Condition & Use Survey of Listed Buildings in Wales

2013 Update

An overview of the risk, condition and occupancy profiles of the Listed Buildings of Wales at the end of the 2013 survey cycle.

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thp buildings at risk

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Introduction

Regular Buildings at Risk surveys have been carried out across Wales for more than fifteen years. These surveys give an invaluable view of the changing condition, use and risk status of the stock of listed buildings of the country.

In general, each local authority area is resurveyed every five years. For some areas three complete inspection programmes have now been completed and from the data collected it is possible to quantify a number of key indicators and to identify clear trends.

In addition to the basic condition and occupancy profile for each building, information is also collected on the condition and predominant materials of all main building elements. The elemental condition data allows problem areas to be identified and the likely rate of change to be predicted, and the material type data gives a way to measure the proportion of non-traditional building materials within the listed building stock, together with their geographic and building type distribution.

The regular reassessment of the buildings means that there is a continuous updating of the data sample for the country as a whole. However, due to the way in which the reassessments have been programmed, the estimates for the changes over time for some areas are a little more current than for others. That said, during the last year a significant proportion of reassessments have been carried out[1]. This gives change data which is representative for the country as a whole for most building types and for most regions.

2013 Key Statistics – Listed Buildings

Buildings at Risk – 8.92%

Vulnerable Buildings – 13.81%

Not at Risk Buildings – **77.27%**

Full Occupancy – 66.72%

Percentage of Listed Buildings in a stable or improving condition[2] **– 75.1%**

At least **5.6%** of buildings have had some elements replaced with non-traditional materials

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1 *During 2013 surveys were carried out for the following authority areas: Carmarthenshire, Ceredigion, Isle of Anglesey, Newport, Snowdonia NP, Swansea & Wrexham. The work on the Isle of Anglesey survey was completed early in 2014. In addition a significant part of the resurvey of Gwynedd had also been completed at the time of preparation of this report and this new data has been included in the analysis.*

2 *New data has allowed a slightly improved assessment of this indicator over that used in previous years.*

Overview

By applying the percentage values to the full stock of listed buildings *(based on the number of individual list entries)* in Wales, the following approximation as to the number in each group can be made:

2013 Risk Profile (Number of List Entries)[1]		
Risk Assessment	**2011**	**2013**
At Risk	2760	2673
Vulnerable	4582	4140
Not at Risk	22587	23158

Trend Arrows ↗

A red arrow shows an undesirable trend and a green arrow shows a desirable trend. A black arrow shows the numerical trend for cases where a rise or fall is not important. The direction of the arrow denotes an increase or decrease in the value.

Analysis of Risk Status of Listed Buildings (2011 versus 2013)

List Grade	At Risk (%)			Vulnerable (%)			Not at Risk (%)		
	2011	2013	Trend	2011	2013	Trend	2011	2013	Trend
I	5.27	4.44	↘	13.71	11.11	↘	81.01	84.44	↗
II*	8.21	7.56	↘	14.57	12.87	↘	77.22	79.57	↗
II	9.37	9.10	↘	15.39	13.93	↘	75.23	76.96	↗
All Grades	**9.22**	**8.92**	↘	**15.31**	**13.81**	↘	**75.47**	**77.27**	↗

Analysis of Condition Profile of Listed Buildings (2011 versus 2013)

List Grade	Very Bad (%)			Poor (%)			Fair (%)			Good (%)		
	2011	2013	Trend	2011	2013	Trend	2011	2013	Trend	2011	2013	Trend
I	0.84	0.81	↘	4.64	3.84	↘	27.85	24.24	↘	66.67	71.11	↗
II*	1.55	1.50	↘	7.96	7.05	↘	38.96	37.01	↘	51.53	54.44	↗
II	1.77	1.86	↗	9.15	8.60	↘	38.93	36.96	↘	50.15	52.59	↗
All Grades	**1.73**	**1.81**	↗	**8.99**	**8.41**	↘	**38.75**	**36.75**	↘	**50.53**	**53.02**	↗

Analysis of Occupancy Profile of Listed Buildings (2011 versus 2013)

List Grade	Vacant (%)			Partly Occupied (%)			Fully Occupied (%)			Structure (%)		
	2011	2013	Trend	2011	2013	Trend	2011	2013	Trend	2011	2013	Trend
I	2.74	2.02	↘	4.85	4.44	↘	61.60	63.03	↗	30.80	30.51	↘
II*	5.30	5.73	↗	8.50	7.47	↘	69.75	70.93	↘	16.45	15.88	↗
II	4.70	5.08	↗	8.42	7.83	↘	65.92	66.46	↗	20.96	20.63	↗
All Grades	**4.71**	**5.08**	↗	**8.36**	**7.75**	↘	**66.12**	**66.72**	↗	**20.81**	**20.46**	↗

1 Differences in total number of listed buildings in each year reflect changes in number of buildings on list. Differences in apparent percentages reflects the fact that the tables relate to individual buildings rather than list entries – some entries are made up of multiple buildings.

Risk status

There has been a continuing fall in the percentage of buildings at risk between 2011 and 2013. Recent survey works would tend to suggest that the rate of risk reduction is starting to slow. The surveys carried out during 2013 include areas for which no previous compatible survey was available, and one for which the previous survey was carried out over ten years ago. It follows from this that it is a little difficult to fully assess this slowdown. Further data will be gathered during the current year, which will assist with this.

There has been a fall in the percentage of buildings of all grades which are at risk. Changes in the smaller grade I and grade II* building groups may be masked by the effect of the new areas added to the data set. It appears that the importance of buildings listed at grade II* may not be being matched by action. Additionally, the types of buildings that are listed at this grade often present significant challenges for recovery once they have fallen into disrepair or have become unoccupied. Early action can therefore be far more cost-effective.

There has been a significant reduction in the percentage of buildings which are in a vulnerable state. Whilst it must be appreciated that it does not follow that buildings always move between the 'At Risk' and 'Not at Risk' categories via this group, there is evidence to suggest that there has been some improvement to buildings in this group. Part of the reduction is also related to a slight change in the assessments applied to bridges to take account of new data which tends to support a number being moved from the 'vulnerable' to the 'not at risk' classifications.

Whilst the overall movement in levels of risk and vulnerability is positive, this trend is not repeated in all building types and in all areas. More details on this variation are set out in later sections.

Condition Profile

The overall building condition profile again shows a generally positive trend. There is a slight rise in the proportion of buildings considered to be in a 'very bad' condition. Again, in part, this reflects the addition of new areas to the dataset, but there does seem to be a slight worsening in condition of some of the more problematic buildings in the stock. This may be occurring as the number of more easily recovered buildings in the stock reduces over time.

Almost 90% of all buildings are in a 'good' or 'fair' condition. Despite the changes in the sample this number appears to be broadly stable.

Occupancy Profile

The occupancy profile changes give some cause for concern. These show that there has been an overall increase in the percentage of buildings which are vacant. There is also a reduction in the percentage which is partly occupied. This may suggest that there has been a total cessation of use in some buildings which did see at least some use in the past.

Overall, this distribution suggests a complex picture, with wide variations in the use profiles of different building types and in different areas. New buildings have been added to the sample since the previous review and this may have a minor effect on the overall occupancy profile statistics. It does not, however, change the overall situation.

KEY INFORMATION

The proportion of **Buildings at Risk** has fallen between 2011 and 2013 from 9.22% to **8.92%**.

The proportion of buildings in a **'good'** condition has increased between 2011 and 2013 from 50.53**%** to **53.02%.**

The proportion of vacant buildings has increased slightly between 2011 and 2013, but the proportion of buildings which are fully occupied has also increased slightly. New additions to the sample may have affected this. Vacancy levels in listed public houses are increasing in some areas and use of telephone call boxes is, in general, very low.

Grade II* buildings need to receive more attention than at the present time.

The rate of reduction in risk and vulnerability appears to have slowed in recent times.

Defects & Rate of Change

Changes over time are assessed in two ways: Firstly, the actual change in the various profiles can be calculated by analysis of the results for each of the comparable periodic surveys. Secondly, by looking at the profiles of defects and levels of use in each building, an assessment as to the potential future rate of change can be made. The two methods of assessment can often give apparently differing outputs, but it must be kept in mind that, in the first case, the actual change is being measured and, in the second, the likelihood of future change is being predicted.

Buildings which are at risk or which are in a vulnerable state can often give few clues to the full extent of their fragility. Generally, a building does not collapse or decay rapidly without the imposition of some external factor such as extreme weather, impact damage or a localised item failure. The way in which the HAA[1] analysis part of the Buildings at Risk survey is assessed seeks to point out the relative level of fragility of buildings and, hence, to give an estimate of the likely potential rate of decay when the building is subject to external detrimental factors.

Potential Rate of Change ***(from HAA Assessment)***

Rate of Change Statement	2011	2013	% Change
No significant decline	43.93	46.01	**4.73**
Slow rate of decline	12.65	11.62	**-8.16**
Very slow rate of decline	13.02	12.85	**-1.28**
Little or no decline	12.51	12.79	**2.27**
Short-term action reqd.	8.48	7.73	**-8.81**
Medium-term action reqd.	3.69	3.32	**-10.03**
Rapid decline likely	3.05	2.91	**-4.47**
Complete loss possible	1.37	1.50	**9.71**
Decline rate may increase	1.30	1.26	**-3.44**

Defect Category Assessment ***(from HAA Assessment)***

Defect Category	At Risk		Vulnerable		Not at Risk	
	2011	2013	2011	2013	2011	2013
No significant work required	0.00	0.00	1.39	0.88	57.92	59.38
Reduced maintenance levels	0.85	0.96	12.96	13.20	14.53	14.16
Maintenance backlog building up	3.70	3.52	34.43	34.44	9.32	8.47
Secondary item maintenance building up	0.46	0.44	11.10	10.55	14.26	14.62
Serious lack of maintenance	3.78	3.89	11.28	12.01	2.55	2.14
Major repairs required to many items	19.13	18.16	9.77	10.12	0.16	0.19
Ongoing general decline	8.25	7.41	10.63	10.74	1.11	0.89
Very poor general condition	19.59	19.27	0.09	0.07	0.00	0.00
Full refurbishment required	6.25	6.15	5.76	5.38	0.15	0.13
Structurally unsound	14.81	16.83	0.00	0.00	0.00	0.00
Some critical items require replacement	10.76	10.90	2.02	2.06	0.00	0.00
Many items require replacement	12.42	12.45	0.56	0.55	0.00	0.00

The data shows a somewhat mixed picture, with changes in a number of the divisions. As with other analysis, this may in part relate to the addition of data from new areas. There has been a reduction in the percentage of buildings needing action in the short and medium term. In general, this may relate to buildings which have seen a full refurbishment or which may have undergone limited urgent works to stabilise their condition. There has been a slight lifting in the 'complete loss' category, which suggests that there are still a number of buildings for which urgent action is required. Additionally, the percentage of buildings needing no significant work has increased, but it can be seen that some level of action is still required to around half of all listed buildings. This work in many cases represents normal routine maintenance.

To give further information on the rate of change the 'stable or improving' KPI can be referred to. This indicator is based on an assessment of comparable cyclic surveys. Whilst there are still some areas which do not have at least two compatible surveys on which to base the calculation, an estimate for the KPI has been made for all of Wales and for each of the 'Wales Spatial Plan Areas'. The current KPI for all Wales has been assessed as being equal to 75.05. This means that 75.1% of the listed buildings are in a stable or improved state. Data for the 'Spatial Plan Areas' is given in a later section.

KEY INFORMATION

The rate of improvement in building condition appears to be slowing down a little. Occupancy of some commercial building groups is falling.

Some **Vulnerable buildings are tending to become more fragile.** Early action is required.

KPI:	Grade I	87.91
	Grade II*	76.91
	Grade II	74.71

1The HAA (Historic Asset Assessment) analysis uses elemental condition and occupancy data to give a score which highlights critical factors and defect patterns in buildings and, as such, is a good way to show the urgency or type of action required.

Building Types

The headline figures for risk, condition and occupancy give a good overview of the condition across the country as a whole, but it is well known that there are very different levels of risk and occupancy in certain types of building.

Between 2011 and 2013 there has been no major shift in the patterns within each type. There have been small falls in levels of risk and vulnerability for most types. Levels of risk and vulnerability are high for groups such as 'Extractive', 'Process' and 'Agricultural'. This shows a continued problem with finding new uses for those buildings which have ceased to be useful for their original, often very specific, purpose.

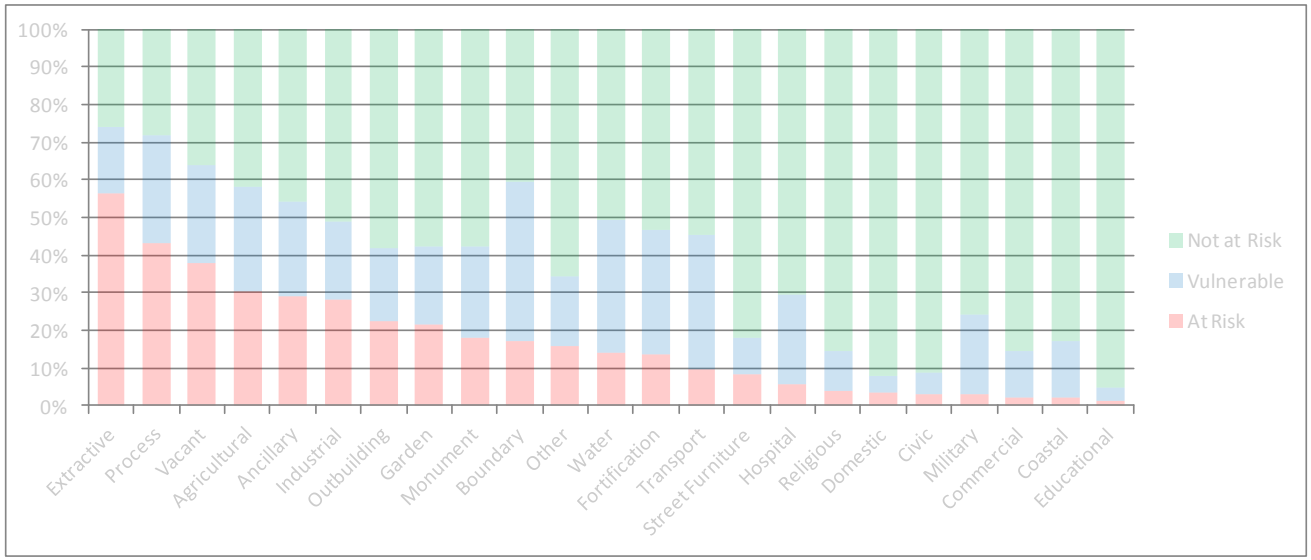
KEY INFORMATION

Agricultural, extractive/industrial and secondary buildings face the most significant issues.

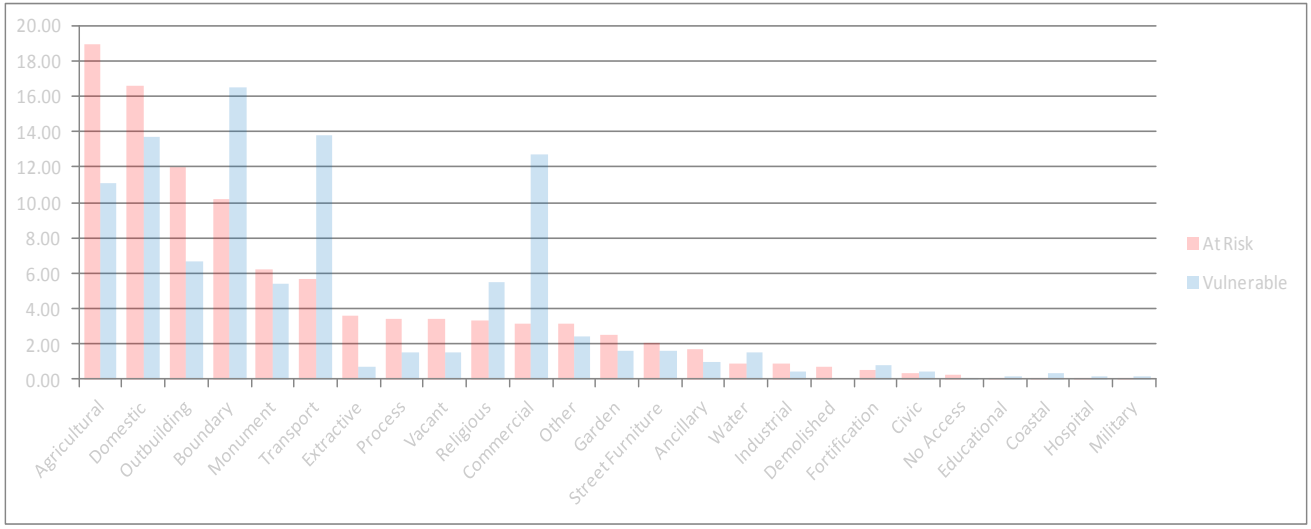
Most former extractive or industrial buildings are at risk or vulnerable. In many cases, dealing with these buildings will present significant problems.

Levels of maintenance of some chapels have increased as a result of congregation consolidation, but at the same time maintenance levels of others have fallen sharply. This group of buildings faces significant pressure in the short to medium term.

% distribution of 'at risk' and vulnerable buildings (2013)



Risk distribution by building type group (2013)



1 *The upper chart shows the risk distribution in each building type group. The lower chart shows how risk and vulnerability are distributed across the whole stock. 'Water' generally relates to wells & well houses.*

Levels of occupancy in the various type groups are also widely varying and, in many cases, this points to the underlying reason for the decline in condition. As noted above, the loss of a very specialised use can leave buildings with no useful purpose, but this is not the only way in which levels of use reduce. In many cases the reduction in use/occupancy is slow, with parts of a building being abandoned or used less until the associated lack of maintenance means that it is no longer feasible to make use of the building at all. Declining levels of use should be monitored very carefully, as early action may well prevent the total abandonment of the building.

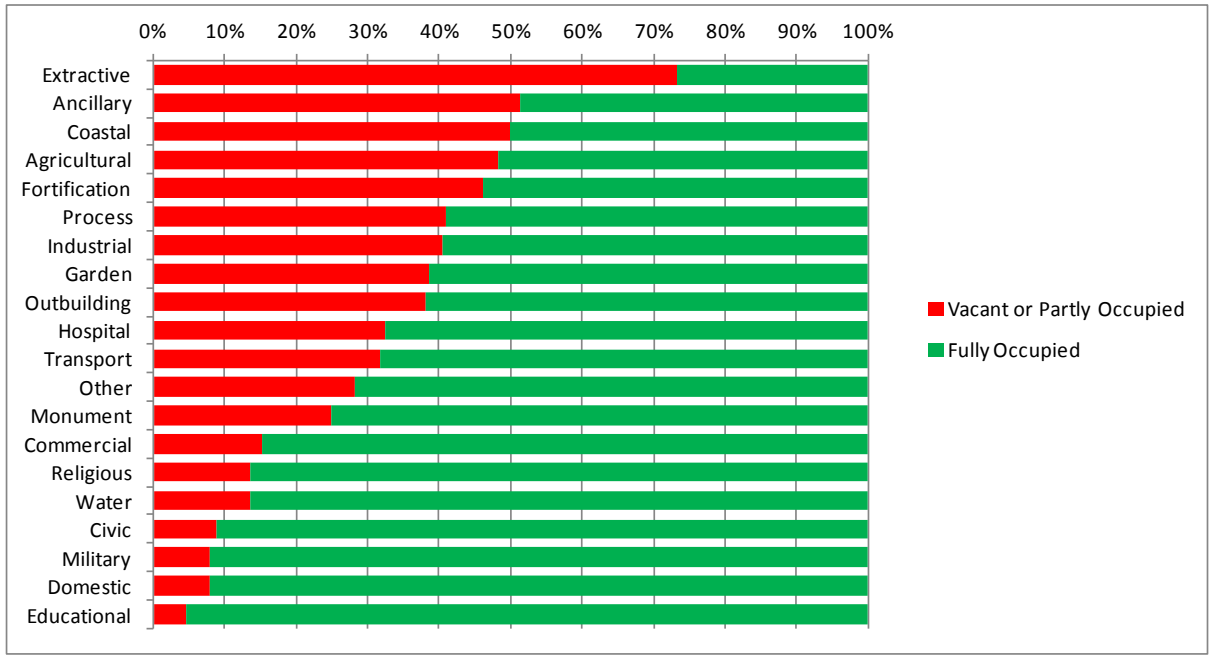
By looking at the like-for-like changes for building types in particular survey areas a number of clear trends can be seen. These can be summarised as follows:

There has been a fall in occupancy levels in commercial buildings in some areas. In some cases this relates to shop units or public houses becoming empty. Levels of vacancy and maintenance deficit in the upper floor areas of commercial buildings appear to be increasing in some areas. This backlog of work may make the refurbishment of such buildings for a commercial purpose difficult to justify on a purely economic basis. Over time the increased fragility of such buildings could become a significant problem.

There has been a reduction in regular maintenance to minor structures such as telephone kiosks, a group which in most cases now sees very little use, and milestones.

While there has been little overall change in the risk profile of agricultural buildings in some parts of the country, there has been an increase in the number moving from being vulnerable to at risk.

% distribution of occupancy for main building type groups (2013)



Many of the buildings which have been at risk for a long period represent ones which are of secondary use or which are ancillary to another, more important building.

Commercial redevelopment, refurbishment of houses or conversion of agricultural buildings to domestic use has been a significant driver for building recovery during the last five to ten years.

Some buildings which were at risk are now considered to be vulnerable. In these cases localised maintenance or partial reuse may be reasonable.

The condition and use patterns of chapels is unusual, as in some cases significant improvements have been made to buildings as part of congregation consolidation, while as the same time other chapels have fallen out of use.

A number of chapels have been lost to fire in recent years.

Former quarrying and mining buildings (extractive) present a major problem. The location and scale of such buildings often makes them very difficult to reuse and in some areas they make up a significant proportion of the buildings at risk. At the current time, due to the investment required in many of these sites, it is difficult to identify a positive way forward.

Regional & Settlement Type Overview

Wales is divided up into six spatial plan areas.

The areas have fuzzy, or overlapping, boundaries, but they do provide a good basis for regional analysis. Due to the overlapping boundaries some buildings will appear in more than one area.

At least some compatible time-separated surveys have been carried out in all spatial plan areas, but at the current time the data for Central Wales and Pembrokeshire Haven is limited. Resurveys of major parts of these plan areas will be carried out during 2014.

In addition to the spatial plan areas, all parts of Wales have been given a topographic designation which describes the settlement type and density. These designations also provide a very useful way to highlight types of areas with particular issues.

KEY INFORMATION

In general, levels of risk and vulnerability have fallen between 2011 and 2013. Further update work to be carried out during 2014 will allow better analysis of this.

1 Resurveys of major parts of these areas are to be carried out during 2014.

Analysis of Risk Status of Listed Buildings by Spatial Plan Area (2011 versus 2013)

Spatial plan area	At Risk (%)			Vulnerable (%)			Not at Risk (%)		
	2011	2013	Trend	2008	2013	Trend	2008	2013	Trend
North-West Wales	9.61	9.57	↘	17.83	14.48	↘	72.54	75.96	↗
North-East Wales	9.12	8.82	↘	15.23	14.05	↘	75.65	77.13	↗
Central Wales[1]	8.84	8.39	↘	15.39	13.35	↘	75.77	78.26	↗
Pembrokeshire Haven[1]	8.31	8.13	↘	15.55	14.66	↘	76.14	77.20	↗
Swansea Bay	10.77	11.16	↗	20.03	17.40	↘	69.20	71.44	↗
South-East Wales	9.11	9.02	↘	13.50	13.35	↘	77.39	77.63	↗

% Defect Category Assessment by Spatial Plan Area 2013 [2]

Defect Category	Spatial Plan Area (High values in bold)					
	NWW	NEW	CW	PH	SB	SEW[1]
No significant work required	44.82	45.30	45.23	**48.18**	44.21	**47.52**
Reduced maintenance levels	**13.11**	12.59	12.93	12.64	12.80	**13.33**
Maintenance backlog building up	12.10	11.67	11.33	12.61	**12.90**	11.30
Secondary item maintenance building up	12.42	**13.24**	12.96	12.67	11.95	12.75
Serious lack of maintenance	3.91	3.82	**4.12**	3.18	**3.97**	2.93
Major repairs required to many items	3.17	3.36	3.00	2.67	**4.39**	3.01
Ongoing general decline	2.81	3.03	**3.23**	2.42	2.22	2.31
Very poor general condition	1.55	2.03	1.67	1.24	**2.43**	1.57
Full refurbishment required	1.38	1.24	1.44	1.38	1.11	1.35
Structurally unsound	**1.93**	1.46	1.43	0.93	1.48	1.49
Some critical items require replacement	1.21	1.19	1.32	1.35	**1.53**	1.32
Many items require replacement	**1.58**	1.07	1.33	0.73	1.00	1.11

% Occupancy Assessment by Spatial Plan Area 2013

Occupancy Category *(excludes structures)*	Spatial Plan Area (High values in bold)					
	NWW	NEW	CW	PH	SB	SEW[1]
Vacant	8.47	7.04	5.52	5.47	**11.08**	6.26
Partly Occupied	10.38	8.50	9.87	10.75	9.80	8.95
Fully Occupied	81.15	84.46	84.60	83.78	79.13	84.79

In general, levels of risk and vulnerability have fallen in the spatial plan areas, the one area which varies from this being Swansea Bay.

The defect analysis would suggest that there is a wide range of issues at play in this area - from a number of buildings which have long-standing issues to a general reduction in maintenance levels.

Pembrokeshire Haven and Central Wales have the lowest levels of risk. As noted previously, update surveys are to be carried out during 2014. This will give a better understanding of the reason for the low level.

The KPI assessment *(for areas with up-to-date data)* shows broad consistency. The figure for the Swansea Bay area does give some cause for concern and further detailed analysis of this area is required. Initial analysis suggests that the Swansea City Council area KPI is significantly higher than that for the area as a whole. It follows from this that other parts of the area have a lower KPI.

There are very clear differences in the risk profiles for the topographic designations. Generally, it can be said that the more 'rural' in nature a building is, the higher the likelihood that it will be at risk or vulnerable. That said, there are clear issues developing in the most densely populated areas. This needs to be monitored in the future. Notwithstanding this, the assessment shows that rural buildings are under most pressure at the current time. This ties in with the distribution of building types in such areas and the change in use of many of the rural buildings.

It can also be seen that there are significant differences across the more urban groups. These differences give a good insight into the types of areas suffering from decline.

Analysis of Risk Status by Topography Designation 2013[1]

Topography Designation	Risk Profile for Topography Type			% Difference from All Wales Value		
	At Risk	Vulnerable	Not at Risk	At Risk	Vulnerable	Not at Risk
Urban > 10000 population – Less Sparse	7.77	13.80	78.43	-12.88	-0.05	1.50
Urban > 10000 population – Sparse	4.39	10.32	85.29	-50.78	-25.28	10.38
Town & Fringe – Less Sparse	6.36	12.38	81.25	-28.68	-10.33	5.16
Town & Fringe – Sparse	4.35	8.34	87.31	-51.28	-39.60	13.00
Village, Hamlet & Isolated – Less Sparse	12.55	16.51	70.95	40.64	19.54	-8.18
Village, Hamlet & Isolated – Sparse	11.34	15.80	72.86	27.07	14.41	-5.70

Distribution of Risk Status by Topography Designation 2013[2]

Topography Designation	Risk Distribution for Topography Type			Risk Distribution for Topo. Group		
	At Risk	Vulnerable	Not at Risk	At Risk	Vulnerable	Not at Risk
Urban > 10000 population – Less Sparse	17.70	20.31	20.62	19.19	22.55	23.95
Urban > 10000 population – Sparse	1.48	2.25	3.32			
Town & Fringe – Less Sparse	10.41	13.08	15.34	17.30	21.62	31.32
Town & Fringe – Sparse	6.89	8.54	15.98			
Village, Hamlet & Isolated – Less Sparse	26.85	22.82	17.53	63.52	55.82	44.74
Village, Hamlet & Isolated – Sparse	36.67	33.01	27.21			

KEY INFORMATION

Rural buildings are **more likely to be at risk** or **vulnerable** than ones in more urban locations.

There are significant variations within each of the spatial plan areas.

Levels of building vacancy in the Swansea Bay area are relatively high.

KPI Assessment

Spatial Plan Area	KPI
North-West Wales	73.58
North-East Wales	75.21
Central Wales[3]	75.58
Pembrokeshire Haven[4]	65.15
Swansea Bay	70.63
South East Wales	75.33

1 *This table shows the % risk distribution for each topographic group.*

2 *This table shows how the overall number of buildings in each risk category is distributed by topographic groups – hence it is an indication of the magnitude of the problem in each group.*

3 A significant part of this area is due to be resurveyed in 2014.

4 Very little of this area has compatible time-change survey data at the present time. This figure is therefore based on a very small sample and should not be treated with caution. A significant part of the area will be resurveyed during 2014.

Without action all buildings will, over time, decline. The rate of the decline will reflect the type of building, its location and its use. By comparing HAA score values for buildings across at least two compatible survey cycles it is possible to produce a decline rate score profile. This score (a higher number denotes a higher rate of decline) is useful in assisting the targeting of action. Of course, by assessing previous surveys the score measures historic change. Whilst this is a good indicator for the likely rate of change over a large group, it should be treated with caution for smaller building groups.

The table gives decline rate scores for building type groups for the country as a whole and according to their spatial plan areas. For a guide as to the types of buildings which are most likely to see significant ongoing decline the 'Wales' column should be referred to. From this it can be seen that the building types with the most rapid historic decline are consistent with the types already highlighted in the risk and defect analyses.

Rate of Change Score for Spatial Plan Areas and Building Use Type

Building Use Group	Rate of Change Score (higher score indicates higher potential decline rate without action)						
	Wales	Spatial Plan Areas (areas with high relative decline rates are highlighted)					
		North-West Wales	North-East Wales	Central Wales[1]	P'brokeshire Haven[1]	Swansea Bay[2]	South-East Wales
Agricultural	**1.80**	1.89	1.94	1.75	1.57	1.83	1.80
Ancillary	**1.59**	1.33	0.62	1.58	0.00	0.25	**2.89**
Boundary	0.98	1.13	0.83	1.21	**2.19**	**1.55**	0.78
Civic	0.67	0.47	0.47	0.56	**1.14**	0.55	**0.96**
Coastal	0.82	0.90	**2.13**	0.00	0.00	0.00	1.52
Commercial	1.03	1.15	1.00	0.8	1.21	1.19	1.17
Domestic	0.68	0.82	0.58	0.71	**1.06**	0.63	0.61
Educational	0.50	0.62	0.62	0.15	0.00	0.80	0.46
Extractive	**1.59**	0.81	**2.05**	0.58	0.00	**2.35**	**2.27**
Fortification	0.81	0.78	0.02	0.51	0.26	**1.79**	0.73
Garden	1.08	1.37	0.50	0.54	0.00	**2.31**	0.95
Hospital	**1.42**	0.36	0.95	0.28	0.57	0.19	**2.58**
Industrial	**1.83**	0.53	3.19	0.86	0.92	**2.91**	0.88
Monument	0.61	**0.96**	0.53	0.69	0.4	0.20	0.66
Other	**1.32**	0.89	0.65	1.27	**2.93**	1.23	1.78
Outbuilding	**1.32**	1.57	1.07	1.39	1.58	1.65	1.41
Process	1.25	0.43	1.47	0.66	1.31	1.56	**3.00**
Religious	1.08	1.13	0.63	1.02	1.13	**1.47**	**1.41**
Street Furniture	0.83	0.86	1.36	0.95	0.00	0.00	0.39
Transport	1.01	0.48	0.60	0.85	1.26	1.21	1.52
Vacant	1.19	0.33	1.34	1.26	0.96	**2.24**	1.57
Water	0.68	**2.27**	0.29	0.80	0.10	1.52	0.09
All Types	1.05	1.16	1.02	1.21	0.19	0.16	0.73

1 Significant parts of these areas are to be resurveyed during 2014. Ahead of this, the data (particularly for Pembrokeshire Haven) should be treated with caution.

2 The parts of this plan area with the buildings most likely to see a decline does no yet have pairs of fully compatible surveys. This being the case, the figures should be treated with caution.

Non-Traditional Materials

Over recent years there has been a developing view that the use of non-traditional materials *(e.g. UPVC windows and doors, artificial slate roof tiles)* in listed buildings may be increasing.

To give a way of assessing the magnitude of any problem which may exist, a new indicator - the 'Non-Traditional Material Index' (NTMI) - has been developed. This uses information gained during the five-yearly Buildings at Risk Surveys to give a two-part indicator for, firstly the proportion *(generally stated in % terms)* of buildings in any defined group which have non-traditional materials and, secondly, a score to show the average extent of such materials in a group *(e.g. buildings with both UPVC windows and doors would have a higher extent score than those with UPVC windows only).*

At the current time, the NTMI data is based on the most recent survey carried out in each area. For some areas this means the data is a number of years old. However, as described previously, the ongoing survey programme means that each area is updated on average every five years. These updates will, over time, allow a rate of change in the NTMI score to be calculated, thus allowing action to be targeted in the most relevant areas.

The NTMI distribution table shows how the incidence of non-traditional materials varies between each of the spatial plan areas. From this it can be seen that there are significant differences in the overall score, but less difference in the degree score. This suggests that, in general, it is a single element which has been changed such as the roof covering or windows frames. The Swansea Bay and South-East Wales areas have by far the highest NTMI scores and it should be noted that within these plan areas there are sub-areas which have scores as high as 30. The high score areas tend to be located in the South Wales valleys and former industrial areas.

Analysis of the data covering national park areas shows that these areas have a low NTMI score (approximately 3.84).

In the North Wales areas those buildings in towns close to the coast appear to have a higher score, perhaps reflecting the need to replace elements more often and the pressure to use more modern materials.

Non-Traditional Material Analysis (NTMI) 2013

Spatial Plan Area	NTMI Assessment Score[1]	NTMI Area / NTMI Wales Score
North-West Wales	5.432	0.96
North-East Wales	4.560	0.81
Central Wales	4.360	0.77
Pembrokeshire Haven	4.330	0.77
Swansea Bay	9.410	1.67
South-East Wales	8.630	1.53
All Wales	**5.640**	
In National Park	**3.840**	
Outside National Park	**5.990**	

1 - % of buildings in group with some non-traditional materials
2 – Measure of average proportion of non-traditional materials in any building

Non-Traditional Material Analysis by Building Type 2013

Spatial Plan Area	NTMI Score[1]				
	Domestic	Commercial	Civic	Religious	Educational
North-West Wales	9.58	**8.32**	0.00	1.94	9.08
North-East Wales	7.12	**8.36**	0.00	1.25	9.08
Central Wales	7.86	3.13	0.99	2.75	**11.76**
Pembrokeshire Haven	7.61	4.58	3.13	3.21	8.33
Swansea Bay	**19.52**	**10.20**	6.38	**13.39**	**13.33**
South-East Wales	**15.96**	5.88	**9.00**	**7.36**	7.50
All Wales	**9.79**	**5.50**	**4.43**	**4.54**	**9.30**

NTMI scores vary significantly between building types. The table shows the types with the highest NTMI scores for all Wales and for each spatial plan area. There are relatively high levels of non-traditional materials in domestic buildings in Swansea Bay and South-East Wales; also of interest is the high figure for religious buildings in the Swansea Bay area. This predominantly relates to replacement windows which have been fitted to a number of chapels and church halls. The high figure for the educational group should be treated with caution, as this is a relatively small group which may be dominated by one or two buildings having had replacement windows and/or doors.

There is a clear difference in the data for commercial buildings within Pembrokeshire Haven and Central Wales when compared to other areas. This may, in part, reflect the higher proportion of buildings in these areas which are rural or which are in a national park. From the data it would also appear that that once a number of buildings in an area have seen non-traditional material replacements, it becomes increasingly difficult to prevent further such replacements in the same areas.

KEY INFORMATION

In some areas a significant number of listed buildings have had elements replaced using non-traditional materials.

South Wales areas have a level of such material use which exceeds the national average.

Conservation Areas[1]

There are over four hundred conservation areas across Wales. These vary considerably in size, location and building type profile. By allocating all of the listed buildings into their respective conservation areas and by looking at the data gathered during Buildings at Risk surveys, it is possible to make a number of assessments as to the current state of the conservation areas when compared to all Wales, buildings outside conservation areas and by reference to spatial plan areas.

Of course, many of the buildings in conservation areas are not listed and the proportion of those which are varies from area to area. This means that any assessments made for the areas by reference to the listed buildings within them will give varying sample proportions. That said, at present no data is available for all buildings in such areas and the use of listed building profiles as a proxy is, in general, reasonable. Over time it would be beneficial to expand the Buildings at Risk Survey to all key buildings within conservation areas.

The risk profile shows that buildings in conservation areas are significantly less likely to be at risk or in a vulnerable condition. The differences are most marked in the grade II listed buildings which are the ones which, in many ways, best reflect the general state of the overall conservation area.

Levels of occupancy are also higher for those buildings in conservation areas. This would, to an extent, be expected due to the nature of settlements within such areas, but notwithstanding this, it would seem that buildings in conservation areas are more likely to see full or at least part use than those in similar but not designated areas.

The partial occupancy figure for the grade II* listed buildings is higher than would be expected.

Analysis of Risk Distribution of Listed Buildings 2013

	In Conservation Area (%)			Not in Conservation Area (%)		
Grade	**At Risk (AR)**	**Vulnerable (V)**	**Not at Risk (NAR)**	**At Risk (AR)**	**Vulnerable (V)**	**Not at Risk (NAR)**
I	3.77	11.30	84.94	5.08	10.94	83.98
II*	4.45	10.49	85.06	9.07	14.03	76.90
II	3.76	9.85	86.39	12.74	16.71	70.55
All Wales	**3.80**	**9.92**	**86.28**	**12.34**	**16.42**	**71.24**

Analysis of Occupancy Distribution of Listed Buildings 2013

	In Conservation Area (%)			Not in Conservation Area (%)		
Grade	**Vacant**	**Part Occ**	**Full Occ**	**Vacant**	**Part Occ**	**Full Occ**
I	1.28	4.49	94.23	4.26	7.98	87.77
II*	3.38	7.94	88.68	8.51	9.34	82.15
II	3.31	6.43	90.26	8.79	12.51	78.70
All Wales	**3.29**	**6.49**	**90.22**	**8.70**	**12.17**	**79.12**

% Defect Category Assessment for Risk Categories 2013

Defect Category	In Conservation Area (%)				Not in Conservation Area (%)			
	All	**AR**	**V**	**NAR**	**All**	**AR**	**V**	**NAR**
No significant work required	51.48	0.00	0.91	59.55	42.35	0.09	0.87	59.24
Reduced maintenance levels	15.46	2.39	20.53	15.46	11.11	0.67	10.24	13.12
Maintenance backlog building up	10.30	4.99	40.32	7.08	12.50	3.22	32.07	9.60
Secondary item maintenance building up	15.25	1.30	11.55	16.29	11.15	0.27	10.14	13.27
Serious lack of maintenance	2.37	6.51	11.22	1.18	4.52	3.35	12.32	2.93
Major repairs required to many items	1.34	20.39	5.40	0.04	4.38	17.69	12.02	0.32
Ongoing general decline	1.20	6.94	6.32	0.35	3.93	7.50	12.53	1.33
Very poor general condition	0.55	14.53	0.00	0.00	2.51	20.23	0.10	0.00
Full refurbishment required	0.70	8.89	3.16	0.06	1.86	5.58	6.28	0.19
Structurally unsound	0.35	9.33	0.00	0.00	2.27	18.36	0.00	0.00
Some critical items require replacement	0.54	12.80	0.58	0.00	1.73	10.50	2.65	0.00
Many items require replacement	0.45	11.93	0.00	0.00	1.68	12.55	0.77	0.00

This once again shows that this grade of listing appears not to receive the attention its designation would imply.

The defect distribution pattern shows broad similarities for buildings both within and outside conservation areas. For the buildings at risk within conservation areas the long-term building up of defects appears to be the main problem. This may suggest that there may be a hidden, but growing, problem developing in some areas, for which early intervention would be of benefit. Again, for the vulnerable buildings within conservation areas lack of maintenance appears to be the main issue.

[1] *The conservation area assessment is based on boundary areas from a number of areas; it may exclude any very recently designated areas or may not allow for boundary changes. Additional areas with no Building at Risk survey data have been excluded from the assessment.*