	4	3	5	3	2	2	2	4	3
Aviation	Commercial air transport - passenger	2	3	3	1	1	1	1	1	1	1	1
	Commercial air transport - cargo	2	3	3	1	1	1	1	1	1	1	1
	General aviation - business, flight training, emergency services aviation, agricultural aviation, aerial survey	2	3	3	1	1	1	2	2	2	2	2
	General aviation - recreational and leisure	2	1	1	2	2	1	2	2	2	2	2
	Maintenance, repair and overhaul	2	3	3	1	2	2	2	2	2	2	2
Emerging Sectors	Energy generation – solar, wind, waste to energy	3	2	2	2	3	3	5	4	5	3	3
	Sustainable industries manufacturing eg turbines	4	4	3	4	3	3	4	3	3	3	3
	Foreign Direct Investment	5	5	3	NA	NA	NA	NA	NA	NA	3	2
	Institutional eg health, prison, other civic	4	4	2	3	4	2	3	3	3	3	3
Do minimum	Agricultural	1	1	5	5	3	1	5	6	6	3	6
	Open storage	1	1	2	4	4	2	4	6	5	4	4

### 7.3.5 Assessment Matrix

The criteria in Table 13 have been selected in order to cover key areas for viable and economically sustainable development, these fall into two main categories:

- Legacy objectives aim to ensure that the impact of the base closure is minimised. These criteria look at other uses and how they might help to reduce the impact on the local economy and community of the RAF base closing. Key metrics include minimising the impact of the closure, create new employment opportunities and integrating new development into existing communities. Uses were then scored against these criteria in order to form a view of which uses would best serve the local economy and community.
- Delivery objectives tie into the overarching FHDC legacy objectives as well as practical delivery criteria. Delivery objectives are divided into planning, market demand, land value, site preparation and remediation, delivery timetable and risk and opportunity. These criteria help to assess viability of the different use classes and allow for analysis of which uses present the most favourable development options when considering delivery, producing long term land values and maximizing the potential of the site.

Once all these criteria has been assessed an overall score was produced for the sector in order to see which broad use classes presented the most favourable opportunities.

### 7.3.6 Shortlisted Scenarios

C&W has shortlisted a number of scenarios that have been modelled (within Section 8). The scenarios below include other uses which are not highlighted, in particular, all include an allowance for land for energy generation. These

For clarity, it should be stressed that for the site to come forward, it will be subject to a mix of uses and there will be full and part site development options.

#### New settlement

We consider that the most commercial viable scenario is likely to be the creation of a new settlement close to Mildenhall of circa 5,000 to 10,000 units. This is based on the clear evidence of long term housing demand and need in the region and the growth of Cambridge as an employment centre. This type of development would present a number of key challenges around creating a sense of place, the actual pace of development and the obvious risk of the settlement becoming a commuter settlement. In support of a new settlement significant public funding would be required in order to provide appropriate infrastructure such as road and rapid transport systems, as these would be likely to impact viability significantly.

#### An employment hub of offices, industrial and education alongside residential

As evident from C&W analysis of the Cambridge sub-region and the Forest Heath District's employment uses, there is limited forecast demand for employment uses at RAF Mildenhall and the site has a number of significant constraints in terms of attracting occupiers. For now and in the near future, any development is likely to require significant 'pump' prime funding from the public sector. Completely new uses such as agri-tech are likely to initially be challenging and unviable, therefore we consider that it would be more beneficially to build upon the existing use base of industrial (with a reasonable demand profile) whilst seeking to create new education and employment hubs. In order to support development

of this nature residential development would be necessary to provide cross subsidy as well as large scale public sector funding and investment over the long term in order to be viable.

### **Aviation**

As seen from the case studies creating a new hub can be challenging especially if the site is bounded by limited markets and infrastructure constraints. Therefore, if an existing use can be built upon to create a knowledge hub this is likely to be the most deliverable solution and in the long term is likely to be the most viable opportunity to bring forward other employment uses. Given RAF Mildenhall's current use as a military air base if there is any scope for aviation activity of some nature to continue this would be preferable to the harder task of creating a new centre. If residential development was to be included it may have to utilise land outside of the core site area.

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## 8. VIABILITY ASSESSMENT

### 8.1 Indicative development schedules

#### 8.1.1 Plot uses

We have undertaken a desktop measurement of the site based on our knowledge of its boundaries, which concurs with the brief for C&W’s commission which states a site area of approximately 4.4 square kilometres (440 ha).

**Table 14 and Figure 13 – RAF Mildenhall Site Area**

SITE AREA	UNIT
4.4	square kilometres
4,400,000	sq m
1,087	acres
440	ha



Following from our market assessment, we have arrived at three potential development options for which we have undertaken high level viability assessments. Our assessment scenarios explore comprehensive solutions to the site but do not necessarily require the entire site area to be utilised in each case. We are aware that the DIO has not settled on a decision as to whether to retain all or part of the site in their ownership.

As well as the 440 ha area we are aware of land owned by County Farms (part of Suffolk County Council) to the south east of the site which could provide an additional direct physical link to the Mildenhall settlement. Therefore in the preferred option we have illustrated how this land may link into the main development on the RAF Mildenhall site. Within this scenario we have also allowed for the inclusion of the ‘The Hub’ – a potential public services led development envisaged by FHDC and outlined in Section 7. Collectively this area is referred to as the ‘expansion land’.

#### **Scenario 1: New Settlement**

Scenario 1 assumes a residential led development of the site, with housing taking up the largest area and yielding 4,000 market dwellings (and 1,750 affordable dwellings). In terms of the density of development we have assumed - based on experience - 25 dph (dwellings per hectare) uniformly throughout the site and for all options featuring residential uses. We have also assumed an average unit size for housing of 100 sq m.

Assumed development densities for other commercial uses are based on typical plot coverage ratios, which establish an assumed footprint, storey height and subsequently a gross (and net) floor space for each use. The key assumed input for our assessment is therefore the estimated plot area (in ha) for which we have based assumptions on experience as well as comparing typical footprints on comparable large development sites, with similar characteristics (see Figure 14). In addition to

developable footprint and floor areas we have also provided a high level estimate of job creation based on regional GVA data from the ONS (basis of calculation shown in Table 15).

**Table 15 – GVA Data from the ONS**

USE TYPE	SQ M PER FULL TIME EMPLOYEE
Business space	12
Industrial & logistics	42
Aviation (including runway)	36

**Table 16 – Scenario 1 Land Use Mix**

	Gross Plot Area (Ha)	Storeys	Net Area (sq m)	Dwellings	FTE Jobs	GVA (m)
Market housing	160	2	320,000	4,000	0	£0
Affordable housing	70	2	140,000	1,750	0	£0
Retail centre	2	1	11,200	0	0	£0
Business space	3	2	28,800	0	2400	£55
Industrial & logistics	5	1	16,000	0	386	£9
Country Park	200		n/a	0	0	£0
<b>Total</b>	<b>440</b>		<b>516,000</b>	<b>5,750</b>	<b>2786</b>	<b>£64</b>

### **Scenario 2: Employment Led**

Scenario 2 is employment led and with a significant quantum of business and industrial space (educational uses are included within the business space area figure).

**Table 17 – Scenario 2 Land Use Mix**

	Gross Plot Area (Ha)	Storeys	Net Area (sq m)	Dwellings	FTE Jobs	GVA (m)
Business space	13	2	124,800	0	10400	£240
Industrial & logistics	10	1	32,000	0	771	£18
Retail centre	2	1	11,200	0	0	£0
Market housing	90	2	180,000	2,250	0	£0
Affordable housing	40	2	80,000	1,000	0	£0
Country Park	285		n/a	0	0	£0
<b>Total</b>	<b>440</b>		<b>428,000</b>	<b>3,250</b>	<b>11171</b>	<b>£258</b>

### **Scenario 3: Aviation Led**

Scenario 3 assumes part retention of the runway and associated terminal for use as a recreational airfield. Our desktop measurement of the site estimated circa 250 ha would be required in order to retain the runway with associated terminal as well as access from the main road. What land remains is assumed to be an industrial based business park with renewable energy provision which we have assumed could take the form of a solar panel array.

**Table 18 – Scenario 3 Land Use Mix**

	Gross Plot Area (Ha)	Storeys	Net Area (sq m)	Dwellings	FTE Jobs	GVA (m)
Aviation (including runway)	250	1	40,000	0	1111	£51
Industrial & logistics	10	1	32,000	0	771	£18
Energy generation	60	1	n/a	0	0	£0
Country Park	120		n/a	0	0	£0
<b>Total</b>	<b>440</b>		<b>72,000</b>	<b>0</b>	<b>1882</b>	<b>£69</b>

**Scenario 3A: Partial Release**

We have considered a partial release option in order to explore how viability and capacity is affected by the MoD retaining a portion of the site (for clarity, we consider that a partial release option is possible for scenarios 1 and 2, but have only modelled Scenario 3). We have assumed that in this scenario, the MoD would require approximately 165 ha. We have explored different options and concluded that the MoD retaining the North of the site allows for the greatest opportunity to achieve FHDC's objectives on the basis that the South then has the potential to tie into the expansion land adjacent to Mildenhall and the existence of hangers on the southern part of the site can be utilised for aviation uses. The scheme modelled includes a runway on the site and is a variant on Scenario 3 (on a smaller site).

**Table 19 – Scenario 3A Land Use Mix**

	Gross Plot Area (Ha)	Storeys	Net Area (sq m)	Dwellings	FTE Jobs	GVA (m)
Aviation (including runway)	165	1	26,400	0	733	£34
Industrial & logistics	10	1	32,000	0	771	£18
Energy generation	40	1	n/a	0	0	£0
Country Park	225		n/a	0	0	£0
<b>Total</b>	<b>440</b>		<b>58,400</b>	<b>0</b>	<b>1504</b>	<b>£52</b>

**Scenario 4: Preferred 'hybrid' Option**

Scenario 4 takes into account the testing of the first 3 scenarios and creates a 'hybrid' option which is aviation led but also includes residential use (based on full land release). We have tested this option based on the assumed 25 dph for the residential; however we consider that this could be increased to approximately 35 dph in order to increase housing yield if necessary.



Table 20 – Scenario 4 Land Use Mix

	Gross Plot Area (ha)	Storeys	Net Area (sq m)	Dwellings	FTE Jobs	GVA (m)
Aviation (including runway)	250	1	40,000	0	1,111	£51
Industrial & logistics	10	1	32,000	0	771	£18
Energy generation	0	1	n/a	0	0	£0
Market housing	56	2	95,200	1,400	0	£0
Affordable housing	24	2	40,800	600	0	£0
Country Park	100		n/a	0	0	£0
<b>Total</b>	<b>440</b>		<b>224,800</b>	<b>2,000 – 2,800*</b>	<b>1,882</b>	<b>£69</b>

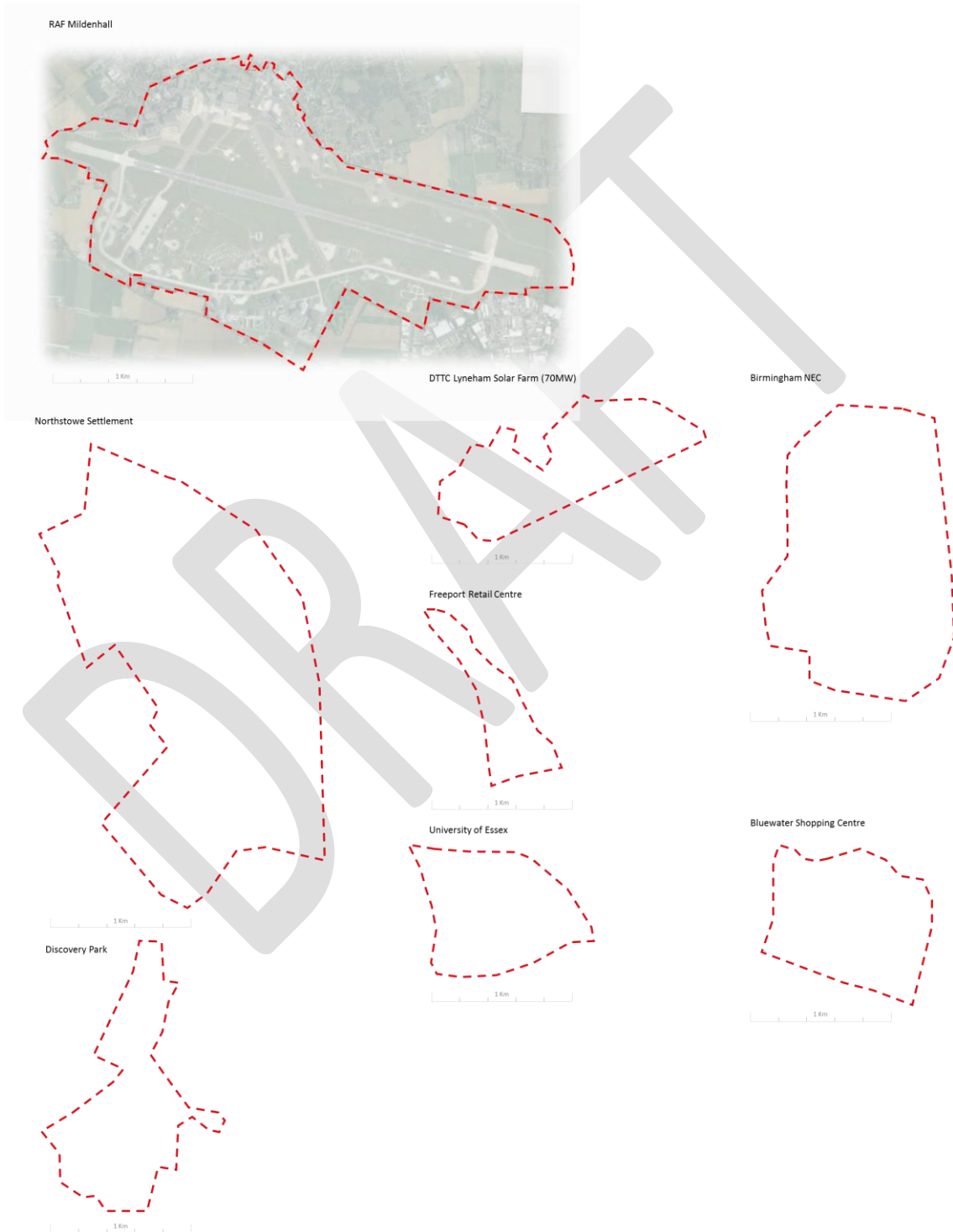
\*at 25 – 35 dph (all other results based on 2,000 dwellings)

### 8.1.2 Comparable Land uses

In order to assume the plot areas for the various uses included within the options above, we have considered plot coverages of various major developments

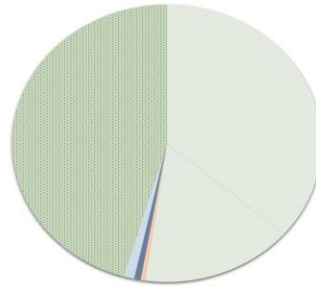
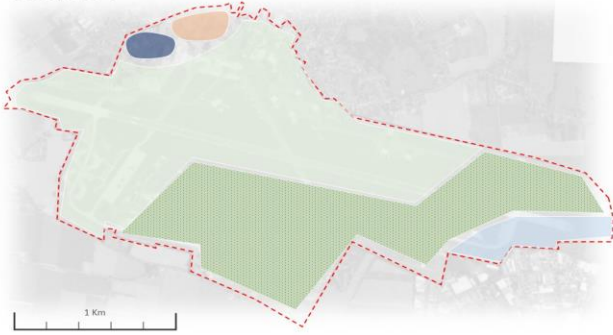
**Figure 14 – Scale of Comparable Land Uses**

*Maps are to scale (non-standard scale)*

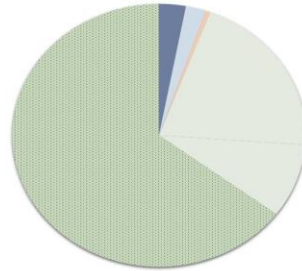


### 8.1.3 Figure 15 - Indicative plans

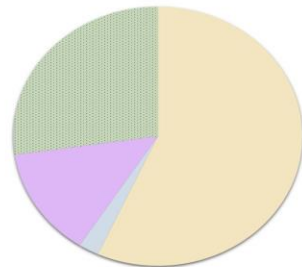
Scenario 1



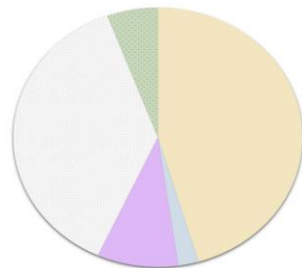
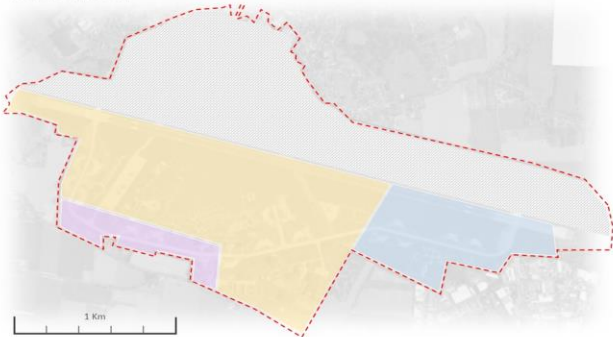
Scenario 2



Scenario 3

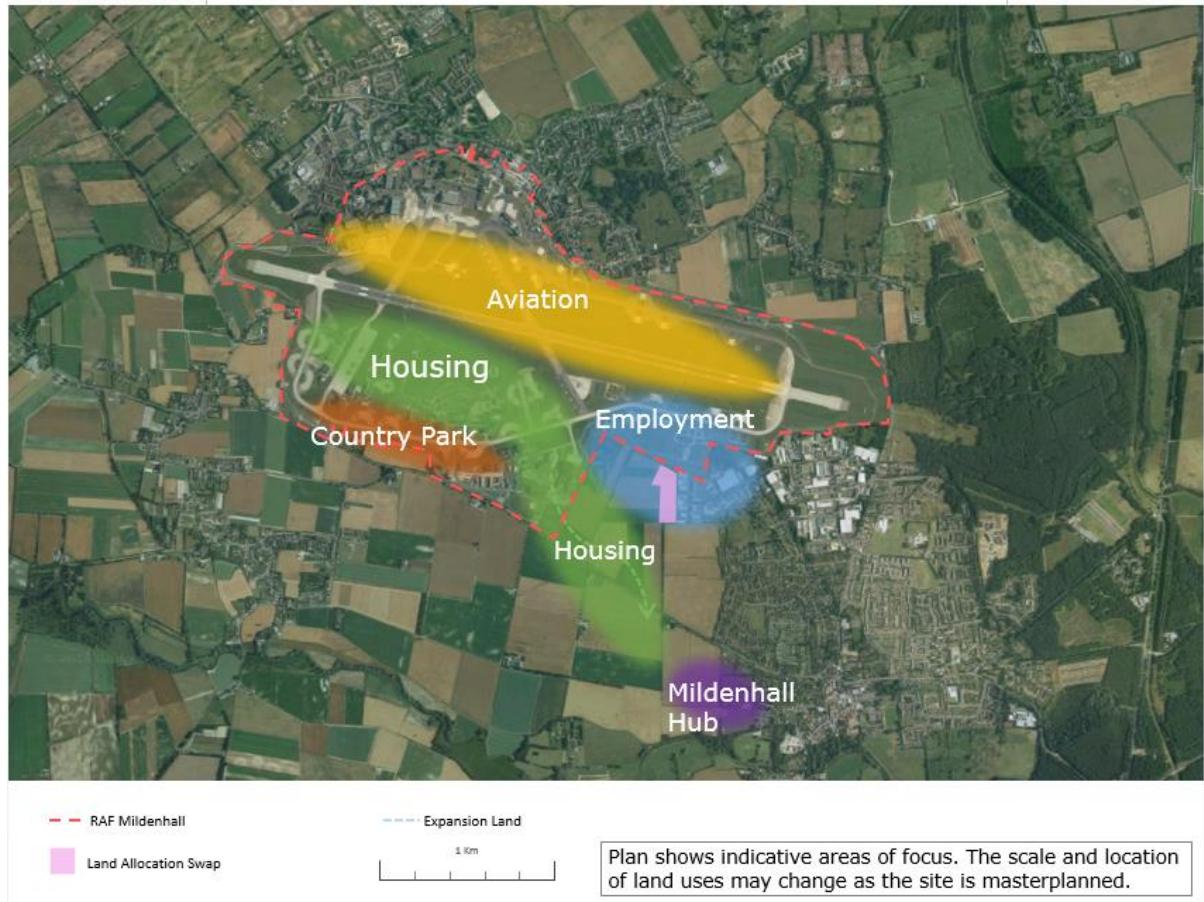


Scenario 3a



### 8.1.4 Figure 16 – Preferred Option

Scenario 4 (Preferred Option)



## 8.2 Viability testing

### 8.2.1 Method

The financial viability assessment is based on undertaking a cashflow assessment of each of the respective scenarios for the site. The assessments are based on the proposed development schemes and the output is either a development surplus or deficit after allowing for all forecast costs and revenues associated with the respective schemes (including input land cost and a developer profit requirement). The development costs include all anticipated physical costs required to service land as well as the build costs and necessary fees for the landowner to fully develop out each use to a fully operational state. In reality a site of this scale would more likely be delivered by a master developer, servicing individual plots and subsequently selling them on to individual developers (as serviced development land). For the sake of this high level assessment however it is suitable to effectively assume the landowner performs all necessary functions in order to develop the land to a fully operation use.

The assessment method utilises a bespoke excel financial model. The approach is residual land value based, in that it makes assumptions on revenues as well as development costs, including an upfront land cost, build costs all major infrastructure and a fixed developer profit. Assumptions for the sales pattern and sales trajectories of the development are plotted in a cash flow on an annual revenue basis against the assumed timing of the associated costs. The resulting output of the cash flow is therefore a surplus (or deficit) which is indicative of return (or profitability) of the proposed scheme, allowing for applicable finance costs (assumed at 100% debt). The project cash flow is structured around the likely phasing of the scheme and incorporates the cost of finance and various other fees. This viability testing generates a surplus (or deficit) and a comparison of these will indicate the relative indicative viability of each scenario and its uses.

Given the level of information available, it should be noted that these assessments are indicative only and the ultimate purpose is to illustrate the relative differences between the sites and the scenarios on an order of magnitude basis.

Indicative densities and Gross External Areas (GEA) of development have been assumed by C&W based on our market research. In summary, the appraisals are a snap shot in time of the potential viability of the scenarios for the emerging options based upon a set of assumptions.

The appraisals are intended to be indicative only and do not represent formal valuations in accordance with the RICS Appraisal and Valuation Standards. They should be treated as being for illustrative purposes only in order to support assessments of viability and they should be read in conjunction with the assumptions set out by C&W. We outline below the other key assumed inputs to our model.

### 8.2.2 Land Costs

We have allowed for an indicative land acquisition cost of circa £20,000 per acre based on an assumed premium to agricultural values. These values are inclusive of the costs of securing vacant possession of the full site area.

The pace of delivery of land will be heavily influenced by the minimum land acquisition cost as the higher the level, the higher the barrier to the release of land for development, i.e. all other things being equal, a scheme with a minimum land price of £20,000 per acre is going to be significantly more deliverable than a scheme with a minimum land price of £50,000 per acre.



The land acquisition is assumed to be on a phased drawdown basis two years prior to the delivery of residential units (i.e. to allow for infrastructure and construction work). No Stamp Duty Land Tax (SDLT) or fees have been explicitly allowed for at this level of analysis and they are assumed to be within the overall land acquisition allowance.

### 8.2.3 Key assumptions

#### Construction

Construction cost assumptions are based on location-adjusted figures from the Build Cost Information Service (BCIS) for Quarter 2 2016.

#### Values

Table 21 outlines our assumptions for values for the relevant uses based on our market research;

**Table 21 – Assumptions for individual uses**

USE CLASS	BUILD COST (£PSM)	RENTAL VALUE (£PSM)	YIELD	CAPITAL VALUE (£PSM)
Business space	£1,527	£165	7.5%	£2,200
Industrial & logistics	£804	£85	6.5%	£1,308
Retail Centre	£760	£160	7.5%	£2,133
Market housing	£1,061	n/a	n/a	£2,430
Affordable housing	£1,061	n/a	n/a	£1,458

For Scenario 1 (residential led) we have added a 5% premium to the residential values to account for the garden community premium, a value increase we would anticipate the settlement to generate itself by nature of its size and therefore, ability to step change its own environment and generate value itself.

We have taken a different approach in relation to:

- Aviation (including runway) – we have assumed a circa 20% margin on the upfront build cost investment in the infrastructure required to convert the runway.
- Energy – we have assumed a circa 20% margin on the upfront build cost investment into the assembly and management of a solar farm.

### 8.2.4 Infrastructure

Infrastructure would likely comprise a significant part of the up-front development costs in order to realise the various options. Without detailed estimates for infrastructure costs, we have made high level assumptions on the necessary infrastructure requirements and associated costs based on comparable schemes. These costs are highly variable based on the topography of the land and position of existing services. We categorise the costs for each scenario as follows:

#### Scheme Wide Enabling Works (linked to residential provision)

1. £16,000 per unit covering on site works that create a series of serviced parcels / plots for development and specifically relates to demolition and site preparation, primary and secondary highways and drainage and utilities distribution.



The cost of on-site works would be drawn down incrementally rather than necessarily as a front loaded cost. The cost draw down would be proportional to the delivery of the residential development on site. For the sake of the modelling we have therefore linked the timing of the cost draw down to residential development output.

#### **Scheme Wide Community Infrastructure (linked to residential provision)**

1. Allowances for education, community and health, open spaces, leisure and sports and environmental/ sustainability/ waste - as such this broadly relates to anticipated S106 contributions. We have not include allowances for separate CIL charging.

An overall total of £10,000 per residential unit has been assumed based on similar projects. As per the on-site cost we have linked the cost draw down for scheme wide infrastructure to residential development.

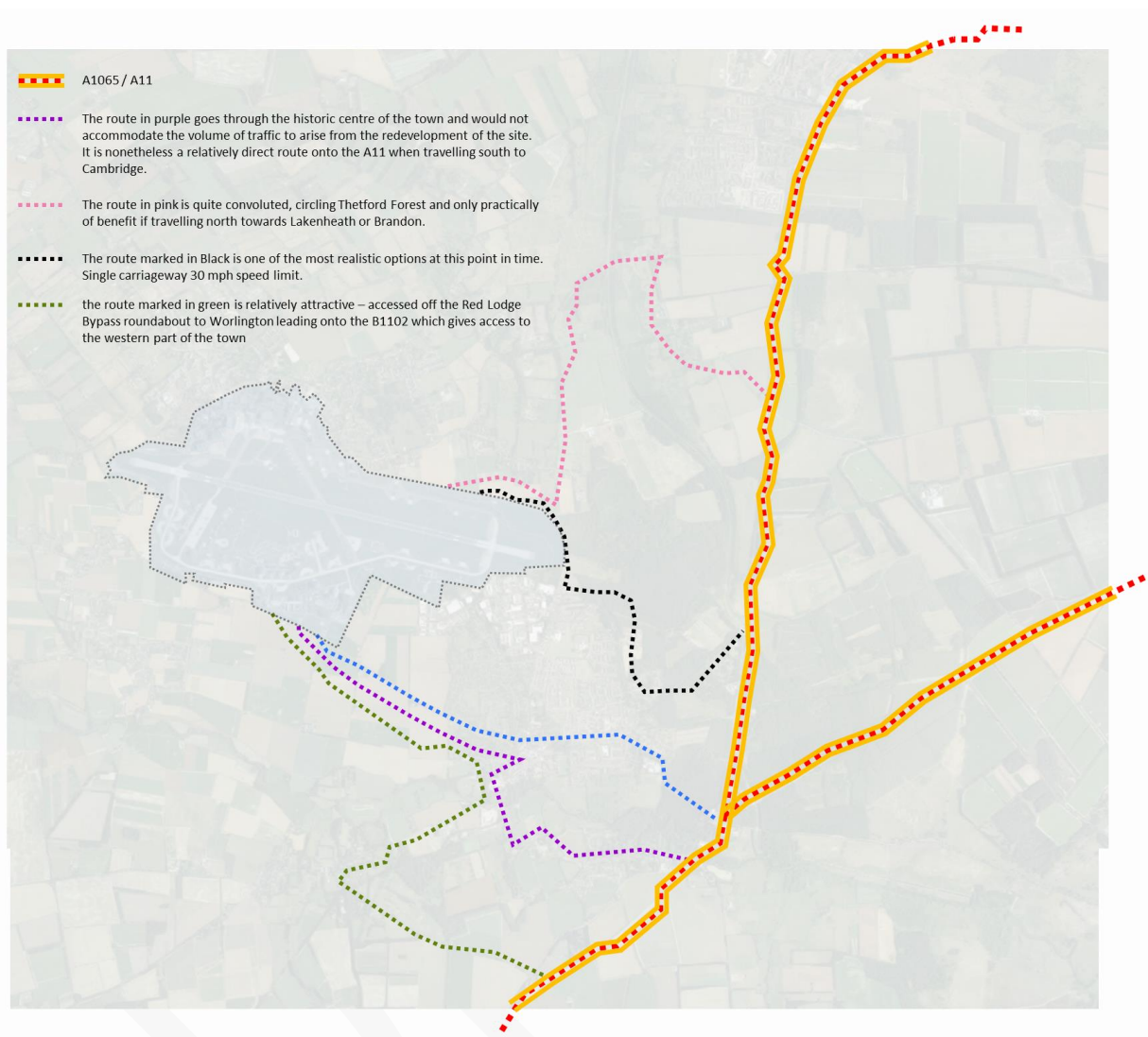
We have added an additional 5% on top of the total Enabling Works + Community Infrastructure costs, in order to reflect the potential requirement of remediation.

#### **Scheme Wide Other Itemised Infrastructure on Site**

1. A standard cost of £50m for a new train station and track extension. We have only included this cost for Scenario 1 only (required to create a new residential community).
2. A standard cost of £80m for new elements of the road network as well as upgraded pedestrian and cycle networks. This includes costs for specific transport, utilities and drainage costs. We have only included this cost for Scenario's 1 and 2 as Scenario 3 is not deemed to require this level of infrastructure input.
3. For Scenario 3 only, we assume the cost of bringing the infrastructure up to the standards of a commercial airfield will be in the range of £20-£50m excluding any planning, legal costs and road access. Given the unknown nature we have assumed the top of this range (£50m) for our appraisals.
4. The above itemised costs would be required early in the project in order to facilitate the comprehensive development of each option. For the modelling we have therefore assumed the cost of this is drawn down at the front end of the cashflow, within the first 5 years of the construction period.

#### **8.2.5 Figure 17 - Indicative Road Infrastructure**

As mentioned above we assume major road infrastructure would likely be required in order to facilitate comprehensive redevelopment of the site in scenarios 1 and 2. We have taken an indicative view on likely routes which could be utilised for a new road in order to connect the site to the wider road network.



### 8.2.6 Professional Fees

Taking into account architect fees, engineering fees and other specialist consultancy input, the rolled up cost of professional advice equates to an approximately 8% sum of build costs. This rate reflects several site characteristics which are:

- The site areas are mostly rural, greenbelt land which does not possess the same degree of complications associated with brownfield delivery.
- The scale of the project affords economies of scale for professional consultants who will typically operate at below average rate to reflect the sheer volume of business.

- Professional fees typically incur a premium charge if the sites and end product are overly complex, but it is envisaged that although there will be a variety of development/land use, there should be relatively few complications.

We have also included a Strategic Planning Cost of £500 per unit in our modelling in addition to professional fees.

### **8.2.7 Growth/Discounting**

Modelling the viability of large scale and in particular long term developments, a discount rate is usually utilised in order to account for the time weighted value of money. Given the high level nature of the assessment, we have not applied a discount rate to the receipts as we are assuming that the value growth would counterbalance the discount rate an investor would assume.

### **8.2.8 Purchaser's Costs**

The land assembly cost is implicit of SDLT charges.

### **8.2.9 Marketing Fees**

A rate of 1% on Gross Development Value has been assumed based upon the need to promote the new communities and settlements, particularly in relation to the early stages of development.

### **8.2.10 Disposal Fees**

This relates to fees on the development as it is being delivered, let and sold to investors/occupiers.

#### **Residential**

- Sales agency fee for private residential units at 1% of GDV.
- Sales legal fee at 0.5% on private and affordable residential units.

#### **Commercial**

- Agency fee - 1% of the sale price.
- Legal fee - 0.5% of the sale price.
- No SDLT allowance.

#### **Lettings Fee**

- Agency fee - 10% of pa commercial rent.
- Legal fee - 5% of pa commercial rent.

### **8.2.11 Finance Rate**

C&W assumes that in all scheme scenarios, costs are 100% debt funded at a flat finance rate of 6.50%. This guidance is based on our experience in reviewing strategic schemes of similar size and nature.

We have not assumed public sector input for funding of infrastructure however this would likely be forthcoming for a scheme of this scale. Infrastructure represents a large cost in the appraisal which is also subject to finance; in the absence of public sector support, the appraisals incur significant borrowing costs which in reality could be significantly reduced with help from the public sector.

### **8.2.12 Contingency**

In C&W's experience typically we would assume a contingency rate on construction costs and infrastructure of circa 10-15% for large scale developments in order to provide sufficient cover for unforeseen costs. This rate reflects the scale of infrastructure works needed to make this an 'oven

ready' site and the greater degree of risk inherent in building out multiple phases over such a long timeframe. This would normally provide a healthy margin to cover unforeseen costs that might arise concerning planning, procurement and construction cost overruns. We have therefore assumed the upper end of this range for the appraisals (15%).

### 8.2.13 S106, Affordable Housing & CIL

Section 106 costs are accounted for within the assumed infrastructure costs and no Community Infrastructure Levy (CIL) allowance has been made. The 'no CIL' assumption is based on the strategic nature of the proposed schemes and the inclusion of all the direct costs associated with creating the infrastructure they require being within this financial assessment.

In relation to affordable housing allowances, the policy level seeks 35% of residential units.

These policy levels of affordable housing are subject to tests of viability on individual sites (as per NPPF guidance) if achieving the target level is shown to impact on the potential to bring forward the schemes. In practice, schemes with the infrastructure burden which exists here are unlikely to achieve target levels of affordable housing provision, particularly in the early phases. This would need to be tested as strategic site schemes often come forward seeking detailed planning permission is sought at lower levels – we have allowed for 30% affordable housing at this stage within the analysis.

## 8.3 Viability Results

Table 22 – Indicative Viability Results (figures in millions)

	Scenario 1 Residential led	Scenario 2 Employment led	Scenario 3 Aviation led	Scenario 3A Aviation led (Partial release)	Scenario 4 Preferred Option
<b>Appraisal Summary</b>					
Gross Development Value	£984	£764	£90	£75	£311
<b>Less</b>					
Construction Costs	£480	£459	£27	£26	£170
Infrastructure	£296	£149	£58	£58	£120
Land Assembly	£22	£22	£22	£22	£22
Contingency	£75	£72	£7	£7	£29
Professional Fees	£40	£38	£4	£4	£15
Planning	£3	£2	£0	£0	£1
Section 106 & CIL	£0	£0	£0	£0	£0
Marketing	£7	£3	£0	£0	£2
Sales, Letting and Legal Costs	£14	£10	£1	£1	£4
Finance	£122	£133	£105	£36	£28
Profit	£0	£0	£0	£0	£0
<b>Surplus / Deficit</b>	<b>-£75</b>	<b>-£124</b>	<b>-£134</b>	<b>-£79</b>	<b>-£80</b>

Figure 18 – Relative Land Split



### 8.4 Development Period

This is a significant site which will take many years to be developed. For the purposes of this assessment, we have assumed a fixed 20 year development period including a 3 year lead in time and therefore 17 years of development. For an indicative development of 4,000 private units (Scenario 1), this therefore equates to a build out and sales rate of 235 units pa, if the settlement is to be delivered within the desired timeframe. We have adopted a flat rate throughout the 17 year sales period of the cashflow but in reality, the residential trajectory would be sensitive to the introduction of major infrastructure (such as significant transport) as well as micro location factors and the overall size of the settlement being delivered. A scheme comprising 4,000 private units has the ability to stimulate its own value generation when it reaches critical mass.

Scenario 2 yields 2,250 private units, which equates to circa 131 sales pa assuming the fixed 20 year period is maintained.

Scenario 4 yields 1,400 private units, which equates to circa 93 sales pa.

We have assumed affordable residential absorption rate is linked to private sales.

## 8.5 Commercial trajectories

We have assumed build out/ take up rates are uniform for all commercial uses. We assume the commercial, both retail as well as business space, is absorbed at a fixed rate between year 5 and 20. The commercial element of the scheme would have a slight delay from the residential. Table 23 outlines the trajectories for each scenario.

**Table 23 – Development Trajectories (sq m)**

	Scenario 1	Scenario 2	Scenario 3	Scenario 3A	Scenario 4
Business space	28,800	124,800	0	0	0
Industrial & logistics	16,000	32,000	32,000	32,000	32,000
Retail centre	11,200	11,200	0	0	0
Total Commercial Area	56,000	168,000	32,000	32,000	32,000
<b>Commercial pa</b>	3,733	11,200	2,133	2,133	2,133



## 9. INTERVENTIONS & DELIVERY

### 9.1 The need for Intervention

Traditionally sites that requires large scale shifts in use classes and infrastructure funding often have support from the public sector. In the case of RAF Mildenhall there is significant need for public sector intervention due to a number of factors;

- Large scale of the site – this makes it too large for any single occupier/developer (apart from in exceptional circumstances) and therefore no private sector firm is likely to be able to develop the whole site. In order for the potential of the site to be reached, only the public sector is able to take a strategic position to create and nurture a vision.
- Limited potential for continued aviation use – given the location, access and surrounding population there is limited use for commercial aviation. This means that the site is unlikely to remain focused solely on aviation and other use classes will need to be considered. In order to create a viable mix the public sector will have to manage the process.
- Need to pursue alternative uses that have strategic fit with the legacy objectives. This requires public sector intervention to create a wider vision considering not just the site but the wider social, economic and physical impacts of the re-development and which use classes would best compliment the region as a whole in the long run.
- Limited pool of demand for other uses creates viability issues – this links with the lack of alternative use classes. When there is limited demand driving the market the decision of how best to re-develop the site falls to the public sector. This is because the public sector has the benefit of a long term payback and time horizon which is unlikely to be delivered by the private sector.
- New uses will constrain the existing infrastructure; access via road is limited and requires going through Mildenhall town centre. There is no access via rail or bus to the site – this creates wider cost implications. In order for the site to be economically viable there needs to be significant infrastructure improvements. These are unlikely to be delivered by the private sector and so the public sector must intervene.

The majority of these limitations and challenges at the RAF Mildenhall site will not be addressed by the private sector given the substantial initial costs and limited financial returns in the short run. In contrast the public sector has the ability to fund projects over the long term making infrastructure projects increasingly viable allowing for wider area improvement and the creation of a ‘vision’.

### 9.2 Delivery Options

#### 9.2.1 Introduction

Currently, FHDC has no control of the site over and above planning policy (which, as per the commentary in Section 5, does not exist in any detail for this site). This report seeks to set out a vision in order that the full potential of the site can be identified and the key stakeholders can further explore the opportunity.

When the USAFE vacate the base and, on the presumption that (whilst no final decision has been made), the RAF do not retain a presence, ownership will be retained in the short term by the DIO. The

DIO's objectives are to maximise the value of land and to encourage the delivery of houses. As an organisation, it is set targets by government to sell land for housing but also to engage with local authorities, communities and other stakeholders as appropriate to mitigate the impact of closure. Typically, the DIO would transfer the land to the HCA on the basis that their key driver is to increase the supply of new affordable and market housing. In a similar manner to the DIO, the HCA is also tasked with working with local authorities to ensure that the maximum economic impact is derived from its interventions, and that investment takes place in a way that wherever possible aligns with local ambitions.

Therefore, FHDC has some leverage and ability to influence the type and form of development through other public sector bodies. However, achieving aspirational visions for sites such as RAF Mildenhall requires a number of pre-requisites, many of which are dependent on an engaged and committed Local Authority (in terms of both financial inputs and partnership arrangements). As per Table 13, the various potential land uses are subject to constraints in terms of market demand and deliverability that may require the public sector to address.

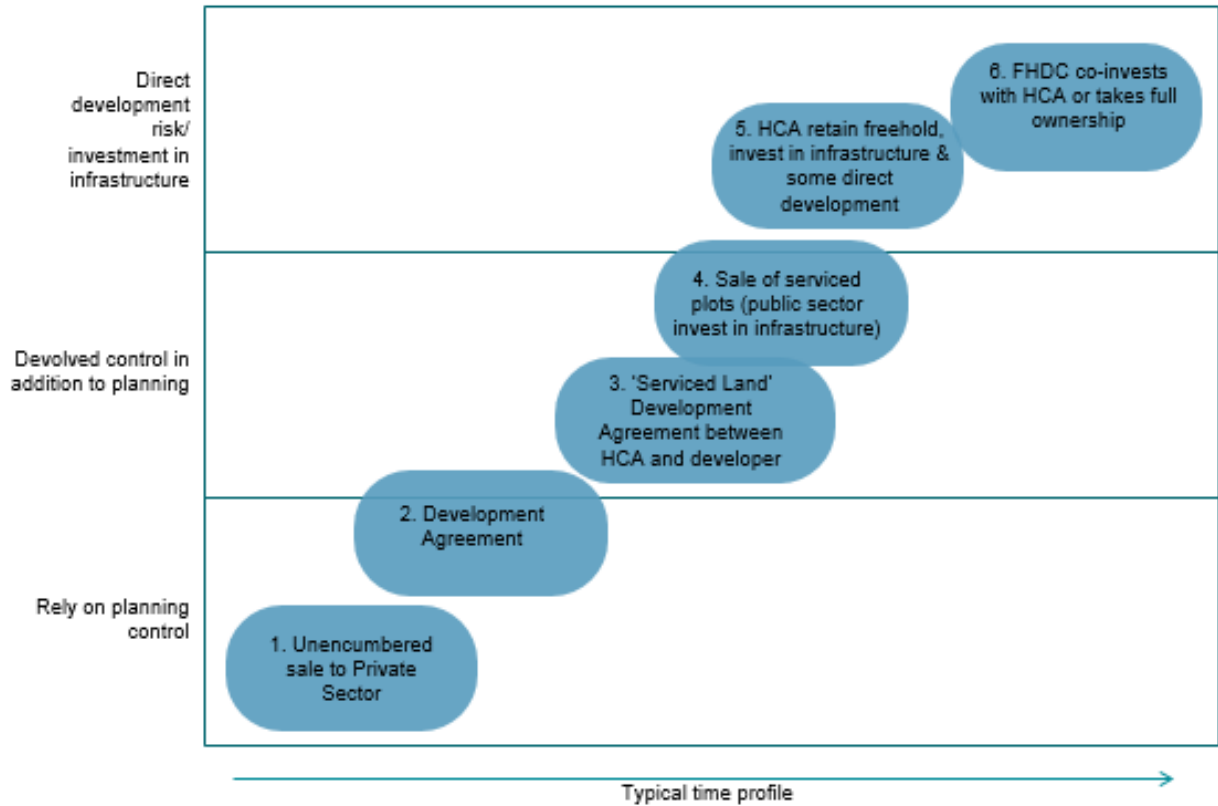
The public sector should be at the heart of delivering the vision in order that an appropriate strategic framework can be established prior to development. It is envisaged that this will involve a collaborative approach with key public sector parties such as FHDC, West Suffolk Council, the DIO, the HCA, the LEPs, the Cabinet Office and HMT. Downstream, the involvement of the private sector will be crucial to maximise the capacity to deliver the ambitious and significant development programme.

As it currently stands, the DIO intend to transfer ownership to the HCA. In this scenario, the type and form of development will be driven to a significant degree by the needs/requirements of the HCA in terms of both the outputs of development (housing and job numbers) but also its financial requirements and attitude to property risk. It would be important under this scenario that FHDC engages early with the HCA and establish an effective governance arrangement in order that FHDC has some real and sustained influence. The case study precedents have shown that this can be effective and the HCA has a track record of engaging locally which should give some reassurance that FHDC can exert effective influence where it engages effectively. It does however need to be recognised that even with a partner with as strong a pedigree as the HCA's in long term multi stakeholder partnerships, the HCA will nevertheless need to balance receipts and value for money along with the resources which are available to it. This can be positive in that there may be the potential to access other forms of public sector funding and support but it will inevitably mean that FHDC is not in total control of the future redevelopment and there could be differences in priorities. External factors will also determine the optimal disposal route including market appetite and conditions at the time that the HCA seeks developer(s)/partner(s), lot size and the complexity of actual delivery and optimal returns relative to risk.

FHDC could therefore consider an alternative scenario in which it seeks to intervene more directly by taking a direct stake in the land, either alongside the HCA or on its own. This would give FHDC more control but would also increase the risk. As the HCA has a track record of collaboration and is the government's preferred organisation for the disposal of surplus central government land, C&W considers that it would be preferable to pursue discussions on the basis that FHDC and the HCA become fully aligned rather than FHDC seeking to take full ownership of the site. This alignment could be established through a properly constituted governance structure or could perhaps be achieved with some shared interest over part of the site (such as the initial land needed to create a viable early employment hub). Regardless of how FHDC engages with the HCA, it might be necessary to work across government so that the HCA is not 'penalised' either financially or in how it accounts for the housing targets that will transfer with the land from the DIO in the event that it sacrifices some housing in order to deliver more employment.

Figure 19 illustrates some potential delivery scenarios and their relationship to time/ value and to the level of FHDC (or other local authority/County Council formations) participation.

**Figure 19 – Delivery Options**



### 9.2.2 Unencumbered Sale to Private Sector

An immediate sale would provide for an early and certain receipt to the HCA and would not be conditional upon achieving planning consent. The planning and development risk passes to the purchaser, which is likely to have an impact on the price achieved. This option does not necessarily make best use of the potential to enhance value for the HCA or retain control over what is delivered onsite (and when), which is left for the market to determine.

This option would mean that the private sector purchaser would then be responsible for moving the site up the value curve through establishing uses in planning terms and promoting the scheme.

The planning and development risk would pass to the purchaser, whom would seek to reflect this in the price paid although the long term flexibility in having an unencumbered freehold ownership would be attractive. The sale (unlike some other options) would not contain any obligations on the developer however so they would be free to pursue whatever scheme they considered maximised value to them (subject to planning constraints); there is a risk that such a scheme would not coincide with FHDC's aspirations for the sites.

### 9.2.3 Development Agreement

This gives the opportunity for the HCA to have a role (and obligations) to enhance values and achieve a reasonable degree of control through partnering with a developer. These can take many forms, but the main attraction is to share cost, risk, resource and leveraging combined expertise. These options involve more risk to the HCA compared to the conventional 'sale' routes as there is no upfront receipt

but they do allow for control over the actual content of the proposed development and mechanisms to generate deferred returns (through elements such as overage). Depending on how the Development Agreement is drafted they can provide an effective mechanism to leverage public sector funding into schemes and provide support for otherwise unviable uses (such as employment land development which would require pump priming).

#### **9.2.4 Serviced Land Development**

This option is primarily categorised by staggered payments to the HCA as the scheme progresses opposed to upfront purchase by the developer. This allows the HCA to share in the development return generated by the scheme and any increase in land value/ market upturn. This option may be beneficial financially should the HCA be willing to accept delayed payments although carries the risk of a potential downturn in the commercial market and the lack of interest from developers willing to commit to such a partnership (depending on the level of profit share requested by the HCA). The level of control over form of development is compromised compared to the Development Agreement option.

#### **9.2.5 Sale of Serviced Plots**

This would require serious investment by the public sector in order to provide readily connected, serviced land plots. The public sector would be taking on the construction risk and the development risk in terms of providing plots of the correct size for the local market. The upside is that this would significantly de-risk the development for individual developers and the profit margin that they sought would be reduced in line with this.

#### **9.2.6 HCA Retains the Freehold and is paid a ground rent rather than a capital sum for the land**

C&W's assumption is that the HCA would retain the freehold in options 2-5. Therefore, this option is identical to Option 2 (Development Agreement) apart from in relation to the land receipt. The land receipt agreed at the time of the sale of the asset is converted into a gearing of the income stream. The HCA would receive a percentage share of the occupational rents received from the development. This generates a significant saving in interest costs through no land payment having to be made.

#### **9.2.7 FHDC co-invests with HCA or takes full ownership**

This scenario envisages FHDC taking an interest in the site, either fully in its own right or in partnership with the HCA. This would yield greater control to FHDC but clearly comes with significant additional risk. This option requires discussion with the Steering Group to understand the appetite for additional risk.

#### **9.2.8 Summary of Delivery Scenarios**

In practice there are variations to each of the options reviewed. In addition to the disposal routes identified above, there might be circumstances where some direct development (i.e. over and above the sale of serviced land plots) may be considered. However, the vast majority of strategic options will involve seeking to enhance value through partnering; this allows the sharing of risk, resources and leveraging combined expertise for such a large and long term site.

## 9.3 Funding Sources

Any comprehensive development of RAF Mildenhall is going to require a variety of funding sources over a very long period of time. This relates to direct funding repaid from development of the site as opposed to the potential for repayment from sources external to the development of the site.

### 9.3.1 Funding from Development on 'the site'

#### Developer

The simplest and most direct form of funding is for the eventual developer (or consortium of developers in partnership with landowners) to fund the upfront infrastructure costs based on the potential for a significant increase to the value on their landholdings. However, the scale of the infrastructure costs (when considering a comprehensive solution for the site) and the likely elongated payback period are likely to be make this difficult for a standard developer to fund.

*Potential payback mechanism: developer's investment is recovered in the form of increased land values which will be created by the new infrastructure (this assumes that the HCA sells the land to them at a value which reflects the lack of existing infrastructure).*

#### HCA funding

The HCA (in a separate function to its landowner role) provides funding for items which assist in delivering significant housing numbers. This funding can come in the way of grant or loan capital. The HCA will look to recover its investment where this is possible, either by direct recovery through loans with a commercially calculated interest rate, or through overage or profit share type arrangements. Where this is not possible then, if the outputs are considered to be of significance, then grant funding can be provided. Access to the recoverable capital investment fund is open to private sector organisations only but must be through a local authority led bid. In terms of infrastructure funding, it is expected that any investment would be at least matched with equal funding from other partners and be made on a repayable basis. If specific infrastructure works which enable development were to be identified at RAF Mildenhall then this could provide some funding.

*Potential payback mechanism: developer payback from long term development revenue on the site.*

#### Local Authority Capital Budget or Prudential Borrowing

The Local Government Act 2003 allows a local authority to borrow for any purpose relevant to its functions or for the 'prudent management of its financial affairs'. Under prudential borrowing, the amount of debt and other liabilities which most local authorities can incur is no longer capped by an upper limit, instead it must conform to the 'Prudential Code' which requires that borrowing be affordable and prudential (each local authority must set a total borrowing limit for itself in accordance with this which cannot be breached) with an appropriate level of reserves. The limit will be related to the revenue streams available to the local authority, with which it can repay the debt. The scale of the investment required at RAF Mildenhall is likely to be significant and the appetite for direct local authority funding is likely to be limited.

*Potential payback mechanism: New Homes Bonus (NHB), Business Rate Retention.*

#### Local Government Pension Scheme (LGPS)

A number of recent studies have found there to be scope for LGPS funds to do more to invest for wider social and economic benefit. In 2012, DCLG carried out a consultation on possible changes to the

Investment Regulations. As a result of the consultation, it amended these to increase the proportion of the capital value of a fund that could be invested in partnerships. The DCLG said the change would give funds more scope to invest in infrastructure projects. A report published by the National Association of Pension Funds (NAPF) in May 2013 found a trend in LGPS investments away from investing in equities towards other assets such as property and infrastructure. The need for such funding is based on the increasing requirement on banks to put aside reserves against all their loans, and their reticence to commit to the long term loans needed to develop infrastructure; in contrast, pension funds have a long term perspective which matches the funding required to a greater extent.

*Potential payback mechanism: NHB, Business Rate Retention.*

### **The UK Guarantees Scheme**

The UK Guarantees Scheme was announced in 2012 in order to progress UK infrastructure projects held back by adverse credit conditions. The government committed up to £40 billion in guarantees to remove barriers to private finance, with contractors charged a fee. Guarantees are awarded via Infrastructure UK and are subject to a number of checks and eligibility criteria, including: national significance; financial credibility; readiness (construction within 12 months); dependence on the guarantee (project must be unlikely to proceed without intervention); and value for money (for the taxpayer). The structure of each guarantee differs, with the government having control over the scale, timing, risk exposure and relationship elements, depending on the need of the individual project. As of April 2014, 40 projects were known to have passed the pre-qualification stage, worth £37 billion in total. Therefore, without an extension of the scheme, there are likely to be only a small number of additional projects that will qualify for a guarantee. A number of high profile guarantees have been awarded to date, including the Northern Line Extension to Battersea (£750m), the Mersey Gateway Bridge (£257m) and the Drax Power Station (£75m). The scheme in its current guise is open until 31 December 2016.

*Potential payback mechanism: developer payback from long term development revenue on the site, NHB, Business Rate Retention.*

### **Growth Deal**

The LEPs have been allocated two rounds of Local Growth Funding to date which is used to meet the objectives of their strategic economic plans through the provision of infrastructure funding to create economic growth and new homes. The third round bid is currently being made and will be announced in the Autumn Statement 2016. Grants would be awarded for capital projects. Growth Deal funding is increasingly becoming aligned with devolution deals where the growth targets and strategic sites are often the same. The current 5 year period for Growth Deal until 2021 may limit its current use at RAFM however future rounds and successor funding could be investigated.

*Potential payback mechanism: to be confirmed.*

### **Norfolk and Suffolk Devolution Deal**

The proposed Suffolk and Norfolk devolution deal could mean control of more than £1 billion of funding to improve Norfolk and Suffolk; enabling the creation of 95,000 jobs by 2026, delivering around 200,000 homes over the lifetime of the deal and providing the skills that employees and businesses want. In that context the development of RAF Mildenhall could be a key project for the new Combined Authority.

The Norfolk and Suffolk Combined Authority's ambition is to will work with local authorities, LEPs, government departments and agencies, ports, universities, the third sector and business to grow the



local and national economy whilst improving the life chances and quality of life of people across the region. The proposals in the governance scheme set out a number of core initiatives including:

- A step change in infrastructure delivery with an integrated approach to the planning of roads, rail and digital connectivity alongside land for new housing and business;
- Making East Anglia the UK's truly connected region in respect of communications and transport connections, linking research-based growth in the major towns and cities with even the most rural villages. Improvements to road and rail infrastructure and using smart ticketing will make it easier for residents to participate fully in the economy across transport modes;
- Devising new models of private/public infrastructure and housing funding to fund strategic capital infrastructure;
- A new partnership between the Universities and Further Education providers in the region to drive a programme of co-ordinated skills and educational improvement to deliver the knowledge based economy.
- Areas of joint collaboration with Cambridgeshire and Peterborough, including strategic issues of scale, such as transport, skills and key sectors, e.g. agri-tech, as well as other areas that represent economic growth opportunities.

The Combined Authority's responsibilities will include:

- A multi-year, consolidated and devolved local transport budget;
- A new Key Route Network of local authority roads to be managed and maintained by the Combined Authority;
- Strategic planning, creating a non-statutory spatial framework;
- Increasing new homes delivery;
- A £25m a year funding allocation over 30 years, to boost growth.

It is proposed that the Mayor of the Combined Authority will have functions corresponding to those of the Mayor of London under Part 8 of the Localism Act 2011 to designate any area of land in the Combined Authority area as a Mayoral Development Area leading to the establishment by Order of a Mayoral Development Corporation subject to the consent of all Constituent Authorities in which the Development Corporation is intended to be based.

### **The Growing Places Fund**

Growing Places Fund funding can be used to establish revolving funds to take forward a range of projects that can help facilitate economic growth, jobs and house building in the local area, providing returns which can be reinvested locally. Examples include infrastructure delivery (such as new roads, utilities and broadband), site acquisition and preparation, residential and commercial building construction and public realm.

In order to qualify for the fund, partnerships must demonstrate that they meet certain criteria such as how the money they receive from the fund will generate economic activity in the short term by addressing immediate infrastructure and site constraints which promote the delivery of jobs and

housing. Bidders also need to demonstrate that they have match funding in place, be in a position to start from the approval date, have private sector involvement or the means of unlocking wider private sector development and economic activity and the necessary planning permissions, legal consents and land ownership in place. It is currently unclear if there are any plans to advance this programme any further or whether it has been superseded by things such as the Cities & Local Growth Unit.

*Potential payback mechanism: this is a revolving infrastructure fund but repayment could be from long term development revenue on the site or Business Rate Retention.*

### **Tax Increment Finance (TIF) schemes**

TIF schemes were approved by the 2010-1015 government as a new mechanism for forward funding infrastructure and capital development. TIF schemes use future uplifts in real estate tax revenues to finance current public infrastructure improvements, which will in turn create tax gains to help fund future projects. The projected increase in taxation is captured in a bond and sold to fund the infrastructure. TIF allows local authorities to borrow against different elements of retained business rate revenue. The revenue is not to the local authority but goes directly back to the government to repay the loan (i.e. central government fund and repay the loan via TIF). TIF is only likely to be suitable where the site is cleared to ensure substantial business rate growth is a realistic prospect (we are not aware of the position at RAF Mildenhall in this regard).

New Development Deals which have been negotiated within City Deals for Newcastle, Manchester, or Sheffield for example, involve the ring-fencing and dedication of proceeds for future growth through TIF. In the absence of more systematic fiscal devolution London First see scope for HMT to apply these principles to a wider range of schemes in London so as to enable growth-stimulating infrastructure investment to go ahead.

The Manchester City Deal, which included a TIF scheme, was set up in 2012 and became known as the 'Greater Manchester earn-back scheme'. Under this deal £1.2 billion is being invested up-front in transport improvements.

*Potential payback mechanism: repayment from Business Rates.*

### **9.3.2 Pay Back Mechanisms**

#### **Direct Developer**

There are examples where significant land owner(s)/developer(s) have funded infrastructure improvements without a mechanism for payback from other potential beneficiaries. For example, Woolwich (Berkeley Homes' Royal Arsenal scheme funded a new Woolwich Crossrail station) and Kidbrooke (Berkeley Homes again – funding for a significant railway station upgrade); the payback mechanism to them is an increased GDV, a faster pace of absorption and improved land values.

#### **Developer Framework through a Supplementary Planning Document (SPD)**

Establishing an SPD for a defined area can help identify infrastructure costs and ensures that the cost of providing this is evenly shared between the different land owners in the defined SPD area. A private sector developer may fund the key piece of infrastructure to allow a scheme on its land to be brought

forward and the SPD would create a mechanism where the developer is able to capture contributions from developers of other plots of land within the defined SPD area as they develop their schemes at a later date and within the timeframe specified within the SPD (benefiting from the infrastructure put in place and already funded by the first developer).

An SPD style approach can also be used in the case of public sector led development, as in the case of the Bedford Bypass project. In this example, English Partnerships (EP, now the HCA) forward funded the first phase of the Bedford Bypass to support and enable the delivery of some of the key housing sites on the west side of Bedford. Under this innovative deal, £17m was put towards the cost of the £24m road through Treasury accounting systems. This went to EP which acted as ringmaster and forward funder on the project. Money is to subsequently be recouped from the housing developers to pay back this funding; various thresholds, such as completion of a particular number of homes, triggers payments. The remainder of the funding for the road came from the government's Growth Area Fund, which provided £5m, and a £2m local transport plan contribution.

### **Enterprise Zones (Business Rates)**

In 2012, the UK government established a number of EZs: geographical areas with a range of incentives to help to build or grow businesses, including simplified planning and tax relief. Hence EZs have a commercial focus rather than being aimed at improving housing supply. Gaining classification as an EZ can help fund infrastructure projects as changes to business rates generated by firms locating in the defined zone are retained and reinvested in local economic growth for a period of typically 25 years. This enables a greater share of business rate uplifts to be retained locally, and large infrastructure projects such as the Northern Line Extension (NLE) at Battersea have benefitted from contributions obtained through a new EZ in the London Borough of Wandsworth and Lambeth.

The NLE to Battersea is largely being funded by the Public Works Loan Board and paid back by the private sector through value uplifts generated by redevelopment in the wider Battersea area; the entire funding requirement, including interest costs, is expected to be met through £266m (2012/13 prices) of developer contributions from Section 106 and CIL and retained business rates via a new EZ. The zone is to be used purely as a funding mechanism for the NLE with no additional incentives available to businesses (so distinct from the 'official EZs').

### **New Homes Bonus**

The NHB is a government scheme aimed at encouraging local authorities to grant planning permission for new homes in return for receiving additional revenue. The NHB provides un-ring fenced funds to local authorities for each new home completed. The scheme only applied to homes that are completed in the previous Spending Review period; that is, to the end of March 2015. There was no announcement relating to the NHB in the March 2015 or July 2015 Budgets. Assuming that the bonus is continued, the additional residential units would unlock additional funds. The scheme pays out for each new home for six years, with an additional payment of £350 for six years for each new affordable home completed. The grant is based on the amount of extra Council Tax revenue raised for new-build homes, conversions and long term empty homes brought back into use. There is also an extra payment for providing affordable homes. The Department for Communities and Local Government set aside £1 billion for the NHB with an aim for the scheme to produce an additional 140,000 homes over 10 years. In 2015 The DCLG announced that almost £3.4 billion had been allocated between 2011 and 2016.

## 9.4 Public Sector Response

### 9.4.1 Clear and Effective Decision Making

The public sector needs to speak with one voice to unite and put the legacy objectives at the heart of future planning for RAF Mildenhall. The OPE programme and potential Norfolk and Suffolk devolution deal will help to improve this and RAF Mildenhall can become a showcase for alignment of public sector strategies and resources to support growth.

A project of this scale and long timescale needs sustained and committed leadership from the public sector at national and local level to give confidence to local communities, businesses and investors that the project has the necessary backing to succeed.

### 9.4.2 Infrastructure Interventions

As the viability section of the report demonstrates there is a need for pump-priming infrastructure investment to build confidence in the deliverability of the project and to introduce private investors to fund discrete phases of the development; this may require early stage public sector interventions.

### 9.4.3 OPE Principles and devolution

RAF Mildenhall represents an excellent opportunity to drive forward West Suffolk's OPE Programme by contributing to the ambitious place – shaping project for the town and surrounding area through co-ordinating activities using the public sector asset base.

The devolution agenda in Suffolk can use RAFM as a flagship to show how sustainable economic growth and homes and the provision of infrastructure can be planned and delivered on a major scale in the region.

### 9.4.4 Potential Delivery Approach

The report suggests that the public sector could take a pro-active role in maintaining the site in single ownership, and taking the role of a 'master developer' to provide project leadership and manage the planning, consultation and strategic infrastructure stages of the development. This would be followed by a series of deals with private sector developers and occupiers to take forward phases in partnership with the public sector owners. There are various models of public sector ownership which could be explored but a partnership between central government and local partners including FHDC could provide a strong combination of land ownership, funding resources, delivery expertise and local knowledge and buy-in.

While we don't have a steer from the DIO at this stage, we should be highlighting the potential for a combined central (for instance DIO/HCA/GPU & Cabinet Office) and local (FHDC/LEP) delivery partnership, and how it could be structured. The partnership structure could explore the use of an EZ and could incorporate land ownership, funding and other powers for example by utilising a Mayoral Development Corporation under the devolution deal or similar delivery mechanism.

A substantial central/local partnership concept would depend on FHDC's attitude to taking a long term financial stake and bearing risk through borrowing and other investment and/or securing external funds for instance the devolution deal. It's unlikely that central partners would be interested in a forming a joint venture unless the local partners bring something to the table.

We will need to understand the terms on which surplus land would transfer to the HCA or a dedicated regeneration partnership. It has been assumed in the study that the DIO would transfer land at 'market value' but it is feasible that it could be transferred for a nominal sum given the uncertainties in the

site conditions and to facilitate the regeneration partnership, in which case we would expect the DIO to seek some form of profit share.

On the assumption that the first tranches of land are not transferred for several years there is a challenge for a new regeneration partnership to define its purpose and stay relevant during the period of project capacity building and feasibility work leading up to the land transfer. Equally this should be viewed as an opportunity for the partnership to build its delivery credentials, show leadership and engagement with stakeholders and secure and manage the funding for the capacity stage of the project.

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## 10. CONCLUSIONS

### 10.1 Vision

- No single use or user for the site is likely and based on the available information, we consider it reasonable to assume that this can be discounted.
- For clarity, it should be stressed that for the site to come forward, it will be subject to a mix of uses and there will be full and part site development options. Whilst the commentary in Section 7 assesses uses in isolation, this is for analysis purpose – actual development will be a mix. The linkages and inter-dependencies between these uses is critical to the success of any scheme.
- A new settlement with a ‘Garden City’ premium is likely to prove the most viable and deliverable development option whilst it would raise complex town planning issues and the danger of creating a commuter settlement.
- Aviation potential is most significant in terms of the MRO sector, particularly if expertise can be developed in composites and also address the shortage of sites for aircraft decommissioning. Building on the existing expertise and hub within the area is likely to be the most deliverable option to generate employment based uses on the site.
- The site offers reasonable prospects for energy generation uses.
- Office, science park or agri-tech development of any scale are going to be significantly challenged in viability and deliverability terms and the potential to be delivered over time will require:
  - A clear delivery platform in place.
  - Quantified data in terms of the existing employment skills base. This might provide a clue to the inherent strengths of the airfield – without the USAF in terms of supply chain companies on the airfield and the highly skilled labour force that might be a significant driver for new uses.
  - Significant campus relocation to pump prime development.
  - Certainty for occupiers through:
    - A unified ownership/delivery strategy for the site.
    - Evidence and demonstration of early infrastructure investment.
    - Marketing and branding of RAF Mildenhall as a place (sustained and consistent).
  - EZ designation.
  - Links to an academic institution on site.
  - Public sector direct development.



- Whilst housing educational facilities would help deliver science park/other uses, this will require an existing hub/areas specialism to build off (as opposed to the other way round) which points toward aviation use.
- Whilst life sciences are not - on the face of it - a strong contender, there may be some potential at the larger industrial end of biotechnology or with life sciences occupiers seeking a very secure site away from existing hubs.
- We do not consider that the site has out of town retail potential.
- Unsurprisingly, given the limited market demand in this location and the infrastructure burden of any significant development, all use combinations for the site are currently unviable in property market terms. This does not mean to say that they are undeliverable however and given certain assumptions/alterations, they could be viable; in particular:
  - Contribution from other sources towards infrastructure costs which can be considered to be serving the wider sub-region as opposed to RAF Mildenhall in isolation.
  - Securing of significant anchor occupiers early within scheme progression.
  - Non policy compliant level of affordable housing.
  - Public sector leadership which is critical to delivery any comprehensive vision on the site and the viable delivery of early phases.

## 10.2 Key Messages to take to the Government

### A Shared Vision

- The public sector needs to speak with one voice to unite and put the legacy objectives at the heart of future planning for RAF Mildenhall
- A residential led commuter town is not the default option and we must avoid mothballing the site
- Government needs to be seen as being 'on board' to deliver the vision.
- We recommend funding is made available for promoting the site and the wider area
- Discussions with potential key aviation partners should be coordinated across the public sector

### Clear and Effective Decision Making

- A strong governance structure needs to be established.
- Government to accelerate and clarify decisions about the timing of the USVF withdrawal and any future British military requirement

- A partial occupation by the British Army could be successful but we need urgent discussions to understand the quantum, nature and longevity of any presence. We are ready to collaborate with the DIO and Front Line Commands to apportion land uses that enable civilian and military uses.
- The airfield, supporting infrastructure and an area of 200 acres should be protected for aerospace

### **Infrastructure Interventions**

- Pump-priming infrastructure by the public sector
- Government to make available capacity funding to assess the costs of infrastructure and to develop business cases which demonstrate the return on this investment
- Government to provide a funding package to be repaid from sale proceeds of the land when it becomes developed to meet the costs of the required improvements to infrastructure and services to facilitate new development
- In the event that there is a British military use for the site we ask that the costs of strengthening infrastructure is met by government
- Minimum site closure standards to be applied before the site is transferred from the military or a dowry fund should be established to meet the costs.

### **OPE Principles and devolution**

- RAF Mildenhall represents an excellent opportunity to drive forward West Suffolk's OPE Programme by contributing to the ambitious place – shaping project for the town and surrounding area through co-ordinating activities using the public sector asset base.
- The devolution agenda in Suffolk can use RAFM as a flagship to show how sustainable economic growth and homes and the provision of infrastructure can be planned and delivered on a major scale in the region.
- In the event that the British Army have a requirement for part (or all) of the site, it needs to be recognised that this will be a very different presence to an RAF or USVF presence. We therefore ask that in this scenario there is appropriate military community integration planning and funding made available.
- We want to work with the HCA to ensure that they are not 'penalised' either financially or in how it accounts for the housing targets that will transfer with the land from the DIO in the event that our vision means it delivers less housing in order to deliver more employment.

### **Delivery Approach**

- We ask that the public sector should take a pro-active role in maintaining the site in single ownership in the near term after closure, and taking the role of a 'master developer' to provide project leadership and manage the planning, consultation and strategic infrastructure stages of the development.

- There are various models of public sector ownership which we want to explore with the DIO and the HCA but a partnership between central government such as DIO and HCA and local partners including FHDC could provide a strong combination of land ownership, funding resources, delivery expertise and local knowledge and buy-in.
- A coordinated public sector delivery response will ensure that development at RAF Mildenhall comes forward holistically, employment uses are seen as a real priority rather than a planning condition to release the next phase of housing and that local needs can be delivered – for example by ensuring that skill training is delivered in line with the build-out of new employment space or delivering demonstration housing projects that ensure the elderly can continue to live independently, safely and sociably.
- This would likely be followed by a series of deals with private sector developers and occupiers to take forward phases in partnership with the public sector owners.
- We ask that we work together across government to address how viability can be improved to deliver better returns to the public purse as well as improving the prospects of creating new jobs.
- We would like capacity funding to pursue a business plan for the aviation uses described in this prospectus and to support discussions with potential operators.
- We want to explore with government the benefits of designations such as Enterprise Zones, Housing Zones and development corporations and to support delivery of the Vision.
- Aside from the delivery of new infrastructure and accommodation on the site there is a requirement for advanced skills training to support new employment.

## APPENDIX 1

### Issues impacting future use of RAF Mildenhall

C&W discuss the approach to RAF Mildenhall in Section 2 assessing the scale of the opportunity in comparison to the existing geography and economy of the area raises a number of critical issues and challenges. C&W outlined a number of areas which the feasibility study needs to address these include:

- **Coordinating national and local government strategies and resources** - the scale of the development will require input from government departments, HCA, LEPs and local authorities among others to maximise the impact of the project at a national and sub regional level.
- **Vision and innovation** - a project of this size requires a visionary approach and innovative uses to ensure future generations can derive lasting economic and social benefits. For instance this could focus on driving the knowledge economy, technology sectors and education and the higher level skills base. C&W, through Infrata a specialist aviation sub-consultant, assesses the potential to specialise in aviation uses given the existing infrastructure.
- **Public: Private Partnership and leadership** - the reference case studies demonstrate that a complex and long term project will require committed leadership and political support. The public sector bodies have a vital role to play in establishing the vision and credentials for the site and attracting private sector partners.
- **Technical challenges** - the legacy of military use could mean large abnormal site costs and the scale of development is likely to require major off-site infrastructure upgrades.
- **Funding and financial mechanisms** - major site development costs are likely to require public funding support from government, LEPs, local authorities and other sources. Innovative funding mechanisms such as EZs and business rates retention schemes should be considered.
- **Community and stakeholder involvement** – another key lesson from many of the reference case studies is that existing communities could feel overwhelmed by the scale of this project and there is a real need to engage with and involve them in the design and operation of the project from the outset to ensure the regeneration brings sustainable benefits.
- **Timescales** - this is a long term project. It will be 2020 before any military withdrawal and even then there may be some continuing military use. The redevelopment of the site will impact the social, economic and physical landscape of Mildenhall and surrounding communities over a wide area and regeneration will be phased over at least 20 years. There will be a need for long term leadership and continuity to maintain momentum and manage the expectations of the local communities.

In order to ensure the appropriate analysis and scope of study C&W has followed the approach and timeline as set out in Figure 20.

Figure 20 – C&amp;W Methodology

Task	Methodology	Week
<b>Baseline Stage</b> Preparing an evidence base for the site and regeneration area. Undertaking market assessments.	<b>Steering Group set up meeting 1</b> w/c 9 May and site visit Stakeholder meetings/telecons to obtain information Information review and preparation of evidence base and market assessments	May 9 <sup>th</sup> Weeks 1-3
<b>Feasibility Stage</b> Prepare a series of high level options for the site defining the development use, mix and outputs	Land use options analysis including aviation use <b>Steering Group review meeting No 2</b> w/c 6 June to review options <b>Stakeholder Workshop No1</b> to consider options w/c 13 June	Weeks 4-7
<b>Viability Stage</b> Test the viability, deliverability (inc phasing) and cost/benefits with financial modelling Investigate public-private delivery options Investigate funding sources and financial mechanisms Client meeting to agree Vision and Preferred development option for the site Prepare a high level Vision Document and the Preferred Site Option	Undertake viability testing, modelling and planning investigations <b>Steering Group review meeting No 3</b> to consider initial viability results w/c 27 June Assess merits of Joint venture structures, public-private partnerships, EZ etc Discussions with BIS, DCLG, LEP, private sector funding <b>Steering Group review meeting No 4</b> to agree Vision and Preferred Option w/c 18 July <b>Stakeholder Workshop No 2</b> to agree the Vision and preferred Option w/c 18 July	Weeks 8- 12
<b>Prospectus and Action Plan Stage</b> Produce a Prospectus for the site stating the benefits and deliverables to influence government/DIO and highlight challenges and asks of government	<b>DIO meeting to discuss draft Prospectus w/c 1 August</b>	Week 13
Final Client meeting to sign off final Prospectus and Action Plan following DIO feedback	Deliver final study deliverables – study report, Prospectus, Action Plan <b>Final Steering Group sign-off meeting August</b>	August 7

## Data Sources

C&W have relied upon the data from reports and assessments including:

- Property Times UK Industrial Q1 2016, C&W Research, (May, 2016)
- Retail Market Snapshot Q1 201, C&W Research, (2016)
- Office Market Snapshot Q1 201, C&W Research, (2016)
- Western Suffolk Land Review, Suffolk County Council, (2009)
- Population Profile, Suffolk County Council, (2012)
- A11 Growth Corridor Feasibility Study, Bruton Knowles and Amion Consulting, (July 2015)
- Better Broadband Suffolk (2016)
- Suffolk Local Broadband Plan, Summary Briefing Note, Better Broadband Suffolk, (2011)
- BDUK Broadband Delivery Project, Local Broadband Plan for Suffolk, Better Broadband Suffolk, (2011)
- Mildenhall and Lakenheath Airbase Group, West Suffolk, (2015)

- Population, Housing and Employment Forecast, Cambridgeshire County Council, (2013)
- Monitoring Report for 2013/14 and 2014/15, Forest Heath District Council Local Plan, Forest Heath District Council (2015)
- Population Profile Suffolk, Health and Wellbeing Suffolk, (2014)
- Rural Vision 2031, St Edmundsbury Council, (2015)
- Western Suffolk Employment Land Review, Suffolk County Council, GVA Grimley, (2009)
- Suffolk Growth Strategy, Suffolk County Council, (2013).
- Joint Development Management Policies Document, Forest Heath and St Edmundsbury Local Plan, (Feb 2015)
- Housing Market Bulletin Cambridge May 2016, Hometrack, (2016)
- Objectively Assessed housing Need, Forest Heath, Cambridgeshire County Council and Cambridge Research Group (January 2016)
- West Suffolk Housing Strategy, Forest Heath District Council, (2014)
- Core Strategy Development Plan Document 2011-2026 (with housing projected to 2031), Forest Heath District Council Core Strategy CS9, Forest Heath LDF, (2010)
- Market Ward Information Forest Heath, West Suffolk.gov, (2011)
- The Cambridge Sub-Region Strategic Housing Market Assessment (SHMA), Cambridge Insight in (June 2013/Updated 2014)
- Strategic Housing Land Availability Assessment (SHLAA), West Suffolk Council, (April/May 2015).
- West Suffolk Council: Single Issue Review (SIR) of Core Strategy Policy CS7 - Overall Housing Provision and Distribution - Preferred Option (3rd Regulation 18 Stage), Forest Heath District Council, (2016).
- A UK Strategy for Agricultural Technologies, HM Government, (2013)
- Retail impact threshold Advice West Suffolk, Strategic Perspectives, (2014)
- Funding Secures Agri-Tech Research Hub for the East, New Anglia, Local Enterprise Partnership for Norfolk and Suffolk, (2015)
- Prisoner population and overcrowding, Key issues for the 2015 Parliament, UK Parliament, (2015).
- National Policy Planning Framework, (2012)
- Forest Heath Core Strategy, West Suffolk (2010)
- Assessment of a five year supply of housing land, Forest Heath District Council, (published March 2016)
- GDGP LEP (<http://www.gcgp.co.uk/>)



- Briefing Note from the Newmarket and District Chamber of Commerce, The proposed closure of RAF Mildenhall and future use of the site, Newmarket & District Chamber of Commerce (2016).

## Limitations

This report is subject to the following limitations:

- Whilst C&W has sought to test, interrogate and understand the potential for the site, this is a visioning exercise which is limited in the extent to which detailed elements can be modelled and allowed for. The assessment is founded on assessing the macro potential of the site and area with allowances made for the obvious and significant constraints and limitations of the site.
- We consider that this analysis and our process provides an appropriate assessment at this - very high - level of analysis. Cost assumptions are indicative and flat rates for values have been utilised in order to allow for comparison between options. For the avoidance of doubt, no advice within this report is to be taken as a C&W formal opinion of value. The information provided by third parties. No values referred to in this report are covered by the RICS Valuation – Professional Standards 2014 (the 'Red Book').
- In light of the recent EU Referendum and the ensuing political and economic uncertainty, sentiment towards and requirements for, property across occupiers, lenders, investors and developers is likely to be affected in the short term at least. At this time organisations involved in the industry are reflecting on the potential implications of the UK leaving the EU. Evidence of the impact on rental and capital values, along with other elements affecting property appraisal is at this time, scarce and largely anecdotal. C&W continues to closely monitor market developments and trends in order that we can provide clients with the most up to date advice. The views contained in this document are provided in the context of this market uncertainty and as such our estimates and opinions are susceptible to short term change. Accordingly we advise that clients have regard to this risk and seek updated advice before acting on the opinions expressed.

## APPENDIX 2

### SWOT Analysis

Table 24 – Strengths, Weaknesses, Opportunities & Threats

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• <b>Large site 440 ha</b> – the scale gives the opportunity to create a step change.</li> <li>• <b>Vacant possession</b></li> <li>• <b>Located in a rapidly expanding area</b> – Suffolk is one of the fastest growing counties in the UK, as economic migrants move out of other expensive regions.</li> <li>• <b>Potential for a creation of place</b> – given the large parcel of open land.</li> <li>• <b>Strategic location within East Anglia</b> – dualled A11, A14 connections, agri-tech EZs, continued USAFE presence at Lakenheath.</li> <li>• <b>Cambridge growth</b> – potential to feed off the major regional hub.</li> <li>• <b>Existing military presence</b> – gives an existing focus to the area/site.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Location</b> - limited access and limited population to draw upon.</li> <li>• <b>Infrastructure constraints</b> – limited road and rail networks serving the site.</li> <li>• <b>Ecologically sensitive area</b></li> <li>• <b>Archaeological potential</b></li> <li>• <b>Challenging local economic and property conditions</b></li> <li>• <b>Buildings are tired</b> and nearing the end of useful life</li> <li>• <b>The opportunities can also become constraints</b> (scale could saturate market; policy vacuum brings uncertainty; airfield could become a millstone)</li> </ul>
OPPORTUNITY	THREATS
<ul style="list-style-type: none"> <li>• <b>Scale</b> – single ownership and vacant possession removes barriers</li> <li>• <b>Local ambition backed by government strategies and resources</b> – potential to align input across government to maximise the impact of interventions and avoid ‘silo’ approach</li> <li>• <b>Policy ‘whiteboard’</b> – opportunity to shape RAF Mildenhall’s future with limited policy constraints</li> <li>• <b>Airfield infrastructure</b> – potential to specialise in aviation uses given the existing infrastructure, subject to demand assessment</li> <li>• <b>Existing buildings</b> – opportunity to generate commercial income stream to cross-fund other initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Military legacy</b> – contamination hotspots, some on-site infrastructure and services unsuitable for new uses, unestablished market location</li> <li>• <b>Unknown future military requirements</b></li> <li>• <b>Competition</b> - from other sites in the area that have been strategically allocated.</li> <li>• <b>Limited Current Employment market</b> – the current market is focused around primary Services and Accommodation &amp; Food therefore limited existing market with scalability.</li> <li>• <b>Overreach</b> – in terms of what is deliverable and achievable on a site of such scale given the number of competitor locations/ sites.</li> </ul>

## APPENDIX 3 - OCCUPIER SITES & COMPETING LAND SUPPLY

In order to assess the competition presented from other major strategic sites in Suffolk, C&W has compared a number of major sites to RAF Mildenhall in terms of the integration with existing markets, infrastructure constraints and site constraints. C&W has further analysed these sites and applied a ranking from 1 to 4 based on their relative deliverability and marketability compared to RAF Mildenhall ('4' reflects the maximum constraints and challenges and is deemed to reflect RAF Mildenhall's position). A ranking of 1 is the most deliverable of the sites assessed (with relatively few market constraints and a strong existing local market). Key criteria that the sites have been assessed against are:

- Integration with existing known property markets
- Infrastructure constraints
- Site constraints

As evident from Table 25 there are a number of significant sites across Suffolk and Cambridgeshire that have been allocated for development and will compete with RAF Mildenhall for occupiers/development potential. The strategy for RAF Mildenhall will need to increase the attractiveness of the site in order to make it preferable to the competing options.

**Table 25 – Strategic Sites and Competing Land Supply**

Site	Size/type	Comments	Ranking in comparison to Mildenhall (1 to 4)
Adastral Park 2000	<ul style="list-style-type: none"> <li>• Strategic site – 2,000 dwellings, hotel, open space and secondary school.</li> <li>• Greenfield (60%) and minerals pits.</li> </ul>	<p>Strategic growth location in Local Plan:</p> <ul style="list-style-type: none"> <li>• No planning permission/brief.</li> <li>• Planning application expected in autumn 2016.</li> <li>• BT board reluctant to commit further funding until a development Partner on Board.</li> </ul>	<p>Adastral Park is located in a superior position to Mildenhall along the A12 and in close proximity to Ipswich. This gives the site greater access however like Mildenhall Adastral Park faces a number of market challenges.</p> <p>Rank 3</p>
Grange Farm, Newnham	<ul style="list-style-type: none"> <li>• Strategic site - 44 ha.</li> <li>• Medium to High Importance for the Green Belt.</li> </ul>	<ul style="list-style-type: none"> <li>• Land is adjacent to Cambridge and identified as "very important" in a study of Cambridge.</li> <li>• Considered for Green Belt release in 2002.</li> <li>• Was previously proposed for development as part of the university but was rejected.</li> <li>• Issues of the site being ecologically important.</li> </ul>	<p>Grange Farm is located in a superior position to Mildenhall being in close proximity to Cambridge and its services.</p> <p>Rank 2</p>
Downing Playing Fields	<ul style="list-style-type: none"> <li>• 5 ha.</li> <li>• Green belt.</li> </ul>	<ul style="list-style-type: none"> <li>• Site is high importance to the city and medium importance to the</li> </ul>	<p>Downing Playing fields whilst being close to Cambridge face challenges over access to services and</p>

Granchester Road		<p>green belt.</p> <ul style="list-style-type: none"> <li>Site put forward by a third party and faces challenges over sustainability, and accessibility.</li> </ul>	<p>conversion from existing Green Belt to new uses. However its proximity to Cambridge means that there is significant market demand.</p> <p>Rank 2</p>
Cambridge South East-Land south Fulbourn Road r/o Peterhouse Technology Park extending south & west of Beechwood on Worts Causeway, land west of Babraham P&R	<ul style="list-style-type: none"> <li>117 ha.</li> </ul>	<ul style="list-style-type: none"> <li>Faces constraints as part of the site is affected by Cambridge Airport safeguarding constraints.</li> <li>Concerns over loss of protected open space.</li> <li>Air quality issues.</li> <li>Poor access by transport.</li> <li>Poor community integration.</li> </ul>	<p>Land to the South East of Cambridge faces a number of constraints. Some of these are similar to Mildenhall (e.g. limited transport availability). However, Mildenhall is not constrained by green belt regulation or issues over air quality. Despite planning and access constraints due to the proximity to Cambridge there is significant housing demand in this area.</p> <p>Rank 3</p>
Bell School, Babraham Road	<ul style="list-style-type: none"> <li>8 ha.</li> </ul>	<ul style="list-style-type: none"> <li>Agricultural and playing fields, 347 dwellings, 100 student beds.</li> <li>Local Plan 2006 Allocation.</li> </ul>	<p>Planning permission has been granted for 347 dwellings and 100-bed student living accommodation. This area has better connectivity than Mildenhall and is in close proximity to Cambridge and existing property markets.</p> <p>Rank 2</p>
Betjeman House	<ul style="list-style-type: none"> <li>1 ha.</li> </ul>	<ul style="list-style-type: none"> <li>Offices and 156 dwellings.</li> <li>Cambridge local plan mixed use allocation.</li> </ul>	<p>This land has been allocated under the Cambridge local plan for conversion from office to residential. Betjeman house is located on the A1307 with good transport links to Cambridge.</p> <p>Rank 1</p>
Clifton Road Area	<ul style="list-style-type: none"> <li>9 ha.</li> </ul>	<ul style="list-style-type: none"> <li>Industrial, office and leisure uses.</li> <li>Maximum capacity of 550 dwellings at a range of densities to reflect residential character 2 ha employment and leisure related uses.</li> <li>There have been issues of surface water flooding requires mitigation.</li> <li>Contamination requires remediation.</li> <li>Open space requirements to reflect location adjacent to an area of open space deficiency.</li> <li>Issues over Access onto Cherry Hinton Road subject to capacity analysis and assessment of links</li> </ul>	<p>The site forms the Clifton Road Area of Major Change. There are a number of constraints and challenges to the site. The site is located near Cambridge Station and in close proximity to the City but there a number of challenges to overcome. RAF Mildenhall has some similar challenges over infrastructure and maintaining the local character during development.</p> <p>Rank 2</p>

		<p>into the wider area.</p> <ul style="list-style-type: none"> <li>New local plan allocation.</li> </ul>	
Ipswich Garden Suburbs (IGS)	<ul style="list-style-type: none"> <li>3,500 homes.</li> <li>Greenfield.</li> <li>Strategic site.</li> </ul>	<p>Planning Status:</p> <ul style="list-style-type: none"> <li>Phase 1 allocated.</li> <li>Phases 2 and 3 draft allocation.</li> <li>No planning permission</li> <li>Current planning application for 1000 units.</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>Main problem is infrastructure e.g. two rail bridges; ransom payments; sec school, primary schools; Country Park; highways.</li> </ul>	<p>IGS is in a superior location to Mildenhall, allowing for the draw of people and services from Ipswich. However, unlike the sites located closer to Cambridge market demand is not as strong.</p> <p>Rank 3</p>
Chilton Woods	<p>1250 dwellings 20 ha employment, 30 ha woodland and 3 ha education.</p>	<p>Planning Status:</p> <ul style="list-style-type: none"> <li>Mixed use Strategic site allocation (thereby not subject to CIL.).</li> <li>Allocation in Core Strategy for 1050 dwellings and employment- policy CS4 - planning application submitted by Suffolk County Council –start date 13/1/16 – (B/15/1718) and currently under consideration by LPA).</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>Western access road (subject of current external bid to secure funding).</li> <li>Potential power supply to employment land.</li> </ul>	<p>Chilton Woods has similar challenges to Mildenhall as it faces issues over access and creating sustainable employment land, with limited access to existing markets.</p> <p>Rank 4</p>
Sproughton	<p>Strategic Employment site of 50 ha.</p>	<p>Planning Status:</p> <ul style="list-style-type: none"> <li>Strategic employment site but Masterplan work is indicating that a mixed development may be possible.</li> </ul> <p>Main challenges:</p> <ul style="list-style-type: none"> <li>Collaborative work advancing on a Masterplan for the site Infrastructure provision may cause viability issues.</li> <li>Connectivity to Ipswich required in infrastructure terms.</li> <li>Power supply issues may be an issue.</li> </ul>	<p>Sproughton is located on the outskirts of Ipswich close to the A14. Therefore whilst it faces some infrastructure challenges it presents fewer site constraints than Mildenhall and can form links with the exiting Ipswich property market although this market is not as strong as the Cambridge market.</p> <p>Rank 3</p>
Snoasis Blakenham	<p>Mixed Use Development – including housing railway</p>	<p>Planning:</p> <ul style="list-style-type: none"> <li>Planning permission granted</li> </ul>	<p>Located near Stowmarket between Bury St Edmunds and Ipswich.</p>

	station and strategic leisure provision/ holiday lodge accommodation.	<p>subject to Section 106.</p> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>• Permission granted and part commenced-condition discharge and reserved matters submission outstanding. Large scale infrastructure provision involved; review likely.</li> </ul>	<p>Whilst near the A14 would need improvement in order to provide adequate access, there are existing markets within the vicinity.</p> <p>Rank 3</p>
Stowmarket A14 Gateway (Mill Lane)	<b>Employment site</b> - 57 ha.	<p>Planning:</p> <ul style="list-style-type: none"> <li>• Planning permission granted subject to Section 106.</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>• Permission granted and part commenced-condition discharge and reserved matters submission outstanding. Large scale infrastructure provision involved; review likely.</li> </ul>	<p>Stowmarket is located in close proximity to the A14 and has its own station. However road access from the A14 to Stowmarket is limited and would need upgrading. Stowmarket is located between Bury St Edmunds and Ipswich and so existing markets to access is available although the strength of the market to absorb a large number of units is unknown.</p> <p>Rank 3</p>
North East Bury St Edmunds	1,250 homes +relief road.	<p>Planning:</p> <ul style="list-style-type: none"> <li>• Masterplan adopted first phase.</li> <li>• Application received Dec 2015.</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>• Capacity.</li> </ul>	<p>North East Bury St Edmunds has a large existing property market in the immediate proximity as well as established road network, this is in direct contrast to Mildenhall.</p> <p>Rank 2</p>
North West Haverhill	1,150 homes.	<p>Planning:</p> <ul style="list-style-type: none"> <li>• Planning permission granted with a S106.</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>• No progress.</li> <li>• Infrastructure concerns.</li> </ul>	<p>Haverhill faces similar challenges to Mildenhall as it is not located near any main road networks. It is however significantly closer to Cambridge than Mildenhall and therefore more likely to be supported by existing property market demand.</p> <p>Rank 3</p>
North East Haverhill	2,500 homes.	<p>Planning:</p> <ul style="list-style-type: none"> <li>• Masterplan Adopted February 2016.</li> <li>• Application for 215 homes and Care home received.</li> </ul> <p>Main Challenges:</p> <ul style="list-style-type: none"> <li>• Viability.</li> </ul>	<p>Haverhill faces similar challenges to Mildenhall as it is not located near any main road networks. It is however significantly closer to Cambridge than Mildenhall and therefore more likely to be supported by existing property market demand.</p> <p>Rank 3</p>