PETERBOROUGH CITY COUNCIL

Cambridgeshire County Council

Cambridgeshire and Peterborough Minerals and Waste Development Plan

Local Aggregate Assesment December 2016

CAMBRIDGESHRIE AND PETERBOROUGH LOCAL AGGREGATES ASSESSMENT FOR 2014 & 2015

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	Sales (Mt)	Av. (10 y) Sales (Mt)	Av. (3 y) Sales (Mt)	Trend	LAA Rate (Mt)	Res've (Mt.)	Land - bank (Yrs.)	Cap'ity (Mtpa)	Comments
Sharp Sand & Gravel	-	-	-	-	-	-	-	-	The 'LAA Rate' is the planned level of provision in the adopted Core Strategy i.e. 3 mtpa. The landbank is based on this rate; the NPPF ten year rolling sales average gives a landbank of 19.06 years. Allocations which have yet to be permitted are estimated to total 26.6 million tonnes.
Soft Sand	-	-	-	-	-	-	-	-	
All Sand & Gravel	2.6	2.4	2.1	+	3.0	45.4	15.1	-	
Crushed Rock	*	*	*	*	0.3	3.1	10.2	-	*Sales figures are confidential. Quarry reserves were reassessed during this period.
Recycled/Secondary Aggregates	1.0	0.6	0.6		**			-	**31% of total aggregate supply
Marine Sand & Gravel	-	-	-		-			-	n/a for Cambridgeshire & Peterborough
Rock Imports by Sea	-	-	-		-	-	-	-	n/a for Cambridgeshire & Peterborough
Rail Depot Sales (S & G)	-	-	-		-	-	-	-	Not available
Rail Depot Sales (Crushed Rock)	-	-	-		-	-	-		
Comments	The steady and adequate supply of sand and gravel is maintained. The supply of limestone is reducing as two sites closed. Limestone is restricted to a small area to the west of Peterborough; and no new locations for limestone extraction have proven acceptable. All figures are rounded to one decimal place.								

CAMBRIDGESHIRE & PETERBOROUGH LAA (DECEMBER 2016) - EXECUTIVE SUMMARY FOR CALENDAR YEAR 2015									
	Sales (Mt)	Av. (10 y) Sales (Mt)	Av. (3 y) Sales (Mt)	Trend	LAA Rate (Mt)	Res've (Mt.)	Land - bank (Yrs.)	Cap'ity (Mtpa)	Comments
Sharp Sand & Gravel	-	-	-	-	-	-	-	-	The 'LAA Rate' is the planned level of provision in the adopted Core Strategy i.e. 3 mtpa. The landbank is based on this rate; the NPPF ten year rolling sales average gives a landbank of 18.76 years. Allocations which have yet to be permitted are estimated to total 26.6 million tonnes.
Soft Sand	-	-	-	-	-	-	-	-	
All Sand & Gravel	2.5	2.1	2.3	+	3.0	43.3	14.4	-	
Crushed Rock	*	*	*	*	0.3	2.7	8.9	-	*Sales figures are confidential. Quarry reserves were reassessed during this period.
Recycled/Secondary Aggregates	0.7	0.6	0.7		**			-	**31% of total aggregate supply
Marine Sand & Gravel	-	-	-		-			-	n/a for Cambridgeshire & Peterborough
Rock Imports by Sea	-	-	-		-			-	n/a for Cambridgeshire & Peterborough
Rail Depot Sales (S & G)	-	-	-		-			-	Not available
Rail Depot Sales (Crushed Rock)	-	-	-		-				
Comments	The steady and adequate supply of sand and gravel is maintained. The supply of limestone is reducing as a further site has closed. Limestone is restricted to a small area to the west of Peterborough; and no new locations for limestone extraction have proven acceptable. All figures are rounded to one decimal place.								

1. INTRODUCTION

1.1 Minerals are important to the local and national economy and play an important part in our everyday lives. They have many uses, particularly for the provision of material for construction and for a wide variety of other industrial and commercial purposes, including the manufacture of bricks, blocks, tiles, paint, paper and toothpaste. The planning system has to ensure that sites are available to provide sufficient minerals to supply these industries. The Cambridgeshire and Peterborough Minerals and Waste Core Strategy Development Plan Document (July 2011) and Site Specific Proposals Development Plan Document (February 2012) has put in place a set of policies and site allocations to enable this to happen locally in a clearly planned and transparent way. Minerals are essential to the growth agenda in which Cambridgeshire and Peterborough have an important role to play.

1.2 Aggregate minerals are those that are used by the construction industry, for example in road making, house construction, manufacture of concrete and railway ballast. Locally they include sand and gravel, crushed rock (limestone) and recycled and secondary aggregates. It is the provision of these minerals with which this assessment is concerned.

Background

1.3 The National Planning Policy Framework (NPPF) (March 2012) requires Mineral Planning Authorities to plan for a steady and adequate supply of aggregates by determining their own levels of aggregate provision. This should be assessed through the preparation of a Local Aggregates Assessment (LAA), which has to set out a rolling average of the previous 10 year and last 3 year sales data, and include other relevant information. An assessment of all supply options should also be factored in, where appropriate. It is advised also that published National and Sub National Guidelines on future provision should be taken into account. These new guidelines mark a shift away from the existing system of apportionment undertaken within the Managed Aggregates Supply System (MASS).

1.4 This LAA sets out the current and future situation in Cambridgeshire & Peterborough in terms of aggregate supply and demand including sales data, aggregate apportionment levels to 2026 and a rolling average of ten years sales data. The LAA reports key information used to monitor the progress and effectiveness of the Cambridgeshire & Peterborough Minerals and Waste Development Plan Document's (DPD) (hereafter referred to as 'the plan').

Economic Context

1.5 The economic situation in Cambridgeshire and Peterborough is influenced by the wider UK economy. 2014 saw economic growth gathering pace with employment at a high, and unemployment falling. The economy grew by 2.8% over 2014 (higher than the estimate of 2.6%); this was assisted by expansion in production and services, as well as household spending. However, 2015 saw a decline in growth of the UK economy to 2.2%, against the backdrop of a slowdown in the global economy.

1.6 Continuing a pattern in place since 2012, employment in 2014 reached a record high, with youth employment increasing and unemployment benefits falling. Similarly during 2015 the employment rate increased and hit the highest level since comparable records began in 1971.

1.7 The Cambridgeshire and Peterborough Minerals and Waste Development Plan documents are based on meeting the high levels of growth associated with the London-Stansted-Cambridge-Peterborough growth corridor and the associated levels of housing delivery set out in the now revoked East of England Regional Spatial Strategy. For Cambridgeshire and Peterborough, provision was made for an annual equivalent of 5,290 net dwellings per annum. Since 2006, the net annual increase in dwellings in Cambridgeshire and Peterborough has ranged from 5,188 completions in 2007/08 to 3,172 completions in

2009/10, indicating that the annual equivalent rate has yet to be met in any year since the Plan began. Net housing completions for Cambridgeshire and Peterborough in 2014/15 were 4,154.

1.8 Arguably the largest planned major infrastructure project in the Plan area, which will have a significant call on local mineral reserves, is the future improvement of the A14 between Cambridge and Huntingdon and Brampton in Cambridgeshire. The Highways Agency submitted a Development Consent Order for the improvement of the A14 between Cambridge and Brampton, and the upgrading of the A1 north of Brampton in Cambridgeshire. The proposed route also incorporates the construction a Southern Bypass around Huntingdon, between Ellington and Swavesey. The Cambridgeshire and Peterborough Core Strategy and Site Specific Proposals DPD's make specific provision for this significant infrastructure project through the allocation of sand and gravel and clay borrowpits close to the alignment of the road scheme, and the Development Consent Order largely reflects the allocations in the Plan, albeit there is some variation in response to detailed geological assessment. The Secretary of State issued his decision on the scheme in May 2016, and approved the Scheme. Work is expected to start by March 2017.

1.9 The Minerals Planning Authorities monitor the strength and scale of local economic growth via the planning application system, tracking changes in the number of planning applications for a range of different land-uses and regular site monitoring of development proposals with planning permission to measure local economic activity. They also work closely with the local planning authorities to understand and note their growth related infrastructure requirements.

2. LOCAL AGGREGATES SUPPLY AND DEMAND IN A NATIONAL AND REGIONAL CONTEXT

2.1 This section of the assessment looks at local sales, consumption, import and exports of aggregates within the national and regional context. The figures are taken from the 2014 Aggregate Minerals Survey, a four yearly survey produced by British Geological Survey on behalf of the Dept. of Communities and Local Government (DCLG) which reports on the movement of aggregates between Mineral Planning Authorities (MPAs) and regions. The sales figures relate to the area in which the material was quarried and reflect weighbridge tonnages of materials leaving sites. More detailed sales figures for the 10 year period from 2004-2013 are shown in section 4.

England & Wales, East of England, and Cambridgeshire & Peterborough

Aggregates Sales 2014

2.2 **Total sales** of sand and gravel produced in England and Wales, including marine-dredged sand and gravel, were 137.0 mt in 2014. Sales in the East of England 12.5 mt (21.8%).

2.3 For **landwon sand and gravel only**, the sales for England and Wales were 40.5 mt, with sales of 11.5 mt recorded in the East of England, 20% above those in 2009. Cambridgeshire and Peterborough had sales of 2.5 mt in 2015. This means Cambridgeshire & Peterborough accounted for of total 6.1% landwon sand and gravel sales in England and Wales and 21.7% of total sales for the East of England.

2.4 The **marine-dredged sand and gravel** sales for the East of England were 350,000 tonnes, and have traditionally been a small percentage of the total produced in England and Wales. No marine-dredged sand and gravel sales were reported in Cambridgeshire & Peterborough (sales are allocated to location of landing wharf), only the port of Wisbech has the potential capacity to achieve this within Cambridgeshire and Peterborough but it is not currently used for this purpose.

2.5 **Crushed rock** sales recorded in 2014 include sales from the East of England which were 632,000 tonnes. This was a small proportion, less than 1%, of the total sales for England and Wales which was 82.4 mt.

Aggregates Consumption 2014

2.6 **Consumption** - Total apparent consumption of primary aggregates (sand and gravel and crushed rock) in England and Wales was 121.4 mt in 2009, which increased to 137.4 mt in 2014 with 24.2 mt of sand and gravel being imported, and 47.3 mt of crushed rock. Consumption in the East of England was 16.1 mt, with 3.3 mt of sand and gravel being imported, and 4.2 mt of crushed rock.

2.7 Exports of primary aggregates were 10.1 mt for sand and gravel and 27.5 mt for crushed rock, making **England and Wales combined, a marginal net importer of primary aggregates.** Exports for the East of England were 2.2 mt of sand and gravel, and 0.2 mt of crushed rock.

2.8 In 2014 within the East of England, the consumption of 9.9 mt of landwon sand and gravel was less than sales of 11.5 mt, indicating that the region is a **net exporter**.

2.9 Landwon sand and gravel is exported to other regions (export to other countries is insignificant). In 2014 (as was the case in 2009), the East of England region remained a net exporter of landwon sand and gravel, primarily exporting to the East Midlands, London and

the South East regions. The export of Cambridgeshire and Peterborough's landwon sand and gravel is primarily to the neighbouring East Midlands region.

2.10 Within the East of England the consumption of **marine dredged sand and gravel** was 1.3 mt.

2.11 **Crushed rock consumption** in England and Wales totalled 84.1 mt, of which 16.1 mt (19%) was consumed within the East of England. Within the region, Cambridgeshire and Peterborough consumed 1.4 mt the second highest amount (Essex, Southend and Thurrock consumed 1.5 mt. The figures indicate that both the East of England and Cambridgeshire and Peterborough are both significant **net importers of crushed rock**.

2.12 Ensuring a steady and sufficient supply of minerals for the construction needs of the nation, cannot be achieved on a regional or sub-regional self-sufficiency basis, owing to the imperfect distribution of mineral reserves. However, the UK as a whole meets the majority of its own aggregates needs. For this reason each sub-region must play its part in ensuring a continued supply, whilst taking account of alternative supplies (such as marine dredged aggregates) alternative materials (secondary and recycled aggregates) and environmental constraints, all of which can affect supply at the local level; and, substitute construction methods and materials such as glass, wood and plastics, which can affect future demand for landwon aggregates.

Marine Dredged Sand and Gravel

2.13 As outlined above marine dredged aggregates play no role in aggregates supply (production) or demand (consumption) in Cambridgeshire and Peterborough. Even within the East of England sales and consumption are limited to less than 3% of the aggregates sales and consumption totals.

2.14 Whilst there is undoubtedly opportunity to make greater use of marine aggregate supply in future years, the abundant land based sand and gravel reserves and their advantageous locations (closer proximity to demand points) means marine dredged alternatives remain economically unfavourable for the foreseeable future.

3. LOCAL AGGREGATES GEOLOGY AND PLANNING

3.1 **Mineral resources** are natural concentrations of minerals or bodies of rock that are, or may become, of potential economic interest as a basis for the extraction of a commodity. That part of a mineral resource which has been fully evaluated and is commercially viable to work, is called a **mineral reserve**.

3.2 In the context of land-use planning, further terms are applied, namely 'allocated resource' and 'permitted reserves'. The term **'allocated resource'** relates to land that has been allocated in a Development Plan Document (DPD) or a Local Plan. In Cambridgeshire and Peterborough that is the Minerals and Waste Development Plan – Core Strategy DPD (July 2011) and Site Specific Proposals DPD (February 2012), which allocates land suitable for mineral extraction. The term **'permitted reserves',** is further limited to those minerals for which a valid planning permission for extraction exists.

3.3 The economic potential of individual sites can only be proved by a detailed evaluation programme. Such an investigation is an essential precursor to submitting a planning application for mineral working.

3.4 The geology of primary interest for the Cambridgeshire & Peterborough local aggregate assessment is sand and gravel and crushed rock aggregate (limestone).

Sand and gravels in Cambridgeshire & Peterborough

3.5 Sand and gravel are defined on the basis of a particle size rather than composition. Commercially, the term 'gravel' is used for material that is coarser than 5mm, with a maximum size of 40mm, and the term sand for the material that is finer than 5mm, but coarser than 0.075mm. The principle uses of sand are as fine aggregate in concrete, mortar and asphalt. The main use of gravel is as a coarse aggregate in concrete. Substantial quantities of sand and gravel may also be used for constructional fill.

3.6 In the Cambridgeshire and Peterborough Plan area sand and gravel resources occur mainly within superficial or 'drift' deposits, subdivided into river sand and gravel, glacial deposits, head deposits and bedrock sand.

3.7 **River sand and gravel** (terrace and sub-alluvial deposits) – resources occur in both raised river terrace sequences flanking the modern floodplains and in floodplain terrace deposits associated with, and underlying, present day alluvium. The main sources of these materials in Cambridgeshire and Peterborough are Quaternary and Recent Age deposits in the valleys of the Nene, Ouse, Welland, Granta and Cam, where generally clean, well bedded sand and gravels rests on weathered bedrock or chalky till. The quality of these deposits can vary along the river valleys. Included within these resources is what is known as Fen Gravel or Fen Edge deposits which form a discontinuous spread at the edge of the Fens and extend up to the present day valleys.

3.8 The Fen Gravel/Fen Edge deposits are good quality sand and gravels. The principal existing and allocated strategic sand and gravel sites are in areas with Fen Edge deposits. These sites will supply the majority of Cambridgeshire and Peterborough's sand and gravel needs.

3.9 **Glacial sand and gravel deposits** – In Cambridgeshire and Peterborough, the glaciofluvial deposits are mainly located in the southeast around Cambridge. Deposits are highly variable in nature and may appear as sheet or delta-like deposits or as elongated irregular lenses.

3.10 **Head deposits** – these comprise gravelly deposits that have been involved in mass movement downslope to their present position. Most deposits contain significant clay

contents and many deposits can be worked as 'hoggin'. In Cambridgeshire and Peterborough these deposits tend to be less economically significant, and are restricted to low quality isolated patches lying at heights between 35 to 60m OD.

3.11 Head deposits have low values and are generally only used as raised. Intense production of sand and gravel from these deposits is not required.

3.12 **Bedrock sand** – these resources are mostly confined to the Woburn Sands Formation, which has a narrow outcrop across the County from Gamlingay to Ely and thins north-eastwards. Sand from this formation has been worked in the past but there is currently no extraction of this resource within the Plan area.

Crushed rock aggregates in Cambridgeshire and Peterborough

3.13 Cambridgeshire and Peterborough has limited resources of rock suitable for crushed rock aggregate. Higher quality aggregates are required for coating with bitumen for road surfacing, or for mixing with cement to produce concrete. For applications such as constructional fill and drainage media, with less demanding specifications, lower quality materials are acceptable.

3.14 **Limestone** – the Lincolnshire Limestone Formation (inferior oolite) crops out in the north-west of the Plan area, west and north west of Peterborough, where it forms part of a prominent limestone outcrop running south to north through Corby, Stamford, Grantham and Lincoln.

3.15 Currently none of the limestone is worked for building stone within the Plan area. It is worked to provide aggregates of relatively low strength and with poor resistance to frost damage, and therefore generally used as constructional fill or as sub-base roadstone material.

3.16 To the south of the Plan area closer to Cambridge the Upware Limestone is quarried on a small scale for use as an agricultural lime and asphalt filler.

Figure 1: Cambridgeshire and Peterborough Minerals Key Diagram covering; Geology, Minerals Zones, Existing Facilities and Strategic Allocations

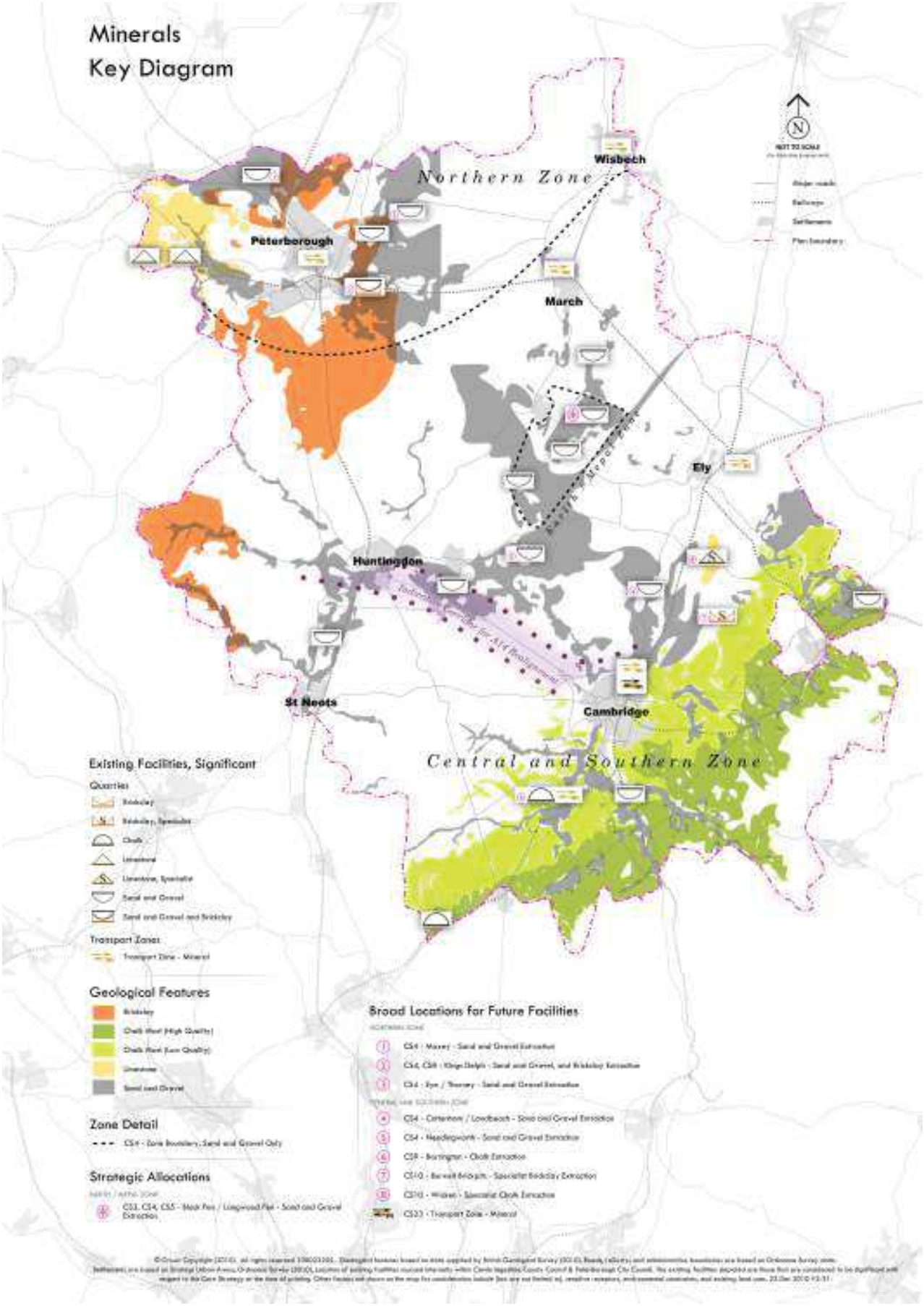


Figure 2a: Cambridgeshire and Peterborough Permitted Aggregate Sites 2014

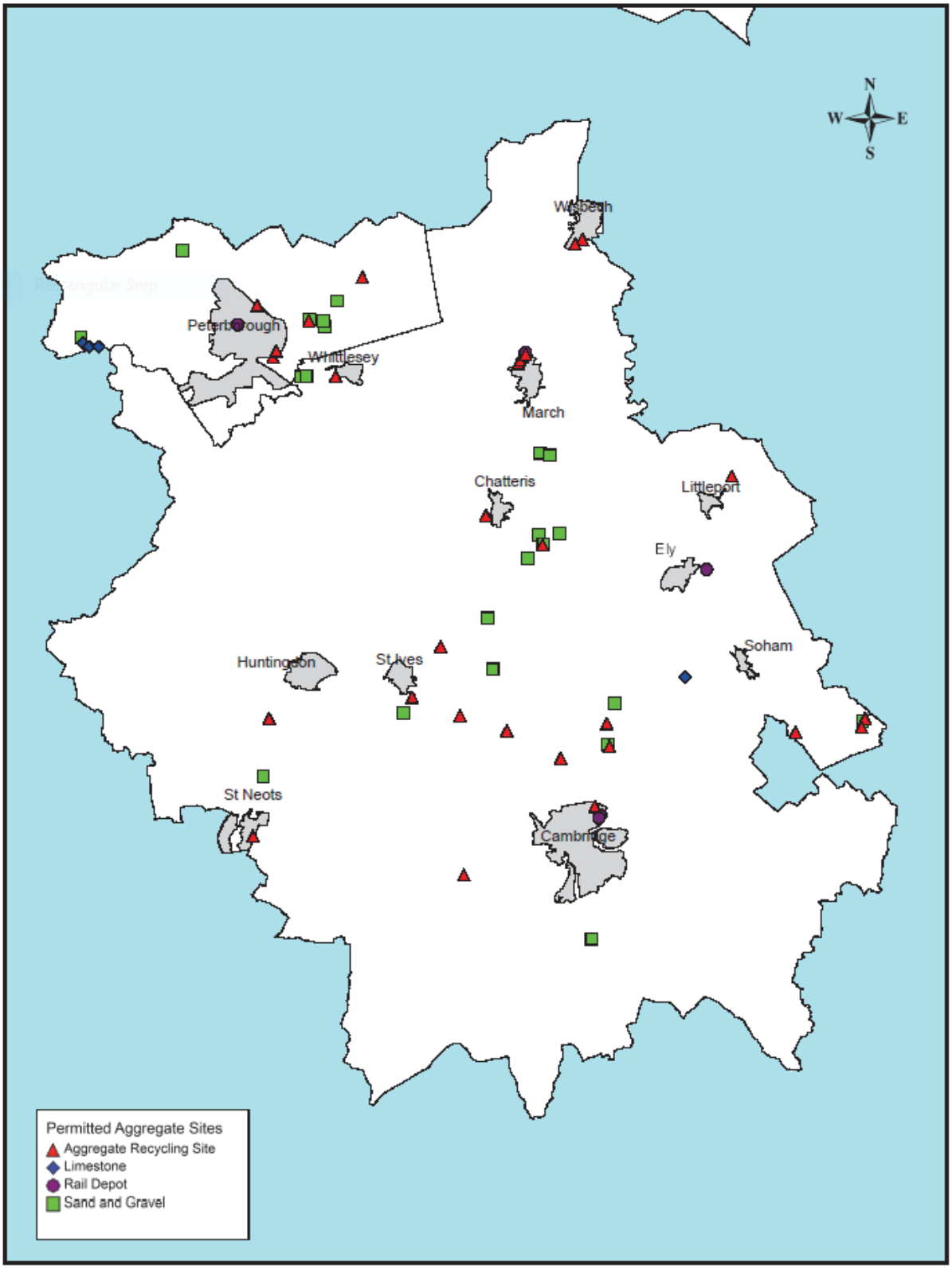
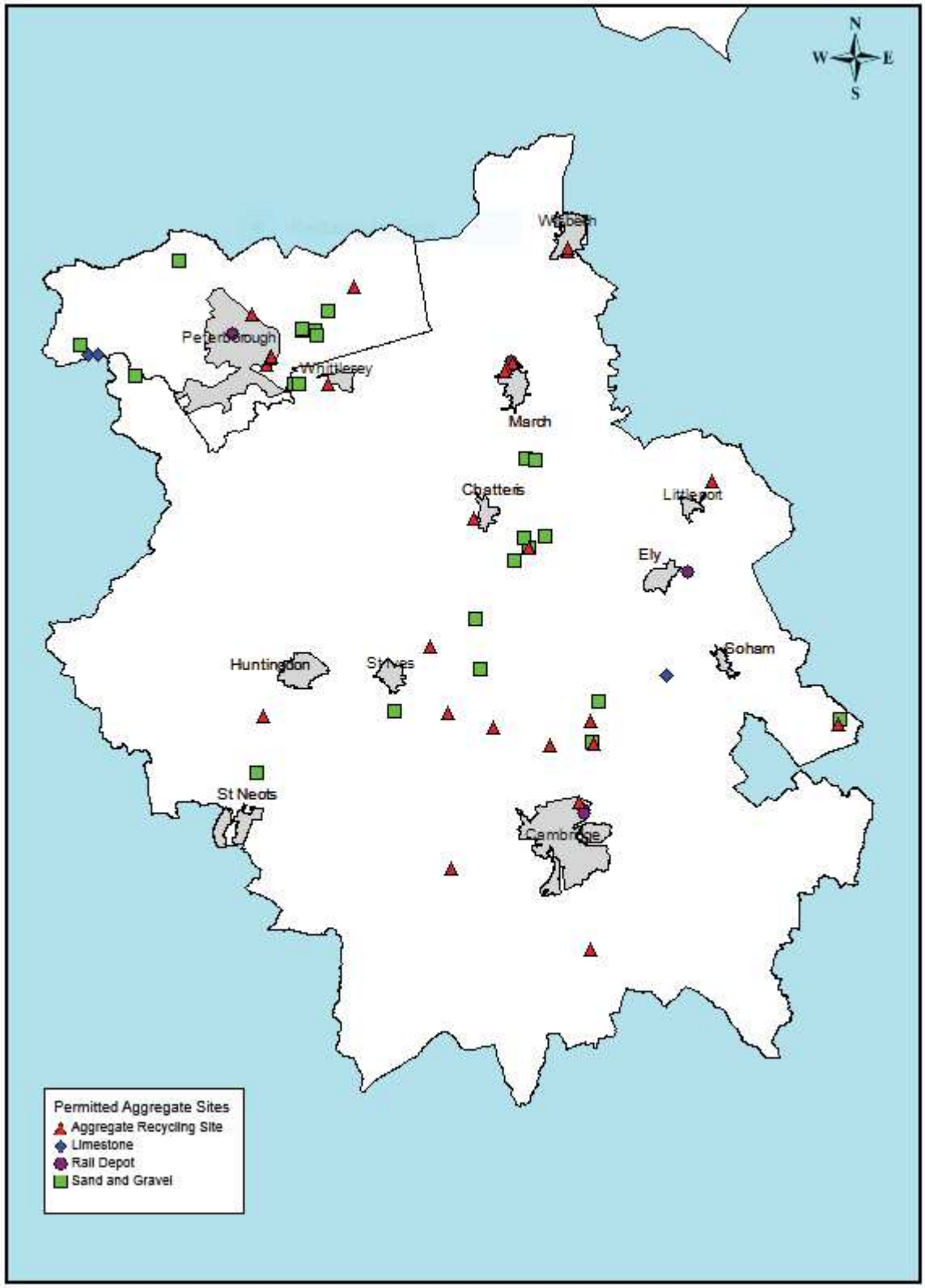


Figure 2b: Cambridgeshire and Peterborough Permitted Aggregate Sites 2015



4. CAMBRIDGESHIRE AND PETERBOROUGH ASSESSMENT OF LOCAL SAND AND GRAVEL SUPPLY AND DEMAND – 2014 AND 2015

Current Supply

4.1 In Cambridgeshire & Peterborough there are currently 24 sand and gravel sites with planning permission of which 11 were active sites in 2014; and 13 in 2015. The sites are listed in Tables 1a and 1b below, and illustrated in Figures 2a and 2b.

Table 1a: Permitted sand and gravel extraction sites in Cambridgeshire & Peterborough, 2014

Site	Operator	Status
Northern Zone		
Briggs Farm Agric Reservoir, Peterborough	P J Thory	Inactive
Willow Hall Farm, Eye	P J Thory	Active
Cooks Hole Quarry	Mick George Ltd	Inactive
Eyebury Quarry (Tanholt Farm), Peterborough	CEMEX UK Materials Ltd	Active
Maxey Quarry, Peterborough	Tarmac Limited - Anglia and South East	Active
Must Farm Quarry, Cambs part only	Hanson Aggregates	Active
Must Farm, Peterborough Part only	Hanson Aggregates	Inactive
Pode Hole Quarry, Peterborough	Aggregate Industries UK Limited	Active
Earith / Mepal Zone		
Block Fen Quarry II, Cambs	Lafarge Tarmac	Active
Mepal Quarry (Witcham Meadlands), Cambs	Aggregate Industries UK Limited	Active
Mepal (Sutton Gault), Cambs	Frimstone	Active
Block Fen Quarry, Cambs	Hanson Aggregates	Inactive
Central and Southern Zone		
Lyons Farm, Cambs	Mick George Ltd	Active
Kennett, Cambs	Mick George Ltd	Active
Needingworth Quarry, Cambs	Hanson UK	Active
Gravel Diggers Farm (Cottenham / Waterbeach) Cambs	Frimstone	Inactive
Dernford Farm, Cambs	RJD Ltd	Active
Little Paxton, Cambs	Aggregate Industries UK Ltd	Inactive
New Farm, Landbeach	Frimstone	Inactive
Wimblington Quarry, Cambs	Hanson UK	Inactive
Marsh Lane, Cambs	Lafarge Tarmac	Inactive
Colne Fen, Earith	Mick George Ltd	Active

*RoMP – Review of Minerals Permission – site not worked for many years and can only commence extraction operations following a review of the old permission. ROMP Reserves are not included in landbank calculations.

Table 2b: Permitted sand and gravel extraction sites in Cambridgeshire & Peterborough, 2015

Site	Operator	Status
Northern Zone		
Cooks Hole Quarry	Mick George Ltd	Active
Eyebury Quarry (Tanholt Farm), Peterborough	CEMEX UK Materials Ltd	Active
Maxey Quarry, Peterborough	Tarmac Limited - Anglia and South East	Active
Must Farm Quarry, Cambs part only	Hanson Aggregates	Inactive
Must Farm Quarry, Cambs part only	Forterra Building Products	Active
Must Farm, Peterborough Part only	Hanson Aggregates	Inactive
Pode Hole Quarry, Peterborough	Aggregate Industries UK Limited	Active
Willow Hall Farm, Eye	P J Thory	Active
Earith / Mepal Zone		
Block Fen Quarry II, Cambs	Tarmac	Active
Mepal Quarry (Witcham Meadlands), Cambs	Aggregate Industries UK Limited	Active
Mepal (Sutton Gault), Cambs	Frimstone	Active
Block Fen Quarry, Cambs	Hanson Aggregates	Inactive
Central and Southern Zone		
Lyons Farm, Cambs	Mick George Ltd	Active
Kennett, Cambs	Mick George Ltd	Active
Needingworth Quarry, Cambs	Hanson UK	Active
Gravel Diggers Farm (Cottenham / Waterbeach) Cambs	Frimstone	Inactive
Little Paxton, Cambs	Aggregate Industries UK Ltd	Inactive
Wimblington Quarry, Cambs	Hanson UK	Inactive
Marsh Lane, Cambs	Tarmac	Inactive
Stibbington Marina	tbc	Inactive
New Farm, Landbeach	Frimstone	Inactive
Colne Fen, Earith	Newman	Active

*RoMP – Review of Minerals Permission – site not worked for many years and can only commence extraction operations following a review of the old permission. ROMP Reserves are not included in landbank calculations.

4.2 **Estimated permitted reserves** of sand and gravel in Cambridgeshire and Peterborough total approximately 45.37 million tonnes in 2014; and 43.33 million tonnes in 2015.

4.3 This stock of reserves with planning permission is known as the landbank. Government policy requires landbanks to be maintained for all primary aggregate minerals, with a required landbank period for sand and gravel of at least 7 years.

4.4 The planned rate of supply or debit is referred to as the 'annual apportionment'. The adopted Cambridgeshire & Peterborough Minerals and Waste Core Strategy makes provision for an annual apportionment of 3.0 mt per annum. The current length of landbank can therefore be calculated as follows:-

For 2014:

Landbank of permissions	=	45.37 mt
Annual Apportionment	=	3.0 mt
Landbank period	=	**15.12 years**

For 2015:

Landbank of permissions	=	43.33 mt
Annual Apportionment	=	3.0 mt
Landbank period	=	**14.44 years**

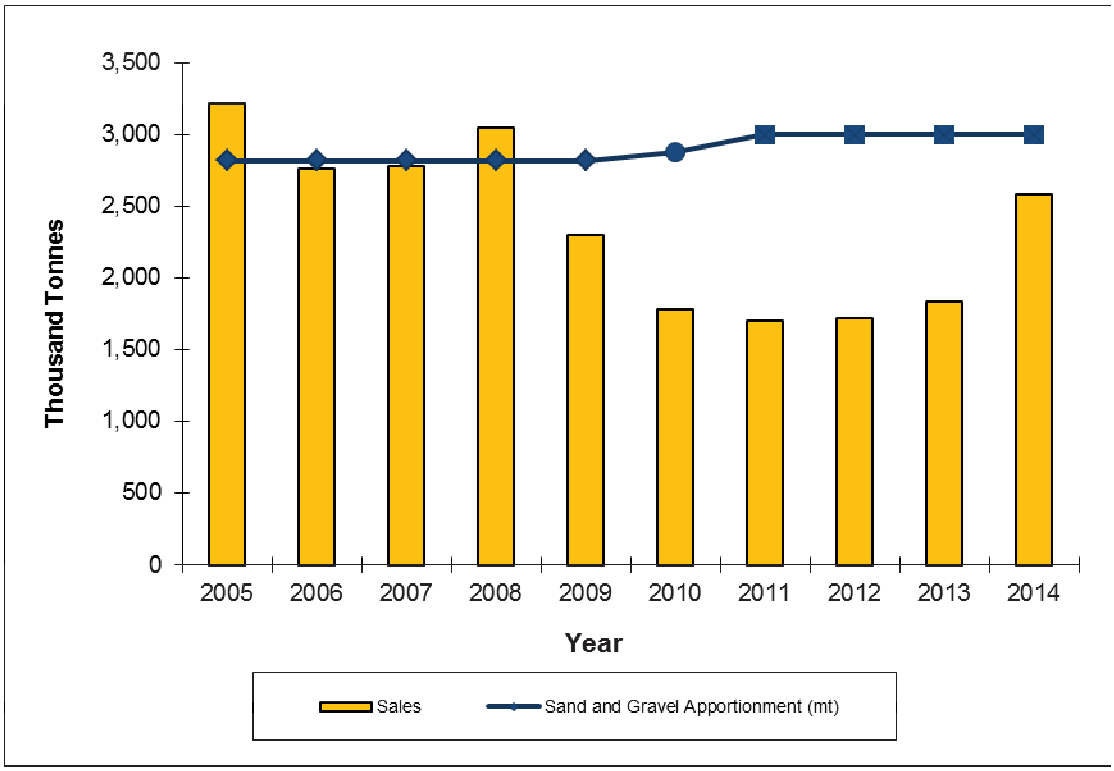
4.5 The scale and location of permitted reserves, together with the associated site production capacities across Cambridgeshire and Peterborough is sufficient to ensure the future provision of sand and gravel supply at levels above the minimum requirement, for each of the three production zones within the Plan area.

Future Provision of Sand and Gravel

4.6 To determine the future supply of sand and gravel, the previous year's sales data needs to be taken into account, together with published National and Sub National Guidelines, as well as any other relevant information. A ten year rolling average of sales is considered in the NPPF to be a valid approach for locally assessing an apportionment figure for two main reasons. Firstly, the time period is short enough so that overly historic sales are not taken into account (historic sales are more likely to be higher than more recent sales owing to improvements in construction technologies and a stronger focus on re-using recycled and secondary material). Secondly the period is also considered long enough to ensure that short-term fluctuations in sales do not mask a true evaluation of what is considered to be a suitable amount of mineral to provide.

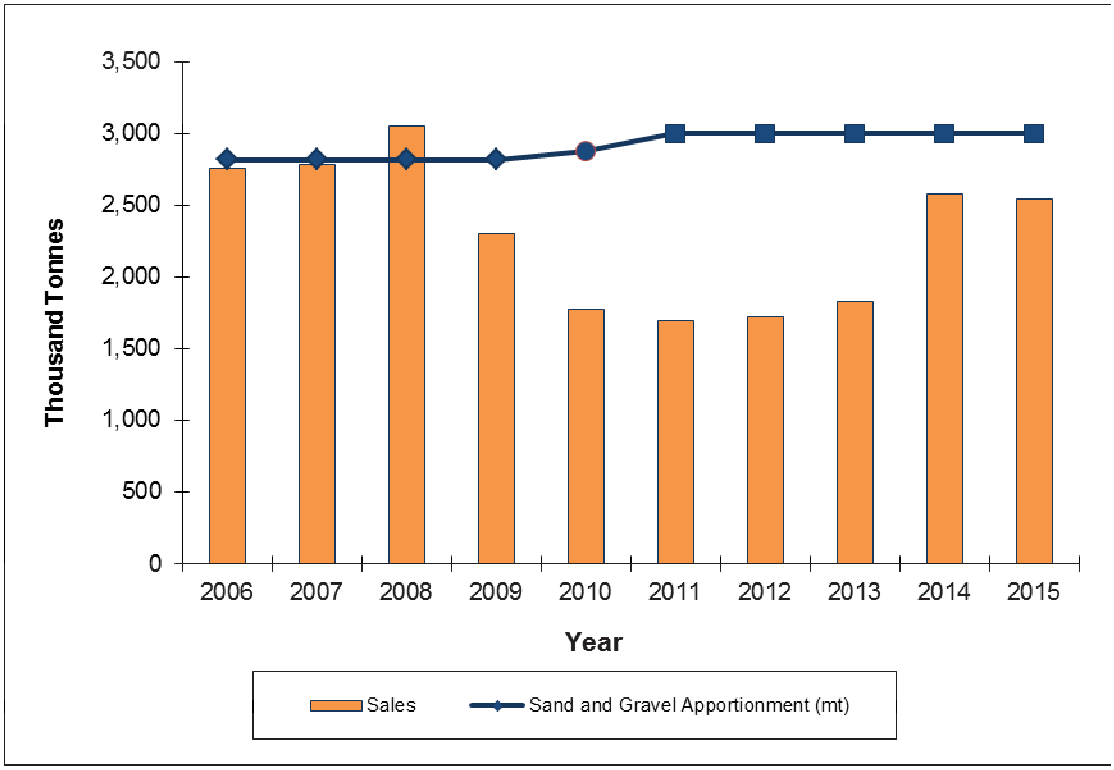
4.7 This assessment takes the above factors into account along with the 10 years sales data provided below. Sales of sand and gravel (which includes soft sand) for the ten year periods between 2005 and 2014, and between 2006 and 2015 are shown in Figure 3a and 3b. Figures presented are for calendar years.

Figure 3a: Sales of sand and gravel in Cambridgeshire & Peterborough 2005 – 2014 in comparison with annual apportionment levels.



Annual Req.1: 2.82mtpa Based on revised national and regional guidelines for Agg Prov 2001-2016 published in 2003 and reflected in EoEPlan (May2008) (◆ markers)
Annual Req.2: 2.88mtpa Based on revised national and regional guidelines for Agg Prov 2005-2020 published in June 2009, and reflected in Draft EoEPlan 2031 (Feb2010) (● marker)
Annual Req.3: 3.0mpta Based on C&PMWCS DPD July 2011 (■ markers)

Figure 3b: Sales of sand and gravel in Cambridgeshire & Peterborough 2006 – 2015 in comparison with annual apportionment levels.



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4.9 Sand and gravel sales peaked in 2005 and 2008, at a level above the annual 2.82 mtpa sub-regional apportionment requirement set in the East of England Plan (May 2008) in place at the time. Throughout the period 2006-2008, annual sales were generally closer to the 2.82 mtpa apportionment level in place at the time. In 2009 the impact of the economic recession can clearly be seen as annual sales decreased sharply. Sales between 2010 and 2012 remained relatively stable at around 1.7 million tonnes per annum; but increased to 2.58 million tonnes in 2014 and 2.54 million tonnes in 2015.

4.10 To facilitate a steady supply of minerals across the Plan area, the Cambridgeshire and Peterborough Core Strategy took into account the need to maintain appropriate levels of production capacity in conjunction with a sufficient supply of permitted reserves. This is reflected in two ways – i) a sand and gravel apportionment of 3.0 mtpa which is marginally above the sub-regional apportionment level (see para 4.12) and ii) the sub-division of the Plan area into three zones – Northern, Central/Southern and Earith/Mepal, the coverage of these zones is illustrated in Figure 1.

4.11 The annual apportionment for the Plan area has accordingly been divided between the three zones based on growth areas (Peterborough and Cambridge) and the location of strategic mineral resources (Earith/Mepal).

Table 2a: Sand and Gravel sales by zone in 2014 in comparison with annual apportionment levels.

Zone	Sales (mtpa)	Apportionment (mtpa)
Northern Zone	0.93	0.75
Earith / Mepal Zone	0.75	1.4
Central and Southern Zone	0.90	0.85
Total	2.58	3.0

Table 2b: Sand and Gravel sales by zone in 2015 in comparison with annual apportionment levels.

Zone	Sales (mtpa)	Apportionment (mtpa)
Northern Zone	0.70	0.75
Earith / Mepal Zone	0.79	1.4
Central and Southern Zone	1.05	0.85
Total	2.54	3.0

4.12 The tables above provide a more detailed understanding of mineral production across the area during 2014 and 2015. They illustrate that while the overall sales total was below the apportionment level; production in the Central and Southern Zone was marginally above its planned apportionment level in 2014, with a further increase in 2015. Mineral production in the northern zone increased above the planned level in 2014, but fell below again in 2015. Production in the Earith / Mepal Zone has increased markedly since 2012 when production was 0.38 mtpa, and over the past two years it has been consistent around 0.7 mtpa, but sales are still below that anticipated.

4.13 The trend for increased production suggests that the economic situation which has supressed the production of sand and gravel in general and on the plans set out in the Cambridgeshire and Peterborough Minerals and Waste Core Strategy (July 2011) in recent years is changing. Sales have increased noticeably in the last three from 2013 (1.9 mt) to those in 2014 (2.58) and 2015 (2.54 mt); giving a three average for this period of 2.34 mt. The Core Strategy had expected that significant mineral reserves in the Earith / Mepal Zone would begin to come on stream in 2010. However, it appears that whilst production levels

have increased, sales in the Central and Southern Zone are meeting mineral demand, therefore quarries in Earith / Mepal are coming on stream at a slower pace than had been planned.

4.13 The sales figures are purely reflective of product demand. There have been no insuperable environmental / planning constraints on production capacity to report for any of the three production zones during the reporting period.

Annual Apportionments

4.14 The current sand and gravel apportionment as set out in the Cambridgeshire & Peterborough Minerals and Waste **Core Strategy** is **3.0 million tonnes per annum** (mtpa). This has been set so as to include a margin for flexibility above the apportionment level of 2.8mtpa as it is known, for example, that major infrastructure improvements may be required throughout the period to 2026, including improvements to the A14 in Cambridgeshire.

4.15 In June 2009 revised national and sub-national guidelines for aggregates apportionment were issued by the Department for Communities and Local Government (DCLG) to replace those published in 2003. In December 2009 the East of England Regional Aggregates Working Party (EMRAWP) agreed on a new sub-regional apportionment for Cambridgeshire & Peterborough, based on the DCLG guidelines. The annual apportionment for sand and gravel was **marginally increased** from 2.82mt **to 2.88mt**.

4.16 This figure was to have been taken forward through the Regional Plan process, and was reflected in the Draft East of England Plan 2031 (published Feb 2010). However, the Government has abolished regional planning bodies and regional strategies. Figures 3a and 3b illustrate the small differences between the historic and existing regional apportionment figures.

4.17 The publication of the NPPF guidelines introduced an alternative way of planning to ensure future need is met, based on the calculated rolling average of 10 years sales data becoming the 'annual requirement' on which to roll forward plans. This new method **calculates an annual apportionment of 2.38 mtpa in 2014, and 2.31 in 2015. The three year average of sales** gives an average of 2.06 mt sales over the period 2012-2014; and 2.34 mt sales over the period 2013 – 2015, reflecting the general recent upturn. This is also broadly reflected in recent housebuilding / housing commitments over this period, although there has been some fluctuation. **Housing completions** for Cambridgeshire and Peterborough were 2,456 and 741 respectively in **2012/13 (3,197 in total)**; 2,044 and 772 respectively in **2013/14 (2,766 in total)**; 3,176 and 863 respectively in **2014/15 (4,039 in total)**; and 2,812 and 1,342 respectively in **2015/16 (4,154 in total)**. **Housing commitments (permissions and allocations)** in Cambridgeshire and Peterborough (as at 1st April) were 34,929 and 20,621 respectively in **2012 (55,550 in total)**; 35,360 and 20,041 respectively in **2013 (55,401 in total)**; and 32,262 and 19,405 respectively in **2014 (51,667 in total)**; and 58,686 and 21,102 respectively in **2015 (79,788 in total)**. With large scale commitments coming forward it would appear that the demand for aggregate over the future years will be increasing, subject to planning permission being granted and developers taking housing schemes forward.

Landbanks

4.18 Estimated sand and gravel reserves in Cambridgeshire and Peterborough as of 31 December 2014 and 2015 are 45.37 and 43.33 mt respectively. This is based on reserve information provided by site operators in response to annual minerals surveys (where a nil return was made, a calculation of reserves was made using previous years information/planning application information). Tables 4a and 4b set out calculations for the sand and gravel landbanks based on the different apportionment rates for Cambridgeshire & Peterborough, using the 2014 and 2015 permitted reserves total.

Table 3a: Sand and gravel landbank calculations for Cambridgeshire & Peterborough, 2014

Cambridgeshire and Peterborough	
Sand and gravel sales 2014 estimate (mt)	2.58
Permitted reserves 31/12/2014 (mt)	45.37
Measure 1	
EoEAWP sub-regional apportionment (mtpa)	2.88
Landbank based on EoEAWP sub-regional apportionment (Years)	**15.75 yrs**
Measure 2	
Cambridgeshire & Peterborough Core Strategy Provision (mtpa)	3.0
Landbank based on Core Strategy Provision (Years)	**15.12 yrs**
Measure 3	
Rolling average of 10 Years Sales (2005-2014)	2.38
Landbank based on rolling 10 years sales average (Years)	**19.06 yrs**

Table 3b: Sand and gravel landbank calculations for Cambridgeshire & Peterborough, 2015

Cambridgeshire and Peterborough	
Sand and gravel sales 2015 estimate (mt)	2.54
Permitted reserves 31/12/2015 (mt)	43.33
Measure 1	
EoEAWP sub-regional apportionment (mtpa)	2.88
Landbank based on EoEAWP sub-regional apportionment (Years)	**15.04 yrs**
Measure 2	
Cambridgeshire & Peterborough Core Strategy Provision (mtpa)	3.0
Landbank based on Core Strategy Provision (Years)	**14.44 yrs**
Measure 3	
Rolling average of 10 Years Sales (2006-2015)	2.31
Landbank based on rolling 10 years sales average (Years)	**18.76 yrs**

Future Supply

4.19 In addition to permitted reserves the adopted Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011) and Site Specific Proposals Plan (2012) make allocations for the future supply of sand and gravel. The tables below summarise the allocations which have been made for which planning permission has not been granted; and the provision made when permitted and allocated reserves are considered together.

Table 4:

Sand and Gravel allocations not granted planning permission (as at 31/12/2015)	
Site Name	**Estimated Reserves (million tonnes)**
Block Fen / Langwood Fen, Mepal	24.0 (10 mt up to 2026) (14 mt post 2026)*
Cottenham	4.1
Needingworth	3.0
Wimblington	0.5
Kings Delph, Whittlesey	4.0
Maxey (remaining allocation area)	2.0
Pode Hole and Eye / Thorney (remaining allocation area)	3.0
TOTAL (up to 2026*)	**26.6**

**calculations exclude the 14 mt allocated for post 2026 at Block Fen / Langwood Fen, Mepal. (The position as at 31/12/2014 was the same as above).*

Table 5a: Provision including permitted and allocated resources in 2014:

	Permitted reserves as at 31/12/14 (million tonnes)	Allocated reserves as at 31/12/14*	Total planned provision as 31/12/14*	Number of years*	Date current planned provision would be exhausted*
EoEAWP sub-regional apportionment of 2.88 mtpa	45.37	26.6	71.58	24.85	2039
Cambridgeshire & Peterborough Core Strategy Provision of 3.00 mtpa	45.37	26.6	71.58	23.86	2038
Rolling average of 10 Years Sales (2005-2014) of 2.38 mtpa	45.37	26.6	71.58	30.07	2045

**calculations exclude the 14 mt allocated for post 2026 at Block Fen / Langwood Fen, Mepal*

Table 5b Provision including permitted and allocated resources in 2015:

	Permitted reserves as at 31/12/15 (million tonnes)	Allocated reserves as at 31/12/15*	Total planned provision as 31/12/15*	Number of years*	Date current planned provision would be exhausted*
EoEAWP sub-regional apportionment of 2.88 mtpa	43.33	26.6	69.93	24.28	2040
Cambridgeshire & Peterborough Core Strategy Provision of 3.00 mtpa	43.33	26.6	69.93	23.31	2039
Rolling average of 10 Years Sales (2009-2015) of 2.31 mtpa	43.33	26.6	69.93	30.27	2046

**calculations exclude the 14 mt allocated for post 2026 at Block Fen / Langwood Fen, Mepal*

4.20 Site specific allocations have also been made for the supply of sand and gravel for the improvement of the A14. This means that the sand and gravel for this scheme will be taken from these borrowpits (now approved though the Development Consent Order, May 2016).Tables 5a and 5b exclude this material.

5. CAMBRIDGESHIRE AND PETERBOROUGH ASSESSMENT OF LOCAL LIMESTONE SUPPLY AND DEMAND 2014 AND 2015

Current Supply

5.1 When the Cambridgeshire and Peterborough Minerals and Waste Core Strategy was produced there were six limestone quarries in the Plan area. Some of these sites have since been closed and are in restoration, whilst the reserves of others are not viable. By the end of 2015 there are only three limestone sites remaining. Three limestone sites were active in 2014, and two in 2015. The details of these are presented in Tables 6a and 6b below, and illustrated in Figures 2a and 2b.

Table 6a: Permitted crushed rock quarries in Cambridgeshire & Peterborough 2014

Site	Operator	Status
Cambridgeshire		
Dimmock's Cote Quarry, Cambs	Francis Flower Ltd	Active
Peterborough		
Cook's Hole, Peterborough	Mick George Ltd	Active
Thornhaugh II Quarry, Peterborough	Aggregate Industries UK Ltd / Mick George Ltd	Active
Thornhaugh IIB Quarry, Peterborough	Bullimore	Inactive

Table 6b: Permitted crushed rock quarries in Cambridgeshire & Peterborough 2015

Site	Operator	Status
Cambridgeshire		
Dimmock's Cote Quarry, Cambs	Francis Flower Ltd	Active
Peterborough		
Cook's Hole, Peterborough	Mick George Ltd	Active
Thornhaugh IIB Quarry, Peterborough	Bullimore	Inactive

5.2 In order to be able to release reserve figures for limestone and not prejudice commercial confidentiality the Dimmock's Cote Quarry in Cambridgeshire has been included in this section, although in practice it produces a small amount of limestone for agricultural/asphalt use.

5.3 Estimated permitted reserves of limestone in Cambridgeshire and Peterborough totalled approximately 3.01 million tonnes in 2014; and 2.68 million tonnes in 2015 (please note that quarry reserves were reassessed during these years).

5.4 This stock of reserves with planning permission is known as the landbank. Government policy requires landbanks to be maintained for all primary aggregate minerals, with a recommended landbank period for limestone (crushed rock) to be at least 10 years.

5.5 The planned rate of supply is referred to as the 'annual apportionment'. The recently adopted Cambridgeshire & Peterborough Minerals and Waste Core Strategy makes provision for an annual apportionment of 0.3mt. The current length of landbank can therefore be calculated as follows:-

For 2014:

Landbank of permissions = 3.01 mt

Annual Apportionment = 0.3mt

Landbank period = **10.03 years**

For 2015:

Landbank of permissions = 2.68 mt

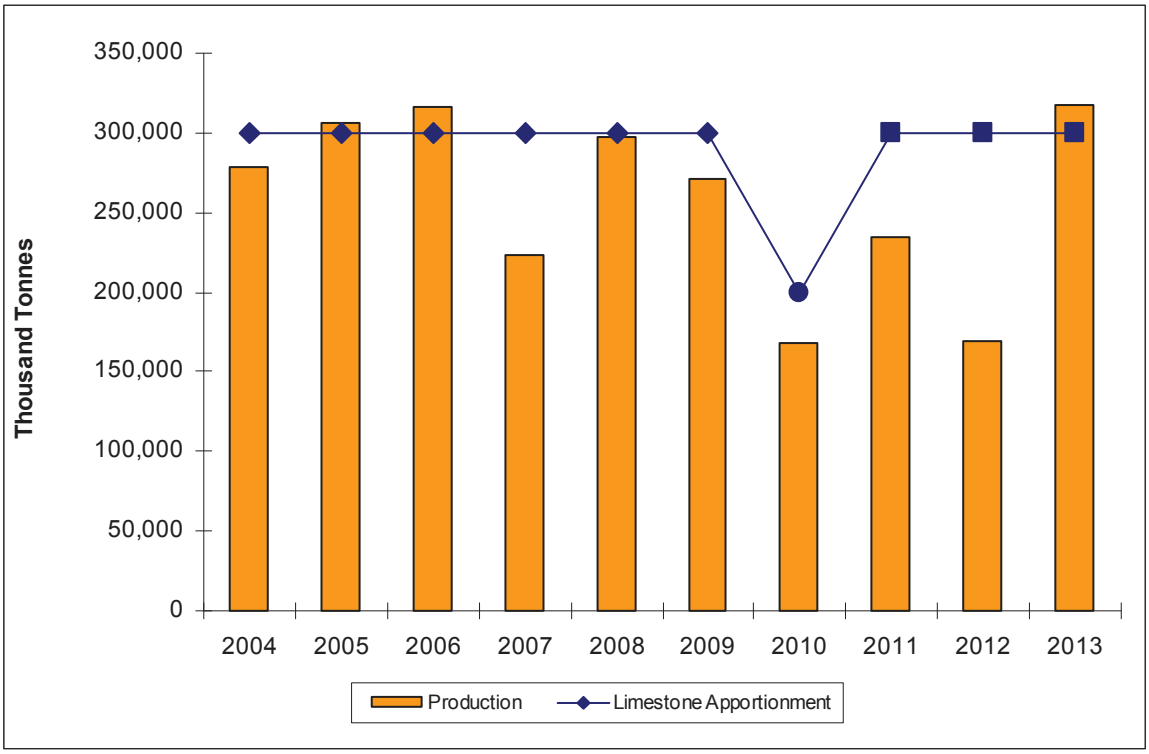
Annual Apportionment = 0.3mt

Landbank period = **8.93 years**

Future Provision of Limestone

5.6 Sales of limestone for the ten year period between 2004 and 2013 are shown in Figure 4. Figures presented are for calendar years. Please note it is not possible to provide the sales given for 2014 and 2015 due to confidentiality restrictions.

Figure 4: Sales of limestone in Cambridgeshire & Peterborough 2004 – 2013 and comparison with annual apportionment levels.



Annual Req.1: 0.3mtpa Based on revised national and regional guidelines for Agg Prov 2001-2016 published in 2003 and reflected in EoEPlan (May2008) (◆markers)
Annual Req.2: 0.2mtpa Based on revised national and regional guidelines for Agg Prov 2005-2020 published in June 2009, and reflected in Draft EoEPlan 2031 (Feb2010) (● marker)
Annual Req.3: 0.3mpta Based on C&PMWCS DPD July 2011 (■ marker)

5.7 Throughout the period 2003 – 2009 sales of limestone remained relatively stable averaging almost 300,000 tonnes per annum; close to the apportionment level in place at the time. Only in 2007 did sales dip below 250,000 tonnes per annum. Between 2009 and 2010 sales fell sharply downwards with only around 168,000 tonnes being sold in 2010. The level of sales increased sharply in 2011 to almost 250,000 tpa, fell again in 2012, and increased in 2013.

5.8 Figure 4 provides a comparison of Cambridgeshire & Peterborough's total limestone sales over the period 2004 to 2013 set against the apportionment during this period. The Cambridgeshire and Peterborough Minerals and Waste Core Strategy policy CS6 seeks to maintain a limestone landbank of at least 10 years, to meet the requirement to supply 300,000 tonnes of limestone per annum.

Annual Apportionments

5.9 The limestone apportionment as set out in the Cambridgeshire & Peterborough Minerals and Waste **Core Strategy** is **0.3 million tonnes per annum** (mtpa).

5.10 In June 2009 revised national and sub-national guidelines for aggregates apportionment were issued by the Department for Communities and Local Government (DCLG) to replace those published in 2003. In December 2009 the East of England Regional Aggregates Working Party (EoERAWP) agreed on a new sub-regional apportionment for Cambridgeshire & Peterborough, based on the DCLG guidelines. The annual apportionment for crushed rock was **reduced** from 0.3mt **to 0.2mt**.

5.11 This figure was to have been taken forward through the Regional Plan process, and was reflected in the Draft East of England Plan 2031 (published Feb 2010). However, the Government subsequently abolished regional planning bodies and regional strategies. Figure 4 illustrates the differences between the historic and existing regional apportionment figures.

5.12 The publication of the new NPPF guidelines introduces an alternative way of planning to ensure future need is met, based on the calculated rolling average of 10 years sales data becoming the 'annual requirement' on which to roll forward plans. This new method results in a different annual limestone apportionment. However, this cannot be released due to confidentiality restrictions.

Landbanks

5.13 Estimated limestone reserves in Cambridgeshire and Peterborough as of 31 December 2014 are 3.06mt, and at 31 December 2015 are 2.68mt. This figure is based on reserve information provided by site operators in response to the annual minerals surveys. Tables 7a and 7b set out the calculations for the Limestone landbank based on the different apportionment rates for Cambridgeshire & Peterborough, using the permitted reserves.

Table 7a: Landbanks for crushed rock (limestone) in Cambridgeshire & Peterborough in 2014

Cambridgeshire and Peterborough	
Limestone sales 2014	*confidential
Permitted reserves 31/12/2014 (mt)	3.06
Measure 1	
Most recent EoEAWP sub-regional apportionment (mtpa)	0.2
Landbank based on EoEAWP sub-regional apportionment (Years)	**15.3 yrs**
Measure 2	
Cambridgeshire & Peterborough Core Strategy Provision (mtpa)	0.3
Landbank based on Core Strategy Provision (Years)	**10.2 yrs**
Measure 3	
Rolling average of 10 Years Sales (2004-2013) (mtpa)	*confidential
Landbank based on rolling 10 years sales average (Years)	*confidential

Table 7b: Landbanks for crushed rock (limestone) in Cambridgeshire & Peterborough in 2015

Cambridgeshire and Peterborough	
Limestone sales 2015	*confidential
Permitted reserves 31/12/2015 (mt)	2.68
Measure 1	
Most recent EoEAWP sub-regional apportionment (mtpa)	0.2
Landbank based on EoEAWP sub-regional apportionment (Years)	**13.4 yrs**
Measure 2	
Cambridgeshire & Peterborough Core Strategy Provision (mtpa)	0.3
Landbank based on Core Strategy Provision (Years)	**8.9 yrs**
Measure 3	
Rolling average of 10 Years Sales (2005-2014) (mtpa)	*confidential
Landbank based on rolling 10 years sales average (Years)	*confidential

5.14 For the first time the landbank for limestone has fallen below the 10 years required by the NPPF. There has been a closure of sites as reserves are worked and have been re-assessed, and no alternative sites have been proposed. This is a reflection of the very limited extent of limestone which is restricted to a small area to the west of Peterborough; and the fact that no new locations for limestone extraction have proven acceptable. The adopted Site Specific Proposals Plan concluded it was not possible to make new allocations for limestone; hence the Core Strategy has a criterion based policy against which any planning applications for a new limestone quarry would be considered.

Crushed Rock Imports

5.15 Cambridgeshire and Peterborough are dependent on imports of crushed rock to meet demand that cannot be met locally. Crushed rock is imported into the region via rail heads in Peterborough, Cambridge, Ely and March from quarries in the East Midlands. Supplies are then distributed by road.

5.15 Quarries exporting crushed rock into Cambridgeshire and Peterborough have permitted reserves of at least 20 years, based on current production rates. Operators have advised the MPA's that there are no constraints to the continued supply of crushed rock into the area provided they are still able to access and operate at rail heads; the only other potential constraints would be large scale changes to the rail system or changes in the planning status of quarries, both of which are unlikely to happen.

Rail Depots

5.16 Cambridgeshire and Peterborough import hard rock through the rail depots in the area. These are at Cambridge, Ely and Peterborough. There are no constraints known that would compromise their continued operation.

6. ASSESSMENT OF RECYCLED AND SECONDARY AGGREGATES 2014 AND 2015

6.1 Along with primary aggregates (which are minerals extracted directly from the ground), there are also secondary and recycled aggregates.

6.2 **Recycled aggregates** are those derived mainly from construction and demolition projects. Examples include the re-use of brick and concrete, being reprocessed to be used in new developments, rather than being disposed of in a landfill site.

6.3 **Secondary aggregates** are created as a by-product of a construction or industrial process. Examples include power station ash resulting from combustion (fly ash) which can be turned into bricks and cement.

6.4 The benefits for maximising the use of both secondary and recycled aggregate are two-fold. Firstly, the use of these aggregates reduces the need to extract primary material, leading to a reduction in the need for new quarries. Secondly, the re-use of aggregate reduces the amount of waste that needs disposal, thereby reducing the need for landfill sites. Such a reduction in the need for quarry and landfill sites has clear economic, environmental and social benefits.

6.5 Increasingly in Cambridgeshire and Peterborough recycled aggregate is being processed in conjunction with projects involving demolition, redevelopment and construction. This can involve stand-alone permanent facilities on industrial estates, or co-located facilities at waste management sites (landfill or other); or temporary inert recycling facilities located at strategic development areas (e.g. urban extensions), major demolition sites; or within existing quarries that remain operational until such a time that quarrying or landfilling ceases.

Local Target for Recycled and Secondary Aggregates

6.6 The Cambridgeshire and Peterborough Minerals and Waste Core Strategy takes account of the National and Sub National aggregate apportionment figures for the period 2005-2020, which propose that the East of England region should provide 117 million tonnes of alternative aggregate materials between 2005 and 2020, equating to 31% of the region's total aggregate supply. This guideline has been applied in the Plan area and extended to 2026. If the overall aggregate figures for sand and gravel and crushed rock match or exceed the planned levels, the Core Strategy makes an important assumption that there will need to be an increase in the target level for the recycling of construction waste from 50%, to 70% by the end of the planned period (2026).

6.7 There is no direct apportionment for recycled/secondary aggregates at regional level, although the East of England as a whole is expected to contribute to the 117mt figure. However, this expectation has meant that the apportionment figures for primary landwon aggregates have been set at a lower level than they otherwise would have been.

Current Supply

6.8 In Cambridgeshire & Peterborough the following sites are known to have contributed to recycled / secondary aggregate production during 2014 and 2015. These sites are listed in Tables 8a and 8b which follow, and which are illustrated in Figure 2.

Table 8a: Main Sites with Recycled and Secondary Aggregate Production Capacity in Cambridgeshire & Peterborough, 2014

Sites with Recycled Aggregate Production Capacity in 2014	Status in 2014	Operator
Cambridgeshire		
Buckden Waste Recycling and Composting Facility, Buckden	Active	Anti Waste Ltd
Britannia Way, Wisbech	Active	Sherwood Park Ltd
Cambridge Transfer Station, Cambridge	Active	Mick George Ltd
Chapsmith Services, Bluntisham	Active	Chapsmith Services Ltd
Cottenham	Active	Cottenham Skips
First Furlong Drove, Chatteris	Active	Malcolm Mandley
Kennett Hall Farm, Kennett	Active	Mick George Ltd
Longstanton	Active	John Henry Group
Littleport	Active	Allen's Skip Hire
March	Active	Glazewing Ltd
March Waste Recycling and Transfer Station, March	Active	Amey Cespa Ltd
Meadow Lane, St Ives		Mick George Ltd
Middle Fen Drove, Swavesey	Active	Dawson Plant Hire Ltd
National Track Recycling Centre, Whitemoor Rail Yard, March	Active	Network Rail Ltd
Plantation Farm, Cambridgeshire	Active	D Haird & Company Ltd
Snailwell, Newmarket	Active	EMR Ltd
Soil Washing Plant, Block Fen, Mepal	Active	Mick George Ltd
Waste Management Park, Waterbeach	Active	Amey Cespa Ltd
Saxon Pit, Whittlesey	Active	P J Thory
St. Neots	Active	Biffa Waste Services Ltd
Toft	Active	Warton & Clark
Waterbeach Recycling Facility, Waterbeach	Active	Frimstone Ltd
Wisbech (Algores Way)	Active	Frimstone Ltd
Peterborough		
Eyebury Quarry, Peterborough	Active	Biffa Waste Services Ltd
Fengate, Peterborough	Active	Fengate Waste (Apex)
Padholme Lane East, Peterborough	Active	Rose and Sons Ltd
Dogsthorpe Recycling Centre	Active	Mick George Ltd
Thorney	Active	The Concrete Company Ltd.

Table 8b: Main Sites with Recycled and Secondary Aggregate Production Capacity in Cambridgeshire & Peterborough, 2015

Sites with Recycled Aggregate Production Capacity in 2015	Status in 2015	Operator
Cambridgeshire		
Buckden Waste Recycling and Composting Facility, Buckden	Active	Invixon Ltd
Britannia Way, Wisbech	Active	Sherwood Park Ltd
Cambridge Transfer Station, Cambridge	Active	Mick George Ltd
Chapsmith Services, Bluntisham	Active	Chapsmith Services Ltd
Cottenham	Active	Cottenham Skips

First Furlong Drove, Chatteris	Active	Malcolm Mandley
Longstanton	Active	John Henry Group
Littleport	Active	Allen's Skip Hire
March	Active	Glazewing Ltd
March Waste Recycling and Transfer Station, March	Active	Amey Cespa Ltd
Middle Fen Drove, Swavesey	Active	Dawson Plan Hire Ltd
National Track Recycling Centre, Whitemoor Rail Yard, March	Active	Network Rail Ltd
Plantation Farm, Cambridgeshire	Active	D Haird & Company Ltd
Sawston	Active	Dockerill Plant Hire Ltd
Soil Washing Plant, Block Fen, Mepal	Active	Mick George Ltd
Waste Management Park, Waterbeach	Active	Amey Cespa Ltd
Saxon Pit, Whittlesey	Active	TAG Industries Ltd
Toft	Active	Warton & Clark
Waterbeach Recycling Facility, Waterbeach	Active	Frimstone Ltd
Wisbech (Algores Way)	Active	Frimstone Ltd
Peterborough		
Eyebury Quarry, Peterborough	Active	Biffa Waste Services Ltd
Fengate, Peterborough	Active	Fengate Waste (Apex)
Padholme Lane East, Peterborough	Active	Rose and Sons Ltd
Dogsthorpe Recycling Centre	Active	Mick George Ltd
Thorney	Active	The Concrete Company Ltd
Vicarage Farm Road, Peterborough	Active	Bourne Skip Hire

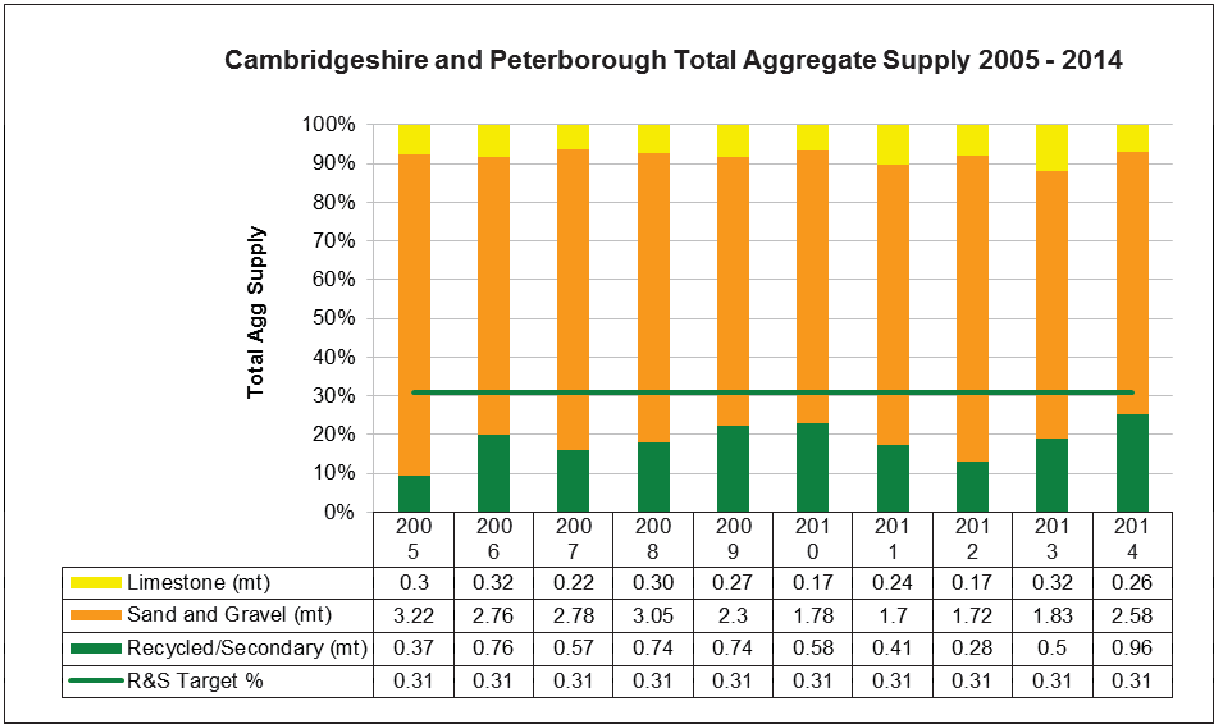
6.9 Information on sales of secondary and recycled aggregates in Cambridgeshire and Peterborough is difficult to obtain. Strictly speaking recycled and secondary aggregates should be produced in accordance with nationally recognised protocols and compliant with both British and European standards. Acquiring such data locally is hard and understates the widely increased use of recycled inert materials that are used on construction and development sites across the plan area. In order to provide a better gauge of the latter, it was decided to make use of the Environment Agency's Waste Interrogator Database to supplement the mineral planning authorities own survey returns on recycled and secondary aggregate sales. The data includes quantities of inert and construction and demolition wastes, less inert materials not used in aggregates production; with care having been taken to minimise any double counting of material by omitting sites that are known to send the materials on to other recycling facilities. However, it is recognised that it is difficult to get precise data, especially when some sites take a mix of waste streams; and there are multiple operations on site including both transfer and treatment. Also, data submission are not always complete or consistently made year to year. With this in mind figures should be treated as indicative.

6.10 It is acknowledged that a proportion of recycled aggregate is also provided through mobile plant on redevelopment sites which is also difficult to capture information about. Nevertheless, the data is indicative of inert recycled and secondary aggregates produced and used on sites. It is not possible to state what proportion of this material has been produced and sold to a BS or EN standard, nor is it possible to clearly state how much is used as a direct substitute for virgin sand and gravel or crushed rock.

6.11 Figures 5a and 5b below illustrate that the recorded level of recycled and secondary aggregate production in Cambridgeshire and Peterborough has remained consistently below the 31% target level. Please note that limestone sales have not been included for 2014 and 2015 as they are confidential for these years, therefore the average of sales between 2004 to

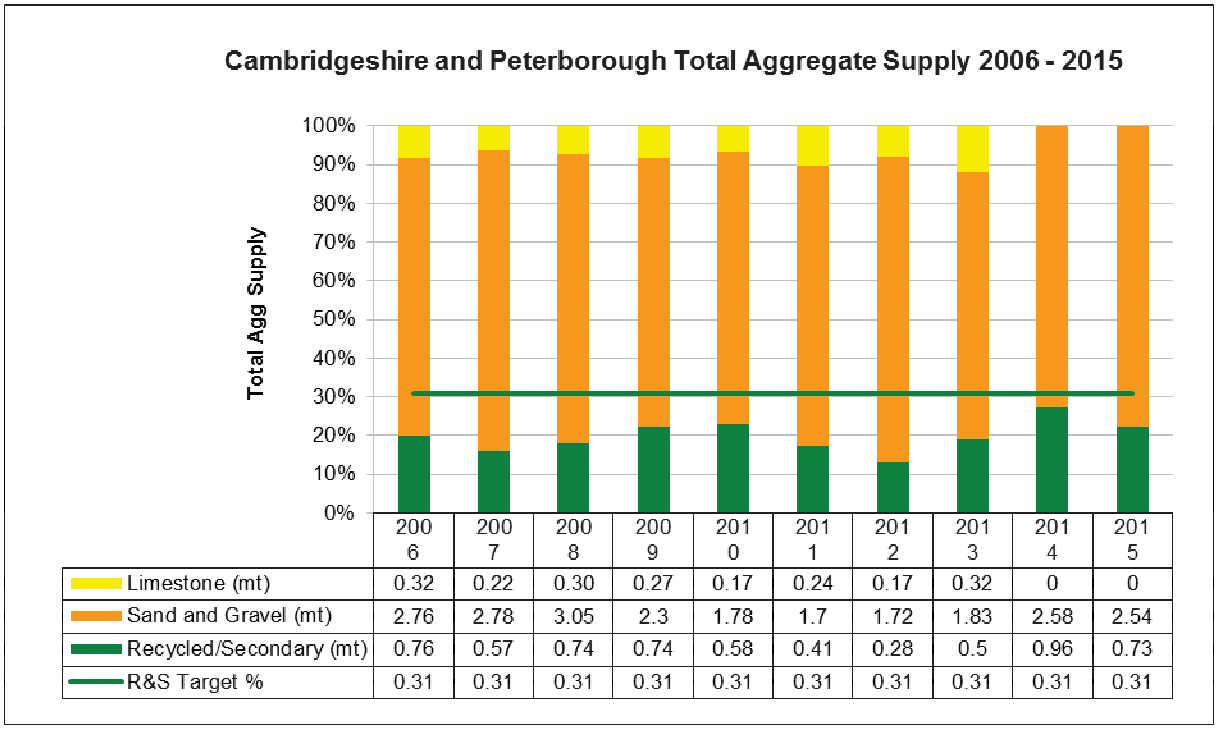
2013 (0.26 mt) has been used in order not to result in an artificially high percentage of recycled / secondary sales. Recycled and aggregate production increased during 2014 to 0.96 million tonnes, but in 2015 it reduced to 0.73 million tonnes .

Figure 5a: Recycled and Secondary Aggregates Supply as a Proportion of Total Aggregate Supply 2014



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Limestone (mt)	0.3	0.32	0.22	0.30	0.27	0.17	0.24	0.17	0.32	0.26
Sand and Gravel (mt)	3.22	2.76	2.78	3.05	2.3	1.78	1.7	1.72	1.83	2.58
Recycled/Secondary (mt)	0.37	0.76	0.57	0.74	0.74	0.58	0.41	0.28	0.5	0.96
R&S Target %	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31

Figure 5b: Recycled and Secondary Aggregates Supply as a Proportion of Total Aggregate Supply 2015



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Limestone (mt)	0.32	0.22	0.30	0.27	0.17	0.24	0.17	0.32	0	0
Sand and Gravel (mt)	2.76	2.78	3.05	2.3	1.78	1.7	1.72	1.83	2.58	2.54
Recycled/Secondary (mt)	0.76	0.57	0.74	0.74	0.58	0.41	0.28	0.5	0.96	0.73
R&S Target %	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31

Figure 6a: Production of Recycled / Secondary Aggregates in Cambridgeshire and Peterborough 2014

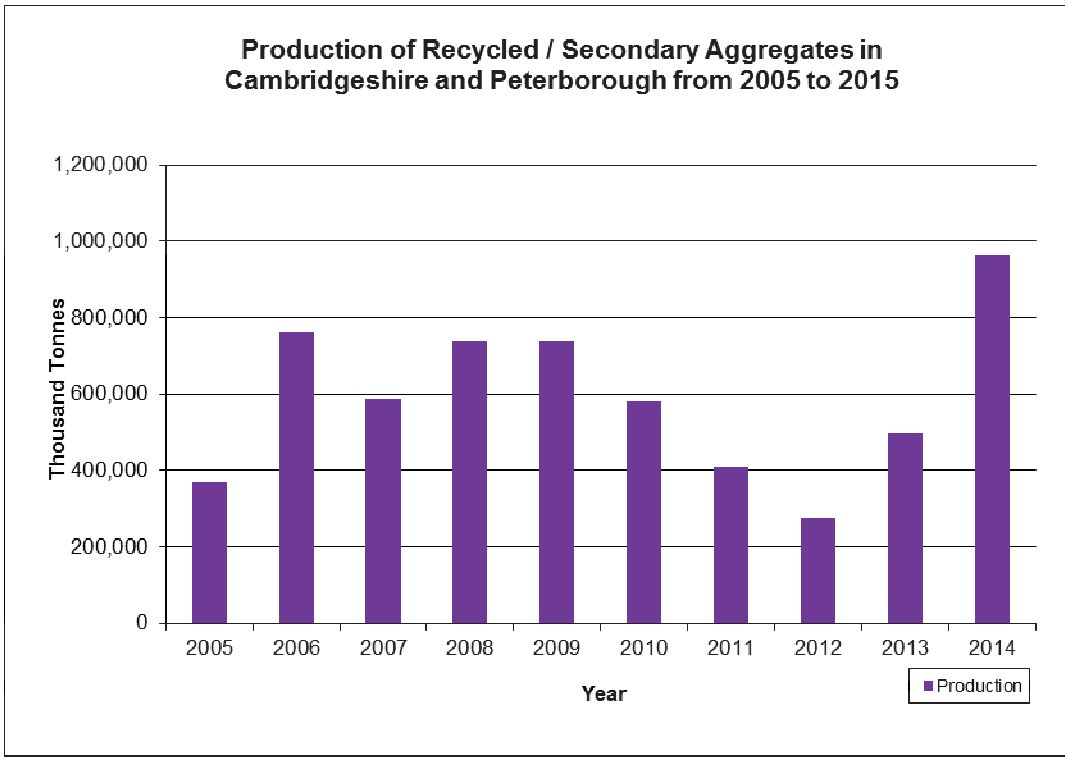
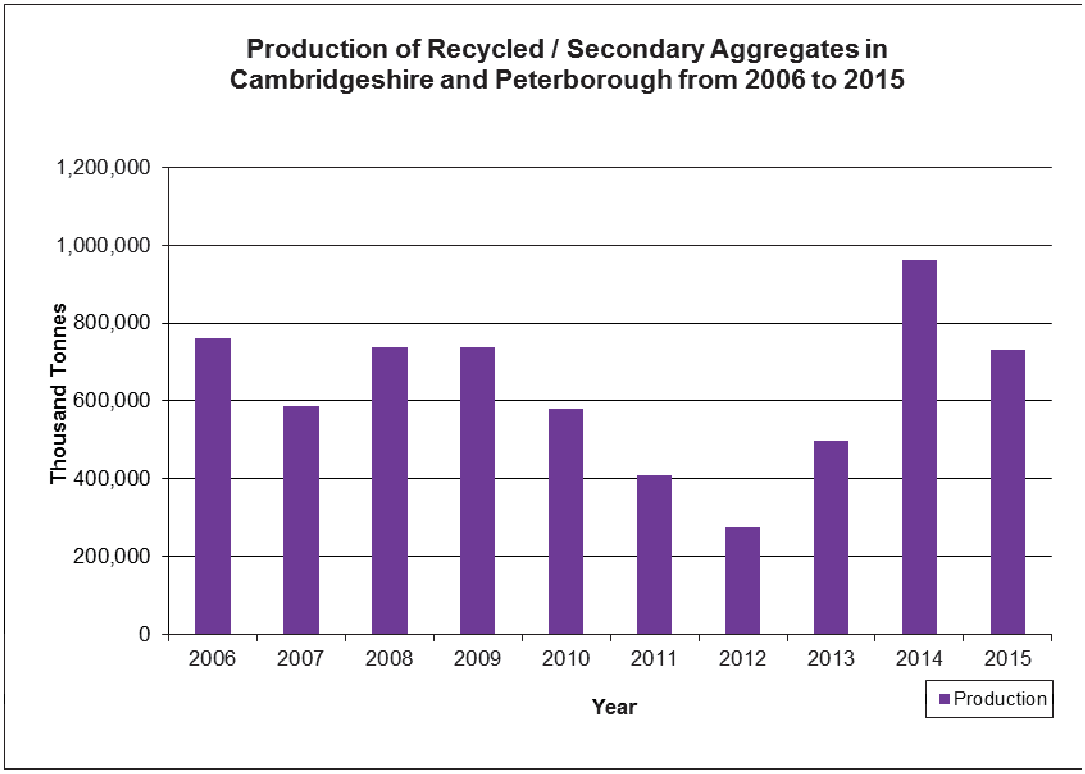


Figure 6b: Production of Recycled / Secondary Aggregates in Cambridgeshire and Peterborough 2015



Road Planings

6.13 As part of the Aggregate Working Party Surveys DCLG requested that Mineral Planning Authorities gather data on road planings produced between January and December.

6.14 Road planers are one of several methods that can be utilised to remove a road when it has reached the end of its functional life. If the road surface material is processed according to controlled specifications, the end material (road planings) is a highly valuable resource that can used in a variety of civil engineering applications.

6.15 Table 9a and 9b below shows the volume of road planings (where known) arising in Cambridgeshire and Peterborough in 2014 and 2015.

Table 9a: Road Planings arising in Cambridgeshire & Peterborough, 2014

Authority	Tonnage of road planings arising (2014)
Cambridgeshire County Council	60,310 tonnes
Peterborough City Council	not available
Total	**n/a**

Table 9b: Road Planings arising in Cambridgeshire & Peterborough, 2015

Authority	Tonnage of road planings arising (2015)
Cambridgeshire County Council	16,078 tonnes
Peterborough City Council	11,412 tonnes
Total	27, 490

7. CONCLUSIONS

7.1 From the evidence set out in this assessment the Cambridgeshire and Peterborough Minerals Planning Authorities jointly conclude that the provisions set out in the adopted Minerals and Waste Core Strategy DPD (July 2011) and the Minerals and Waste Site Specific proposals DPD (February 2012) make satisfactory provision for the steady and adequate supply of aggregates to meet the needs of the construction industry. The Mineral Planning Authorities have taken the evidence in this Local Aggregates Assessment into account and concluded that on the basis of mineral supply it is not necessary to amend the Plan at this stage; the Plan's long-term objectives remain valid and the certainty the Plan affords is valued.

7.2 The National Planning Policy Framework decentralised the responsibility for providing a steady and adequate supply of aggregates to Mineral Planning Authorities. To ensure supply meets strategic requirements each MPA is required to participate in an Aggregate Working Party; Cambridgeshire and Peterborough are members of the East of England Aggregate Working Park (EoEAWP). As members Cambridgeshire and Peterborough will submit a draft copy of the Local Aggregate Assessment to the EoEAWP for comments. This process will help ensure that each MPA is planning for adequate provision to meet local and national demands.

Sand and gravel

7.3 The Core Strategy's provision for 3.0mtpa is above the 10 year sales average. Applying the Core Strategy annual apportionment level the sand and gravel landbank is 15.12 years in 2014, and at 2015 it is 14.4 years. This is well above the 7 year NPPF requirement and will provide sufficient aggregate to the end of the Core Strategy Plan period in 2026, and beyond. There are also allocated sites in the Minerals and Waste Site Specific Proposals DPD which have yet to come forward; which with estimated reserves of around 26.6 million tonnes extend provision well beyond 2026.

Limestone

7.4 The Core Strategy's provision for 0.3mtpa is above the 10 year sales average. Applying the Core Strategy annual apportionment level, at 2014, the limestone landbank duration is 10.2 years, and at 2015 is 8.9 years. This latter figure is below the 10 year NPPF requirement for the first time. Unlike for sand and gravel (and other minerals) the Minerals and Waste Site Specific Proposals DPD did not allocate any sites for limestone as it was not possible for the MPAs to satisfy themselves that identified environmental constraints could be satisfactorily overcome. In the event that proposals come forward they will be considered against adopted policies. However, it is recognised that the geographical extent of limestone is very limited.

7.5 In national terms, Cambridgeshire and Peterborough contribute less than 1% of the nation's crushed rock supply. However, at the regional level the supply is significant, as the source of crushed rock is geologically limited to two relatively small geographical locations i.e. north Norfolk and north west of Peterborough. The MPAs jointly recognise that the relatively poor quality of the limestone limits it to low grade specification uses. These factors were considered by the East of England Aggregates Working Party, and also taken into account by DCLG in the publication of the National and Sub National Aggregate Apportionment figures for the period 2005-2020, and are reflected in the reduced annual apportionment for crushed rock from 0.3mtpa to 0.2mpta. When this apportionment level is applied the landbank increases to 15.3 years in 2014, and 13.4 years in 2015.

7.6 The Core Strategy sets out a criteria based policy for the provision of future limestone sites, which will be applied in conjunction with this and future local aggregates assessments and the NPPF when determining future planning applications.

Recycled and Secondary Aggregates

7.9 There is an apparent shortfall of recycled and secondary aggregates supply when compared with the Plan target level of 31% of all aggregates supply; and the general trend has reflected the wider economic situation and dipped like other aggregate production when the economic has been depressed. However, it is nationally recognised that there are data quality issues concerned with secondary and recycled aggregates supply, sales, uses and definitions relating to quality standards. The implications for total aggregate supply are not considered to be of sufficient concern to warrant more than a 'watching brief' at this time.

Figure 7a: Summary of all aggregates in Cambridgeshire and Peterborough from 2005 to 2014

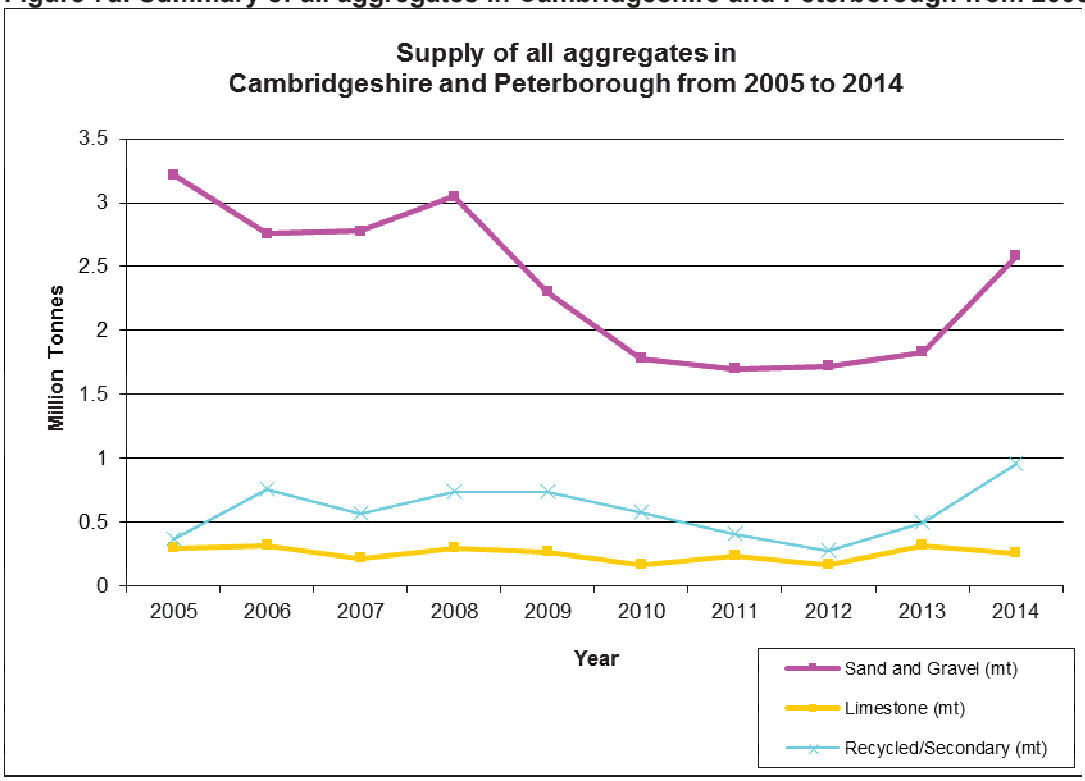
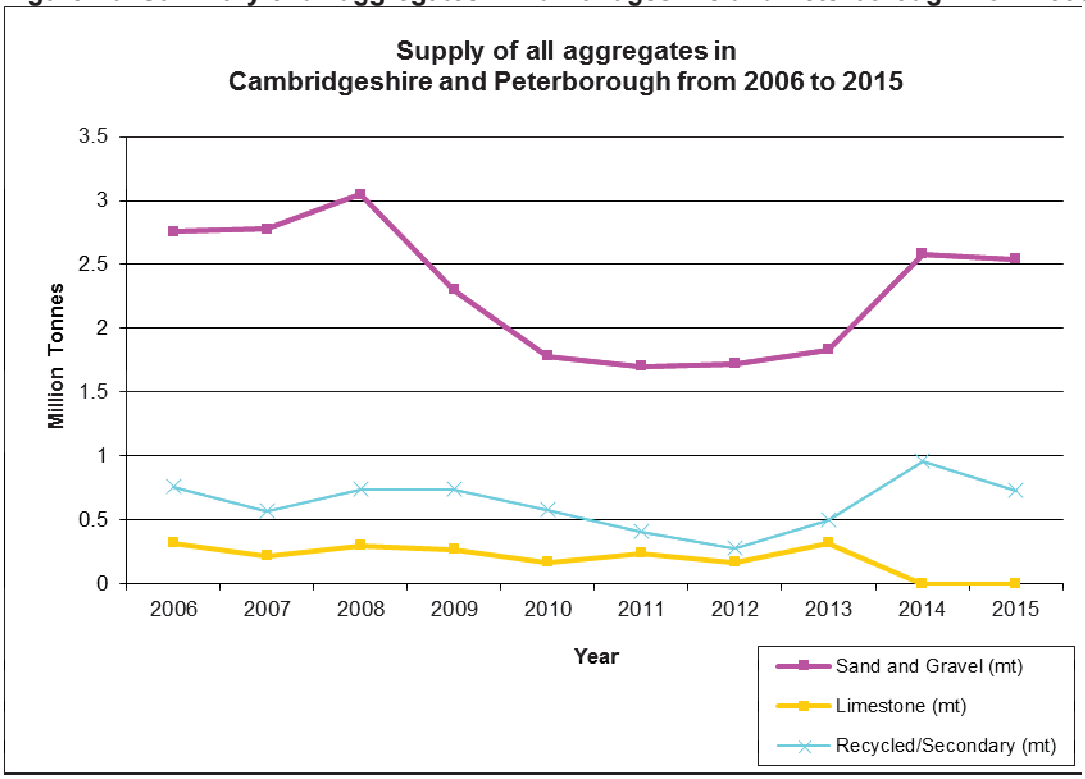


Figure 7b: Summary of all aggregates in Cambridgeshire and Peterborough from 2006 to 2015



Future review of the Minerals and Waste Core Strategy

7.10 The current Cambridgeshire and Peterborough Minerals and Waste Core Strategy covers the period up to 2026. The Local Aggregates Assessment, Annual Monitoring Report and East of England Aggregate Working Party Annual Survey will be used to assess how successfully the Core Strategy is meeting its objectives. The annual LAA will draw attention to any increase or decrease in aggregate demand. Taken together these documents will highlight, on an annual basis, areas of the Core Strategy that could potentially need to be reviewed.

7.11 Cambridgeshire's five district councils are currently in the final stages of producing new local plans that will set out planned housing and employment growth for Cambridgeshire up to at least 2031. These plans are progressing to the submission and examination stage and will begin to be adopted over the coming 12 months.

7.12 The current Cambridgeshire and Peterborough Minerals and Waste Core Strategy apportionment level is set so as to be flexible enough to meet demand should additional development and planned large scale infrastructure projects come forward. However, in due course it will become necessary to review the Plans and to roll them forward; and the need for this will be kept under review.