

Assignment Title – Constructing a Cost Indices

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BSC Quantity Surveying

Cost Studies of Buildings

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1.0 Introduction

This report is an analysis in to the current housing market throughout the South Wales area. The report is being produced for a major French developer who are investigating the possibility of expanding their business to Wales and the rest of the UK. The aims and objectives of this report are to provide my 'client' with a good understanding of the individual regions throughout South Wales.

By looking at the house prices in a number of regions a cost indices will be produced which will allow quick adjustments on cost change over time and/or locations can disclose patterns on the housing markets in these areas. I will also be giving a brief indication in to the current demand in these areas along with the employability, transport links and leisure facilities that influence demand.

2.0 Welsh Housing Market

In order to achieve a consistent comparison, I have researched in to the overall Welsh Housing Market and looked in to the UK House Price Index documents that are produced and published by the UK government, I have chosen the early part of the year for each year between 2016-2019, as shown in *Fig 1.0* below.

Currently the average house price in the Welsh sits at **£160,232.00** based upon current statistics from the UK House Price Index: Wales January 2019. This is a very healthy annual rise of 4.60%. (UK Government, 2019).

GOV.UK UK House Price Index: Wales					
		April 2016	January 2017	January 2018	January 2019
Average Price of Property (£)	£	139,385.00	£ 145,933.00	£ 153,034.00	£ 160,232.00
Annual Price Change (%)		1.70%	4.20%	4.50%	4.60%
Index Figure		102.4	107.2	112.6	117.7
Cost Difference	£	-	£ 6,548.00	£ 7,101.00	£ 7,198.00

2016 <https://www.gov.uk/government/publications/uk-house-price-index-wales-april-2016/uk-house-price-index-wales-april-2016>
2017 <https://www.gov.uk/government/publications/uk-house-price-index-wales-january-2017/uk-house-price-index-wales-january-2017>
2018 <https://www.gov.uk/government/publications/uk-house-price-index-wales-january-2018/uk-house-price-index-wales-january-2018>
2019 <https://www.gov.uk/government/publications/uk-house-price-index-wales-january-2019/uk-house-price-index-wales-january-2019>

Fig 1.0 – Analysis of Welsh Housing Market (UK Government, 2019).

Additionally, to the overall housing market in Wales, government publications from November 2018 show that the Average Sold Price for a New Build property is £211,384 with an annual change of 7.5% increase. (UK Government, 2019) These are very healthy figures which are likely to continue to be consistent due to the Help to Buy scheme introduced by Welsh Government between 2016 – 2021. (Zoopla, 2019)

From analysing current government statistics, the above information gives a very good indication in to the current housing market in Wales. We can also see that between 2016 and 2019 there has been an average rise of £6,949 per year. Additionally, we can see on the graph below (Fig 1.1) that the annual rise for the past 5 years has been fairly consistent between the 4%-6% marker.

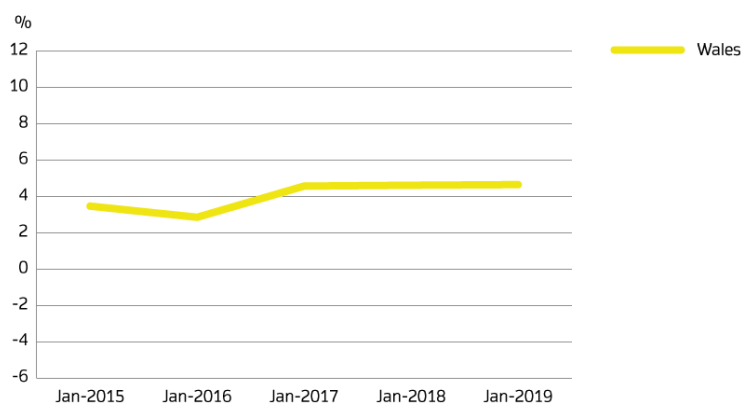


Fig 1.1 – Annual price change for Wales over the past 5 years (UK Government, 2019).

Although there is a consistent rise in the current housing market in Wales, the UK as a whole is still in the state of a housing crisis with demand for homes, and more importantly affordable homes is at an all time high. A Welsh Government reports in 2011 as estimated that approximately 14,000 Homes a year for the next 15 years will be required to meet demand this is a staggering 210,000 new homes in Wales alone. (Welsh Assembly, 2011).

3.0 Regions Researched

I have conducted my research in the following regions;

- Carmarthenshire
- Neath & Port Talbot
- Bridgend
- Newport

These regions cover the whole of the South Wales area, and the reason I have chosen these are to give my client a variety of locations to choose from. From these regions I have selected a number of new build developments in order to produce similar comparisons across the regions and to match up with what my client will be looking to build. My research looks in to the current cost and cost changes of 2 Bedroom to 4/5 Bedroom Dwellings on developments that are currently on going in the relative regions.

Government sources give a good insight in to the regional housing markets as shown in *Fig 2.0* below. As we can see there has been reasonably increase in the house prices in Bridgend and Carmarthenshire and Newport with a very healthy rise of 8% in a year. Unfortunately, statistics show that Neath Port Talbot hasn't achieved the rise as per other regions in South Wales. (UK Government, 2019).

GOV.UK

Annual price change by local authority for Wales

Local authorities	Jan-19	Jan-18	Difference
Bridgend	£151,372	£145,964	3.70%
Carmarthenshire	£145,935	£140,694	3.70%
Neath Port Talbot	£113,006	£112,024	0.90%
Newport	£179,306	£166,005	8.00%

<https://www.gov.uk/government/publications/uk-house-price-index-wales-january-2019/uk-house-price-index-wales-january-2019>

Fig 2.0 – Annual price change by local authority for Wales (UK Government, 2019).

3.1 Carmarthenshire

Carmarthenshire is situated between Swansea & Pembrokeshire. It is a semi-rural region which borders mid Wales and the Brecon Beacons all the way down to the coast including Pembrey Country park, it also includes towns such as Llanelli, Pontarddulais and Carmarthen town itself. It has great transport links with a rail link to Swansea which has connections to Cardiff and London, additionally the M4 Motorway goes right in to the heart of Carmarthenshire ending at Pontarddulais. The area of Carmarthenshire is 925 Square Miles. (Wiki, 2019) Based off the 2011 Census the population of Carmarthenshire is **183,777**. (Carmarthenshire County Council, 2011) Census statistics show a large number of Carmarthenshire residents are in the Wholesale and retail trade or Human Health and Social work activities these jobs being more targeted towards the larger towns such as Carmarthen & Llanelli. (Carmarthenshire County Council, 2011)



3.2 Neath Port Talbot

Neath Port Talbot is a region situated in the centre of South Wales and the M4 Corridor. It borders the City of Swansea which is a central location for employment in the area. Neath and Port Talbot consists of two main towns of Neath and Port Talbot, it boasts beautiful beaches and also home to the TATA Steel works which employs over 4,000. (Wiki, 2019). Away from the main towns there are a number of valleys that are home to semi-rural villages that were formed hundred of years ago due to the founding of coal mines. The population of the area is **142, 090**. (Stats Wales, 2019).

Neath Port Talbot is also set to be the home of a new housing development plans to create a new village called Coed Darcy on the former site of a BP Oil Refinery which has been remediated by St. Modwen. (Coed Darcy, 2019) The new village is planned to become a replica of the characteristic Poundbury in Dorset which used modern methods of construction but with keeping the historical look and feel. This will increase the population of the region as well as boost the housing market.



3.3 Bridgend

Bridgend is another region situated to the South of the M4 corridor. It is sandwiched between Cardiff and Swansea and the county surrounds the Town of Bridgend in its centre. Unlike Neath above Bridgend has a large number of employers from shops and retail units in the Bridgend designer outlet to the Ford Engine Factory and South Wales Police Head Quarters. With all these employment opportunities come the residents and the need for housing. The current population of the Bridgend County is **139,178** based off the 2011 Census Data. *(Stats Wales, 2011)*

This region is ever growing and figures were published in 2012 that the regions population had increased by 8.2% over 10 years. *(Wales Online, 2012)*

Additionally, the local development plan is proposing that more than 7,500 homes are to be build in the county by 2033, and that the population in this area is set to rise by approximately 14,500 people by the same time. *(Owen, 2019)*

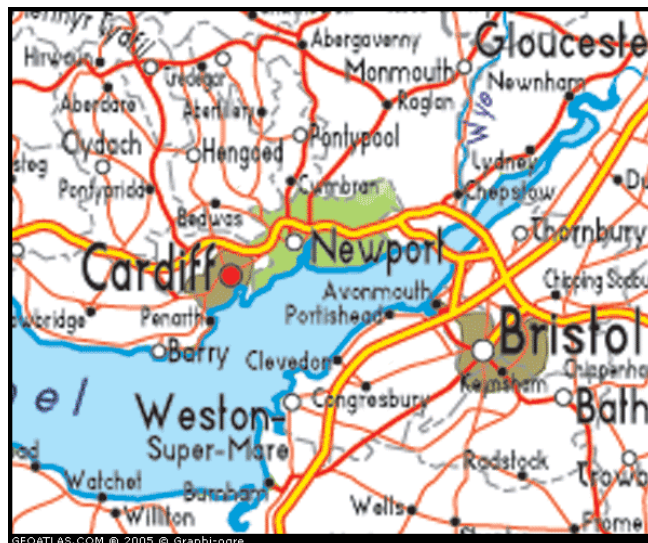


3.4 Newport

The area of the Newport is the most Easterly region of South Wales. This city of Newport sits directly off the M4 and has great transport links to Cardiff, Bristol and Further afield. In 2018 the toll fee of the Severn Bridge was scrapped which increases employment in the Newport area but also encourages more to reside in Newport and commute the places of employment in Bristol. The region of Newport is 73.35 Square Miles in area. As of 2017 had a population of **151,500**. (Wiki, 2019)

Newport was the former home to Wales' largest coal exporting port; it lays at the foot of a number of valleys that were home to coal mines and that resulted in the formation of the City of Newport.

The Local Development Plan for Newport proposes to deliver 10,350 New Homes and a total of 7,400 new jobs by 2026. (Newport Council, 2015)



4.0 Cost Indices Analysis

A cost index or cost indices are a valuable tool that can be used in many different industries, the true definition of an index is;

‘A cost index is an indicator of the average cost movement over time of a fixed basket of representative goods and services related to the Industry’

(Swarup, N/A)

In terms of cost indices for house prices the UK Government produce the UK House Price Index (UK HPI) which captures changes in the value of residential properties, these are all collated records from every house purchase in the UK from 1995 and the data is available at different levels from local authorities, regional and summarised by counties.

(UK Government, 2018)

These cost indices are used within the construction industry and provide valuable information which assist in feasibility studies, estimations and cost checking but even more importantly can give developers a good insight in to the condition of the market in certain areas which can give a good indication of the most profitable areas to develop.

In order to produce the cost indices within this report the following formula has been used.

$$\text{Index Number} = \frac{\text{VALUE}}{\text{BASE VALUE}} \times 100$$

Prior to the completion of the above formula all the house prices for the appropriate house type have been researched and obtained via their respectable developers websites, then to provide to base value figure the house prices for all developments across all regions were added together and divided by the number to provide an average. Over the 36 different house prices the average cost is **£207,301.53**. This is shown in *Fig 3*.

	Bedrooms		
	2	3	4
1	£ 135,000.00	£ 197,500.00	£ 220,000.00
2	£ 152,995.00	£ 173,995.00	£ 234,995.00
3	£ 135,000.00	£ 161,000.00	£ 189,995.00
4	£ 139,995.00	£ 220,995.00	£ 245,000.00
5	£ 162,995.00	£ 180,995.00	£ 258,995.00
6	£ 162,995.00	£ 216,995.00	£ 309,995.00
7	£ 139,995.00	£ 202,995.00	£ 224,995.00
8	£ 162,995.00	£ 186,995.00	£ 265,500.00
9	£ 152,995.00	£ 224,995.00	£ 246,995.00
10	£ 179,995.00	£ 260,995.00	£ 305,995.00
11	£ 179,995.00	£ 205,995.00	£ 280,995.00
12	£ 175,995.00	£ 254,995.00	£ 309,995.00
	£1,880,950.00	£2,488,450.00	£3,093,455.00
Average for Base Cost			£ 207,301.53

Fig 3.0 - Base Value Calculation

Utilising the above formula, I have calculated the indices for each house size for each development researched. My findings are published below in *Fig 3.1*.

Development Indices			
Carmarthenshire	2 BED	3 BED	4 BED
Parc Brynderi, Bynea, Llanelli - Persimmon Homes	65.12	95.27	106.13
Parc y Strade, Llanelli - Taylor Wimpey	73.80	83.93	113.36
Maes Y Parc, Cefneithin, Carmarthen - Persimmon Homes	65.12	77.66	91.65
Neath & Port Talbot	2 BED	3 BED	4 BED
Allt-Y-Celyn, Rhos, Neath - Persimmon Homes	67.53	106.61	118.19
Cwm Celyn, Tonna, Neath - Barratt Homes	78.63	87.31	124.94
Pentre Bach, Gorseinon - Barratt Homes	78.63	104.68	149.54
Bridgend	2 BED	3 BED	4 BED
Oakwood View, Bridgend, Persimmon Homes	67.53	97.92	108.54
Morgans Meadow, Bridgend - Barratt Homes	78.63	90.20	128.07
Gerdidi Castell, Bridgend - Taylor Wimpey	73.80	108.54	119.15
Newport	2 BED	3 BED	4 BED
Oakfield Grange, Cwmbran, Newport - Lovell Homes	86.83	125.90	147.61
Parc Celyn, Newport - Taylor Wimpey	86.83	99.37	135.55
St. Ederyns - Persimmon Homes	84.90	123.01	149.54

Fig 3.1 - Cost indices for each development

Further to the above, we can see the average index shown in the graph below (Fig 3.2) gives a good indication to the housing market in the researched areas. The graph shows the most desirable area is the Oakfield Grange development by Lovell homes with a very healthy average index of 120.11, and the least desirable being the Maes-Y-Parc development by Persimmon Homes in Carmarthenshire at 78.15. From this information alone we can see that there is a varied housing market across South Wales with the further West areas not doing as great as the East of the country.



Fig 3.2 – Average Development Index Graph.

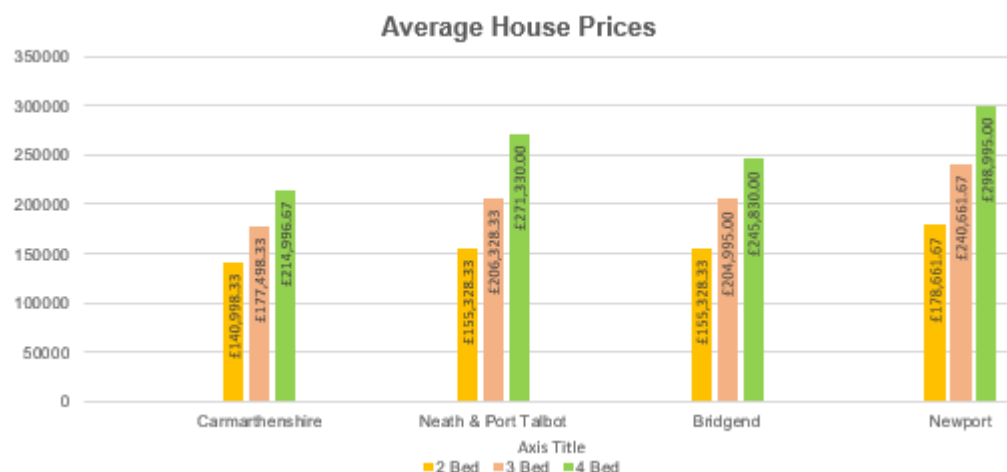


Fig 3.3 – Average Regional House Prices.

The average house prices per region are shown in Fig 3.3 above, we can see from the above the 2 Bed properties in Carmarthen, Neath & Port Talbot and Bridgend are below the National Average of **£160,232.00**. From analysing the statistics, we can see that the average of all the 3 Bed properties across all regions is **£207,370.83**, again this comes within the National Average for New Build properties **£211,384**.

(UK Government, 2019)

The findings also show that 4 Bed properties in the Neath area and Newport are the most favorable and the highest value which would lead to increased revenue if a developer was to decide to build larger dwellings in these areas.

Looking at the average of all house types across the regions as shown below

- Carmarthenshire - **£177,831**
- Neath & Port Talbot - **£210,995**
- Bridgend – **£202,051**
- Newport - **£239,439**

The average across all regions comes in above the National average and somewhat near the new build average for the Neath and Bridgend areas. I believe that Carmarthenshire has risen above the National Average due to the large number of developments taking place in the Llanelli area which has good transport links to Swansea as well as easy access to the M4 for commuters to cities and towns further afield. I would predict that the further West new build prices would drop to near or

below the average figure which could result in an uncertain sales market in these areas.

5.0 Limiting Factors

There are a number of limiting factors that have ability to influence the research and/or profitability of a development.

Predominantly the information made available by developers varies between different developers in different regions. The difficulty I found whilst undertaking my research was the variation in house types in different regions this has a positive and negative impact on the research. Positive because it shows that where developers may only be constructing 3-5-bedroom houses in the Newport region this indicates that this is the situation of the market in this area but negatively makes having a consistent level of research more difficult.

Another factor that subconsciously affects the research is the quality differences between the housing developers where some may be of a higher standard than others then this would affect the price of new builds in certain areas.

Finally factors that can affect the market are things such as transport links, employability and also salaries in these areas as explained in my research areas such as Newport have great transport links to major cities which will increase the demand for housing unlike Carmarthenshire where there are smaller more self employed people which would reduce the need for mass developments.

5.1 Conclusion

In Conclusion, South Wales currently has a very stable and growing housing market. Local Development Plans are looking to expand their local regions quite excessively over the next few years which creates a gateway for investors and developers alike. My proposal would be to develop in the Neath Port Talbot, Bridgend or Newport due to the growth that they are expecting. Personally, I would advise not to develop further West than Swansea due to the uncertainty in the market in the area as well as this the difficulty on getting tradesmen in West Wales greatly increases build cost and lowers profit.

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