

# **Botley West Solar Farm**

**Environmental Statement** 

### Volume 3

Appendix 15.1: Desktop Baseline Assessment

November 2024

PINS Ref: EN010147 Document Ref: EN010147/APP/6.5 Revision P0 APFP Regulation 5(2)(a); Planning Act 2008; and Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulation



### **Approval for Issue**

#### Jonathan Alsop



15 November 2024

The report has been prepared for the exclusive use and benefit of the Applicant and solely for the purpose for which it is provided. Unless otherwise agreed in writing by RPS Group Plc, any of its subsidiaries, or a related entity (collectively 'RPS') no part of this report should be reproduced, distributed or communicated to any third party. RPS does not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report.

The report has been prepared using the information provided to RPS by its client, or others on behalf of its client. To the fullest extent permitted by law, RPS shall not be liable for any loss or damage suffered by the client arising from fraud, misrepresentation, withholding of information material relevant to the report or required by RPS, or other default relating to such information, whether on the client's part or that of the other information sources, unless such fraud, misrepresentation, withholding or such other default is evident to RPS without further enquiry. It is expressly stated that no independent verification of any documents or information supplied by the client or others on behalf of the client has been made. The report shall be used for general information only.

Prepared by:

Prepared for:

### RPS

20 Western Avenue, Milton Park, Abingdon, Oxfordshire, OX14 4SH United Kingdom Photovolt Development Partners GmbH, on behalf of SolarFive Ltd.





### **EXECUTIVE SUMMARY**

This study has been prepared by RPS for Photovolt Development Partners GmbH (PVDP), on behalf of SolarFive Ltd. (the Applicant) to assess the social and economic characteristics of the area in the context of the proposed development known as Botley West Solar Farm (BWSF) which would cover approximately 1,300 hectares (ha) and would be formed by three separate but related solar farm areas, with interconnecting cables, which together would generate renewable power through photovoltaic (PV) panels. The Project aims to deliver approximately 840MW of power to the National Electricity Transmission System (NETS), providing secure and clean energy of an equivalent level to meet the needs of approximately 330,000 homes.

Based on an assessment of commuting patterns and travel to work areas, our suggested study area for this socio-economic report covers the Local Authority areas of Cherwell District Council, West Oxfordshire District Council, Vale of White Horse District Council, South Oxfordshire and Oxford City.

The socio-economic indicators considered within this report include population, demographics, employment, health, travel to work patterns, access to renewable energy, deprivation (WIMD) tourism and recreation. These have been chosen specifically in regard to the proposed development and its potential impacts.

Population growth has been significantly higher in the study area (12.7%) compared to the South East region as a whole (7.5%) However, it is worth noting that the working age population in the study area has declined by 1.8% compared to the 2011 Census results.

Looking at economic activity and employment rates, we can see that according to the latest ONS data (2023 the study area has a higher average level (86.0%) of economic activity compared to the South East as a region (82.3). The average is, however, lowered by the economic activity rate in Oxford (81.9%), which is below the region average.

When looking at employment sectors across Oxfordshire we can see that Agriculture only accounted for 0.5% of all employment with circa 1,891 people employed in the industry. Compared to 2018, the sector has lost circa 42.7% of its employees. The table below also shows that construction employment has decreased by circa 20.9% across Oxfordshire over this period and accounts for 4.4% of all jobs.

Tourism is also an important local economic contributor with Blenheim Palace and the Cotswolds AONB bringing more than £900m into the study area and representing approximately 28,830 jobs in 2021. Access to these tourist attractions and their associated expenditure also support a network of micro businesses, which in the study area represent circa 88.2% of all businesses.

Regarding health, although the study area covers some of the least deprived areas in England, there are pockets of deprivation where health inequalities present serious challenges, across all three local authority areas.





### Contents

EXEC	UTIVE	E SUMMARY	
1	INTR	ODUCTION & CONTEXT	1
	1.1	Overview	
	1.2	National Policy Context	1
	1.3	Local Policy & Legislation	3
2	DEFI	NING THE STUDY AREA	5
	2.1	Site Location	5
	2.2	Travel to Work Areas (TTWs)	7
	2.3	Commuting Patterns	
	2.4	Summary	.11
3	SOCI	O-ECONOMIC BASELINE	12
•	3.1	Introduction	
	3.2	Population	
	3.3	Demographics	
	3.4	Employment	
	3.5	Jobs by Employment Sector in Study Area- ONS 2011	
	3.6	Wages	.23
	3.7	GVA per Employee	
	3.8	Qualifications	.28
	3.9	Tourism and Recreation	.29
	3.10	Deprivation (IMD)	.36
	3.11	Health	.40
	3.12	Travel To Work Patterns	.42
	3.13	Access to Renewable Energy	.47
	3.14	Broadband access	49
	3.15	Future Baseline	49

### Figures

Figure 1:	Google Aerial Showing Approximate Site Location – not to scale	5
Figure 2:	Proposed Site Location Plan	6
Figure 3:	Map Showing TTWA with Approximate Site Location outlined in red. Not to scale	7
Figure 4:	Commuting Totals Cherwell - Source: ONS, Census WU01UK - Location of usual	
	residence and place of work	8
Figure 5:	Commuting Totals West Oxfordshire - Source: ONS, Census WU01UK - Location of	
	usual residence and place of work	9
Figure 6:	Commuting Totals Vale of White Horse - Source: ONS, Census WU01UK - Location of	
	usual residence and place of work	10
Figure 7:	Population Change from 2011 Census to 2021 Census. Source: ONS Visualisations	13
Figure 8:	Median Age Maps - Source: Office for National Statistics – Census 2021	13
Figure 9:	Working Age Population - Source: Office for National Statistics – Census 2021	14
Figure 10:	Unemployment Rate 2012-2022 – ONS - Annual Population Survey	23
Figure 11:	Labour intensity of different farm types (number of jobs per hectare)	25
Figure 12:	Local AirBnB Providers	
Figure 13:	Local Hotel & B&B Providers	27
Figure 14:	West Oxfordshire Tourism Data	29
Figure 15:	Economic Impact of Tourism Profile, Oxfordshire (1)	31
Figure 16:	Economic Impact of Tourism, Oxfordshire (2)	32
Figure 17:	Economic Impact of Tourism, Cherwell (1)	33
Figure 18:	Economic Impact of Tourism, Cherwell (2)	34





Figure 19:	Economic Impact of Tourism, Oxford (1)	35
Figure 20:	Economic Impact of Tourism, Oxford (2)	36
Figure 21:	Indices of Multiple Deprivation - Cherwell	37
Figure 22:	Indices of Multiple Deprivation – West Oxfordshire	
Figure 23:	Indices of Multiple Deprivation – Vale of White Horse	38
Figure 24:	Indices of Multiple Deprivation – Oxford	39
Figure 25:	Indices of Multiple Deprivation - South Oxfordshire	39
Figure 26:	Method of Travel to Work	43
Figure 27:	Density of Charging Devices by Local Authority – Department for Transport	47
Figure 28:	Gas & Electricity Prices - Fuel price indices in the domestic sector in real terms	48
Figure 29:	ONS Population Projections (2018-based)	50

### **Tables**

Table 1.1:	Summary of the Designated NPS EN-1 and Draft NPS EN1 requirements relevant to this	
	socio-economic chapter	1
Table 1.2:	Summary of NPPF requirements relevant to this chapter	3
Table 1.3:	Summary of NPPG requirements relevant to this chapter	3
Table 2.1:	Cherwell Commuting Patterns (2011)	8
Table 2.2:	West Oxfordshire Commuting Patterns (2011)	10
Table 2.3:	Vale of White Horse Oxfordshire Commuting Patterns (2011)	11
Table 3.1:	Employment (thousands) by Local Authority County within Region (public/private split)-	
	ONS 2022 (numbers may not add due to rounding)	14
Table 3.2:	Employment (thousands) by Local Authority County within Region (public/private split)-	
	ONS 2021 (numbers may not add due to rounding)	15
Table 3.3:	South Oxfordshire Employee Jobs by Industry & Region – ONS Business Register and	
	Employment Survey 2021	16
Table 3.4:	Oxford Employee Jobs by Industry & Region – ONS Business Register and Employment	
	Survey 2021	17
Table 3.5:	Cherwell Employee Jobs by Industry & Region – ONS Business Register and	
	Employment Survey 2021	18
Table 3.6:	West Oxfordshire Employee Jobs by Industry & Region - ONS Business Register and	
	Employment Survey 2021	19
Table 3.7:	Vale of White Horse Employee Jobs by Industry & Region - ONS Business Register and	
	Employment Survey 2021	
Table 3.8:	Oxfordshire: Employees by industry sector. OxLEP 2024 based on ONS.	
Table 3.9:	ONS Annual Population Survey 2023	
	Number and Size of Businesses - ONS UK Business Count (2023)	
	Average Gross Salary – ONS – Results of Annual Survey of Hours and Earnings, 2023	
	Room Occupancy (%) - 2023	26
Table 3.13:	Holiday accommodation adjoining The Project site with price per night. Source: Google	
	Maps [Last accessed 28 July 2023]	
	Highest Qualification – ONS 2021	
	ONS, Travel to Work methods, 2021.	
	ONS, Travel to Work methods, 2011.	
Table 3.17:	Census 2021 - Car or Van Availability by Local Authority Area	46





### 1 INTRODUCTION & CONTEXT

### 1.1 Overview

- 1.1.1 This study has been prepared by RPS for Photovolt Development Partners GmbH (PVDP), on behalf of SolarFive Ltd. (the Applicant) to assess the social and economic characteristics of the area in the context of the proposed development known as Botley West Solar Farm (BWSF) which would cover approximately 1400 hectares (ha) and would be formed by three separate but related solar farm areas, with interconnecting cables, which together would generate renewable power through photovoltaic (PV) panels. The Project aims to deliver approximately 840MW of power to the National Electricity Transmission System (NETS), providing secure and clean energy of an equivalent level to meet the needs of approximately 330,000 homes.
- 1.1.2 The project spans parts of the administrative areas of Cherwell, West Oxfordshire and The Vale of White Horse Districts.
- 1.1.3 The Project extends from an area of land in the north of Oxfordshire, situated between the A4260 and the Dorn River Valley near Tackley and Wootton through a central section, situated broadly between Bladon and Cassington, and connecting to a section further south near to Farmoor Reservoir and north of Cumnor, where the Project will connect to the National Grid transmission network.

### 1.2 National Policy Context

**Planning Policy Context** 

### **National Policy Statements**

- 1.2.1 There are currently six energy National Policy Statements (NPSs)
- 1.2.2 Table 1.1 sets out a summary of the policies within these NPSs, relevant to socioeconomics.

## Table 1.1:Summary of the Designated NPS EN-1 and Draft NPS EN1 requirements<br/>relevant to this socio-economic chapter

### **Summary of NPS requirement**

Where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES (para 5.12.2).

Set out information on the likely significant environmental, social, and economic effects of the development, and show how any likely significant negative effects would be avoided, reduced, mitigated or compensated for, following the mitigation hierarchy (para 4.2.2).

The ES should cover the environmental, social and economic effects arising from pre-construction, construction, operation and decommissioning of the project (para 4.2.3).

Where some details are still to be finalised, the ES should, to the best of the applicant's knowledge, assess the likely worst-case environmental, social and economic effects of the proposed development to ensure that the impacts of the project as it may be constructed have been properly assessed (para 4.2.8).

Assessment should consider all relevant socio-economic impacts, which may include:

• the creation of jobs and training opportunities





### **Summary of NPS requirement**

- the provision of additional local services and improvements to local infrastructure
- indirect beneficial impacts for the region hosting the infrastructure
- effects on tourism
- the impact of a changing influx of workers during the different construction, operation, and decommissioning phases
- cumulative effects (para 5.12.3).

Describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies (para 5.12.4).

Paragraph 5.13.1 states that the construction, operation and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels and 5.13.2 states that where the project is likely to have socio-economic impacts at local or regional levels, the applicant should undertake and include in their application an assessment of these impacts as part of the ES.

Paragraph 5.13.3 states that the applicant is strongly encouraged to engage with relevant local authorities during early stages of project development so that the applicant can gain a better understanding of local or regional issues and opportunities.

Paragraph 5.13.4 states that the applicant's assessment should consider all relevant socio-economic impacts, which may include:

- the creation of jobs and training opportunities;
- the contribution to the development of low-carbon industries at the local and regional level as well as nationally;
- the provision of additional local services and improvements to local infrastructure, including the provision
  of educational and visitor facilities;
- any indirect beneficial impacts for the region hosting the infrastructure, in particular in relation to use of local support services and supply chains;
- effects on tourism;
- the impact of a changing influx of workers during the different construction, operation and decommissioning phases of the energy infrastructure;
- cumulative effects.

Paragraph 5.13.5 states that applicants should describe the existing socio-economic conditions in the areas surrounding the proposed development and should also refer to how the development's socio-economic impacts correlate with local planning policies.

Paragraph 5.13.6 states that socio-economic impacts may be linked to other impacts, for example visual impacts considered in Section 5.10 but may also have an impact on tourism and local businesses. Applicants are encouraged, where possible, to demonstrate that local suppliers have been considered in any supply chain.

Paragraph 5.13.7 states that applicants should consider developing accommodation strategies where appropriate, especially during construction and decommissioning phases, that would include the need to provide temporary accommodation for construction workers if required.

### The National Planning Policy Framework

- 1.2.3 The National Planning Policy Framework (NPPF) was published in 2012 and updated in 2018, 2019,2021 and 2023 (Department for Levelling Up, Housing and Communities, 2023). The NPPF sets out the Government's planning policies for England.
- 1.2.4 **Table 1.2** sets out a summary of the NPPF policies relevant to this chapter.
- 1.2.5 **Table 1.3** sets out a summary of the NPPG policies relevant to this chapter.





### Table 1.2: Summary of NPPF requirements relevant to this chapter

# PolicyKey provisionsParagraph 9States that in guiding developments towards sustainable development, local circumstances

should be considered, to reflect the character, needs and opportunities of each area.

### National Planning Policy Guidance (NPPG)

### Table 1.3: Summary of NPPG requirements relevant to this chapter

Document	Key provisions
Natural Environment	Green infrastructure can improve the wellbeing of a neighbourhood with opportunities for recreation, exercise, social interaction, experiencing and caring for nature, community food-growing and gardening, all of which can bring mental and physical health benefits.

### 1.3 Local Policy & Legislation

Cherwell Local Plan (CLP) 2011-2031 (adopted 2015)

- 1.3.1 The strategic objectives for developing a sustainable local economy contained within the CLP are S01-S05 and include measures such as promoting a more diverse local economy with an emphasis on attracting and developing higher technology industries (S01), supporting the diversification of Cherwell's rural economy (S02) and supporting an increase in skills and innovation (S03).
- 1.3.2 Cherwell also has a number of strategic objectives related to sustainable development (S011-S015). In particular it seeks to promote decentralised and renewable or low carbon energy (SO11) and to increase the attraction of and opportunities for travelling by public transport, cycle and on foot (S013).

**Cassington Neighbourhood Plan** 

1.3.3 The Neighbourhood plan identifies a number of community facilities under Policy CAS7: local services and community facilities.

Eynsham Neighbourhood Plan

- 1.3.4 Policy ENV6 requires new developments to ensure that Eynsham continues to offer a range of employment opportunities whereas Policy ENP10 requires new developments to support the existing and potential scale of local employment in the Eynsham area.
- 1.3.5 Policy ENP14 states that the form of any development should have regard to its impact on the village edge as viewed from public paths and bridleways.

Woodstock Neighbourhood Development Plan

1.3.6 Of relevance, Policy WNDP1 identifies local green spaces that are important to the local area.





### West Oxfordshire Local Plan (WOLP) 2031 (adopted 2018)

- 1.3.7 Section 3 of the WOLP sets out the council's core objectives. Objective CO1 seeks to enable new development, services and facilities of an appropriate scale and type in locations which will help improve the quality of life of local communities and where the need to travel, particularly by car, can be minimised. Objective C07 supports sustainable economic growth which adds value to the local economy, improves the balance between housing and local jobs, provides a diversity of local employment opportunities, capitalises on economic growth in adjoining areas, improves local skills and work readiness, removes potential barriers to investment and provides flexibility to adapt to changing economic need.
- 1.3.8 CO9 seeks to promote inclusive, healthy, safe and crime free communities and C011 seeks to maximise the opportunity for walking, cycling and use of public transport.
- 1.3.9 CO17 sets out an objective to minimise the use of non-renewable natural resources and promote more widespread use of renewable energy solutions.

Vale of White Horse Local Plan (VWHLP) 2031 Part 1 (adopted 2016)

- 1.3.10 The VWHLP identifies a number of key challenges and opportunities that are faced by the district and these are focused around four thematic areas. These are central to the Local Plan 2031 and are carried throughout the document. These are:
  - building healthy and sustainable communities
  - supporting economic prosperity
  - supporting sustainable transport and accessibility, and
  - protecting the environment and responding to climate change.
- 1.3.11 The core policies relevant to the socioeconomic chapter are Core Policy 1: Presumption in Favour of Sustainable Development, Core Policy 6: Meeting Business and Employment Needs, Core Policy 28: New Employment Development on Unallocated Sites, Core Policy 33: Promoting Sustainable Transport and Accessibility, Core Policy 35: Pro Promoting Public Transport, Cycling and Walking, and Core Policy 41: Renewable Energy.





### 2 DEFINING THE STUDY AREA

### 2.1 Site Location

- 2.1.1 Botley West Solar Farm (BWSF or The Project) will be located in the county of Oxfordshire, across an area of approximately 1,400 ha. The Project extends from an area of land in the north, situated between the A4260 and the Dorn River Valley near Tackley and Wootton, through a central section, situated broadly between Bladon and Cassington, and connecting to a section further south near to Farmoor Reservoir and north of Cumnor, where the Project will connect to the National Grid transmission network. The name 'Botley West' is derived from the location of the grid connection point.
- 2.1.2 The Project lies within the administrative areas of Cherwell (CDC), West Oxfordshire (WODC) and Vale of White Horse (VWHDC) District Councils. The site is also covered by the Oxfordshire County Council (OCC) administrative boundary. The majority of the Project lies within West Oxfordshire.
- 2.1.3 A google map aerial is included below to show the site location in the wider context. Below that the proposed site location plan is included to give a more localised context.



Figure 1: Google Aerial Showing Approximate Site Location – not to scale





2.1.4 As can be seen above, the main population centres adjacent to the site include villages and towns such as Tackley, Wotton, Woodstock, Bladon, Cassington, Eynsham, Botley and Cumnor.

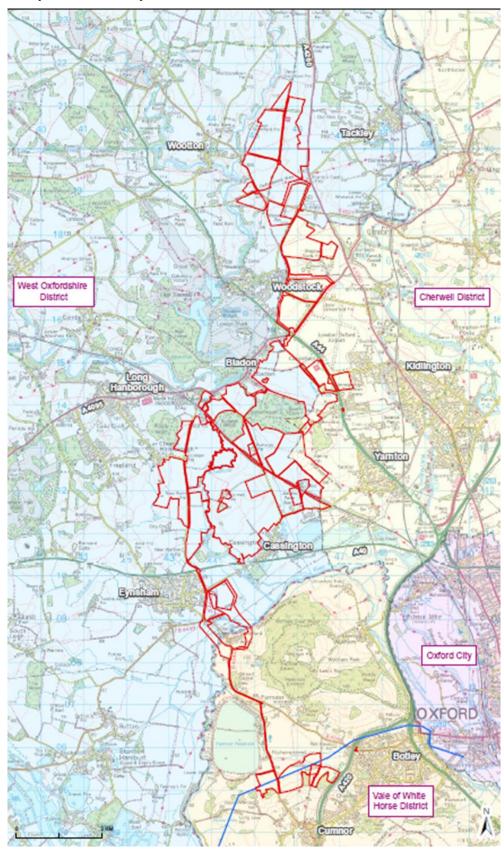


Figure 2: Proposed Site Location Plan





### 2.2 Travel to Work Areas (TTWs)

- 2.2.1 In September 2016, the Office for National Statistics (ONS) published its latest Travel to Work Area (TTWA) boundaries, derived from Census 2011 data. Travel to Work Areas are a useful starting point for understanding the spatial extents of labour markets. Each TTWA has a high degree of self-containment; meaning that the vast majority of people who work within the TTWA also live in that same area.
- 2.2.2 As can be seen below, the Project site falls entirely within the Oxford TTWA.

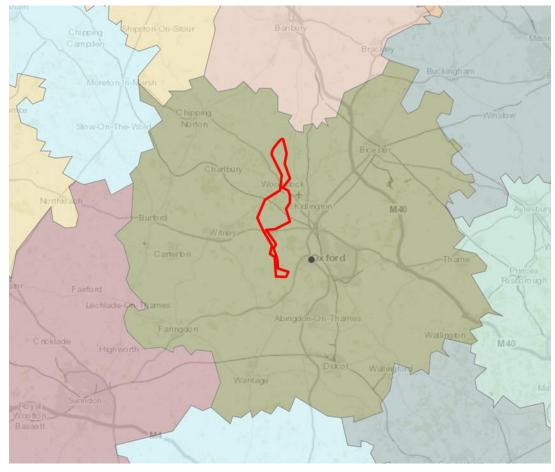


Figure 3: Map Showing TTWA with Approximate Site Location outlined in red. Not to scale

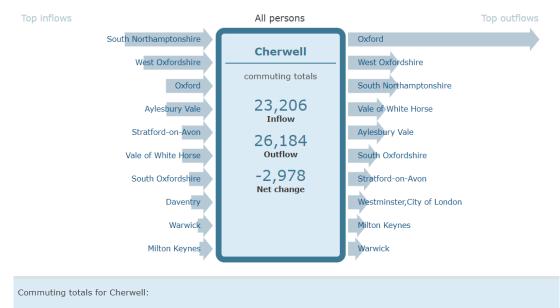
### 2.3 Commuting Patterns

2.3.1 In addition to the TTWA's it is useful to analyse the commuting patterns data from the 2011 Census. It is worth noting that, although a Census was carried out in 2021, due to the impact of the Coronavirus pandemic, travel patterns were significantly impacted and, therefore, the Office of National Statics (ONS) does not recommend using travel patterns from the 2021 Census for planning and policy purposes as it could provide skewed results. On that basis, this report uses travel and commuting patterns derived from Census 2011 data.





# 2.3.2 The infographic below shows the inflow and outflow of workers for each of the Local Authority areas which form part of The Project. Results are presented in the following order: Cherwell, West Oxfordshire and Vale of White Horse.



### Cherwell

• Inflow: 23,206 all persons commute into Cherwell from other local authorities in the UK.

• Outflow: 26,184 all persons commute out of Cherwell to other local authorities in the UK or abroad.

• Net change: Overall, commuting results in a population decrease of 2,978 all persons in Cherwell.

# Figure 4: Commuting Totals Cherwell - Source: ONS, Census WU01UK - Location of usual residence and place of work

- 2.3.3 As can be seen, there is a higher net migration of workers out of Cherwell (2,978) compared to those who commute into the area to work (23,206). The majority of residents who commute out of the area for work travel to Oxford (9,528) and the largest inflow of workers comes from South Northamptonshire (4,278).
- 2.3.4 The table below is extracted from the ONS data on the location of usual residence compared with the usual place of work. As can be seen; the majority of workers in Cherwell also live in the area (34,879). Although outside of the TTWA we can see that a significant number of people travel from South Northamptonshire. In total there is an inflow of 4,278 workers from South Northamptonshire with 2,224 travelling the opposite way from Cherwell into South Northamptonshire for work resulting a net change of 2,054 workers.

### Table 2.1: Cherwell Commuting Patterns (2011)

	Place of work
Usual residence	Cherwell
Cherwell	34879
South Northamptonshire	4278
West Oxfordshire	3321
Oxford	2187

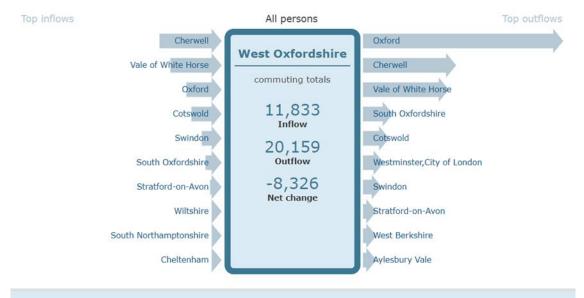
Botley West Solar Farm





	Place of work	
Aylesbury Vale	2160	
Stratford-on-Avon	1377	
Vale of White Horse	1366	
South Oxfordshire	1014	

### West Oxfordshire



Commuting totals for West Oxfordshire:

- Inflow: 11,833 all persons commute into West Oxfordshire from other local authorities in the UK.
- Outflow: 20,159 all persons commute out of West Oxfordshire to other local authorities in the UK or abroad.
- Net change: Overall, commuting results in a population decrease of 8,326 all persons in West Oxfordshire.

# Figure 5: Commuting Totals West Oxfordshire - Source: ONS, Census WU01UK - Location of usual residence and place of work

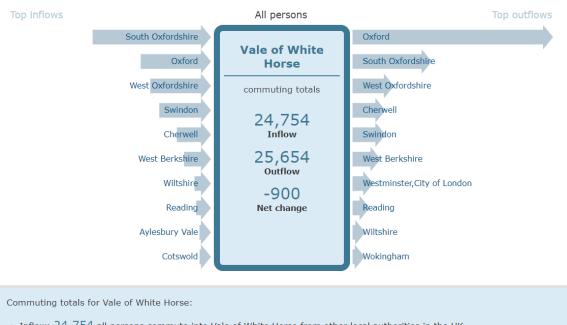
- 2.3.5 As can be seen, there is a higher net migration of workers out of West Oxfordshire (8,326) compared to those who commute into the area to work (11,833). The majority of residents who commute out of the area for work travel to Oxford (7,541) and the largest inflow of workers comes from Cherwell (2,269).
- 2.3.6 The table below is extracted from the ONS data on the location of usual residence compared with the usual place of work. As can be seen; the majority of workers in West Oxfordshire also live in the area (24,437) with workers commuting towards Oxford, Cherwell, Vale of White Horse and South Oxfordshire representing a total of 14,712. Commuting numbers into West Oxfordshire from other areas outside of West Oxfordshire, Cherwell and Vale of Whitehorse are significantly smaller and thus these areas are unlikely to experience a significant impact.





### Table 2.2: West Oxfordshire Commuting Patterns (2011)

	Place of work
Usual residence	West Oxfordshire
West Oxfordshire	24437
Cherwell	2269
Vale of White Horse	1852
Oxford	1245
Cotswold	1052



### Vale of White Horse

- Inflow: 24,754 all persons commute into Vale of White Horse from other local authorities in the UK.
- Outflow: 25,654 all persons commute out of Vale of White Horse to other local authorities in the UK or abroad.
- Net change: Overall, commuting results in a population decrease of 900 all persons in Vale of White Horse.

# Figure 6: Commuting Totals Vale of White Horse - Source: ONS, Census WU01UK - Location of usual residence and place of work

- 2.3.7 In the case of Vale of White Horse, there is also a higher net migration of workers out of Vale of White Horse (900) compared to those who commute into the area to work (24,754) however this negative net change is significantly lower for Vale of White Horse than for Cherwell and West Oxfordshire.
- 2.3.8 The majority of residents who commute out of the area for work travel to Oxford (10,713) and the largest inflow of workers comes from South Oxfordshire (6,217).
- 2.3.9 The table below is extracted from the ONS data on the location of usual residence compared with the usual place of work. As can be seen; the majority of workers in Vale of White Horse also live in the area (25,228). A reasonably high number of workers commute into the area from South Oxfordshire, Oxford and to a lesser extent Swindon.





	Place of work	
Usual residence	Vale of White Horse	
Vale of White Horse	25228	
South Oxfordshire	6217	
Oxford	3574	
West Oxfordshire	3051	
Swindon	2552	
Cherwell	1584	
West Berkshire	1192	

### Table 2.3: Vale of White Horse Oxfordshire Commuting Patterns (2011)

### 2.4 Summary

- 2.4.1 On the basis of the above analysis of Census Travel to Work data, the areas that are likely to experience the greatest social and economic impact from The Project comprises of the three local authorities of Cherwell, West Oxfordshire and Vale of White Horse.
- 2.4.2 It has also been established that a wider area incorporating South Northamptonshire and South Oxfordshire could have some impacts due to the number of workers commuting in and out of the area. South Northamptonshire is, however, now part of West Northamptonshire Council which overall as a local authority area will have a less than significant impact from the proposals.
- 2.4.3 In addition, Oxford could experience an impact given the number of workers commuting into the area for work from the local authorities where the project is located.
- 2.4.4 Therefore, in addition to the three local authorities where the project is located, where relevant we have also considered the baseline data for Oxford and South Oxfordshire within this assessment.





### **3 SOCIO-ECONOMIC BASELINE**

### 3.1 Introduction

- 3.1.1 This section defines the baseline environment characteristics of the study area based on our desktop research. Where appropriate the data is also analysed at regional and national levels for comparison.
- 3.1.2 In order to provide a comprehensive baseline, the data presented in this section is shown in an aggregate form, with a breakdown for each authority. The baseline data covers the following topic areas: population, demographics, employment, education, health, travel to work patterns, deprivation, access to renewable energy, tourism and recreation.
- 3.1.3 The majority of baseline data used for this chapter has been taken from the Office of National Statistics 2021 & 2011 (where appropriate) Census Data, Department for Transport, Department for Business Energy & Industrial Strategy, Visit Britain, and the national policy documents outlined in section 1.

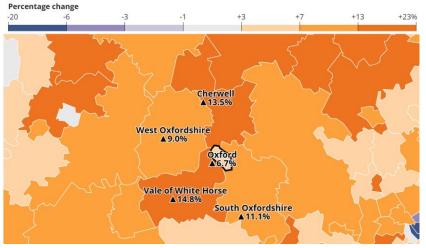
### 3.2 **Population**

- 3.2.1 The ONS data taken from the 2011 Census estimated that the total population for Cherwell equated to 141,868. The population for West Oxfordshire was 104,779, while the population of Vale of White Horse amounted to 120,988 people. The surrounding local authorities of South Oxfordshire and Oxford were identified to have populations of 135,000 and 145,500 respectively. The study area as of 2011 was, therefore, calculated to have a total population of 647,865 which equated to circa 7.5% of the population of the South East (8,652,800) as a whole.
- 3.2.2 Looking at the latest ONS Census data on population (2021) we can see that the population of the study area has grown to 724,162 which would equate to a population growth of circa 11.8% over the intervening period. Of the local authorities covered by The Project, Vale of White Horse presented the largest increase, with 14.8% more inhabitants than in 2011. This is followed by Cherwell, with an increase of 13.5%.
- 3.2.3 In general, the South East region saw a population increase of 7.5%.





Nearby areas like <u>Vale of White</u> <u>Horse</u> and <u>Cherwell</u> have seen their populations increase by around 14.8% and 13.5%, respectively, while others such as <u>South Oxfordshire</u> saw an increase of 11.1% and <u>West</u> <u>Oxfordshire</u> saw smaller growth (9.0%). Population change in local authority areas near Oxford between 2011 and 2021



# Figure 7: Population Change from 2011 Census to 2021 Census. Source: ONS Visualisations

### 3.3 Demographics

3.3.1 As well as understanding the total resident numbers it is also useful to analyse the age profile of the population. Looking at the study area we can see that Cherwell has a median age of 41 years; West Oxfordshire has a median age of 44 years and Vale of White Horse has a median age of 41 years. The study area as a whole has a similar age profile to neighbouring authorities, with the exception of Oxford, where the median age is 31 years, particularly as a result of its student population.

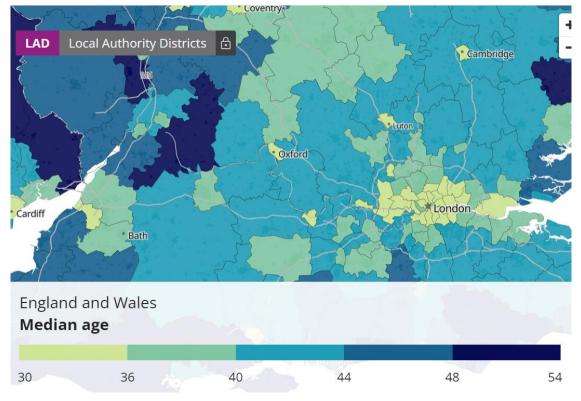
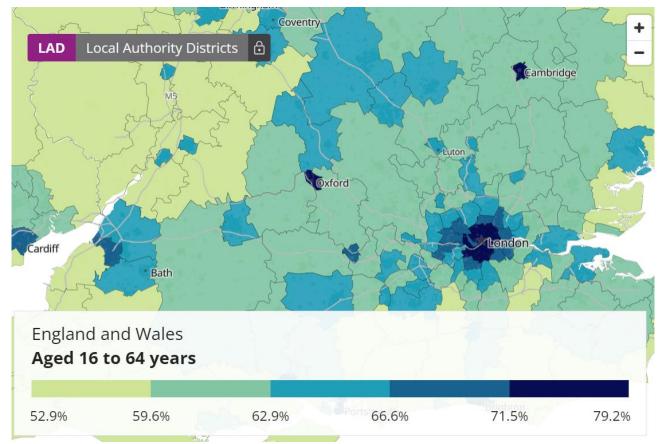


Figure 8: Median Age Maps - Source: Office for National Statistics – Census 2021





3.3.2 Similarly looking at the working age population (16-64 age group), we can see that Oxford has the largest percentage (72.7%) which is much higher than the county and national averages of 65% and 63% respectively. Cherwell's working age population is commensurate with the county average whereas the other authorities in the study area have a slightly below average working age population of circa 61%.



### Figure 9: Working Age Population - Source: Office for National Statistics – Census 2021

### 3.4 Employment

3.4.1 Based on the most recent revised data published by the Office for National Statistics (ONS) and taken from the Business Register & Employment Survey (BRES) in 2021 there were a total of 369,100 working people in the TTWA, of these, 312,500 (85%) work in the private sector, with the remaining working in the public sector.

## Table 3.1:Employment (thousands) by Local Authority County within Region<br/>(public/private split)- ONS 2022 (numbers may not add due to rounding)

Local Authority District	Total employment (000's)			
	Public	Private	All	
Cherwell	11.0	74.3	85.4	
Oxford	25.5	97.8	123.3	
South Oxfordshire	8.1	55.5	63.6	





Local Authority District	Total employment (000's)			
	Public	Private	All	
Vale of White Horse	11.1	61.5	72.7	
West Oxfordshire	4.4	44.3	48.8	
Total	60.1	333.4	393.8	
South East	645.7	3712.8	4358.5	

3.4.2 Looking at the 2021 data below we can see that employment increased in Oxford between 2021 and 2022 (3.1%). Employment grew in all five areas by between 4.3% (Cherwell) and 6.4% (Vale of White Horse).

### Table 3.2: Employment (thousands) by Local Authority County within Region (public/private split)- ONS 2021 (numbers may not add due to rounding)

Local Authority District	Total employ	Total employment (000's)			
	Public	Private	All		
Cherwell	10.4	71.5	81.9		
Oxford	24.7	93.2	117.9		
South Oxfordshire	7.3	52.8	60.1		
Vale of White Horse	10.8	57.5	68.3		
West Oxfordshire	4.3	42.9	47.2		
Total	57.5	317.9	375.4		
South East	631.3	3597.0	4228.3		

- 3.4.3 Having reference to employment sectors, we can see that according to the ONS Business Register and Employment Survey 2022, the largest employment sectors for Cherwell relate to Retail (20.5%), Administrative and Business Support (10.8%) and Manufacturing (10.8%).
- 3.4.4 For West Oxfordshire, the largest employment sectors are Retail (14.9%) and Manufacturing (12.8%). Education, Accommodation food service activities and Professional, scientific and technical activities all rank the same, employing circa 9.6% of the employed population in the area.
- 3.4.5 In the case of Vale of White Horse; Professional, Scientific and Technical activities is the largest employment sector with 22.5%, followed by Retail (11.3%) and Education (9.9%).
- 3.4.6 For South Oxfordshire, the largest employment sector is professional, scientific and technical activities (19.7%) followed by wholesale and retail trade; repair of motor vehicles and motorcycles (14.8%).
- 3.4.7 For Oxford the largest sectors are education (31.1%) and human health and social work (18.9%) owing to the university and hospital located in this area.
- 3.4.8 There are 15,250 people employed in the construction industry within the study area which accounts for approximately 4% of all jobs. Other than Oxford which has a lower level of construction employment (1,750), all other local authorities in the study area provide a commensurate amount of construction employment (3000-3,500 jobs).





#### Jobs by Employment Sector in Study Area- ONS 2011 3.5

#### South Oxfordshire Employee Jobs by Industry & Region - ONS **Table 3.3: Business Register and Employment Survey 2021**

Employee jobs (2022)				
	South Oxfordshire (Employee Jobs)	South Oxfordshire (%)	South East (%)	Great Britain (%)
Total Employee Jobs	61,000	_	-	-
Full-Time	42,000	68.9	68.2	68.8
Part-Time	20,000	32.8	31.8	31.2
Employee Jobs By Industry				
B : Mining And Quarrying	10	0.0	0.1	0.2
C : Manufacturing	3,000	4.9	5.9	7.6
D : Electricity, Gas, Steam And Air Conditioning Supply	150	0.2	0.3	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	600	1.0	1.0	0.7
F : Construction	3,500	5.7	5.0	4.9
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	9,000	14.8	15.0	14.0
H : Transportation And Storage	2,250	3.7	4.8	5.0
I : Accommodation And Food Service Activities	6,000	9.8	7.5	8.0
J : Information And Communication	3,000	4.9	6.1	4.6
K : Financial And Insurance Activities	1,250	2.0	2.5	3.3
L : Real Estate Activities	1,000	1.6	1.7	1.9
M : Professional, Scientific And Technical Activities	12,000	19.7	9.6	9.1
N : Administrative And Support Service Activities	5,000	8.2	9.2	9.0
O : Public Administration And Defence; Compulsory Social Security	1,500	2.5	3.6	4.7
P : Education	6,000	9.8	9.9	8.6
Q : Human Health And Social Work Activities	4,500	7.4	12.7	13.5
R : Arts, Entertainment And Recreation	2,250	3.7	3.0	2.4
S : Other Service Activities	1,000	1.6	2.0	2.0

Source: ONS Business Register and Employment Survey : open access

Source: ONS Business Register and Employment Survey : open access
 Data unavailable
 Notes: % is a proportion of total employee jobs excluding farm-based agriculture Employee jobs excludes self-employed, government-supported trainees and HM Forces Data excludes farm-based agriculture





#### Oxford Employee Jobs by Industry & Region – ONS Business Register **Table 3.4:** and Employment Survey 2021

Employee jobs (2022)

	Oxford (Employee Jobs)	Oxford (%)	South East (%)	Great Britain (%)
Total Employee Jobs	122,000	_	-	-
Full-Time	82,000	67.2	68.2	68.8
Part-Time	39,000	32.0	31.8	31.2
Employee Jobs By Industry				
B : Mining And Quarrying	10	0.0	0.1	0.2
C : Manufacturing	4,000	3.3	5.9	7.6
D : Electricity, Gas, Steam And Air Conditioning Supply	15	0.0	0.3	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	350	0.3	1.0	0.7
F : Construction	1,750	1.4	5.0	4.9
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	10,000	8.2	15.0	14.0
H : Transportation And Storage	2,500	2.0	4.8	5.0
I : Accommodation And Food Service Activities	8,000	6.6	7.5	8.0
J : Information And Communication	7,000	5.7	6.1	4.6
K : Financial And Insurance Activities	700	0.6	2.5	3.3
L : Real Estate Activities	1,250	1.0	1.7	1.9
M : Professional, Scientific And Technical Activities	12,000	9.8	9.6	9.1
N : Administrative And Support Service Activities	6,000	4.9	9.2	9.0
O : Public Administration And Defence; Compulsory Social Security	3,500	2.9	3.6	4.7
P : Education	38,000	31.1	9.9	8.6
Q : Human Health And Social Work Activities	23,000	18.9	12.7	13.5
R : Arts, Entertainment And Recreation	1,750	1.4	3.0	2.4
S : Other Service Activities	1,750	1.4	2.0	2.0

Source: ONS Business Register and Employment Survey : open access - Data unavailable Notes: % is a proportion of total employee jobs excluding farm-based agriculture Employee jobs excludes self-employed, government-supported trainees and HM Forces Data excludes farm-based agriculture





### Cherwell Employee Jobs by Industry & Region – ONS Business Register and Employment Survey 2021 **Table 3.5:**

Employee jobs (2022)

	Cherwell (Employee Jobs)	Cherwell (%)	South East (%)	Great Britain (%)
Total Employee Jobs	83,000	_	-	_
Full-Time	58,000	69.9	68.2	68.8
Part-Time	25,000	30.1	31.8	31.2
Employee Jobs By Industry				
B : Mining And Quarrying	100	0.1	0.1	0.2
C : Manufacturing	9,000	10.8	5.9	7.6
D : Electricity, Gas, Steam And Air Conditioning Supply	300	0.4	0.3	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	500	0.6	1.0	0.7
F : Construction	3,500	4.2	5.0	4.9
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	17,000	20.5	15.0	14.0
H : Transportation And Storage	4,000	4.8	4.8	5.0
I : Accommodation And Food Service Activities	5,000	6.0	7.5	8.0
J : Information And Communication	3,000	3.6	6.1	4.6
K : Financial And Insurance Activities	900	1.1	2.5	3.3
L : Real Estate Activities	1,500	1.8	1.7	1.9
M : Professional, Scientific And Technical Activities	8,000	9.6	9.6	9.1
N : Administrative And Support Service Activities	9,000	10.8	9.2	9.0
O : Public Administration And Defence; Compulsory Social Security	4,000	4.8	3.6	4.7
P : Education	6,000	7.2	9.9	8.6
Q : Human Health And Social Work Activities	8,000	9.6	12.7	13.5
R : Arts, Entertainment And Recreation	2,000	2.4	3.0	2.4
S : Other Service Activities	1,500	1.8	2.0	2.0

Source: ONS Business Register and Employment Survey : open access - Data unavailable Notes: % is a proportion of total employee jobs excluding farm-based agriculture Employee jobs excludes self-employed, government-supported trainees and HM Forces Data excludes farm-based agriculture





#### West Oxfordshire Employee Jobs by Industry & Region - ONS Business **Table 3.6:** Register and Employment Survey 2021

Employee jobs (2022)

	West Oxfordshire (Employee Jobs)	West Oxfordshire (%)	South East (%)	Great Britain (%)
Total Employee Jobs	47,000	-	-	-
Full-Time	32,000	68.1	68.2	68.8
Part-Time	14,000	29.8	31.8	31.2
Employee Jobs By Industry				
B : Mining And Quarrying	75	0.2	0.1	0.2
C : Manufacturing	6,000	12.8	5.9	7.6
D : Electricity, Gas, Steam And Air Conditioning Supply	5	0.0	0.3	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	400	0.9	1.0	0.7
F : Construction	3,000	6.4	5.0	4.9
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	7,000	14.9	15.0	14.0
H : Transportation And Storage	2,000	4.3	4.8	5.0
I : Accommodation And Food Service Activities	4,500	9.6	7.5	8.0
J : Information And Communication	2,250	4.8	6.1	4.6
K : Financial And Insurance Activities	800	1.7	2.5	3.3
L : Real Estate Activities	1,000	2.1	1.7	1.9
M : Professional, Scientific And Technical Activities	4,500	9.6	9.6	9.1
N : Administrative And Support Service Activities	3,500	7.4	9.2	9.0
O : Public Administration And Defence; Compulsory Social Security	800	1.7	3.6	4.7
P : Education	4,500	9.6	9.9	8.6
Q : Human Health And Social Work Activities	3,500	7.4	12.7	13.5
R : Arts, Entertainment And Recreation	2,500	5.3	3.0	2.4
S : Other Service Activities	1,250	2.7	2.0	2.0

Source: ONS Business Register and Employment Survey : open access

Data unavailable
 Notes: % is a proportion of total employee jobs excluding farm-based agriculture
 Employee jobs excludes self-employed, government-supported trainees and HM Forces
 Data excludes farm-based agriculture





#### Vale of White Horse Employee Jobs by Industry & Region - ONS Table 3.7: **Business Register and Employment Survey 2021**

Employee jobs (2022)

	Vale Of White Horse (Employee Jobs)	Vale Of White Horse (%)	South East (%)	Great Britain (%)
Total Employee Jobs	71,000	-	-	-
Full-Time	52,000	73.2	68.2	68.8
Part-Time	19,000	26.8	31.8	31.2
Employee Jobs By Industry				
B : Mining And Quarrying	100	0.1	0.1	0.2
C : Manufacturing	5,000	7.0	5.9	7.6
D : Electricity, Gas, Steam And Air Conditioning Supply	125	0.2	0.3	0.4
E : Water Supply; Sewerage, Waste Management And Remediation Activities	1,500	2.1	1.0	0.7
F : Construction	3,500	4.9	5.0	4.9
G : Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	8,000	11.3	15.0	14.0
H : Transportation And Storage	3,000	4.2	4.8	5.0
I : Accommodation And Food Service Activities	4,000	5.6	7.5	8.0
J : Information And Communication	6,000	8.5	6.1	4.6
K : Financial And Insurance Activities	600	0.8	2.5	3.3
L : Real Estate Activities	1,000	1.4	1.7	1.9
M : Professional, Scientific And Technical Activities	16,000	22.5	9.6	9.1
N : Administrative And Support Service Activities	5,000	7.0	9.2	9.0
O : Public Administration And Defence; Compulsory Social Security	1,750	2.5	3.6	4.7
P : Education	7,000	9.9	9.9	8.6
Q : Human Health And Social Work Activities	6,000	8.5	12.7	13.5
R : Arts, Entertainment And Recreation	1,250	1.8	3.0	2.4
S : Other Service Activities	900	1.3	2.0	2.0

Source: ONS Business Register and Employment Survey : open access

Data unavailable

blocks: % is a proportion of total employee jobs excluding farm-based agriculture Employee jobs excludes self-employed, government-supported trainees and HM Forces Notes:

Data excludes farm-based agriculture

The above tables do not include data for people employed in farm-based 3.5.1 agriculture and there are no updated figures for this sector at Local Authority Level. We have therefore, had reference to the 2022-2023 data on employment industries presented by OxLEP and Oxfordshire County Council available at:

https://public.tableau.com/views/OxfordshireLocalSkillsDashboard/Home?%3 AshowVizHome=no [Last accessed 07/08/2024].

3.5.2 On a county basis, we can see that agriculture only accounted for 0.5% of all employment with circa 1,891 people employed in the industry. Compared to 2018, the sector has lost circa 42.7% of its employees. The table below also shows that construction employment has decreased by circa 20.9% across Oxfordshire over this period and accounts for 4.4% of all jobs.



### Table 3.8: Oxfordshire: Employees by industry sector. OxLEP 2024 based on ONS.

Sector	Jobs	Rate	Change	%
P: Education	55,738	14.4%	-3,053	5.2%
G: Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	53,561	13.8%	-3,036	-5.4%
M: Professional, Scientific and Technical Activities	49,144	12.7%	3,604	7.9%
Q: Human Health and Social Work Activities	47,902	12.3%	2,466	5.4%
N: Administrative and Support Service Activities	34,334	8.8%	6,542	23.5%
: Accommodation and Food Service Activities	26,749	6.9%	-2,148	-7.4%
C: Manufacturing	24,319	6.3%	-3,007	11.0%
J: Information and Communication	18,263	4.7%	-1,718	-8.6%
F: Construction	17,081	4.4%	-4,510	-20.9%
H: Transportation and Storage	15,298	3.9%	3,327	27.8%
O: Public Administration and Defence; Compulsory Social Security	10,127	2.6%	183	1.8%
R: Arts, Entertainment and Recreation	8,147	2.1%	1,133	16.2%
S: Other Service Activities	7,909	2.0%	-679	-7.9%
L: Real Estate Activities	6,425	1.7%	19	0.3%
E: Water Supply; Sewerage, Waste Management and Remediation Activities	5,018	1.3%	2,592	106.8%
K: Financial and Insurance Activities	4,510	1.2%	-33	0.7%
A: Agriculture, Forestry and Fishing	1,891	0.5%	-1,409	-42.7%
D: Electricity, Gas, Steam and Air Conditioning Supply	1,623	0.4%	713	78.4%
B: Mining and Quarrying	307	0.1%	-40	-11.5%

3.5.3 Regarding occupational structure, the table overleaf taken from the annual population survey (2022), highlights the diversity of skills which exist within the local economy. The largest share of the working population in the study area fall within the 'Professional' and 'Associate professional' categories.

### Table 3.9: ONS Annual Population Survey 2023

	Cherwell	Oxford		Vale of White Horse	West Oxfordshire
Managers, directors and senior officials	6,400	11,400	11,400	5,300	6,300
Professional occupations	23,000	38,100	37,200	26,200	16,000
Associate professional occupations	13,400	14,200	12,400	10,100	7,700
Administrative and secretarial occupations	4,200	8,800	4,900	6,000	7,000
Skilled trades occupations	5,800	#	4,200	5,700	9,900





	Cherwell	Oxford		Vale of White Horse	West Oxfordshire
Caring, leisure and other service occupations	9,400	!	!	10,300	4,800
Sales and customer service occupations	3,900	!	#	!	3,500
Process, plant and machine operatives	9,000	!	!	!	!
Elementary occupations	5,600	4,000	4,800	5,600	6,700
TOTAL	80,700	76,500	74,900	69,200	61,900

# These figures are suppressed as statistically unreliable.

! Estimate and confidence interval not available since the group sample size is zero or disclosive (0-2).

3.5.4 According to the ONS UK Business Count (2023) there are currently 31,735 businesses in the study area. 88.2% of these are micro businesses (employing between 0 and 9 people); 9.6% are small (10 to 49 employees); around 1.8% are medium (50 to 249 employees); This represents a slightly lower proportion of micro businesses than the regional average, with the South East presenting 89.5%.

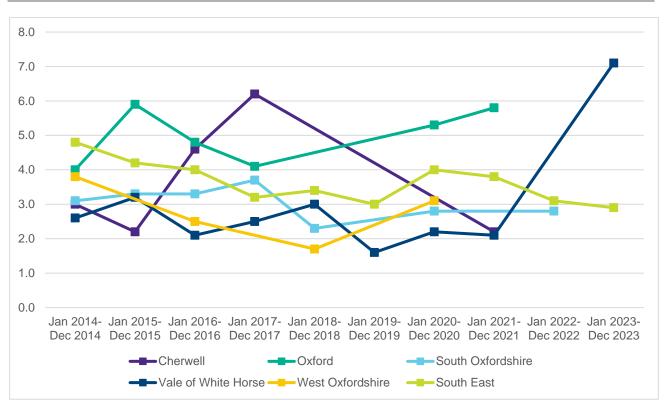
Employment Size Band	Cherwell	Oxford	South Oxfordshire	Vale of White Horse	West Oxfordshire	Total	%
Total	7,115	4,915	7,940	5,965	5,800	31,735	100.0%
Micro (0 to 9)	6,290	4,105	7,170	5,245	5,175	27,985	88.2%
Small (10 to 49)	665	615	640	575	540	3,035	9.6%
Medium-sized (50 to 249)	130	155	105	105	70	565	1.8%
Large (250+)	30	35	25	40	20	150	0.5%

### Table 3.10: Number and Size of Businesses - ONS UK Business Count (2023)

- 3.5.5 Looking at economic activity and employment rates, we can see that according to the latest ONS data (year ending June 2022), the study area has a higher average level (86.0%) of economic activity compared to the South East as a region (82.3%). The average is, however, lowered by the economic activity rate in Oxford (81.9%) which is below the region average.
- 3.5.6 In terms of the unemployment rate, as each of the Local Authorities that form the study area (with the exception of South Oxfordshire) provide a small dataset, ONS unemployment rates show as 'statistically unreliable'. Typically, the local authorities that make up the study area have an unemployment rate below the regional average throughout the 10-year period, with the exception of Cherwell. The study area appears to follow the same pattern as the County and Region and in all cases aside from Cherwell, which has unreliable data during this time period, there was a rise in unemployment since 2020 which could be a result of the COVID-19 pandemic.







### Figure 10: Unemployment Rate 2012-2022 – ONS - Annual Population Survey

\*Missing data points indicate unreliable data

### 3.6 Wages

3.6.1 According to the Annual Survey of Hours and Earnings, in 2023 (the latest available data), those working in the Study Area earned £44,023 annually compared to £33,892 for England. Speaking of the district authorities and the city of Oxford, full-time workers in all the districts included in this study, except for Oxford, earned more than the country average. Cherwell has a mean salary of £34,858, South Oxfordshire has a mean salary of £41,240, Vale of White Horse average is £39,045 and West Oxfordshire average salary is £32,201. Oxford's mean salary is only 1.8% below the national average at £33,309.

### Table 3.11: Average Gross Salary – ONS – Results of Annual Survey of Hours and Earnings, 2023

	Mean	Annual Change (%)
South East	42,326	4.57%
Cherwell	40,520	-4.33%
Oxford	42,708	6.59%
South Oxfordshire	45,334	12.84%
Vale of White Horse	45,330	-0.14%
West Oxfordshire	46,223	*

\*West Oxfordshire 2022 data is unreliable

3.6.2 2024 Annual Survey of Hours and Earnings data for industry specific wages in the South East indicates that the median salary for the Construction industry





is £41,024. The median salary in the Manufacturing industry is slightly lower, at £40,000.

### 3.7 GVA per Employee

- 3.7.1 Gross Added Value (GVA) is a measure of economic output. In this case, it is useful to understand the average GVA per employee in the study area to assess the effects of operational stage employment and also the GVA of construction workers, to assess the effect of construction employment.
- 3.7.2 ONS data 2022 (latest available) on Local Authority GVA by industry has been used, alongside BRES estimates of employment by industry, to calculate the average GVA per employee and per construction employee in the study area. The table below outlines the results.

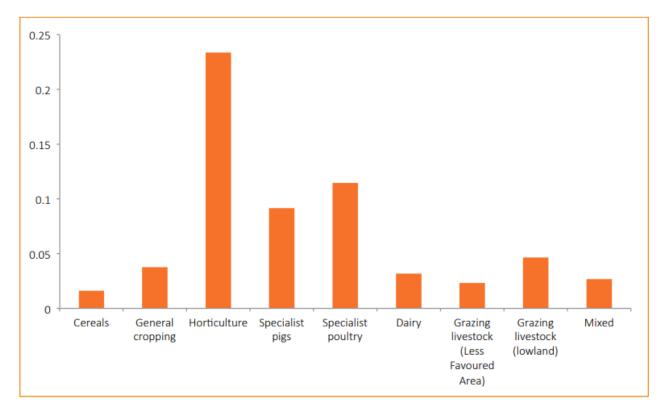
# Table 3.12:Regional gross value added (balanced) by industry: local authorities by<br/>ITL1 region: TLJ South East, current prices, pounds million (2022) &<br/>Business Registry Employment Survey (2022)

District	GVA per employee (£/employee)	GVA per employee in construction (£/employee)
Cherwell	£67,179.18	£74,285.71
Vale of White Horse	£69,050.55	£130,285.71
West Oxfordshire	£80,338.60	£74,571.43
South Oxfordshire	£80,744.12	£98,571.43
Oxford	£69,873.00	£69,333.33
Average	£72,712.05	£85,377.05

- 3.7.3 A similar calculation was carried out to identify the average Agricultural (inc. forestry and fishing) GVA per employee in the study area. ONS GVA data for Berkshire, Buckinghamshire and Oxfordshire has been used in this case, as data is not available for Agriculture (inc. fishing and forestry) at a more localised level. Berkshire, Buckinghamshire and Oxfordshire were estimated to generate £451,000,000 in the agricultural industry (inc. fishing and forestry) in 2022. BRES data estimates that there were 11,900 individuals employed in the industry in Berkshire, Buckinghamshire and Oxfordshire in 2022. Subsequently, a GVA estimate per Agriculture employee has been estimated as £37,899.16.
- 3.7.4 In relation to agricultural GVA; information from 'Agriculture in the UK Evidence Pack September 2022 update' prepared by the DEFRA and the ONS indicate that agriculture covers circa 17.2 million hectares in the UK with the industry employing circa 467,400 people which would mean agriculture employs circa 0.03 people on average per hectare of agricultural land. This would support research carried out by the Food Research Collaboration in 2016 which assesses the employment generation per hectare of different types of agricultural uses. This is shown in the graph below.







Source: UK Agriculture departments June Survey/Census of Agriculture (6)

### Figure 11: Labour intensity of different farm types (number of jobs per hectare)

### **Local Accommodation Providers**

- 3.7.5 Every month the England Occupancy Survey (EOS) measures room occupancy across the serviced accommodation sector. Data is collected from a panel of participating accommodation businesses who submit data each month.
- 3.7.6 We have compared the average room occupancy rate in both the South East and England throughout 2023. In both locations the average occupancy rate was 77%. The South East had higher room occupancy rates during spring/summer months, but lower occupancy rates during autumn/winter months.
- 3.7.7 We have also had reference to the occupancy rates in England pre-pandemic to post-pandemic in order to get an understanding of how demand has evolved in England during this period. Data does not appear to have been collected by the EOS during 2020.
- 3.7.8 The most recent UK Occupancy Annual report indicates the average room occupancy rate in England in 2022 was 73%. This shows occupancy rates across the local, regional and national are remarkably similar.
- 3.7.9 The full data for regional room occupancy is presented in the table below. As can be seen, the South East region has lowest room occupancy levels between December to March which is expected due to seasonality.





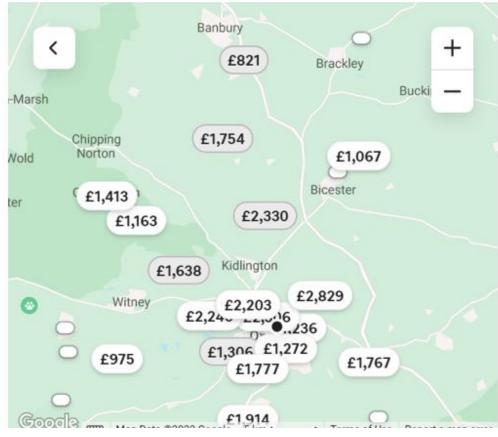
### Table 3.12: Room Occupancy (%) - 2023

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average
South East	64	72	74	77	79	84	86	82	84	78	75	70	77
England	65	73	75	77	78	83	84	80	83	80	78	73	77
Room C	)ccup	ancy	(%) -	Sou	th Eas	st							
2021	27	32	37	40	49	63	70	73	72	67	62	55	54
2022	50	65	67	71	76	81	83	78	80	78	76	70	73
2023	64	72	74	77	79	84	86	82	84	78	75	70	77
Room C	)ccup	ancy	(%) -	Eng	land								
2019	65	73	75	76	78	83	85	82	83	82	79	71	78
2021	23	29	33	34	42	56	65	71	72	70	67	56	52
2022	47	65	70	73	76	80	83	78	80	80	78	71	73
2023	65	73	75	77	78	83	84	80	83	80	78	73	77

Source: VisitBritain England Occupancy Survey (EOS)

### **Local Trends**

3.7.10 Looking more specifically at the subject area we can see that when inputting flexible dates there are currently over 1,000 stays available for rent in the study area on the short term letting site Airbnb.



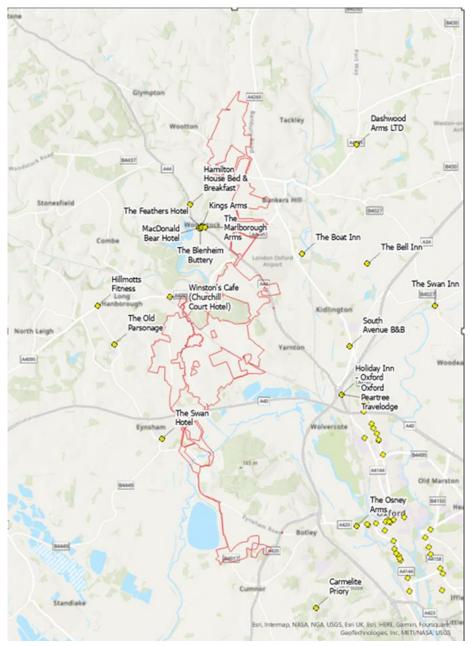
### Figure 12: Local AirBnB Providers

Source: AirBnb, 2023 [Last accessed 26 July 2023].





- 3.7.11 Screenshots from the Airbnb map search are included above to give an indication of the location of available holiday rentals. As can be seen there is a concentration of availability in Oxford but also a wide spread of accommodation available in more rural settings especially closer to Woodstock.
- 3.7.12 Looking at availability in August 2023 (being the month with the highest occupancy in the region) we can see that there are approximately 590 stays available at the time of this report (26.07.23).
- 3.7.13 The map below shows the closest Hotels and Bed & Breakfasts (B&B) to The Project site area. This shows circa 10 Hotels and B&Bs and circa 3 holiday accommodation rentals adjoin The Project area. A list of the charge per night is also included below. It shows that on average, accommodation in the vicinity to the site is circa £133 per night.



### Figure 13: Local Hotel & B&B Providers





# Table 3.13: Holiday accommodation adjoining The Project site with price per night.Source: Google Maps [Last accessed 28 July 2023].

Holiday accommodation name	Location	Price per night	
Kings Arms	Woodstock	116	
The Feathers Hotel	Woodstock	100	
The Marlborough Arms	Woodstock	181	
The Blenheim Buttery	Woodstock	113	
MacDonald Bear Hotel	Woodstock	145	
Churchill Court Hotel	Long Hanborough	108	
The Woodstock Arms	Woodstock	127	
Sturdys Castle	Near Tackley	104	
The Henrietta Cottage	Woodstock	295	
The Duke of Marlborough	Wooton	130	
The White Hart	Eynsham	80	
The Talbot Inn	Near Swinford	97	
Sabine Barn	Near Cumnor	130	
	Average price per night	133	

### 3.8 Qualifications

3.8.1 According to the 2021 Census data, the study area had a higher proportion of Level 4 Qualifications and above (42%) compared to the country wide level (34%). At District level Oxford (48.1%), Vale of White Horse (44%) and South Oxfordshire (44%) had an even higher proportion of highly qualified residents, whereas West Oxfordshire and Cherwell had lower than average levels of highly qualified residents (38% and 35% respectively).

Highest level of qualification	Cherwell	Oxford	South Oxfordshir e	Vale of White Horse	West Oxfordshir e	England
	%	%	%	%	%	%
Total: All usual residents aged 16 years and over	100.0	100.0	100.0	100.0	100.0	100.0
No qualifications	16.0	12.6	12.4	12.5	13.9	18.1
Level 1 and entry level qualifications	10.5	6.1	8.5	8.5	9.5	9.7
Level 2 qualifications	13.9	7.6	12.7	12.2	13.4	13.3
Apprenticeship	5.6	2.8	4.8	5.0	5.4	5.3
Level 3 qualifications	16.1	20.6	15.7	15.4	17.2	16.9
Level 4 qualifications or above	35.1	48.1	43.6	44.0	38.3	33.9
Other qualifications	2.8	2.3	2.2	2.3	2.3	2.8

### Table 3.14: Highest Qualification – ONS 2021





### 3.9 Tourism and Recreation

- 3.9.1 The Project covers a total area of circa 1,300 ha with a number of historical designations, open spaces and tourism spotlights in close proximity, as such, it is important to identify what the baseline is for these elements to then ascertain how The Project could impact or benefit the study area.
- 3.9.2 Tourism is one of the most valuable service sectors across the study area after scientific, technical and education sectors, and plays a vital role in the study area.
- 3.9.3 The Economic Impact Report for Tourism in Oxfordshire (2022) shows there was a 11% increase in number of day visitors and a 17% increase in related expenditure compared to 2021 2022 witnessed a 28% recovery to 36,969 tourism related jobs from 28,830 in 2021. The report highlights that visits to Oxfordshire during 2022 were mainly for holiday (52%), and for business (23%).
- 3.9.4 Similar results as to the Economic Impact of Tourism in 2022 were produced for Oxford and Cherwell. This, in line with Oxfordshire, showed that there was a 11% increase in number of day visitors and a 17% increase in related expenditure compared to 2021. Tourism employment increased by a substantial 63% in Oxford. A more modest increase in tourism employment equivalent to 15% was observed in Cherwell.
- 3.9.5 Directly related to the study area, Cherwell's *"Planning for Cherwell to 2040: A community involvement paper"* (July 2020) identifies that *"In 2019 the tourism sector accounted for 11% of jobs in the District and the value to the local economy was over £450m."* however this report acknowledges that the impact of COVID-19 in the tourism sector was great, and policies to help with its recovery will be needed.
- 3.9.6 In terms of the value of the visitor economy for West Oxfordshire, the following data is a summary of the figures presented within the West Oxfordshire Economic Impact Assessment (2019):

### Total direct visitor spend\*: <u>£247 million</u>

- £124m from 3.5m day visits
- £123m\* from 548,500 staying visits (£43m from overseas visitors)

### Areas of spend\*:

- Food & drink £79m (£10m overseas visitors)
- Retail £63m (£12m O/S)
- Accommodation £43m (£12m O/S)
- Attractions & entertainment £29m (£5m O/S)
- Other £34m (£4m O/S)

\*Note: the vast majority of the spend is from domestic visitors **Employment:** 

- 4,400 jobs (3,200 FTE)
- 8% of total employment in West Oxfordshire

### Figure 14: West Oxfordshire Tourism Data

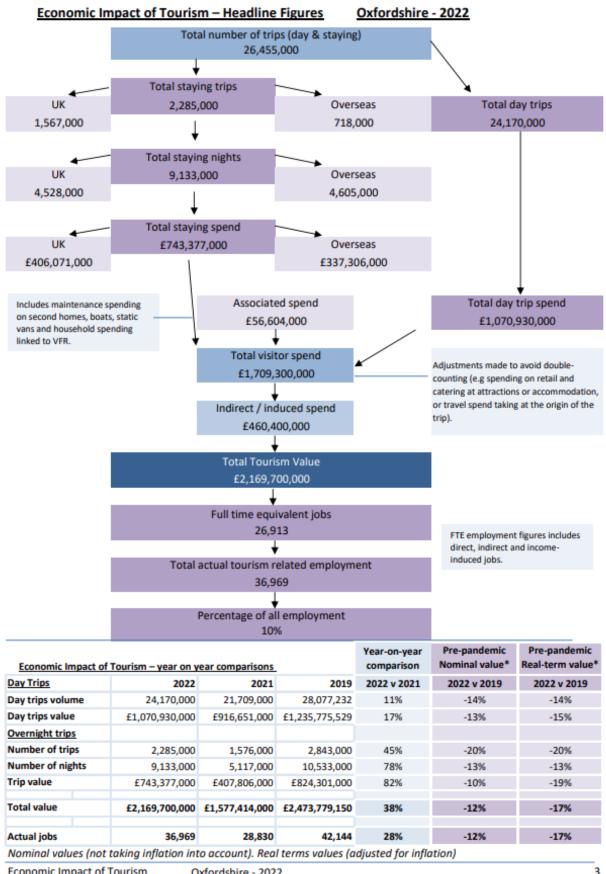




- 3.9.7 The most up to date data on the value of tourism for Vale of White Horse, was published in 2016 as part of the Local Plan. This states that the tourism industry generated approximately £202 million worth of income for local businesses in 2011. However, a significant proportion of this was generated by day visitors.
- 3.9.8 A tourism section is included as part of the preferred options for the Oxford Local Plan 2040. This states that Tourism plays an important role in Oxford's economy. According to Experience Oxfordshire, in 2019, tourism generated around £988m for the city's economy from 7.8m visitors to the city, of which just over 84% were day visitors. Before the pandemic, Oxford had a strong tourism sector with 14% of all the jobs in the city being tourism-related in 2019, when there were around 7.8 million visitors to the city. It further states that Oxford has many short-stay visitors, often visiting for a day or only a few hours, which has fewer benefits for the local economy.
- 3.9.9 In regard to the economic impact of Tourism in South Oxfordshire; the adopted Local Plan refers to "The Economic Impact of Tourism on Oxfordshire Estimates for 2014, Tourism South East Research Unit August 2015. This has now been superseded by the Experience Oxfordshire Economic Impact of Tourism reports which have been produced for Oxford, Cherwell, and Oxfordshire as a whole. Extracts from the Oxfordshire, Oxford and Cherwell reports are included below.







Economic Impact of Tourism Oxfordshire - 2022

#### Figure 15: Economic Impact of Tourism Profile, Oxfordshire (1)





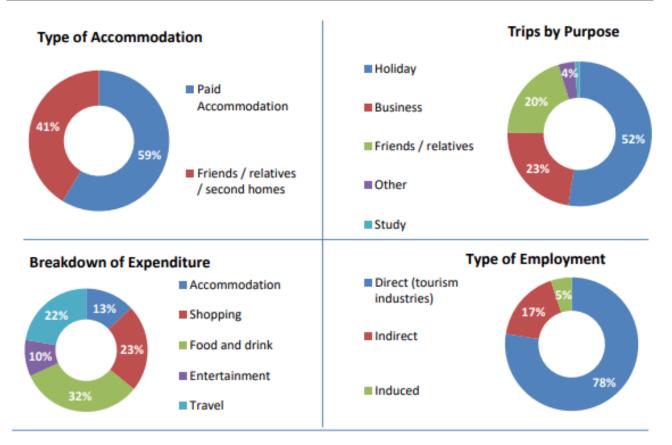
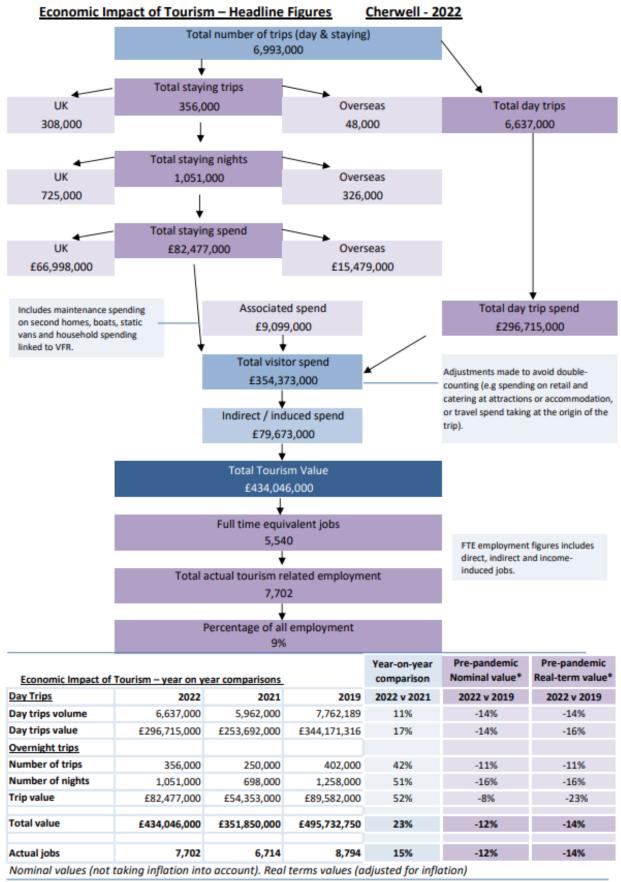


Figure 16: Economic Impact of Tourism, Oxfordshire (2)





Economic Impact of Tourism Cherwell - 2022

Figure 17: Economic Impact of Tourism, Cherwell (1)

3





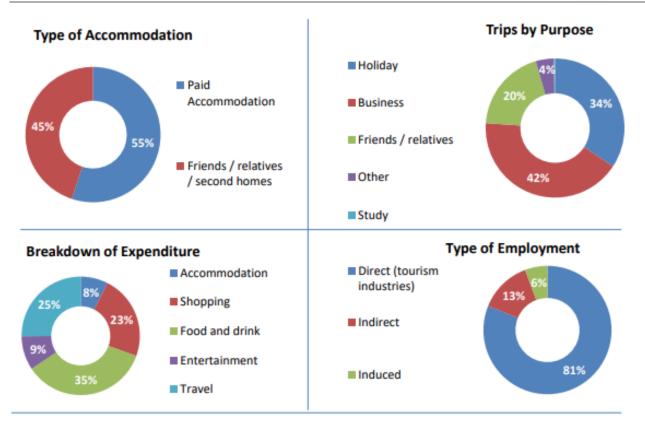
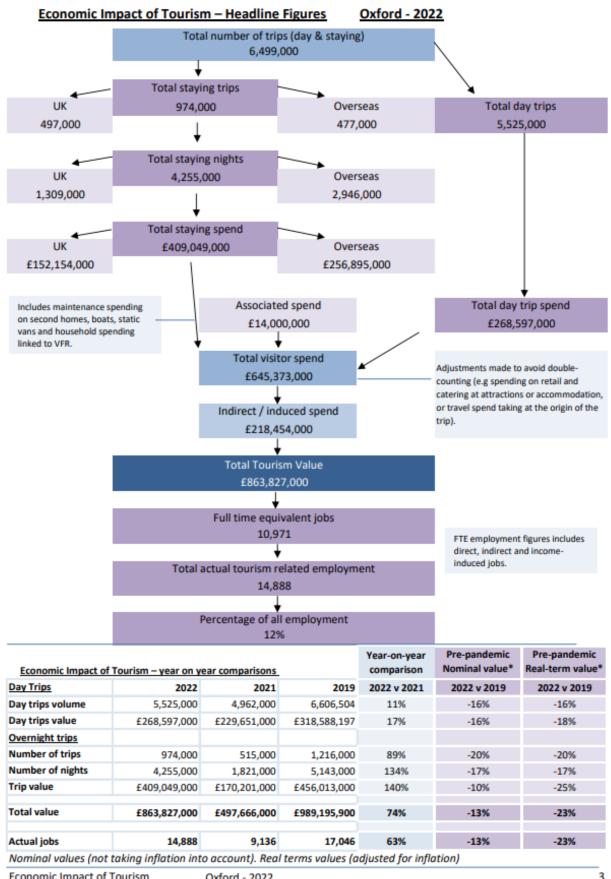


Figure 18: Economic Impact of Tourism, Cherwell (2)



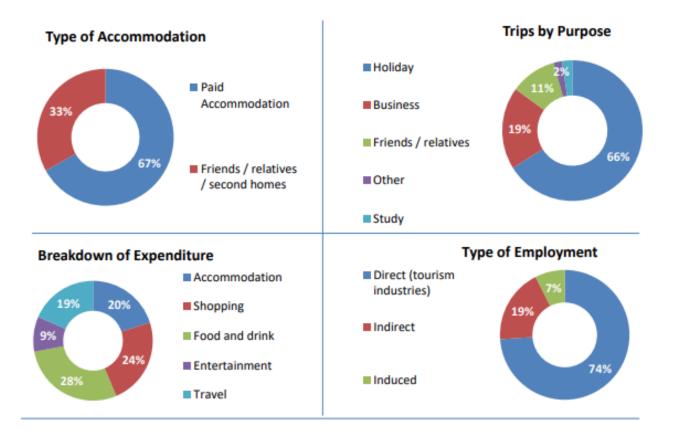


Economic Impact of Tourism Oxford - 2022

# Figure 19: Economic Impact of Tourism, Oxford (1)







## Figure 20: Economic Impact of Tourism, Oxford (2)

# 3.10 Deprivation (IMD)

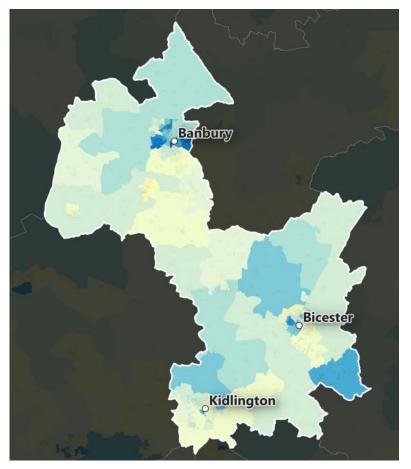
- 3.10.1 The Indices of Deprivation 2019 provide a set of relative measures of deprivation for small areas (Lower-layer Super Output Areas) across England, based on seven different domains of deprivation:
  - Income Deprivation: measures the proportion of the population in an area experiencing deprivation relating to low income. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings (and who satisfy the respective means tests).
  - Employment Deprivation: measures the proportion of the working age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities
  - Education, Skills and Training Deprivation: measures the lack of attainment and skills in the local population. The indicators fall into two sub-domains: one relating to children and young people and one relating to adult skills.
  - Health Deprivation and Disability: measures the risk of premature death and the impairment of quality of life through poor physical or mental health. The domain measures morbidity, disability and premature mortality but not





aspects of behaviour or environment that may be predictive of future health deprivation.

- Crime: measures the risk of personal and material victimisation at local level in four ways: Violence; Burglary; Theft and Criminal damage.
- Barriers to Housing and Services: measures the physical and financial accessibility of housing and local services. The indicators fall into two subdomains: 'geographical barriers', which relate to the physical proximity of local services, and 'wider barriers' which include issues relating to access to housing such as affordability.
- Living Environment Deprivation: measures the quality of the local environment. The indicators fall into two sub-domains. The 'indoors' living environment measures the quality of housing; while the 'outdoors' living environment contains measures of air quality and road traffic accidents.
- 3.10.2 Two supplementary indices are also available; the Income Deprivation Affecting Children Index (IDACI) and the Income Deprivation Affecting Older People Index (IDAOPI). The Index of Multiple Deprivation 2019 (IMD2019), domain indices and the supplementary indices, together with the higher area summaries, are collectively referred to as the IoD2019.
- 3.10.3 The maps below show the relative deprivation of areas within the study area.



Cherwell

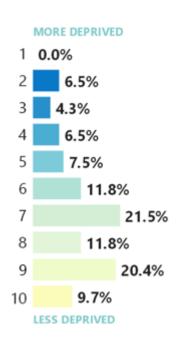
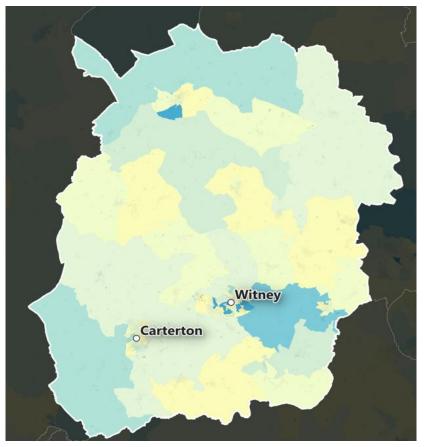


Figure 21: Indices of Multiple Deprivation - Cherwell





# West Oxfordshire



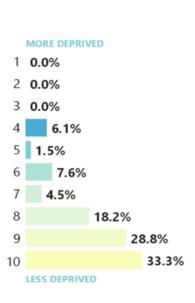


Figure 22: Indices of Multiple Deprivation – West Oxfordshire Vale of White Horse

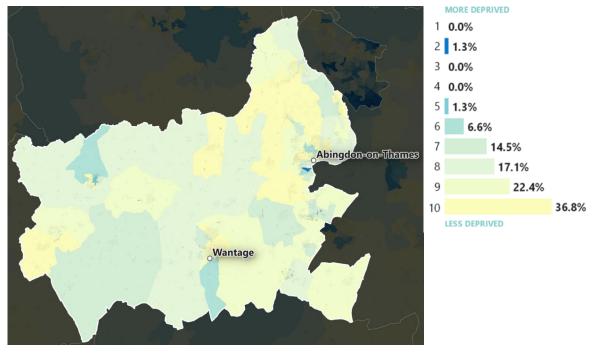


Figure 23: Indices of Multiple Deprivation – Vale of White Horse





# Oxford

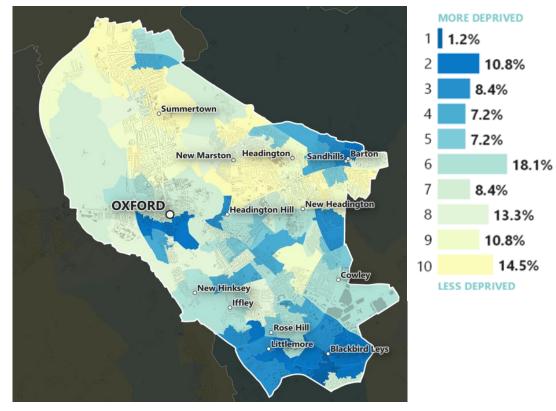
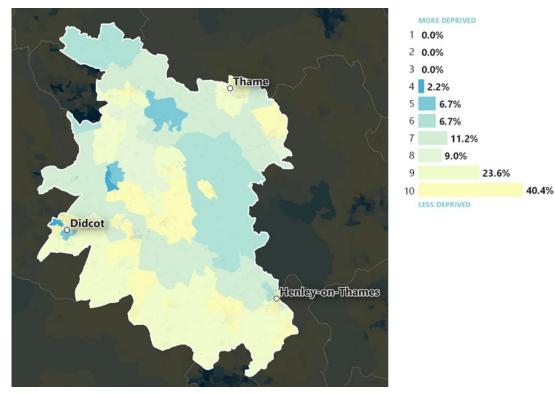


Figure 24: Indices of Multiple Deprivation – Oxford South Oxfordshire



# Figure 25: Indices of Multiple Deprivation - South Oxfordshire

Index of multiple deprivation by Local Authority. Source: https://www.sheffield.ac.uk/usp/research/projects/english-indices-deprivation-2019#maps





3.10.4 We can see that most of the study area falls within the least deprived areas of England however, Cherwell and Oxford present the highest proportion of Lower Super Output Area (LSOA) falling under the more deprived category, with circa 17.3% and 27.6% of their LSOAs being more deprived. Of the study area, Vale of White Horse presents the least deprived areas, with only 1.3% of it LSOAs being more deprived.

# 3.11 Health

- 3.11.1 Renewable energy generation is intrinsically linked to health. Therefore, it is useful to understand the reasons for ill health and health inequalities in the study area.
- 3.11.2 Local Authority Health profiles prepared by the Office for Health Improvement and Inequalities, (<u>https://fingertips.phe.org.uk/profile/health-profiles/data#page/13/ati/301/are/E07000177</u>) show the following summary for the study area.

#### Cherwell

- 3.11.44 The health of people in Cherwell is generally better than the England average. About 10.1% (2,820) children live in low income families and life expectancy for men is higher than the England average. Life expectancy is 7.4 years lower for men and 6.7 years lower for women in the most deprived areas of Cherwell than in the least deprived areas.
- 3.11.45 In terms of child health; in Year 6, 17.8% (300) of children are classified as obese, which is better than the average for England.
- 3.11.46 For adults, the rate for alcohol-related harm hospital admissions is 506 and the rate for self-harm hospital admissions is 167, better than the average for England. The rates of statutory homelessness, violent crime (hospital admissions for violence), under 75 mortality rate from cardiovascular diseases and employment (aged 16-64) are better than the England average.

## West Oxfordshire

- 3.11.47 The health of people in West Oxfordshire is generally better than the England average. West Oxfordshire is one of the 20% least deprived districts in England, however about 8.1% (1,565) children live in low income families. Life expectancy for both men and women is higher than the England average and life expectancy is 2.7 years lower for men and 0.3 years lower for women in the most deprived areas of West Oxfordshire than in the least deprived areas.
- 3.11.48 In terms of child health; in Year 6, 15.2% (165) of children are classified as obese, better than the average for England.
- 3.11.49 For adults, the rate for alcohol-related harm hospital admissions is 469\* and the rate for self-harm hospital admissions is 179\* which is better than the England average. However, the rate of killed and seriously injured on roads is worse than the England average as is the rate of statutory homelessness.





## Vale of White Horse

- 3.11.50 The health of people in Vale of White Horse is generally better than the England average. Vale of White Horse is one of the 20% least deprived districts in England, however about 8.5% (1,905) children live in low income families. Life expectancy for both men and women is higher than the England average but life expectancy is 5.8 years lower for men and 1.7 years lower for women in the most deprived areas of Vale of White Horse than in the least deprived areas.
- 3.11.51 In terms of child health; in Year 6, 15.7% (214) of children are classified as obese, better than the average for England.
- 3.11.52 For adults, the rate for alcohol-related harm hospital admissions is 443 and the rate for self-harm hospital admissions is 191\* which are better than the England average. The rates of statutory homelessness, violent crime (hospital admissions for violence), under 75 mortality rate from cardiovascular diseases and under 75 mortality rate from cancer are better than the England average.

## Oxford

- 3.11.53 The health of people in Oxford is varied compared with the England average. About 16.2% (3,925) children live in low-income families. Life expectancy for women is higher than the England average. Life expectancy is 9.9 years lower for men and 6.3 years lower for women in the most deprived areas of Oxford than in the least deprived areas.
- 3.11.54 In terms of child health; in Year 6, 16.4% (217) of children are classified as obese, better than the average for England. The rate for alcohol-specific hospital admissions among those under 18 is 50\*, worse than the average for England. This represents 15 admissions per year. Levels of breastfeeding and smoking in pregnancy are better than the England average.
- 3.11.55 For adults, the rate for alcohol-related harm hospital admissions is 640\*. This represents 810 admissions per year. The rate for self-harm hospital admissions is 237\*, worse than the average for England. This represents 400 admissions per year. Estimated levels of excess weight in adults (aged 18+), smoking prevalence in adults (aged 18+) and physically active adults (aged 19+) are better than the England average. The rate of killed and seriously injured on roads is better than the England average. The rates of new sexually transmitted infections and new cases of tuberculosis are worse than the England average. The rates of new sexually admissions for violence), under 75 mortality rate from cancer and employment (aged 16-64) are better than the England average.

## South Oxfordshire

3.11.56 The health of people in South Oxfordshire is generally better than the England average. South Oxfordshire is one of the 20% least deprived districts/unitary authorities in England, however about 7.9% (1,910) children live in low-income families. Life expectancy for both men and women is higher than the England average. Life expectancy is 2.5 years lower for men and 1.4 years lower for





women in the most deprived areas of South Oxfordshire than in the least deprived areas.

- 3.11.57 In terms of child health; in Year 6, 13.0% (188) of children are classified as obese, better than the average for England. The rate for alcohol-specific hospital admissions among those under 18 is 33\*. This represents 10 admissions per year. Levels of GCSE attainment (average attainment 8 score), breastfeeding and smoking in pregnancy are better than the England average.
- 3.11.58 For adults, the rate for alcohol-related harm hospital admissions is 479\*, better than the average for England. This represents 666 admissions per year. The rate for self-harm hospital admissions is 184\*. This represents 230 admissions per year. Estimated levels of physically active adults (aged 19+) are better than the England average. The rates of new sexually transmitted infections and new cases of tuberculosis are better than the England average. The rates of violence), under 75 mortality rate from cardiovascular diseases, under 75 mortality rate from cancer and employment (aged 16-64) are better than the England average.

#### Summary

3.11.59 In general, the study area covers the least deprived areas in England however there are pockets of deprivation where health inequalities present serious challenges, such as life expectancy in the most deprived areas in Vale of White Horse and Cherwell and people killed in roads and statutory homelessness in West Oxfordshire.

# 3.12 Travel To Work Patterns

- 3.12.1 Given that construction and operational employees will need to travel to the site for work it is important to understand people's current methods of travel. The 2021 Census data has been published, however, given this data was obtained during the COVID-19 pandemic we have also had reference to the 2011 census data.
- 3.12.2 As can be seen in the graphic below, the majority of people who travel to work in the study area do so by private van or car. This has reduced slightly since the 2011 Census but still remains the most common form of transport to work. We can see that the number of people working from home has increased dramatically over the census period, however, travelling to work by foot remains the second most common method of travel for those who do not work from home.





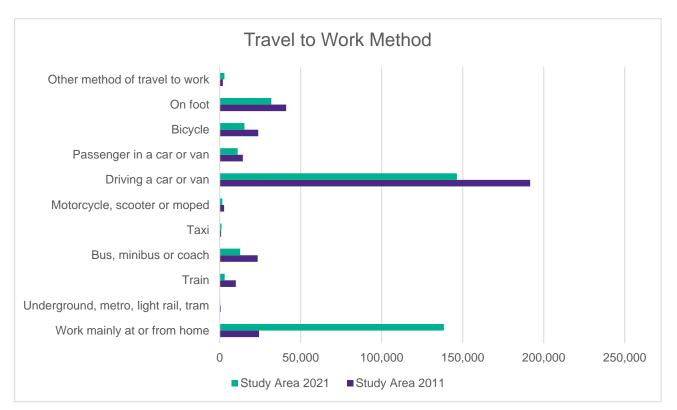


Figure 26: Method of Travel to Work

3.12.3 The full data sets are included below for reference.



## Table 3.15: ONS, Travel to Work methods, 2021.

Local Authority	Work mainly at or from home	Underground metro, light rail, tram	Train	Bus, minibus or coach	Taxi	Motorcycle scooter or moped		Passenger in a car or van	Bicycle	On foot	Other method of travel to work	Not in employment or aged 15 years and under
Cherwell	27343	41	1027	1887	437	345	39508	3353	2156	8135	737	76044
West Oxfordshire	20629	42	272	1156	57	263	28364	1849	1432	4394	466	55311
Vale of White Horse	29239	41	344	1941	103	344	29825	1988	2313	4229	495	68049
Oxford	28427	77	523	6493	417	375	17163	1778	7724	9697	650	88714
South Oxfordshire	32709	73	897	1168	81	289	31562	2097	1637	5393	568	72609
Total	138347	274	3063	12645	1095	1616	146422	11065	15262	31848	2916	360727

## Table 3.16: ONS, Travel to Work methods, 2011.

Method of Travel to Work	Cherwell	Oxford	South Oxfordshire	Vale of White Horse	West Oxfordshire
Work mainly at or from home	4,757	4,300	6,229	4,472	4,516
Underground, metro, light rail, tram	96	170	180	105	87
Train	2,185	1,769	3,453	1,455	1,053
Bus, minibus or coach	3,672	11,405	2,184	3,695	2,444
Taxi	298	264	103	111	101
Motorcycle, scooter or moped	556	482	558	640	495
Driving a car or van	47,271	23,735	43,957	39,766	36,866
Passenger in a car or van	4,034	2,245	2,766	2,660	2,588
Bicycle	2,592	12,270	2,575	4,018	2,315
On foot	8,964	12,674	7,682	5,905	5,777
Other method of travel to work	404	493	400	354	273





Method of Travel to Work	Cherwell	Oxford	South Oxfordshire	Vale of White Horse	West Oxfordshire
Not in employment	28,440	48,630	26,805	24,296	19,648





3.12.4 Given the travel patterns identified above it is not surprising to see that across the study area, over three quarters of households own at least one car or van (83%). The study area data is included in the table below and a full breakdown by local authority area is also provided for reference.

# Table 3.20: Vehicle Availability across Local Authority Areas in Study Area – Census 2021 (may not add due to rounding)

	Value	%
No cars or vans in household	46,634	16
1 car or van in household	117,446	40
2 cars or vans in household	90,071	31
3 or more cars or vans in household	33958	12
Total	288109	100%

## Table 3.17: Census 2021 - Car or Van Availability by Local Authority Area

Cherwell	No cars or vans in household	9699
Cherwell	1 car or van in household	26671
Cherwell	2 cars or vans in household	21461
Cherwell	3 or more cars or vans in household	8064
Oxford	No cars or vans in household	17735
Oxford	1 car or van in household	25086
Oxford	2 cars or vans in household	9559
Oxford	3 or more cars or vans in household	2859
South Oxfordshire	No cars or vans in household	6644
South Oxfordshire	1 car or van in household	23693
South Oxfordshire	2 cars or vans in household	22172
South Oxfordshire	3 or more cars or vans in household	8987
Vale of White Horse	No cars or vans in household	7040
Vale of White Horse	1 car or van in household	22898
Vale of White Horse	2 cars or vans in household	20223
Vale of White Horse	3 or more cars or vans in household	7338
West Oxfordshire	No cars or vans in household	5516
West Oxfordshire	1 car or van in household	19098
West Oxfordshire	2 cars or vans in household	16656
West Oxfordshire	3 or more cars or vans in household	6710

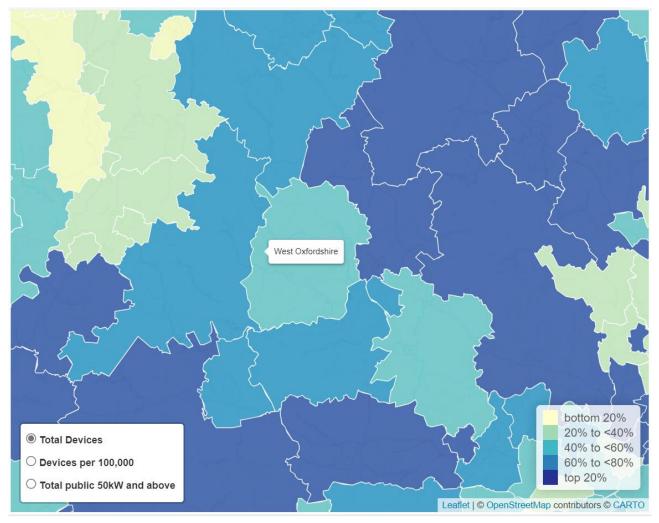
- 3.12.5 Having identified that a large proportion of the population of the study area regularly use a private car or van as a method of transport, we have also had reference to the House of Commons Parliamentary data (based on Department of Transport data) on electric vehicles and charging points.
- 3.12.6 The most recent available data from Q1 2024 shows that there were a total of 5,720 licenced electric, plug-in or range extending vehicles in Cherwell; 2,540 in West Oxfordshire, 2,259 in Oxford, 3,937 in South Oxfordshire and 3,468 in Vale of White Horse for a total of 17,924 in the study area.
- 3.12.7 Looking at vehicle charging facilities we can see that, as of July 2024, the local authority of Cherwell has 253 publicly available charging devices (PACDs),





Oxford has 181 PACDs West Oxfordshire has 111, South Oxfordshire has only 87 PACDs and the Vale of Glamorgan has 141 PACDs.

- 3.12.8 Looking more widely, charging infrastructure has seen an increase in the last year in the region, with the South East having an 37.1% increase in number of charging devices and an increase of circa 33.1% in rapid charging devices in the region.
- 3.12.9 The below provides a mapped visualisation of the electric charging vehicle charging point data.



## Figure 27: Density of Charging Devices by Local Authority – Department for Transport

# 3.13 Access to Renewable Energy

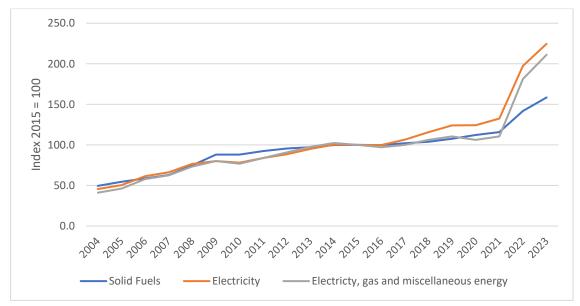
- 3.13.1 Due to the nature of the scheme benefits in terms of renewable energy generation it is useful to understand the baseline position across the study area. According to the Department for Business Energy & Industrial Strategy (BEIS) Regional Renewable Statistics data; at the end of 2022, the study area produced a total of approximately 517,495MWh of renewable energy which equates to circa 17% of the South East total (2,986,824MWh).
- 3.13.2 The biggest producer of renewable energy in the study area was Vale of White Horse which produced 219,324MWh of renewable energy. This was mainly





generated from solar (149,944MWh). Cherwell generated 246,144MWh of solar energy whereas West Oxfordshire generated 80,727MWh of solar. South Oxfordshire generated 61,569MWh of solar and Oxford only generated 9,731MWh.

- 3.13.3 Of the five local authorities covered by the study area, Oxford is the area that generated the least renewable energy.
- 3.13.4 Overall, the study area produced approximately 393,000MWh of solar energy which equated to circa 18% of the solar energy production in the South East region (2,195,757 MWh).
- 3.13.5 In terms of installed capacity, the DBEIS data indicates that as of 2022, the study area has approximately 404.8MW of installed solar photo voltaic capacity. This equates to circa 17% of the total of photovoltaic installed capacity in the South East region (2,332.3MWh).
- 3.13.6 As well as understanding the current renewable energy capacity of the study area, we have also had reference to the DBEIS regional and local authority electricity consumption statistics. According to the 2022 data (latest available), domestic properties in the study area consumed a total of 1,150.2GWh. On this basis the solar energy currently produced in the study area would be able to cover 34.1% of the domestic energy usage.
- 3.13.7 At the time of writing this report, the cost of non-renewable energy resources has risen significantly and is predicted to continue to rise. As discussed in the above section some areas of the study area are within the top 10% most deprived in England and thus the rising cost of energy may have dramatic impacts on their health, social and economic wellbeing.
- 3.13.8 Monthly data from the Consumer Prices Index (CPI) shows the monthly average UK gas and electricity prices and illustrates the jump in prices since 2021.



# Figure 28: Gas & Electricity Prices – Fuel price indices in the domestic sector in real terms





# 3.14 Broadband access

- 3.14.1 A study from Ericsson and Chalmers University of Technology for 2013 identified that the results from both macroeconomic and microeconomic studies support the theory that broadband availability and speed drive growth in an economy.
- 3.14.2 In the case of household income, the following appear to be linked to internet access speed:
  - A faster broadband speed boosts personal productivity and allows for more flexible work arrangements; and
  - A higher speed also opens up possibilities for more advanced home-based businesses as a replacement, or complement to, an ordinary job.
- 3.14.3 On the above basis, it is considered useful to understand broadband provision in the study area, in order to identify if The Project would have a direct impact on this socio-economic variable.
- 3.14.4 Data from Digital Infrastructure Oxfordshire, a partnership between Oxfordshire County Council, the district councils, local enterprise and commercial suppliers provided over 80,000 new addresses with superfast broadband and its map identified that by 2022 there would be only circa 2% of addresses in the county do not have plans to be connected to superfast broadband.
- 3.14.5 ThinkBroadband.com data, as of August, confirms that there is 99.06% coverage of Superfast (>24mbps) in Oxfordshire.
- 3.14.6 However, data from ThinkBroadband.com identifies that Oxfordshire has circa 58.85% coverage of Full Fibre, which provides higher and more reliable internet speeds.

# 3.15 Future Baseline

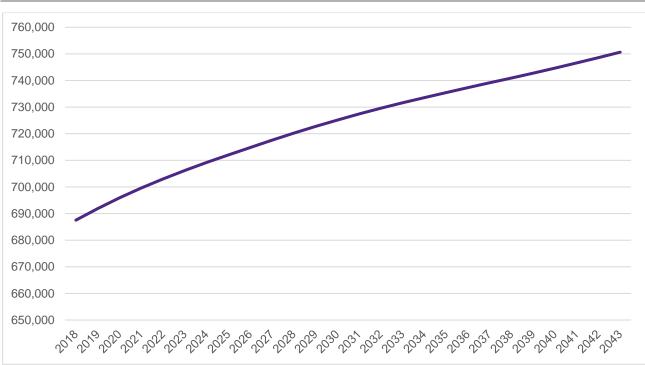
3.15.1 This section outlines any likely future changes to baseline conditions within the study area. Only receptors where there is likely to be a notable change are detailed.

## **Population**

- 3.15.2 ONS data estimates future population growth based on the ONS 2018-based interim projections. It suggests that the Study Area's population will increase to around 750,634 in 2043, approximately a 9.2% increase. The Study Area is projected to experience a 51.3% increase in the 65+ age group, while 0-15 age group in is expected to decrease by 4.3%.
- 3.15.3 It should be noted, however, that these population projections are trend-based projections, which means assumptions for future levels of births, deaths and migration are based on previous observations. They show what the population will be if recent trends in these continue.







## Figure 29: ONS Population Projections (2018-based)

## **Education**

- 3.15.4 The latest government National pupil projections (2023) predict a yearly downward trend for the number of state nursery and primary school places from 4,593,497 in 2023 to 4,180,930 in 2028 representing a circa 9.0% decrease.
- 3.15.5 In terms of secondary school numbers, the number is expected to slightly decrease from 3,244,230 in 2023 to 3,191,441 in 2028, representing a loss equivalent to 1.6%.

Climate Change

3.15.6 Climate change is not considered to have a significant impact upon the socioeconomic baseline. Increases to the cost of fossil fuels may result in rising household bills, consequently making home ownership more expensive, however, there should also be a greater take up of green energy and electric vehicle ownership which may combat this. Overall, the baseline is not expected to be affected by the impacts of climate change.