

# 2<sup>nd</sup> REVIEW OF THE REGIONAL TECHNICAL STATEMENTS (SOUTH AND NORTH WALES REGIONAL AGGREGATE WORKING PARTIES)



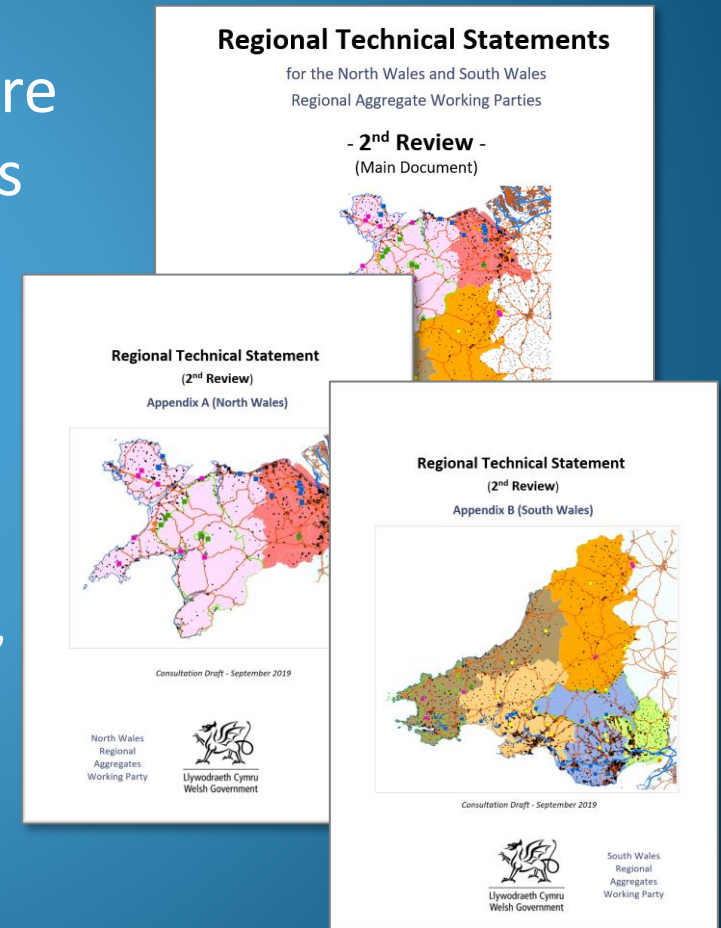
Llywodraeth Cymru  
Welsh Government

Cuesta

Consultation Presentation

# The Purpose of the RTS

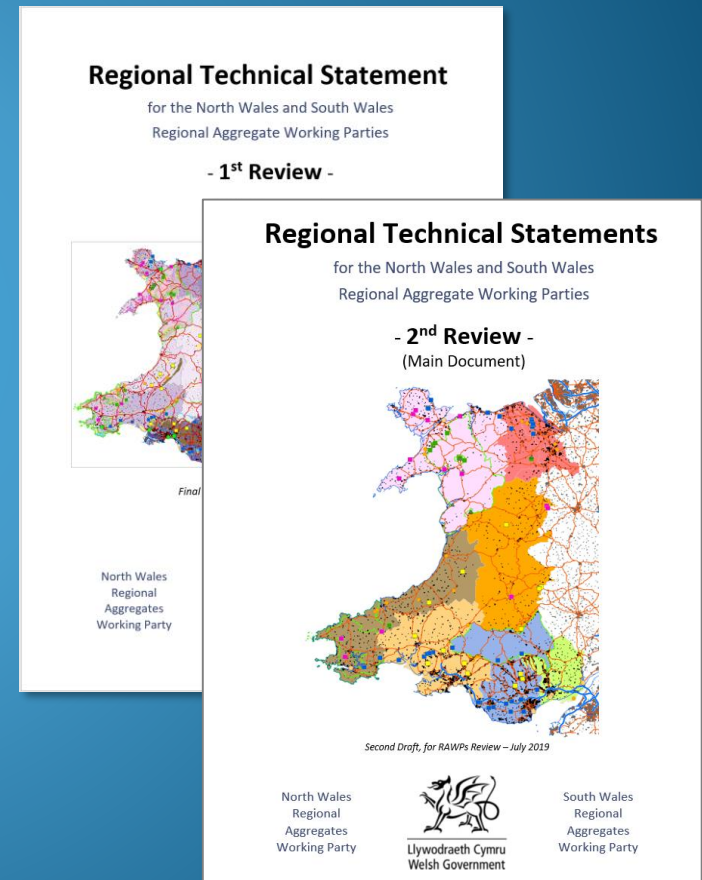
- To provide a strategy for the future supply of construction aggregates across Wales and within each Region
- The strategy aims ensure that an adequate and steady supply of aggregates can be maintained, taking into account the key objectives of sustainable supply outlined in MTAN 1.



# Aims of the Review

- i. to confirm or refine the existing methodology and update the current data/information inputs of the current RTS documents; and
- ii. to prepare new apportionments and an updated RTS for each RAWP region

(identical to the 1<sup>st</sup> Review)



# Key Definitions

- A **landbank** is the stock of reserves with planning permission for mineral extraction at active and inactive sites (MTAN 1 para. 45).
- An **allocation** is the identification, within the LDP, of an area of land for future mineral working.
- An **apportionment** is the rate at which the planning system requires provision to be made, in LDPs.



- **Provision** is the total amount of aggregates required to be supplied from a local authority over the duration of its LDP. It may include both landbanks and allocations (subject to maintaining a minimum landbank of 10 years (CR) or 7 years (S&G) at all times throughout the entire Plan period).
- For the purposes of this review, reserves at **dormant** sites are excluded from basic landbank calculations.
- Such reserves are however required to be identified in Development Plans (MTAN 1 para. 47).

# RTS Timescale

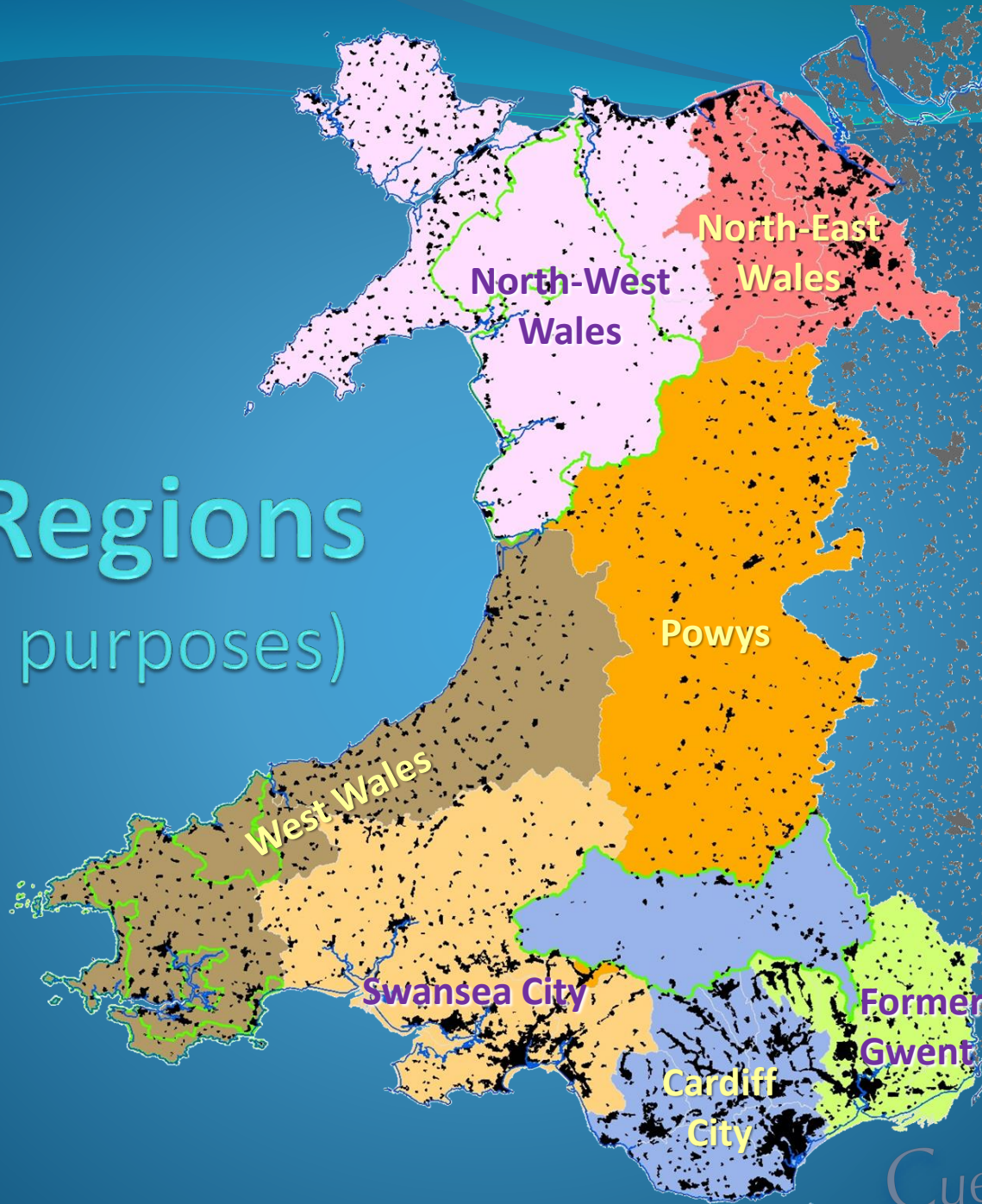
- Each RTS needs to have a 'horizon' sufficiently far ahead for LPAs to draw upon when preparing their LDPs
- To allow for the 15 year period of most individual LDPs, and the requirement to maintain a minimum 10 year landbank throughout this period, for crushed rock, the RTS 'horizon' needs to extend to 25 years.

# RTS 2<sup>nd</sup> Review Process

1. Assessment of the overall level of future aggregates provision required, on a **National** scale.
2. Calculation of the **Regional** split (N. Wales / S, Wales)
3. Examination of the existing pattern of supply, and determination of **sub-regional & LPA apportionments**.
4. Comparison with existing permitted reserves to determine the need, or otherwise, for **new allocations**
5. **Consultation** & Endorsement
6. **Implementation** by LPAs

# Sub-Regions

(for RTS purposes)





# 1) National analysis

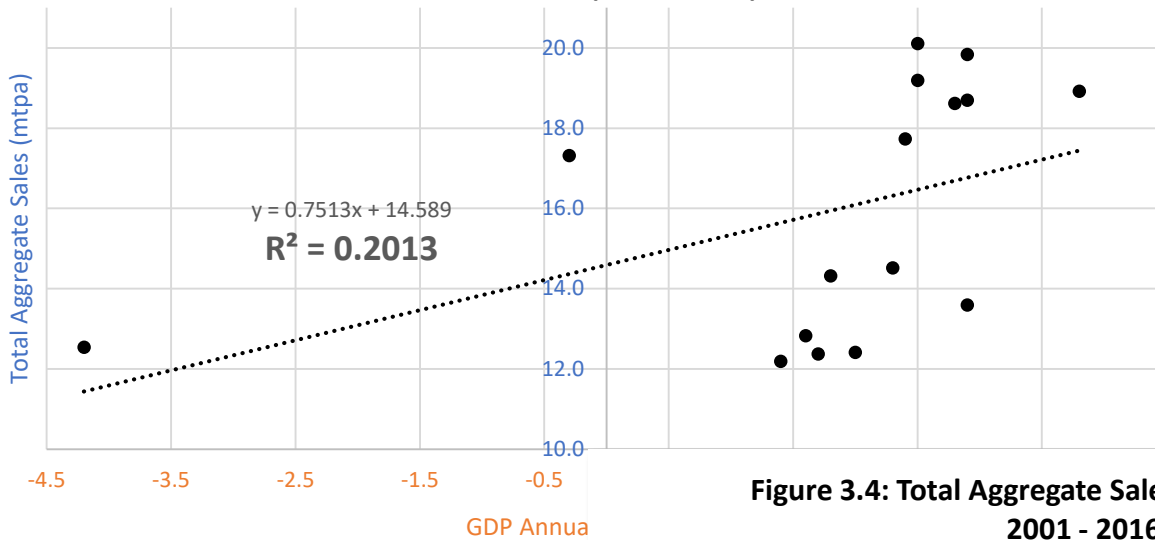
- Calculation of historical sales averages over the most recent 10-year 'baseline' period (2007-2016) and over the most recent 3 years.
- These figures represent the 'residual' demand for land-won primary aggregates (*since alternative aggregates - secondary, recycled and marine - were also contributing to the market throughout this period*).
- Consideration of influences on future demand which might change over the next 10 years, compared to the baseline period.

Table 3.2

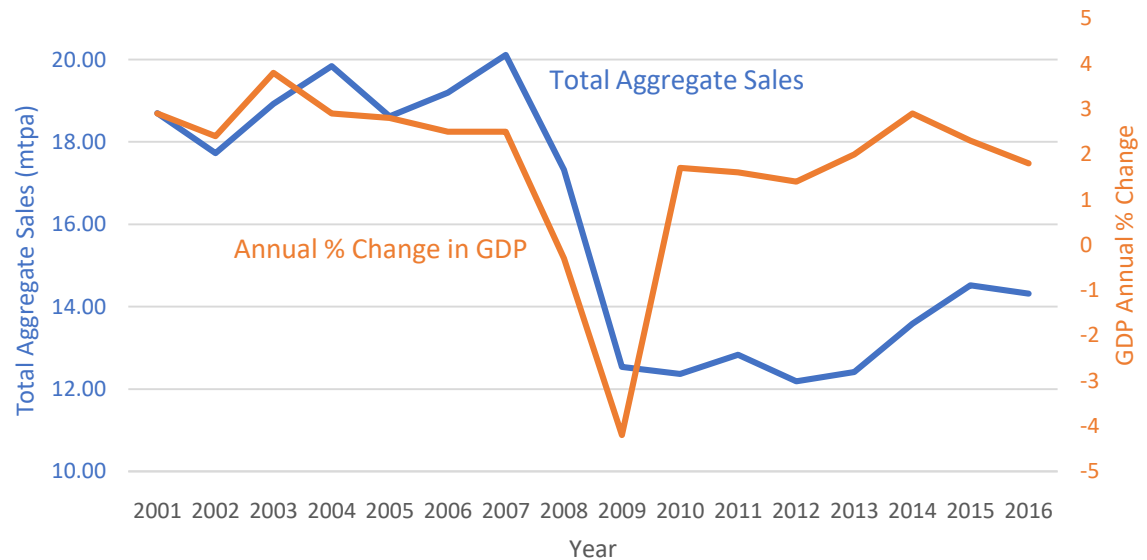
## Aggregate Sales

| Unitary Authority            | 10-yr Average<br>Aggregate Sales (total)<br>(mtpa) | 3-yr Average<br>Aggregate Sales<br>(total) (mtpa) | Highest of 3-yr and<br>10-yr ave. sales in<br>each LPA (mtpa) |
|------------------------------|--|---|---|
| Blaenau Gwent                | 0.170  | 0.180   | 0.180   |
| Brecon Beacons National Park | 0.490  | 0.540   | 0.540   |
| Bridgend                     | 0.580  | 0.600   | 0.600   |
| Caerphilly                   | 0.390  | 0.100   | 0.390   |
| Cardiff                      | 0.830  | 1.060   | 1.060   |
| Carmarthenshire              | 0.832  | 0.821   | 0.832   |
| Ceredigion                   | 0.300  | 0.240   | 0.300   |
| Conwy + Snowdonia NP         | 0.955  | 0.813   | 0.955   |
| Denbighshire                 | 0.329  | 0.043   | 0.329   |
| Flintshire                   | 2.663  | 3.204   | 3.204   |
| Gwynedd                      | 0.868  | 0.898   | 0.898   |
| Isle of Anglesey             | 0.236  | 0.255   | 0.255   |
| Merthyr Tydfil               | 0.150  | 0.010   | 0.150   |
| Monmouthshire                | 0.070  | 0.060   | 0.070   |
| Neath Port Talbot            | 0.460  | 0.300   | 0.460   |
| Newport                      | 0.000  | 0.000   | 0.000   |
| Pembrokeshire                | 0.510  | 0.360   | 0.510   |
| Pembrokeshire Coast NP       | 0.330  | 0.270   | 0.330   |
| Powys                        | 2.470  | 2.650   | 2.650   |
| Rhonda Cynon Taf             | 0.610  | 0.670   | 0.670   |
| Swansea                      | 0.000  | 0.000   | 0.000   |
| Torfaen                      | 0.000  | 0.000   | 0.000   |
| Vale of Glamorgan            | 0.660  | 0.580   | 0.660   |
| Wrexham                      | 0.435  | 0.514   | 0.514   |
| <b>TOTAL, Wales</b>          |  |   | <b>15.557</b>   |

**Figure 3.3: Total Aggregate Sales vs GDP Annual % Change (UK), 2001 - 2016 (Correlation)**

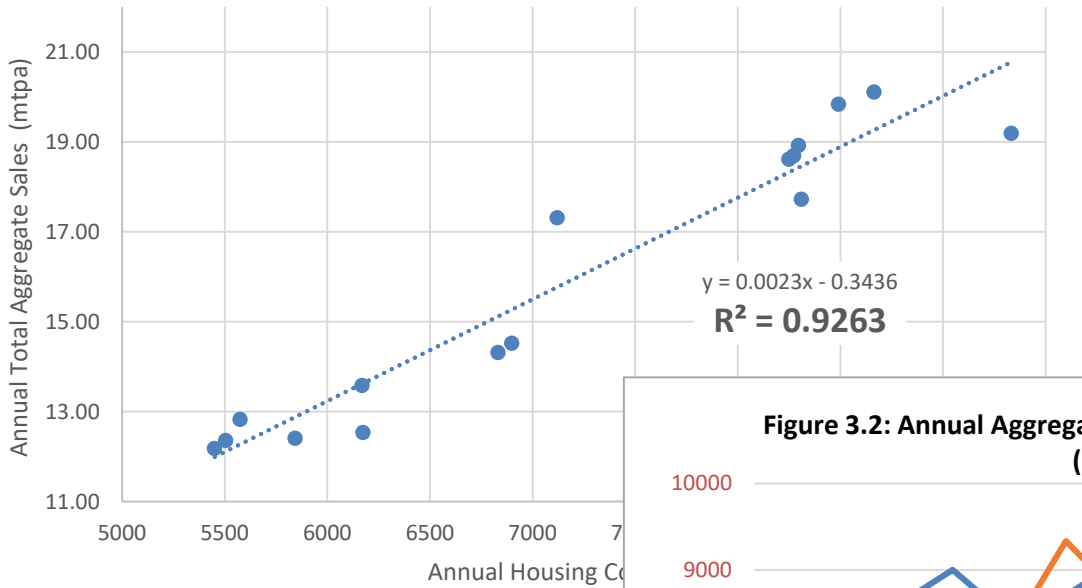


**Figure 3.4: Total Aggregate Sales vs GDP Annual % Change (UK), 2001 - 2016 (time series)**

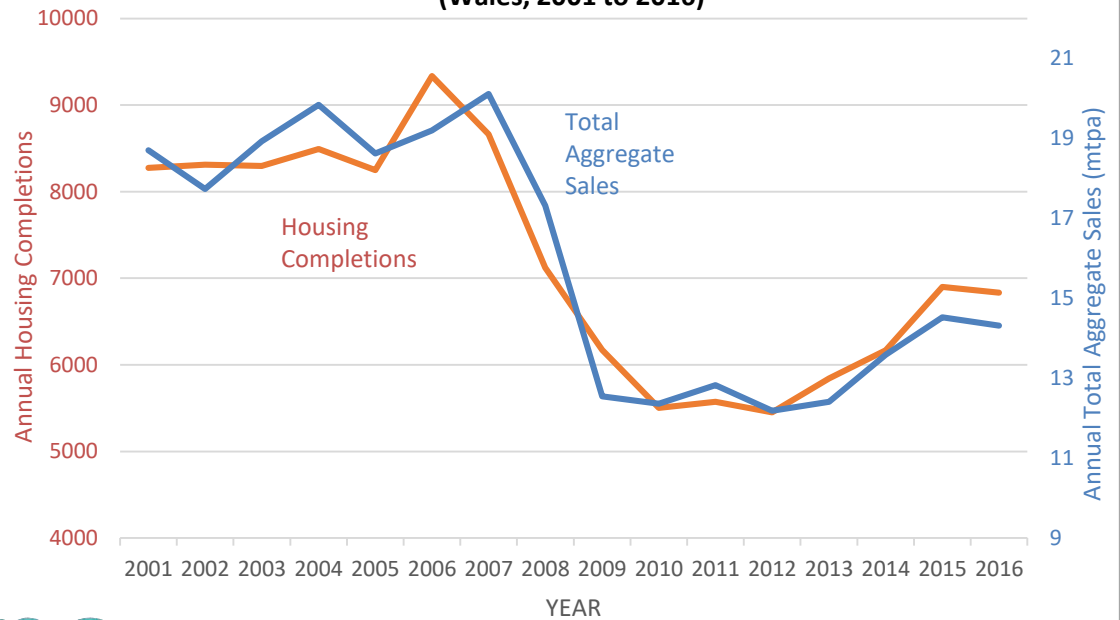


**Sales vs  
GDP**

**Figure 3.1: Correlation of Total Aggregate Sales with Annual House Completions (Wales, 2001 - 2016)**



**Figure 3.2: Annual Aggregate Sales and Housing Completions Time Series (Wales, 2001 to 2016)**



# Sales vs Housing Completions



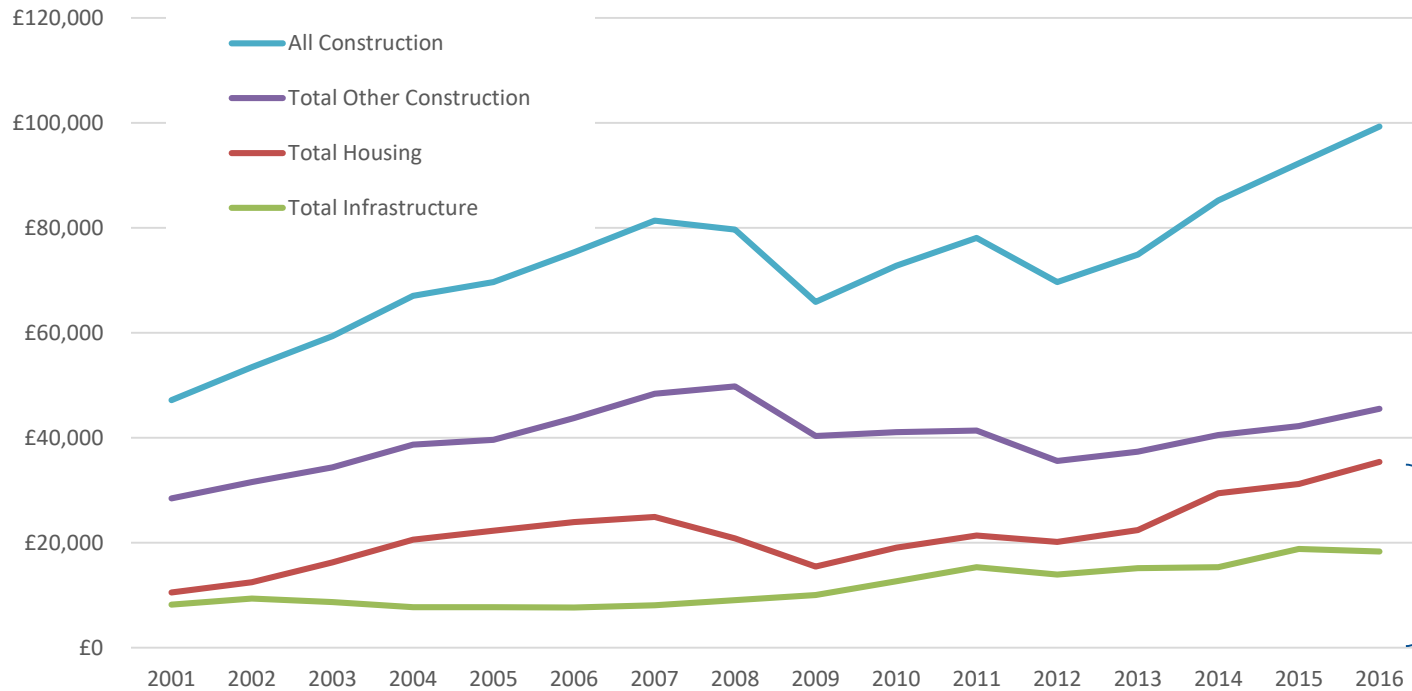
Table 3.3

# Housing requirements

| Unitary Authority                             | Plan Status | Plan period       | Planned Future Housing Requirements | Annualised Future Housing Requirements | Average House Completions per year (2007 – 2016) |
|---|-------------|-------------------|-------------------------------------|--|--|
| Blaenau Gwent                                 | Adopted     | 2006-2021         | 3,500                               | 233                                    | 99.1   |
| Bridgend                                      | Adopted     | 2006-2021         | 8,153                               | 544                                    | 365  |
| Caerphilly                                    | Adopted     | 2006-2021         | 8,625                               | 575                                    | 335.2  |
| Cardiff                                       | Adopted     | 2006-2026         | 41,415                              | 2,071                                  | 825.3  |
| Carmarthenshire                               | Adopted     | 2006-2021         | 15,197                              | 1,013                                  | 517.8  |
| Ceredigion                                    | Adopted     | 2007-2022         | 6,000                               | 400                                    | 126.1  |
| Conwy +Snowdonia                              | Adopted     | 2007-22 & 2016-31 | 7,350                               | 490                                    | 178.6  |
| Denbighshire                                  | Adopted     | 2006-2021         | 7,500                               | 500                                    | 156.2  |
| Flintshire                                    | in progress | 2015-2030         | 6,950                               | 463                                    | 288.6  |
| Gwynedd + Isle of Anglesey                    | Adopted     | 2011-2026         | 7,184                               | 479                                    | 280  |
| Merthyr Tydfil + Brecon Beacons National Park | Adopted     | 2006-2021         | 4240                                | 283                                    | 133.2  |
| Monmouthshire                                 | Adopted     | 2011-2021         | 4,500                               | 300                                    | 228.6  |
| Neath Port Talbot                             | Adopted     | 2011-2026         | 7,800                               | 520                                    | 274.3  |
| Newport                                       | Adopted     | 2011-2026         | 10,350                              | 690                                    | 527.5  |
| Pembrokeshire + PCNP                          | Adopted     | 2011-2026         | 7,299                               | 487                                    | 240  |
| Powys   | Adopted     | 2011-2026         | 4,500                               | 300                                    | 191.7  |
| Rhonda Cynon Taf                              | Adopted     | 2006-2021         | 14,385                              | 959                                    | 373.9  |
| Swansea                                       | in progress | 2010-2025         | 15,600                              | 1,040                                  | 519.4  |
| Torfaen                                       | Adopted     | 2006-2021         | 4,700                               | 313                                    | 174.6  |
| Vale of Glamorgan                             | Adopted     | 2011-2026         | 9,460                               | 631                                    | 284.3  |
| Wrexham                                       | in progress | 2013-2028         | 7,750                               | 517                                    | 304.2  |
| <b>TOTAL, Wales</b>                           |             |                   | <b>202,458</b>                      | <b>12,808</b>                          | <b>6,423.6</b>                                   |

# Housing as a proportion of all construction

Figure 5.1: Value of Construction Output by Type of Work (Great Britain)



30%

# Planned Major Infrastructure

- (from the 1<sup>st</sup> Review)
  - Caernarfon bypass construction;
  - North Wales Gateway Project, including redevelopment of the Shotton steelworks sites and of the former RAF Sealand site near Queensferry;
  - New nuclear power station at Wylfa on the Isle of Anglesey;
  - Numerous large scale wind farm proposals (land-based and offshore);
  - Possible future expansion of Harwarden as a Regional Airport and to accommodate Airbus manufacturing; and
  - A55 North Wales coast road upgrade.
  - M4 (toll) Newport Relief Road
  - Swansea Bay tidal lagoon
  - Severn Barrage (subject to further evidence on economic feasibility)
  - Various large scale wind farm proposals

# Calculating the National Figure

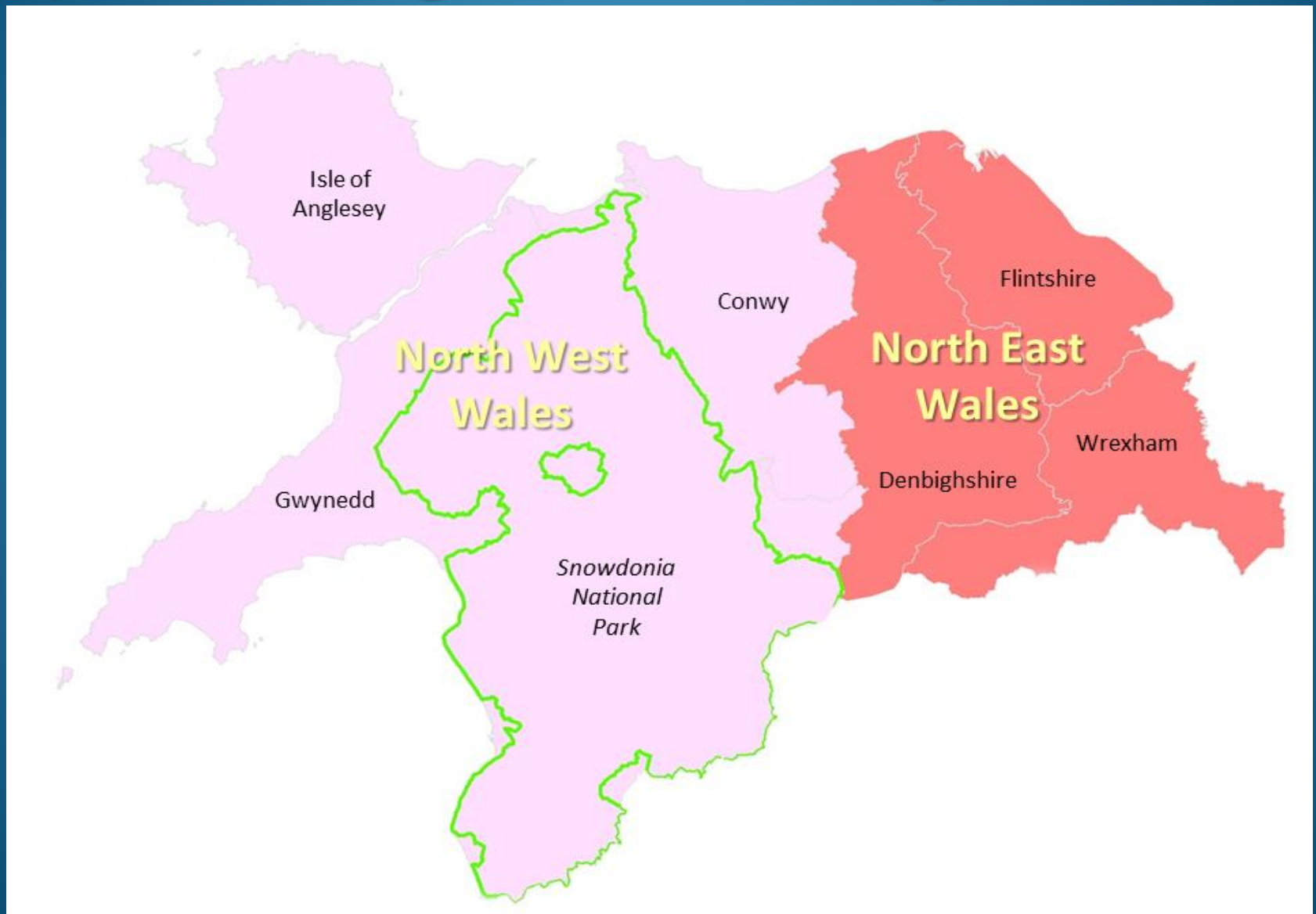
- Sum of the highest of the 10-yr or 3-yr historical sales averages for each LPA (= **15.557** mtpa)
- Then allow for the fact that the planned provision for housing in Wales is set to double ...
- ... and that housing is very strongly correlated with aggregate sales, and accounts for around 30% by value of all construction ...
- So the national level of overall provision should be set at 130% of the historical sales average ...
- = **20.224** mtpa (similar to pre-recession figure of 20.11 in 2007)















## 2) Regional Split

- **North Wales** supplies between 34% and 41% of the national total, averaging 38.26%
- So, N. Wales Provision =  $38.26\% \times 20.224 = 7.738$  mtpa
- *(12.5% higher than the provision of 6.88 mtpa in 1<sup>st</sup> Review)*
- **South Wales** supplies between 59% and 66% of the national total, averaging 61.74%
- So, S. Wales Provision =  $61.74\% \times 20.224 = 12.486$  mtpa
- *(15.6% higher than the provision of 10.80 mtpa in 1<sup>st</sup> Review)*







# 3) Sub-regional analysis



# Sub-Regional Issues: North-East Wales






| Quarries & Pits   |                          | Inactive or Dormant   |
|---|--------------------------|---|
| Active  |                          |   |
|  | Limestone (excl. cement) |  |
|  | Sandstone                |  |
|  | Igneous                  |  |
|  | Slate                    |  |
|  | Slate Waste              |  |
|  | Sand & Gravel            |  |

## Crushed Rock Resources

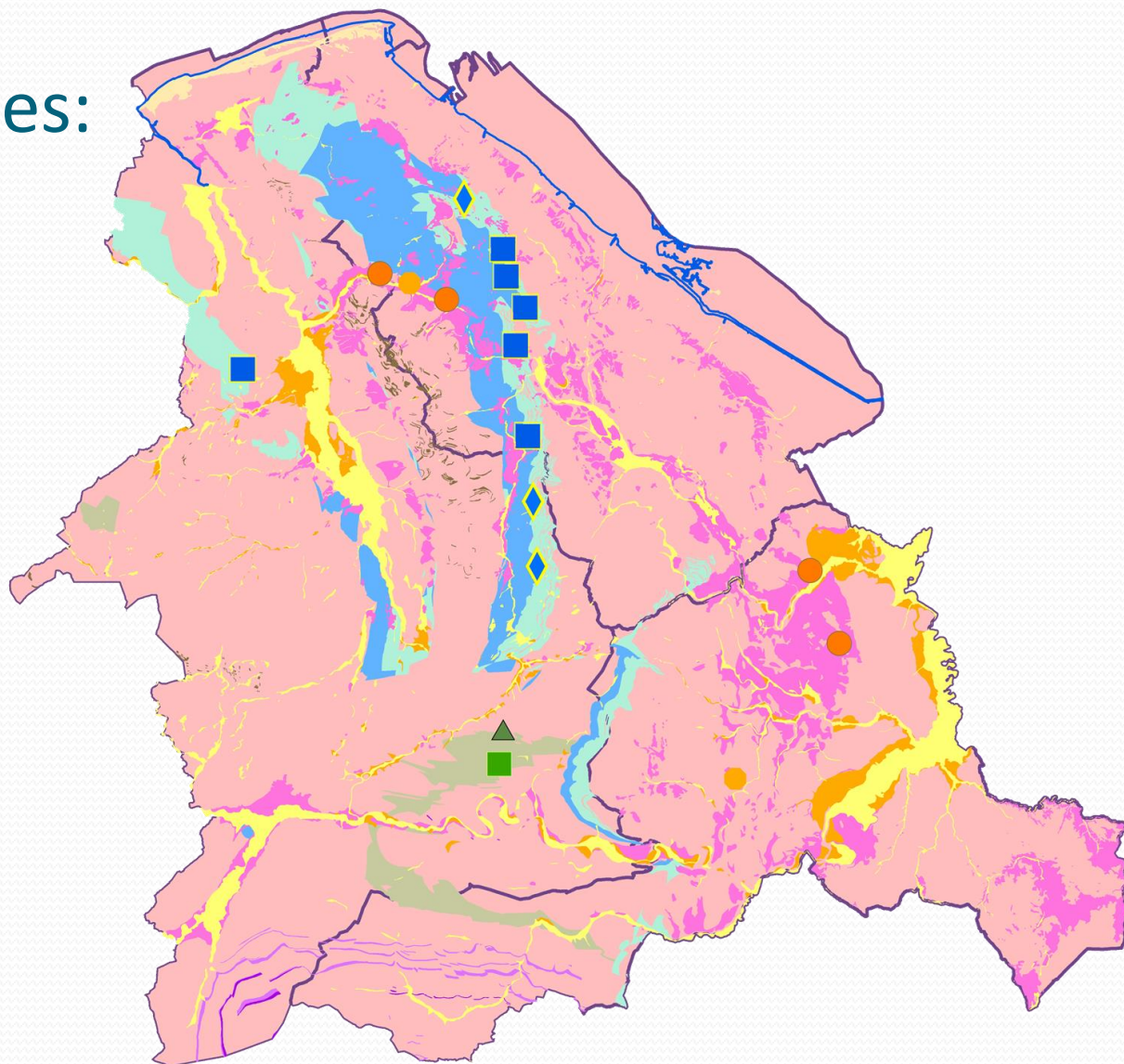
|   |                                       |
|---|---------------------------------------|
|    | Carboniferous & older HSA Sandstone   |
|    | Carboniferous Limestone (high purity) |
|    | Carboniferous Limestone (other)       |
|  | Slate                                 |
|  | HSA Dolerite                          |
|  | Other Igneous Rock resources          |

BGS  
resource  
mapping

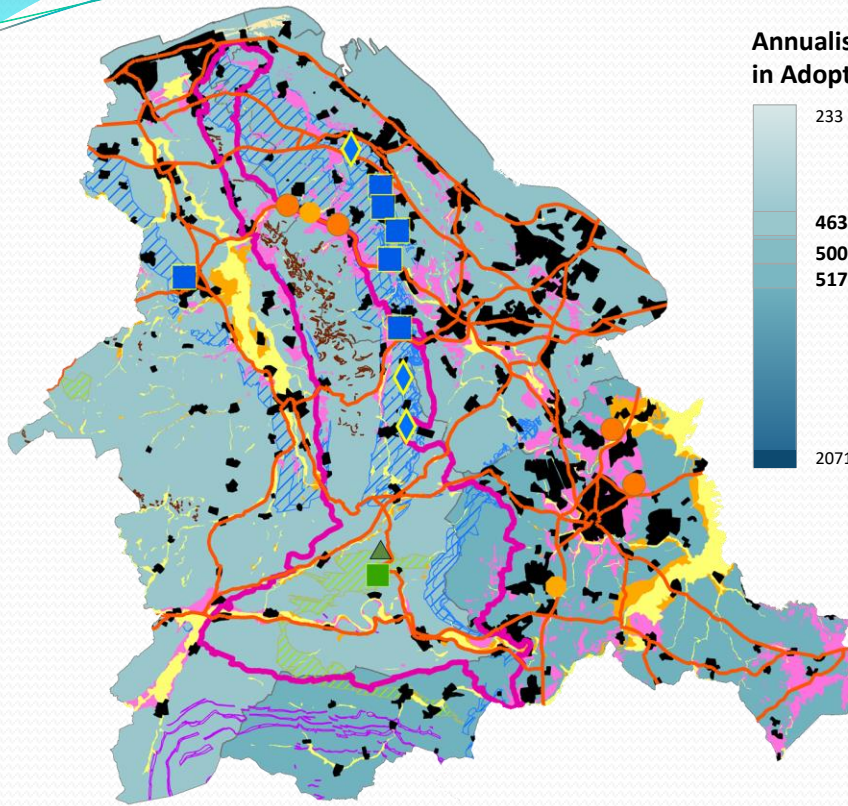
## Land-based Sand & Gravel Resources

|   |                           |
|---|---------------------------|
|  | Sub-alluvial deposits     |
|  | River Terrace deposits    |
|  | Glaciofluvial deposits    |
|  | Other Glacigenic deposits |
|  | Blown Sand deposits       |

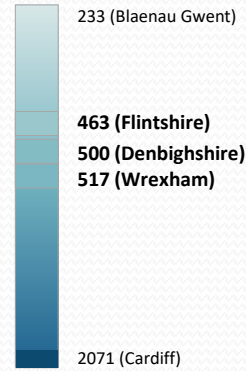
BGS  
resource  
mapping







### Annualised Housing Requirements in Adopted LDPs (houses per year)



- Main urban areas
- National Parks
- AONBs

### Environmental Capacity \*

- Relatively Low Environmental Capacity\*
- Medium Environmental Capacity\*
- Relatively High Environmental Capacity\*
- Areas not assessed\*

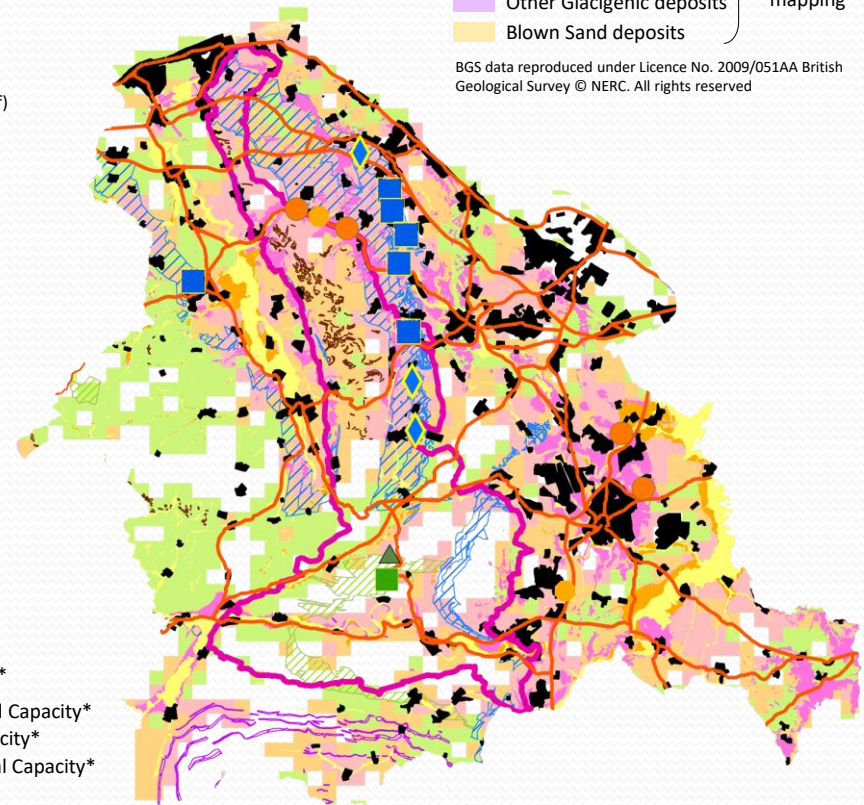
### Crushed Rock Resources

- Carboniferous & older HSA Sandstone
- Carboniferous Limestone
- Slate
- Igneous including HSA Dolerite

### Land-based Sand & Gravel

- Sub-alluvial deposits
  - River Terrace deposits
  - Glaciofluvial deposits
  - Other Glacigenic deposits
  - Blown Sand deposits
- BGS resource mapping

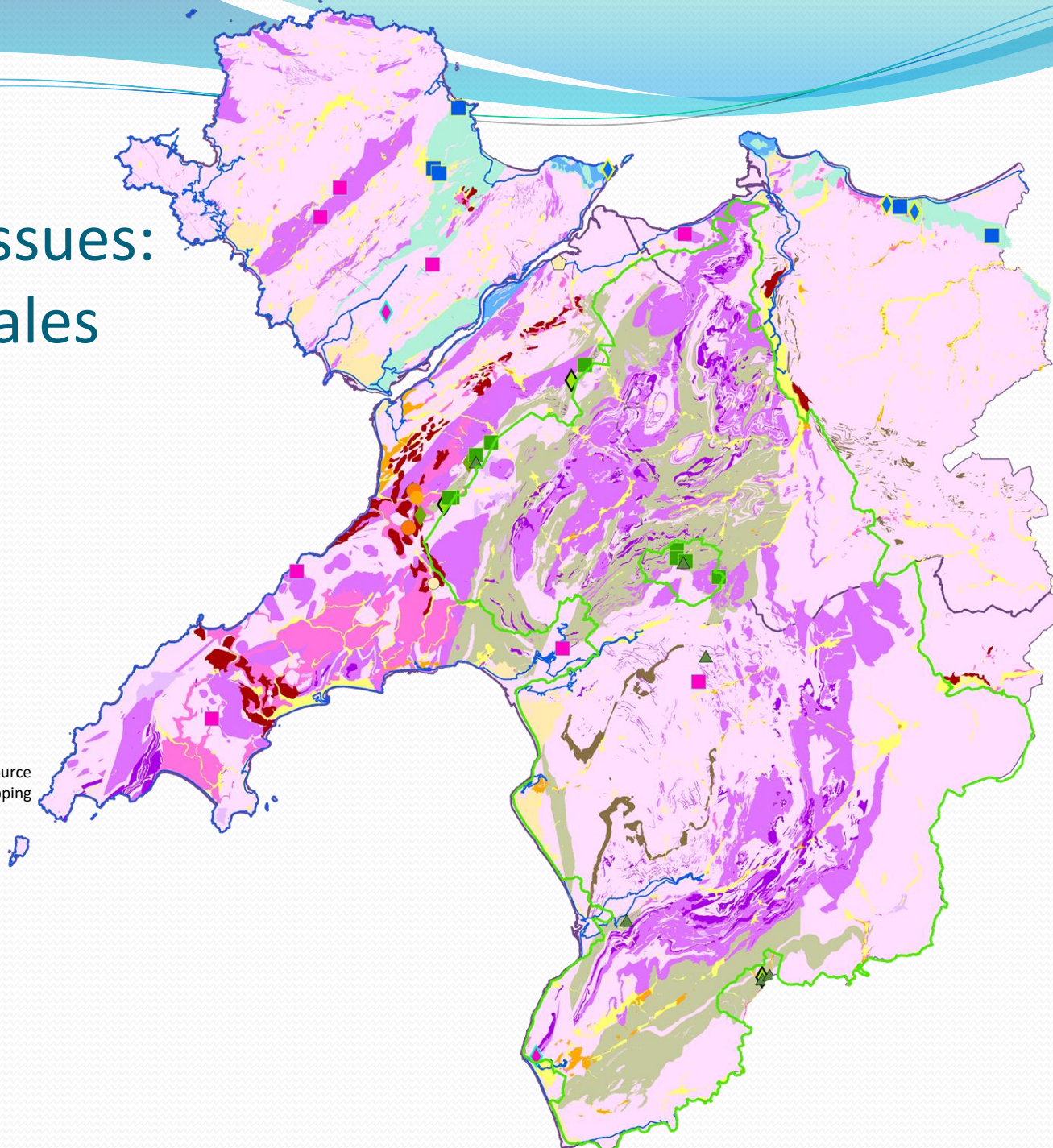
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\* Assessed as part of the 'IMAECA' project, (Implementing the Methodology for Assessing the Environmental Capacity for Primary Aggregates - Enviros, 2005).



# Sub-Regional Issues: North-West Wales



| Quarries & Pits                        |                          | Inactive or Dormant                    |
|--|--------------------------|--|
| Active                                 |                          |  |
| <span style="color: blue;">■</span>    | Limestone (excl. cement) | <span style="color: blue;">◆</span>    |
| <span style="color: yellow;">■</span>  | Sandstone                | <span style="color: yellow;">◆</span>  |
| <span style="color: magenta;">■</span> | Igneous                  | <span style="color: magenta;">◆</span> |
| <span style="color: green;">■</span>   | Slate                    | <span style="color: green;">◆</span>   |
| <span style="color: olive;">▲</span>   | Slate Waste              | <span style="color: olive;">◆</span>   |
| <span style="color: orange;">●</span>  | Sand & Gravel            | <span style="color: orange;">●</span>  |

## Crushed Rock Resources

|   |                                       |
|---|---------------------------------------|
| <span style="color: brown;">■</span>      | Carboniferous & older HSA Sandstone   |
| <span style="color: blue;">■</span>       | Carboniferous Limestone (high purity) |
| <span style="color: lightgreen;">■</span> | Carboniferous Limestone (other)       |
| <span style="color: olive;">■</span>      | Slate                                 |
| <span style="color: purple;">■</span>     | HSA Dolerite                          |
| <span style="color: pink;">■</span>       | Other Igneous Rock resources          |

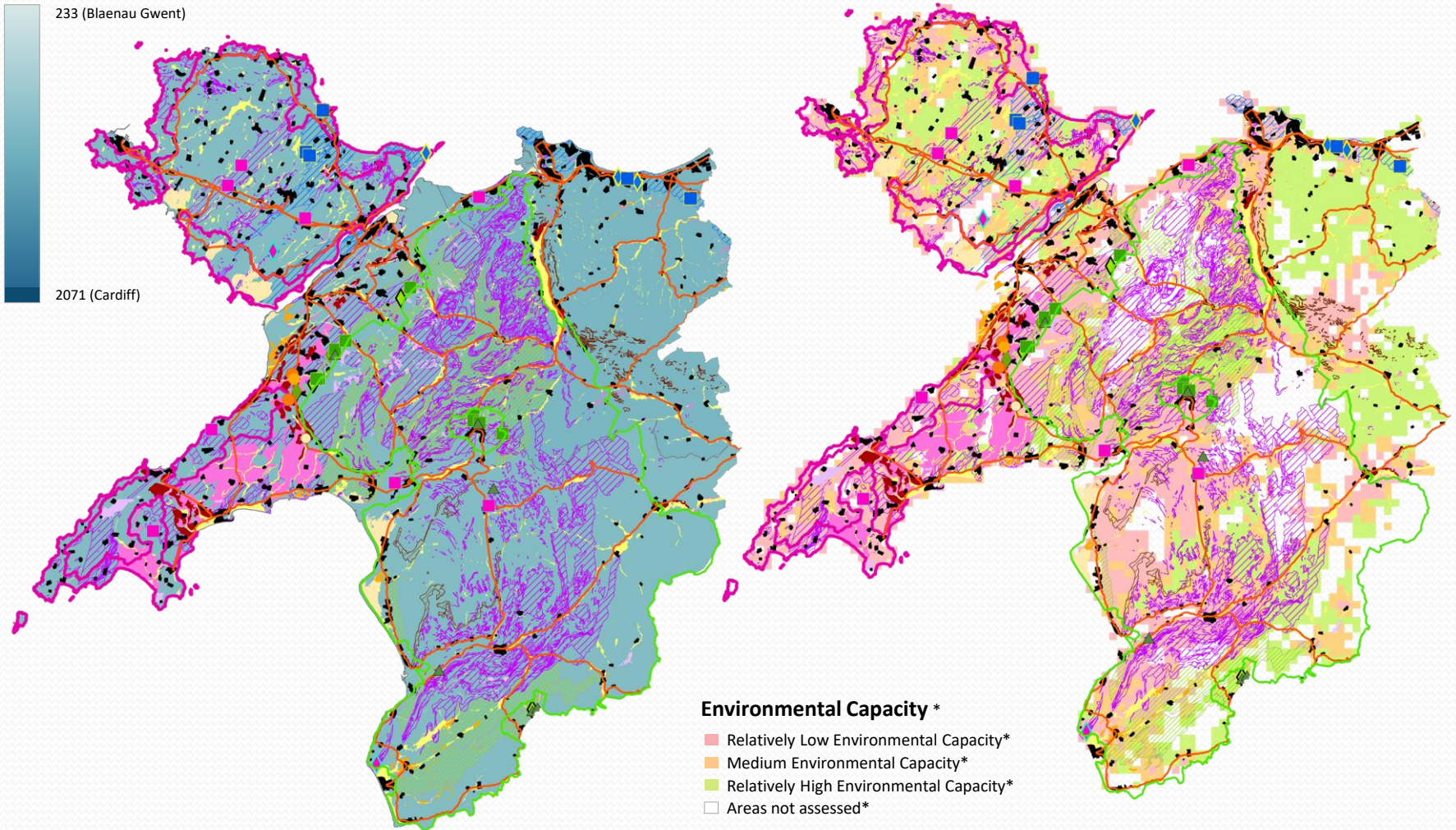
BGS resource mapping

## Land-based Sand & Gravel Resources

|  |   |
|--|---|
| <span style="color: red;">■</span>         | Resource blocks identified by WG research |
| <span style="color: yellow;">■</span>      | Sub-alluvial deposits                     |
| <span style="color: orange;">■</span>      | River Terrace deposits                    |
| <span style="color: pink;">■</span>        | Glaciofluvial deposits                    |
| <span style="color: lightpurple;">■</span> | Other Glacigenic deposits                 |
| <span style="color: peachpuff;">■</span>   | Blown Sand deposits                       |

BGS resource mapping

## Annualised Housing Requirements in Adopted LDPs (houses per year)



\* Assessed as part of the 'IMAECA' project, (Implementing the Methodology for Assessing the Environmental Capacity for Primary Aggregates - Enviro, 2005).



# Sub-Regional Apportionments

| Local Planning Authority      | OPTION A   |                           |   | OPTION B   |                               |   | Preferred Annualised Apportionments (mtpa)<br><small>[By default = Option A, but modified in some cases (red figures) to allow for Option B or qualitative observations as noted in column to right]</small> | Qualitative Observations   |
|-------------------------------|--|---------------------------|---|--|-------------------------------|---|--|--|
|                               | highest of 10-yr and 3yr Ave. Aggregate Sales (total) (mtpa) | % share of Regional total | Resulting Annualised Apportionments for all Land-Won Primary Aggregates <sup>1</sup> (mtpa) | Annualised Future Housing Requirement from Local Plans | % share of Sub-Regional total | Resulting Annualised Apportionments for all Land-Won Primary Aggregates <sup>2</sup> (mtpa) |  |  |
| N. WALES TOTAL (from Stage 2) | 7.738  |                           |   |  |                               |   |  |  |
| <b>NE Wales Sub-Region</b>    | <b>4.047</b>   | <b>65.75%</b>             | <b>5.088</b>  | <b>1,480</b>   | <b>100.00%</b>                | <b>5.088</b>  | <b>5.088</b>   | The existing supply pattern here (Option A) provides an appropriate balance between market forces (including substantial exports) and the availability of unconstrained resources. Flintshire has much higher aggregate sales than Denbighshire, despite similar housing requirements. This reflects local market distortion by exports to NW England. The slight modification shown within the preferred apportionment figures is to make the best use of existing landbanks and thereby reduce future allocation requirements overall. Wrexham supplies only sand & gravel as its limestone resources are largely constrained by the AONB. |
| Denbighshire                  | 0.329  | 5.35%                     | 0.414   | 500  | 33.78%                        | 1.719   | 0.860  |  |
| Flintshire                    | 3.204  | 52.06%                    | 4.028   | 463  | 31.28%                        | 1.592   | 3.582  |  |
| Wrexham                       | 0.514  | 8.35%                     | 0.646   | 517  | 34.93%                        | 1.777   | 0.646  |  |
| <b>NW Wales Sub-Region</b>    | <b>2.108</b>   | <b>34.25%</b>             | <b>2.650</b>  | <b>969</b>   | <b>100.00%</b>                | <b>2.650</b>  | <b>2.650</b>   |  |
| Conwy + Snowdonia NP          | 0.955  | 15.52%                    | 1.201   | 490  | 50.57%                        | 1.340   | 1.201  |  |
| Gwynedd                       | 0.898  | 14.59%                    | 1.129   | 479  | 49.43%                        | 1.310   | 1.129  |  |
| Isle of Anglesey              | 0.255  | 4.14%                     | 0.321   |  |                               |   | 0.321  |  |

Table 5.2

# Allocations

- Comparison of the total apportionments over 22 years for sand & gravel, or 25 years for crushed rock (or 30 years in Cardiff), with the size of existing landbanks reveals where there are shortfalls of available reserves and thus a need for new allocations



# Allocations – Sand & Gravel

Table 5.4

| Local Planning Authority       | Overall 'Preferred' Apportionment (S&G & CR) <sup>1</sup> (mt) | Historic proportion supplied from sand & gravel sources <sup>2</sup> | New Annualised Apportionment for sand & gravel <sup>3</sup> (mt) | Total Apportionment Required over 22 years | Existing permitted reserves at end of 2016 in mt <sup>4,5</sup> | Existing landbank <sup>6</sup> (years) | Surplus or Shortfall (-) of Existing Permitted Reserves (mt) | Minimum Allocation needed to meet Required Provision <sup>7</sup> (mt) | Additional reserves at Dormant sites, 2016 <sup>4</sup> (mt) |
|--------------------------------|--|--|--|--|---|--|--|--|--|
| Denbighshire                   | 0.860  | 0.00%  | 0.000  | 0.000                                      | 0.000   | n/a                                    | 0.000  | 0.000  | 0  |
| Flintshire                     | 3.582  | 6.23%  | 0.223  | 4.912                                      | 1.369   | 6.1                                    | -3.543   | 3.543  | 0.5  |
| Wrexham                        | 0.646  | 100.00%  | 0.646  | 14.217                                     | 12.652  | 19.6                                   | -1.565   | 1.565  | 0  |
| Conwy + Snowdonia NP           | 1.201  | 0.00%  | 0.000  | 0.000                                      | 0.000   | n/a                                    | 0.000  | 0.000  | 0  |
| Gwynedd                        | 1.129  | 15.44%   | 0.174  | 3.834                                      | 1.175   | 6.7                                    | -2.659   | 2.659  | 0  |
| Isle of Anglesey               | 0.321  | 0.00%  | 0.000  | 0.000                                      | 0.000   | n/a                                    | 0.000  | 0.000  | 0  |
| <b>Sub-totals, North Wales</b> | <b>7.738</b>   | <b>13.40%</b>  | <b>1.044</b>   | <b>22.963</b>                              | <b>15.196</b>   |  | <b>-7.767</b>  | <b>7.767</b>   | <b>0.5</b>   |

# Allocations – Crushed Rock

Table 5.6

| Local Planning Authority       | Overall 'Preferred' Apportionment (S&G & CR) <sup>1</sup> (mt) | Historic proportion supplied from crushed rock sources <sup>2</sup> | New Annualised Apportionment for crushed rock <sup>3</sup> (mt) | Total Apportionment Required over 25 years | Existing permitted reserves at end of 2016 in mt <sup>4</sup> <sub>5</sub> | Existing landbank <sup>6</sup> (years) | Surplus or Shortfall (-) of Existing Permitted Reserves (mt) | Minimum Allocation needed to meet Required Provision <sup>7</sup> (mt) | Additional reserves at Dormant sites, 2016 <sup>4</sup> (mt) |
|--------------------------------|--|---|---|--|--|--|--|--|--|
| Denbighshire                   | 0.860  | 100.00%   | 0.860   | 21.500                                     | 21.710   | 25.2                                   | 0.210  | 0.000  | 0  |
| Flintshire                     | 3.582  | 93.77%  | 3.359   | 83.968                                     | 48.040   | 14.3                                   | -35.928  | 35.928   | 1.41   |
| Wrexham                        | 0.646  | 0.00%   | 0.000   | 0.000                                      | 0.000  | n/a                                    | 0.000  | 0.000  | 0  |
| Conwy + Snowdonia NP           | 1.201  | 100.00%   | 1.201   | 30.016                                     | 62.500   | 52.1                                   | 32.484   | 0.000  | 0.25   |
| Gwynedd                        | 1.129  | 84.56%  | 0.955   | 23.867                                     | 28.540   | 29.9                                   | 4.673  | 0.000  | 0  |
| Isle of Anglesey               | 0.321  | 100.00%   | 0.321   | 8.015                                      | 14.400   | 44.9                                   | 6.385  | 0.000  | 0  |
| <b>Sub-totals, North Wales</b> | <b>7.738</b>   | <b>86.60%</b>   | <b>6.695</b>  | <b>167.366</b>                             | <b>175.19</b>  |  |  | <b>35.928</b>  | <b>1.66</b>  |

- Allocations should ideally take the form of **Specific Sites**, where sufficiently detailed information exists.
- Where that is not possible, they should normally take the form of **Preferred Areas**, within which operators should be encouraged to bring forward more specific proposals.
- As a last resort, where there is no information on the quantity or quality of potential resources, allocations may need to be in the form of **Areas of Search** .... but these would need to give the potential for the release of new reserves which are far greater than the minimum allocation recommended, in order to allow for the uncertainties involved.

# Consultation Process

- Consultation with the Steering Group to check and refine technical data and to review each draft of the RTS;
- Consultation with the full RAWPs on the 3<sup>rd</sup> draft to obtain approval for wider consultation;
- Public consultation over 3 months including publication on RAWP websites and two **consultation events**;
- Revision of RTS and final Steering Group review;
- Political endorsement by each LPA
- Final endorsement by WG.



# Implementation by LPAs

- The RTS provides strategic recommendations to each LPA regarding the apportionments and allocations which may need to be made in their LDP, to ensure that adequate provision is maintained throughout the relevant Plan Period.
- Paragraph 50 of MTAN 1 specifically requires the relevant parts of the RTS strategy to be incorporated into individual LDPs.
- ... however ...

- Where it is justified by new evidence, it is open for individual LPAs to depart from the apportionment and allocation figures recommended by the RTS.
- In doing so, an LPA would need to demonstrate that their intended departure would not undermine the overall strategy provided by the RTS itself (e.g. by working together with other LPAs to ensure that sub-regional and regional totals are still achieved)
- To reinforce that concept, this Review introduces a new requirement for all LPAs within each sub-region to agree a **Sub-Regional Statement of Collaboration**, and for this to be approved by the RAWP, prior to the Examination of any individual LDP within that area.

- Where the local authorities involved are unable to reach agreement, or if individual local authorities do not accept the Regional Technical Statement, the Welsh Government will consider its default powers to intervene in the planning process, as a last resort (MTAN 1, paragraph A3).