

Cheshire West & Chester Council

Local Plan



Local Aggregate Assessment 2021

(Version 2, published March 2022)

Covering sales and reserves data from January 2020 – December 2020 and 2019 import data from BGS

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Cheshire West
and Chester

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Local Aggregate Assessment

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Executive summary

- 1** The National Planning Policy Framework (NPPF) identifies the requirement to prepare an annual Local Aggregate Assessment (LAA) to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options [NPPF 2021](#) (paragraph 213)
- 2** This version of the report mainly covers the period from 1 January to 31 December 2020 in order to incorporate updates to national and regional data for 2019 and 2020, as well as some additional forecasting information in12 'Future demand'.
- 3** Sand and gravel is the main naturally occurring aggregate mineral within Cheshire West and Chester. The east of the borough also includes an area of silica sand, which is a nationally important industrial mineral. The borough does not contain crushed rock aggregate reserves and therefore needs to import this material. Any Local Plan review will include engagement under the duty to co-operate with relevant authorities who supply crushed rock and / or sand and gravel which would ensure better information gathering in future to see the
- 4** Sales of land won sand and gravel aggregate during 2020 were 0.60 million tonnes, which is lower than 2018 and 2019. This is the lowest in the past 5 years, which reflects the economic downturn and low levels of construction due to the impact of the Coronavirus pandemic on sales from March 2020 onwards. The full impact would continue to be assessed in the future versions of the LAA.
- 5** The level of sand and gravel aggregate permitted reserves has decreased steadily since 2015, as a result of the high level of sales and lack of additional sites or extensions to existing sites until 2019, when the Rudheath Lodge site was added. Since Rudheath Lodge is primarily an industrial sand site, this marginally increased reserves as the site is divided across Cheshire East and Cheshire West and Chester, thereby reducing the share of reserves within the borough. However, reserve levels still remain higher than those recorded between 2010 and 2014, and marginally exceed the 'at least' seven years as required by [NPPF 2021](#) (paragraph 213), based on either ten year average sales or the annual apportionment figure.
- 6** The borough is a key supplier of high quality sand and gravel in the North West and the largest consumers of this sand and gravel outside of Cheshire during the 2019 period was Wrexham (2019 Aggregate Minerals Survey for England and Wales', British Geological Survey, 2021). High demand for sand and gravel aggregate is likely to continue due to continued increases in levels of development within the borough and in nearby areas and due to closure of some quarries in nearby areas. Provision will be reviewed on an annual basis to ensure it remains flexible and proportionate to growth aspirations alongside the reality of delivery and economic conditions.
- 7** The approach to providing a steady and adequate supply of sand and gravel throughout the plan period is set out in the Local Plan (Part Two). It involves: continued provision of sand and gravel from permitted reserves at existing sites; allocation of a sand and gravel site; identification of a Preferred Area and identification of an Area of Search. This will help to alleviate potential future supply issues. This issue will need to be monitored through future LAAs.

Summary of main conclusion from this Local Aggregate Assessment

Table 1

| | Performance in 2020 | Comparison to previous year (2019) ⁽¹⁾ |
|--|---------------------|---|
| Land won sand and gravel sales (million tonnes) | 0.60mt | ↓ 0.20mt |
| 3 year average sales (million tonnes) | 0.73mt | ↓ 0.03mt |
| 10 year average sales (million tonnes) | 0.62mt | No Change |
| Permitted reserves of sand and gravel (million tonnes) | 6.00mt | ↓ 0.10mt |
| Landbank based on annual apportionment figure (years) | 7.50 years | ↓ 0.13 years |
| Landbank based on 10 year average sales (years) | 9.68 years | ↑ 0.16 years |
| Landbank based on 3 year average sales (years) | 8.22 years | ↑ 0.18 years |
| Permitted aggregates sites | 4 | No Change |
| Active aggregate sites | 4 | ↑ 1 site |

1. Please note that the reserve figure for 2019 was slightly miscalculated in LAA 2019 Version 1 due to rounding. This has led to minor change in the landbank figures as well. The comparison column in the table above has been calculated with the new figure.

1 Introduction

1.1 Minerals planning authorities should plan for a steady and adequate supply of aggregates. The National Planning Policy Framework (NPPF) (2021) identifies the requirement to prepare an annual Local Aggregate Assessment (LAA) to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (paragraph 213 [NPPF 2021](#).)

1.2 This Local Aggregate Assessment (LAA) covers the period from 1 January to 31 December 2020 and has been prepared in accordance with the NPPF, Planning Practice Guidance (PPG) and the practice guidance on the production and use of LAAS (May 2017) prepared by the Planning Officers Society and Mineral Products Association.

1.3 The LAA contains the following core elements:

- a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information;
- an analysis of all aggregate supply options as indicated by landbanks, allocations, marine extraction and recycled aggregates;
- an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation; and
- a conclusion on whether there is a shortage or a surplus in supply and how any shortage is being addressed.

Information used to produce the LAA

1.4 The key information used to prepare this LAA includes:

- National Aggregate Minerals Survey 2019 data from the British Geological Survey (BGS), published in 2021.
- Data and information on marine dredged aggregates held by the Crown Estate
- NW Aggregate Working Party (AWP) Annual Report 2021 covering data from 2020 period.
- Data on recycled and secondary aggregates
- Other BGS data
- Local information, including:
 - Data and correspondence related to planning applications

- Levels of planned housing and employment development within and affecting the borough
- Details of other key projects within and affecting the borough

Aggregates in Cheshire West and Chester

1.5 Sand and gravel is the main naturally occurring aggregate mineral within Cheshire West and Chester. The east of the borough also includes an area of silica sand, which is a nationally important industrial material. The borough does not contain crushed rock aggregate reserves and therefore needs to import this material. Further detail relating to the borough's geology is set out in chapter 2 'Local context'.

1.6 The LAA includes an analysis of sales, reserves and landbanks alongside consideration of potential future demand from both within the borough and further afield, and provides an up to date landbank and supply position. The information contained within this report and LAAs from previous years forms part of the evidence base supporting the development and adoption of relevant policies and allocations, including the Local Plan (Part Two) Land Allocations and Detailed Policies.

1.7 A glossary of key terms is provided at Appendix A 'Glossary'.

2 Local context

2.1 Cheshire West and Chester is located in the north west of England in the Cheshire sub-region. The borough is adjoined by the Merseyside authorities of Wirral, Liverpool, Halton and Warrington to the north, Cheshire East to the east, Shropshire to the south and the Welsh authorities of Wrexham and Flintshire to the west. There are major centres both within the borough and nearby, including Chester, Crewe, Liverpool and Manchester.

Population and growth

2.2 Cheshire West and Chester has a resident population of 343,823⁽ⁱ⁾. The population of the Cheshire West and Chester area is expected to reach 346,200, by 2026, according to the Office for National Statistics.

Local geology

2.3 The solid geology of the borough comprises Triassic mudstones and sandstones, apart from a small outcrop of Carboniferous rocks in the north-east of the borough. The solid geology is predominantly overlain by large glacio-fluvial deposits of glacial till, sand and gravel deposited by glacial ice movements over the past two million years. These deposits have provided significant resources of sand and gravel aggregate, the majority of which is found in the east of the borough in the areas surrounding Delamere Forest and in the areas to the west of Northwich. The distribution of these deposits is illustrated in Map 2.1.

2.4 Sand and gravel deposits are generally thick, with some deposits found to reach a depth of 30m. Resources are often overlain by boulder clay and silt deposits, which in places can limit accessibility and workability of the underlying sand and gravel. The Delamere sands, found in the areas immediately to the south west of Northwich, are economically significant deposits of outwash sand and gravel. This area also contains significant deposits of sands which are found in deeper narrower deposits reaching approximate depths of 30m.

2.5 These deposits are protected from incompatible development and therefore unnecessary sterilisation through the Minerals Safeguarding Area as shown on the [Policies Map](#) and covered by policy [ENV 9 Minerals supply sand safeguarding](#) of the Cheshire West and Chester Local Plan (Part One) Strategic Policies and policy M2 of the [Local Plan \(Part Two\)](#).

Current extraction

2.6 Historically, the Delamere sands have been the main focus of sand and gravel extraction within Cheshire with deposits of industrial silica sand being worked in the east of the area. In 2009 approximately 40 per cent of the total supply of sand and gravel in the north west was sourced from Cheshire, of which approximately 70 per cent was from the Delamere sands area. An indication of current supply patterns is included in chapter 6 'Exports and imports'.

i Source:
<https://www.cheshirewestandchester.gov.uk/your-council/key-statistics-and-data/key-statistics-and-data.aspx>

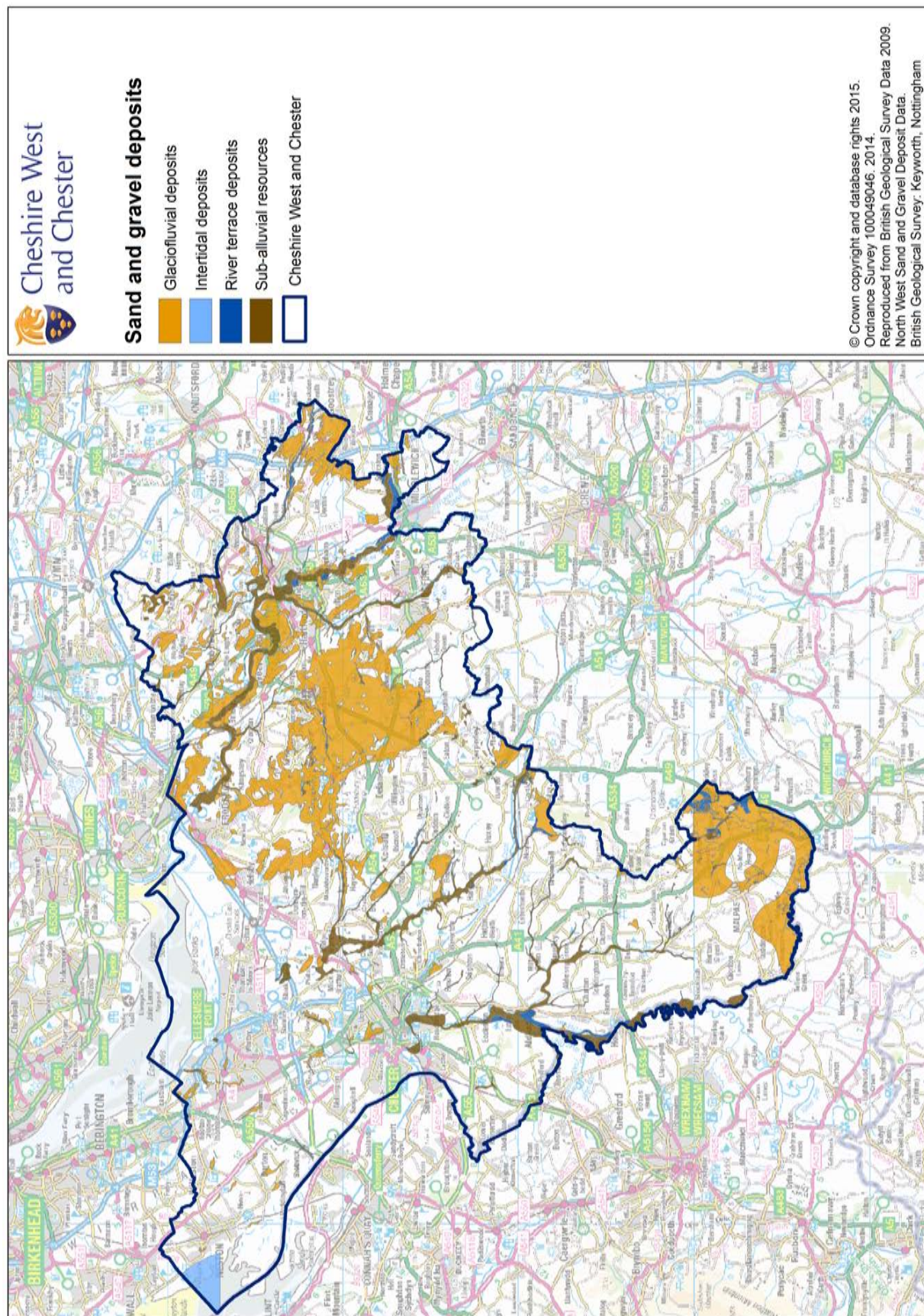
2.7 Current permitted reserves are concentrated in the superficial glacio-fluvial deposits found immediately surrounding Delamere Forest and to the west and south west of Northwich. Material is primarily high quality soft sand used for asphalt and mortar, and coarse sharp sand used in the manufacture of concrete and concreting products as well as general construction fill. These deposits have historically been a significant source of aggregate grade sand and gravel to markets in the north west and beyond. However, the number of active permitted sites within the borough has reduced significantly in recent years.

2.8 It is imperative to note here that in June 2021, the Sandstone Ridge has been shortlisted for Area of Outstanding Natural Beauty (AONB) designation, but this hasn't yet been decided. If designated, it would need to be taken into account when making decisions on future applications relating to sand and gravel extraction in Cheshire West and Chester.

2.9 The Managed Aggregates Supply System (MASS) seeks to ensure a steady and adequate supply of aggregates in England, taking into account the geographical imbalances in occurrence and need of suitable aggregates resources. It involves national, sub-national and local partners working together - from minerals planning authorities at the local level, Aggregate Working Parties at the sub-national level and a National Aggregate Coordinating Group who monitor the overall provision of aggregate in England. Cheshire West and Chester is a member of the North West AWP. The AWP are consulted on the draft LAA and ratify the final version.

2.10 The paragraph 24 [NPPF 2021](#) also identifies that local planning authorities are under a duty to co-operate with each other, and with other prescribed bodies, on strategic matters that cross administrative boundaries. Cheshire West and Chester Council will co-operate with relevant local authorities and other bodies on strategic minerals issues.

Map 2.1 Sand and gravel formations



3 Local Plan

3.1 The Local Plan (Part One) Strategic Policies was adopted on 29 January 2015 and seeks the delivery of at least 22,000 new homes alongside 365ha of employment land over the period 2010 to 2030. The Local Plan (Part One) took account of and reflects the projected growth in the population set out in chapter 2 'Local context' and the subsequent needs for additional homes, employment and infrastructure. It is therefore essential that the authority seeks to ensure a steady and adequate supply of aggregate minerals to support this projected growth. Further detail relating to future requirements is contained within chapter 12 'Future demand'.

3.2 Policy [STRAT 1 Sustainable development](#) sets out the Council's sustainable development principles which provide the basis for other policies within the plan, whilst reflecting the presumption in favour of sustainable development set out in the Framework. The policy seeks to facilitate economic growth and meet the social and environmental needs of the borough whilst ensuring 'the prudent use of our natural finite resources'. Policy STRAT 1 underpins policy [ENV 9 Minerals supply and safeguarding](#) which sets out the Council's approach to ensuring a steady and adequate supply of aggregate minerals.

3.3 Policy ENV 9 states that provision will be made for the adequate, steady and sustainable supply of sand and gravel contributing to the sub-national guidelines for aggregate land-won sand and gravel. This will be achieved by maintaining a minimum seven year landbank, in line with the Local Aggregate Assessments. The policy identifies that specific sites and preferred areas will be identified within the Local Plan (Part Two).

3.4 Policy ENV 9 also safeguards the extent of sand and gravel resources in the borough from incompatible development within the Mineral Safeguarding Area as shown on the [Policies Map](#) and in Map 4.1.

3.5 The Cheshire West and Chester Local Plan (Part Two) was adopted on 18 July 2019. Policy M 1 identifies that provision will be made for the extraction of at least 16 million tonnes of land-won sand and gravel over the plan period (0.8 million tonnes per annum). The requirement to provide a minimum seven year supply beyond the plan period would result in an additional requirement of at least 5.6 million tonnes. This is a total requirement of at least 21.6 million tonnes which will be achieved by:

- The continued provision of sand and gravel from the permitted reserves at the following existing sites – Cheshire Sands, Oakmere; Forest Hill, Sandiway; Cobden Farm, Oakmere; and Town Farm, Kingsley.
- The allocation of a site for sand and gravel north of the railway to extend Forest Hill, Sandiway.
- The identification of a Preferred Area at Moss Farm and north of the railway forming an extension to Forest Hill, Sandiway.
- The identification of an Area of Search.

3.6 The Local Plan (Part Two) also allocates a site at Rudheath Lodge, New Platt Lane, Cranage, for silica sand extraction following borehole evidence provided with a planning application relating to the site. Since the above were set out in the Local Plan policy, Rudheath Lodge (primarily silica sand quarry) and an extension to the Forest Hill quarry have been granted permission and will contribute to the supply in future versions of the LAA. The protection of Mineral Safeguarding Areas is covered in more detail by policy M 2 Mineral safeguarding areas in the Local Plan (Part Two).

Planned provision

3.7 As set out above, policy ENV 9 seeks to ensure an adequate, steady and sustainable supply of sand and gravel aggregate in line with the sub-national guidelines and up to date Local Aggregate Assessments. The previous Local Aggregate Assessment identified a planned provision of 0.80mt per annum of sand and gravel aggregate, which remains at the annual apportionment figure for the borough as identified in the Local Plan (Part One). This Local Aggregate Assessment reviews the planned provision to ensure it remains proportionate to growth aspirations, supply, demand and the reality of current economic conditions. Chapter 13 'Conclusions and policy considerations' sets out the future planned provision.

4 Aggregate sites

4.1 During 2020 there were three permitted aggregate sites within Cheshire West and Chester, supplying varying qualities of sand to markets across the northwest and beyond. There was also one silica sand site that provides a proportion of construction sand. Table 2 provides the operational details of the sites.

Map 4.1

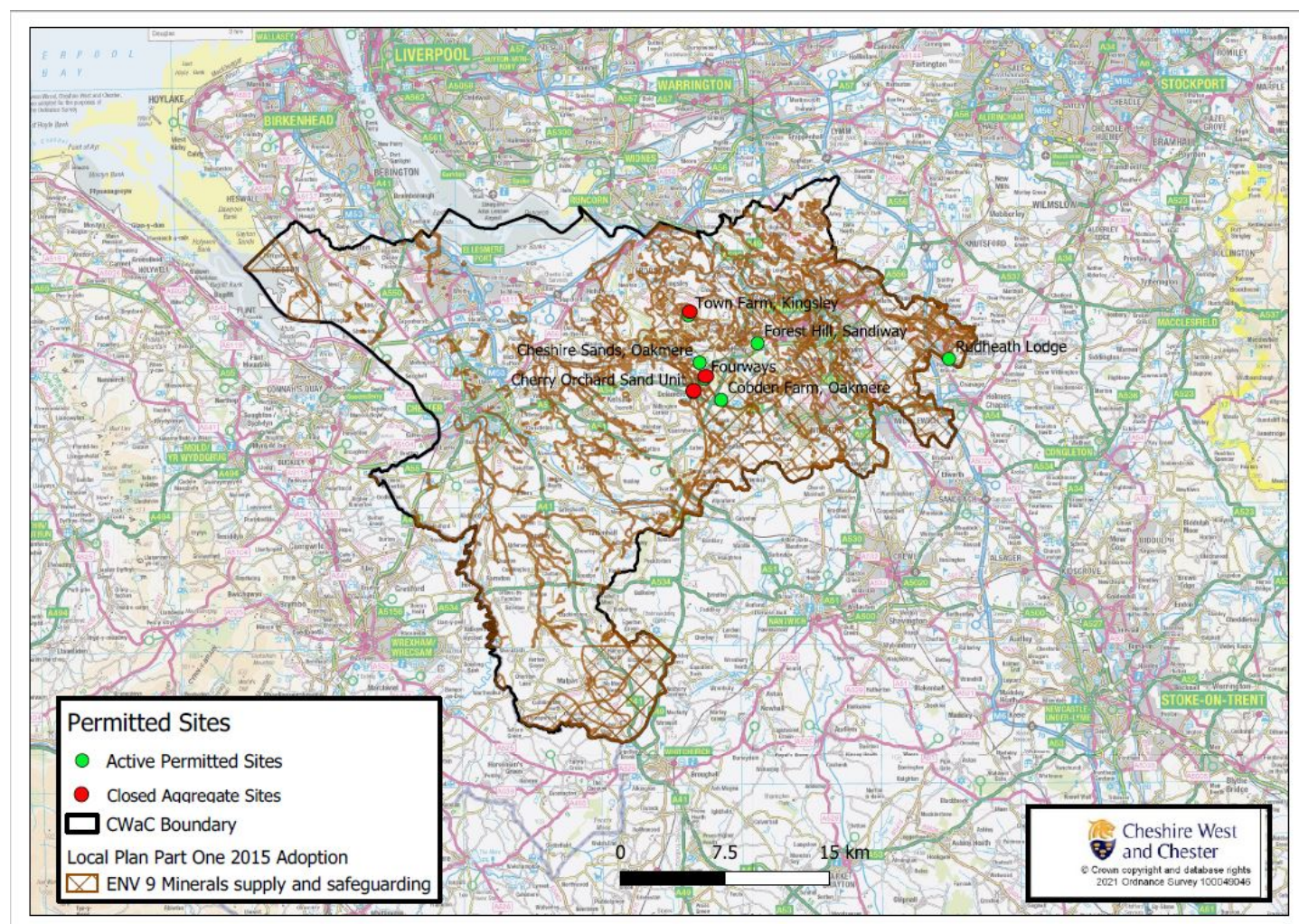


Table 2 Sand and gravel aggregate sites in Cheshire West and Chester

| Site | Operator | 2012 status | 2013 status | 2014 status | 2015 status | 2016 status | 2017 status | 2018 status | 2019 status | 2020 status | Material | Site area (ha) | Grid ref |
|--------------------------|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|-------------|-----------------------------------|----------------|----------------|
| Cherry Orchard Sand Unit | Cherry Orchard Sand Unit Limited | Active | Closed | Closed | Closed | Closed | Closed | Closed | Closed | Closed | Sand | 11ha | SJ 568 680 |
| Cheshire Sands (1) | Tarmac Ltd | Active | Active | Active | Active | Active | Active | Active | Active | Active | Sand | 135ha | SJ 572 699 |
| Cobden Farm | Tarmac Ltd | Inactive | Inactive | Inactive | Inactive | Inactive | Inactive | Active | Active | Active | Sand | 24ha | SJ 587 673 |
| Forest Hill | CEMEX UK | Active | Active | Active | Active | Active | Active | Active | Active | Active | Sand | 74ha | SJ 612 714 |
| Fourways | Tarmac Ltd | Active | Closed | Closed | Closed | Closed | Closed | Closed | Closed | Closed | Sand | 143ha | SJ 577 690 |
| Town Farm | P Casey Enviro Ltd | Active | Active | Active | Inactive | Active | Active | Active | Closed | Closed | Sand | 42ha | SJ 565 735 |
| Rudheath Lodge | Sibelco UK Ltd | - | - | - | - | - | - | - | Permitted but construction not started | Active | Silica Sand and Construction Sand | 33.5ha | SJ 75286 69990 |

1. Formerly Station Road (Delamere) and Crown Farm quarries, planning permission granted subject to s106 which was signed 26 March 2015

Cherry Orchard Sand Unit

Status: Closed

4.2 The Cherry Orchard Sand Unit is located on Abbey Lane, Oakmere and began operation in 1993 supplying aggregate sand to local and wider markets. Extraction of sand at the site ceased unexpectedly in 2013 when reserves depleted ahead of schedule. The landowners have since received planning permission for the seasonal change of use of agricultural land to provide an events venue.

Cheshire Sands

Status: Operational - Extraction permitted to 22 February 2042

4.3 Cheshire Sands is a quarry which links both Crown Farm Quarry and Delamere Quarry on Stoneyford Land off Chester Road and Station Road in Oakmere. Delamere Quarry was a partially restored and mothballed quarry which initially commenced in 1946, whilst Crown Farm Quarry was an active sand quarry which had been active since 1987. Crown Farm Quarry gained planning permission for a significant extension in 1992 with an expected operational lifespan of ten years. However, due to fluctuations in the market a significant amount of reserve remained unworked and subsequent extensions of time were granted. In 2011 the application to link and extend the permissions at both Delamere Quarry and Crown Farm Quarry was submitted to the Council. The application was subsequently granted planning permission at the Strategic Planning Committee in October 2012, subject to a Section 106 legal agreement and the permission issued on 13th January 2015.

4.4 The permission makes provision for the extraction of approximately nine million tonnes of sand over a 30 year period with an average extraction rate of between 300,000 to 650,000 tonnes per annum. The permission also involves surrender of reserves of 5,000,000 tonnes beneath areas subject to constraints such as ecological issues, increased overburden and beneath the water table. Various conditions of planning permission [11/04200/MIN](#) have since been discharged, the most recent being [21/04693/S73](#) to extend the extant planning permission consents at Delamere Quarry (Ref 4/31844) and Crown Farm Quarry (Ref 4/APP/2002/1514) in order to work sand and gravel reserves in a phased manner. ⁽ⁱⁱ⁾

4.5 An application for construction of a concrete batching plant at Cheshire Sands Quarry (18/01210/FUL) was approved in November 2018. This relates to provision of an on-site production unit utilising concrete sand from the quarry, together with the bulk delivery of cement and limestone aggregates to produce concrete.

Cobden Farm

Status: Operational - Extraction permitted to 17 September 2021. ⁽ⁱⁱⁱ⁾

-
- ii Tarmac Ltd has advised that anticipated extraction rates may result in Cheshire Sands reserves being depleted within six years
 - iii Please note that in the time period covered by this LAA, Cobden Farm was still operational. However, at the time of publishing in 2022, extraction has ceased and the quarry is in the restoration phase.

Cobden Farm Quarry is located on Longstone Lane, Commonside north of Little Budworth. Permission for the extraction of sand was granted in 2001 and operations commenced in 2005. The site was mothballed in 2008 due to the drop in demand caused by the recession. An extension of time was granted in 2012 providing a five year extension to the original permission which provided for a working life of six years. An application to extend the lifetime of Cobden Farm Quarry by 5 years until 2021 and to amend the permitted working area in Phase 3 of planning application [15/04063/S73](#) to enable the extraction of additional mineral reserve was approved by the Planning Committee on 6th December 2016, subject to an updated S.106 agreement and permission was issued on the 13th September 2017. The additional permitted working area provides approximately 25,000 tonnes of additional mineral reserves. Various conditions on permission [15/04063/S73](#) were also discharged in November 2017. Extraction resumed in 2018.

In August 2018, [18/03346/MIN](#) was approved for construction of two stock bays (one retrospective) for use in connection with the importation of up to 50,000 tonnes of limestone fines per annum to produce mortar sand, building sand and concrete grade sand. This does not amount to any additional reserves, but includes importation of limestone fines to produce mortar sand, building sand and concrete. A non-material amendment application [19/00673/NMA](#) was also approved in February 2019 for Alteration of the Dust Monitoring Scheme submitted on 4 May 2004 (except for Phase 3 as amended by Planning Permission number [15/04063/S73](#) dated 13 September 2017).

Forest Hill

Status: Operational - Extraction permitted to 2027 (or later, depending on date of commencement of extension)

4.6 Forest Hill Quarry is located on Chester Road, Sandiway west of Northwich. The site has been worked for sand since the 1970s with various extensions permitted over time. Mineral extraction under permission [10/04021/MIN](#) was completed in May 2015 and a further permission was granted for a western extension to the quarry ([13/03715/MIN](#)) necessitating the continued need to retain the bagging plant infrastructure. Permission [13/03715/MIN](#) makes provision for the extraction of approximately 635,000 tonnes of soft sand for a period of six years from the date of commencement which was 11 May 2015. An extension of time for the bagging plant was permitted until 11 May 2021 or within twelve months of the completion of mineral extraction ([15/04076/S73](#)).

4.7 In January 2021, [19/02452/MIN](#) was approved for a Proposed Northern extension to the quarry (north of the railway line) for the extraction of approximately 350,000 tonnes of sand with restoration to nature conservation, including a temporary access and extension of the existing haul road across the site. Extraction will be permitted till 5 years after the date of commencement, of which there has been no notification as yet. In April 2021, application [21/01861/S73](#) was submitted to vary conditions on permission [13/03715/MIN](#) to allow an extension of time to complete the working and restoration of the current working area, and amendments to the phased working pattern. The application was granted planning permission in October 2021 by the Planning Committee, subject to a Section 106 legal agreement which is awaited. The application includes amending the cessation of the winning and working of sand until 31st December 2023. It estimates that a maximum of 170,000 tonnes of sand remains to be extracted and rate of extraction is approximately 75,000 tonnes per annum. It states that the

northern extension ([19/02452/MIN](#)), which is anticipated to contain 350,000 tonnes will follow on once extraction of the remaining 170,000 tonnes of sand on the current site is extracted. The [21/01861/S73](#) application will be added to the next version of the LAA, once issued.

Fourways

Status: Closed

4.8 Fourways Quarry is located on Chester Road (A556) east of Chester. The site was worked for sand extraction since the 1970s with various extensions to the permitted working areas over time. Extraction at the quarry ceased in March 2013 with stockpiles remaining during 2014. The site is now closed and an application for the construction of holiday lodges and a new sailing facility at the site ([15/01803/FUL](#)) was approved. The sailing facility was completed and operational in 2020. Some of the holiday lodges are complete and some are still under construction.

Town Farm

Status: Closed

4.9 Town Farm Quarry is located on Mill Lane in Kingsley. The site has been worked for sand and gravel extraction since the early 1980s with various extensions to the permitted working areas over time. Extraction at the quarry ceased in March 2014. A number of applications for variations and discharge of conditions have been submitted relating to the restoration of the site. An application ([14/01677/S73](#)) was submitted to vary conditions of permission [11/00816/S73](#) and allow an additional three years for extraction. This was approved on appeal in February 2016, allowing for extraction to be undertaken until 31 March 2018 and requiring restoration to be complete by 30 December 2019. Extraction re-started in June 2016. Planning permission [17/00575/S73](#) allows for the winning and working of sand and gravel until 30 June 2019 and has approved amendments to the permitted restoration scheme. Extraction was undertaken during 2017 and 2018, but the site closed in 2018 and the operators have stated that the remaining sand is of poor quality and is not worth extraction. Since its closure, a variation of condition ([19/03409/S73](#)) has been approved for the restoration of the site.

Rudheath Lodge

Status: Operational since September 2020

4.10 In addition to the sites listed above, there is a silica sand site at Rudheath Lodge, Cranage. This site is partly within Cheshire West and Chester and partly within Cheshire East. The planning application submitted for this site for silica sand extraction and associated development provided borehole evidence of silica sand provision at the site, in both Cheshire West and Chester and Cheshire East. The site contains 33.5 hectares within Cheshire West and Chester and 41.8 hectares within Cheshire East. The application identifies that the amount of sand to be extracted, processed and sold from the site as a whole is likely to be approximately 3.3 million tonnes, of which 75% will be suitable for sale as high quality silica sand to industrial end uses and 25% would be construction sand. No information is provided as part of the planning application to show the exact reserves in each authority. However, since 33.5 hectares (approximately 44% of the total area) is within Cheshire West and Chester, the

reserves in CWaC are estimated to be 44% of the 3.3 million tonnes of total reserves, that is, 1,452,000 tonnes. This is to prevent double counting of reserves across both boroughs. In terms of Cheshire West and Chester, keeping in mind the 75%/25% split as mentioned above, approximately, 1,089,000 tonnes would be silica sand and 363,000 tonnes would be construction sand.

4.11 The application [17/03104/MIN](#) (for silica sand extraction and associated development- mineral extraction by dredging, progressive restoration, mineral processing and despatch) was approved at the Planning Committee and issued in July 2019. There have also been several approvals for discharge of conditions of this planning permissions, such as, [19/04069/DIS](#), [20/00562/DIS](#), [20/02035/DIS](#) and [20/02468/DIS](#). Most of these were regarding habitat management and protection of ecology.

Overview of Reserves

4.12 Table 3 provides an overview of when reserves in the borough are expected to deplete over time. This can only be used as an indication and only reflects planning permission expiration. As has been seen in previous years reserves can remain for far longer than predicted and thus require extension of time applications or conversely deplete far faster than expected.

4.13 As seen in the table below, in line with permissions, Cheshire Sands will remain operational until 2042 (reserves may deplete by 2027 as mentioned in Table 3). There has been an extension approved at Forest Hill and extraction will be permitted until 5 years after commencement and but this has not yet started, so it is likely that reserves will be available until 2027. Rudheath Lodge with reserves of silica sand and aggregate sand, has been operational since July 2019. However, actual extraction began in September 2020. Only having two operational sites beyond 2027 could result in the market being unnecessarily constrained and consideration therefore needs to be given to paragraph 213 of the [NPPF 2021](#). Paragraph 213 states that authorities should plan for a steady and adequate supply of aggregate minerals by, amongst other things, "ensuring that large landbanks bound up in very few sites do not stifle competition".

4.14 In line with the findings of the previous LAA and the approach to the future supply of aggregate minerals set out in Local Plan (Part One) policy ENV 9, the Council carried out a minerals call for sites consultation. A number of sand sites were submitted to this consultation and initial screening was carried out. The sites were then assessed and the details of the assessment were subject to consultation with interested groups and bodies. The results of the call for sites and the assessment of the sites fed into the preparation of the Local Plan (Part Two) Land Allocations and Detailed Policies, which allocates an extension to Forest Hill, identifies a Preferred Area and an Area of Search. This contributes to maintaining a steady and adequate supply of aggregate land-won sand and gravel, and help to increase the number of operators after 2022.

4.15 Chapters 12 'Future demand' and 13 'Conclusions and policy considerations' examines the wider implications of the limited number of sites and future options in more detail.

Table 3 Overview of expiry of Planning Permissions to 2042

| | | | | | | | |
|------|--------------------------|--|-------------|-------------|----------------|----------|-----------|
| 2042 | Closed | Cheshire Sands (Tarmac Sands Ltd advise that reserves may deplete by 2027) | | | | Closed | Closed |
| 2041 | | | | | | | |
| 2040 | | | | | | | |
| 2039 | | | | | | | |
| 2038 | | | | | | | |
| 2037 | | | | | | | |
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| 2025 | | | | | | | |
| 2024 | | | | | | | |
| 2023 | | | | | | | |
| 2022 | | | | | | | |
| 2021 | | | | | | | |
| 2020 | | | | | | | |
| 2019 | | | | | | | |
| | Cherry Orchard Sand Unit | | Cobden Farm | Forest Hill | Rudheath Lodge | Fourways | Town Farm |

5 Aggregate sales

5.1 Sales for 2010 - 2020 are provided in Table 4 alongside the ten and three year average sales figures. It should be noted that sales figures for 2010 is an estimate for Cheshire West and Chester, based on monitoring data for the former Cheshire County Council area.

Table 4 Sand and gravel aggregate sales 2010 - 2020 (million tonnes)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 10 year average | 3 year average |
|--|------|------|------|------|------|---------------------|------|------|------|------|------|-----------------|----------------|
| Cheshire West and Chester ⁽¹⁾ | 0.54 | 0.66 | 0.56 | 0.42 | 0.42 | 0.60 ⁽²⁾ | 0.71 | 0.67 | 0.80 | 0.80 | 0.60 | 0.62 | 0.73 |

1. Data for the year 2010 is estimates based on data from the former Cheshire County Council area
2. Data for 2015 is a general representation of the increase experienced during this period, given issues experienced with confidentiality

5.2 Sales of sand and gravel aggregate from within the borough had generally been relatively stable, except for a rise in 2018 and decline to 0.42mt per annum during 2013 and 2014. Sales in 2018 and 2019 have been higher than at any other point over the last 10 years. However, it has not yet reached the levels experienced in 2005-2007 (0.95mt, 0.86mt and 0.91mt). Rudheath Lodge sales have been added to the figure for 2020 but is still at its lowest in the past 4 years.

5.3 In line with the approach outlined in the NPPF and Planning Practice Guidance, a ten year average sales figure has been calculated for Cheshire West and Chester as 0.62 million tonnes. The ten year average sales take account of the lower levels experienced in the middle of the ten year period and the higher sales over recent years. A three year average sales figure is also included in Table 4 and this is significantly higher than in recent years, due to the high sales experienced in 2018 and 2019.

5.4 The annual apportionment figure for Cheshire West and Chester remains at 0.80mt as set out in the Local Aggregate Assessment 2014. Aggregate sales were above aggregate apportionment figures for the period 2005 - 2007 but fell sharply in 2008, then stabilised, with a further decline in 2013/14 and have since begun to increase. Aggregate sales have fallen in 2020 after significantly higher figures in 2018 and 2019.

5.5 The Mineral Product Association (MPA) report 'Profile of the UK Mineral Products Industry' (2018) identified that growth in mineral products sales in Great Britain levelled off in 2017 across all major markets, except for mortar. This reflected muted UK economic growth and elevated uncertainty regarding Brexit negotiations. However, there was continued momentum in house building. The report predicted that demand would remain broadly flat in 2018, before picking up from 2019, as major infrastructure projects come to full capacity. This suggests that the increase in sales of sand and gravel aggregate in Cheshire West and Chester in 2018 and 2019 relates to growth in house building, as sand is a key component of mortar. The low sales figure in 2020 is reflective of the general economic slowdown due to the Coronavirus pandemic.

6 Exports and imports

6.1 Cheshire West and Chester is a key supplier of high quality sand and gravel in the North West. Material is exported to neighbouring mineral planning authorities as well as to destinations further afield. In 2009, 40 per cent of sand and gravel aggregate sold in the North West was from sites within Cheshire. Table 5 provides export destination data for the period 1 January to 31 December 2019 for all active sites within the borough alongside export data for 2016, 2017 and 2018 for comparison.

Table 5 Sales by destination 1 January to 31 December 2019

| Destination | Export amount (tonnes) 2016 | Export amount (tonnes) 2017 | Export amount (tonnes) 2018 | Export amount (tonnes) 2019 | Percentage of overall 2019 sales |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------------|
| Derbyshire and Peak District | 2,270 | 4,517 | 1,480 | 1,172 | < 1% |
| Cheshire West and Chester and Cheshire East | 345,858 | 274,278 | 454,462 | 554,895 | 70% |
| Greater Manchester, Merseyside, Halton and Warrington | 207,451 | 186,596 | 166,893 | 176,601 | 22% |
| Lancashire, Blackpool and Blackburn with Darwen (1) | 10,448 | 4,601 | 16,516 | 19,827 | 2.50% |
| Shropshire and Telford and Wrekin (2) | 20 | 36 | 2,127 | 4,189 | <1% |
| Staffordshire | 30,426 | 10,023 | 587 | 1,041 | <1% |
| South Yorkshire | - | - | - | - | 0 |
| West Yorkshire | 65,555 | 112,248 | 92,541 | 23,071 | 2.90% |
| North East Wales | 8,932 | 24,948 | 12,232 | 14,031 | 2% |
| North West Wales | 1,167 | 314 | 523 | 318 | <1% |
| North West (unknown destination in the North West) | 34,645 | 77,464 | 41,345 | (3) | |
| Unknown | - | - | 7,351 | (4) | |

| Destination | Export amount (tonnes) 2016 | Export amount (tonnes) 2017 | Export amount (tonnes) 2018 | Export amount (tonnes) 2019 | Percentage of overall 2019 sales |
|-------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------------|
| Total | 706,772 | 695,025 ⁽⁵⁾ | 796,066 ⁽⁶⁾ | | |

1. In the previous years, this has been called 'Lancashire'
2. In the previous years, this has been called 'Shropshire'
3. This data has not been collected in the latest survey
4. This data has not been collected in the latest survey
5. This includes sand and gravel for non-aggregate use
6. This includes sand and gravel for non-aggregate use

6.2 Table 5 illustrates that in 2019, as in previous years, Cheshire West and Chester and Cheshire East remains the largest consumer of sand and gravel aggregate from Cheshire West and Chester. After this, the Greater Manchester, Merseyside, Halton and Warrington area is still the second largest consumer. Please note that we do not have this data for 2020 as most of our main quarry operators did not return this data.

6.3 Compared to 2018, proportions of overall sales by destination remain fairly constant, apart from sales within Cheshire West and Chester and Cheshire East, which have increased significantly, from 57% to 70% and sales to West Yorkshire, which have reduced from 12% to 2.90%.

Imports

6.4 The most recent import data is for the 2019 monitoring period, gathered as part of the Aggregate Minerals Survey by the British Geological Society. This data is for Cheshire as a whole and is not split down for Cheshire West and Chester and Cheshire East. Table 6 below shows quantities of imported primary aggregates in Cheshire in 2019. ^(iv)

Table 6 Imports of primary aggregates in Cheshire in 2019

| | Land won Sand and gravel | Marine sand and gravel | Total sand and gravel | Crushed rock | Total primary aggregates |
|------------------------------|--------------------------|------------------------|-----------------------|--------------|--------------------------|
| Imports (in thousand tonnes) | 219 | 29 | 248 | 1612 | 1860 |

6.5 The summary data on consumption of sand and gravel in Cheshire (Cheshire West and Chester and Cheshire East) is provided in Table 7 and the summary data on consumption of crushed rock is provided in Table 8.

iv Import data taken from Table 10 in 'Collation of the results of the 2019 Aggregate Minerals Survey for England and Wales', British Geological Survey, 2021.

Table 7 Consumption of total sand and gravel in Cheshire (land-won and marine-dredged) for aggregate use in 2019 by source, identifying the principal supplying Mineral Planning Authorities

| Source Mineral Planning Authority (final correct) | Consumption of total sand and gravel |
|---|--------------------------------------|
| Cambridgeshire County Council | <1% |
| Petersborough | <1% |
| Derbyshire County Council | <1% |
| Nottinghamshire County Council | <1% |
| Shropshire Council | <1% |
| Staffordshire County Council | 1-10% |
| Cheshire East Council | 1-10% |
| Cheshire West and Chester Council | 60-70% |
| Liverpool City Council | 1-10% |
| Salford City Council | 1-10% |
| Flintshire | <1% |
| Wrexham | 20-30% |

6.6 As Cheshire West and Chester does not have any permitted crushed rock aggregate reserves, all material consumed within the borough is imported from other mineral planning authorities. More detailed data on crushed rock movement is currently unavailable. However, any future Local Plan review will include engagement under the duty to co-operate with relevant authorities who supply crushed rock and sand and gravel which could ensure more detailed and accurate information.

Table 8 Consumption of crushed rock for aggregate use in Cheshire in 2019, identifying the principal supplying Mineral Planning Authorities

| Source Mineral Planning Authority | Consumption of crushed rock for aggregate use |
|-----------------------------------|---|
| Derbyshire County Council | 30-40% |
| Shropshire Council | 1-10% |
| Staffordshire County Council | 1-10% |

| Source Mineral Planning Authority | Consumption of crushed rock for aggregate use |
|-----------------------------------|---|
| Leicestershire County Council | 10-20% |
| Peak District National Park | 10-20% |
| Telford and Wrekin Council | <1% |
| Neath Port Talbot | <1% |
| Lancashire County Council | 1-10% |
| Cumbria County Council | 1-10% |
| Yorkshire dales National Park | <1% |
| Northumberland National Park | <1% |
| Powys | 1-10% |
| Rhondda, Cynon, Taf (Taff) | <1% |
| Conwy (Aberconwy & Colwyn) | 1-10% |
| Denbighshire | <1% |
| Flintshire | 10-20% |
| Gwynedd | <1% |

7 Reserves

7.1 Table 9 provides reserve data for the period 2010 - 2020. Data for 2010 is estimated for Cheshire West and Chester, as it was collected based on the former County area.

7.2 During 1 January to 31 December 2015 there were only two operational aggregate sites within Cheshire West and Chester which resulted in issues with confidentiality and meant that information relating to sales and reserves could not be published. The figure provided for 2015 is based on the permitted reserves according to the latest planning application, minus potential extraction since date permitted. Further information on this figure is provided in the 2016 LAA report.

Table 9 Sand and gravel aggregate reserves 2010-2020 (million tonnes)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---------------------------|------|------|------|------|------|------|------|------|------|---------------------|------|
| Cheshire West and Chester | 4.40 | 4.30 | 4.40 | 4.50 | 4.70 | 8 | 6.80 | 6.60 | 5.80 | 6.10 ⁽¹⁾ | 6.00 |

1. Please note that the reserve figure for 2019 was miscalculated slightly as 6.06 due to rounding errors in LAA 2019 Version 1

7.3 Sand and gravel aggregate reserves as at 31 December 2020 were 6.00 million tonnes. This is a decrease from reserves in 2019 due to sales and no new quarries or extensions during the year.

7.4 The level of reserves during 2020 still remains higher than that between 2010-2014, reflecting the inclusion of figures for the large Cheshire Sands site. This was granted permission in 2012, but could not be included in the reserves figures until 2015, when the Section 106 was signed.

7.5 Chapter 4 'Aggregate sites' provides details on the expected depletion dates for each aggregate site.

7.6 The reserves in 2020 do not include the additional 350,000 tonnes that will be provided through the extension to Forest Hill, as the S106 wasn't signed until January 2021. This will be included in the next monitoring period.

7.7 The NPPF suggests that the required stock of permitted reserves for each silica sand site should be based on the average of the previous 10 years sales, but 10 year sales figures are not available for Cheshire West and Chester or Rudheath Lodge as this is the first silica sand quarry in the borough for some time and it has only been operating since 2020. The Rudheath Lodge site is partly within Cheshire West and Chester and partly within Cheshire East. The Planning application was decided and S106 agreement was signed in 2019. The Mineral Reserve Assessment submitted as part of the application mentions that the extraction would be approximately 3.3 million tonnes of sand over a 12 year period, of which around 75% (2.5 million tonnes) would be suitable for sale as silica sand for industrial purposes. In terms of reserves within Cheshire West and Chester, approximately, 1,089,000 tonnes would be silica industrial sand and 363,000 tonnes would be construction sand.

8 Landbank

8.1 Table 10 provides sand and gravel aggregate landbank calculations for the borough as at 31 December 2020 using both the current apportionment figure of 0.80mt per annum and 10 year average sales of 0.62 mt per annum.

Table 10 Aggregate landbanks as at 31 December 2020

| Method | Ten year average sales (million tonnes) | Annual apportionment (million tonnes) | Reserves as at 31 December 2020 (million tonnes) | Landbank (years) |
|-----------------------------|---|---------------------------------------|--|------------------|
| Ten year average sales | 0.62 | | 6.00 | 9.68 |
| Annual apportionment figure | | 0.80 | 6.00 | 7.50 |

8.2 Table 10 shows that the landbank provides more than the 'at least' seven years required by paragraph 213 of the [NPPF 2021](#) based on either ten year average sales or the annual apportionment figure. The landbank figure for 2020 is slightly lower than in 2019 when the landbank position was 9.77 years based on ten year average sales and slightly lower based on the annual apportionment figure which was 7.58.

8.3 It is recommended that the annual apportionment figure is used to calculate the landbank and potential future requirements for aggregates within the borough. This is because the annual apportionment figure is based on the 'Future of sub-regional apportionment in the Cheshire sub-region' report and the research and consultation undertaken in association with preparation of this document. In the 12 'Future demand' there is more information on forecasting of future demand, including how the annual apportionment figure has been further consolidated by other forecasting methods.

8.4 The ten year average sales figure includes lower sales resulting from the impact of the recession and over recent years sales figures had begun to increase, although there will be additional changes from 2021 onwards due to the Coronavirus pandemic. The sales figure for the 2020 period (0.60 mt) is considerably lower than 2019 owing to the pandemic. Prior to 2020 it was anticipated that sales would increase as a result of additional development and closure of quarries in other areas. The Coronavirus pandemic will have impacted on this and it is now expected that there will be a reduction in sales 2020 onwards due to temporary closures of quarries and building sites, however after the initial lockdown period quarry operations resumed and building work continued, so the sales figures may pick up again quite quickly. As such, the annual apportionment figure provides a sensible level of provision for the future. 12 'Future demand' includes more details on predicted future demand, which has informed the decision on the figure to use to calculate the landbank.

9 Marine wharves and dredging areas

9.1 Port Bridgewater (formerly Manisty Wharf), operated by Peel Ports Group in Ellesmere Port is the only operational marine wharf in Cheshire West and Chester, however, this is not currently used for landing or transporting aggregates. Outside Cheshire West and Chester, material is currently landed at wharves in Merseyside including Garston and Bramley-Moore Dock in Liverpool.

9.2 There is currently an additional wharf which is expected to become operational during the Local Plan period (2010-2030). The wharf is identified at Ince as part of the permitted Protos scheme, which has planning consent for a rail connection giving rise to the potential for this wharf to be utilised for minerals landings and onward distribution by sustainable transport modes. As such, it is identified as minerals infrastructure proposed to be safeguarded in the Local Plan (Part Two).

9.3 The active dredging areas in the North West are currently located in the Irish Sea. Material landed from dredging areas across the North West is of a varying quality with minimal gravel content. It is currently difficult to assess the contribution marine aggregate makes to fulfilling demand in the borough and beyond or the future potential for this. The Mineral Products Association publication '[Profile of the UK Mineral Products Industry - 2020 Edition](#)' identifies that marine sand and gravel contributed approximately 3.42% to the total minerals and mineral products sales in Great Britain.

9.4 According to the most recent information provided by The Crown Estate's [Capability and Portfolio document 2021](#) 1.10 million tonnes of material was extracted from the three marine aggregate licences in the North West region during 2020. This is a bit less than 1.30 million tonnes (approximate) of material extracted from the region in 2019. Material extracted from the region was mainly delivered to North West English wharves (95.1%). There is also an application for a marine licence that could, if approved, increase the permitted tonnage by 0.5 million tonnes. Current estimates suggest there are 35 years of primary marine aggregate production permitted. While this is an increase in the reserve life from 21.90 years in 2019, here is a general decrease in the amount extracted from more than 0.2 million tonnes in 2019 to just over 0.1 million tonnes in 2020.

9.5 Meetings have recently been undertaken with the Crown Estate, relevant operators and other local authorities to get a better understanding of the current position with regard to marine reserves and future resources. Meetings and further work will continue over the next few months in order to understand the potential future use of marine aggregates in more detail.

10 Secondary and recycled aggregates

10.1 Data for construction, demolition and excavation waste recycling is by its nature difficult to compile. The majority of material is reprocessed and utilised at source using mobile plants and therefore does not give rise to monitoring the quantities recycled or their end use. However, the national and regional guidelines for aggregate provision^(v) set out an assumption that approximately 30 per cent of aggregate will be sourced from alternative materials (including recycled aggregate) over the period 2005 - 2020.

10.2 According to the Mineral Products Association publication '[Profile of the UK Mineral Products Industry - 2020 Edition](#)' Recycled and secondary materials accounted for 28% of total aggregates supply in Great Britain in 2018. Recycled and secondary materials accounted for 28% of the total aggregates supply, which has put Great Britain in a leading position internationally in the use of recycled and secondary aggregates for many years, well ahead of the European average.

10.3 The most recent survey was undertaken in February 2021 and indicated that there were 15 sites in Cheshire West and Chester which have potential to provide for the treatment, transfer or recycling of CD&E waste stream were surveyed (details of the sites are included in Appendix B 'Recycled aggregate sites'). In 2021, two companies operating 8 sites in total responded. The results of the 2021 survey indicate that in 2020 the total recorded sales of recycled aggregates was 37374.33 tonnes. This accounts for around 5.83% of total aggregate sales in 2020.

10.4 Part of the reason for this low figure is the relatively low number of respondents to the survey and this difficulty retrieving data from operators has presented challenges to understanding the exact level of contribution that secondary and recycled materials make to the supply of minerals. It is also likely to be because the majority of transfer stations are small in scale and operate as bulking stations and whilst some waste streams are segregated, they are not a ready source of recycled aggregates. The volume of waste of a suitable composition delivered to transfer stations is unlikely to be sufficient to justify a fixed plant to separate and screen into individual sizes. The material is more likely to be moved to another site outside of the borough where economies of scale allow crushing and screening plant to be installed.

10.5 Support for the use of secondary and recycled mineral resources is set out in policy ENV 9 of the Local Plan (Part One), and the Council will continue to monitor and seek to obtain further information and evidence on this through future work.

10.6 The Environment Agency's Waste Data Interrogator (WDI) provides information to identify the amount of CD&E waste produced and handled at licenced facilities in the borough. This is likely to represent only a proportion of the recycled aggregates in circulation, and it excludes data which is coded as 'Cheshire' (i.e. not specifically specified to Cheshire West and Chester or Cheshire East). It is to be noted here that there is also some loss of quantities recycled where processing takes place at the point of source, i.e. at a demolition/construction site, which would not necessitate the use of a transfer station.

v National and regional guidelines for aggregate provision in England 2005 - 2020, Communities and Local Government, June 2009

10.7 Data from the latest WDI shows that in 2020, 0.61 million tonnes of inert / construction and demolition waste was received at waste management facilities permitted by the Environment Agency within the borough. This shows an increase since 2019 when the figure was 0.32 mt. The Environment Agency has less detailed information on waste removed than waste received.

10.8 Due to the differences in trends between waste handled and waste produced and the robustness of the data, it is difficult to confirm whether this data represents a general increase or decrease in the amount of recycled aggregate available for use in the borough. The data from the WDI only includes material that has been sent to or from waste management facilities permitted by the Environment Agency. As explained above, due to the nature of aggregate recycling, this only forms a relatively small part of the total recycled aggregate generated and used within the borough.

Table 11

| Cheshire West and Chester | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| CD&E waste Received | 0.29mt | 0.08mt | 0.10mt | 0.07mt | 0.07mt | 0.13mt | 0.24mt | 0.32mt | 0.61mt |
| CD&E waste Removed | 0.08mt | 0.25mt | 0.28mt | 0.18mt | 0.53mt | 0.15mt | 0.10mt | 0.13mt | 0.12mt |

10.9 Please note that the figures for 2012 onwards in the above table do not match to the figures in the previous years' LAAs. This is because the figures have now been recalculated by removing 'Landfill' as Fate of Waste within the Inert/C+D Waste category.

10.10 With regards to recycled or secondary material, there has been a variation of condition application 20/01012/S73 to allow importation of recycled soil compost for mixing with sand for construction and landscaping market. The proposed importation of soil compost and subsequent mixing with sand utilises both recycled compost matter and consented sand reserves at Cheshire Sands Quarry, thereby ensuring the re-use and recycling of materials in accordance with the Policy DM4 of the Local Plan (Part Two). There are a couple of notable applications which are pending decisions. 21/04076/FUL is to set up a materials recycling facility (includes plastic, paper and glass) and 20/00361/WAS is for change of use to inert and excavation waste recycling facility.

11 Aggregates infrastructure

11.1 There are several important minerals infrastructure facilities within Cheshire West and Chester, as shown in the table below.

Table 12 Minerals infrastructure safeguarded sites

| Facility type | Site | Planning status | Operator |
|--|--|---|---------------------------|
| Rail sidings | Freight terminal, Ellesmere Port | Operational | Quality Freight Ltd |
| | Resource Recovery Park, Ince | Planned / non-operational | |
| | Lostock works rail sidings | Non-operational former minerals sidings | |
| Wharves | Resource Recovery Park, Ince | Planned / non-operational | |
| | Manisty wharf (Port Bridgewater), Ellesmere Port | Operational | Quality Freight Ltd |
| Asphalt plant | Stanlow | Operational | Cemex |
| | Wincham Lane, Northwich | Operational | Express Asphalt |
| | The Quarry, Hobb Hill, Malpas | Operational | Quarry Plant Surfacing |
| Concrete batching plant | Deakin's Road, Winsford | Operational | Hanson |
| | Sealand Trading Estate, Chester | Operational | Hanson |
| | Bridges Road, Ellesmere Port | Operational | Hanson |
| | Liverpool Road, Chester | Operational | Aggregate Industries |
| | Wharton Industrial Estate, Nat Lane, Winsford | Operational | Cemex |
| | Tattenhall Road, Tattenhall | Operational | T G Concrete (Tattenhall) |
| Substitute, recycled and secondary aggregate operators | Middlewich Road, Rudheath, Northwich | Operational | AAA Skip Hire |
| | Liverpool Road, Chester | Operational | Cheshire Waste Skip Hire |
| | Indigo Road, Ellesmere Port | Operational | Dig and Shift Ltd |

11.2 The above table of Mineral Infrastructure safeguarded sites, has been taken from the Local Plan (Part Two) Policy M8. There are also additional substitute, recycled and secondary aggregate operators that are shown in Appendix B.

11.3 Manisty Wharf in Ellesmere Port is the only operational marine wharf in Cheshire West and Chester, however, this is not currently used for landing or transporting aggregates. The proposed wharf at Ince Park is expected to become operational during the Local Plan period (2010-2030). The site also has planning consent for a rail connection giving rise to the potential for this wharf to be utilised for minerals landings and onward distribution by sustainable transport modes.

11.4 The minerals infrastructure identified within Table 12 is safeguarded by policy M 8 within the adopted Local Plan (Part Two) Land Allocations and Detailed Policies. This policy safeguards significant infrastructure that supports the supply of minerals in Cheshire West and Chester in line with Policy ENV 9 in the Local Plan (Part One) Strategic Policies. It safeguards this infrastructure against development that would adversely affect operations at an existing mineral site and the use of associated mineral infrastructure by creating incompatible land uses nearby.

11.5 An informal, targeted consultation on safeguarding minerals and minerals infrastructure was undertaken in 2011 and the results of the consultation have informed the identification of mineral infrastructure. The listed sites were reviewed as part of preparation of the Local Plan (Part Two). The secondary and recycled aggregate survey undertaken in 2018 (and after this point) indicated that the household waste recycling centres operated by HW Martin, on behalf of Cheshire West and Chester Council also generate secondary and recycled aggregate sales. As such, they also constitute important minerals infrastructure facilities.

12 Future demand

12.1 Demand forecasting is required in order for the Council to fully assess the capacity, capability and future policy requirements for aggregate minerals within the borough. The Council must take account of factors other than the ten and three year rolling sales averages and apportionment figures when calculating demand patterns going forward.

12.2 The following chapter assesses the demands from both within the borough itself and the areas to which the borough has exported significant quantities of aggregates.

12.3 Population and economic growth and construction activity forecasts are factors that influence the demand of minerals. In the coming sections, we have attempted to forecast aggregate demand till the end of the Local Plan period (2030) based on past housing and employment completions. We have compared this with our approach in previous LAAs of following the annual apportionment figure as the future yearly aggregate demand.

12.1 Demand from within the borough

12.4 Current monitoring of sales by destination is available for 2011 - 2020 (excluding 2015 where this data could not be published due to confidentiality issues). In 2019, 60-70% of the total sand and gravel aggregate from the Cheshire region was consumed within Cheshire West and Chester. This has increased from 40-50% in 2014. It is possible that a continuing pattern is emerging in relation to consumption within the borough as a percentage of overall sales and it suggests that consumption may be rising in line with housing completions and employment land development over the same period.

12.5 Sales of aggregate from within the borough only provide a limited illustration of demand. Material from elsewhere will be imported in to the borough to meet demand alongside material which is sourced locally. This is most significant for crushed rock due to the absence of any reserve within the borough. Other indicators of demand include increases in population, which in turn result in increases in employment levels, housing completions and economic development completions in the borough. These factors are explored further below.

Employment

12.6 A key indicator of the health of a local economy is the level of employment and employment levels are strongly linked to consumption of aggregate. Total employment in the borough has been rising since 2007. The employment rate is at 79.3% (2021) which is higher than the North West average of 73.2%. Taken alongside a marginally falling unemployment rate (3.8% in 2017 compared to 3.7% in 2021) ^(vi). While this would generally indicate a continuing trend of a strengthening economy in the borough, the impact of the Covid-19 pandemic on the economy, businesses and jobs within the borough is uncertain. Some of the contextual indicators in the AMR 2021 do not yet take account of changes in the economy since the first UK lockdown period, which started 23rd March 2020.

vi (Source: AMR 2021 <https://consult.cheshirewestandchester.gov.uk/file/5930681>)

12.7 Alongside the changes in employment, the completion of employment floorspace provides an indication of economic growth in the borough. Table 13 sets out the amount of completed employment floorspace for the period 20010/11- 2020/21. This has been relatively unstable as it is influenced by the completion of large schemes, with a peak in 2019 of 77,204 m2 but they dropped as low as 5,019 m2 in 2013/14. The total amount of employment floorspace completed had generally been increasing 2013/14 onwards, except in 2018 when it decreased. This information is also reported in the Council's Annual Monitoring Reports (AMR) and therefore this LAA should be read alongside the AMR for the relevant period. The table also shows the aggregate sales till 2020 as shown in Table 13. Additionally, it also shows forecasted employment floorspace by historical forecasting method, and aggregate sales till 2030, as calculated by the forecasting function in MS Excel. All the forecasted information are shown in ***bold italics***.

12.8 The correlation-coefficient between Employment Floorspace completions (2011-2021) shows a high figure of 0.77 and hence have given us the confidence to use it to forecast future aggregate demand.

Table 13 Total amount historical and forecasted employment floorspace completed (m2) and actual and forecasted aggregate sales

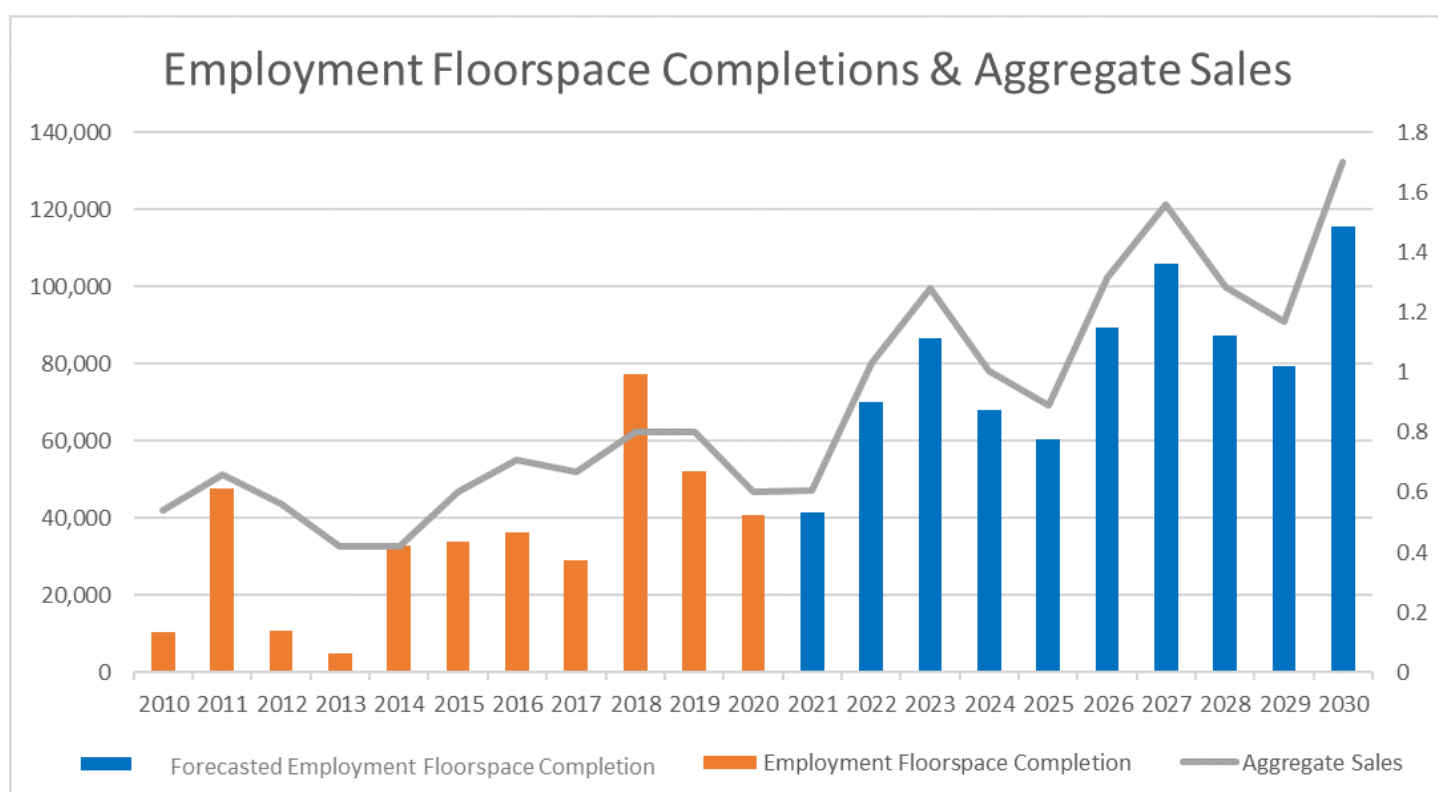
| Year | Employment Floorspace Completion (Sqm) | Aggregate Sales (mt) (Forecasted 2021 onwards) |
|--------------------|--|--|
| 2010 | 10,270 | 0.54 |
| 2011 | 47,740 | 0.66 |
| 2012 | 10,874 ⁽¹⁾ | 0.56 |
| 2013 | 5,019 | 0.42 |
| 2014 | 32,842 | 0.42 |
| 2015 | 33,692 | 0.6 |
| 2016 | 36,192 | 0.71 |
| 2017 | 29,049 | 0.67 |
| 2018 | 77,204 | 0.8 |
| 2019 | 52,157 | 0.8 |
| 2020 | 40,741 | 0.6 |
| 2021 | 41297 | <i>0.61</i> |
| <i>2022</i> | <i>70176</i> | <i>1.03</i> |
| <i>2023</i> | <i>86775</i> | <i>1.28</i> |

| Year | Employment Floorspace Completion (Sqm) | Aggregate Sales (mt) (Forecasted 2021 onwards) |
|-------------|--|---|
| 2024 | 68104 | 1.00 |
| 2025 | 60384 | 0.89 |
| 2026 | 89262 | 1.31 |
| 2027 | 105862 | 1.56 |
| 2028 | 87191 | 1.28 |
| 2029 | 79471 | 1.17 |
| 2030 | 115588 | 1.70 |

1. This figure has been changed from 10,422 in the previous LAAs due to changes in source data

12.9 The Local Plan (Part One) Strategic Policies makes provision for at least 3,650,000 sqm of employment land which make provision for significant economic growth in the borough. The following diagram shows how closely the aggregate demand correlates with employment floorspace completion.

Picture 12.1



Housing completions

12.10 Housing completions began to rise during the 2013/14 monitoring period and there has been a sustained yearly increase in net completions since, reaching a 10 year high of 2,542 net completions in 2017/18 (1 April 2017 - 31 March 2018). This pattern is generally mirrored in aggregate sales which have also increased year on year since 2013-14, other than a slight decrease from 2016 to 2017. This would suggest that there is a strong relationship between housing completions and aggregate sales from the borough, with the potential for continuing increase in housing completions to increase demand for aggregates.

12.11 The following table shows the housing completions (historical and forecasted till 2030) and aggregate sales till 2020 as shown in Table... . Additionally, it also shows forecasted aggregate sales by historical forecasting method, corresponding to the forecasted housing completions till 2030, as calculated by the forecasting function in MS Excel. All the forecasted information are shown in ***bold italics***.

12.12 The correlation-coefficient between Housing completions (2011-2021) shows a moderate figure of 0.55 and hence could be used to forecast future aggregate demand.

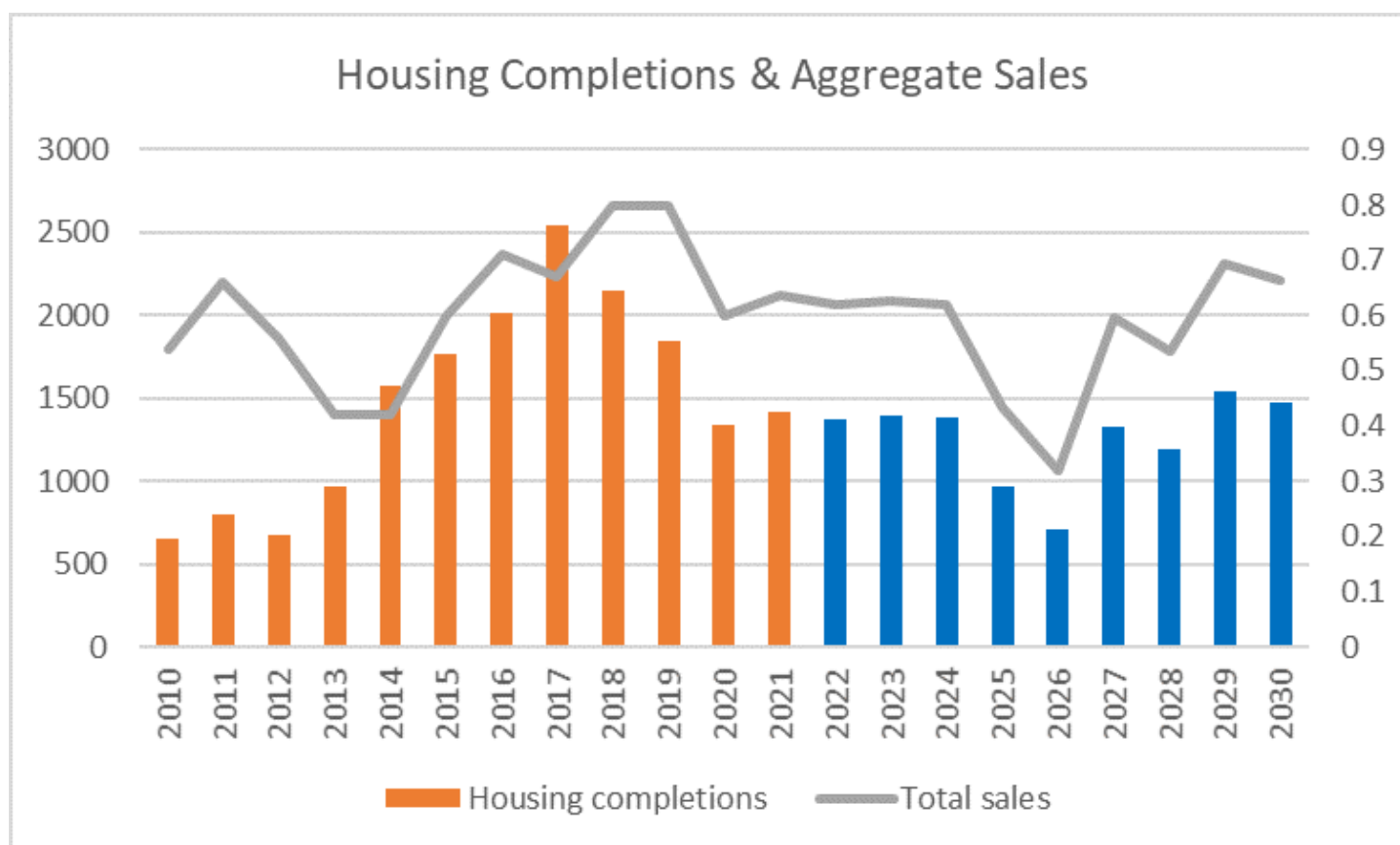
Table 14

| Year | Housing Completion (Units of Dwellings) | Aggregate Sales (mt) |
|------|---|----------------------|
| 2010 | 654 | 0.54 |
| 2011 | 796 | 0.66 |
| 2012 | 673 | 0.56 |
| 2013 | 970 | 0.42 |
| 2014 | 1571 | 0.42 |
| 2015 | 1769 | 0.6 |
| 2016 | 2017 | 0.71 |
| 2017 | 2542 | 0.67 |
| 2018 | 2152 | 0.8 |
| 2019 | 1849 | 0.8 |
| 2020 | 1335 | 0.6 |
| 2021 | 1416 | <i>0.60</i> |

| Year | Housing Completion (Units of Dwellings) | Aggregate Sales (mt) |
|-------------|---|----------------------|
| 2022 | 1375 | 0.60 |
| 2023 | 1393 | 0.60 |
| 2024 | 1381 | 0.60 |
| 2025 | 967 | 0.40 |
| 2026 | 707 | 0.30 |
| 2027 | 1329 | 0.60 |
| 2028 | 1189 | 0.50 |
| 2029 | 1547 | 0.70 |
| 2030 | 1478 | 0.70 |

12.13 The housing trajectory set out in the Local Plan (Part One) predicted that total completions would rise up to a peak in 2017/18 before gradually declining towards the end of the plan period (2030). However, the predicated completions have been exceeded from 2014/15 onwards. In line with the predictions, completions in 2018/19 and 2019/20 have declined and plateaued. The following diagram shows the information in a graph where the correlation is visually clear.

Picture 12.2



12.14 There are several large housing schemes within the borough that have either commenced recently or will start shortly, including:

- Land At Wrexham Road, Chester: Phased delivery of 1400 dwellings and the provision of associated infrastructure (including roads, footpaths, cycleways, landscaping, playing fields, children's play areas and other open spaces). The delivery of this development has commenced, however, there were 744 dwellings outstanding as of April 2020.
- 162 Middlewich Road, Rudheath, Northwich, Cheshire, CW9 7DX: Demolition of existing detached dwelling and erection of a 2 storey (Use Class C2) 68 bed residential care home. This has commenced construction.
- Land Off Chester Road, Malpas: Residential development for up to 57 dwellings, the provision of a Community Health Hub and open space. A reserved matters application is currently pending decision.
- Land At Rear of, West Drive, Winsford, Cheshire, CW7 3BQ: Erection of 205 affordable dwellings (127 dwellings and 78 apartments) and ancillary works. This has not started yet.
- Weaver Park - Phase 4.5: School Lane, Hartford, Northwich, CW8 1PW: Residential development comprising 350 dwellings and associated amenity areas together with new access on to School Lane. Development delivery has commenced and 258 dwellings are outstanding as of April 2020.

12.15 Table 14 sets out the number and percentage change in net housing completions over the last ten year period.

Table 15 Housing completions in previous years 2008/09 - 2019/20

| | 08 / 09 | 09 / 10 | 10 / 11 | 11 / 12 | 12 / 13 | 13 / 14 | 14 / 15 | 15 / 16 | 16 / 17 | 17 / 18 | 18 / 19 | 19 / 20 | 20 / 21 |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Completions | 723 | 733 | 564 | 803 | 673 | 970 | 1,571 | 1,796 | 2,017 | 2,542 | 2,152 | 1,849 | 1335 |
| % change | +2% | +1% | -23% | +42% | -16% | +44% | +62% | +14% | +12% | +26% | -15% | -14% | -28% |

12.16 In an attempt to come up with a single average figure for future yearly demand for the rest of the plan period, we have calculated a mean figure of the forecasted aggregate sales correlated to both future housing and employment completions as follows and the figure of 0.80 mt is exactly same as the planned provision or annual apportionment figure of 0.80 mt.

Table 16

| Year | Forecasted Aggregate Sales dependent on future housing completions (mt) | Forecasted Aggregate Sales dependent on future employment floorspace completions (mt) |
|-----------------------|---|---|
| 2022 | 0.6 | 0.6 |
| 2023 | 0.6 | 1.0 |
| 2024 | 0.6 | 1.3 |
| 2025 | 0.4 | 1.0 |
| 2026 | 0.3 | 0.9 |
| 2027 | 0.6 | 1.3 |
| 2028 | 0.5 | 1.6 |
| 2029 | 0.7 | 1.3 |
| 2030 | 0.7 | 1.2 |
| Yearly Average | 0.8 | |

Major projects

12.17 Major projects alongside employment and housing growth will create further increased demand for aggregate.

- The Local Plan (Part One) Strategic Policies allocates a number of strategic sites which include employment and housing development alongside additional infrastructure requirements. Allocations at Ledsham Road, Ellesmere Port; Wrexham Road, Chester and the Station Quarter, Winsford all include provision for associated infrastructure including schools and community facilities. The Ledsham Road (1802 total dwellings outstanding) and Station Quarter (143 dwellings outstanding) schemes are under construction and the Wrexham Road scheme began in 2019.
- The Mersey Dee Alliance (MDA) published a £220m Cross Border Recovery Deal aligned with the Chancellor's vision for a levelled up, higher-wage, higher-skill, higher-productivity economy and commences negotiations with the Welsh and UK Governments to fund the Deal. Some of their growth objectives have a clear potential to increase demand of aggregates within the borough. ^(vii) The overall objectives of the Mersey Dee Growth Prospectus and the Investment Programme are to:
 - To improve cross border rail connectivity by lobbying for investment in Chester, Shotton and Deeside Stations, the Wrexham to Bidston/Liverpool line and ultimately the electrification of the North Wales Coast Mainline.
 - To improve cross border road connectivity by lobbying for investment to improve the A494, A483, A550 and A41, Chester Broughton Growth Corridor primarily, as well as several other major cross border routes.

12.18 Additionally, there are some more feasibility studies underway such as Winnington Swing Bridge/A533 Corridor Improvements and Middlewich southern Link.

- Policy T1 in the Local Plan (Part Two) also identifies that priority local road network schemes include improvements to the link between Winsford / Middlewich and the M6 Junction 18 and interventions to the north of Northwich, including the Winnington Swing Bridge. The A51 Tarvin to Chester Improvement Scheme received full approval in August 2019. In March 2020, all land acquisitions were completed and construction is underway. Completion is currently programmed for Spring 2021.

12.19 Other regeneration schemes within the borough will also demand provision of primary aggregate.

12.20 The Local Plan (Part Two) identifies several allocations for employment use and housing. Future development of these site allocations would result in requirements for aggregates.

12.21 The Council's Community Infrastructure Levy came into effect on 1 September 2017. The Regulation 123 list includes education, public realm and several transport and highways projects, which could result in requirements for aggregates. The Regulation 123 list currently includes the following projects: a new Chester Park and Ride site, highway improvement schemes and improvements to station car parking and accessibility at railway stations across the borough.

vii Source: <http://www.merseydeealliance.org.uk/news/>

12.22 The current proposed route alignment of HS2 (phase 2) passes through eastern parts of the borough. Creation of HS2 and its associated infrastructure, will have significant aggregate requirements. A recent ongoing consultation on the Environmental Statement for HS2 indicates that there are likely to be four large borrow pits located within CWaC to meet the shortfall of sand, gravel, crushed rock and clay. It is currently not clear whether these borrow pits will provide for all of the remaining requirements for HS2, along with material from excavation of cuttings etc, or whether additional materials. The North West Aggregate Working Party, as well as Cheshire West and Chester will draft responses to the consultation and also seek further clarification on the exact requirements.

12.23 The HyNet North West project may also result in aggregate requirements, but volumes required are not currently clear. The project includes a hydrogen production plant in Ellesmere Port, a carbon dioxide pipeline from Ellesmere Port to depleted gas reservoirs under Liverpool Bay and a hydrogen pipeline from the production plant to storage areas and users.

12.2 Demand from outside of the borough

12.24 Demand from within Cheshire, as outlined in chapter 6 'Exports and imports' accounts for approximately 60 - 70% of overall sales. There is no data available to split this down between Cheshire West and Chester and Cheshire East, but it would be expected that the majority of the sales would be within the Borough, but sales to Cheshire East would still be significant.

12.25 The Local Plan Strategy for Cheshire East was adopted in July 2017. This identifies that provision will be made for a minimum of 380 hectares of employment land and a minimum of 36,000 homes between 2010 and 2030. It also includes infrastructure projects such as improvements to Crewe Railway Station, which links to the proposals for HS2. The regeneration of Crewe Town Centre is likely to be a major user of sand and gravel aggregate in Cheshire East. In September 2021, phase two of the scheme was approved which includes – a leisure-led, mixed-use development – which would include a state-of-the-art cinema, 10-pin bowling centre, gym, restaurants, cafes and bars, retail units and public realm enhancements.

12.26 In October 2017 the government announced its support for a new bypass for Middlewich. This employment, housing and infrastructure will all result in additional requirements for sand and gravel aggregate. The 2019 LAA for Cheshire East identified that the sand and gravel landbank was 4.87 years and the shortfall would need to be addressed in the proposed Minerals and Waste Development Plan Document through the allocation of new sites, extensions to existing quarries and the designation of preferred areas and areas of search. However, the current shortfall of aggregates may impact on demand within Cheshire West and Chester.

12.27 The largest consumer of sand and gravel aggregate from Cheshire West and Chester (outside Cheshire) is Wrexham. The level of material being exported to these areas have been around 20-30% in 2019.

12.28 Though Manchester, Merseyside, Halton and Warrington have been historically the most significant consumer, 2019 data indicates, this has now changed to Wrexham and hence, North Wales' growth aspirations should be considered when assessing future demand.

12.29 The 2016 Vision for North Wales Economy ^(viii) mentions that by 2035, delivery of their vision will be powered by high value economic clusters. They mention a comprehensive list of infrastructure projects in order to attain this, which includes, A55 / A494 Route Improvement Project (£210m), improving the main access from North Wales to the Northern Powerhouse, Northern Gateway, Deeside (£10m), Warren Hall, Broughton (£20m), Wrexham Technology Park expansion (£10m) Powerhouse throughout North Wales.

12.30 The Liverpool City Region (LCR) LEP covers the authorities of Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral. The LCR Growth Strategy (2016) sets targets to create over 100,000 new jobs by 2040, alongside additional investments and targets including development of Liverpool2 container terminal, development of the Mersey Waters Enterprise Zone including Liverpool and Wirral Waters schemes and the Northern Powerhouse Rail proposals. The Liverpool Local Plan has been adopted on 26 January 2022, which mentions that the city has an overall requirement for 145 hectares of land for industrial and business uses, over the period of the Local Plan, to meet the needs of the City and the sub-regional demand resulting from planned development associated with SuperPort. For the period 2013-2033, Liverpool's housing requirement is for at least 34,780 net additional dwellings. Therefore, the average level of housing growth equates to 1,739 or more dwellings per year.

12.31 A Liverpool City Region (LCR) Spatial Development Strategy (SDS) is being developed in partnership with Local Authority Planning teams within the Liverpool region who are able to provide insight into what is needed in each constituency, borough and neighbourhood. The SDS will set out a spatial planning framework for the LCR for the next 15 years, covering the City of Liverpool and the Metropolitan Boroughs of Knowsley, St Helens, Sefton, Wirral and Halton. The SDS will be different to the Greater Manchester Spatial Framework [GMSF] in that it will not allocate housing and employment sites throughout the region and will not make changes to Green Belt boundaries. In the LCR, these policies will be contained within the development plans for the constituent local authorities. There has been a second public consultation which ended in February 2021 and further updates are awaited.

12.32 The Cheshire and Warrington LEP covers the authorities of Cheshire East, Cheshire West and Chester and Warrington. By 2040 the LEP aims to create 120,000 jobs and build up to 127,000 new homes as identified in the updated 'Strategic and Economic Plan for Cheshire and Warrington'.

12.33 The Warrington proposed submission version Local Plan identifies objectives to deliver a minimum of 18,900 new homes and provide 362 hectares of employment land between 2017 and 2037. The Warrington Western Link road between the A56 Chester Road in Higher Walton and the A57 Sankey Way in Great Sankey is also anticipated to start within the next two years. Consultation on the draft proposed submission version has been closed in November 2021 and further updates are awaited.

12.34 The Joint Local Aggregate Assessment Greater Manchester, Merseyside and Halton, and Warrington January 2018 (Data for the period up to December 2016) indicates that there is only one remaining operational sand and gravel quarry in that area and the landbank is well below the requirement of at least 7 years. This may impact on sales within Cheshire West and Chester.

viii Source: <https://democracy.gwynedd.llyw.cymru/documents/s14828/Item10-Appendix1-NorthWalesGrowthDealBid.pdf>

12.35 Cheshire West and Chester is a member of the Constellation Partnership, a partnership between two LEPs and seven Local Authorities which seeks to maximise growth and investment opportunities associated with HS2. The partnership's ambition is to deliver 100,000 new homes and 120,000 new jobs across the Constellation region by 2040. HS2 itself would also have significant aggregate requirements. In a latest webinar by HS2, it was mentioned that the construction would mainly use borrow pits which are shown on the latest plans i.e. areas where material will be excavated for construction, then re-filled and the land reinstated. There are 4 identified in MA02 area shown on the plans (e.g. east of the proposed line near Wimboldsley, within CWaC).

12.36 Additional demand for aggregate will be created through the delivery of additional infrastructure permitted by the Planning Inspectorate at the National Infrastructure Directorate. Significant projects that are currently underway or anticipated shortly include: Wrexham Energy Centre; Keuper Gas Storage Project, Northwich; Hydrodec Oil Re-refinery Eastham Wirral; Clocaenog Forest Wind Farm, North Wales.

12.37 All of the above Local Plans, growth strategies and significant projects fall within the geographical area where material from Cheshire West and Chester is consumed. These strategies and projects will continue to place demand on sites from within the borough and therefore form a significant consideration when assessing future policy requirements.

13 Conclusions and policy considerations

13.1 There will be continuing demand for sand and gravel aggregate from within the borough throughout the Plan period and beyond and the level of demand is likely to be impacted by the Coronavirus pandemic, but then increase in the future. The ten year and three year average sales indicate that demand had reduced but then increased and levelled off.

13.2 The Local Plan (Part One) Strategic Policies makes provision for the adequate, steady and sustainable supply of sand and gravel. It states that a minimum seven year landbank will be maintained for aggregate land-won sand and gravel. It makes provision for the allocation of specific or preferred minerals sites as either new sites or extensions to existing ones. There are no permitted crushed rock reserves within Cheshire West and Chester and currently there is reliance on imports for this.

Policy considerations

13.3 Policy ENV 9 of the adopted Cheshire West and Chester Local Plan (Part One) Strategic Policies sets out:

Cheshire West and Chester will make provision for the adequate, steady and sustainable supply of sand, gravel, salt and brine, contributing to the sub-national guidelines for aggregate land-won sand and gravel, whilst ensuring the prudent use of our important natural finite resources.

This will be achieved by:

- Maintaining a minimum seven year landbank for aggregate land-won sand and gravel, making provision for a steady and adequate supply over the Plan period in line with national policy and Local Aggregate Assessments, providing a flexible approach to the location of future minerals development to ensure a diversity of supply for the market.

Local Plan (Part Two) Land Allocations and Detailed Policies

13.4 An 'Issues and additional call for sites' consultation was carried out in May to June 2014 which was followed by a targeted 'Minerals call for sites' consultation in October to November 2014. Both consultations sought information from industry representatives relating to potential future areas for minerals extraction in the borough. The sites submitted to these consultations went through an assessment and consultation process, and the results fed into preparation of the minerals policies and allocations within the Local Plan (Part Two) Land Allocations and Policies Preferred Approach.

13.5 The Local Plan (Part Two) was adopted in July 2019 and policy M 1 identifies that provision will be made for the extraction of at least 16 million tonnes of land-won sand and gravel over the plan period (0.80 million tonnes per annum). The requirement to provide a minimum seven year supply beyond the plan period would result in an additional requirement of at least 5.60 million tonnes. This is a total requirement of at least 21.60 million tonnes. It sets out that this will be achieved by: continued extraction

of permitted reserves at existing sites; allocation of a new site to extend Forest Hill, Sandiway; identification of a Preferred Area; and identification of an Area of Search. An extension to the Forest Hill quarry has now been approved.

Conclusion

13.6 The current landbank for sand and gravel aggregate is 7.50 years based on the current annual apportionment figure of 0.80mt per annum. If calculated using ten year average sales of 0.62mt per annum the landbank increases to 9.68 years.

13.7 The Coronavirus pandemic will have a short-term impact on sand and gravel sales, but after that, the requirement is likely to increase due to continued increase in levels of development within the borough and in nearby areas. There are several nearby authorities promoting growth in their areas, but with reducing sand and gravel supplies. As such, this is likely to result in an increase in future sand and gravel demand experienced in the borough in the short to medium term. HS2 may also have significant impacts on demand for aggregates, but the amount required to be provided from CWaC is not yet clear.

13.8 Whilst the borough currently has a landbank of 7.50 years, there will be a future requirement to provide additional sites or extensions to existing sites in order to provide an adequate supply and ensure that at least a 7 year landbank is maintained throughout and at the end of the plan period (2030). This is covered by the provisions within the Local Plan (Part Two), which identifies in policy M 1 that the Council will maintain a steady and adequate supply of aggregate land-won sand and gravel by the continued provision of sand and gravel from permitted reserves at existing sites; the allocation of a sand and gravel site as an extension to Forest Hill, Sandiway; identification of a Preferred Area; and identification of an Area of Search. An extension to Forest Hill has now been approved and will be added to the landbank in the next monitoring period.

13.9 This approach will help to reduce reliance on a small number of sites / operators, making provision for a steady and adequate supply over the Local Plan period in line with national policy.

13.10 In order for the provision of aggregates in the borough to be flexible enough to respond to increased growth, the planned provision will remain at the annual apportionment figure of **0.80mt per annum**. The sales, reserves, landbank and planned provision will be assessed through future LAAs on an annual basis to ensure provision remains flexible and proportionate to growth aspirations alongside the reality of delivery and economic conditions. In an attempt to come up with a single average figure for future yearly demand for the rest of the plan period, we have calculated a mean figure of the forecasted aggregate sales correlated to both future housing and employment completions as mentioned in 'Planned provision' and the figure of 0.80 mt is exactly same as the planned provision or annual apportionment figure of 0.80 mt.

Planned provision

Planned provision will remain at the annual apportionment figure of **0.80mt per annum**.

A Glossary

Aggregate - sand, gravel, crushed rock and other bulk materials used in the construction industry for purposes such as the making of concrete, mortar, asphalt or for roadstone, drainage or bulk filling materials.

Aggregate Working Party (AWP) – a technical working group with members from mineral planning authorities and the minerals industry.

Apportionment – a specific amount of aggregates to be produced annually on a sub-regional basis.

Area of Search - areas where knowledge of mineral resources may be less certain but within which planning permission may be granted, particularly if there is a potential shortfall in supply.

Landbank – a sum of all permitted reserves in active and inactive sites at a specified time and for a given area which provides a monitoring tool of the provision of aggregates in a particular area.

Managed Aggregate Supply System - system used by Government to ensure that there is a steady and adequate supply of aggregate minerals to meet national and local requirements.

Marine aggregates – sand and gravel dredged from the sea.

Mineral resource - concentration of minerals that are of economic interest.

Permitted reserves - sites where planning permission has been granted for development but where extraction has still to take place or is not yet completed.

Preferred Area - areas of known resources where planning permission might reasonably be anticipated by industry.

Primary aggregates – land-won and marine-dredged sand and gravel produced from naturally occurring minerals deposits, extracted specifically for use as aggregate and used for the first time. This also includes crushed rock aggregates, although no consented crushed rock reserves are currently available in Cheshire West and Chester.

Recycled aggregates – produced by recycling construction, demolition, excavation and other wastes.

Reserve – a mineral resource that has a valid planning permission for mineral extraction.

Specific sites - sites where viable resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms.

Secondary aggregates – aggregates obtained as a by-product of other quarrying and mining operations or as a by-product of other industrial processes.

B Recycled aggregate sites

Construction, demolition and excavation waste sites

| Site | Facility type | Status | Operator |
|--|--|-------------|-------------------------------------|
| Ash Skip Hire, CW8 4EB | Transfer station with screening facility | Operational | Ash Skip Hire Limited |
| AAA Skip Hire Ltd, CW9 7DR | Transfer station | Operational | AAA Skip Hire Ltd |
| Cheshire Waste Skip Hire, CH1 6PE | Transfer station | Operational | Cheshire Waste Skip Hire Limited |
| The Recycling Yard, CH65 4AJ | Transfer Station | Operational | Dig And Shift Limited |
| Canalside Operations Hub, CH65 4EF | Transfer station | Operational | Kier M G Limited |
| Cheshire Waste Management Centre, CH65 4UU | Hazardous waste transfer station | Operational | Tradebe North West Limited |
| Davenham Highways Depot, CW9 8JU | Transfer station | Operational | Ringway Infrastructure Services Ltd |
| Guilden Sutton Highways Depot, CH3 7EX | Transfer station | Operational | Ringway Infrastructure Services |
| Lostock Sodium Carbonate Manufacturing Site, CW9 7TH | Physical treatment facility | Operational | Tata Chemicals Europe |
| Manisty Wharf, CH65 1AB | Glass reprocessing facility | Operational | Recresco Limited |
| Northwich Skip Hire, CW9 7DR | Transfer station | Operational | Northwich Skip Hire |
| Aggregates Yard, CW9 7GG | Transfer Station + treatment | Operational | UK Aggregates and Plant |
| Chapterhouse Transfer Station, CH65 4EP | Transfer station | Operational | F C C Waste Services (UK) Ltd |
| Tattenhall Transfer Station, CH3 9QQ | Transfer station | Operational | Tudor Griffiths Ltd |
| Winsford Depot, CW7 4EH | Transfer station | Operational | Kier M G Limited |

| Site | Facility type | Status | Operator |
|---|-------------------------------|---------------------|----------------------------|
| Lostock Works Fertiliser Production and Metal Recovery Plant, CW9 7XU | Transfer Station | Operational | Eco- Option (U K) Limited |
| Bridges Road Transfer Station, CH65 4LB | Transfer station | Operational | Alchem Merseyside Limited |
| Gowy Landfill Site, CH2 4JP | Landfill and composting | Operational | 3C Waste Ltd (FCC) |
| Household waste recycling centres: Winsford, Tattenhall, Northwich, Neston, Frodsham, Ellesmere Port, Chester | Transfer station | Operational | HW Martin |
| Lostock Works, CW9 7NU | Recycled aggregate processing | Not yet operational | Northwich O&M Limited |
| Ince Resource Recovery Park, CH2 4RB | Recycled aggregate processing | Not yet operational | Not yet known |

Whilst all of the above sites have the potential to provide recycling and reprocessing of construction, demolition and excavation (CD&E) waste, the Council is only aware of processing and sales of CD&E waste for aggregate use on one of the sites. Some of the sites have screening facilities on-site whilst others only operate mobile facilities where material is recycled and reprocessed at source.