

North Lincolnshire Local Plan (2020 to 2038)

Minerals Apportionment Background Paper

April 2021

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1. INTRODUCTION

- 1.1 Minerals play a vital role in society. Aggregates and other types of construction minerals are needed to build homes, factories, offices and transport infrastructure. Other minerals are used in industry, food production and agriculture. Energy minerals like oil and gas provide the country with power and heating. It is therefore important for development and for our quality of life as well as creation of sustainable communities that we plan appropriately for minerals. Mineral planning ensures that the need for minerals by society and the economy, and the impacts of extraction and processing on communities and the environment, are managed in an integrated way.
- 1.2 North Lincolnshire Council (NLC) is the mineral planning authority (MPA) for its area. This means it is responsible for creating a planning policy framework for minerals, including safeguarding, and making decisions on proposals for minerals development. NLC is preparing a new Local Plan, covering the period 2020 to 2038, that will replace the existing documents that make up the Local Development Framework and the saved policies of the North Lincolnshire Local Plan (May 2003). The new plan will set out up to date planning policies for minerals, including those for maintaining a steady and adequate supply of aggregates.
- 1.3 This paper has been prepared to support the Preferred Options version of the Local Plan, in respect of its approach to aggregate supply. It will also be used for ongoing consultation and discussions with the minerals industry and other key stakeholders. Accordingly, it is a “live” document and may be subject to change as work on the Local Plan progresses.

2 NORTH LINCOLNSHIRE’S AGGREGATE RESOURCES

- 2.1 North Lincolnshire’s mineral resources are a reflection of its geological, economic and social history. The solid geology of North Lincolnshire is relatively simple consisting almost entirely of Jurassic and Cretaceous rocks that dip regularly eastwards in continuous belts from north to south. The topography presents a correspondingly simple and regular arrangement, the limestone and chalk standing out as the west facing escarpments of the Lincolnshire Wolds and the Lincoln Edge, separated by valleys underlain by Jurassic clays.
- 2.2 Exposures of the solid geology in the area occur mainly in the upland areas of the Lincolnshire Wolds and around the Scunthorpe area. The remainder of the area is overlain extensively with drift deposits consisting mainly of alluvium, peat, blown sands and boulder clay. Chalk of the Upper Cretaceous period underlies much of the area to the east and outcrops of Jurassic limestone occur to the south of Scunthorpe. To the north are outcrops of the Frodingham Ironstone. Further west in the Trent Valley layers of Quaternary deposits are underlain by Mercia Mudstone. Blown sands are found in the areas around Messingham and Manton.
- 2.3 Much of the solid rock of North Lincolnshire is however overlain by glacial deposits of boulder clays, sands and gravels that add complexity to the overall picture and contribute local variation in landscape character. Extensive deposits of sands and gravels, so called cover sands, which derive from Bunter Sandstones further west beyond the Trent, have been blown in an easterly direction across the landscape to build up against the west facing escarpments and the area of Mercia Mudstones that forms the Isle of Axholme. To the north, the Humber has cut through the Cretaceous and Jurassic rock and has overlain the estuarine landscape with alluvial deposits.
- 2.4 As the description of North Lincolnshire’s geology outlined above states, the area has a number of mineral resources. These play an important role in meeting national, regional and local supply requirements. Based on BGS mineral resources mapping, North Lincolnshire contains the following range of economically important minerals, some of which are used for aggregate purposes:
- Jurassic Limestone
 - Chalk
 - Brick Clay

- Sand & Gravel
- Silica Sand
- Ironstone

2.5 Hydrocarbons (oil and gas) as well as deep coal and large area of peat deposits are also found in the area.

3 NATIONAL POLICY CONTEXT

3.1 The National Planning Policy Framework (NPPF) (March 2018) requires MPAs to assess the projected demand for minerals use, taking full account of opportunities to use materials from secondary and other sources which could provide suitable alternatives to primary materials. MPAs should plan for a steady and adequate supply of aggregates by preparing a Local Aggregate Assessment (LAA) based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources).

3.2 National Planning Practice Guidance (NPPG) emphasises that LAAs must consider other relevant local information in addition to the 10-year rolling supply, which seeks to look ahead at possible future demand. This includes, for example, levels of planned construction and housebuilding in their area and throughout the country. Average sales over the last three years in particular should be examined to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply.

3.3 The Planning Officers Society and Mineral Products Association have also produced practice guidance on producing LAAs, which provides further guidance on what other relevant local information should be considered.

4 LOCAL CONTEXT

4.1 In order to meet the requirements, the NPPF, NLC needs to make provision for a steady and adequate supply of aggregates. More specifically this means providing for land banks of at least 10 years for crushed rock and 7 years for sand and gravel over the plan period to 2038.

4.2 NLC works closely with its neighbours in the Humber area (East Riding of Yorkshire Council, Hull City Council and North East Lincolnshire Council) to produce an LAA for the Humber area. This feeds into the monitoring arrangements of the Yorkshire and Humber Aggregates Working Party (YHAWP), alongside LAAs produced by other Mineral Planning Authorities (MPA) in Yorkshire and Humber covering Doncaster & Rotherham, North Yorkshire, Yorkshire Dales National Park & York, and West Yorkshire.



4.3 The latest version of the Humber LAA (July 2018) calculates a 10 year average of sales data for crushed rock and sand and gravel sales in line with the NPPF. It then monitors whether permitted reserves amount to a land bank of 10 years for crushed rock and 7 years for sand and gravel. The LAA does not break down the average sales figures or the number of years of permitted aggregate reserves (based on average sales) down to the MPA level. It also only provides an indication of supply requirements up to 2031. Therefore, any forecasts will need to be extrapolated to the Local Plan end date of 2038.

4.4 To support the North Lincolnshire Local Plan (2017 to 2038), there is a need to understand and set out the average amount, or apportionment, of aggregates that the area needs to provide for on an annual basis, as well as over the lifetime of the plan. Hence, the production of this paper. This is similar to the

approach being adopted by East Riding of Yorkshire Council and Hull City Council to support their emerging Joint Minerals Local Plan.

- 4.5 A north/south approach was agreed upon due to there being separate markets for aggregates on each side of the Humber Estuary, including different export markets, and the cost of transporting aggregates across the Humber Bridge.

5 SOURCES OF INFORMATION

- 5.1 The main source of information on aggregate supply and demand is the Humber Local Aggregate Assessment. As highlighted in paragraph 4.2 (above), this result of close co-operation by the four Humber mineral planning authorities.
- 5.2 Other key sources of data are the Annual Monitoring Reports prepared by the Yorkshire & Humber Aggregates Working Party (YHAWP). These are based on information received from annual surveys of mineral operators across the region. Planning application data can also be used, particularly in respect of landbank information.
- 5.3 It should, however, be noted that information on aggregate sales and landbanks for North Lincolnshire can often be limited due to lack of operator survey returns, the need to retain a degree of commercial confidentiality and limiting number of aggregate producing sites in the area. Information on sand and gravel sales and landbanks are in particular is very limited. The council will continue to engage with mineral operators and industry representatives to obtain relevant information to support the Local Plan and assess supply and demand.
- 5.4 As part of work undertaken to produce the LAA, the aggregate sales over the 10 year period were split on a percentage basis between the north and south banks of the Estuary in order to give an indicative annual apportionment for North Lincolnshire. These indicative apportionments were:
- Sand & Gravel – 0.12 million tonnes
 - Crushed Rock – 0.37 million tonnes
- 5.5 Using the above apportionment figures, and details on reserve information drawn from the Yorkshire & Humber AWP reports and planning applications suggests that North Lincolnshire's indicative reserves are:
- Sand & Gravel: 1.47 million tonnes – giving an indicative landbank of 12.3 years
 - Crushed Rock: 5.82 million tonnes – giving an indicative landbank of 15.6 years

AGGREGATE SALES AND RESERVES

The use of historic average sales over the previous 10-year period as an indicator of future requirements has advantages in terms of simplicity and transparency. However, it does not:

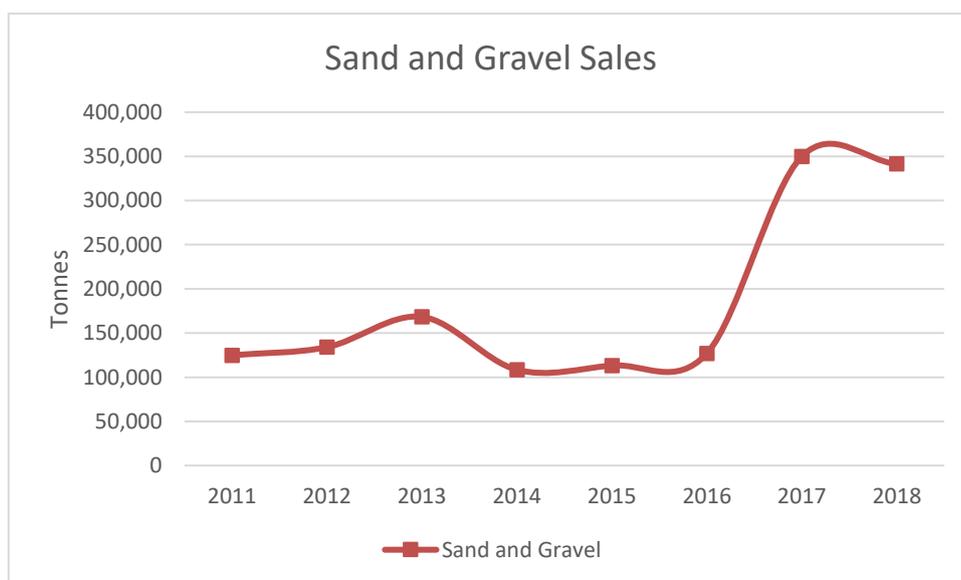
- Anticipate future changes in aggregates supply patterns or economic trends;
- Account for any emerging environmental issues or constraints that might limit supply; or
- Reflect current national and local aspirations for growth, particularly expected growth in house building, which creates an additional requirement for aggregates.

The following section presents the historic sales and reserves data which is then used to formulate average figures over the available time period and over the most recent 3-year period.

For both sand and gravel and crushed rock, the 3-year sales average is higher than the sales average over the period from 2011-2018. Ideally, NLC would have data to cover the whole previous 10-year period, but currently, data to cover that period is not available.

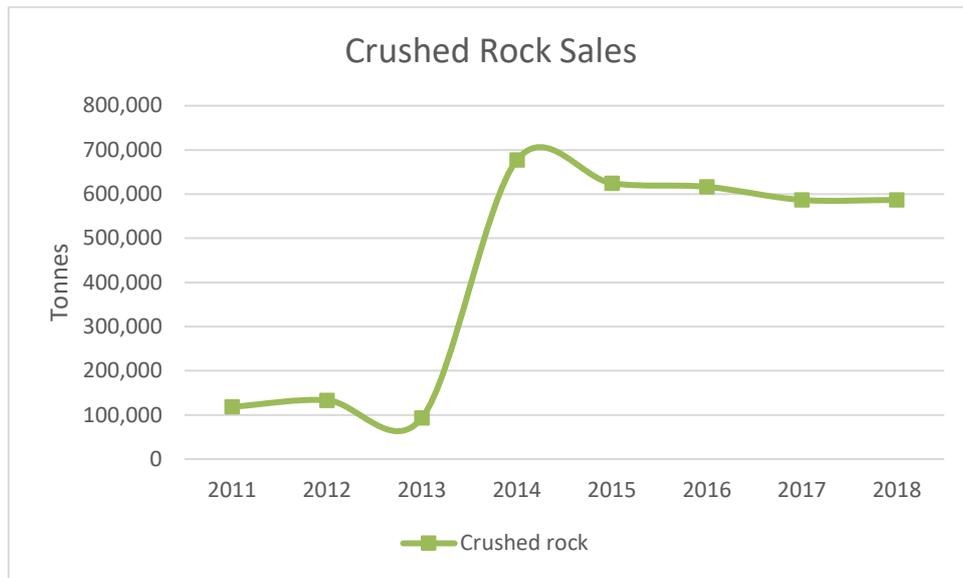
SALES

Sand and Gravel Sales



Year	2011	2012	2013	2014	2015	2016	2017	2018	3 Year Average
Sales (tonnes)	124,894	134,026	168,318	108,437	113,268	126,805	349,785	341,411	272,667

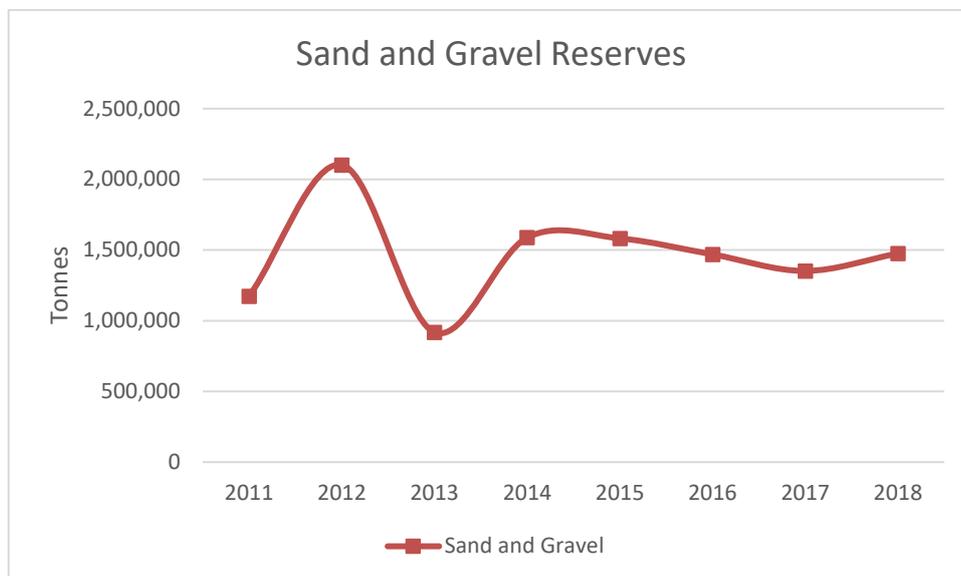
Crushed Rock Sales



Year	2011	2012	2013	2014	2015	2016	2017	2018	8 Year Average
Sales (tonnes)	118,465	133,465	93,600	677,000	624,675	616,546	586,800	586,800	429,669

RESERVES

Sand and Gravel Reserves

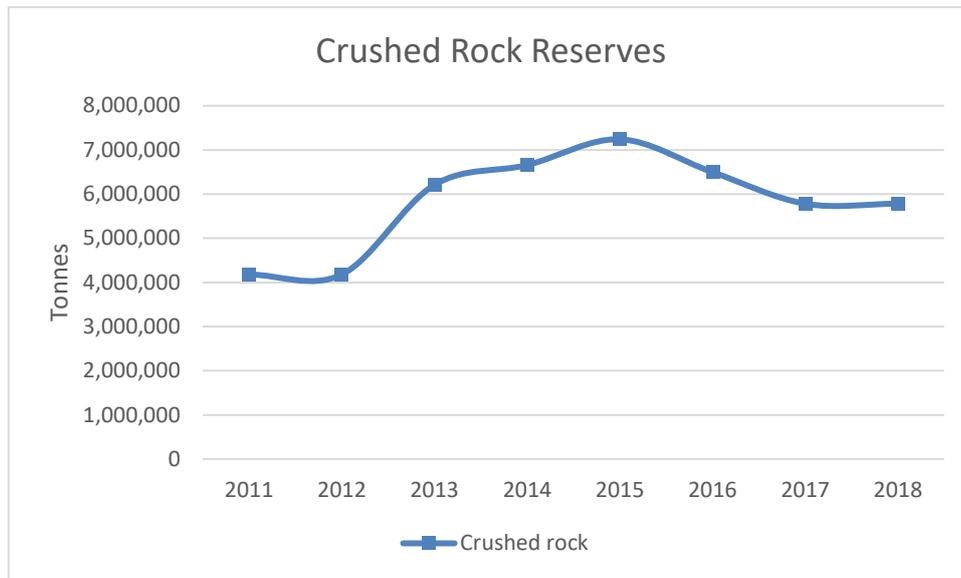


Year	2011	2012	2013	2014	2015	2016	2017	2018
Reserves (tonnes)	1,173,268	2,101,564	918,864	1,587,825	1,582,325	1,469,420	1,352,252	1,475,557

Sand and Gravel Landbank

2018 aggregate Sales (Mt)	Permitted Reserves at 31/12/18 (Mt)	Average Annual Sales, previous 3-years (Mt)	Average Annual Sales 2011-2018 (Mt)	Landbank as at 31/12/2018 (years) (based on 8 years average sales)	LAA Provision figure (Mt)	Landbank as at 31/12/2018 based on LAA provision figure (years)
341,411	1,475,557	272,667	183,368	8.05	0.15	9.8

Crushed Rock Reserves



Year	2011	2012	2013	2014	2015	2016	2017	2018
Reserves (tonnes)	4,180,000	4,180,000	6,210,000	6,657,000	7,240,000	6,497,193	5,782,393	5,782,393

Crushed Rock Landbank

2018 aggregate Sales (Mt)	Permitted Reserves at 31/12/18 (Mt)	Average Annual Sales, previous 3-years (Mt)	Average Annual Sales 2011 – 2018 (Mt)	Landbank as at 31/12/2018 (years) (based on 8 years average sales)	LAA Provision figure (Mt)	Landbank as at 31/12/2017 based on LAA provision figure (years)
586,800	5,782,393	596,715	429,669	13.45	0.27	21.4

6 FUTURE AGGREGATE REQUIREMENTS

A range of methods could potentially be used to help identify the scale of future requirements for aggregates. Any method used should be compatible with national policy and guidance, be relatively straightforward to calculate and lead to a realistic forecast capable of being monitored.

In order to get a better understanding of the behaviour of the aggregates market within the North Lincolnshire, this study analysed some key demographic housing and economic indicators to illustrate to what degree the recorded trends in aggregate sales reflect wider economic conditions. Housing completions and trajectories and GVA forecasts have all also been used as indicators.

Economic Trends

The Planning Officers Society and the Mineral Products Association provide further guidance on other indicators that can be used including Gross Domestic Product, population, planned housing and infrastructure demand¹.

The Gross Domestic Product (GDP) of the UK has increased year on year since 2009 with a range of between 1% and 3%. However, the data shows that UK economic growth is slowing with GDP increase having decreased from 3% in 2013 to 1.4% growth in 2017. It is unknown as to whether this economic slowdown will continue but there are uncertainties with regard to the economic outlook of the UK due to ongoing Brexit negotiations.

Over the Plan Period, Total Gross Value Added (GVA) is projected to increase by around 1.07% per annum. This would be below the anticipated growth for both the rest of the Humber region (1.32% per annum) and the wider Yorkshire and Humber area (2.08% per annum).

It should be noted that these projected levels of growth do not consider the potential impacts of the Covid-19 pandemic and Brexit on the UK economy. It may well be the case that the UK economy will take several years to rebound from the shock of those two 'events', which could in turn have an impact on the demand for minerals across the UK and within the sub-region. This will have to be closely monitored going forward.

GVA in the construction sector over the same period grew by around % in North Lincolnshire. This is indicative of an expected return to more normal economic conditions with average annual growth a little above 2%.

Demographic Indicators

At a local level, in the period between 2006-2016 total the population in in North Lincolnshire grew by around 5.9%. This was higher than the regional Humber average of around 2.7% but in line with the wider Yorkshire and Humber regional average of 5.7%.

Throughout the Plan Period (2017-2038), the population of NLC is projected to increase by around 3.1%², to 179,600, this is above the wider Humber average of 1.7% but below the regional Yorkshire and Humber average of 5.9%.

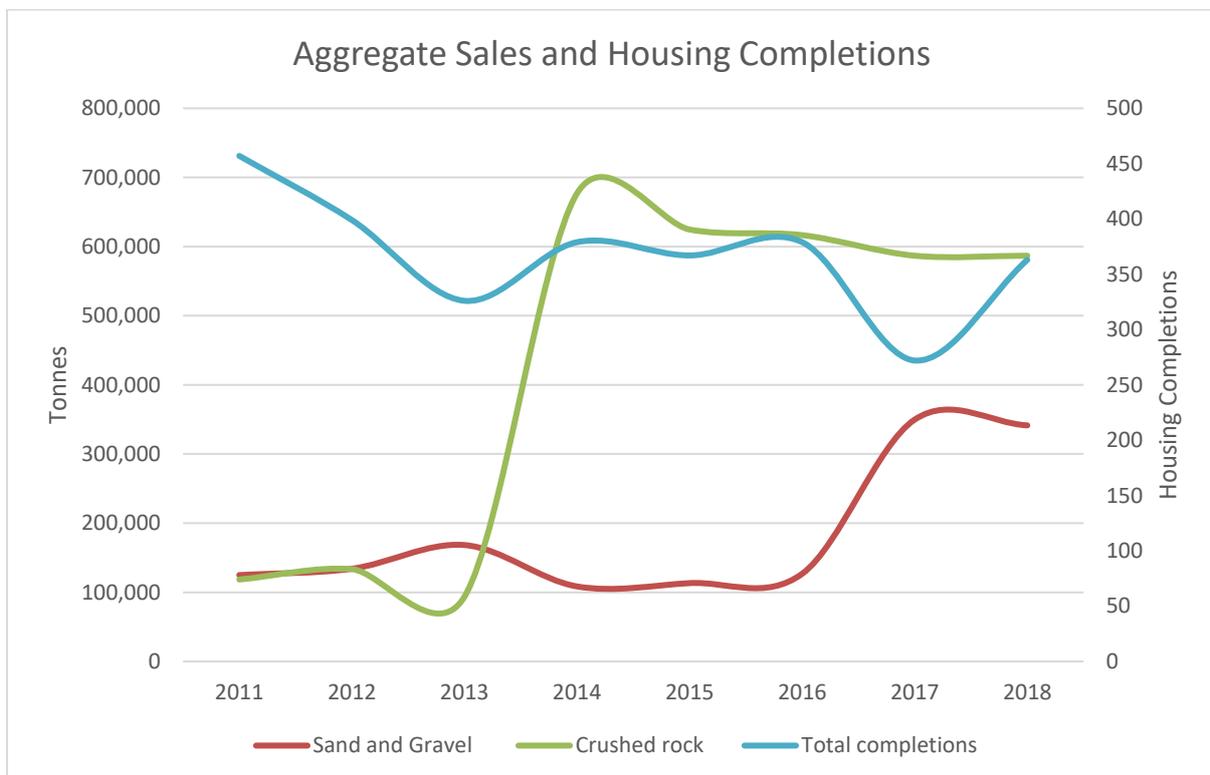
¹ Practice guidance on the production and use of local aggregate assessments, living document, May 2017
https://mineralproducts.org/documents/LAA_GUIDANCE_May2017.pdf

²<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2>

Housing Indicators

As an accepted key indicator of construction sector activity, it is necessary to assess whether past aggregate sales correlate with past housing completion statistics. The total number of housing completions in NLC between 2008/09 and 2017/18 was 3,581, with the annual average number of housing completions within that time period being 358 dwellings.

The below graph shows a broad correlation between crushed rock sales and housing completions between 2011 and 2018, although statistically speaking, the correlation coefficient between the two variables of 0.3 could not be described as strong. The below graph also clearly shows that there has been no historic correlation between sand and gravel sales and housing completions in NLC.



6.5 The annual housing requirement for North Lincolnshire is 419 dwellings per annum following the methodology as set out by MHCLG. The new annual housing requirement is less than that promoted by the North Lincolnshire Core Strategy (2011) and slightly higher than actual number of annual dwelling completions since 2010.

Given that both housebuilding and commercial activities are set to increase, it is likely that demand for aggregates will increase to support growth in the construction sector beyond historic sales estimates. However, as demonstrated above, there is no clear relationship between house completions and aggregate sales within NLC. This is also covered in the Humber LAA (2017), which highlights and cites several reasons behind the difficulty in establishing the exact nature of the relationship between aggregate sales and housebuilding.

As a general guide, The Mineral Products Association Report *Mineral Products Industry at a Glance* (2016) suggests that 200 tonnes of aggregate are required to build one house. If, as is anticipated, 9,171 dwellings

are delivered in NLC over the Plan Period up to 2038, that would equate to around 717,000 tonnes of aggregate. Alternatively - as mentioned in the Humber LAA (2018) - using the BGS 'rule of thumb', building a new home would require around 60 tonnes of aggregates, which would equate to around 550,260 tonnes of aggregate.

Major Infrastructure Projects

At the local level, North Lincolnshire aspires for economic growth and prosperity. The Able Marine Energy Park (AMEP) will involve the development of 245ha of land on the South Humber Gateway for the manufacturing and assembly of off-shore wind turbines. This project is the largest of its type in the country and will be a major job creator. In close proximity to the AMEP site is the Able Logistics Park which involves the development of 454ha of land for facilities to support the growth of the South Humber Gateway. It includes the creation of transport depots, warehousing and external storage areas, together with offices, a business park and a motel. A further 190.07ha of land of proposed for allocation for employment related uses through the new local plan.

The Lincolnshire Lakes development is one the area's largest regeneration projects. The vision is to create six high quality, sustainable village communities containing a total of 6,000 new homes on land between the western edge of Scunthorpe and the River Trent, set within an attractive waterside environment with major opportunities for leisure, sport and recreation. It will also provide an ideal setting for new businesses with the creation of new high-quality employment space within a business park. All new development will meet the highest environmental standards. Using the BGS estimates mentioned previously, this would equate to around 360,000 tonnes of aggregates. If infrastructure is included, this could mean 2.4 million tonnes. However, it is not possible to break these figures down into sand and gravel and crushed rock requirements.

However, it is difficult to be sure as to whether or not such major infrastructure projects will have a significant impact upon the aggregate supply within NLC, as materials may be sourced from elsewhere.

Secondary and Recycled Aggregates and Marine Aggregates

There is some data on the production of secondary and recycled aggregates within NLC as shown in the below table.

	2011	2012	2013	2014	2015	2016	2017	2018
Secondary and Recycled production	N/A	N/A	50,383	N/A	26,713	463,583	718,616	21,502

However - as also considered by Humber Area LAA - due to the variable nature of the information, it is difficult to accurately assess the role that secondary and recycled aggregates have within aggregate supply and demand. By way of illustration, Construction and Demolition Waste (a form of Recycled Aggregate) can be processed on site and then either reused on site or taken direct to other construction sites for use. Collecting information from these sites is extremely difficult because of their temporary nature.

The Humber LAA (2018) notes the findings of the Crown Estate Marine Aggregate Summary of Statistics (2016), including that current estimates suggest there are 25 years of primary marine aggregate production permitted in areas of the North Sea off the Humber.

The YHAWP commissioned a Marine Aggregates Study to assess the potential deliverability of a substantially greater supply of marine aggregate into the Yorkshire and Humber region, in substitution for an element of supply currently provided by land-won resources. It found there was a very large marine aggregate resource of the required quality, and sufficient fleet capacity to land it.

The resources located off the Humber Estuary are thought to be extensive. Crown Estate information produced in 2018³ shows that there are currently 10 licensed dredging areas in the North Sea in the Humber region, from which 5.9 million tonnes can be extracted per year. The sand and gravel resources found in this area range from fine sands to coarse gravels. One new dredging application could potentially increase permitted extraction by 0.6 million tonnes if approved. Current estimates suggest there are 26 years of primary marine aggregate (50.90 million tonnes) production permitted.

Only a limited amount of infrastructure utilised for, or with, the potential to be utilised for the transport of marine aggregates is safeguarded. Stakeholders considered the move towards a greater utilisation of marine aggregates will most likely take place beyond 5 years and thereafter increase with time. Economically, operators did not think the marine option was viable at that point of time but the viability gap against land won aggregate was narrowing. The study noted that the Humber Bridge toll creates separate aggregate markets north and south of the Humber, due to the cost of a lorry making a round trip across the bridge. For example, it is not cost effective to take marine material across the bridge (or around) but this would be circumvented if there was somewhere to land marine material on the south side. With the reduction in bridge tolls since the study was completed, this may be something that needs to be monitored.

The appointed consultants made recommendations for further work that include MPAs reviewing Local Plans to consider the requirements of the National Planning Policy Framework (NPPF) for safeguarding aggregate infrastructure and a formal regional Local Authority group to collaborate on cross boundary aggregate issues (which may fall within the scope of reference for the YHAWP).

Any increase in sales of secondary, recycled and marine aggregates in NLC and the wider Humber region will likely lead to a reduction in the need for primary land won aggregates.

Cross Boundary Movements

The main source of information on the movement of aggregates between different Minerals Planning Authority Areas and Sub-Regions is Aggregate Minerals Survey 2014. Other WPAs who's LAAs are considered relevant to NLC may also contain information on cross boundary movements. However, most of the data has been analysed at the Humber sub-region level and can therefore not be analysed at smaller geographies.

Doncaster and Rotherham

The latest LAA (2019) assesses possible sources of supply from neighbouring areas including North Lincolnshire. The proximity to the Doncaster area (within 30 miles) of active sand and gravel/silica sand sites within North Lincolnshire (North Cave, Cove Farm and Eastfield Farm) is highlighted. It is considered that material from these could potentially assist in meeting supply to the Doncaster area. Although, it is considered that these sites would be unlikely to supply the Rotherham area.

³ Marine Aggregates Capability and Portfolio 2018, The Crown Estate

The AMS 2014 shows that 20% to 30% of South Yorkshire's sand and gravel consumption (amounting to 152,000 to 228,000 tonnes) came from the Humber in 2014 but all of this was from the East Riding. The AMS 2014 shows that less than 1%, (amounting to less than 4,240 tonnes in 2014), of the sand and gravel consumed within the Humber area was from Doncaster.

In terms of crushed rock, the AMS 2014 shows that none of South Yorkshire's crushed rock consumption was met from the Humber area, however somewhere between 1% to 10% of the Humber area's consumption of crushed rock, amounting to 7,240 to 72,400 tonnes, was supplied from Doncaster Metropolitan Borough Council's area.

Nottingham and Nottinghamshire

The latest LAA (2019) highlights that the sand and gravel from the Nottinghamshire area has traditionally been supplied into the Yorkshire and Humber region, in particular to the Doncaster and Rotherham area. However, no mention has been made about imports and exports to/from the Humber area.

The AMS 2014 does not record any contribution from the Humber to Nottinghamshire's sand and gravel supply, though it shows that between 30% and 40% of the sand and gravel consumed within the Humber area was from Nottinghamshire in 2014. This amounts to between 127,200 and 169,600 tonnes.

The AMS 2014 shows that 1% to 10% of Nottinghamshire's crushed rock consumption (amounting to 12,640 to 126,400 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire. None of the crushed rock consumed within the Humber area was sourced from Nottinghamshire.

Lincolnshire

Lincolnshire LAA (2019) notes that 4.5% of sand and gravel exported from the county goes to the Yorkshire & Humber region. However, no particular destinations are mentioned.

The AMS 2014 shows that 1% to 10% of Lincolnshire's sand and gravel consumption (amounting to 9,890 to 98,900 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire's area. Between 10% and 20% of the sand and gravel consumed within the Humber area was from Lincolnshire in 2014. This amounts to between 42,400 and 84,800 tonnes. It is likely to be associated with Northern Lincolnshire rather than Hull and East Yorkshire due to the geography of the area.

The AMS 2014 shows that 1% to 10% of Lincolnshire's crushed rock consumption (amounting to 8,190 to 81,900 tonnes) came from the Humber in 2014 and all of this was from North Lincolnshire's area. None of the crushed rock consumed within the Humber area was sourced from Lincolnshire.

West Yorkshire

The West Yorkshire LAA (2016) acknowledges that continuity of the area's supply is far more dependent on cooperating with neighbouring MPAs than managing supply in West Yorkshire itself. It notes that under the Duty to Corporate, the West Yorkshire authorities will need to seek agreement with East Riding of Yorkshire Council to ensure that it is continuing to include in its plan, the exportation of aggregates to West Yorkshire. A draft updated West Yorkshire LAA (2017) reaffirmed this approach.

AM2014 shows that 20% to 30% of West Yorkshire's sand and gravel consumption (amounting to 140,400 to 210,600 tonnes) came from the Humber in 2014 and all of this was from East Riding of Yorkshire's area. It amounts to between 22% and 33% of the Humber's primary aggregate sand and gravel sales, which is a very significant proportion. West Yorkshire made no contribution to the Humber's sand and gravel consumption.

None of the crushed rock consumed within the West Yorkshire area was sourced from the Humber. Under 1% (under 7,240 tonnes) of the Humber’s crushed rock consumption was supplied from West Yorkshire, and all of this was from Leeds City Council’s area.

North Yorkshire

The North Yorkshire LAA (2016) recognises that sand and gravel is imported to the North Yorkshire area from East Riding of Yorkshire. It represents between 5% and 7% of the sand and gravel consumed within the area.

AM2014 shows between 84,800 tonnes and 127,200 tonnes (20% and 30% of the Humber’s consumption) of sand and gravel was supplied from North Yorkshire in 2014. It shows that 1% to 10% of North Yorkshire’s sand and gravel consumption (amounting to 11,250 to 112,500 tonnes) came from the Humber in 2014 and all of this was from East Riding of Yorkshire’s area.

None of the crushed rock consumed within the North Yorkshire area was sourced from the Humber.

Between 40% and 60% of the Humber’s crushed rock consumption (amounting to between 289,600 and 434,400 tonnes) came from the North Yorkshire area in 2014 and between 10% and 20% was from the North Yorkshire County Council area and between 30% and 40% from the Yorkshire Dales National Park area.

Preferred Approach – Future Needs

As demonstrated above, there is no demonstrably suitable way of directly linking demand for aggregates with housebuilding or the economy of the area as a means of projecting aggregate demand into the future.

In line with the sales-based methodology employed in the East Riding and Hull Joint Minerals Plan, which was examined and found to be acceptable by the Planning Inspectorate⁴, the preferred approach for sand and gravel is to take the 8-year annual average of sales of 183,368 tonnes (0.18 million). This would equate to a landbank of 8.05 years. The following reasons provide further justification for that decision:

- The Planning Practice Guidance states that MPAs should look at average sales over the last 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply (PPG ID: 27-064-20140306).

However, the three-year sales average would equate to an average 272,667 tonnes per annum (0.27 million tonnes), an uplift from the 8-year average of 183,368 tonnes per annum (0.18 million tonnes) of over 48%. This is a significant increase when considering that housing completions have not grown at anywhere near the same rate.

- The 0.18 million tonnes sales figure is 52% higher than the 0.12 million tonnes sales figure apportioned to North Lincolnshire in the Humber LAA.
- As mentioned earlier in the report, the 0.12 million tonnes figure would equate to a landbank of 12.3 years. Increasing that apportionment figure to 0.18 million tonnes sales figure would result in the reduction of the landbank to 8.05 years.

⁴ Report on the Examination of the East Riding of Yorkshire & Kingston upon Hull Joint Minerals Local Plan 2016-2033 (July 2019)

- There is the potential for future increases in marine aggregate landings, as indicated previously in this report, which would reduce the need for land-won aggregates.

Either approach would ensure that NLC is able to meet the government recommendation of having a landbank for sand and gravel of at least 7 years.

For crushed rock, the preferred approach would be to also use the past 8 years average annual sales figure and project that forward across the Plan Period as NLC's future annual apportionment. This would equate to 429,669 tonnes per annum (0.43 million tonnes). With permitted reserves of 5.7 million tonnes, this would equate to a landbank of 13.5 years. As with sand and gravel, using the 8 years sales figures would result in an increase above the Humber LAA (2018) apportionment figure which would result in a decrease in the landbank. At 370,000 tonnes (0.37 million) the landbank for crushed rock would be around 15.6 years.

Again, either approach would result in there being sufficient permitted reserves exist within NLC to satisfy the NPPF recommended landbank requirement period of 10 years for crushed rock.

For both sand and gravel and crushed rock, the aggregate apportionments, and by extension the existing landbanks will need to be monitored and kept under review.

Conclusions & Next Steps

It is essential that a steady and adequate supply of aggregates is maintained to support growth and development in the NLC area. In accordance with national policy and guidance on aggregate supply and planning to meet future demand, 10-year sales averages (in this case 8 as 10 year figures are not available) and current aggregate apportionments for the Humber area have been considered, alongside other relevant local factors such as supply/demand requirements from neighbouring areas, future house building and major development and infrastructure projects.

To examine what appropriate annual aggregate apportionments might be for the NLC Local Plan, this paper calculates the annual average sales rate for both crushed rock and sand and gravel aggregates over a 8 year period within the NLC area in line with the NPPF. More recent sales data for the last three years, as well as rates experienced during the pre-recession period which supported higher levels of housebuilding have also been considered.

As a result, annual apportionments of primary aggregate have been proposed for the NLC Local Plan as follows:

- Sand and gravel 0.18 million tonnes per annum
- Crushed rock 0.43 million tonnes per annum

A number of sites in the NLC area receive and/or produce recycled aggregates through treatment of construction, demolition and excavation waste, whilst there are others that produce secondary aggregates as a by-product of industrial processes. However, a reliable indication of overall recycled aggregate production is not available. Therefore, an accurate assessment of the contribution secondary and recycled aggregates make towards overall supply cannot be fully established at this stage. The capture of consistent and reliable data on secondary and recycled aggregate production will continue to be the subject of future work.

