Oxfordshire Minerals and Waste Local Plan

OXFORDSHIRE LOCAL AGGREGATE ASSESSMENT (Calendar Year 2024)

November 2025

Prepared by Oxfordshire County Council (including information provided in 2014 by LUC and Cuesta Consulting Ltd)

Contents

1.Oxfordshire Summary of Key Data 2024

Summary – Oxfordshire County Council 2024 (million tonnes)									
Quarry Sales	**2024 Sales (Mt) & Trend**	**Average (10-yr) Sales & Trend**	**Average (3-yr) Sales & Trend**	**Annual Provision Rate (APR) (Mt)**	**Reserve (Mt)**	**Landbank (years)**	**Allocations (years)**	**Production Capacity (Mtpa)**	**Comments**
Soft Sand	⇩ 0.132	⇩ 0.226	⇩ 0.188	0.235	⇩ 3.021mt	13.0	N/A	0.299	LAA rate remains at 0.235mtpa. Landbank above 7-year requirement
Sharp Sand & Gravel	⇧ 0.934	⇧ 0.868	⇩ 0.928	0.986	⇩ 6.177	6.3	N/A	1.652	LAA rate remains at 0.986 Landbank fallen below 7-year requirements
Crushed Rock	⇩ 0.981	⇩ 0.956	⇩ 1.043	0.964	⇩ 3.359	3.5	N/A	1.704	LAA rate remains at 0.964. Landbank remains below 10-year requirement
Recycled / Secondary Aggregates	0.447	0.413	0.470	0.926	N/A	N/A	N/A	1.493	These are for 2023. 7% of operators surveyed responded to the 2024 RSA survey. Average sales is 9 years not 10

Rail Depot Sales (Sand & Gravel	c	c	c	c	c	c	c	c	Due to commercial confidentiality, we are unable to share these figures
Rail Depot Sales (Crushed Rock)	c	c	c	c	c	c	c	c	Due to confidentiality, we are unable to share these figures

General Comments

The reduction in sales Oxfordshire saw in 2023 continued in 2024 for soft sand and crushed rock, but there was a small increase for sharp sand and gravel.

The 2024 LAA Aggregate Provision Rate for Soft Sand remains 0.235, the 10-year average, following a review of demand, consumption, imports and exports and other local factors such as economic growth, population and housing.

The 2024 LAA Aggregate Provision Rate for Sharp Sand and Gravel remains at 0.986mtpa following a review of demand, consumption, imports and exports and other local factors such as economic growth, population and housing.

The 2024 LAA Aggregate Provision Rate for Crushed Rock remains at 0.964 following a review of demand, consumption, imports and exports and other local factors such as economic growth, population and housing.

Using the Crushed Rock LAA Rate, we are still below the required 10-year landbank for the seventh consecutive year. Using the Sharp Sand & Gravel LAA Rate, we are below the required 7-year landbank. Landbanks will be considered within the preparation of the new Minerals and Waste Local Plan.

The Recycled and Secondary Aggregate figures are for 2023 and have been calculated using the Waste Data Interrogator for 2023 as 7% of operators responded to 2024 survey.

2. Executive Summary

2.1 The National Planning Policy Framework, December 2024 (NPPF) states that mineral planning authorities should prepare an annual Local Aggregate Assessment (LAA).

2.2 The LAA is required to:

- Forecast the demand for aggregates based on average 10 years' sales data and other relevant local information;
- analyse all aggregate supply options and;
- assess the balance between demand and supply.

2.3 This is the thirteenth LAA for Oxfordshire and includes the 2024 aggregate sales and reserves data for the County. The 10-year period covered by this LAA is 2015 to 2024 and the three-year period is 2022 to 2024.

2.4 The primary aggregate figures within this LAA are taken from the 2024 Aggregates Minerals Survey (AM2024) undertaken by the County Council on behalf of the South East England Aggregate Working Party (SEEAWP).

Demand

Sharp Sand and Gravel

2.5 Sales of Sharp Sand and Gravel increased in 2024 to 0.938mt. This is a 7% increase on 2023 sales, and 4% below the Aggregate Provision Rate for 2023 of 0.986mt.

2.6 There was a 4% increase in the 10-year sales average (0.869mt from 0.839mt), which is 12% below the current Aggregate Provision Rate. The 3-year sales average of Sharp Sand and Gravel decreased by 7% to 0.928mt, which remains higher than the 10-year average, but 6% lower than the Aggregate Provision Rate for 2023.

2.7 Having considered the sales trends and other relevant information contained within this report, it is not considered necessary to change the Aggregate Provision Rate for Sharp Sand and Gravel and it will remain at 0.986mt per annum.

Soft Sand

2.8 Sales of Soft Sand in 2024 decreased to 0.132mt, a decrease of 35% on 2023 sales and 44% below the Aggregate Provision Rate for 2023 of 0.235mt.

2.9 The 10-year sales average decreased 4% to 0.226mt from 2023, which is also 4% below the Aggregate Provision Rate (APR) for 2023 of 0.235mtpa. The 3-year sales average decreased 19% on the previous year to 0.188mt which is 20% lower than the Aggregate Provision Rate for 2023.

2.10 Having considered the sales trends and other relevant information contained within this report, it is not considered necessary to change the Aggregate Provision Rate for Soft Sand and it will remain at 0.235mt per annum.

Crushed Rock

2.11 Sales of Crushed Rock in 2024 decreased to 0.981mt, a decrease of 2% on 2023, though 2% above the Aggregate Provision Rate of 2023 of 0.964mt.

2.12 The 10-year sales average decreased 1% to 0.956mtpa compared with 2023, which is 1% above the Aggregate Provision Rate for 2023. The 3-year sales average decreased 8% to 1.043mt on the previous 3-year period, this is 8% higher than the Aggregate Provision Rate for 2023.

2.13 Having considered the sales trends and other relevant information contained within this report; it is not considered necessary to change the Aggregate Provision Rate for Crushed Rock and it will remain at 0.964mt per annum.

Rail Depots

2.14 There were returns from two operators on sales from Rail Depots for 2024. However, due to the need to maintain confidentiality, we are unable to publish these figures. Due to a number of planning decisions in 2021, Oxfordshire has increased its rail depot capacity to over 3.5million. It is known that the increased capacity at Hennef Way Banbury is temporary to provide material for HS2, and Appleford Sidings added two more rail sidings. This site now has a planning condition limiting it to 1.5million tonnes per annum.

Recycled and Secondary Aggregates

2.15 To ensure a consistent picture of the availability of secondary and recycled aggregates over time which could result in sales, this LAA uses an approach from the published Guidance on Assessing Levels of Recycled Aggregates[1].

2.16 Due to the Environment Agency's data on CDE in the Waste Data Interrogator for 2024 not being released at the time of report writing, we are unable to estimate the Recycled Waste findings for 2024. This will be published in future LAA's. Using 2023 data, estimated Recycled and Secondary aggregates was estimated to be 0.447 million tonnes.

2.17 The LAA APR figure for recycled and secondary aggregate should be maintained as the provision figure set in the Oxfordshire Minerals and Waste Local Plan: Part 1 – Core Strategy 2017, Policy M3 which is 0.926mtpa.

Supply

Sand and Gravel

2.18 In Oxfordshire at the end of 2024, there were eleven sharp sand and gravel quarries within Oxfordshire, eight of which are active. The permission at Stonehenge Farm quarry expired at the end of 2023 and therefore the

[1] Recycled Aggregates Data: Guidance on Assessing Levels of Recycled Aggregates April 2022

permitted 1.5million tonnes was removed from the landbank. There were four Sharp Sand and Gravel planning applications outstanding at the end of 2024.

2.19 Total permitted reserves of Sharp Sand and Gravel in Oxfordshire at the end of 2024 were 6.177mt. Using the Aggregates Provision Rate figures of 0.986 mtpa, this gives a landbank of 6.3 years. This is below the NPPF requirement of a landbank of at least 7 years.

Soft Sand

2.20 In Oxfordshire, at the end of 2024, there were 8 sites with planning permission for Soft Sand extraction. No planning applications for Soft Sand were granted in 2024. There was one Soft Sand planning application outstanding at the end of 2024.

2.21 Total permitted reserves for Soft Sand in Oxfordshire at the end of 2024 were 3.021mt. Using the Aggregates Provision Rate figure of 0.235 mtpa, this gives a landbank of 13.0 years. This is in accordance with the NPPF requirements of a landbank of at least 7 years.

Crushed Rock

2.22 At the end of 2024, there were 14 sites with planning permission for Crushed Rock extraction, 12 of which were active. No permissions for Crushed Rock were granted in 2024. There were three planning applications for Crushed Rock outstanding at the end of 2024.

2.23 Total permitted reserves for Crushed Rock in Oxfordshire at the end of 2024 were 3.3594mt. Using the Aggregates Provision Rate of 0.964. mtpa this gives a landbank of years 3.5 years which is below the requirements of the NPPF of at least a 10-year landbank. Some operators re-evaluated their reserves and returned figures that were lower than had been anticipated.

Recycled and secondary material sites

2.24 Due to the Environment Agency's data on CDE in the Waste Data Interrogator for 2024 not being released at the time of report writing, we are unable to estimate the Recycled and Secondary aggregate figures for sales in Oxfordshire for 2024. This will be published in future Local Aggregate Assessments.

2.25 At the end of 2023, Oxfordshire's estimated recycled and secondary aggregate available to be sold was recorded as approximately 0.447mt. However, permitted capacity taken from planning decisions, application statements and previous survey findings at the end of 2024 was 1.493mt.

Rail Depots

2.26 Oxfordshire has four permitted rail depots, three of which are operational. Two returns for the sales from the Depots were submitted for 2024.

Relationships with other MPA's

2.27 Every county in the UK has to import aggregates because none possess the geology necessary to produce all the types of aggregate required. All sales

between Authority areas which reflect supply and demand are tracked in the approximately four-year national aggregate surveys.

2.28 The most recent is the 2023 Aggregates Minerals Survey for England and Wales[2] (AM2023), undertaken by British Geological Survey (BGS) under a contract with the Ministry of Housing, Communities and Local Government (MHCLG). The AM2023, which was published August 2025, sets out aggregate movements at a sub-regional level.

2.29 It states that Oxfordshire is a net exporter of sand and gravel but has shifted to being a significant net importer of crushed rock.

Factors affecting supply and demand

2.30 2024 has seen a continued decrease in sales of Soft Sand and Crushed Rock compared to 2023. There has been an increase in Sharp Sand and Gravel sales.

2.31 However, there are major infrastructure projects, as well as local housing and transport projects continuing to take place during the Plan period. Further, the Government has made a strong commitment to growth, and the Construction Products Association (CPA) is anticipating a period of increased growth[3].

Executive Summary Conclusion

2.32 The purpose of an annual Local Aggregates Assessment is to review the latest information available, to forecast future demand as well as analysing all aggregate supply options and assessing the balance between supply and demand.

2.33 To ensure that supply continues to meet demand, the **Aggregates Provision Rate (APR)** for 2024 onwards will be maintained from the LAA for 2023, as follows:

- **Sand and Gravel – 0.986mtpa**
- **Soft Sand – 0.235mtpa**
- **Crushed Rock – 0.964 mtpa**
- **Recycled and Secondary Aggregates- 0.926mtpa**

2.34 Using these APRs and the Oxfordshire reserves at the end of 2024, the Landbank can be calculated as:

- **Sand and Gravel – 6.3 years**
- **Soft Sand – 13 years**
- **Crushed Rock – 3.5 years**

2.35 To meet the current Minerals and Waste Local Plan Part 1: Core Strategy (2017) Policy M2 requirements, we will need to identify Sharp Sand and Gravel sites to meet the following mineral requirements over the Plan Period.

[2] Aggregate minerals survey for Great Britain, 2023 - GOV.UK
[3] CPA Releases Summer Forecasts 2025

There would be no further need to identify any further Soft Sand and Crushed Rock.

- **Sand and Gravel – 3.022million tonnes**.
- **Soft Sand – 0 million tonnes**
- **Crushed Rock – 0 million tonnes**

2.36 However this will not address the issue of the Crushed Rock landbank being below the at least 10 years requirement by the NPPF. This will be addressed in the New Minerals and Waste Local Plan.

2.37 Mineral requirements within the Core Strategy will be replaced with the mineral requirements as set out in a new Minerals and Waste Plan upon adoption.

3. Demand

Land Won Aggregate

Sharp Sand and Gravel Past Sales

3.1 Sales of Sharp Sand and Gravel from quarries in Oxfordshire for the period 2015 – 2024 are shown in Table 3.1. These figures are taken from two sources: The annual Aggregates Minerals Survey for England and Wales undertaken by Oxfordshire County Council on behalf of SEEAWP (South East Aggregates Working Party) and the historic four/five yearly British Geological Survey (BGS) under a contract with the Ministry of Housing, Communities and Local Government (MHCLG).

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10-year average	Last 3-year average
0.768	0.651	0.703	0.796	0.994	0.830	1.157	0.972	**0.877**	**0.934**	**0.868**	**0.928**

Table 3.1: Sales of Sharp Sand and Gravel 2015 – 2024 (million tonnes) (Sources: SEEAWP Aggregates Monitoring Surveys)

3.2 Sales of Sharp Sand and Gravel increased 7% in 2024 compared with 2023.

3.3 There was a 15% fall in sales of Sharp Sand and Gravel from quarries in Oxfordshire from 2015 to 2016. Most of this decrease was accounted for by sales at one quarry - Bridge Farm, Sutton Courtenay. The fall in sales at this quarry in 2016 was caused primarily by a break in production whilst the determination and issue of the planning permission to work the full depth of gravel in Phase 4b at Bridge Farm was awaited; the permission was issued on 17 May 2016.

3.4 The shortfall in supply from Bridge Farm during this time was made up by imports of marine dredged material, delivered by rail from East London into Appleford Sidings, Sutton Courtenay Depot. Crushed Rock (limestone) was also imported by rail into this depot, from Somerset, and used to substitute sand and gravel.

3.5 In 2017 sales of sand and gravel extracted from Bridge Farm, Sutton Courtenay Quarry returned to the 2015 level; and overall sales of Sharp Sand and Gravel in Oxfordshire increased again.

3.6 In 2020, due to the impact of the Global Covid pandemic there was a fall in sales. In addition, Hatford was awaiting a determination for their western extension, which was submitted in 2019.

3.7 In 2021, developments and strategic projects both in Oxfordshire and neighbouring Authorities commenced again following the lockdowns of 2020. Also, production at New Barn Farm, following the 2018 permission became established and there was permission for an extension at Hatford that enabled production on the site to continue in 2021.

3.8 In 2022, there was a slight decrease in sales compared with 2021, but this was considered to be settling after the unusual years in 2020 and 2021. 2022 also saw rises in inflation and the energy crisis, along with an increase in the cost of materials. This could have potentially impacted on sales.

3.9 2023 saw another drop in sales, down 9.8% from 2022, however 2024 sales are up by 7% from 2023, showing consistency with sales from 2022. This could be attributed to recovery in the building and construction sector, combined with regional projects such as HS2. Further, a number of operator returns reflected a reassessed mineral reserve, which reflects the difference in 2023 sales and the 2024 reserve.

3.10 All these factors have had implications for the 10-year average and 3-year average.

3.11 The 10-year average is currently 0.868tpa, which includes the time period following the recession (2015-2017) and the Covid pandemic which impacted the reduced sand and gravel sales over this time.

3.12 The 3-year average is 0.928tpa.

3.13 Based on linear trend analysis shown in Figure 3.1, the average rate of increase over the period 2015 to 2024 in Oxfordshire was 0.326mtpa, with four intervals of decline.

3.14 There has been a 4% increase in the 10-year period and a 7% decrease in the 3-year period. The 3-year sales average of Sharp Sand and Gravel is 7% higher than the 10-year average.

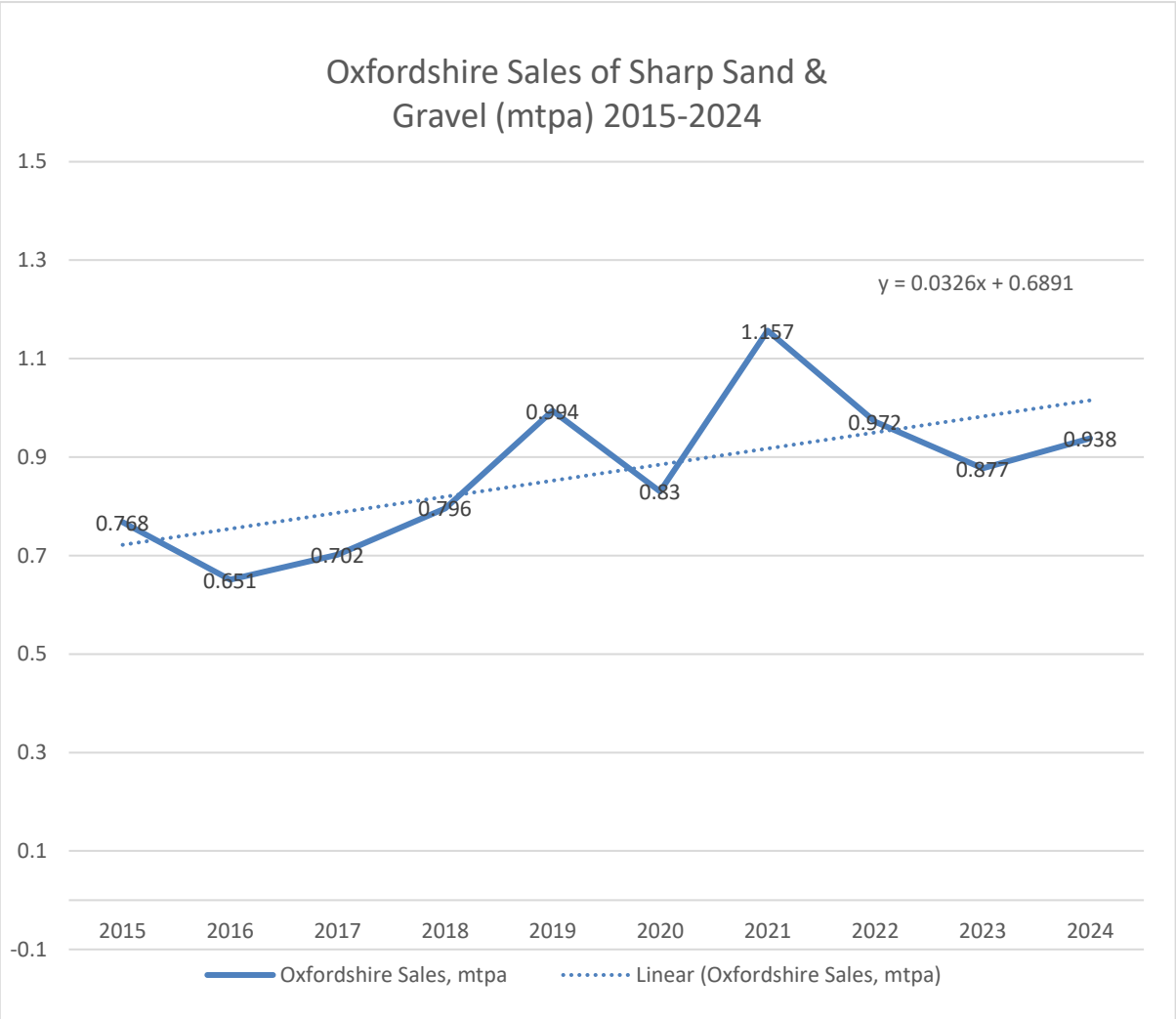

Figure 3.1 Linear trend analysis - Sharp Sand and Gravel sales (mtpa) 2015-2024

Soft Sand Past Sales

3.15 Sales of Soft Sand from quarries in Oxfordshire 2015–2024 are shown in Table 3.2. These figures are taken from two sources: The annual Aggregates Minerals Survey for England and Wales undertaken by Oxfordshire County Council on behalf of SEEAWP and the historic four/five yearly British Geological Survey (BGS) under a contract with the Ministry of Housing, Communities and Local Government (MHCLG).

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10-year average	3-year average
0.233	0.227	0.251	0.252	0.254	0.210	0.264	0.229	0.203	**0.132**	**0.226**	**0.188**

Table 3.2: Sales of Soft Sand 2015 – 2024 (million tonnes) (Sources: SEEAWP Aggregates Monitoring Surveys)

3.16 Sales of Soft Sand showed steady recovery from 2015, following the impact of the recession, until the Covid pandemic in 2020.

3.17 Hatford quarry gained permission in early 2021 which enabled production to continue on site. Planning permission for Shellingford was issued at the end of 2020 and production resumed on site in 2021. Along with the post COVID surge in developments, this caused a sharp increase in the sales in 2021.

3.18 Sales have been decreasing since 2022, with sales in 2024 having decreased by 35% from 2023.

3.19 2024 sales are the lowest sales for Soft Sand since 2013. This could be due to less demand, or it could be due to the geology of the sites. Soft Sand is often located with other primary aggregate reserves such as Crushed rock, and if more alternative aggregate has been available and extracted from this site over 2024 due to this geology, this may have caused an impact on our Soft Sand sales for this year. The decrease in soft sand sales however does seem to be consistent across operators in Oxfordshire. Further, there are a number of sites coming to the end of their permission. This will be closely monitored in future Local Aggregate Assessments.

3.20 The 10-year average sales have now decreased by 4%, and 2024 sales significantly impacting the 3-year average sale figure to be 19% lower than in 2023.

3.21 Linear trend analysis (Figure 3.2) over the period 2015 to 2024 now reveals an average rate of decrease of 0.0072mtpa for Oxfordshire (with five periods of decline) over the baseline period.

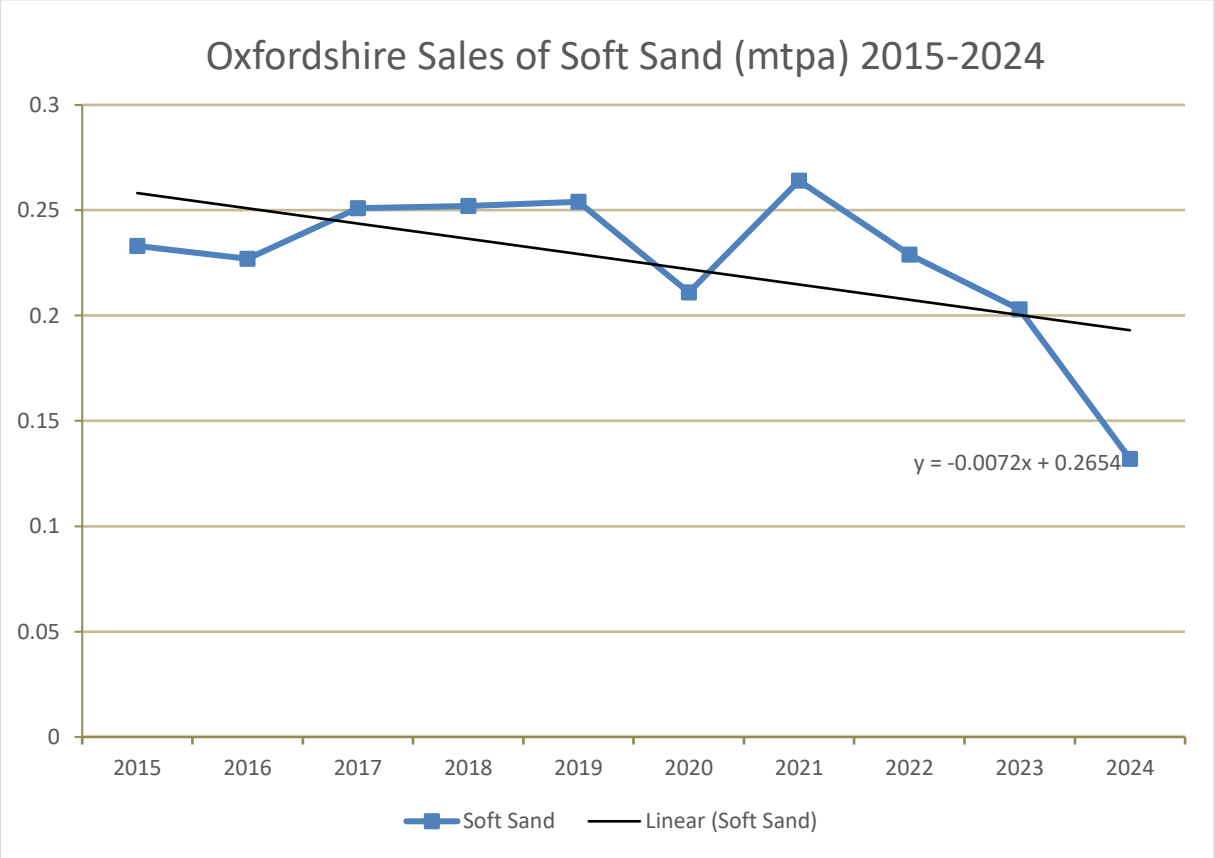

Figure 3.2 Linear trend analysis – Soft Sand sales 2015-2024

Overall sand and gravel sales

3.22 Oxfordshire saw a 6% increase in Sharp Sand and Gravel and a 35% decrease in Soft Sand in 2024, giving an overall decrease of 1% in all Sand and Gravel, which is higher than the Mineral Products Associations (MPA) reported figure of a decline of 7.9% sales of Sand and Gravel nationally[4].

Crushed Rock Past Sales

3.23 Sales of Crushed Rock from quarries in Oxfordshire for the period 2015– 2024 are shown in Table 3.3. These figures are taken from the Aggregates Monitoring Survey by SEEAWP and the BGS Survey.

2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	**10-year average**	**3-year average**
0.914	0.715	0.867	0.751	0.843	1.087	1.254	1.146	1.002	**0.981**	**0.956**	**1.043**

Table 3.3: Sales of Sharp Crushed Rock 2015- 2024 (million tonnes) (Sources: SEEAWP Aggregates Monitoring Surveys)

3.24 The sales for 2024 decreased by 2% compared with 2023, a decrease for the third consecutive year.

3.25 The Minerals Products Association[5] records that across the UK crushed rock sales fell by 0.4% in 2024.

3.26 It is believed HS2 was still demanding mineral in 2024. There was an application for 2.7 million tonnes of material at Finmere submitted in 2020 which was specifically for HS2, with the work programme anticipated from the end of 2022 to 2025, however this was withdrawn. Construction of HS2 continues though, the materials for which could be being drawn from our Crushed Rock quarries, impacting on our sales.

3.27 There are a number of sites coming towards the end of their permission, additionally there are a number of outstanding planning applications to be determined for the working of crushed rock.

3.28 In 2024 there was a less than 1% decrease on the previous 10-year average period. The three-year average decreased by 8% on the previous 3-year period.

3.29 Linear trend analysis of Crushed Rock sales (Figure 3.3) over the period 2015 to 2024 reveals an average rate of increase of 0.0349mtpa for Oxfordshire with (5 periods of decline).

[4] MPA Quarterly Sales Volumes Survey
[5] MPA Quarterly Sales Volumes Survey

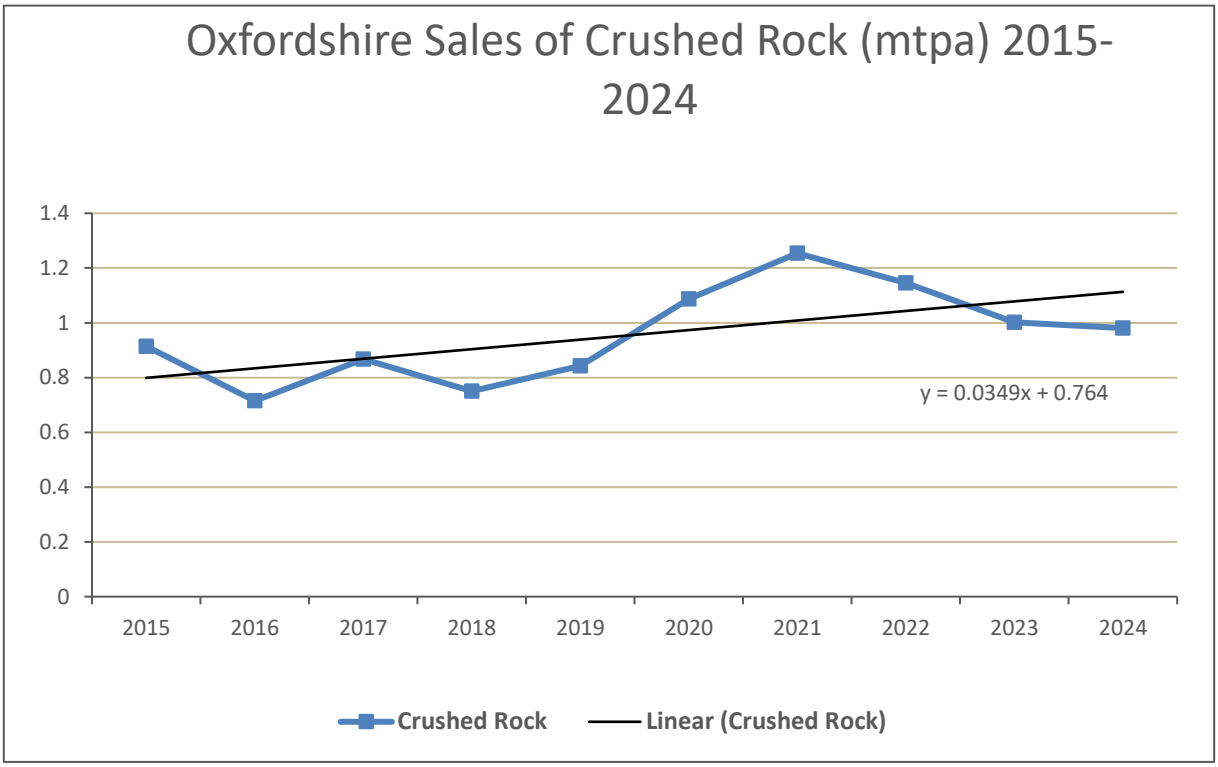

Figure 3.3 Linear trend analysis – Crushed Rock sales

Secondary and Recycled Aggregate

3.30 Whilst reasonable data on recycling capacity is available for Oxfordshire through Decision Notices and Planning Statements, robust data on arisings and sales of construction, demolition and excavation waste (CD&E) is difficult to obtain and a standard methodology has not been adopted nationally.

3.31 Past aggregates monitoring surveys, for example, have not produced a full response from secondary and recycled aggregates site operators and returns are getting less each year as Operators also have to supply the information to the Environment Agency. The 2024 survey had a 7% response rate. This is a recognised issue across Minerals and Waste Planning Authorities.

3.32 In 2021, due to poor returns the approach was taken to use survey returns where these were received, and where not, then a 50% average of material received into a CDE recycling site was taken from the WDI received figures for that site, as this was the recommended approach by our regional group SEWPAG at this time.

3.33 In 2022, the National Waste Technical Advisory Board and Aggregate Working Party Chairs produced a Guidance note[6]. This details the various options

[6] Recycled Aggregates Data: Guidance on Assessing Levels of Recycled Aggregates April 2022

available for the collation of data to estimate arisings and sales of Recycled Aggregate.

3.34 Therefore, in light of the publication of this guidance and the continued reduction in operator responses, a methodology has been applied. This methodology uses the WDI for “Waste received” data into CDE sites (using CDE waste codes as set in the guidance) for recycling, recovery and transfer. Material used in landfill and on/in land is not considered.

3.35 Then using the WDI for “Waste removed”, (with the same CDE codes) any waste removed from the sites that received waste is identified and removed from the “waste received” data for each site.

3.36 This provides an estimate of material that was received into Oxfordshire sites, which was not removed as waste. Therefore, considered material that potentially could be sold.

3.37 It is recognised that there may be a number of limitations with this methodology such as an element of overestimating/double counting associated with the use of data from the WDI, where waste is handled at more than one facility. In addition, waste recorded as being received by mobile plant in the WDI has been excluded because this data is not available for most years and also as mobile plant are only listed in the WDI based on the registered address of the company, which is not necessarily where the mobile plant is actually used.

3.38 However, due to the consistent poor Recycled and Secondary Aggregate Returns, a lack of national methodology and any further detailed evidence, this approach will provide a consistent approach to be able to collate, review and monitor estimated potential recycled aggregate for sale from sites within Oxfordshire over a period. Within this LAA this methodology has also been applied retrospectively to previous years (Table 3.4 below) to be able to view these estimates over time. This will be explored in further detail when we prepare a New Minerals and Waste Local Plan.

3.39 As the WDI for 2024 had not been released at the time this report was written, this LAA is unable to calculate the Recycled Aggregate for 2024. This will be reported in future LAAs.

3.40 For Secondary Aggregate sites, an estimate is made using averages from previous returns and any other information we may have available.

3.41 Using the Recycled Aggregate methodology with the secondary estimate for 2023 the Recycled and Secondary Aggregate figure for sales is estimated to be 0.447mt.

3.42 It is likely that these estimated 2023 figures are significantly less than the total actual production.

2015	2016	2017	2018	2019	2020	2021	2022	2023	9-year average	3-year average
0.389	0.439	0.283	0.316	0.435	0.444	0.516	0.443	**0.447**	**0.413**	**0.470**

Table 3.4: Sales of Secondary and Recycled Aggregate 2015-2023 (Sources: SEEAWP Aggregates Monitoring Surveys)

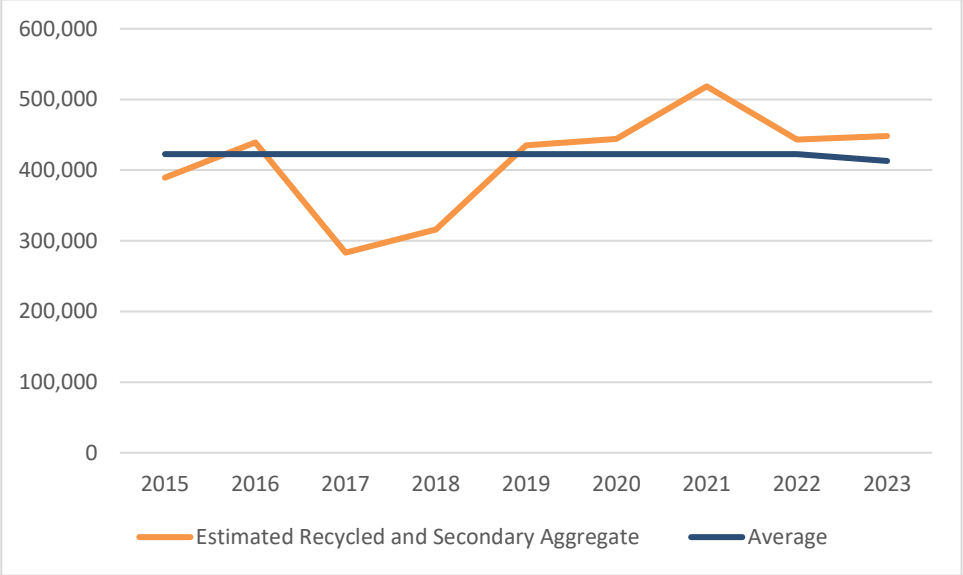

Figure 3.4 Recycled and Secondary Aggregate Sales against 9-year average of 0.413

3.43 Due to the correction of a historic administrative error relating to 2017, the 9 year and 3-year average figures have been adjusted to take this into account. Estimated sales have been moderately consistent since 2019, with a larger increase in 2021.

3.44 Within the Mineral Products Association report *"Construction Aggregates Supply in Great Britain: Primary, Recycled and Secondary Aggregates"* [7] it is reported in 2023, total recycled and secondary aggregates are estimated to have accounted for 31% of total aggregates supply in Great Britain.

3.45 If this percentage was rolled over to Oxfordshire's total Aggregate sales for 2024, it could be estimated that 0.635million tonnes of recycled and secondary aggregate were sold in 2024.

Imports of Secondary Aggregates

3.46 No known secondary aggregates are currently transported into Oxfordshire. This is largely due to the costs of transporting the material and because the

[7] Resource Use

exemptions from the aggregates levy, which gave secondary aggregates a cost advantage over primary aggregates were withdrawn in April 2014.

Rail Depots

3.47 There are three railhead depots in Oxfordshire used for importing aggregates, namely at Banbury, Kidlington and Sutton Courtenay, and these are safeguarded in the Oxfordshire Minerals and Waste Local Plan: Part 1 Core Strategy. These depots import Crushed Rock aggregates from the South-West (Somerset) and the East Midlands (Leicestershire). There is planning permission for a further railhead aggregate depot at Shipton on Cherwell, but this has not yet been developed. There is also a depot at Hinksey Sidings, Oxford but this is used solely by the rail industry to bring in rail ballast for internal use on the rail network; it is currently operational.

3.48 Figures for imports of Crushed Rock by rail collected by Oxfordshire County Council are only available from 2007 onwards. Prior to that year, only the regional totals were available.

3.49 In addition, Oxfordshire figures are confidential because they are derived from returns for only two companies.

3.50 However, due to a number of planning decisions in 2021, Oxfordshire's rail depot capacity increased to over at least 3.5million tonnes.

3.51 It is known that the increased capacity at Hennef Way Banbury is temporary for 5 years, to October 2026, to provide material for HS2, and Appleford Sidings has added two more rail sidings. Appleford site now has a condition limiting it to 1.5million tonnes per annum.

3.52 Due to the latest aggregate returns and the demand for additional capacity it can be considered that imports and sales remain significant through Rail Depots in Oxfordshire.

Consumption

3.53 In 2023 the British Geological Survey (BGS) undertook the Aggregates Survey alongside Oxfordshire County Council, and this survey included asking operators for imports and exports of minerals between Mineral Planning Authorities, alongside asking for reserve and sales data.

3.54 The survey results set out how much mineral Oxfordshire imports and how much is exported[8] and how much Oxfordshire Land Won Aggregate Oxfordshire consumed in 2023. Sharp Sand and Gravel and Soft Sand are combined within the BGS Survey.

[8] Aggregate minerals survey for Great Britain, 2023 - GOV.UK

3.55 The full summary is shown in Appendix 2. The consumption figures have been summarised in Table 3.6. This also includes the information for the comparative years of 2014 and 2019. Figures for 2009 are available in Appendix 2.

	Sand and Gravel 2014	Crushed Rock 2014	All Oxfordshire Aggregate 2014	Sand and Gravel 2019	Crushed Rock 2019	All Oxfordshire Aggregate 2019	Sand and Gravel 2023	Crushed Rock 2023	All Oxfordshire Aggregate 2023
Total Consumed within Oxfordshire (Mt)	0.765	1.501	2.266	0.900	0.617	1.517	**0.677**	**3.218**	**3.895**

Table 3.6: Mineral consumed within Oxfordshire 2014, 2019 and 2023 (BGS Surveys)

3.56 The table shows that in 2023, Oxfordshire consumed 0.677mt of sand and gravel, a decrease of 25% from 2019.

3.57 For crushed rock, Oxfordshire consumed 3.218mt in 2023. This is an increase of 422% from 2019.

3.58 It should be noted that for some minerals within the survey it is not clear where they were consumed. These minerals are identified as sold within the Southeast or Unallocated. The consumption rates within Oxfordshire do not include any of the quantities from these two categories, so there is potential for these figures to be higher.

3.59 For more information on Imports and Exports see Chapter 6 and Appendix 2 of this report.

4.Factors affecting demand

4.1 The NPPF requires that the level of future provision within the LAA should be based, in part, on the rolling average of 10 years' sales figures, and that "other relevant local information" to be taken into account (NPPF 2024, paragraph 226a).

4.2 We need to consider whether or not the historical 10-year average for land-won primary aggregate production can be relied upon as a guide to future levels of provision, or whether this needs to be changed in order to reflect other factors which may influence either the supply (availability) and/or the demand for aggregates produced within Oxfordshire, in future years.

The Economy and Growth

4.3 In considering economic growth on the supply and demand of aggregates, several national forecasts have been considered. To consider economic forecasts this section considers Gross Domestic Product (GDP) along with construction rates.

4.4 The Gross Domestic Product (GDP) is only available at UK level, but it does provide a background indicator as to the relative changes in economic activity likely to be experienced in Oxfordshire over time. Table 4.1 below shows the annual GDP year on year growth for the UK as a whole for the 10-year baseline period[9]. The GDP growth rate has varied significantly over the period 2015 to 2024, but 2024 shows a modest increase from 2023.

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2.2%	1.9%	2.7%	1.4%	1.6%	-10.3%	8.6%	4.8%	0.4%	1.1%

Table 4.1: Changes in UK Real GDP over the baseline period (Office for National Statistics)

4.5 The growth forecasts are set out in Table 4.2 below, from the Office for Budget Responsibility as of March 2025[10]. It forecasts growth accelerating to 1.9% in 2026 and then averaging at 1.8% across the rest of the forecast. The 2023-2029 average remains at 1.8%, the same average for the period 2022-2028.

[9] Gross Domestic Product: Year on Year growth: CVM SA % - Office for National Statistics (ons.gov.uk)
[10] Economic and fiscal outlook – March 2025 - Office for Budget Responsibility

	2023	2024	2025	2026	2027	2028	2029	2030 – 2032	2023-2028 average
UK	0.4%	0.9%	1.0%	1.9%	1.8%	1.7%	1.8%	*Not yet forecast*	**1.8%**

Table 4.2: Real GDP Growth Forecasts

4.6 There are also more recent assumptions for GDP Growth[11] which are taken from a range of independent predictions. A comparison of 14 forecasts for 2025 shows 1.1% growth and 1% for 2026, compared to the prediction of 1% for 2025 and 1.9% for 2026 set out in the table above.

4.7 In addition, inflation could be considered, as this impacts on costs for raw materials, energy and labour, including the minerals sector. The UK inflation rate, as measured by the Consumer Prices Index, rose almost continuously from under 1% in early 2021 to 9.2% in November 2022. The inflation rate then declined, dropping to 4.2% in November 2023. The inflation rate has been relatively stable since then, and in July 2025 was 4.2%[12] (the most recent figure available at the time of writing).

4.8 The Construction Products Association forecasts[13] that construction output is due to rise by 1.9% in 2025 and 3.7% in 2026, likely in part in response to the Government's commitment to growth. This growth is anticipated to be driven by the three largest sectors of construction: private housing new build, private housing repair and maintenance, and improvement and infrastructure.

4.9 According to the Mineral Products Association Regional overview of construction and mineral products markets in Great Britain report[14], private housing, which is a key driver of mineral products demand, saw an 11.9% drop in new housing output in 2023, with a further anticipated 2.9% decline in construction output in 2024.

4.10 This is supported by the findings of the Office for Budget Responsibility, who forecast net additions of new homes in 2025-2026 to be 192,000 compared to 265,000 for 2023-2024. This is driven by the lagged impact of the fall in private housing construction, the fall itself a result of higher interest rates and higher costs of building homes[15].

4.11 However, both the Mineral Products Association and the Office for Budget for Responsibility anticipate recovery from 2025 driven by housing recovery and growth in infrastructure, with net forecast additions reaching 238,000 in 2029-30.

[11] Forecasts for the UK economy: July 2025 - GOV.UK
[12] CPIH ANNUAL RATE 00: ALL ITEMS 2015=100 - Office for National Statistics (ons.gov.uk)
[13] Construction Industry Forecasts - Summer 2025
[14] MPA_Regional_overview_of_construction_and_mineral_products_markets_in_GB_2024.pdf
[15] Economic and fiscal outlook – March 2025 - Office for Budget Responsibility

4.12 The same report also states that the construction outlook in the South-East will rise around 2.7% per annum in 2024-2028, due to private housing growth, but this includes large developments in Kent at Otterpool Park and Wycombe Film Studios. The report does not go down to Authority level.

4.13 It would be beneficial if consideration could be given to any indicators of more local economic growth. Oxfordshire does have a growth agenda, as set out in the 2023 Oxfordshire Strategic Economic Plan[16] and in the Oxfordshire Growth Board's Oxfordshire Infrastructure Strategy (OXIS)[17] but forecasting economic growth at the regional level is challenging and there is limited quantitative data.

Economic Forecast Conclusion

4.14 Although some uncertainty remains regarding the economy, it is anticipated that there will be recovery and growth, particularly in light of the Government's growth agenda.

4.15 It is possible that future levels of economic growth could be less than anticipated, or there are unforeseen events that could result in reduced demand for construction aggregate in the future. This will be kept under close review in future LAA's.

Major Infrastructure Projects/Key Development

4.16 Major infrastructure projects, including those at the national scale, and key developments throughout Oxfordshire, should be considered alongside housing and associated infrastructure development in terms of their likely influence on the future demand for construction aggregates.

4.17 Oxfordshire's Local Industrial Strategy[18] 2020 highlights that the infrastructure projects within Oxfordshire that are critical to the Investment Plan total £1,117.5million.

4.18 Across Oxfordshire developments, including infrastructure, includes:

- Allocated sites for development in the current District Local Plans.
- Housing Infrastructure Funded projects – HIF1 in Didcot and HIF2 on the A40.
- HS2
- Various highways improvements throughout Oxfordshire, including works to A34 and A40
- Proposed Nationally Significant Infrastructure Projects (NSIPs), including East West Rail, SESRO and OxSRFI

[16] Strategic Economic Plan | Enterprise Oxfordshire
[17] Local Growth Fund Projects | OxLEP (oxfordshirelep.com)
[18] The Oxfordshire Investment Plan - August 2020.pdf (oxfordshirelep.com)

- Oxfordshire Housing and Growth Deal[19]: Provides £60m for affordable housing and £150m for infrastructure improvements, including road and rail. Supports the ambition of building 100,000 new homes across Oxfordshire between 2011 and 2031 to address the county's severe housing shortage and expected economic growth.
- OxRail 2040 – including proposed new and improved railway stations and passenger services on the Cowley Branch Line.
- Oxfordshire Knowledge Spine, which includes Science Vale, Oxford and Bicester
- Science Vale area - the largest concentration of research and development in Europe with 20,000 new jobs and around 20,000 new homes.
- Oxford Cambridge Arc
- Proposed Puy Du Fou Development
- Upper Heyford New Town nomination
- Oxford United Football Club Stadium

4.19 It is difficult to assess the overall impact of this infrastructure and major development proposals in terms of their demand for construction aggregates. Some projects that were previously mentioned such as the Harwell Satellite Test Centre have now been built, whilst others such as HS2, East West Rail and growth within Bicester and the south of the county are currently underway, with a few yet to commence or to be approved.

4.20 In 2024, the Labour Government were elected and have made a commitment to deliver 1.5 million homes over this parliament. It has also been announced that the largest number of major infrastructure projects have been 'green-lit' in the first year of a Parliament including an expansion of Gatwick Airport[20]. This could have a significant impact on demand for aggregate over the next few years.

Major Infrastructure Projects/Key Development Conclusion

4.21 Whilst it is difficult to quantify, evidence suggests that planned infrastructure and major development both within and outside the county will continue. Demand on minerals is therefore expected to be maintained, if not increased, whilst these progress.

Population and Housing Growth

4.22 In considering the future projections we also need to consider population growth and local authority housing forecasts.

4.23 Adopted District Local Plans in Oxfordshire indicate the major sites for new homes

[19] Oxfordshire housing deal - GOV.UK
[20] Record number of major infrastructure projects green-lit - GOV.UK

- Cherwell – concentrated around Bicester, Banbury and the former RAF site at Upper Heyford, plus growth around Begbroke, Kidlington and Yarnton to meet Oxford's unmet need.
- Oxford City – concentrated at Barton Park, Northern Gateway and Oxpens.
- South Oxfordshire – concentrated around Chalgrove Airfield and the Didcot Garden Town in conjunction with Vale of White Horse, with further strategic land at the edge of Oxford
- Vale of White Horse – concentrated around the Didcot Garden Town, Wantage and Abingdon (the Science Vale)[21]
- West Oxfordshire - concentrated at Salt Cross Garden Village Eynsham, Witney and Chipping Norton.

4.24 Population figures are published by the Office of National Statistics[22](ONS). There has been a steady population increase between 2011 and 2024.

4.25 In the 2021 Census, the population of England and Wales grew by more than 3.5 million (6.3%) since 2011[23].

4.26 Unlike aggregate sales there was not a dip in population at the start of the baseline period, at least not at a county level, or on the scale associated with year-on-year variations. It is hard to draw a correlation between population figures and aggregate demand.

4.27 Over the 10-year period to 2024 there was an overall growth in the population of Oxfordshire of 80,647 people (an average of 1.25% per year).

4.28 Looking to the future, Oxfordshire County Council population forecasts predict a total population in Oxfordshire of 814,749 by 2032. Whereas the ONS have population forecast of 816,697 by 2032 (Appendix 4).

4.29 Whilst there is no statistical justification for assuming that rates of population growth will correlate with changes in demand for aggregates, they do at least provide a mechanism for looking further ahead than the current economic forecasts. They suggest that there will be continued pressure for new housing and associated infrastructure development which is likely to be reflected in an increase in the demand for construction aggregates.

4.30 This can be examined further by considering data on rates of house completion (Appendix 4).

4.31 Using the District Authority Monitoring Reports for housing completions, for the 10-year baseline period (2014/15-2023/24) the average housing completion rate in Oxfordshire was 4,665 homes, with 4,001 completions in the monitoring period 2023/24[24]. This is a notable drop (27%) from 5,492 from the

[21] http://www.sciencevale.com/
[22] www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/
[23] Population and household estimates, England and Wales - Office for National Statistics (ons.gov.uk)
[24] District Authority Monitoring Reports.

previous monitoring year 2022/23 and is consistent with the national trend of decreasing housing completions as discussed above.

4.32 However, if we took the last 3 years average from the same data, as a baseline period (2023/24-2021/22), the average housing completion rate in Oxfordshire is 4,816, a 5% decrease on the previous 3-year baseline of 5,064 homes (2020/21-2022/22).

4.33 Looking forward, the District Authority projections for housing growth for 2024 onwards can be seen in Appendix 4. For the period 2024/25-2032/33 it is projected that 40,060 houses will be built.

4.34 In the LAA for 2023, it was projected that 33,761 homes would be built between 2023/24 and 2030/31, the figures for 2024/25/2032/33 shows a 19% increase over an eight-year period. This in part could be accounted for by some of the planned developments commencing from 2031.

4.35 In 2024, the Labour Government were elected and have made a commitment to deliver 1.5 million homes over this parliament. In December 2024 the housing need assessment methodology was updated, and other Planning Reforms were introduced, with more expected by the end of the year. This is likely to impact future housing projections and completions over the next few years and will need to be monitored in future LAA's.

Population and Housing Growth Conclusion

4.36 It is clear that we need to continue to consider the implications of population and housing growth on the minerals provision over the plan period.

Conclusion

4.37 The evidence available suggests that Economic Growth, Major Infrastructure Projects/Key Development and Population Growth and Housing within Oxfordshire will continue into the foreseeable future. The impact of government policies, planning reforms, and commitment to housing growth will continue to be explored in future LAA's.

5. Aggregate Provision Rates

5.1 The NPPF[25] states that Minerals Planning Authorities should plan for a steady and adequate supply of aggregates. One of the ways to do this is to prepare an annual Local Aggregate Assessment to forecast future demand, based upon a rolling average of 10 years sales data and any other relevant local information. To forecast and ensure that supply continues to meet demand, the Aggregates Provision Rate (APR) for each aggregate is set within the annual Local Aggregate Assessment.

Sharp Sand and Gravel Aggregate Provision Rate

5.2 For Sharp Sand and Gravel, the Core Strategy included a provision figure of 1.015mtpa, which was set in the LAA 2014 on the basis of the 10-year sales average at that time.

5.3 This figure was updated in the LAA2022 to 0.986mtpa and maintained in 2023 to reflect the level of demand and following review of other evidence to ensure a steady and adequate supply.

5.4 Sales in 2024 of sharp sand and gravel have increased 7% in 2024 compared with 2023 (from 0.877mtpa to 0.934mtpa), with continued demand anticipated from the construction industry from 2025.

5.5 The 10-year sales average increased 4% (from 0.839mtpa to 0.869mtpa), but the 3-year sales average (0.929mtpa) decreased by 7% compared to the previous 3-year sales average of 1.002mtpa. The current 3-year sales average is 7% higher than the 10-year average. Sales in 2024 are still the 4th highest in the last 10 years.

5.6 Our 10-year rolling average for sales data is 0.869mtpa, however as set out within Section 3 Demand, the 10-year baseline period for sand and gravel includes the impact of economic recession at the start of the period and the effects of the Covid pandemic.

5.7 Figure 5.1 shows actual Sharp Sand and Gravel sales compared with the 10 year and 3-year average sales (mtpa), the Aggregates Provision Rate and the Core Strategy Provision rate over the last 10 years.

[25] National Planning Policy Framework (publishing.service.gov.uk)

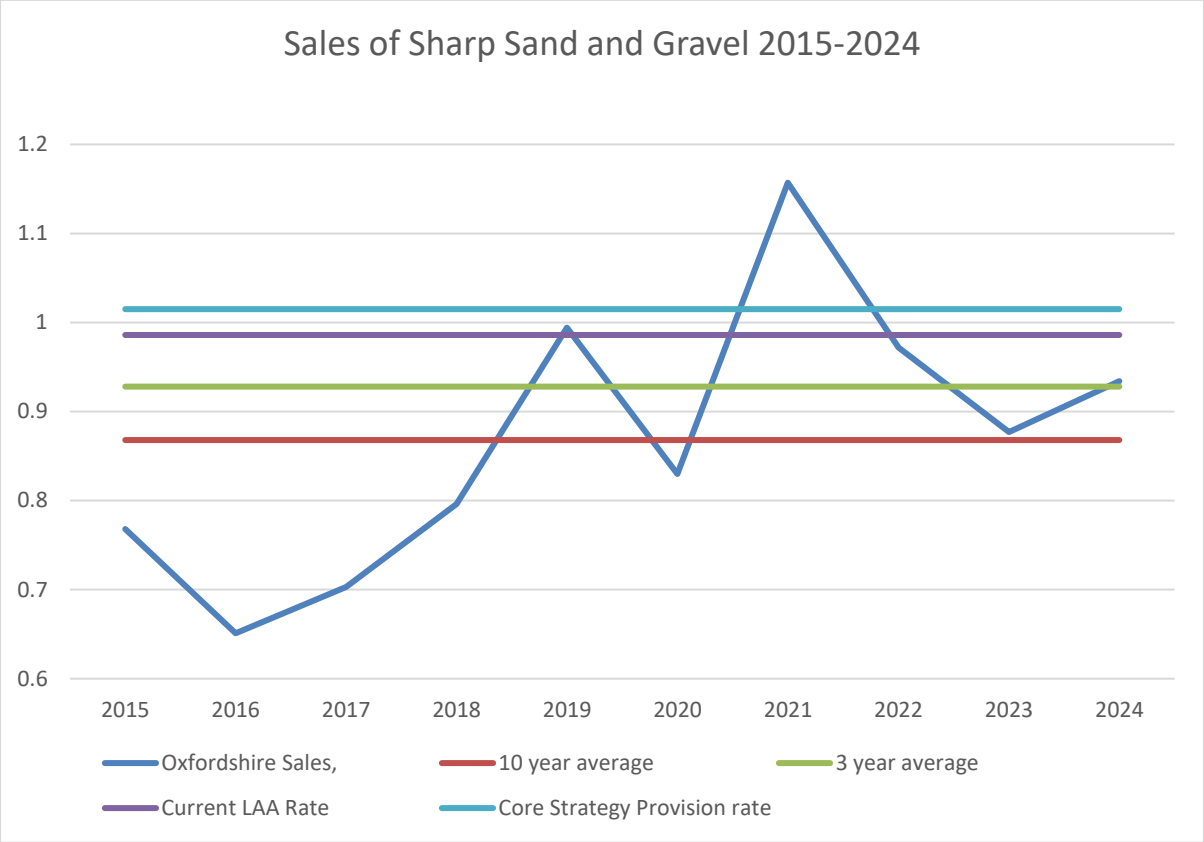

Figure 5.1 Comparison of actual sharp sand and gravel sales compared with the average sales and the current LAA Aggregates Provision Rate (APR) and Core Strategy Provision levels (mtpa).

5.8 Taking into account sales and Oxfordshire's consumption and exports alongside all the evidence, at this time there is no justification for a change in the Aggregates Provision Rate for Sharp Sand and Gravel, and it will remain at the current level of 0.986mtpa.

Soft Sand

5.9 For soft sand, the Core Strategy included a provision figure of 0.189mtpa, which was set in the LAA 2014 on the basis of the 10-year sales average at that time.

5.10 This figure was updated in the LAA2019 to 0.243mtpa to reflect the consistently higher level of demand and following review of other evidence.

5.11 This figure was reduced in the LAA2023 to 0.235mtpa.

5.12 Sales in 2024 decreased significantly from 0.203mt in 2023 to 0.132mt, a 35% decrease and the lowest in the last 10 years. The 3-year sales average (0.188mtpa) saw a 19% decrease compared with the previous 3-year sales

average (0.232mtpa) and a 4% decrease in the 10-year sales average (from 0.235mtpa to 0.226mtpa).

5.13 The current 10-year average is 4% lower than the current APR of 0.235, a3-year 3-year average is 20% lower.

5.14 This reduction in sales is consistent across a number of operators within Oxfordshire in 2024 and this could be due a number of reasons, including less demand, or the geology of the site areas excavated during the year. Soft Sand is often located with other primary aggregate reserves such as Crushed Rock, and if the alternative aggregate has been available and extracted from this site over 2024, this may have caused an impact on our Soft Sand sales for this year. Further, there are a number of sites coming to the end of their permission (See Section 7). This will be closely monitored in future Local Aggregate Assessments. However, this significant drop in sales will be closely monitored in future Local Aggregate Assessments.

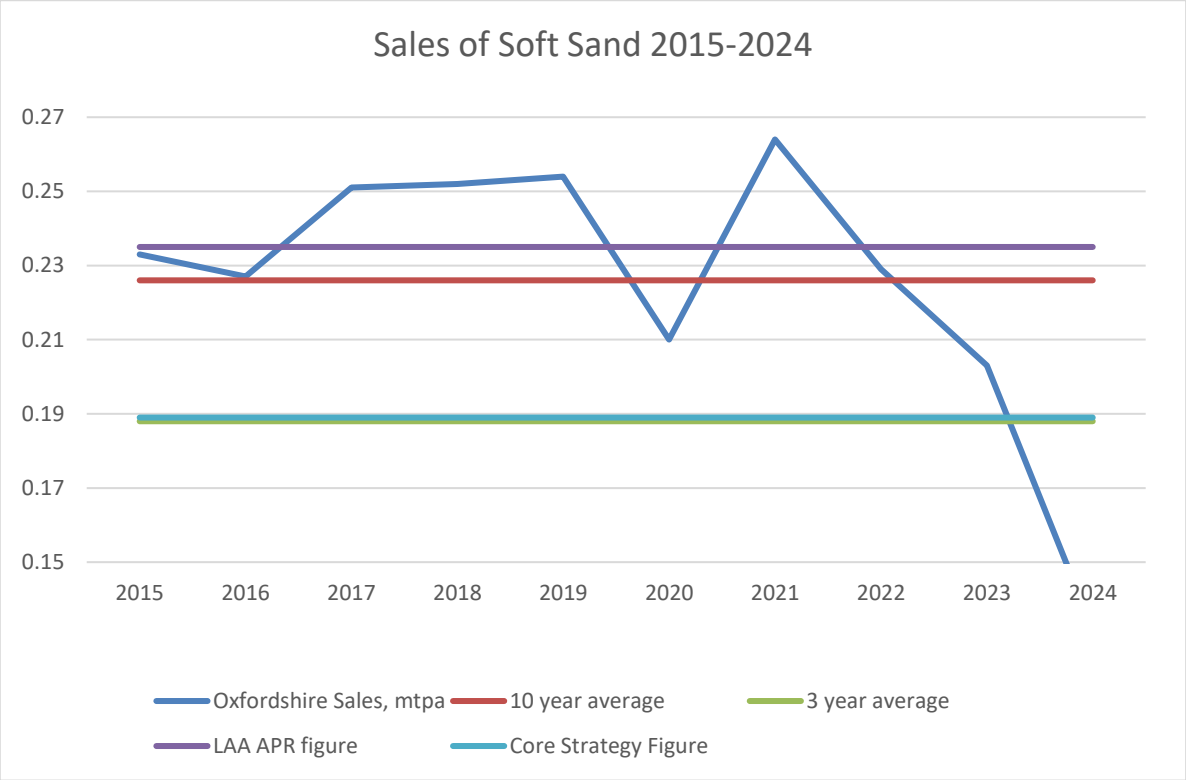

Figure 5.2 Comparison of actual Soft Sand sales compared with the average sales and the current LAA APR and Core Strategy Provision levels (mtpa).

5.15 2024 was an unusual year for Soft Sand sales within Oxfordshire, with the lowest sales in the last 10 years, therefore in light of all the other factors considered, such as economic growth, and housing projections alongside Oxfordshire's imports and exports, and all other evidence, it is considered that at this time, to maintain the current Aggregates Provision Rate of 0.235mtpa to enable us to ensure a steady and adequate supply of soft sand. However, sales of soft sand will be closely monitored, and the Aggregate Provision Rate will continue to be assessed in future LAAs.

Crushed Rock

5.16 For crushed rock, the Core Strategy provision level figure of 0.584mtpa was set in the LAA 2014 on the basis of an upward adjustment of the 10-year sales average at that time.

5.17 This figure was updated in the LAA2019 to 0.778mtpa, in the LAA for 2021 to 0.824mtpa, in the LAA for 2022 to 0.914mtpa and again in the LAA 2023 to 0.964. These reflected the consistently higher level of demand and the review of other evidence.

5.18 Sales in 2024 saw a 2% decrease from 1.002mt to 0.981mt, with sales dropping below 1 million tonnes a year for the first time since 2019.

5.19 The 3-year sales average (1.043mtpa) was 8% lower than the previous 3-year sales average (1.134mtpa) and the 10-year average decreasing 1% from 0.964mtpa to 0.956mtpa. The 3-year sales average is 8% higher than the current LAA 2023 APR of 0.964mtpa, and the 10-year average just below (0.956mtpa).

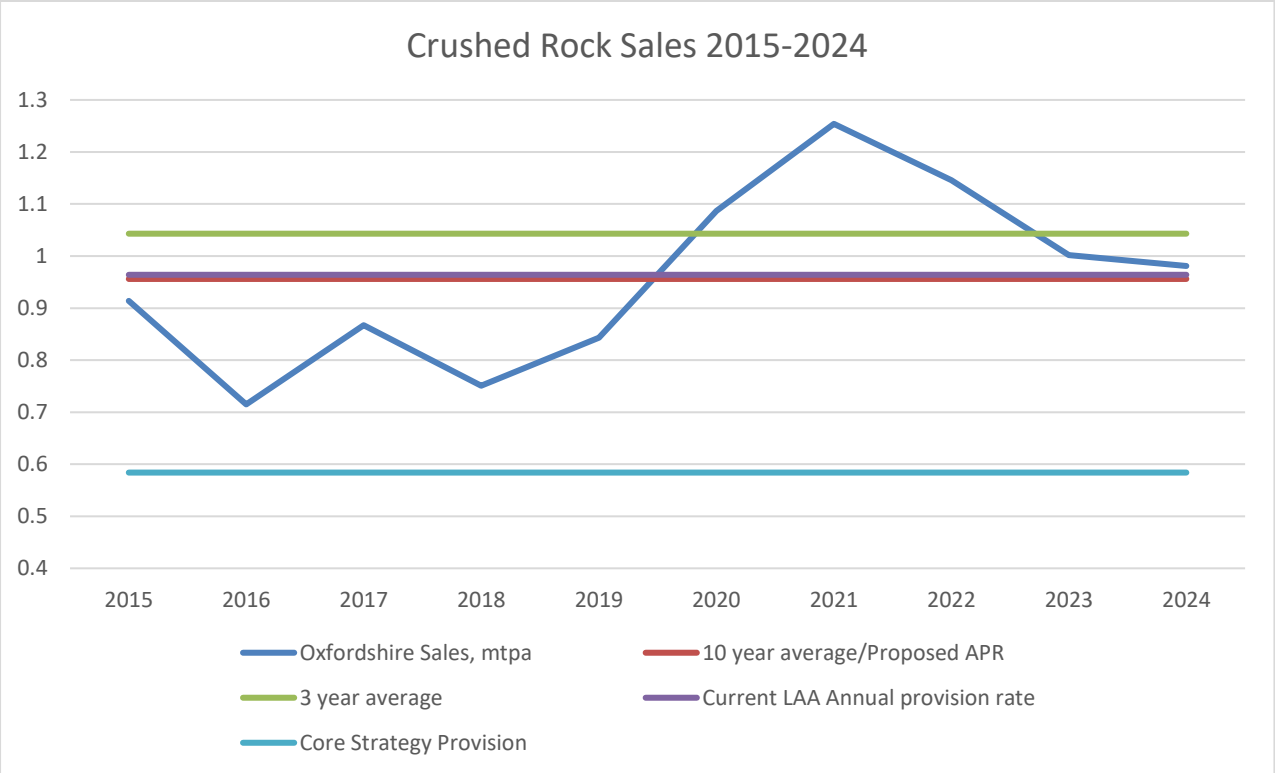

Figure 5.3 Comparison of actual Crushed Rock sales compared with the Aggregates Provision Rate/10-year average, 3-year average and Core Strategy Provision levels (mtpa).

5.20 Available evidence, especially in terms of large infrastructure project demand, indicates that demand for crushed rock is likely to continue.

5.21 Therefore, alongside this evidence, taking into account sales, Oxfordshire's consumption, imports and exports, and national infrastructure projects, it is considered that at this time, there is no justification for a change in the Aggregates Provision Rate and it will remain at 0.964mtpa to enable us to provide a steady and adequate supply of crushed rock.

Recycled and Secondary Aggregate & Rail Depots

5.22 In addition to setting provision level figures for local land-won aggregates, the LAA should also include provision levels for other relevant sources of aggregates supply to ensure that future demands are met. In the case of Oxfordshire these are recycled and secondary aggregates and aggregate rail depots.

5.23 In the case of recycled and secondary aggregates, the appropriate figure to maintain in this LAA is the provision rate set in the Oxfordshire Minerals & Waste Local Plan: Part 1 – Core Strategy (2017) policy M3. This is 0.926mtpa.

5.24 In the case of aggregate rail depots, due to confidentiality, we are unable to provide a LAA provision figure at this stage.

Conclusion for LAA Aggregate Provision Rates

Sharp Sand and Gravel	**0.986mtpa**	**Unchanged from 2023**
Soft Sand	**0.235mtpa**	**Unchanged from 2023**
Crushed Rock	**0.964mtpa**	**Unchanged from 2023**
Recycled and Secondary Aggregate	**0.926mtpa**	**Unchanged from 2023**

Table 5.1 – APR Rate for LAA for 2024

6.Supply

Oxfordshire Supply

6.1 Oxfordshire is rich in mineral resources. Those which are used for primary aggregate production comprises extensive alluvial sand and gravel resources along the River Thames and its tributaries; smaller deposits of glacio-fluvial sand and gravels in the northeast of the county; deposits of Soft Sand mainly in the southwest; and extensive areas of limestone in the north west and of ironstone in the north.

6.2 Oxfordshire also produces some secondary aggregates and a wide range of recycled aggregate materials. Further detailed information of the geological resources of Oxfordshire can be found in the LAA2014[26] (LUC and Cuesta Consulting Limited).

Recycled and Secondary Aggregate

6.3 As discussed within the Demand section of this LAA, estimations of recycled and secondary aggregate have been made.

6.4 As the WDI for 2024 had not been released at the time of writing, this LAA is unable to calculate the Recycled and Secondary Aggregate figures for 2024, and latest figures are based upon 2023.

6.5 Using the Recycled Aggregate methodology with the secondary estimate for 2023, the Recycled and Secondary Aggregate figure for sales is estimated to be 0.447mt.

6.6 It is likely that these estimated 2023 sales figures are significantly less than the total actual production. Similarly, the actual capacity figures are likely to be significantly higher than the reported figures.

6.7 Table 6.1 below presents a fuller picture, showing the estimated[27] capacity for the production of recycled and secondary aggregates at each site at the end of 2024, sub-divided between operational and non-operational sites.

6.8 Of a total capacity of approximately 1.523mtpa, 1.458mtpa is at operational facilities and 0.035mtpa is currently non-operational. Of the operational capacity, that which is at sites with planning permission to the end of the plan period (2031) or beyond is 1.075mtpa, whereas the capacity of sites with permissions that expire before the end of 2031 is 0.382mtpa.

Facility Name	Operator	Planning Life	Production Capacity (tpa)

[26] https://www.oxfordshire.gov.uk/residents/environment-and-planning/planning/planning-policy/minerals-and-waste-policy/minerals-and-waste-documents#paragraph-10820
[27] Taken from Survey responses, Planning Decisions and Planning Application Statements.

Operational Recycled Aggregate Production Facilities with Permanent consent or Time Limited Consent to end of Plan Period (2031)			
Drayton	Oxfordshire Highways	Permanent	75000
Ferris Hill Farm	Banbury Plant and Skip Hire (incorporating NL Matthews)	Permanent	24999
Grove Industrial Park	Aasvogel	Permanent	40000
Hundridge Farm	G.D. Parker Instant Skip Hire	Permanent	5000
Lakeside Industrial Park	Micks Skips and Recycling Ltd.	Permanent	2000
New Barn Farm	Grundon	2037	10000
New Wintles Farm	O Malley Haulage	Permanent	170000
Newlands Farm	Smiths of Bloxham	Permanent	32000
Playhatch Quarry	Grabloader Ltd.	Permanent	70000
Rear of Cemex Batching Plant (Hardwick)	Fergal Contracting	Permanent	20000
Rumbolds Pit	Richard Hazel (Hazel & Jefferies)	Permanent	20000
Sandfields Farm	K J Millard Ltd.	Permanent	12000
Shipton Hill	Hickman Bros	Permanent	12600
Stonepitt Barn	SCB Oxford Ltd	Permanent	75000
Worton Farm (Cresswell Field)	M&M Skip Hire	Permanent	60000
Swannybrook	NAP Grabhire	Permanent	75000
Chilton Waste Transfer Site/Prospect Farm	Collard Environmental	2032	75000
Gill Mill	Smith and Sons (Bletchington) Ltd.	2044	150000
Ewelme No. 2	Grundon Waste Management	2032	12000
Shellingford Quarry	Earthline Ltd.	2044	60000
Total Operational Production Capacity at Recycled Aggregate Production Facilities available through the Plan Period.			**1,000,599**

Operational Recycled Aggregate Facilities with Time-Limited Consent ending before end of Plan Period (2031)			
Dix Pit Complex	Sheehan's	2028	175000
Shipton Quarry	Earthline Ltd.	2025	75000
Dix Pit	D&M Plant Hire	2028	20000
Total Operation Production Capacity at Recycled Aggregate Facilities with Time limited consent ending before end of Plan Period (2031)			**270,000**

Facility Name	Operator	Planning Life	Production Capacity (tpa)

Operational Secondary Aggregate Facilities with Permanent or Time-Limited Consent to end of Plan Period (2031)			
Ardley ERF (IBAA) Facility	Raymond Brown Minerals and Recycling	2049	75000
Operational Secondary Aggregate Facilities with Time Limited Consent ending before end of Plan Period (2031)			
Sutton Courtenay Block Recycling	Hanson (reject building blocks & Concrete used in block making)	2030	62500
Sutton Courtenay Asphalt Recycling Plant	Heidelberg	2030	50000
Total Operational Secondary Aggregate Capacity			**187,500**

Overall Total Operational Capacity at 'Permanent' Facilities (facilities available throughout the Plan Period)	**1,075,599**
Overall Total Operational Capacity at Time Limited Facilities (facilities with consent ending before end of 2031)	**382,500**
Overall Total Operational Capacity	**1,458,099**

Non-Operational Facilities

Facility Name	Operator	Planning Life	Production Capacity (tpa)
Upwood Quarry	Hills Quarry Products Ltd.	2029	15000
NW Corner of TW Depot	Clancy Docwra	Permanent	20000
Total Non-Operational Capacity			**35000**

Operational and Non-Operational Facilities

Total Operational and Non-Operational Capacity 2024 (tpa)	1,493,099

Table 6.1 Recycled and Secondary Aggregates Permissions at end of 2024

Imports and Exports

6.9 Every county in the UK has to import aggregates from elsewhere because the geology means that no single county area produces exactly the profile of different types of aggregate in the exact amounts or proportions consumed therein. As part of the Local Aggregate Assessment, we should consider demand and supply factors from other MPAs.

6.10 All sales of aggregate are the result of commercial decisions by both buyers and sellers, and the resulting movements reflect the relative locations of supply and demand. Where these movements cross a county boundary, they are tracked in the four (or five) yearly national aggregates monitoring surveys (AM Survey), these have been 2005, 2009, 2014, 2019 and most recently 2023. The AM2023 data was published in 2025, and the survey is known as AM2023.

6.11 The figures within this Imports and Exports section of the LAA for 2024 were taken from the AM2023 which shows movement of minerals at a sub-regional and Minerals Planning Authority level. These are set out in detail in Appendix 2.

Sand and Gravel

6.12 AM2023 stated that total sales of primary aggregates produced in Great Britain, including marine dredged sand and gravel, but not imports of aggregates from outside Great Britain, were 164.9 Mt in 2023. Total sales decreased by about 2% between 2019 (168.9 Mt) and 2023 (164.9 Mt).

6.13 In England and Wales, land won Sand and Gravel sales in England decreased by 10% between 2019 and 2023, whilst Crushed Rock sales increased 4% and marine dredged sand and gravel increased by 25% over the same period.

6.14 Total primary aggregate sales within Oxfordshire have decreased by 4% since 2019, however the Southeast as a whole has seen an overall increase of 8%.

6.15 Some neighbouring MPAs have limited resources of their own. These authorities therefore rely on Oxfordshire to supply some of their needs. Other MPAs also supply aggregates into Oxfordshire; Somerset, South Gloucestershire and Derbyshire have provided Crushed Rock in 2023 to supplement the county's own production and to cater for higher specification requirements from harder rock resources.

6.16 The AM2023 sets out the sales of primary aggregates by MPA and principal destination sub region in 2023. These findings are shown in Table 6.2. As the table shows Oxfordshire was responsible for 22% of the Southeast Region's Land Won Sand and Gravel Sales and 42% of the Crushed Rock sales in 2023. This is similar to the 20% for Sand and Gravel in 2019 and remains at 42% for Crushed Rock. Detailed figures are set out in Appendix 2.

However, our Crushed rock exports decreased from 69% in 2019 to 22% in 2024, despite an increase in sales.

(thousand tonnes)

Destination	Land won sand and gravel	MPA%	AWP%	Crushed Rock	MPA	AWP%
Oxfordshire	624	58%		785	78%	
Southeast	315	29%		89	9%	
Elsewhere	141	13%		128	13%	
	1,080	100%	22%	1002	100%	42%

Table 6.2 Sales of primary aggregates and principal sub regions 2023 (Exports)

6.17 The AM2023 also sets out Oxfordshire's imports in 2023. A summary of the import findings is shown in Table 6.3. The table also shows as a percentage, of the Southeast total, Oxfordshire's imports.

(thousand tonnes)

Total Imports	Land won Sand and Gravel	Marine Sand and Gravel	Total Sand and Gravel	Crushed Rock	Total Primary Aggregate
Oxfordshire	50	4	54	2432	2486
Southeast Total	1559 (3%)	2620 (0.15%)	4179 (1%)	9148 (27%)	13326 (19%)

Table 6.3 Imports of primary aggregates and its relationship with the Southeast Imports Total

6.18 In 2023 Oxfordshire was responsible for importing 27% of the Southeast total crushed rock, compared with the 0.6% it imported in 2019, demonstrating a significant increase. Land won Sand and Gravel saw a drop of 3% imported from 6% to 3%, whilst marine won sand and gravel remained similar at under 1%.

6.19 The AM Survey 2023 (Tables 6.2, 6.3 and Appendix 2) show that Oxfordshire remains a net exporter of Land won Sand and Gravel, whilst in 2024 it changed to be a net importer of Crushed Rock, when in 2019 we were a net exporter for primary aggregate.

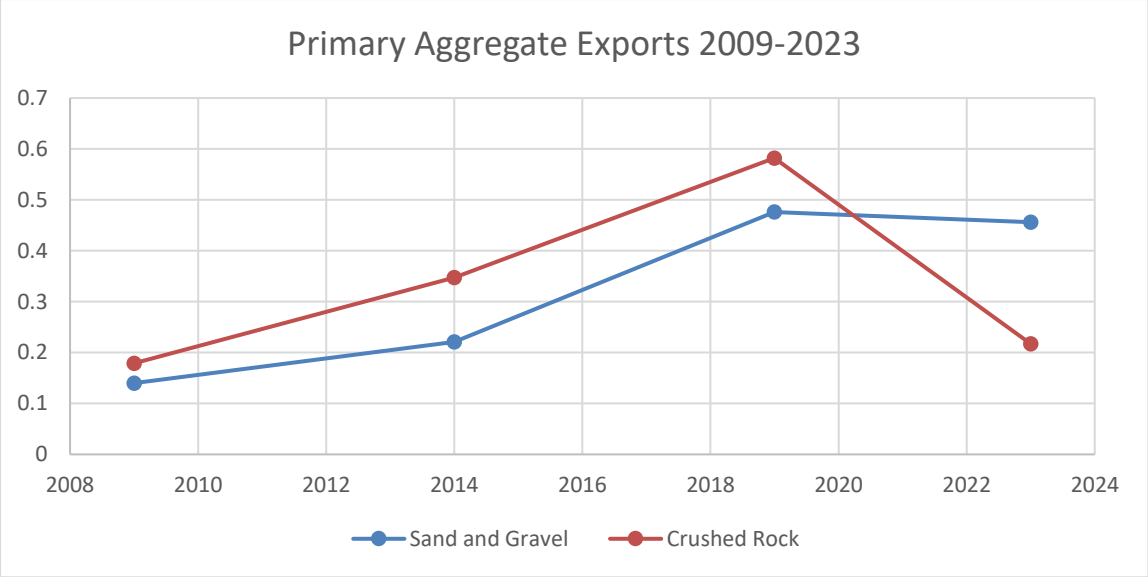

Figure 6.1 Exports of primary aggregates from Oxfordshire 2009-2024 (million tonnes)

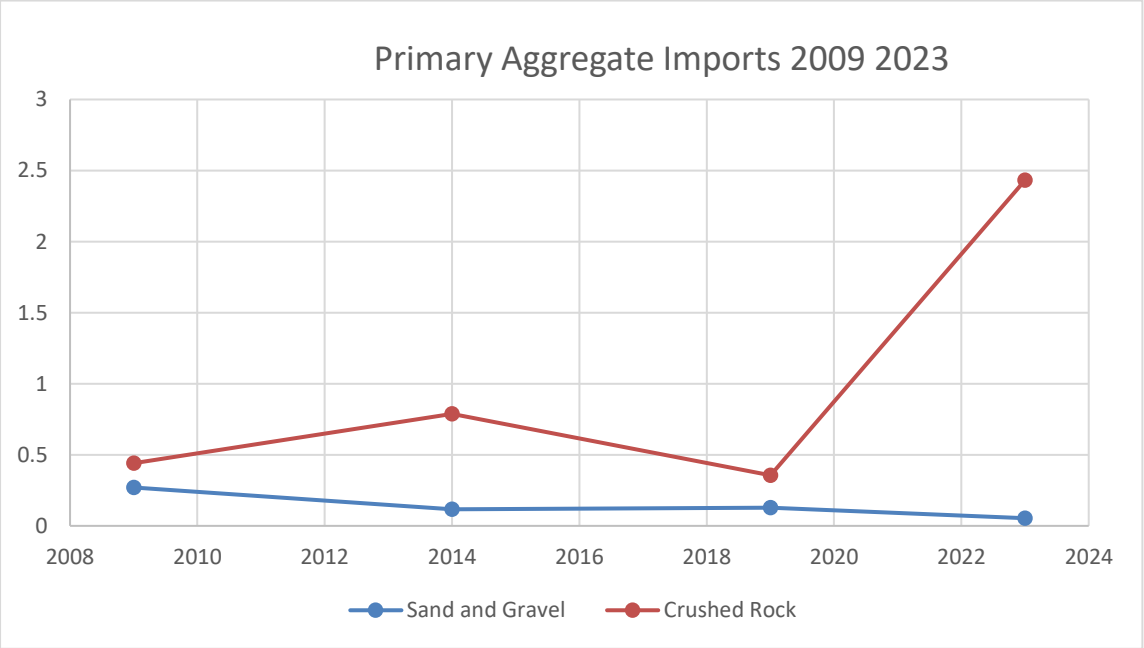

Figure 6.2 Imports of primary aggregates to Oxfordshire 2009-2024 (million tonnes)

Sharp Sand and Gravel

6.20 The AM2023 does not differentiate between Soft Sand and Sharp Sand and Gravel. They are combined into Land won Sand and Gravel.

6.21 Comparison of the AM2009, AM2014, AM2019 and AM2023 results show that Oxfordshire continues to be a net exporter of sand and gravel since 2014.

Exports

6.22 Exports have significantly increased since 2009 as shown in Figure 6.1. From 140,000 tonnes in 2009, doubling to 221,000 tonnes in 2014, and in 2019 doubling again to 476,000 tonnes. In 2023 Sand and Gravel exports dropped slightly by 4% to 456,000 tonnes, though this is still significantly higher than 2009 and 2014 export figures.

6.23 The AM 2023 survey sets out that Oxfordshire consumed 58% of the sand and gravel produced in the county. Exports make up approximately 42%[28] of Oxfordshire's total sand and gravel sales. The majority of exports to within the Southeast but authority unknown (29%). Therefore, there is the potential for Oxfordshire's own consumption to be higher, whilst 13% are known to have gone elsewhere.

6.24 As set out in Appendix 2 the figures from the AM2023 show that Central and Eastern Berkshire, Hertfordshire, East London and Hampshire were the main authorities that Oxfordshire exported Sand and Gravel to. We contributed up to 20% of East London's and Central and Eastern Berkshire's total consumed sand and gravel.

Imports

6.25 Whilst we exported 456,000 tonnes of Land won Sand and Gravel, Oxfordshire only imported 54,000 tonnes, (Figure 6.2) a decrease of 58% since 2019 when 128,000 tonnes was imported. Our largest import was from Cambridgeshire and data on all imports can be seen in Appendix 2. Therefore, we are a net exporter of land won sand and gravel.

6.26 We did import 4,000 tonnes of marine sand and gravel from Bristol, as we do not have this aggregate type within Oxfordshire. However, our consumption rates of marine won sand and gravel, only make up 0.10% of total aggregate consumption within Oxfordshire.

Crushed Rock

Exports

6.27 Table 6.3 shows that exports make up approximately 22% of Oxfordshire's total sales. The majority of exports were to destinations within the Southeast (9%) whilst 13% went elsewhere.

6.28 Our exports decreased from 582,000tonnes in 2019 to 217,000 tonnes, a reduction of 63%.

6.29 As set out in Appendix 2 the figures from the AM2019 show that Gloucestershire was one of the main Authorities that Oxfordshire exported Crushed Rock to, along with Buckinghamshire, Warwickshire and Wiltshire and Swindon.

[28] The figures include the exports that were identified as being consumed within the Southeast only in their return and therefore some of these sales may have stayed within Oxfordshire.

Imports

6.30 Appendix 2 demonstrates that Oxfordshire became a net importer of crushed rock in 2023.

6.31 Crushed rock imports recorded in 2023 were significantly higher than in any previous Aggregates Monitoring Survey, representing an increase of approximately 583% compared to 2019 — rising from 0.356 million tonnes to 2.432 million tonnes.

6.32 In addition, the imports in 2023 were approximately two and a half times higher than Oxfordshire's own production/sales. These imports were from Somerset, Derbyshire, along with Caerphilly, Peak District and South Gloucestershire.

6.33 In 2023, HS2 was understood to be in a peak phase of development within Oxfordshire and its immediate vicinity. It is considered highly likely that some of the imported materials may have supported this major national infrastructure project. However, the specific destinations of these imports within Oxfordshire remain unknown as the survey is not site specific.

6.34 Future National Aggregates Monitoring surveys will be closely observed to determine whether this scale of imports continues in subsequent years, or whether it was specific to the HS2 infrastructure project, which is anticipated to have progressed beyond Oxfordshire by the time of the next survey,

6.35 These shall be monitored under Duty to Cooperate and, if necessary, Statements of Common Ground between Authorities will be entered into.

7.Quarries

Sharp sand and gravel

7 In Oxfordshire, at the end of 2024, there were eleven sites with planning permission for Sharp Sand and Gravel extraction, of which eight are active.

7.2 There were no permissions granted in 2024 for Sharp Sand and Gravel extraction. There was an extension of time granted in 2024 for Bridge Farm to permit extraction until the end of 2025.

7.3 At the end of 2024 there were five outstanding planning permissions; Oxfordshire Flood Alleviation scheme (MW.0027/22) for 12,300 tonnes (incidental and not to be sold off site), Finmere Quarry extension (MW.0069/20) for 370,000 tonnes, Land at Thrupp Lane, Radley (MW.0041/23), which is for a reactivation of dormant planning permission for 1 million tonnes, Sonning Quarry for 2,500,000 tonnes (MW.0063/24) and Gill Mill for 1,000,000 (MW.0057/24). There was also an appeal outstanding at White Cross Farm for 500,000tonnes (MW.0115/21)

7.4 Information on permitted sites is summarised in Table 7.1, including the operator and a summary of the current status of each site.

Quarry Site	Operator	Status at end of December 2024
Caversham	Lafarge Tarmac	Active
Finmere	AT Contracting	Active
Gill Mill, Ducklington	Smiths of Bletchington	Active
Hatford	Earthline	Active
Sutton Courtenay (Bridge Farm)	Hanson Aggregates	Inactive
Sutton Wick	H Tuckwell & Sons	Ceased in 2024
Thrupp Lane, Radley	H Tuckwell & Sons	Inactive: Estimated 1 million tonnes confirmed as a permitted reserve but under ROMP procedure has gone into suspension and cannot be worked until new conditions have been approved; therefore, not currently included as part of permitted reserve or landbank. A ROMP application was received in 2023 and is awaiting determination.
Wroxton Quarry	Earthline	Active
Faringdon Quarry	Grundon Sand & Gravel	Active
New Barn Farm, Cholsey	Grundon	Active:
Shellingford	Earthline	Active

Table 7.1 Permitted Sharp Sand and Gravel Extraction Sites in Oxfordshire, including Operators and Status at end of 2024 (Source: OCC)

7.5 Total permitted reserves of Sharp Sand and Gravel in Oxfordshire at the end of 2024 were 6.177mt, as shown in Table 7.2 below. This is taken from the AM2024 survey calculated using annual operator returns. The actual operator returns for individual quarries cannot be presented due to confidentiality.

7.6 A number of operator returns reflected a reassessed mineral reserve, which reflects the difference in 2023 sales and the 2024 reserve.

7.7 Production capacity is also relevant, as a large amount of reserve in a quarry with only a low production rate will make a smaller contribution to annual supply than equivalent reserves in a high producing quarry and in addition large reserves in control of one operator can impact mineral production. The 2024 Annual Monitoring Survey did not request production capacity; therefore, production capacity has been established through responses to previous surveys, planning permissions and submitted planning statements.

7.8 At the end of 2024 total estimated permitted production capacity for sharp sand and gravel was 1.652mtpa.

Sharp Sand and Gravel Permitted Reserves at 31/12/2024
6.177mt

Table 7.2: Sharp Sand and Gravel Permitted Reserves at 31/12/24 (million tonnes)

Soft Sand

7.9 In Oxfordshire, at the end of 2024, there were eight sites with planning permission for Soft Sand extraction. The operator and current status of each site is provided in Table 7.4.

7.10 No planning permissions were granted for soft sand sites in 2024.

7.11 At the end of 2024 there was one outstanding planning permission at Barn Farm, Tubney for 900,000 tonnes (MW.0037/24).

Quarry Site	Operator	Status at end of December 2024
Bowling Green / Chinham Farm	Hills Quarry Products	Active
Duns Tew	Smiths Bletchington	Active
Hatford	Earthline Ltd	Active
Shellingford	Earthline Ltd	Active
Upwood	Hills Quarry Products	Active: sand & limestone.
Finmere	AT Contracting	Active
Gill Mill	Smiths Bletchingdon	Active
Wroxton	Earthline Ltd	Active

Table 7.3 Active and Permitted Soft Sand Extraction Sites in Oxfordshire, including Operators and Status as at end of 2024.

7.12 Total permitted reserves of Soft Sand in Oxfordshire at the end of 2024 were 3.021mt, as shown in Table 7.4 below. This is taken from the AM2024 survey,

calculated using annual operator returns. The actual operator returns for individual quarries cannot be presented due to confidentiality.

7.13 However, total production capacity is also relevant, as a large amount of reserve in a quarry with only a low production rate will make smaller contribution to annual supply than equivalent reserves in a high producing quarry, in addition large reserves in control of one operator can impact mineral production. The current reserves are currently spread across a number of operators and current estimated permitted production capacity at the end of 2024 is estimated at 0.291mtpa.

Soft Sand Permitted Reserves at 31/12/24
3.021 mt

Table 7.4: Soft Sand Permitted Reserves at 31/12/24 (million tonnes)[29]

Crushed Rock

7.14 In Oxfordshire at the end of 2024, there were fourteen sites with planning permission, twelve of which were active. The operator and current status of each site is provided in Table 7.5.

7.15 An extension of time was granted in 2024 for Land at Quarry Farm to permit extraction until October 2024.

7.16 There were three applications for Crushed Rock outstanding at the end of 2024; Whitehill Quarry (MW.0157/22) for 3 million tonnes, Wroxton Fields for 754,000 (MW.0063/24) and a retrospective application for 500,000 tonnes at Shipton on Cherwell (MW.0077/2).

Quarry Site	Operator	Status at end of December 2024
Dewars Farm	Smiths Bletchington	Active
Burford	Smiths Bletchington	Active
Chinham Farm (Bowling Green)	Hills Quarry Products	Active
Land at Quarry Farm North, Enstone	Heritage	Active
Duns Tew	Smiths Bletchington	Aftercare
Faringdon Quarry	Grundon Sand and Gravel	Active
Hatford	Earthline	Active
Rollright Quarry Phase 1	Oxfordshire Quarries Group	Active

[29] SEEAWP Aggregates Monitoring Survey 2024

Quarry Site	Operator	Status at end of December 2024
Rollright Quarry Phase 2	Smiths Bletchington	Restoration in progress
Shellingford	Earthline	Active
Shipton on Cherwell	Earthline	Planning permission expired 30th September 2019. Appeal outstanding for extension to site MW.0046/18
Upwood	Hills Quarry Products	Active
Whitehill	Smiths Bletchington	Active
Wroxton	Earthline	Active

Table 7.5 Active and Permitted Crushed Rock Extraction Sites in Oxfordshire, including Operators and Status at end of December 2024

7.17 Total permitted reserves of Crushed Rock in Oxfordshire at the end of 2024 were 3.359mt, as shown in Table 7.6 below. This is taken from the AM2024 Survey, calculated using annual operator returns. The actual operator returns for individual quarries cannot be presented due to confidentiality.

7.18 However, total production capacity is also relevant, as a large amount of reserve in a quarry with only a low production rate will make a smaller contribution to annual supply than equivalent reserves in a high producing quarry, and large reserves in control of one operator could also impact mineral production. Total permitted production capacity for crushed rock at the end of 2024 was 1.704mtpa.

7.19 Permitted reserves of Crushed Rock in Oxfordshire, as reported in the SEEAWP Aggregates Monitoring Survey 2024, are shown in Table 7.6 below.

Crushed Rock Permitted Reserves at 31/12/24
3.359mt

Table 7.6: Crushed Rock Permitted Reserves at 31/12/24 (million tonnes)[30]

Rail Depots

7.20 In 2024, there were two returns from operators on sales from Rail Depots. This information is confidential for commercial reasons.

7.21 In 2021 Oxfordshire's rail depot capacity was increased to over 3.5million. It is known that the increased capacity at Hennef Way Banbury is temporary to provide material for HS2, and Appleford Sidings has added two more rail

[30] AM2024 Survey

sidings. This site now has a condition limiting it to 1.5million tonnes per annum.

Landbanks

7.22 Based on the Aggregates Provision Rates set out in Section 5 that have been determined for this LAA and the permitted reserves as of 31 December 2024, as set out above, the landbanks at the end of 2024 can be seen below in Table 7.7.

Permitted Reserves at 31.12.2024. by mineral type	Landbank (LAA Aggregates Provision Rate)
Soft Sand 3.021m. tonnes	13 years at 0.235mtpa
Sharp Sand & Gravel 6.177m. tonnes	6.3 years at 0.986mtpa
Crushed Rock 3.359m. tonnes	3.5 years at 0.964mtpa

Table 7.7 Oxfordshire Landbank at 31/12/2024

7.23 As can be seen the Landbank for Soft Sand has the 7-year requirement however, Sharp Sand and Gravel has fallen below the 7-year requirement and the Crushed Rock landbank is below the 10-year requirement for the seventh consecutive year.

8. Core Strategy Mineral Requirements

8.1 The Minerals and Waste Local Plan Part 1: Core Strategy (Policy M2) sets out the total provision requirement of minerals for the Plan Period 2014-2031. These are:

- 18.27 million tonnes of Sharp Sand and Gravel
- 3.402 million tonnes of Soft Sand; and
- 10.512 million tonnes for Crushed Rock

Sharp Sand and Gravel

8.2 Taking into account sales in 2014 – 2024 (9.325 million tonnes) and estimated reserves that are available to be worked during the plan period (5.923 million tonnes), the remaining Core Strategy Requirement over the Plan Period is 3.022 million tonnes. See Appendix 3 for calculations.

Soft Sand

8.3 Taking into account sales of Soft Sand in 2014 – 2024 (2.485 million tonnes), and reserves that are available to be worked during the plan period (3.021 million tonnes), there are no more requirements for additional Soft Sand to meet Core Strategy Requirements over the Plan Period. See Appendix 3 for calculations.

Crushed Rock

8.4 Taking into account sales in 2014 – 2024 (10.621 million tonnes), and reserves that are available to be worked during the plan period (2.917 million tonnes), there are no more requirements for additional Crushed Rock to meet Core Strategy Requirements over the Plan Period.

8.5 Therefore, to meet the Core Strategy Requirements, we will need to identify sites to meet the following:

- **Sand and gravel – 3.022 million tonnes**
- **Soft Sand - 0 million tonnes**
- **Crushed Rock - 0 million tonnes**

9. Conclusion

9.1 In concluding this year's Oxfordshire's LAA, based upon consideration of all the available evidence, the Aggregates Provision Rates are:

- **Sand and Gravel – 0.986 mtpa**
- **Soft Sand – 0.235mtpa**
- **Crushed Rock – 0.964mtpa**
- **Recycled and Secondary Aggregates- 0.926mtpa**

9.2 To meet the Core Strategy Requirements as set out in Policy M2, we will need to identify sites to meet the following need:

- **Sand and Gravel – 3.022 million tonnes**
- **Soft Sand - 0 million tonnes**
- **Crushed Rock - 0 million tonnes**

9.3 To ensure we maintain a steady and adequate supply over the Plan Period, we need to consider these LAA Provision Rates with the permitted reserves as of 31 December 2024[31] and the implications for the Authorities landbank.

9.4 Our landbank for Soft Sand is above the 7-year requirement. However, for Crushed Rock the landbank is at 3.5 years, below the NPPFs 10-year requirement and for Sand and Gravel the landbank is at 6.3 below the NPPFs 7-year requirement.

9.5 The future Minerals and Waste Local Plan will review all mineral requirements over a new Plan period (at least a 15-year period) and identify the amount of mineral required and the ways in which this will be met.

9.6 Mineral requirements within the adopted Core Strategy will be replaced with the mineral requirements set out within the new Minerals and Waste Plan upon adoption.

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[31] Appendix 2

List of Definitions and Acronyms

The Local Aggregate Assessment uses the following terminology throughout this report:

- **Alternative aggregates** - A general term which can be used to refer to anything other than primary, land-won aggregates. It can include secondary, recycled and sometimes marine aggregates.
- **Landbank** - Landbank is a measure of the stock of permitted reserves expressed in terms of the number of years that these would allow production for at a given average rate of extraction. It is a theoretical measure of the life of the reserves if these were to be worked at a consistent annual rate.
- **Land-won aggregates** - Primary aggregates extracted from land.
- **Marine aggregates** - Primary aggregates dredged from the sea, almost exclusively sand and gravel.
- **Primary aggregates** - These are aggregates produced from naturally occurring mineral deposits, extracted specifically for use as aggregate and used for the first time. They are produced either from rock formations that are crushed to produce 'crushed rock' aggregates, from naturally occurring sand and gravel deposits, or solid formations to produce soft sand.
- **Aggregate Provision Rate (APR)** - the quantity of aggregate for which provision needs to made in plans within each Mineral Planning Authority in order both to satisfy local needs and to contribute fairly towards National expectations of future demand
- **Recycled aggregates** - Aggregate materials recovered from construction and demolition processes and from excavation waste on construction sites.
- **Secondary aggregates** - Aggregates derived as a by-product of other quarrying and mining operations or industrial processes, including colliery spoil, china clay waste, slate waste, power station ashes, incinerator bottom ashes and similar products.
- **Sharp Sand and Gravel -** Sharp sand tends to be relatively coarse and the component grains are more angular than soft sand (see below). Such sands are typically deposited within river channels, rather than in oceans, and are generally found, as part of a sequence of mixed sand & gravel, within river floodplains, river terraces, and (in areas which have been glaciated) within other types of deposit. As the name implies, they have a sharper texture than soft sands and, although they can be used as building sand, they are generally not preferred for that purpose because they produce less 'workable' mortars, unless special additives are included in the mix, adding to the cost. They are better suited to use within concrete products, not least because they usually occur in conjunction with gravels which provide the coarse aggregate component of the concrete mix.
- **Soft Sand** - Soft Sand is generally fine-grained sand in which the individual grains are well-rounded, imparting a relatively soft texture and free-flowing nature to the sand. Such sands are commonly deposited in marine environments, where constant movement by the sea results in the rounding,

polishing and sorting of the grains. The characteristics of such sands lend themselves especially to products which are required to 'flow' or be easily 'workable' by hand when they are being used - particularly mortars, but also plaster, in the case of very fine-grained sand. These are collectively known as 'building sand'. Soft Sand may also be used in asphalt products where it is used to stiffen the bitumen binder, and in concrete products - although sharp sand is more commonly used for that purpose.

The Local Aggregates Assessment uses the following acronyms throughout this report:

- **AMRI** – Annual Minerals Raised Inquiry Surveys
- **APR** – Aggregate Provision Rate
- **AWP** – Aggregate Working Party
- **BGS** – British Geological Survey
- **CLG –** Communities and Local Government (See MHCLG below)
- **DLUHC** – Department of Levelling Up, Housing and Communities
- **GDP –** Gross Domestic Product
- **LAA** – Local Aggregates Assessment
- **MASS** – Managed Aggregates Supply System
- **MPAs** – Mineral Planning Authorities
- **Mt** – Million tonnes
- **mtpa** – Million tonnes per annum
- **MHCLG –** Ministry of Housing, Communities and Local Government
- **MWLP** – Minerals and Waste Local Plan
- **NPPF** – National Planning Policy Framework
- **OCC** – Oxfordshire County Council
- **PPG** – Planning Practice Guidance
- **RAWP** – Regional Aggregate Working Parties
- **ROMP** – Review of Old Mineral Permissions
- **SEEAWP** – South East of England Aggregate Working Party
- **SHMA –** Strategic Housing Market Assessment

Appendix 1

Total Oxfordshire Sand and Gravel Sales (including Soft Sand)
(Source: AM Surveys and SEEAWP Surveys)
The AM2019 did not include a separate England total for Soft Sand for 2019, therefore for comparative purposes we have combined the historical records for Sharp Sand and Gravel and Soft Sand to be able to compare the 2019 figure with previous years.
Data for sharp sand and gravel and soft sand sales as individual percentage of England's minerals sales were last available in 2014[32].

	Oxfordshire Sharp Sand & Gravel Sales (million tonnes)[33]	Oxfordshire Soft Sand Sales (million tonnes)[34]	Total Oxfordshire Land won Sand and Gravel (million tonnes)	England Total Land Won Sand and Gravel (million tonnes)	Oxfordshire's sales as a percentage of England's sales [35]
2003	1.372	0.234	1.479	59.974	2.47%
2004	1.184	0.295	1.289	62.735	2.05%
2005	1.090	0.199	1.166	58.926	1.98%
2006	0.983	0.183	1.059	56.148	1.89%
2007	0.893	0.166	0.78	54.512	1.43%
2008	0.629	0.151	0.627	50.134	1.25%
2009	0.462	0.165	0.597	37.81	1.58%
2010	0.455	0.142	0.69	36.723	1.88%
2011	0.489	0.201	0.714	36.589	1.95%
2012	0.559	0.155	0.566	33.229	1.79%
2013	0.401	0.165	0.869	35.855	2.42%
2014	0.639	0.230	1.001	38.785	2.58%
2015	0.768	0.233	0.878	2015 figures not available	n/a
2016	0.651	0.227	0.954	2016 figures not available	n/a
2017	0.703	0.251	1.048	2017 figures not available	n/a
2018	0.796	0.252	1.133	2018 figures not available	n/a
2019	0.994	0.254	1.248	39.708	3.14%

[32] Previous years LAA's contain these figures if required
[33] Source: SEEAWP Aggregates Monitoring Surveys
[34] SEEAWP Aggregates Monitoring Surveys
[35] Figures include data for marine dredged material. This data is allocated to the county in which the port of landing is situation.

	Oxfordshire Sharp Sand & Gravel Sales (million tonnes)[33]	Oxfordshire Soft Sand Sales (million tonnes)[34]	Total Oxfordshire Land won Sand and Gravel (million tonnes)	England Total Land Won Sand and Gravel (million tonnes)	Oxfordshire's sales as a percentage of England's sales [35]
2020	0.830	0.210	1.040	2020 figures not available	n/a
2021	1.157	.264	1.421	2021 figures not available	n/a
2022	0.972	0.229	1.201	2022 Figures not available	n/a
2023	0.877	0.203	1.008	38.712	**2.60%**
2024	**0.934**	**0.132**	**1.066**	2024 Figures not available	**n/a**
Rolling 10-year annual average, 2003 - 2012	0.812	0.182	0.891	40.433	2.01%
Rolling 10-year annual average, 2004 - 2013	0.715	0.176	0.839	38.629	1.85%
Rolling 10-year annual average, 2005 - 2014	0.660	0.179	0.812	36.853	1.79%
Rolling 10-year annual average, 2006 – 2015	0.628	0.184	0.787	n/a	n/a
Rolling 10-year annual average, 2007 – 2016	0.595	0.192	0.778	n/a	n/a
Rolling 10-year annual average, 2008 – 2017*	0.576	0.202	0.822	n/a	n/a
Rolling 10-year average 2009 – 2018	0.592	0.230	0.923	n/a	n/a
Rolling 10-year average 2010 – 2019	0.646	0.211	0.857	n/a	n/a

	Oxfordshire Sharp Sand & Gravel Sales (million tonnes)[33]	Oxfordshire Soft Sand Sales (million tonnes)[34]	Total Oxfordshire Land won Sand and Gravel (million tonnes)	England Total Land Won Sand and Gravel (million tonnes)	Oxfordshire's sales as a percentage of England's sales [35]
Rolling 10-year average 2011 – 2020	0.683	0.218	0.901	n/a	n/a
Rolling 10-year average 2012 – 2021	0.750	0.224	1.016	n/a	n/a
Rolling 10-year average 2013 – 2022	0.791	0.232	1.023	n/a	n/a
Rolling 10-year average 2014 – 2023	0.839	0.235	1.074	n/a	n/a
Rolling 10-year average 2015 – 2024	0.868	0.226	1.094	n/a	n/a
Average of last 3 years 2014 – 2016	0.686	0.230	0.95	n/a	n/a
Average of last 3 years 2015 – 2017	0.707	0.237	0.717	n/a	n/a
Average of last 3 years 2016 - 2018	0.717	.243	0.96	n/a	n/a
Average of last 3 years 2017- 2019	0.831	.252	1.083	n/a	n/a
Average of last 3 years 2018- 2020	0.873	.239	1.112	n/a	n/a
Average of last 3 years 2019- 2021	.994	0.243	1.237	n/a	n/a
Average of last 3 years 2020- 2022	.986	0.234	1.221	n/a	n/a
Average of last 3 years 2021- 2023	1.002	0.232	1.234	n/a	n/a
Average of last 3 years 2022- 2024	0.928	0.188	1.116	n/a	n/a

Sales of Crushed Rock 2003 – 2024 (million tonnes)

(Sources: SEEAWP Aggregates Monitoring Surveys, and AMRI Surveys)

	Oxfordshire Crushed Rock Sales (million tonnes)[36]	**England Crushed Rock Sales (million tonnes)[37]**	**Oxfordshire's sales as a percentage of England's sales.**
2003	0.629	83.957	0.75%
2004	0.557	85.653	0.65%
2005	0.564	80.593	0.70%
2006	0.495	83.722	0.59%
2007	0.717	82.922	0.86%
2008	0.543	75.179	0.72%
2009	0.363	59.666	0.61%
2010	0.272	50.115	0.54%
2011	0.322	57.744	0.56%
2012	0.242	52.980	0.46%
2013	0.502	53.417	0.94%
2014	1.061	63.835	1.66%
2015	0.914	*2015 figures not available*	n/a
2016	0.715	*2016 figures not available*	n/a
2017	0.867	*2017 figures not available*	n/a
2018	0.751	*2018 figures not available*	n/a
2019	0.843	83.015	1.02%
2020	1.087	2020 figures not available	n/a
2021	1.254	2021 figures not available	n/a
2022	1.146	2022 figures not available	n/a
2023	1.002	78.485	2.55%
2024	**0.981**	**2024 figures not available**	**n/a**
Rolling 10-year annual average 2003 - 2012	0.470	71.253	0.66%
Rolling 10-year annual average 2004 - 2013	0.458	68.199	0.67%
Rolling 10-year annual average 2005 - 2014	0.508	66.017	0.77%

[36] SEEAWP Aggregates Monitoring Surveys
[37] Source: BGS 2014, 2019 and 2023 survey

	Oxfordshire Crushed Rock Sales (million tonnes)[36]	England Crushed Rock Sales (million tonnes)[37]	Oxfordshire's sales as a percentage of England's sales.
Rolling 10-year annual average 2006 - 2015	0.543	n/a	n/a
Rolling 10-year annual average 2007 - 2016	0.565	n/a	n/a
Rolling 10-year annual average 2008 – 2017	0.580	n/a	n/a
Rolling 10-year annual average 2009 – 2018	0.601	n/a	n/a
Rolling 10-year annual average 2010 – 2019	0.649	n/a	n/a
Rolling 10-year annual average 2011 – 2020	0.730	n/a	n/a
Rolling 10-year annual average 2012 – 2021	0.824	n/a	n/a
Rolling 10-year annual average 2013 – 2022	0.914	n/a	n/a
Rolling 10-year annual average 2014 – 2023	0.964	n/a	n/a
Rolling 10-year annual average 2015 – 2024	**0.956**	**n/a**	**n/a**
Average of last 3 years 2014 – 2016	0.897	n/a	n/a
Average of last 3 years 2015 – 2017	0.832	n/a	n/a
Average of last 3 years 2016 – 2018	0.778	n/a	n/a
Average of last 3 years 2017 – 2019	0.820	n/a	n/a
Average of last 3 years 2018 – 2020	0.894	n/a	n/a
Average of last 3 years 2019 – 2021	1.061	n/a	n/a
Average of last 3 years 2020-2022	1.162	n/a	n/a
Average of last 3 years 2021-2023	1.134	n/a	n/a
Average of last 3 years 2022-2024	**1.043**	**n/a**	**n/a**

Appendix 2

Imports and Exports

Imports, Exports and Consumption of Primary Aggregates in Oxfordshire

2009, 2014, 2019 and 2023 imports and exports (millions of tonnes) (Source: Collation of the Results of the 2023, 2019, 2014 and 2019Aggregates Minerals Survey for England and Wales)

	Sand and Gravel 2009	Crushed Rock 2009	All Primary Aggregates 2009	Sand and Gravel 2014	Crushed Rock 2014	All Primary Aggregates 2014	Sand and Gravel 2019	Crushed Rock 2019	All Primary Aggregates 2019	Sand and Gravel 2023	Crushed Rock 2023	All Primary Aggregates 2023
A. Production / Sales in Oxfordshire	0.628	0.363	0.991	0.869	1.061	1.93	1.248	0.843	2.091	1.08	1.002	2.082
B. Exported out of Oxfordshire	0.14	0.179	0.319	0.221	0.347	0.568	0.476	0.582	1.058	0.456	0.217	0.673
C. Produced and consumed in Oxfordshire (A – B)	0.487	0.184	0.672	0.648	0.714	1.362	0.772	0.261	1.033	0.624	0.785	1.409
D. Imported into Oxfordshire	0.27	0.441	0.711	0.117	0.787	0.904	0.128	0.356	0.484	0.054	2.432	2.972
E. Total Consumption in Oxfordshire (C + D)	0.757	0.625	1.383	0.765	1.501	2.266	0.9	0.617	1.517	0.677	3.218	3.895

The equivalent figures for 2005 are not available because Oxfordshire was grouped with Buckinghamshire and Berkshire in the AM2005 Report.

No equivalent information can be derived from the earlier AM2001 Survey report, because all results are presented on a regional basis and there are no local figures.

Destinations

Destinations of Sand & Gravel Produced in Oxfordshire 2023

Destinations of Sand & Gravel Produced in Oxfordshire 2023 (Source: BGS/MHCLG Survey 2023)

Total Oxfordshire Land won Sand and Gravel (Including soft sand) (S&G) exported destinations in 2023 0.456mt		
Destination MPA	**Proportion of the destination MPA total consumed S&G**	**Range* (millions of tonnes)**
Buckinghamshire	Between 1% and 10% of total consumed in Buckinghamshire	Between 0mt and 0.010mt
Central and Eastern Berkshire	Between 10% and 20% in Central and Eastern Berkshire	Between 0.041mt and 0.081mt
East London	Between 10% and 20% in East London	Between 0.032mt and 0.064mt
Gloucestershire	Between 1% and 10% of total consumed in Gloucestershire	Between 0.004mt and 0.036mt
Hampshire, Portsmouth, Southampton, New Forest National Park, and part of the South Downs National Park	Between 1% and 10% of total consumed in Hampshire	Between 0.006mt and 0.059mt
Hertfordshire	Less than 1% of total consumed in Hertfordshire	Between 0mt and 0.082mt
Milton Keynes	Between 1% and 10% of total consumed in Milton Keynes	Between 0.002mt and 0.018mt
Surrey	Less than 1% of total consumed in Surrey	Between 0 and 0.002mt
Warwickshire	Between 1% and 10% of total consumed in Warwickshire	Between 0.004mt and 0.036mt
West London	Between 1% and 10% of total consumed in West London	Between 0.002mt and 0.024mt
Wiltshire and Swindon	Between 1% and 10% of total consumed in Wiltshire and West London	Between 0.005mt and 0.047mt
Worcestershire	Between 1% and 10% of total consumed in Worcestershire	Between 0.002mt and 0.023mt
Unknown in the Southeast	Between 20% and 30% of total consumed in the Southeast	Between 0.163mt and 0.244mt
Unknown in the West of England	Between 10% and 20% of total consumed in the West of England	Between 0.002mt and 0.024mt

*This is the highest and lowest percentage taken from the Authorities total Sand and Gravel consumed.

Destinations of Crushed Rock Produced in Oxfordshire 2023

Total Crushed Rock (CR) exported destinations in 2023 0.217mt		
Destination MPA	**Proportion of the destination MPA total consumed CR**	**Range* (millions of tonnes)**
Bedfordshire (Central, Beds and Luton)	Between 1% and 10% of total consumed in Bedfordshire	Between 0.007mt and 0.067mt
Buckinghamshire	Between 1% and 10% of total consumed in Buckinghamshire	Between 0.011mt and 0.113mt
Gloucestershire	Between 1% and 10% of total consumed in Gloucestershire	Between 0.021mt and 0.212mt
Milton Keynes	Between 10% and 20% of total consumed in Milton Keynes	Between 0.017mt and 0.034mt
Northamptonshire	Less than 1% of total consumed in Northamptonshire	Between 0 and 0.010mt
Warwickshire	Between 1% and 10% of total consumed in Warwickshire	Between 0.015mt and 0.153mt
West Berkshire	Between 1% and 10% of total consumed in West Berkshire	Between 0.006mt and 0.012mt
Wiltshire and Swindon	Between 1% and 10% of total consumed in Wiltshire and Swindon	Between 0.009mt and 0.090mt
Worcestershire	Between 1% and 10% of total consumed in Worcestershire	Between 0.004mt and 0.039mt
Unknown in the Southeast	Between 50% and 60% of total consumed in the Southeast	Between 0.021mt and 0.025mt
Unknown in the West of England	Less than 1% of total consumed in the West of England.	Between 0 and 0,009mt

*This is the highest and lowest percentage taken from the Authorities total Crushed Rock consumed.

Destinations of Sand & Gravel Produced in Oxfordshire 2009 and 2014

(Source: Oxfordshire County Council Aggregates Monitoring Survey 2009 and 2014)

Destination	**2009 Sand and Gravel (including soft sand)** Tonnes	**2009 Sand and Gravel (including soft sand)** %	**2014 Sand and Gravel (including soft sand)** Tonnes	**2014 Sand and Gravel (including soft sand)** %
Oxfordshire	487,260	77.6	648,282	74.60
Berkshire	20,785	3.3	99,259	11.42

Destination	2009 Sand and Gravel (including soft sand) Tonnes	2009 Sand and Gravel (including soft sand) %	2014 Sand and Gravel (including soft sand) Tonnes	2014 Sand and Gravel (including soft sand) %
Buckinghamshire & Milton Keynes	13,663	2.2	9,712	1.11
Rest of Southeast & London	15,565	2.5	4,642	0.81
Wiltshire, Swindon & Gloucestershire	68,203	10.9	95,089	10.94
Northamptonshire & Warwickshire	4,993	0.8	9,674	1.11
TOTAL	627,783	100	866,658	100

Destinations of Crushed Rock Produced in Oxfordshire 2009 and 2014

(Source: Oxfordshire County Council Aggregates Monitoring Survey 2009 and 2014)

Destination	2009 Crushed Rock Tonnes	2009 Crushed Rock %	2014 Crushed Rock Tonnes	2014 Crushed Rock %
Oxfordshire	180,867	49.8	663,463	62.56
Berkshire & Buckinghamshire & Milton Keynes	23,081	6.4	254,223	23.97
Rest of Southeast & London	0	0	5,755	0.55
Wiltshire, Swindon & Gloucestershire	29,694	8.2	14,308	1.35
Northamptonshire & Warwickshire	118,788	32.7	121,258	11.43
TOTAL	362,839	100	1,060,573	99.86

The AM2005 survey report combined figures for the destinations of aggregates sold in Oxfordshire with the destinations of sales in Berkshire and Buckinghamshire. It is therefore not possible to derive equivalent figures for 2005.

Destinations of Sand & Gravel Produced in Oxfordshire 2019

(Source: BGS/MHCLG AM2019 Survey)

For 2019, we do not currently have the exact amounts of mineral produced in Oxfordshire that were consumed by other areas.
The AM2019 set out the % of the amount of sand and gravel consumed in each destination that was produced from Oxfordshire in relation to the Authorities own total demand of sand and gravel. The table then indicates the lowest and maximum amount of sand and gravel produced from Oxfordshire based on these percentages.

Destination of Oxfordshire's produced Land won Sand and Gravel (Including soft sand) in 2019 (1.248mt)

Destination	Proportion	Range* of tonnages produced in Oxfordshire (millions of tonnes)
Oxfordshire	62% of total sand and gravel consumed in Oxfordshire	0.772mt**
Hampshire and Isle of Wight	Between 10% and 20% of total sand and gravel consumed in Hampshire and Isle of Wight	Between 0.095mt and 0.189mt came from Oxfordshire
Buckinghamshire and Milton Keynes	Between 1% and 10% of total sand and gravel consumed in Berkshire	Between 0.014mt and 0.138mt came from Oxfordshire
Berkshire	Between 1% and 10% of total sand and gravel consumed in Berkshire	Between 0.007mt and 0.074mt came from Oxfordshire
Wiltshire and Swindon	Between 1% and 10% of total sand and gravel consumed in Wiltshire and Swindon	Between 0.005mt and 0.052mt came from Oxfordshire
West of England (Avon)	Between 10% and 20% of total sand and gravel consumed in West of England	Between 0.002mt and 0.006mt came from Oxfordshire
Surrey, Dorset, Gloucestershire, Northamptonshire, Somerset and Exmoor National Park, Warwickshire, Worcestershire, Scotland and West London	Less than 1% of each MPAs total sand and gravel was sourced from Oxfordshire	Max .043mt came from Oxfordshire
Unknown in the Southeast	Between 40 and 50% sand and gravel consumed in the Southeast	Between 0.172mt and 0.216mt came from Oxfordshire
Unknown Destination	Between 1%-10% of the total sand and gravel consumed that went to unknown destinations.	Between 0.014mt and 0.142mt came from Oxfordshire

*This is the highest and lowest percentage of sand and gravel from Oxfordshire taken from the importing Authorities total Sand and Gravel consumed. (Other than Oxfordshire)

** Known figure from AM2019

Destinations of Crushed Produced in Oxfordshire 2019

(Source: BGS/MHCLG AM2019 Survey)

The AM2019 set out the % of the amount of Crushed Rock consumed in each destination that was produced from Oxfordshire, in relation to the Authorities own total demand of sand and gravel. The table then indicates the lowest and maximum amount of sand and gravel produced from Oxfordshire based on these percentages. Total Crushed Rock exported destinations in 2019 (0.582mt)

Source	Proportion	Range* (millions of tonnes)
Oxfordshire	31% of total Consumed Crushed Rock in Oxfordshire	0.261mt*
Northamptonshire	Between 1% and 10% of total Crushed Rock consumed in Northamptonshire	Between 0.017mt and 0.165mt came from Oxfordshire
Buckinghamshire and Milton Keynes	Between 10%and 20% of total Crushed Rock consumed in Buckinghamshire and Milton Keynes	Between 0.070 and 0.141mt came from Oxfordshire
Warwickshire	Between 1% and 10% of total Crushed Rock consumed in Warwickshire	Between 0.011mt and 0.107mt came from Oxfordshire
Berkshire	Between 1% and 10% of total Crushed Rock consumed in Berkshire	Between 0.009mt and 0.089mt came from Oxfordshire
Unknown somewhere in the Southeast	Between 50% and 60% of total Crushed Rock destination in the Southeast unknown	0.256mt and 0.307mt came from Oxfordshire
Bedfordshire, Gloucestershire, Hampshire and Isle of Wight, Hertfordshire, Surrey	Less than 1% of each MPAs total Crushed Rock was sourced from Oxfordshire	Max 0.043mt came from Oxfordshire

*****This is the highest and lowest percentage of sand and gravel from Oxfordshire taken from the importing Authorities total Crushed Rock consumed. (Other than Oxfordshire)

** Known figure from AM2019

Destinations of Sand and Gravel Produced in Oxfordshire 2005, 2009 and 2014 (Source: AM2005, and AM2009, 2014)

Destination (Source MPA – Oxfordshire)	Sand and gravel (millions of tonnes) 2005	Sand and gravel (millions of tonnes) 2009	Sand and gravel (millions of tonnes) 2014
Berkshire, Oxfordshire and Buckinghamshire	0.304	0.520 of which 0.487 in Oxfordshire	0.757 of which 0.648 in Oxfordshire
Elsewhere in Southeast	0.418	0.015	0.012
Elsewhere	0.550	0.090	0.100
Unallocated	0.017	0	0
Total	1.289*	0.627*	0.869*

*Totals may not match sub totals due to varying categories

Destinations of Crushed Rock Produced in Oxfordshire 2005 and 2009

Destination (Source MPA – Oxfordshire)	Crushed Rock (millions of tonnes) 2005	Crushed Rock (millions of tonnes) 2009	Crushed Rock (millions of tonnes) 2014
Berkshire, Oxfordshire and Buckinghamshire	0.277	0.184 all in Oxfordshire	0.919
Elsewhere in Southeast	0.134	0.025 incl. Berkshire & Buckinghamshire	0.010
Elsewhere	0.152	0.154	0.130
Total	0.564*	0.363	1.061

*May not match sub totals due to varying categories.

This data comparison is not currently available for AM2019.

Sources

Sources of Sand and Gravel consumed in Oxfordshire 2023

Sources of land won sand and gravel consumed in Oxfordshire 2023 (Source: BGS)

Total Land won Sand and Gravel (Including soft sand) consumed in Oxfordshire in 2023 0.677mt		
Source	Proportion	Tonnage range (millions of tonnes)
Oxfordshire	90-100%	0.624mt*
Cambridgeshire	1% -10%	Between 0.007mt and 0.067mt**
Central Bedfordshire, Gloucestershire, Herefordshire, Hampshire, Portsmouth, Southampton, New Forest National Park, and part of the South Downs National Park, Leicestershire, Staffordshire, Warwickshire, Wiltshire and Worcestershire	<1%	Between 0 and 0.006mt***

* Exact figure taken from AM Survey 2023

** The lower number represents 1% of total consumed and the higher represents 10% of total consumed.

*** A maximum of 1% was taken for each Authority that exported Minerals to Oxfordshire

Sources of Marine Sand and Gravel consumed in Oxfordshire 2023

Sources of Marine Sand and Gravel consumed in Oxfordshire 2023 (Source: BGS)

Total Marine Sand and Gravel consumed in Oxfordshire in 2023 0.004mt		
Source	Proportion	Tonnage where known (millions of tonnes)
Bristol City	100%	0.004%

Sources of Crushed rock consumed in Oxfordshire 2023

Sources of Crushed Rock consumed in Oxfordshire 2023 (Source: BGS)

Total Crushed Rock consumed in Oxfordshire in 2023 3.218mt		
Source	Proportion	Tonnage Estimates (millions of tonnes)
Oxfordshire	20-30%	0.785mt*
Somerset	30-40%	0.965mt – 1.287mt**
Derbyshire	10-20%	0.322mt – 0.644mt**
Caerphilly County Borough Council. Peak District and South Gloucestershire	1-10%	0.032mt – 0.322mt**
Gloucestershire, Leicestershire, Merthyr Tydfill, North Somerset, Powys, Rhondda, Shropshire, Warwickshire	<1%	0.032mt***

* Exact figure taken from AM Survey 2023

** The lower number represents lower % of total consumed and the higher represents higher % of total consumed.

**** A maximum of 1% was taken for each Authority that exported Minerals to Oxfordshire

Sources of Sand and Gravel consumed in Oxfordshire 2019

(Source: BGS)

Total Land won Sand and Gravel (Including soft sand) consumed in Oxfordshire in 2019 (0.900mt)

Source	Proportion	Tonnage where known (millions of tonnes)
Oxfordshire	80-90%	0.772mt*
Cambridgeshire, Lincolnshire, Staffordshire and Wiltshire	Between 1% and 10% from each area of total consumed within Oxfordshire	Between 0.036mt and 0.363mt**
Leicestershire, Buckinghamshire Bristol City, Central Bedfordshire, Gloucestershire, Hampshire, Hertfordshire and Portsmouth	Less than 1% from each area	Max .081mt***

* Exact figure taken from AM Survey 2019

** The lower number represents 1% of total consumed and the higher represents 10% of total consumed.

*** A maximum of 1% was taken for each Authority that exported Minerals to Oxfordshire

Sources of Crushed Rock Gravel consumed in Oxfordshire 2019

(Source: BGS)

Total Crushed Rock consumed in Oxfordshire in 2019 (0.617mt)

Source	Proportion	Tonnage Estimates (millions of tonnes)
Oxfordshire	40-50%	0.261mt*
Gloucestershire, Leicestershire, Somerset	10-20%	Between 0.185 and 0.370**
North Somerset, Powys, Rhondda Cynon Taf (Taff), Shropshire, South Gloucestershire	Between 1% and 10% from each area of total consumed within Oxfordshire	Between 0.031mt and 0.308mt***
Cambridgeshire, Derbyshire, Warwickshire	Less than 1% from each area	Max .024mt****

* Exact figure taken from AM Survey 2019

** The lower number represents 10% of total consumed and the higher represents 20% of total consumed.

*** The lower number represents 10% of total consumed and the higher represents 20% of total consumed.

**** A maximum of 1% was taken for each Authority that exported Minerals to Oxfordshire

Sources of Sand and Gravel consumed in Oxfordshire 2014

(Source: BGS)

Source	Proportion	Tonnage where known (millions of tonnes)
Oxfordshire	80-90%	0.612 - 0.6885
Wiltshire, Windsor & Maidenhead, Cambridgeshire, Leicestershire	1-10%	0.00765 – 0.0765
Devon, Gloucestershire, Hampshire, West Berkshire, Central Bedfordshire,	<1%	<0.00765

Source	Proportion	Tonnage where known (millions of tonnes)
Essex, Hertfordshire, Northamptonshire, Staffordshire, Worcestershire.		

Sources of Crushed Rock consumed in Oxfordshire 2014

(Source: BGS)

Source	Proportion	Tonnage where known (millions of tonnes)
Oxfordshire	40-50%	0.6 – 0.75
Somerset	30-40%	0.45 – 0.6
Leicestershire	10-20%	0.15 – 0.3
Gloucestershire	1-10%	0.015 – 0.15
North Somerset, South Gloucestershire, Cambridgeshire, Shropshire, Powys	<1%	<0.015

Sources of Sand and Gravel consumed in Oxfordshire 2009

(Source: BGS)

Source	Proportion	Tonnage where known (millions of tonnes)
Oxfordshire	64%	0.474
Gloucestershire	25%-20%	0.145- 0.185
Warwickshire, Bristol (marine), Hampshire, Berkshire and Leicestershire (in descending order)	Between 5% and 1% from each area	n/a
Milton Keynes, Central Bedfordshire (includes Bedford Borough), Kent, Cambridgeshire, Staffordshire, Buckinghamshire, Dorset, Wiltshire, Solihull (includes Walsall) and Hertfordshire (in descending order)	Less than 1% from each area	n/a

Sources of Crushed Rock consumed in Oxfordshire 2009

(Source: BGS)

Source	Proportion	Tonnage where known (millions of tonnes)
Oxfordshire	29%	0.181
South Gloucestershire	30%-25%	0.187- 0.156
Somerset	25% - 20%	0.156- 0.125
Leicestershire	15%-10%	0.093- 0.063
Rhondda, Cynon, Taf (Taff), Gloucestershire and Powys (in descending order)	Between 5% and 1% from each area	n/a
Shropshire, North Somerset and Caerphilly/Merthyr Tydfil (merged for confidentiality) and Derbyshire (in descending order)	Less than 1% from each area	n/a

Appendix 3

Oxfordshire Minerals and Waste Local Plan Part 1: Core Strategy Mineral provision requirements over the Plan period.

This section sets out the requirements to meet the Core Strategy Provision requirements as set out in Policy M2

Sand and Gravel Provision required over plan period 2014 – 2031
(As of Dec 2024)

	Sharp Sand & Gravel (million tonnes)
A. Annual Provision (from policy M2 / LAA)	1.015
B. Requirement 2014 – 2031 (policy M2) (A x 18 years)	18.270
C. Sales in 2014 – 2024	9.325
D. Remaining requirement (B – C)	8.945
E. Permitted Reserves at end 2024	6.177
F. Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2025 to end 2031)	5.923
G. Remaining requirement to be provided for in Plan (D – F)	**3.022**

Notes:

1. Permitted Reserves at end 2024 (Row E) do not include approximately 1.0 million tonnes of Sharp Sand and Gravel at Thrupp Farm Quarry, Radley (South), which were previously included. Under 'ROMP' procedure the planning permission for this site has gone into suspension, and is currently dormant, and the site cannot be worked until there has been a review of the planning conditions attached to the planning permission. An application (MW.0041/23) has been submitted. Consequently, in accordance with national Planning Practice Guidance, the 'reserves' at this site should not currently be included as permitted reserves and they do not form part of the landbank.

2. Stonehenge Farm permission expired at the end of 2023. This reserve has now been removed from the landbank, and this has impacted on total mineral available to be worked over the Plan period.

3. A number of sites have limited production capacity and at these current rates, will not be able to extract all the mineral required by the end of the planning permission.

Soft Sand provision required over the Plan period 2014-2031
(As of Dec 2024)

	Soft Sand Core Strategy Requirement (Million Tonnes)
A. Annual Provision	0.189 (Policy M2)
B. Requirement 2014 – 2031	3.402
C. Sales in 2014 – 2024	2.485
D. Remaining requirement (B – C)	0.917
E. Permitted Reserves at end 2024	3.021
F. Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2025 to end 2031)	1.388
G. Remaining requirement to be provided for in Plan	**0**

Notes:

1. A number of sites are due to continue to be worked after 2031. This impacts on the amount able to be worked over the plan period.

Crushed Rock provision required over the Plan period 2014-2031
(As of December 2024)

	Core Strategy Requirement
A. Annual Provision (from policy M2 / LAA)	0.584
B. Requirement 2014 – 2031 (policy M2) (A x 18 years)	10.512
C. Sales in 2014 – 2024	10.621
D. Remaining requirement (B – C)	0
E. Permitted Reserves at end 2024	3.359
F. Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2025 to end 2031)	2.917
G. Remaining requirement to be provided for in Plan	**0**

Appendix 4

Population

The table below presents the population figures for Oxfordshire for the 10-year period (2015 to 2024)

Table 1: Oxfordshire population figures for the 10-year period (2015 to 2024 [38])

Year	Population
2015	682,571
2016	690,541
2017	696,188
2018	702, 259
2019	708,513
2020	714,766
2021	726,727
2022	737,795
2023	750,230
2024	763, 218

Population forecasts for Oxfordshire up to 2031

Year	Population Forecast[39] (ONS)	Population Forecast [40] (OCC)
2025	773,130	762,929
2026	778,869	769,910
2027	784,525	775,544
2028	790,608	782,769
2029	797,209	790,787
2030	803,837	798,465
2031	810,364	806,604

Housing Completion Figures (taken District Authority Monitoring Reports (AMRs)

New Build Housing completions by year in Oxfordshire[41]

Year	Oxfordshire Total Completions from AMRs
2011/12	1,797
2012/13	1,576
2013/14	1,881
2014/15	3,012
2015/16	3,858

[38] Population mid-year estimate (MYE) Office for National Statistics (ONS)
[39] 2022 based population statistics ONS
[40] 2023 based housing led population forecasts, Oxfordshire County Council
Oxfordshire Data Hub – Population – Future Population
[41] District Authority Monitoring Reports (Combined by the M&W Policy Team)

2016/17	4,370
2017/18	4,818
2018/19	5,287
2019/20	6,114
2020/21	4,746
2021/22	4,956
2022/23	5,492
2023/24	4,001

Planned housebuilding[42]

Year	Planned housebuilding
2024/25	3,213
2025/26	4,120
2026/27	3,975
2027/28	4,677
2028/29	4,841
2029/30	4,637
2030/31	4,883
2031/32	4,912
2032/33	4,982

[42] District local plans, District Planning Officers, Oxfordshire County Council Data Team