West Midlands Aggregates Working Party

Annual Report 2023 [2022 Data]

December 2023

Correct as of this date: 19/12/2023

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Acronyms

AWP	Aggregate Working Party
BAA	British Aggregates Association
BGS	British Geological Survey
BMAPA	British Marine Aggregate Producers Association
CDEW	Construction, Demolition and Excavation Waste
DLUHC	Department for Levelling Up, Housing and Communities
LAA	Local Aggregate Assessment
MPA	Mineral Products Association
NPPF	National Planning Policy Framework
SOCG	Statement of Common Ground
UDP	Unitary Development Plan
WDI	Waste Data Interrogator
WMAWP	West Midlands Aggregate Working Party

Glossary

Active/Inactive sites	Sites are described as active where material was produced at any time during the monitoring year and as inactive when the site was not in production during that period. Inactive sites include those that have been worked in the past and those that have yet to begin. The term 'inactive' replaces the term 'dormant' used in surveys prior to AM97 as the term 'dormant' acquired a more specific meaning under the terms of the Planning & Compensation Act 1991 and the Environment Act 1995.
Aggregates	Aggregates are defined as being hard, granular materials which are suitable for use either on their own or with the addition of cement, lime or a bituminous binder in construction. The most important applications for aggregates include concrete, mortar, roadstone, asphalt, railway ballast, drainage courses and bulk fill.
Development Plan	The complete set of policies and proposals for the development and use of land and buildings in an area. This includes adopted Local Plans and neighbourhood plans, and is defined in section 38 of the Planning and Compulsory Purchase Act 2004.
Duty to Cooperate:	Collaborative working with adjoining authorities, and other public bodies, regarding strategic issues which may have significant cross boundary impacts, during the preparation of Local Plans.
Landbanks	The stock of mineral reserves with valid planning permissions for their extraction but where their extraction has yet to take place. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment. The landbank is usually calculated at a mineral planning authority level
Local Aggregate Assessment	An annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.
LAA Aggregates Provision Rate (APR)	The annual rates of provision for aggregates as detailed in the Local Aggregate Assessment which planning authorities should use as an indicator of how much should be planned for in their area.
Managed Aggregate Supply System (MASS)	This system works through national, sub-national and local partners working together to ensure a steady and adequate supply of aggregate mineral across the country.
Marine Aggregates	Sand and gravel dredged offshore.
Mineral Plans / Mineral Local Plan	A specialist type of Local Plan for those planning authorities with responsibilities for minerals planning, which set of a framework for decisions involving minerals development.

National and Sub National Guidelines	An indication of the total amount of aggregate provision that the mineral planning authorities, collectively within each Aggregate Working Party, should aim to provide.
Permitted Reserves	In land use planning terms, reserves are those minerals that have planning permission for extraction. It includes reserves at active and inactive quarries but does not include reserves at dormant sites or sites that have not been granted planning permission. Permitted reserves are included in the landbank calculations.
Primary Aggregates	Naturally occurring mineral deposits, extracted specifically for use as aggregates and are used for the first time. Most primary aggregates are produced from hard, strong rock formations by crushing to produce crushed rock aggregate or from naturally occurring particulate deposits such as sand and gravel.
Recycled Aggregates	Produced from various sources including the demolition or construction of buildings and structures or from asphalt plantings as a result of work to resurface roads and from railway track ballast. Recycling involves the processing of the waste material so that it can be made into new materials for aggregate use.
Secondary Aggregate	Secondary aggregate is usually defined as aggregate obtained as a by-product of other quarrying and mining operations or as a by-product from industrial processes such as power station ash, glass (cullet) or railway ballast.
Statement of Common Ground	A written record of the progress made by strategic policy-making authorities during the process of planning for strategic cross boundary matters. For minerals plans, aggregate working parties are also expected to be treated as additional signatories.

Executive Summary

This Annual Monitoring Report for the West Midlands covers the calendar year 2022 and has been compiled by the West Midlands Aggregates Working Party (WMAWP).

The WMAWP was established to collect data and monitor the production and supply of aggregate minerals for each of the sub regions within the West Midlands, as well as the reserves of aggregate minerals covered by valid planning permissions and provide technical advice on the supply of and demand for aggregates from their areas.

The Aggregate Working Party is not a policymaking body but is responsible for data collection to facilitate planning by Mineral Planning Authorities (MPAs), national government agencies and the aggregate minerals industry, and to inform the general reader. Funding for the secretariat is provided by the Department for Levelling Up, Housing and Communities (DLUHC) but the members of the Aggregates Working Party provide their time on a voluntary basis.

This Annual Monitoring Report provides sales and reserve data for the calendar year 1st January – 31st December 2022, and considers trends over a 10-year period.

The Annual Monitoring Report provides information on aggregates in the West Midlands so that the WMAWP can contribute to the monitoring of the Managed Aggregate Supply System (MASS) and assess whether the West Midlands is making a full contribution towards meeting both national and local aggregate needs.

This report includes:

- Maps showing the geographical area covered by the WMAWP and the location of quarries and rail depots;
- Sales and reserves of primary aggregates in 2022, collected from the WMAWP Annual Monitoring Survey undertaken in 2023;
- The landbank in the WMAWP area at 31st December 2022;
- Secondary and Recycled Aggregates figures in the WMAWP area;
- Information on minerals plans and policies in the WMAWP area;
- Information on aggregates sites and planning applications and;
- Information on the latest Local Aggregate Assessments prepared by the Mineral Planning Authorities

The key findings of this Annual Monitoring Report are as follows:

Land-won Sand and Gravel

- Total land-won sand and gravel sales in 2022 of 7.99mt (8.09mt in 2021).
- Total land-won sand and gravel reserves at the end of 2022 of 94.92mt (92.87mt in 2021)
- Landbank at the end of 2022 of 13.7 years (12.97 years in 2021)

The collected data demonstrates a slight decrease in the amount of sand and gravel sales compared to 2021, but sales in 2022 exceeding both the 10- and 3-year averages. Staffordshire continued to be the main production area of sand and gravel, accounting for 66% of the region's sales. Shropshire and Telford & Wrekin and the West Midlands Conurbation saw a slight increase from last year in sand and gravel sales.

Permitted reserves in the West Midlands at the end of 2022 were at 94.924mt, representing an increase of 2mt from the previous year and amounting to a landbank of 13.7 years when based on the 10-year average sales. This satisfies the requirement within the NPPF for mineral planning authorities to make provision for maintaining a landbank of at least 7 years for sand and gravel. Shropshire and Telford & Wrekin continued to maintain the highest level of reserves, representing a landbank of 26.3 years based on their LAA APR. Staffordshire follows with a landbank of 12.3 years, then Warwickshire with 11.6 years and Worcestershire with 9.1 years. The West Midlands Conurbation's landbank is the only one in the region that is below 7 years, at 6.3 years based on their 10-year average sales.

Herefordshire's figures for 2021 and 2022 were not included in any sand and gravel calculations due to data confidentiality.

Crushed Rock

- Total crushed rock sales in 2022 of 4.97mt (4.2mt in 2021)
- Total crushed rock reserves at the end of 2022 of 209.71mt (209.09mt in 2021).
- Landbank at the end of 2022 of 49.7 years (50.7 years in 2021)

The collected data demonstrates an increase in the amount of crushed rock sales and reserves in the West Midlands, however the land-bank is lower compared to last year as it's based on the 10-year average. The 2022 sales figure exceeds both the 10-year and 3-year averages.

There is slight increase in sales in the Herefordshire, Staffordshire and Warwickshire areas and Shropshire and Telford & Wrekin compared to last year. Due to an increase in the 10-year average sales and a lower increase in reserves, the landbank has slightly dropped by 1 year to 49.7 years compared to last year. However, this is still satisfying the requirement within the NPPF for mineral planning authorities to make provision for maintaining a landbank of at least 10 years for crushed rock. Herefordshire, Staffordshire and Warwickshire have a combined landbank of 102.1 years while Shropshire and Telford & Wrekin have 29 years.

Figures from Herefordshire, Staffordshire and Warwickshire are combined due to data confidentiality.

Overall Primary Aggregates figures

- Total primary aggregates sales in 2022 of 12.96mt (12.29mt in 2021)
- Total primary aggregates reserves at the end of 2022 of 304.62mt (301.97mt in 2021)

This demonstrates that there is an overall increase in primary aggregate sales and reserves in the West Midlands.

A summary of key figures for 2022 are provided in Table 1 below.

Summary

From the data provided by MPAs in the West Midlands, it can be established that there are a number of largescale schemes in the pipeline including HS2 Phase 1 that will require significant quantities of aggregates. However, it is not currently possible to establish the likely total demand for minerals required for these large-scale projects, due to the lack of estimates of demand from those within the region, and the absence of a comprehensive list of projects outside the region.

Referring to the findings of the Aggregate Minerals Survey 2019, sales in the West Midlands as a proportion of consumption of aggregate minerals remain similar to previous surveys (83% in 2019/ 80% in 2014/ 81% in 2009) indicating little change in meeting local/ sub-national consumption. However, it is important to note that these figures will not have captured the significant take of minerals supplying the HS2 project and therefore the ability to meet local and national needs may be compromised. It is noted, however, that West Midlands consumption is dependent on imports of crushed rock from the East Midlands and South Wales.

Regarding the contribution made by quarries in the West Midlands to inter-regional/ national supply, it was agreed by the members of WMAWP that this is difficult to measure given the lack of up-to-date guidelines for sub-national aggregate provision.

Table 1 Dashboard key data summary for West Midlands in 2022

Aggregate	*Sales in 2022 (thousand tonnes)*	*Change in sales from previous year*	*10 year sales average (thousand tonnes)*	*3 year sales average (thousand tonnes)*	*Sales Trend (10 year)*	*LAA annual provision[1] (thousand tonnes)*	*Permitted reserves at 31 December 2022 (thousand tonnes)*	*Change in permitted reserves from previous year*	*Landbank (years)*	*Change in Landbank from previous years*
Land won Sand and Gravel	*7993*	↓	*7019*	*7741*	↑	*N/A[2]*	*94916*	↑	*13.7*	↑
Crushed Rock	*4971*	↑	*4220*	*4594*	↑	*N/A*	*209708*	↑	*49.7*	↓
Marine sand and gravel	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*				
Total Primary Aggregates	*12964*	↑	*11303*	*12335*	↑	*N/A*				
Secondary Aggregates	*N/A*	↑ or ↓	*N/A*	*N/A*	↑ or ↓	*N/A*				
Recycled Aggregates	*N/A*	↑ or ↓	*N/A*	*N/A*	↑ or ↓	*N/A*				

[1] This refers to the rate used to calculate the landbank.
[2] Due to the low levels of updated LAAs, the overall landbank calculation was based on the 10-year average.

West Midlands AWP Membership

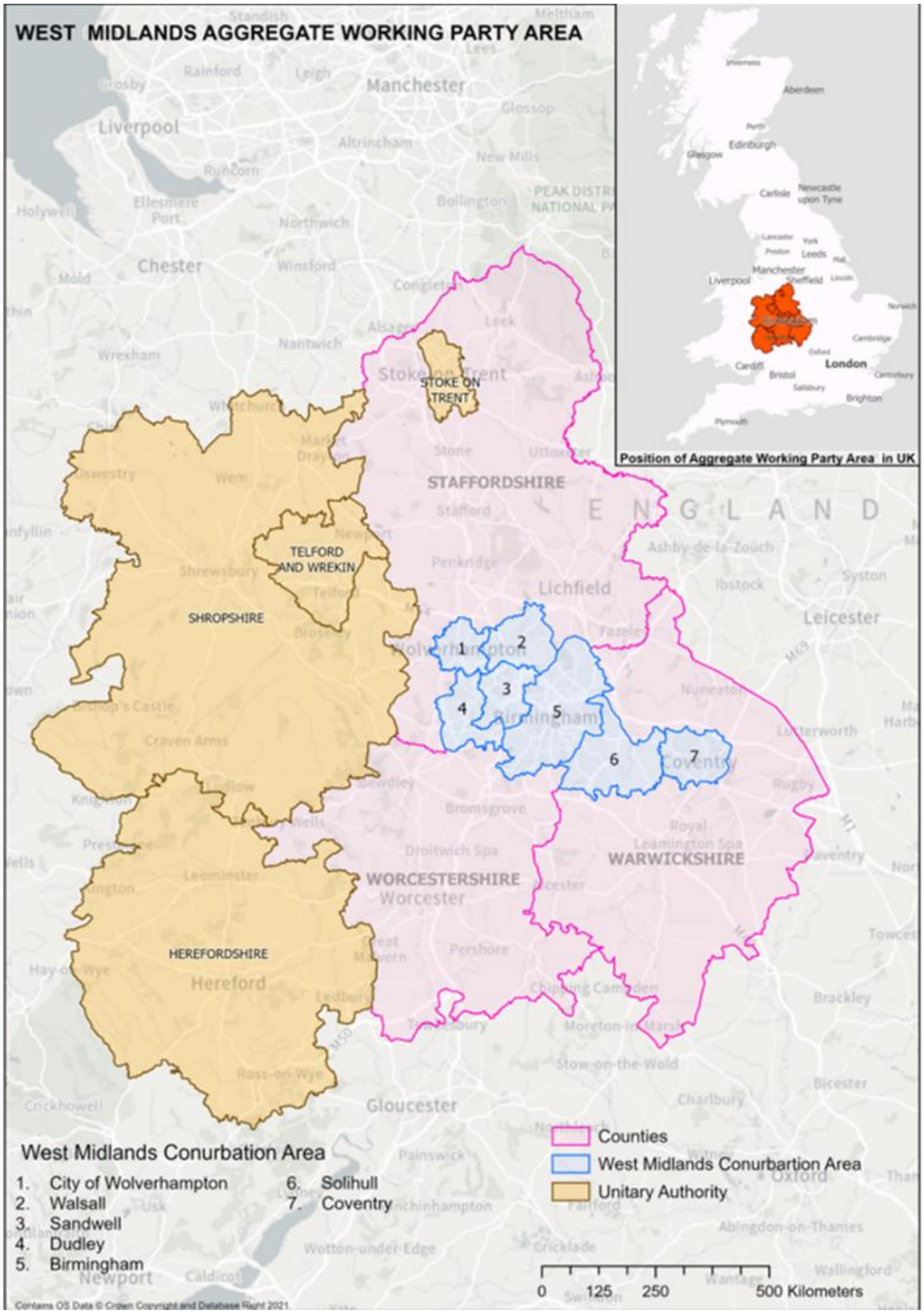
The West Midlands Aggregate Working Party (WMAWP) is one of nine similar working parties throughout England and two in Wales established in the 1970's to identify and consider likely problems in the supply of aggregate minerals. Today, Aggregate Working Parties are technical advisory groups of mineral planning authorities and other relevant organisations covering specific geographical areas who work together to:

- produce fit-for-purpose and comprehensive data on aggregate demand and supply in their area; and
- provide advice to individual mineral planning authorities and to the National Aggregate Co-ordinating Group.

The coverage of the WMAWP is detailed in Figure 1. It is made up of 14 mineral planning authorities within West Midlands:

- Herefordshire
- Worcestershire
- Shropshire
- Staffordshire
- Warwickshire
- Stoke-on-Trent
- Telford & Wrekin
- West Midlands Metropolitan Area
    - Birmingham
    - Dudley
    - Sandwell
    - Walsall
    - Wolverhampton
    - Coventry
    - Solihull

Figure 1 West Midlands AWP Area Mineral Planning Authorities



In 2023 the WMAWP was Chaired by Marianne Pomeroy from Worcestershire County Council and Secretarial duties covered by Dorottya Faludi from Capita. Membership comprises mineral planning authority and aggregate industry representation within the West Midlands region. AWP Members contributing to the running of the WMAWP are as follows:

Mineral Planning Authority Representatives

- Birmingham City Council
- Coventry City Council
- Dudley Metropolitan Borough Council
- Herefordshire Council
- Sandwell Metropolitan Borough Council
- Shropshire Council
- Solihull Council
- Staffordshire County Council
- Stoke City Council
- Telford & Wrekin Council
- Walsall Council
- Warwickshire County Council
- City of Wolverhampton Council
- Worcestershire County Council

Minerals Industry Representatives

- Aggregate Industries UK
- APT Group
- Breedon Group
- British Aggregates Association
- Cemex UK
- Hanson
- Mineral Products Association
- Tarmac

Other

- DLUHC
- Environment Agency

The WMAWP met twice in 2022 (see Appendix 1 for details of AWP meetings held this year) which is according to the Terms of Reference (TOR), and minutes of meetings are available for public inspection. Planning Practice Guidance states that the role of an AWP is three-fold:

- to consider, scrutinise and provide advice on the Local Aggregate Assessment of each mineral planning authority in its area;

- to provide an assessment on the position of overall demand and supply for the Aggregate Working Party area, including whether, in its view, the area is making a full contribution towards meeting both national and local aggregate needs. This assessment should be based on local aggregate assessments and should be informed by other economic data. It should also include an indication of emerging trends of demand in the Aggregate Working Party area; and
- to obtain, collect and report on data on minerals activity in their area. This includes annual data on sales, permissions and mineral reserves in their area, and data on recycled and secondary sources.

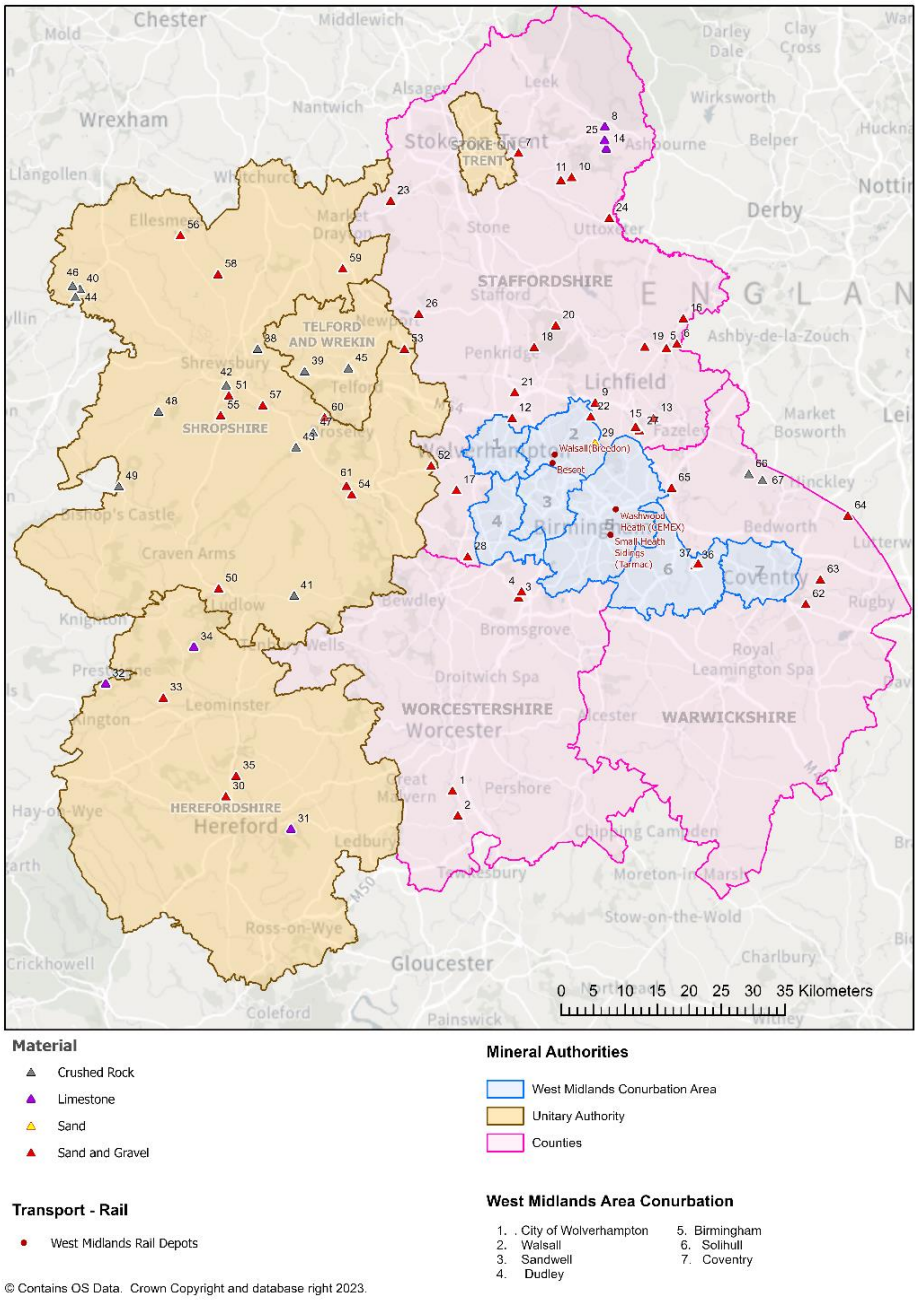
Primary Aggregates

Introduction

Data on primary land-won aggregates (sand and gravel and crushed rock) sales and reserves has been derived both from the Local Aggregate Assessments (LAAs) produced by the Mineral Planning Authorities (MPAs) within the West Midlands and the annual survey returns provided by operators.

Land Won Aggregates

Figure 2 Location of Quarries, Wharves and Rail Depots in 2022

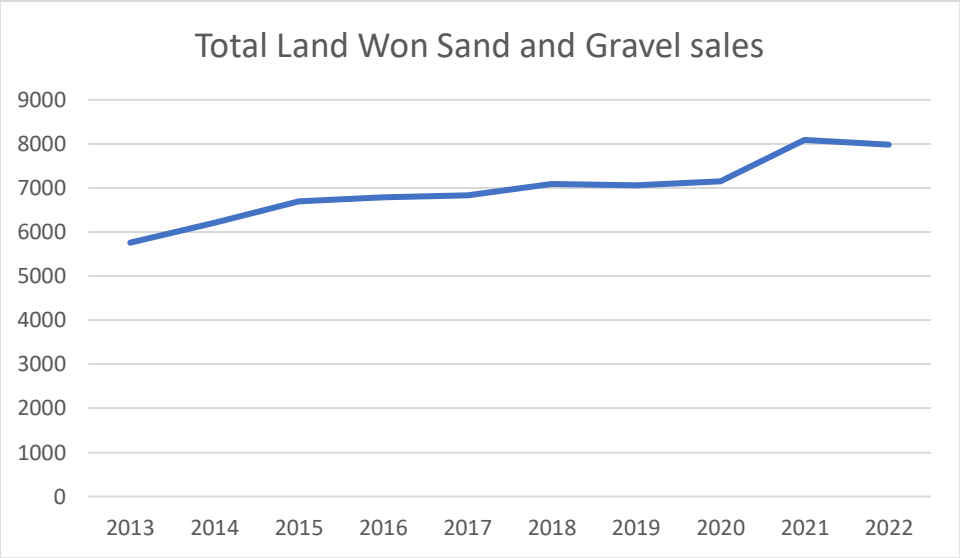


Sales of Primary Aggregates

Table 2 below shows sales of land-won aggregate sand and gravel and crushed rock sales in the West Midlands over the 10-year period from 2013-2022. With the exception of 2019, the figures for land won sales have been derived from individual LAAs or have been provided by the relevant mineral planning authority. For 2019, sales' figures have been taken from Table 9f 'Sales of primary aggregates by MPA and principal destination sub-region in 2019: West Midlands' in the final collation of the AM2019 Survey produced by the BGS.[3]

Sand and Gravel

Whilst there is not a significant variation in the sales of land won sand and gravel from year to year between 2013 and 2022 (variations generally remained in the range of 0.1 to 0.8mt per annum), there has been a trend of a growth in sales across this period with sales in 2022 approximately 39% higher than in 2013. Sales figures have grown from 5.8mt to 8mt in the past 10 years, however this is lower than the region's sand and gravel production in the 1990's and early 2000s, when sales figures were around 9-10mt per annum. In 2005 sales fell to only 5.8mt and figures in the coming years remained hovering at that level but since 2012 there has been a slow but steady growth in sand and gravel production in the West Midlands.



The total land-won sand and gravel sales in 2022 were 7.99mt. This is a slight decrease from 2021 sales figures which were 8.07mt. Sand and gravel sales in 2022 were above both the 10-year average and 3-year average sales figures, demonstrating that 2022 was still an above average year for sand and gravel sales. It should be noted however that in 2022, sand and gravel figures from Herefordshire were discounted from all sand and gravel calculations to maintain confidentiality, therefore the sales and reserves figures should be treated with caution.

[3] It should be noted that data for 1st January – 31st December 2019, was taken from the Government's Aggregate Minerals Survey 2019 (AM2019). A full report covering aggregate data in 2019 has not been undertaken at the WMAWP level, as the national AM2019 undertook this assessment of aggregate demand and supply. A copy of the full report can be viewed at: https://www.gov.uk/government/publications/aggregate-minerals-survey-for-england-and-wales-2019.

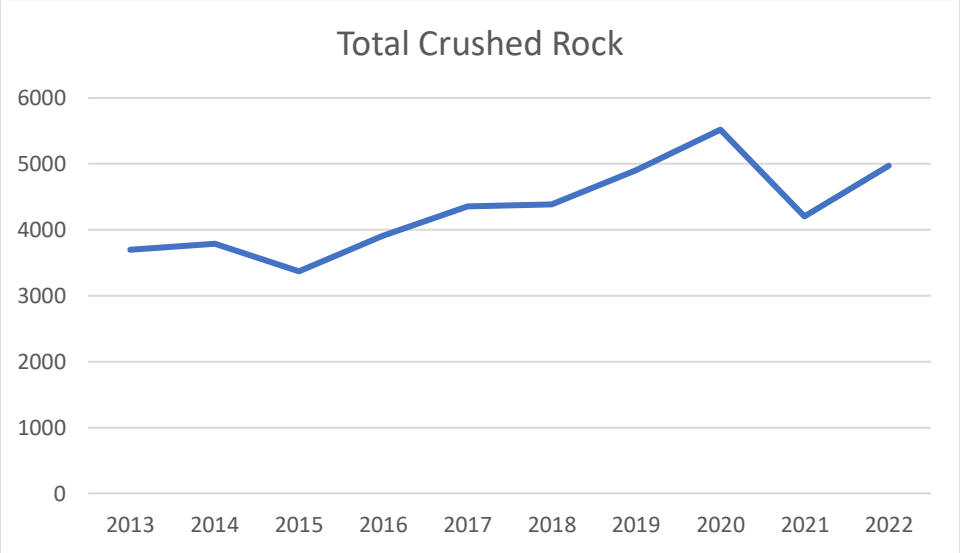
For land won sand and gravel, Staffordshire continues to be the main producer in the region, a position it has held in the past 10 years. While sales have generally been growing each year, it peaked at 5.4mt in 2021 and slightly dropped to 5.3mt in 2022.

Following a significant drop in sand and gravel sales in 2020, Worcestershire has seen sales rebound in 2021 to levels above any in the previous 10 years. Totalling at 0.67mt in 2022, it is just slightly below the previous year's sales figure by 0.03mt.

Shropshire showed a steady increase in sand and gravel sales in the past 10 years, having hovered around 0.66 in 2013, the figures have been showing an increase of 0.47mt, and the 2022 figure being greater than the 10 average.

Crushed Rock

Between 2013 and 2022 there has been a general increase in crushed rock sales in the West Midlands, with sales in 2022 approximately 18% higher than in 2013. There is a slight variation year on year with sales growing between 2012 and 2014, decreasing in 2015, but sales growth picks up and it is steadily rising until 2020 before dropping significantly in 2021 (24% lower than 2020) and returning to slightly higher than 2019-levels in 2022. The total crushed rock sales in 2022 were 4.97mt which is an increase compared to 2021 sales figures which were 4.2mt. It exceeds both the 10-year and 3-year sales averages for the region. Despite the general growth in sales figures in the past 10 years, the West Midlands contribution to the country's crushed rock output has been significantly lower compared to the 1990's and before.



Crushed rock is extracted in only four out of fourteen local authority areas in the West Midlands. Sales of crushed rock mainly come from Shropshire and Telford & Wrekin, and after significant drop in the previous year, sales in 2022 have climbed to 3.2mt from 2.6mt in 2021. In 2022 Shropshire and Telford & Wrekin's contribution to the region's total output of crushed rock amounted to 64% (up from 62% in 2021).

Sales of crushed rock have increased in the Herefordshire, Staffordshire and Warwickshire areas as well. Apart from a slight drop in 2019, the area's crushed rock production has

been steadily growing year on year. The 2022 sales figure totalled at 1.78mt, which exceeds both the 10-year and 3-year averages.

The AM2019 Survey shows that the West Midlands has been less active in crushed rock production than other regions in the country and made up only 5.9% of the country's total output.

As shown in Table 2, the figures for Herefordshire, Staffordshire and Warwickshire are amalgamated between 2013-2022 to maintain commercial confidentiality.

Table 2 Primary Aggregate Sales in WMAWP Area (in thousand tonnes)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	10 year average	3 year average
Land Won Sand and Gravel												
Shropshire and Telford & Wrekin	660	630	730	740	670	710	910	900	1080	1130	816	1037
Worcestershire	660	520	540	400	460	600	650	380	700	668	558	583
Herefordshire		100	100	130	150	190	310	170	C	C	174	195
Staffordshire	3740	4180	4470	4610	4740	4840	5040	4850	5430	5316	4722	5199
Warwickshire	210	280	320	330	330	390	430	470	360	319	344	383
West midlands Conurbation	490	500	530	580	480	360	260	390	500	560	465	483
Total Land Won Sand and Gravel sales	**5760**	**6210**	**6690**	**6790**	**6830**	**7090**	**7600**	**7160**	**8070***	**7993***	**7019***	**7741***
Crushed Rock												
Shropshire and Telford & Wrekin	2880	3130	2760	2680	3090	3010	3620	3290	2600	3190	3025	3027
Worcestershire	0	0	0	0	0	0	0	0	0	0	0	0
Herefordshire	820	660	610	1230	1270	1380	1280	1320	1602	1781	1195	1568
Staffordshire												
Warwickshire												
West midlands Conurbation	0	0	0	0	0	0	0	0	0	0	0	0
Total Crushed Rock	**3700**	**3790**	**3370**	**3910**	**4360**	**4390**	**4900**	**4610**	**4202**	**4971**	**4220**	**4594**
Total Aggregate Sales	**9460**	**10000**	**10060**	**10700**	**11190**	**11480**	**12500**	**11770**	**12272**	**12964**	**11240**	**12335**

Notes:
C = confidential figure
* = excluding data from Herefordshire for 2021 and 2022 due to data confidentiality requirements

Permitted Reserves and Infrastructure Capacity

The NPPF states that mineral planning authorities should plan for a steady and adequate supply of aggregates. This includes amongst other matters, making provisions for the maintenance of landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised. Determining permitted reserves provide a framework for sustainable resource management, indicating potential decline in supply and ensuring that extraction does not exceed the available resources or cause undue harm to the environment. Permitted reserves can fluctuate depending on a variety of factors, including approval of planning applications, changes in aggregate demand and environmental considerations. For the purposes of annual reports and the assessment of landbanks, reserves tend to be quantified on the basis of the tonnage of mineral within a planning permission area that can be used for aggregate purposes. The permitted reserves of sand and gravel and crushed rock in the WMAWP area at 31 December 2022 are set out in Table 3 below.

Sand and Gravel

Reserves of sand and gravel are considerably less than those of crushed rock. The permitted reserves of sand and gravel in the West Midlands at 31 December 2022 were 94.92mt. This is the second highest levels of sand and gravel permitted reserves in the past 10 years and it is an increase from 2021 when it totalled at 92.87mt.[4] The past 10 years show that permitted reserves of sand and gravel in the West Midlands has been hovering between 90.5mt and 95.05mt.

Consistently in the past 10 years and in 2022, the largest proportions of permitted reserves of sand and gravel are in quarries in Staffordshire (64%).

Crushed Rock

The permitted reserves of crushed rock in the West Midlands at 31 December 2022 were 209.71mt. This is a slight increase in permitted reserves compared to 2021, however it is still considerably lower than the 2020 figure that totalled at 237.78mt. The year-on-year variation of crushed rock production in the region shows that between 2013 and 2016 reserves were relatively stable at between 304.3mt and 316.6mt, but dropped sharply to 217.4mt in 2017 and have then remained relatively consistent (between 209.1mt and 237.8mt) up to 2022. Table 3 shows the significant change in the amount of total permitted reserves since 2013 when they stood at a high of 314mt.

Permitted reserves of crushed rock are found in only four out of fourteen local authority areas in the West Midlands. The crushed rock reserve figures for Herefordshire, Staffordshire and Warwickshire have been amalgamated between 2014-2021 to maintain commercial confidentiality on the crushed rock reserve figures across these MPAs due to the small number of operational crushed rock quarries within those counties.

[4] Sand and gravel permitted reserves figure was adjusted for the previous monitoring year due to a flaw in reporting from Walsall. The figure was adjusted from 96.97mt to 92.87mt.

Table 3 Permitted Reserves in WMAWP Area (in thousand tonnes)

Aggregate	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sand & Gravel										
Shropshire and Telford & Wrekin	13950	12270	10430	11290	11340	10930	15240	17050	19460	21470
Worcestershire	6010	2500	540	4290	3470	2940	2610	2500	3500	5061
Herefordshire		2760	2660	2750	2600	2480	2310	2680	C	C
Staffordshire	62260	68090	67860	63630	62940	66780	64110	58980	61454	61447
Warwickshire	4960	4440	3870	6690	6360	6200	6070	5600	5500	4008
West midlands Conurbation	5390	4850	5180	5860	3990	3260	4710	4260	2960	2930
Total Sand & Gravel Permitted Reserves	92570	94910	90540	94510	90700	92590	95050	91070	92874*	94916*
Crushed rock										
Shropshire and Telford & Wrekin	113850	109550	104050	114440	113200	100300	92600	115080	92000	87649
Worcestershire	0	0	0	0	0	0	0	0	0	0
Herefordshire	11540	197920	200270	202140	104210	127910	123900	122700	117094	122059
Staffordshire	188610									
Warwickshire										
West midlands Conurbation	0	0	0	0	0	0	0	0	0	0
Total Crushed Rock Permitted Reserves	314000	307470	304320	316580	217410	228210	216500	237780	209094	209708
Total Aggregates Permitted Reserves	406570	402380	394860	411090	308110	320800	311550	328850	301968*	307250*

C = confidential figure
* = excluding data from Herefordshire for 2021 and 2022 due to data confidentiality requirements

Imports and Exports

The latest available data on imports and exports was collected via the National Aggregates Minerals Survey (AMS) 2019[5], which was undertaken jointly between the Ministry of Housing Communities and Local Government (now known as the Department of Levelling Up Homes and Communities) and the British Geological Survey (BGS). These four yearly surveys are the only published source of information on aggregate sales by destination region. No imported and exported aggregate data was collected through the WMAWP for this report. The following text is taken from the final published version of the AMS 2019.

'Quarry operators cannot always be sure of where their products will be sold, particularly for 'collect' sales. Consequently it has not been possible to allocate all sales of primary aggregates to definite destinations by either region or sub-region.'

'Inter-regional flows of crushed rock are significantly larger than for sand and gravel because of the overall larger demand for crushed rock, particularly for roadstone, and because regions such as the South East, London and the East of England have only minor, or inferior quality, crushed rock resources. In addition, the consistency and extent of some hard rock deposits permits their working on a very large scale, enabling much wider geographical areas to be served economically by rail. The transfer of crushed rock between regions is, therefore, more complex and uneven than for sand and gravel. It reflects the combined pattern of the extent of crushed rock resources and markets /population (demand).'

The AMS 2019 data showed that the West Midlands did not import either sand and gravel or crushed rock from outside England and Wales.

Table 3 of the AMS 2019 shows that the West Midlands is net importer of crushed rock and net exporter of sand and gravel from other regions in England and Wales. Looking at a national scale, West Midlands' import and export activities are not as significant as other regions' in the country. The AMS 2019 established that *'The traditionally large crushed rock producers in England, the East Midlands and South West, have the largest exports representing 49% (14.3 Mt) and 33% (8.4 Mt) of their respective total crushed rock sales. The main importing regions were the East of England (8.8 Mt), mainly from the East Midlands and the South West, the North West (6.2 Mt), mainly from the East Midlands and North Wales, and the South East (5.3 Mt), mainly from the South West.'* In terms of sand and gravel, the AMS 2019 says *'The leading exporters of sand and gravel were the East Midlands (2.2 Mt), London (2.1 Mt) and the South East (1.7 Mt), and the leading importing regions were the East of England (2.3 Mt) and the South East (1.6 Mt). The majority of marine sand and gravel was used within the region where it was landed.'*

Table 5f of the AMS 2019 shows that the West Midlands overall imports 35% of its consumption of primary aggregates. This figure is mostly comprised of crushed rock because the West Midlands imports around 50% of its crushed rock consumption whereas with sand and gravel it is only 11%.

This shows that the West Midlands is more self-sufficient in sand and gravel than crushed rock. The declining crushed rock reserves indicate the possibility that more crushed rock

[5] Aggregate Minerals Survey 2019 - https://www.gov.uk/government/publications/aggregate-minerals-survey-for-england-and-wales-2019

imports will be required in the future if no planning applications come forward or are approved.

Table 5f of the Aggregate Mineral Survey 2019 demonstrates that the largest proportion of imports of both sand and gravel and crushed rock into the West Midlands were from the East Midlands. 0.43mt of sand and gravel and 2.77mt of crushed rock was imported from the East Midlands.

Secondary and Recycled Aggregates

Introduction

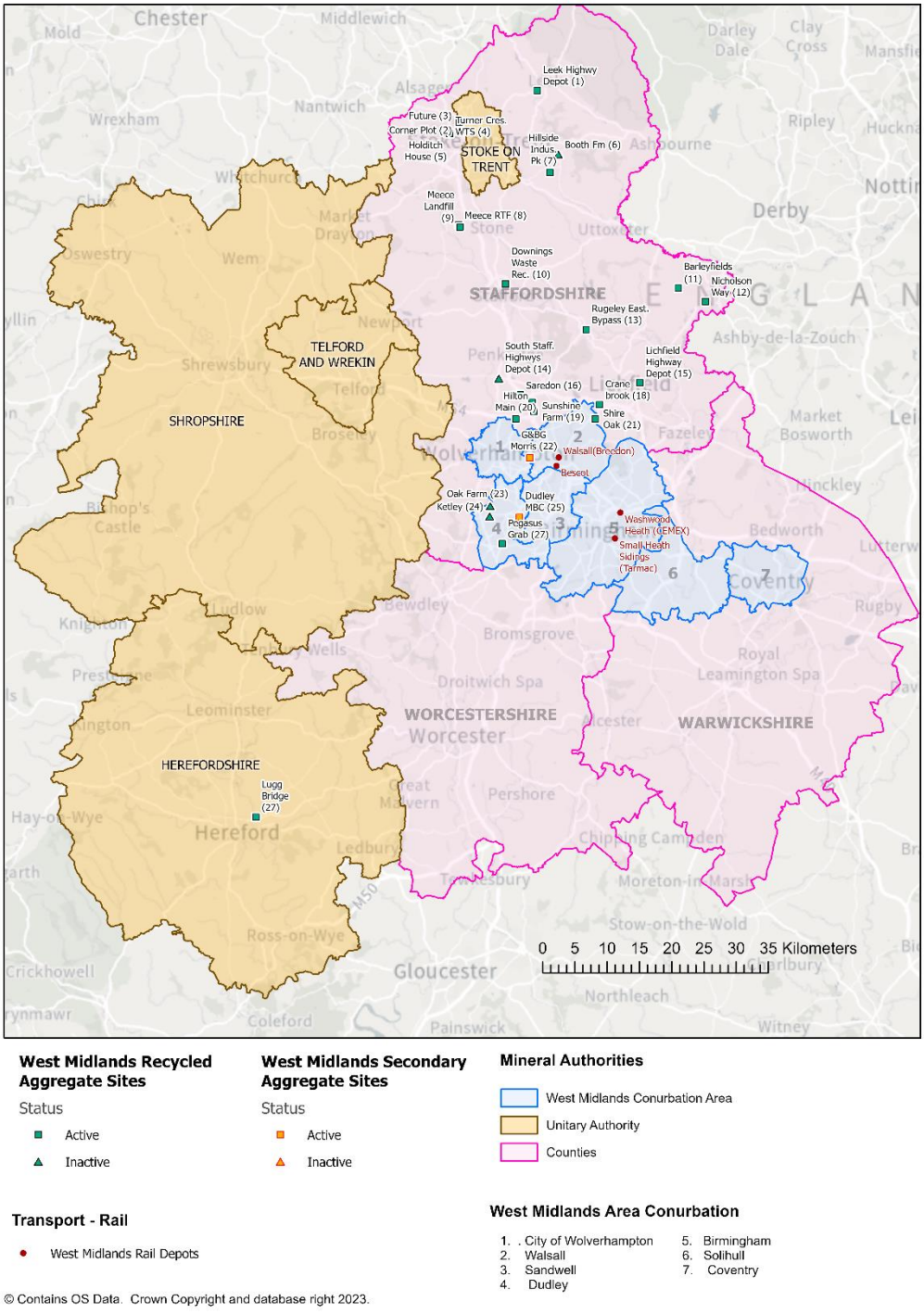
The NPPF (paragraph 210) requires mineral planning authorities to take account of the contribution made by substitute or secondary and recycled materials and minerals waste before considering the extraction of primary materials whilst aiming to source minerals supplies indigenously.

The best available data for recycled and secondary aggregates is that provided through analysis of information contained in the Environment Agency's Waste Data Interrogator (WDI). The WDI has been used to identify the amount of construction, demolition and excavation waste (CD&EW) produced and handled at licenced waste facilities within each Waste Planning Authority and is presented by sub-region in the table below. It is likely to only represent a proportion of the recycled aggregates in circulation. The most up-to-date data available from the Environment Agency Waste Data Interrogator is from 2022.

It is important to understand the data limitations associated with secondary and recycled aggregates. Most notably regarding the WDI the data within the WDI is collected from the returns from permitted facilities and records only waste received, and waste exported from sites, but the data reported is not 'sales'.

Secondary aggregates, where certain quality protocol specifications are met, is considered to be non-waste and is therefore not included within the waste tonnage returns. The data within the WDI does not account for mobile crushers or recycling and re-use that occurs on individual construction sites. The tonnage of recycled aggregates reported in the WDI is likely to only represent a proportion of the recycled aggregates in circulation and only presents a high- level view of CDEW in the region. These figures are only estimates and should be treated with caution.

Figure 4 Location of recycled and secondary aggregate sites in 2022



Secondary Aggregates

Secondary aggregates are defined within the NPPF as ‘waste from china clay, coal and slate extraction and spent foundry sand. These can also include hydraulically bound materials’.

Secondary aggregates, where certain quality protocol specifications are met, is considered to be non-waste and is therefore not included within the waste tonnage returns.

Recycled Aggregates

Recycled aggregates are primarily derived from construction, demolition and excavation waste which has been processed to achieve a marketable quality. This processing may either be carried out with imported inert waste at fixed recycling sites, often located within a quarry, a landfill site, or waste transfer station, or at a construction site using mobile plant to process the material arising from demolition being carried out. The aggregates derived from this waste stream are then distributed for use offsite or are used on-site.

Within the West Midlands, a significant proportion of the wastes recycled for aggregate use are recycled at demolition/ construction sites using mobile processing plants and indeed often reused on-site.

The tonnage of recycled aggregates reported in the WDI is likely to only represent a proportion of the recycled aggregates in circulation and only presents a high- level view of CDEW in the region. These figures are only estimates and should be treated with caution.

Table 4 CD&E Waste Arisings (Environment Agency, 2022)

Planning Authority	Amount Produced (tonnes)	Amount Managed (tonnes)
Herefordshire	181,156.138	175,395.367
Shropshire	176,232.065	281,664.779
Telford & Wrekin	113,988.67	201,193.75
Staffordshire	2,124,861.665	1,028,918.659
Warwickshire	6,824,354.722	6,217,823.594
Worcestershire	452,438.991	443,824.646
West Midlands Conurbation	2,283,996.159	1,989,932.183
Stoke-on-Trent	342,535.643	132,730.704
Totals	**12,499,564.053**	**10,471,483.68**

Trends and Analysis

Herefordshire

Sand and gravel sales and reserves data provided through the 2022 annual survey cannot be published for reasons of commercial confidentiality. Assessment of future demand indicates that there will be a need for additional reserves of sand and gravel to become operational before the end of the Minerals and Waste Local Plan (MWLP) period (2041). Whichever method of demand forecasting is used, the two currently active quarries must cease operations by 2029 and 2032, therefore provision is made in the emerging MWLP to address this and increase resilience, through the allocation of new sites and areas of search.

In terms of crushed rock, data on sales and reserves provided through the annual surveys cannot be published for reasons of commercial confidentiality, and it is reported in an amalgamated figure with Staffordshire and Warwickshire. Herefordshire relies significantly on imports of crushed rock. Even if similar levels of reliance were to continue over the MWLP period (up to 2041), permitted reserves may not be sufficient to meet demand, due to restrictive planning conditions on permitted operations. If the county were to become self-sufficient in production, there are likely to be insufficient permitted reserves to meet demand over the plan period. There is likely to be a need for additional reserves of crushed rock to be permitted up to 2041. Allocations and areas of search are being developed through the emerging MWLP.

Recycled aggregates could have an increasingly important role to play in reducing the reliance on imports of aggregates in Herefordshire in the future. Herefordshire produced recycled aggregate from the waste recovery facility at the Lugg Bridge facility near Hereford. During 2019 and 2020, Lugg Bridge sales amounted to below 50% of its permitted production capacity. Demand for recycled aggregate from waste is set to increase up to 2041. The Lugg Bridge facility is allocated in the emerging Minerals and Waste Local Plan (MWLP) for an extension to its operational capacity. Strategic employment sites, industrial estates and active mineral workings are also identified for additional waste recovery capacity to meet forecast demand.

Shropshire and Telford & Wrekin

Shropshire has reported its highest sand and gravel sales figures in 2022 in the last 10 years. The market area for sand and gravel aggregates produced in Shropshire is generally local and whilst some material is supplied into adjacent areas to the north and west, only a limited amount of sand and gravel produced from Shropshire is currently exported eastwards to the main markets in the West Midlands conurbation due to the availability of more proximate and higher quality materials closer to these markets, although Shropshire continues to supply significant amounts of sand and gravel for construction activity in Telford. These trends are expected to continue.

The area is currently responsible for producing over half of the regional requirement for crushed rock. Production of crushed rock from a single site in Telford & Wrekin contributes about a quarter of the annual production. Crushed rock is mainly used as engineering fill, roadstone and asphalt in road construction and maintenance. High specification aggregate is exported by both road and rail to a wider regional and national market area.

Whilst there are some existing and potential sources of secondary aggregates and a large number of local recycling facilities, low values and high transport costs and distances are likely to limit the contribution which these materials can make to supply.

The rates of housing and employment development in Shropshire and Telford & Wrekin recovered following the recession of the mid-2000's and have remained high over a number of years. This increased demand for construction aggregates.

Staffordshire

The quarrying of aggregate minerals is the most significant minerals extraction in Staffordshire in terms of quantity of production. Aggregate minerals are produced mainly from deposits of sand and gravel across the county but also from limestone in the Staffordshire Moorlands. The supply of aggregates within the county is supplemented by recycling construction, demolition and excavation wastes as well as by aggregate mineral from other parts of the country, particularly crushed rock from the East Midlands.

During 2022 sand and gravel sales in Staffordshire exceeded 5mt. This is greater than the target in Policy 1 in the Minerals Plan. The 3-year average 5.2mt exceeds the 10-year average sales which has now increased to 4.7mt. Both the sales and reserves figures hover at the previous year's levels, they only show a slight decrease. The landbank stands at just over 12 years based on the LAA rate and it is well above the 7-year requirement. There were 15 sand and gravel and 1 limestone quarries active in Staffordshire in 2022.

Based on the level of received and determined applications, it is assessed that the plan level of provision could be made until 2029. The 3-year average indicates a greater trend in the increasing demand for aggregates which is influenced by national strategic projects like HS2. There are planning applications pending determination for 6 sand and gravel and 1 crushed rock quarries in the area.

Warwickshire

There are two types of sand and gravel deposits in Warwickshire: river terrace deposits of the River Tame and River Avon and its tributaries and glaciofluvial deposits in the Rugby area and to the southeast of Coventry.

Warwickshire continues to make a contribution towards the supply of primary aggregates within the county from a small number of sites. While the 3-year average exceeds the 10-year average the rate of increase is very small and not significant in terms of supply calculations. The adopted minerals plan made provision for future growth in the county and elsewhere but this is yet to materialise into increased production capacity, sales and permitted reserves. However, a planning application for a new site allocated in the plan has been received and others are in the pipeline. While a significant part of HS2 Phase 1 lies within the county only recently has the project indicated a need for borrow pits to supplement the level of materials required. The supply of aggregates is supplemented by recycling construction, demolition and excavation wastes from a number of sites and this is expected to continue.

West Midlands Conurbation

The West Midlands Conurbation consisting of Birmingham, Dudley, Sandwell, Walsall, Wolverhampton, Coventry and Solihull. Most of these authorities are struggling with resourcing therefore facing difficulties in monitoring their aggregates production.

There are no active primary won mineral sites currently operational within Coventry, Birmingham, Dudley and Sandwell. It is not established whether there is any active primary won minerals sites operating in Wolverhampton.

In Walsall there is one active primary won sand and gravel site. 2022 was the first year when the quarry was transacting sales. Further to primary sites, there are seven secondary aggregates sites of which three are inactive.

Solihull is the main provider of primary sand and gravel aggregates with 2 active sites, which also contribute towards secondary and recycled aggregates. There is also some recycled aggregates activity in Solihull since December 2018 at Meriden Quarry.

Worcestershire

There are two distinct types of sand and gravel deposits in Worcestershire: the bedrock deposit solid sands of the Kidderminster Formation and Wildmoor Sandstone Formation, and the surface river terrace deposits of the rivers Severn and Avon and glacial deposits found in association with boulder clay. Indicators of demand in Worcestershire suggest that the production guideline for primary sand and gravel should be increased above the 10-year sales average. An uplift is considered to be appropriate after assessing Worcestershire's ability to supply sand and gravel, as resources exist, the Minerals Local Plan (2018-2036) allocates a significant number of areas of search, and there is significant interest in bringing sites forward shown by the minerals industry in response to "calls for sites" for allocation in the emerging Mineral Site Allocations Development Plan Document, as well as a number of pre-application discussions and planning applications under consideration. However, there are some concerns in relation to continuity of supply in the near future due to the permitted timescale of some existing sites.

Worcestershire has no permitted reserves, no productive capacity and no landbank for crushed rock. However, whilst the 10-year sales average for crushed rock sales is 0 tonnes and there has been no production of crushed rock in Worcestershire since 2010, it is important to recognise that there is demand for crushed rock to meet needs within Worcestershire, and there may also be an increasing need for crushed rock to be supplied from within Worcestershire as reserves are diminished elsewhere. This indicates that the annual production guideline should be increased above the 10-year average. The production guideline for crushed rock in Worcestershire is unable to be calculated, but it is explicitly greater than 0 tonnes.

It is recognised that significant levels of infrastructure development are proposed in the Local Plans and Strategic Economic Plans in and around Worcestershire which will create some demand for aggregate minerals from within Worcestershire. However, there is a lack of data to be able to estimate the level of future demand for aggregate resources which local infrastructure developments might create, and whether this is likely to be significantly higher or lower than levels of demand over the last 10 years to facilitate understanding of the adequacy of the 10-year sales average or scale of change which may be required.

Worcestershire has been able to meet its own needs for sand and gravel, and there is ongoing demand for supply from Worcestershire as part of the Managed Aggregate Supply

System, but the data does not indicate whether such demand is likely to increase or decrease in future.

Overall

It is difficult for most MPAs to determine the level of sales, permitted reserves and consumption due to the lack resources and updated guidelines. MPAs reported that local plan examinations are taking too long and take up too much of their resources that it obstructs them in focusing on other matters such as monitoring their aggregates production and consumption, reaching out and building relationships with quarry operators, and preparing yearly LAAs. These then result in a setback for reporting their consumption, sales and demands data back to the AWP and the Annual Monitoring Report will not be able to provide a full picture whether the West Midlands' contribution towards national and local requirements is sufficient.

Some MPAs have put their local plan review on hold due to the awaited changes in national regulations and policy and challenges due to insufficient staff to commit full time. It is anticipated that preparations on the local plans on hold will soon restart. The recent adoption of the Levelling Up and Regeneration Act will influence future plan making. It is anticipated that the preparation of local plans and minerals and waste plans will have a more streamlined process, requiring less resources, that will speed up plan making. It is hoped that the changes will have a positive impact on minerals monitoring and reporting.

The West Midlands Aggregate Working Party has been seeking to work closely with HS2 to better understand the implications for minerals supply from the West Midlands. It is not yet understood how that the withdrawal of Phase 2 will impact the West Midlands. The latest figures supplied to the West Midlands AWP by HS2 indicate that between 2020 and 2027, HS2's demand for resources from within the West Midlands may be approximately 50% of current production levels. Therefore, in order to continue supplying existing markets, production in the West Midlands region will require a 50% increase to meet the extra demand placed upon the region by HS2. However, due to the cancellation of Phase 2, and the wider slowing of activities in the construction sector, this need would become lower.

Major Construction Projects or Developments

Major construction projects have a significant effect on the aggregate supply within a region. The West Midlands has large development growth aspirations, particularly within and surrounding Birmingham. The construction of HS2 phase 1 will have an impact on aggregate demand in the West Midlands region.

Table 5 below outlines the major construction projects or developments that are proposed within the West Midlands.

Table 5 Major Construction Projects or Developments

	Project/Development name	Time Scale (estimated start and end date)	Comments
Warwickshire	High Speed 2 (phase1)	Work has commenced and will continue. Two Schedule 17 applications were submitted in 2022 for borrow pits and then appealed. Both appeals were upheld in 2023.	National High Speed Railway connecting London with Birmingham
Staffordshire	High Speed 2 (Phase 1)	Work has already commenced and construction/commissioning is to take place in stages and end 2029 to 2033	National High Speed railway connecting London with Birmingham (and connection with West Coast Mainline at Handsacre)
	Willington C Gas Pipeline	SoS decision 17th December 2014 and on 9th December 2016 SoS confirmed transfer of benefit of DCO	The application for gas pipeline approximately 27km in length, buried for its entire length, with an above ground installation at the start point.
	West Midlands Interchange	Development Consent Order granted 4 May 2020 - Phase 1 works to start summer 2023.	An intermodal freight terminal, rail served warehousing, connection to West coast mainline, new road infrastructure and structural earthworks
	M54 and M6 Link Road	Development Consent Order granted 21 April 2022. Work to commence in 2023.	Proposed link between the M54 and M6.
Shropshire	North West Relief Road	The project anticipates the following timescales: Summer 2024 - start of main works construction. Autumn/Winter 2026 - road opens. Spring 2027 - project fully completed.	Resolution to grant planning permission (21/00924/EIA) subject to conditions reached at planning committee.

Walsall	M6 Junction 10	2019-May 2023 (initially planned for 2022 completion)	Final surfacing/landscaping works.

In addition to these specific major projects and developments, there will also be various housing and employment developments on allocations within the Development Plan within each mineral planning authority area. The relevant Local Plans should be referred to for details of the location and scale of planned development.

Development Plans and Mineral Policies in WMAWP Area

Local Planning Authorities are required to prepare Local Plans which include policies to aid the determination of planning applications and to set out the development of a county/borough/district over a 15-year period. This includes policies for minerals development, which mineral planning authorities must prepare. Some authorities will include mineral planning policies within their overall Local Plans, whilst others will prepare specific Minerals and Waste Local Plans. Table 6 below details the status and progress of Local Plans in the WMAWP area.

Following the decision of the 4 Black Country LPAs to cease work on the Black Country Local Plan in 2022, each authority decided to produce their own local plans.

Table 6 Minerals Plans Information

Mineral Planning Authority / Authorities	**Plan Name / Mineral DPD**	**Status**	**Change since previous annual monitoring report** **(Yes or no)**	**Comments**	**Estimated quantity of minerals allocated in Plan**	
					Total sand and Gravel (Quantity from total which has been permitted to date)	**Crushed Rock** (Quantity from total which has been permitted to date)
Staffordshire	*The Minerals Local Plan for Staffordshire (2015-2030)*	Adopted in 2017	No		14.45Mt	0Mt
Worcestershire	Minerals Local Plan	Adopted in July 2022	No	The Minerals Local Plan allocates areas of search for sand and gravel and policy criteria to enable both sand and gravel and crushed rock development. Individual sites are to be allocated in a separate Minerals Site Allocations DPD.	N/A	N/A
Worcestershire	Mineral Site Allocations DPD	Regulation 18 delayed	No			
Herefordshire	Herefordshire Minerals & Waste Local Plan	At examination	No	Adopted Core Strategy 2015 which is in the early stages of an update process. The draft Minerals & Waste Local		

				Plan was submitted for examination in March 2022.		
Dudley	Dudley Local Plan 2041 (draft)	Regulation 18	No	Regulation 18 closing in December 2023. Until the adoption of the new Dudley Local Plan, the Black Country Core Strategy 2011 is in place for minerals planning.	N/A	N/A
Shropshire	Shropshire Local Plan (2016 – 2038	At examination				
Warwickshire	Minerals Local Plan (2018-2032)	Adopted July 2022	Yes	n/a	7.51mt	0mt
Birmingham	The Birmingham Development Plan (BDP) 2031	Adopted in 2017	No			
Telford & Wrekin	The Telford & Wrekin Local Plan 2011-2031	Adopted in 2018	No	Currently reviewing the Local Plan, with a Regulation 18 consultation ongoing.		
Coventry	Coventry Local Plan(2011 - 2031)	Adopted in 2017	No	Currently reviewing the plan – Regulation 18 closed in September 2023	N/A	N/A
Sandwell	Sandwell Local Plan 2041 (draft)			Regulation 18 closing in December 2023		
Solihull	Soilhull Local Plan	Submitted for examination in May 2021	No	Examination is on hold.	Total sand and gravel in emerging plan 4.1mt, quantity permitted 0.4mt.	

Stoke-on-Trent	Stoke-on-Trent Local Plan 2020-2040	Issues and Options consultation closed 21 June 2021	No	Early stages of preparation		
Walsall	Walsall Borough Local Plan			Preparations will commence autumn 2024. Until then the Black Country Core Strategy 2011 is in place.		
Wolverhampton	Wolverhampton Local Plan (draft)	Early stages of preparation		Regulation 18 anticipated February 2024		

Planning applications in WMAWP Area

The West Midlands WMAWP monitors the nature and outcome of planning applications for primary aggregates extraction in the West Midlands on an annual basis. Table 7 below lists the planning applications for aggregate production within the West Midlands which were either decided or pending a decision during both 2022.

There were 6 applications granted planning permission in 2022 (with 2 of these still awaiting for the legal agreements to be formalised).

Table 7 Planning Applications and Decisions in WMAWP Area in 2022

Mineral Planning Authority	Site Name	Grid Reference	Operator / Applicant	Type of Application	Mineral	Date Submitted	Decision date	Decision	Tonnage	Planning permission end date
Shropshire	Former Ironbridge Power Station		Harworth Group Plc	Full	Sand and gravel	19/12/2019	21/09/22	Granted	1.9Mt	
Solihull	Berkswell Quarry Park Farm extension	422997 280202	Cemex	Variation of Condition		09/2022	07/2023	Granted	0.627	12/26
Staffordshire County Council	Pyford Brook	SK149 151	Cemex	Full	Sand and gravel	11/05/2020	16/03/22	Granted with condition	1.4Mt	Within 5 years of commencement
	Croxden Quarry	SK 033 417	Tarmac	Full	Sand and gravel	22/05/2020	25/04/22	Granted with conditions	1.5Mt	30/11/23
	Uttoxeter	SK 097 351	Aggregate Industries	Full	Sand and gravel	12/10/2021	N/A	Approval pending completion of legal agreement	0.9Mt	N/A
	Saredon	SJ 944 80	NRS Aggregates	Full	Sand and gravel	10/03/2022	N/A	Approval pending completion of legal agreement	3Mt	N/A
	Croxden Quarry	SK 033 417	Tarmac	Full	Sand and gravel	07/02/2022	N/A	Approval pending completion of legal agreement	4.65Mt	N/A
	Weeford	SK 133 026	H.D Ricketts	Full	Sand	23/03/2021	N/A	Pending	0.3Mt	N/A
	Newbold	SK 205 195	Aggregate Industries	Full	Sand and gravel	18/05/2022	N/A	Pending	2.8Mt	N/A
	Willington	SK277 267	Cemex	Full	Sand and gravel	09/12/2022	N/A	Pending	0.6Mt	N/A

	Cauldon Quarries Complex	SK 084 474	Aggregate Industries	Full	Limestone	14/12/2022	N/A	Pending	74Mt	N/A
Warwickshire	Land south of Wasperton Farm	427370 259375	Smiths Concrete Ltd	Full		14/11/2022		Pending	2Mt	
Worcestershire	Ryall North Quarry	SO8510 4122	Cemex	Extension	Sand and gravel	27/04/2020	27/10/2022	Granted with conditions	0.475Mt	Within 3 years of commencement of the development
	Sandy Lane Quarry	395202 276101	NRS Ltd	Full	Sand	06/08/2021	08/07/2022	Granted with conditions	0.245Mt	Within 6 years of commencement of the development
	Bow Farm	SO 875365	M C Cullimore (Gravels) Ltd	New	Sand and gravel	14/11/2019	08/11/2022		1.5Mt	Within 9 years of commencement of the development
	Lea Castle Farm	383959 278992	NRS Aggregates Ltd	New	Sand and gravel	14/01/2020	27/05/2022	Refused, and decision has been appealed	3Mt	
	Pinches 4	396794 275686	Timmins	Full	Sand and gravel	07/01/2020		Pending	1Mt	
	Wilden Lane	382646 272908	A C Buck and Son Ltd	Full	Sand and gravel	05/08/2022		Pending	0.25Mt	
	Ripple East	386900:236 900	Cemex	Full	Sand and gravel	18/03/2022		Pending	0.475Mt	
	Notes: TYPE: N – New; E – Extension; ET – extension of time; G – Greenfield; B – Borrow Pit; R – Renewal; C – Conditions pursuant; C of E – Certificate of Lawfulness; C o U – Change of Use; PD – Permitted Development; WP – Installation of water pipe; VC – Variation of Condition. MINERAL: S/G Sand and Gravel; G Gravel; S Sand; B/S Building Sand; L Limestone; C/R Crushed Rock; SA Secondary Aggregates; RA Recycled Aggregates C = confidential figure									

Local Aggregate Assessments

Each Mineral Planning Authority is required to produce an annual Local Aggregate Assessment which provides:

- An analysis of local aggregate supply;
- A statement on forecasted demand for aggregates; and
- An assessment of the balance between demand and supply.

Paragraphs 061-071 relating to Local Aggregate Assessments in national Planning Practice Guidance, and the 'Practice Guidance on the Production and Use of Local Aggregate Assessments' produced by the Planning Officers' Society and the Mineral Products Association, provide advice on how this should be done.

Only Staffordshire and Worcestershire produced LAAs with data from 2021, and both have drafted LAAs with data from 2022. Herefordshire produced an LAA with combined data from 2019 and 2020 and Shropshire has an LAA with 2019 data. All other areas in the West Midlands either have LAAs that are over 5 years old or have no LAAs. Authorities in the area are facing resourcing issues which result in poor monitoring of the production and consumption of aggregates. This is negatively impacting updating their LAAs.

Table 8 2022 Local Aggregate Assessments in the West Midlands

Mineral Planning Authority	***Complete (Yes or No)***	***LAA Figure***		***Calculation Method***
		Sand and Gravel	***Crushed Rock***	
Staffordshire	*No (2022 in draft version)*	*5Mt/a*	*n/a*	*S&G provision based on figure used in MLP/ no figure for crushed rock on basis that data is confidential due to single operational site.*
Herefordshire	*No (2019-2020)*	*0.16Mt*	*n/a*	
Walsall	*No (2015)*	*WMCA (in million tonnes) Permitted Reserves: 5.4, Unpermitted Resources in Walsall Area of*	*There has been no production of crushed rock in the West Midlands Metropolitan Area since 2007 when*	*The length of the landbank is calculated by dividing permitted reserves by the annual*

		Search: 6.4, [same] in Solihull Area of Search: 2.5 - Total Supply: 14.3 *There is currently a 7-year landbank of permitted sand and gravel reserves, and existing local plans make sufficient provision in Solihull and Walsall to meet longer term requirements up to and beyond 2030.*	*the last quarry closed, and there are no winnable deposits of crushed rock remaining in the Area.*	*requirement. The overall annual production requirement for sand and gravel in the West Midlands Metropolitan Area, based on indicative "apportionments" identified in Local Plans (1) and rolling average (mean) 10-year sales (2), is just over 0.5 million tonnes. Therefore, to provide a 7-year landbank the Area needs to identify permitted reserves of around 3.5 million tonnes in total.*
Solihull MBC	*No (2015)*	*0.5Mt*		
Shropshire	*No (2018-2019)*	*0.71Mt*	*3.01Mt*	*Production guideline based on 10-year average. No other relevant local information which indicates deviation from this average is currently required.*
Worcestershire	*No (2021 LAA figures presented here, 2022 currently in draft version)*	*0.827Mt*	*>0 tonnes*	*The 2021 data LAA proposes a deviation from the 10-year average for both the sand and gravel and crushed rock*

				production guidelines.
Warwickshire	*No (2017)*	*0.5Mt*	*N/A*	*Production of sand and gravel based on the 10-year average of 2007-2016 which strikes a reasonable balance between some years of economic growth and some years of recession.*
West Midlands Metropolitan Area (Birmingham, Dudley, Sandwell, Solihull, Walsall)	*No (2015)*	*N/A*	*N/A*	*Works on data collection and analysis started in 2023.*

Conclusions

At 31 December 2022, the reserves of sand and gravel in the West Midlands overall are above the minimum 7 year landbank (at a figure of 13.7 years when calculated using the 10 year average) and in the case of crushed rock above the minimum 10 year landbank (at a figure of 49.7 years calculated using the 10 year average). It should be noted however that 2022 sand and gravel figures from Herefordshire were discounted from all sand and gravel calculations to maintain confidentiality, therefore the sales and reserves figures should be treated with caution.

Regarding the contribution made by quarries in the West Midlands to inter-regional/ national supply, it was agreed by members of WMAWP that this is difficult to measure given the lack of up-to-date guidelines for sub-national aggregate provision. Referring to the findings of the Aggregate Minerals Survey 2019, sales in the West Midlands as a proportion of consumption of aggregate minerals remain similar to previous surveys (83% in 2019/ 80% in 2014/ 81% in 2009) indicating little change in meeting local/ sub-national consumption. However, it is important to note that these figures will not have captured the significant take of minerals supplying the HS2 project and therefore the ability to meet local and national needs may be compromised. It is noted, however, that West Midlands consumption is dependent on imports of crushed rock from the East Midlands and South Wales.

Due to the lack of updated LAAs in the region, there is not enough data to conclude whether mineral planning authorities in the West Midlands are meeting their requirements separately.

The West Midlands is mainly self-sufficient in sand and gravel production and it is importing 50% of its crushed rock consumption. There is no substantial export from the region to other areas, 1.3mt sand and gravel was exported according to the AM2019.

HS2 has an impact on the crushed rock consumption in the region. The absence of up-to-date national guidelines is increasing the uncertainties around aggregate demand for major national projects like HS2.

Most MPAs in the region are experiencing resourcing difficulties which result in poor monitoring of aggregate production and consumption. This results in low levels of updated LAAs in the area.

Appendix 1: AWP Meetings

Meeting Date	Link to minutes of the meeting	Summary of Key Points
27 April 2023		***To be updated***
23 November 2023		

Appendix 2: Primary Aggregates sites in WMAWP area

Mineral Planning Authority	Site Name	Cross Reference to Figure 2	Type of site (Wharf, rail depot, quarry etc)	Operator	Grid Reference	Mineral	Status	Planning Permission End Date
Worcestershire County Council	Clifton	1	Quarry	Tarmac	384712:245233	Sand & Gravel	Active	
	Ryall North	2	Quarry	Cemex	386900:236900	Sand & Gravel	Active	
	Wildmoor	3	Quarry	Salop Sand & Gravel	394983:275913	Sand & Gravel	Active	
	Chadwich Lane	4	Quarry	Salop Sand & Gravel	395480:276827	Sand & Gravel	Active	
	Sandy Lane		Quarry	NRS Ltd	395202:276101	Sand	Inactive, permitted not yet commenced	Within 6 years of commencement of the development
	Bow Farm		Quarry	M C Cullimore (Gravels) Ltd	SO 875365	Sand & Gravel	Inactive, permitted not yet commenced. Contingent on planning permission being granted for site access and processing plant within Gloucestershire. The application for the part to the site in Gloucestershire was refused in January 2023 (application reference 19/0081/TWMAJM)	Within 9 years of commencement of the development

							and this decision has been appealed.	
Staffordshire	Alrewas	5	Quarry	Tarmac Trading Ltd	SK 175 125	Sand and Gravel	Active	2029
	Barton	6	Quarry	Hanson UK	SK 195 155	Sand and Gravel	Active	2032
	Captains Barn Farm	7	Quarry	Dalecrete	SK 950 455	Sand and Gravel	Active	2026
	Cauldon Low	8	Quarry	Aggregate Industries UK Ltd	SK 084 474	Limestone	Active	2042
	Crane Brook	9	Quarry	Mac Quarries	SK 070 064	Sand and Gravel	Active	2033
	Croxden	10	Quarry	Tarmac Trading Ltd	SK 033 417	Sand and Gravel	Active	2023
	Freehay	11	Quarry	Hanson UK	SK 015 411	Sand and Gravel	Active	2025
	Hilton Park	12	Quarry	Hanson UK	SJ 952 45	Sand and Gravel	Inactive, worked in past, remaining reserves	2042
	Hints	13	Quarry	Tarmac Trading Ltd	SK 163 462	Sand and Gravel	Active	2025
	Kevin	14	Quarry	Tarmac Trading Ltd	SK 086 465	Limestone	Inactive, worked in past, remaining reserves	2028
	Weeford (Moneymore)	15	Quarry	Hanson UK	SK 133 026	Sand and Gravel	Active	2042
	Newbold	16	Quarry	Aggregate Industries UK Ltd	SK 205 195	Sand and Gravel	Active	2029
	Poolhouse Road	17	Quarry	n/a	SO 853 927	Sand and Gravel	Inactive, worked in past, remaining reserves	2042
	Pottal Pool	18	Quarry	Hanson UK	SJ 973 147	Sand and Gravel	Active	2034
	Pyford Brook	19	Quarry	Cemex	SK149 151	Sand and Gravel	Inactive, not yet worked	2027
	Rugeley	20	Quarry	Cemex	SK 010 181	Sand and Gravel	Active	2031

	Saredon	21	Quarry	NRS Saredon Aggregates Ltd	SJ 944 80	Sand and Gravel	Active	2028
	Shire Oak	22	Quarry	JPE Aggregates	SK 063 042	Sand and Gravel	Active	2025
	Trentham (Lordsley)	23	Quarry	Hanson UK	SJ 750 380	Sand and Gravel	Inactive, worked in past, remaining reserves	2042
	Uttoxeter	24	Quarry	Aggregate Industries UK Ltd	SK 097 351	Sand and Gravel	Active	2016
	Wredon/ Wardlow	25	Quarry	Tarmac Trading Ltd	SK 087 572	Limestone	Inactive, worked in past, remaining reserves	2046
	Weavers Hill Sand Pit	26	Quarry	GRS (Roadstone Ltd)	SJ 794 203	Sand and gravel	Inactive, worked in past, remaining reserves	2024
	Weeford (Ricketts)	27	Quarry	H.D. Ricketts	SK 133 026	Sand and Gravel	Active	2042
	Whittington Hall Lane	28	Quarry	n/a	SO 870 820	Sand and Gravel	Inactive, worked in past, remaining reserves	2042
Walsall	Branton Hill Quarry Extension	29	Quarry	Bliss Sand & Gravel Co Ltd	SK067002	Sand	Pre-Operational	
Herefordshire	Upper Lyde Quarry	30	Quarry	Hereford Quarries Limited	Easting: 349311 Northing: 244918	Sand and gravel	Active	
	Perton	31	Quarry	Perton Quarry Ltd	SO 59468 39777	Limestone	Active	
	Nash Quarry	32	Quarry	Tarmac	Easting: 330443 Northing: 262410	Limestone	Inactive	
	Shobdon Quarry	33	Quarry	Tarmac	Easting: 339452 Northing: 260251	Sand and gravel	Inactive	
	Leinthall	34	Quarry	Breedon Group	Easting: 344294 Northing: 268083	Limestone	Active End date: 2027	

	Wellington Quarry	35	Quarry	Tarmac	Easting: 350904 Northing: 248046	Sand and gravel	Active End date: 31/12/2032 Restoration: 31/12/2034	
Solihull	Berkswell Quarry	36	Quarry	Cemex	4.228E+11	Sand and gravel	Active	
	Meriden Quarry	37	Quarry	NRS Wastecare	Easting: 423124 Northing: 281243	Sand and gravel	Active	
Shropshire and Telford & Wrekin	Haughmond Hill Quarry	38	Quarry	Aggregate Industries UK Ltd	SJ 542 148	Crushed Rock	Active	
	Leaton Quarry	39	Quarry	Breedon Group	SJ 618 113	Crushed Rock	Active	
	Llynclys Quarry	40	Quarry	Llynclys Aggregates	SJ 264 242	Crushed Rock	Active	
	Clee Hill Quarry	41	Quarry	Midland Quarry Products (MQP) Ltd	SO 599 762	Crushed Rock	Active	
	Bayston Hill Quarry	42	Quarry	Tarmac Trading Ltd	SJ 493 091	Crushed Rock	Active	
	Coates Quarry	43	Quarry	Aggregate Industries UK Ltd	SO 602 994	Crushed Rock	Inactive	
	Blodwell Quarry	44	Quarry	Hanson Aggregates	SJ 257 229	Crushed Rock	Inactive	
	New Hadley Quarry	45	Quarry	Michelmersh Brick UK Ltd	SO 590 980	Crushed Rock	Inactive	
	Nantmawr Quarry	46	Quarry	Midland Quarry Products (MQP) Ltd	SJ 253 242	Crushed Rock	Inactive	
	Farley Quarry	47	Quarry	Non-Mineral Owner	SJ 629 017	Crushed Rock	Inactive	
	Callow Quarry	48	Quarry	Tarmac Trading Ltd	SJ 387 050	Crushed Rock	Inactive	
	More Quarry	49	Quarry	Tarmac Trading Ltd	SO 325 933	Crushed Rock	Inactive	

	Bromfield Quarry	50	Quarry	Bromfield Sand & Gravel Co Ltd	SO 481 773	Sand & Gravel	Active	
	Norton Farm Quarry	51	Quarry	Hanson Aggregates	SJ 497 075	Sand & Gravel	Active	
	Shipley	52	Quarry	JPE Aggreagates	SO 813 963	Sand & Gravel	Active	
	Woodcote Wood	53	Quarry	NRS Woodcote Aggregates Ltd	SJ 773 149	Sand & Gravel	Active	
	Bridgwalton Quarry	54	Quarry	Shropshire Sand & Gravel Co Ltd	SO 689 920	Sand & Gravel	Active	
	Gonsal Quarry	55	Quarry	Shropshire Sand & Gravel Co Ltd	SJ 484 044	Sand & Gravel	Active	
	Wood Lane Quarry	56	Quarry	TG Aggregates	SJ 422 328	Sand & Gravel	Active	
	Cound Quarry	57	Quarry	Hanson Aggregates	SJ 550 060	Sand & Gravel	Inactive	
	Sleap Quarry	58	Quarry	Hanson Aggregates	SJ 480 265	Sand & Gravel	Inactive	
	Conyburg Wood Quarry	59	Quarry	Hanson Aggregates	SJ 675 274	Sand & Gravel	Inactive	
	Buildwas Quarry	60	Quarry	JPE Aggreagates	SJ 647 041	Sand & Gravel	Inactive	
	Morville Quarry	61	Quarry	Shropshire Sand & Gravel Co Ltd	SO 685 936	Sand & Gravel	Inactive	
Warwickshire	Wolston Fields Quarry, Rugby BC	62	Quarry	Smiths Concrete	SP395744	Sand and Gravel	Active	
	Brinklow Quarry, Rugby BC	63	Quarry	Astons	SP417792	Sand and Gravel	Active	

	High Cross Quarry, Rugby BC	64	Quarry	KSD Limited	SP465888	Sand and Gravel	Inactive	
	Dunton Quarry	65	Quarry	KSD Limited	SP188931	Sand and Gravel	Inactive	
	Mancetter Quarry	66	Quarry	Tarmac Trading Limited	SP309955	Crushed Rock	Active	
	Hartshill Quarry	67	Quarry	Crown Aggregates Ltd	SP324947	Crushed Rock	Active	