



Mineral Products Association

AMPS 2021

9th Annual Mineral Planning Survey Report

Extracting Minerals . . . Manufacturing Products . . . Supplying Markets

EXECUTIVE SUMMARY

The 9th Annual Mineral Planning Survey, AMPS 2021, reports on mineral planning data for 2020.

This report is set against the backdrop of decreasing aggregate sales in 2019 (-4.8%) and 2020 (-8.8%) compared to 2018. The slowdown in market sales in 2019 was partly attributed to Brexit related uncertainty that impacted particularly commercial construction projects. The decline in sales in 2020 reflects the impact of the first Covid lockdown, although demand rebounded quickly over the second half of the year and in 2021.

This report identifies that the long-term reserve base upon which the aggregates sector is so dependant remains under pressure, illustrated by the difference between annual sales and replenishment (see fig 1&2). This decline was confirmed in the recently published Aggregate Minerals Survey for England and Wales, AM2019.

The number of planning applications for new mineral reserves submitted by the industry continues to be low, which is considered to reflect a combination of factors including the cumulative costs of obtaining access to land and minerals, and securing the necessary permissions and permits, together with the uncertainty and disruption caused by Brexit and the Covid pandemic.

Analysis of regional replenishment rates and annual sales illustrates the declining reserve

trends that are emerging across Great Britain, particularly in regions that traditionally have been responsible for large exports to other regions. Using the 10-year average sales and reserves data for each region (see figs 3 & 4), the outputs for both sand & gravel and crushed rock illustrate the challenge that some of the key regions responsible for national supply are facing in maintaining their reserve base given the pressures of ongoing demand. Given the additional material demands that are emerging to support the delivery of the pipeline of nationally significant infrastructure projects, this situation needs to be closely monitored.

In 2020, the average time taken to determine a mineral planning application and issue a permission was 35.7 months for sand and gravel and 34.3 months for crushed rock. However, the overall time taken for application preparation through to implementing a consent will be significantly longer. Typically, it can take between 5 to 15 years to convert a new site from exploration into an active, operational concern. The continued absence of a strategic approach to forecasting future demand requirements is increasingly resulting in inconsistencies and tensions between individual mineral planning authorities and the Aggregate Working Parties in England who oversee the function of the Managed

Aggregate Supply System (MASS). This in turn creates further uncertainty for industry in committing to investment and long-term developments.

The sustainable future supply of essential minerals cannot be assumed. It requires effective planning, management and monitoring and there is a continued desire from both local authorities and from industry for the National and Sub-national Guidelines for aggregates provision in England to be updated to support the delivery of MASS.

The MPA's 'Long term aggregates demand & supply scenarios, 2016-2030' indicates that a cumulative total of between 3.2 to 3.8 billion tonnes of construction aggregates are likely to be required by 2030 to support economic growth and development across Great Britain. Securing the supply of these materials will require active management, supported by regular survey and up to date data to monitor performance, to ensure the right resources are made available in the right location and at the right time.

If there is no reversal in the long-term trend of diminishing reserves, it is inevitable that the tensions involved in maintaining future supply will increase, with our members reporting anecdotally that quarries are operating at their maximum capacity with product going straight to market over longer distances rather than building up as stock.

THE KEY FINDINGS OF THE REPORT

■ Sales

Land won aggregates sales volumes by MPA members declined for two consecutive years in 2019 (-4.8%) and 2020 (-8.8%), from a total of 140Mt in 2018 to 122Mt in 2020

■ Replenishment of sand & gravel reserves

As of the end of 2020, the rolling 10-year average for sand & gravel replenishment is 63%, indicating that sales continue to outstrip the tonnage of new reserves permitted.

■ Replenishment of crushed rock reserves

The 10-year average for the replenishment of crushed rock reserves was 76% as of the end of 2020.

■ Number of planning applications

There were 35 applications in 2020 (40 in 2019). Out of this total, 9 (13 in 2019) were for new land-won aggregate (sand and gravel and crushed rock) extraction with the vast majority of those being for extensions to existing operations rather than new sites.

■ Number of planning decisions

15 applications (11 in 2019) were determined for sand & gravel extraction in 2020, with 14 being granted (9 in 2019), 1 refused (2 in 2019) and a further 2 withdrawn. For crushed rock in 2020, 2 applications were approved (3 in 2019) with no refusals.

■ Time taken to obtain permission

In 2020 it took on average 35.7 and 34.3 months respectively to secure permission (from the commencement of pre-application discussions to the permission being issued) for new sand & gravel and crushed rock reserves.

■ Plan Allocations

Over the past 10 years, 38% of all new permissions issued were for sites that had not been allocated in a mineral plan.

INTRODUCTION

AMPS 2021 is the latest in a series of annual reports produced by the Mineral Products Association (MPA), informed by a survey of the planning activities of the membership across Great Britain during 2020.

The objective of the AMPS survey is to provide an annual overview of the performance of the mineral planning processes taking place across Great Britain. These support the delivery of the permitted reserves which ultimately sustain the minerals industry and those activities that rely on it, primarily construction and manufacturing. Attention is drawn to other reports produced by the MPA which evidence the sustainable development performance of the industry¹, the contribution it makes to the UK economy², the contribution of recycled and secondary materials to aggregates supply³, and other industry achievements in relation to quarry restoration and biodiversity⁴.

Some of the data reported relate only to construction aggregates, which represent by far the largest element of mineral extraction and supply in Great Britain. The planning application statistics relate to all planning applications submitted by MPA members and include data for aggregates and other minerals including high PSV roadstone, and industrial materials such as industrial limestone, industrial clay, dimension stone and silica sand.

Each figure sets out the scope of the information that is presented and the variations between the topics reflect the historical data that can be drawn upon. This

is principally because the AMPS report is continually evolving in response to feedback received and what information is available. Consequently, some data has only been collected relatively recently, whilst other data goes back to the 1990s. The overall objective is to produce a document which is useful to all those involved in planning for minerals, primarily aggregates

¹ <https://mineralproducts.org/Sustainability/Reporting.aspx>

² <https://mineralproducts.org/Publications/Communicating-Industry-Value.aspx>

³ <https://mineralproducts.org/Publications/Resource-Use.aspx>

⁴ <https://mineralproducts.org/Publications/Natural-Environment.aspx>

Mineral products in construction

QUARRYING, MINING & PRODUCTION

2,400 UK sites

- Aggregates
- Cement
- Concrete
- Mortar
- Asphalt
- Dimension Stone
- Silica Sand
- Industrial Clay & Lime

QUARRY RESTORATION

- Biodiversity Net Gain
- Nature Reserves
- Country Parks
- Agriculture

RECOVERY, REUSE & RECYCLING

- Construction waste
- Excavation waste
- Commercial waste
- Industrial by-products



81,000 jobs



400 million tonnes produced in UK each year



£5.8 billion contribution to UK economy



Homes

Business & Commerce

Power, Water & Communication Systems

Sea & Flood Defences

Schools & Hospitals

Factories & Depots

Roads, Railways & Bridges

Ports & Airports

Mineral products in manufacturing



Steel



Glass



Water



Food



Fertiliser



Medicine



Ceramics



Paper

Figure 1. Land-won sand & gravel: Difference between new permitted reserves and sales (GB)

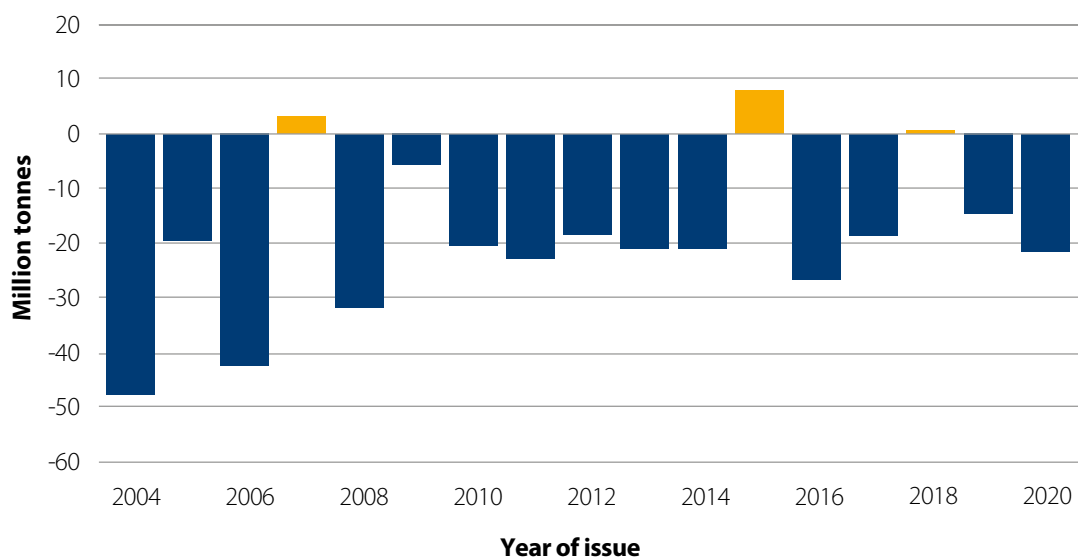


Figure 2. Crushed rock: Difference between new permitted reserves and sales (GB)

Note: 2007, 2011 and 2012 dominated by major individual consents

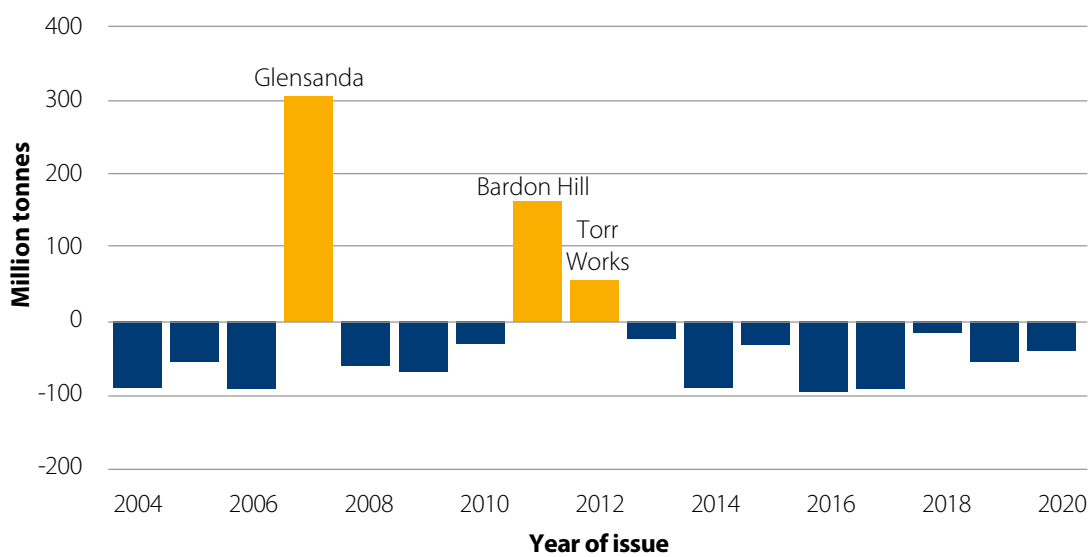
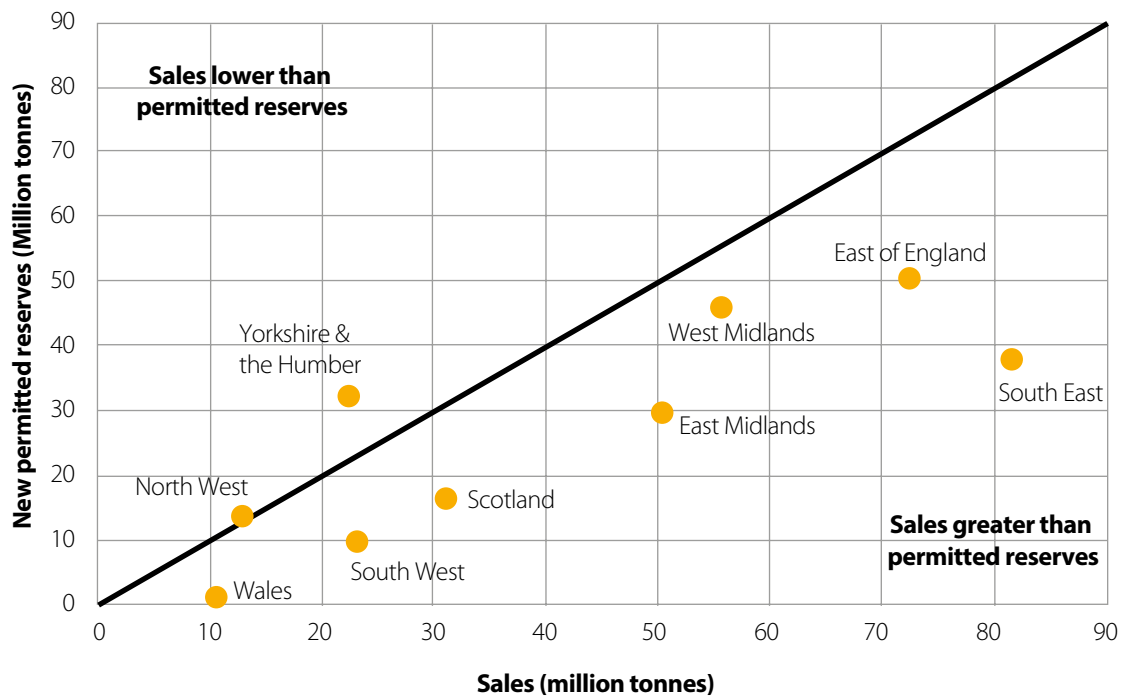
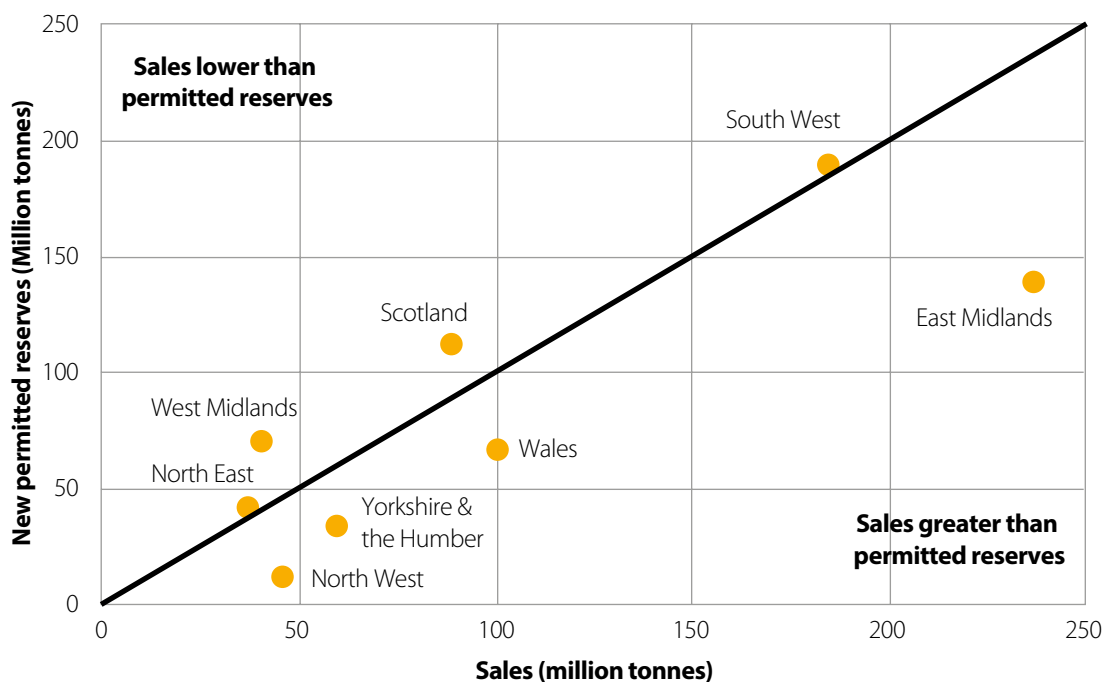


Figure 3: Regional sales volumes and new permitted reserves of sand & gravel 2011-20



- (1) Permitted reserves include land-won aggregates only. The sales data include marine sand & gravel. This difference primarily affects the comparability in the South East, and to a lesser extent, the South West.
- (2) Sales from MPA aggregates producers. Whilst the sample of producers reporting the new permitted reserves cover all MPA members, the sales sample is smaller, marginally under-representing total sales from MPA producers.
- (3) Volumes for the North East have been removed for confidentiality.
- (4) London has been removed from the comparison due to marine sand & gravel landings dominating sales.

Figure 4. Regional sales volumes and new permitted reserves of crushed rock, 2011-20



- (1) Sales from MPA aggregates producers. Whilst the sample of producers reporting the new permitted reserves cover all MPA members, the sales sample is smaller, marginally under-representing total sales from MPA producers.
- (2) Volumes for London, the South East and the East of England have been removed for confidentiality.

MINERAL PLANNING OVERVIEW

Previous reports highlighted that the managed aggregate supply system (MASS) in England was struggling to perform in the absence of updated National and Sub-national Guidelines for aggregates provision that provide a clear and strategic statement of future demand and needs for construction aggregates. This continues to be the case.

From an industry perspective, accurate and up to date data is essential for planning and ensuring a steady and adequate supply of materials, and thus the effectiveness of the MASS. Alongside additional resourcing within the Department for Levelling-Up, Housing and Communities (DLUHC) and a commitment to support the Aggregates Working Parties (AWPs) until 2023, the Aggregate Minerals Survey (AM19) was undertaken in 2020 and was published during 2021. The Aggregate Minerals surveys remain the only government funded national data collection exercise for aggregate minerals, and takes place every four or five years. AM19, which reports 2019 data, confirms the continued trend of declining reserves as identified in previous AMPS reports.

The most recent Guidelines for aggregates provision in England, which were published in 2005 and subsequently updated in 2009, covered the period 2005 to 2020. These set out figures for provision for land-won mineral production over this period, alongside assumptions for the contributions from other sources of supply, including marine sand and gravel, secondary and recycled sources, and imports. Without updated Guidelines, there is an absence of any strategic forecasting and

benchmarks against which local planning including Local Aggregates Assessments (LAAs), can be measured. This creates a risk of under-provision arising from local subjectivity and interpretation around what constitutes future 'need'.

The reliance on LAAs to determine local needs remains flawed, given that most LAAs do not include a forecast of demand (as required by national planning guidance) and instead rely on past sales figures alone. This results in a backwards-looking approach which in reality is more of a monitoring role. This in turn creates uncertainty for industry in committing to significant and long-term investment and developments. There remains an urgent need to produce revised National and Sub-national Guidelines for aggregates provision, effectively providing a clear national 'statement of need' for aggregates.

A key consideration for effective mineral planning remains the intra- and inter-regional supply of material – given the location of resources can often be distant from the main centres of demand and consumption. Although LAAs are meant to try and address these issues, the absence of data and resource constraints within mineral planning

authorities mean that in practice this cannot be done on a consistent or comparable basis. As a default, it is generally assumed by local planning authorities that historic supply patterns will continue.

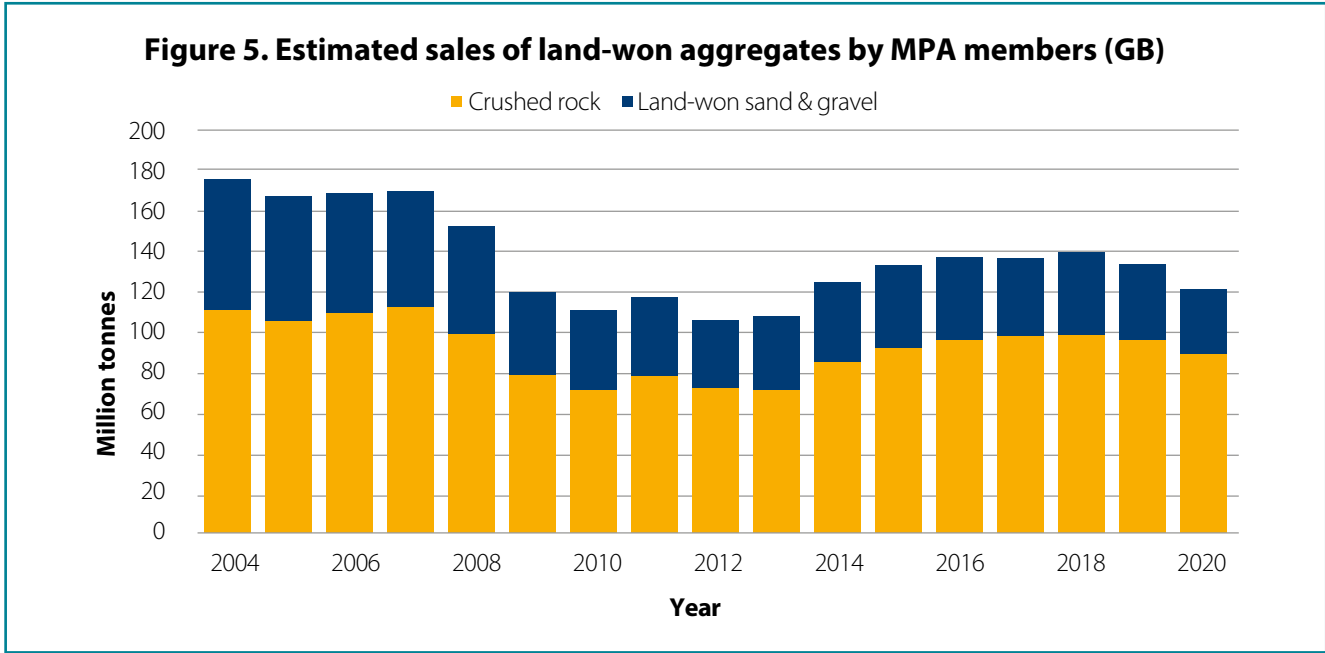
The 2020 AMPS report has examined reserves versus sales for both sand & gravel and crushed rock, on a regional basis, using the 10-year average (see figs 3 & 4). This clearly shows that reserves in the traditional supply areas, such as the East & West Midlands, North West, South West and South East, are under increasing pressure as the quantity of new reserves permitted remains below sales, resulting in a gradual depletion of the reserve base.

It is notable that Government have acknowledged the need for a sound and consistent evidence base, alongside mechanisms to quantify future housing needs to support the timely and effective delivery of local planning processes. The same requirements equally apply to the minerals necessary to realise the ambitions around housing delivery – as well as support the delivery of wider infrastructure ambitions. Given the characteristics of both the minerals that are produced and the construction sector that is being supplied, the basic premise of 'plan, monitor and manage' to ensure a steady and adequate supply of minerals requires long term coordination and support from central Government.

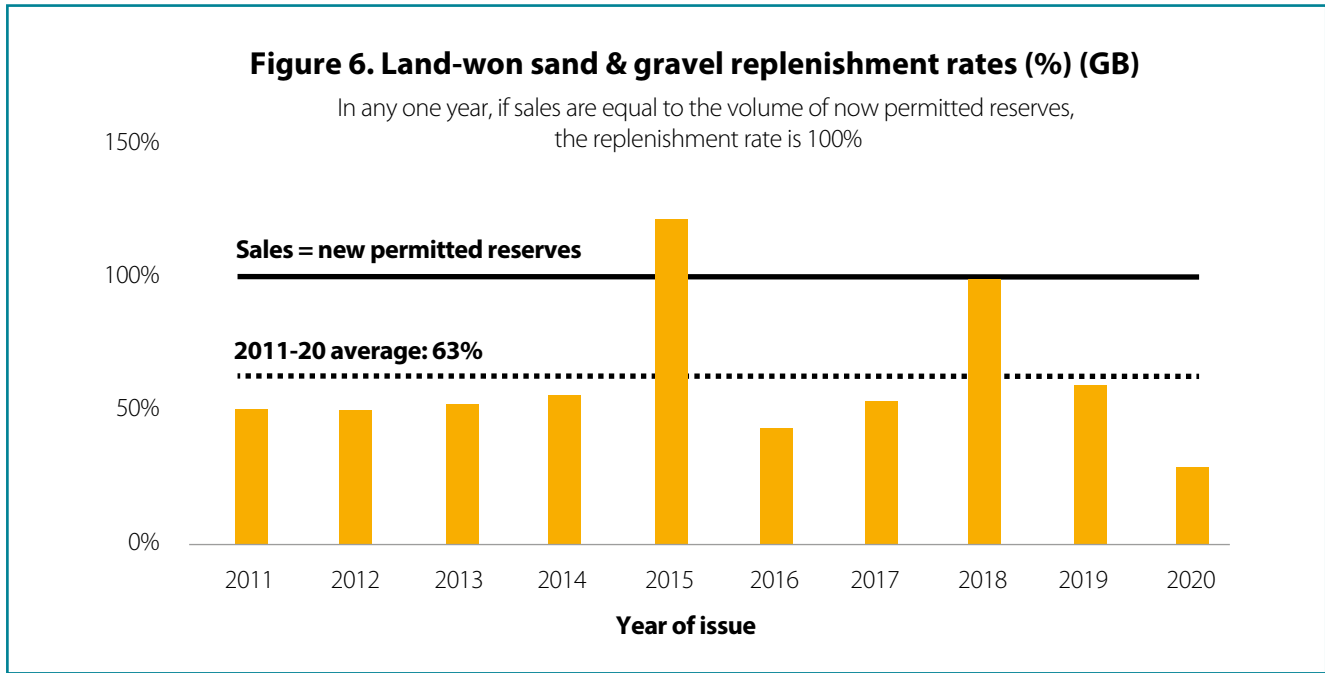


1. SALES

Figure 5 has been derived from sales data provided by MPA members, which typically represents 90% of the total GB primary aggregates market. It shows that primary aggregate sales declined over 2019 and 2020 compared to 2018. Land-won sand & gravel sales in 2020 decreased 12% compared to 2019, while crushed rock sales were 7% lower. The decline in sales in 2019 vs 2018 is thought to be partially as a result of Brexit uncertainty, and delays to housebuilding and infrastructure delays, while 2020 sales were reduced in Q2 due to pandemic restrictions but rebounded sharply in the second half of the year and into 2021.

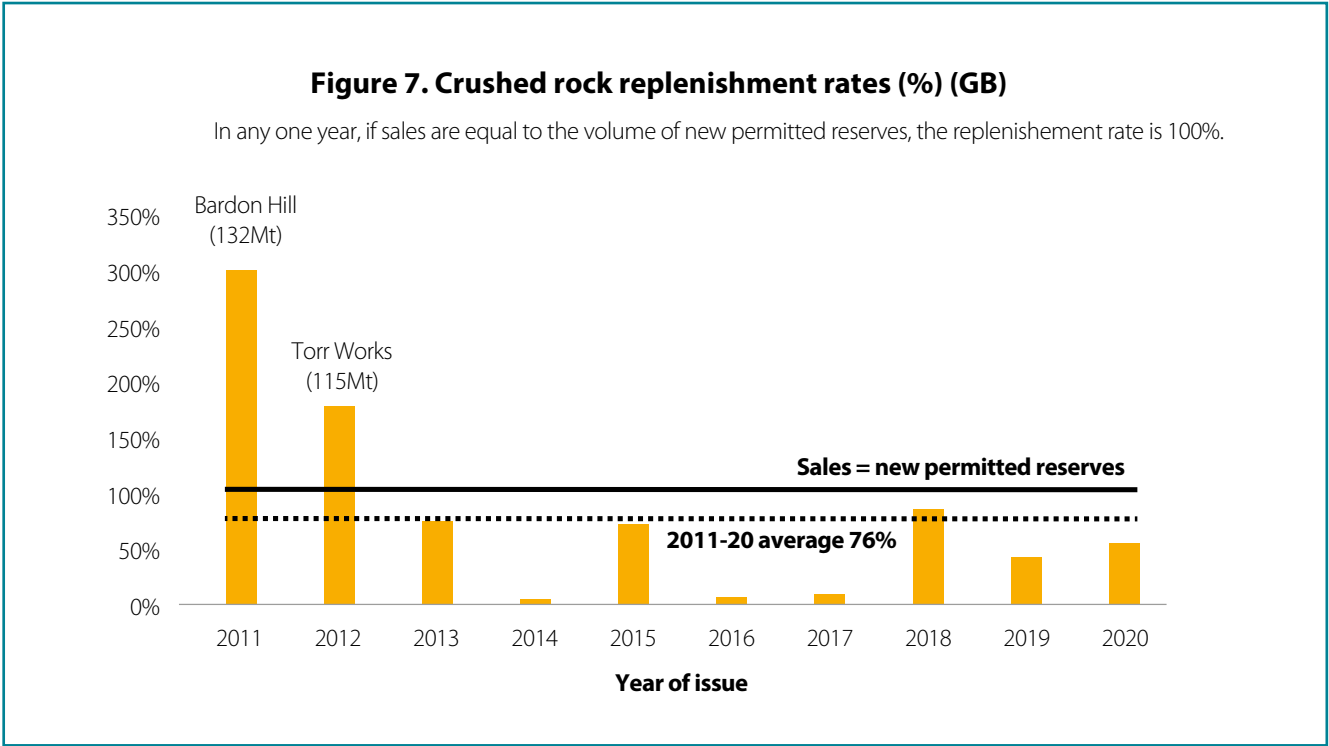


During 2020 only 36% of land-won sand & gravel annual sales were replaced by newly permitted reserves. Long-term replenishment rates for land-won sand & gravel also continue to be of concern, with the 10-year average remaining at only 63% (see figure 6). This means that, in the past 10 years, for every 100 tonnes of land-won sand & gravel produced, only 63 tonnes on average have been replaced with new permitted reserves.



In 2020, new crushed rock reserves of 46.4 million tonnes were permitted, representing 52% of annual sales.

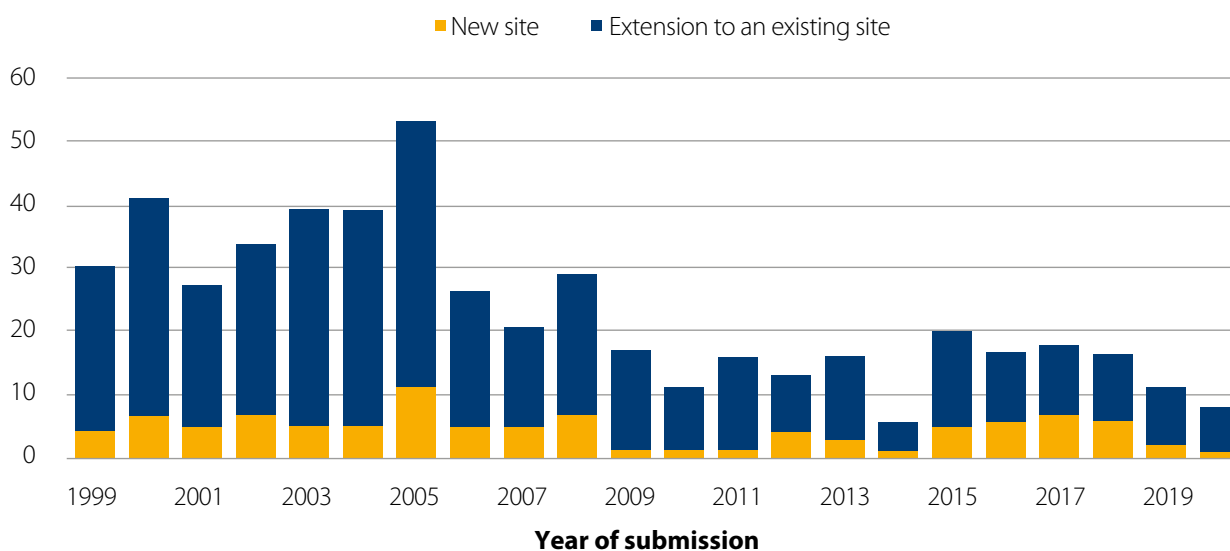
Survey results show that for the eighth year running, annual sales have continued to exceed the replenishment rates for crushed rock reserves. Consequently, the 10-year average replenishment rate for crushed rock currently stands at 76% (see figure 7).



2. NUMBER OF APPLICATIONS

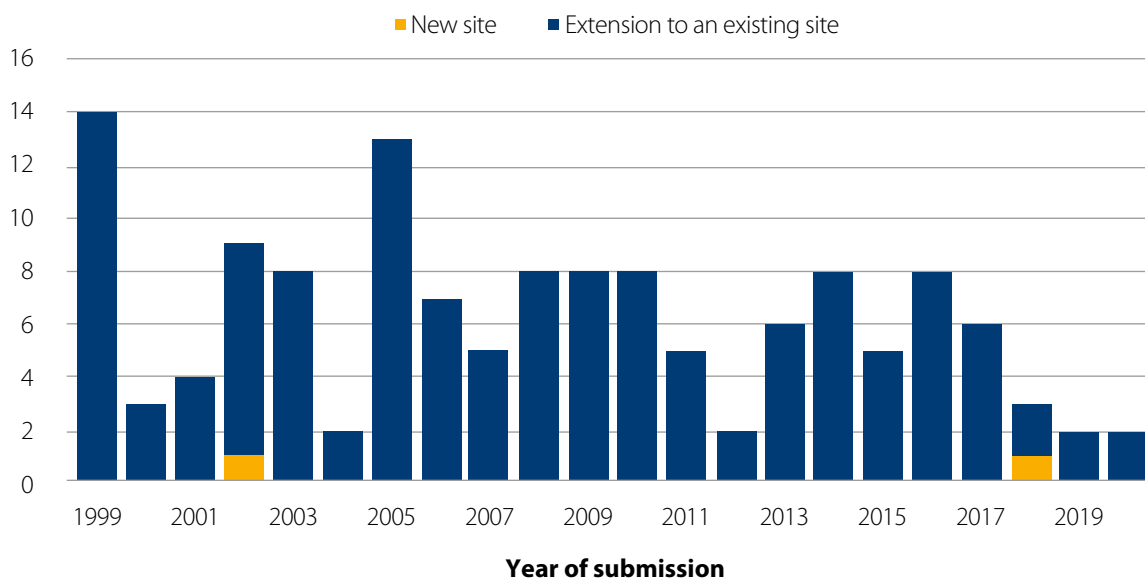
In 2020, just 1 sand & gravel application was made for a greenfield site, and 6 applications were made to physically extend existing quarries.

Figure 8. Number of land-won sand & gravel extraction applications submitted (GB)



In 2020 there were 2 crushed rock extension applications submitted. There were no applications for new sites.

Figure 9. Number of crushed rock extraction applications submitted (GB)



3. NUMBER OF APPEALS

No appeal decisions were identified by MPA members in 2020. It would still appear to be the case that where a refusal recommendation seems inevitable, the most likely outcome would be the withdrawal of the planning application.

4. NUMBER OF DETERMINATIONS

In 2020 14 sand & gravel applications were approved and 1 refused. In respect of crushed rock, 2 applications were approved in 2020 with no refusals or withdrawn applications.

5. REGIONAL RESERVES AND DEMAND

An analysis of sales versus newly permitted reserves has been undertaken, for both sand & gravel and crushed rock using the 10-year average data for each region (see figs 3&4). The outputs illustrate the challenge that some of the regions responsible for national supply are facing in maintaining their reserve base given the levels of ongoing demand. Given the demands required to support the delivery of the nationally significant infrastructure programme, this situation needs to be urgently addressed by central Government in revising the Guidelines for aggregates provision to incorporate the additional demands that exist. A way to improve the transparency and visibility of the material demands created by infrastructure projects and major housing developments would be to require projects to prepare an upfront mineral resource assessment and supply audit as part of the assessment of the scheme. In turn, this would support both mineral planning authorities and the mineral industry to forward plan for future demand requirements.

6. TIME TAKEN TO OBTAIN PERMISSION

Figures 10 and 11 show the time taken to complete each stage of the overall planning process required to secure a mineral planning permission. In 2020 it took on average 35.7 months for a sand & gravel application to be approved and issued and 34.3 months for crushed rock.

The average time (2011-20) for a permission to be issued is 32.1 months for sand & gravel and 30.8 months for crushed rock. It is important to note, though, that the determination phase represents just one part of a wider site development process that can take 10 to 15 years to complete.

Figure 10. Average time to obtain a sand & gravel extraction planning permission (GB)

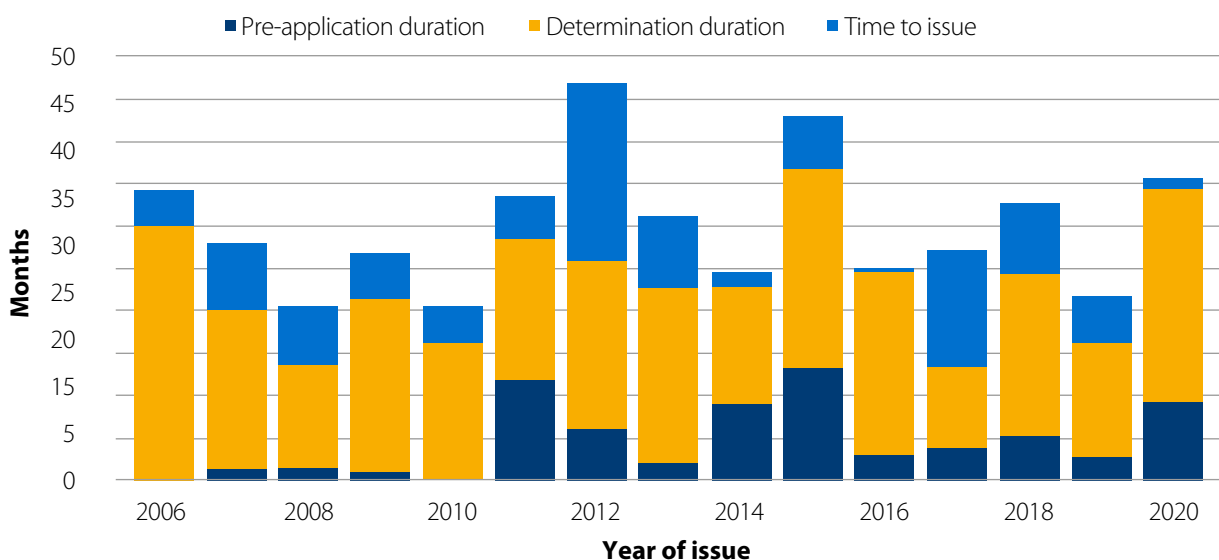


Figure 11. Average time to obtain a crushed rock extraction planning permission (GB)

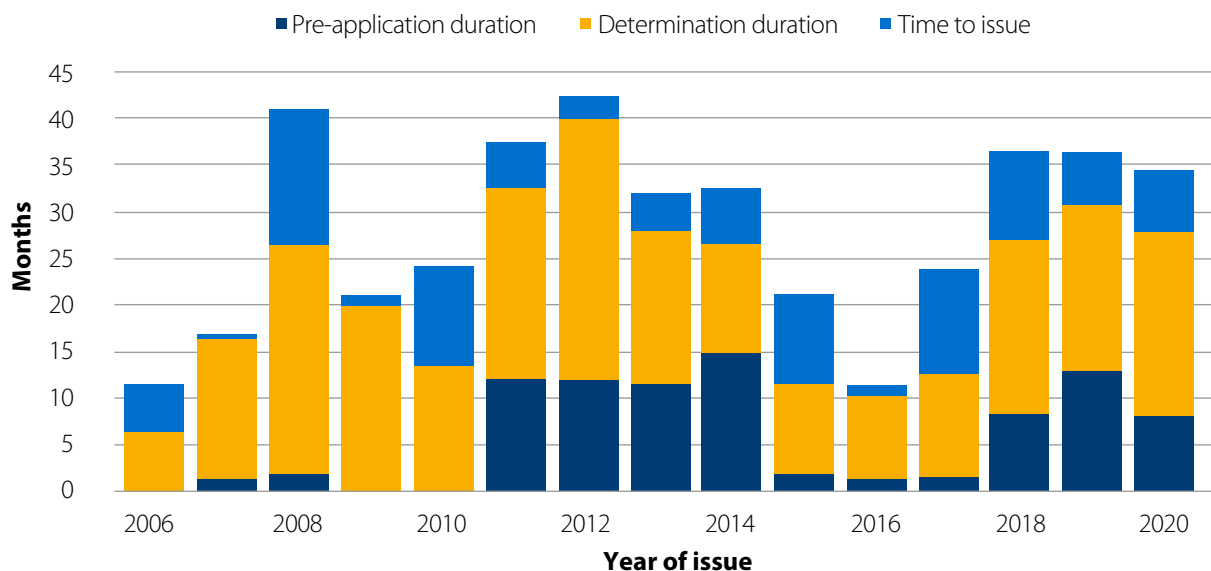


Table 1: Metrics for planning authority approvals, permissions issued only, during 2011-20

Material	SAND & GRAVEL		CRUSHED ROCK		Total
Type of site	New	Extension	New	Extension	All
No. of approvals	18	96	0	50	164
% of total GB	11%	59%	0%	30%	-
Tonnage approved (Mt)	41	181	0	641	863
% of total GB	5%	21%	0%	74%	-
Area covered (Ha)	1,049	4,858	0	2,357	8,264
% of total GB	13%	59%	0%	29%	-
Tonnage ('000) per approval	2,297	1,885	0	12,822	-
Tonnage ('000) per Ha approved	39	37	0	272	-

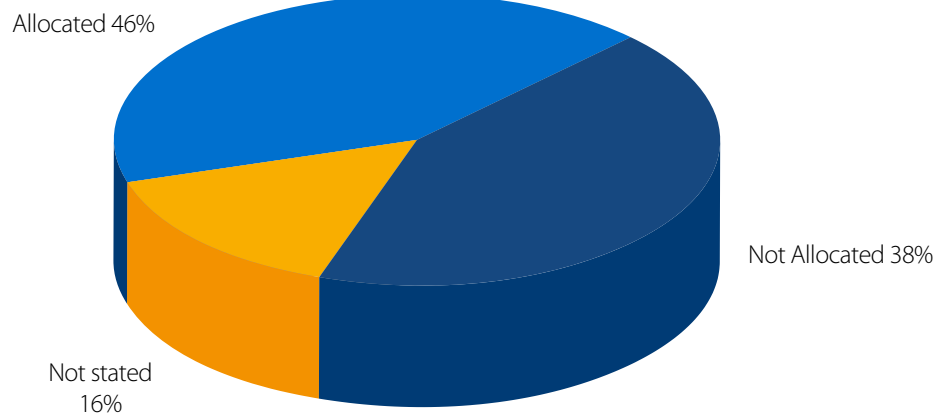
Note: This table covers only members' returns where both tonnage and area information was provided.

7. ALLOCATED VERSUS UNALLOCATED SITES

Figure 12 shows that for the period 2011 to 2020, 38% of the permissions granted for extraction of minerals were not identified/allocated in an adopted Mineral Plan.

**Figure 12. Local plan status for land-won aggregates*
permissions issued, 2011-20 (GB)**

*Crushed rock and sand & gravel

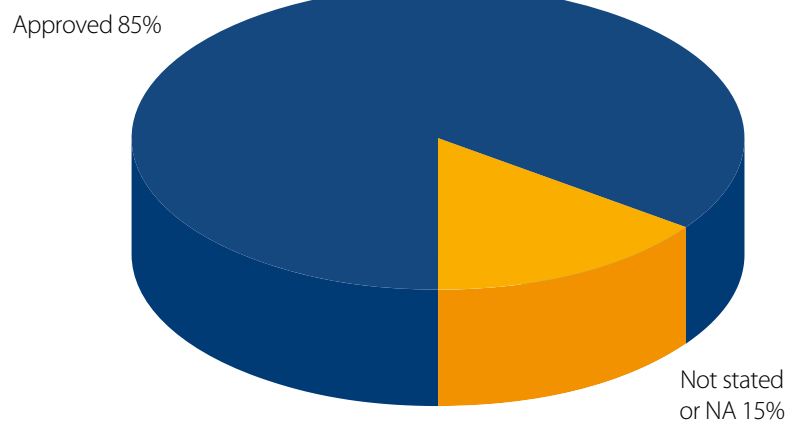


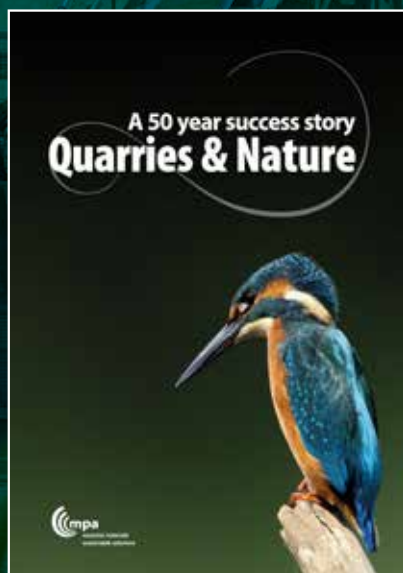
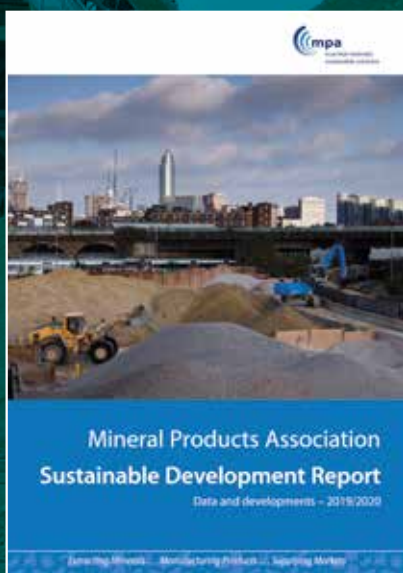
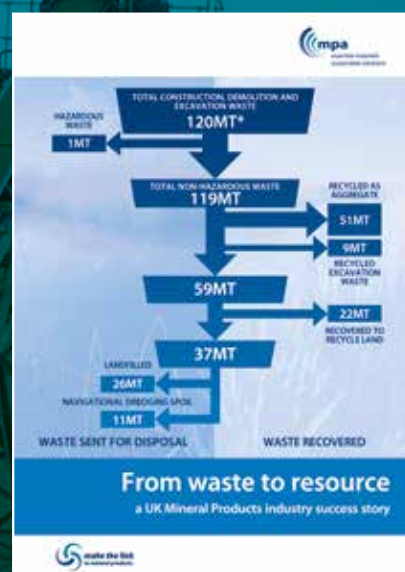
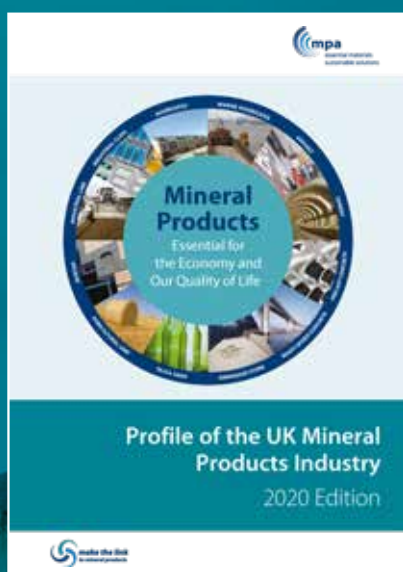
8. PLANNING OFFICER RECOMMENDATIONS

For permissions issued over the period 2011 to 2020, 85% were issued following an officer's recommendation for approval. It is likely that a high proportion of the remaining balance may also have had officer support.

**Figure 13. Officer recommendation for land-won aggregates*
permissions issued, 2011-20 (GB)**

*Crushed rock and sand & gravel





The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

For further MPA information visit www.mineralproducts.org

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