

Condition & Use Survey of Listed Buildings in Wales 2015 Update

*An overview of the risk, condition and occupancy
profiles of the Listed Buildings of Wales at the end of
the 2015 survey cycle.*

Introduction

Regular Buildings at Risk surveys have been carried out across Wales since the mid-1990s. 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. 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. This cycle pattern, which has evolved over time, lead to the data gathered during 2014 being a little unrepresentative for all of Wales, hence the completion of this report was delayed to allow it to take into account surveys carried out during 2015.

1 During 2014 surveys were carried out in Blaenau Gwent, Pembrokeshire, Powys & Torfaen and during 2015 surveys were carried out in Brecon Beacons NP, Bridgend, Caerphilly, Cardiff & Monmouthshire.

2 This measure uses data collected over varying time periods (related to the resurvey cycles). It has been cross-checked in a number of ways and is considered accurate.

2015 Key Statistics – Listed Buildings

Buildings at Risk – 8.54%

Vulnerable Buildings – 12.20%

Not at Risk Buildings – 79.26%

Full Occupancy – 68.09%

Percentage of Listed Buildings in a stable or improving condition² – 73.85%

At least 6.68% of buildings have had some elements replaced with non-traditional materials

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 v 2015 Risk Profile (Number of List Entries) ¹		
Risk Assessment	2013	2015
At Risk	2673	2646
Vulnerable	4140	3655
Not at Risk	23158	23754

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.

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

Analysis of Risk Status of Listed Buildings (2013 versus 2015)									
List Grade	At Risk (%)			Vulnerable (%)			Not at Risk (%)		
	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend
I	4.44	4.64	↗	11.11	10.08	↘	84.44	85.28	↗
II*	7.56	11.61	↗	12.87	11.61	↘	79.57	81.05	↗
II	9.10	8.69	↘	13.93	12.28	↘	76.96	79.03	↗
All Grades	8.92	8.54	↘	13.81	12.20	↘	77.27	79.26	↗

Analysis of Condition Profile of Listed Buildings (2013 versus 2015)												
List Grade	Very Bad (%)			Poor (%)			Fair (%)			Good (%)		
	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend
I	0.81	1.01	↗	3.84	3.63	↘	24.24	23.59	↘	71.11	71.77	↗
II*	1.50	1.55	↗	7.05	6.72	↘	37.01	36.86	↘	54.44	54.87	↗
II	1.86	2.07	↗	8.60	7.73	↘	36.96	35.18	↘	52.99	55.02	↗
All Grades	1.81	2.02	↗	8.41	7.60	↘	36.75	35.11	↘	53.02	55.27	↗

Analysis of Occupancy Profile of Listed Buildings (2013 versus 2015)												
List Grade	Vacant (%)			Partly Occupied (%)			Fully Occupied (%)			Structure (%)		
	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend
I	2.02	2.42	↘	4.44	4.23	↘	63.03	62.90	↘	30.51	30.44	↘
II*	5.73	6.02	↗	7.47	7.01	↘	70.93	71.13	↗	15.88	15.84	↘
II	5.08	5.44	↗	7.83	6.77	↘	66.46	67.95	↗	20.63	19.84	↘
All Grades	5.08	5.43	↗	7.75	6.75	↘	66.72	68.09	↗	20.46	19.73	↘

Risk status

The pattern of the risk profile for the 2015 data is a little different from that for previous years. Overall, there has been a continuing reduction in the proportion of the buildings which are at risk or vulnerable. Clearly, the vast majority of buildings are listed at grade II and this group will therefore dominate any changes in the data. It can be seen, however, that there has been an increase in the proportion of both Grade I and Grade II* buildings which are at risk. In the case of the grade I buildings the change is very small, as is this group overall, and this figure does not give cause for concern. More important is the change in the risk levels in the grade II* buildings. In previous reports this group has been identified as being potentially under-protected and again, whilst a small group, the rise in the proportion at risk does warrant further analysis.

Condition Profile

Overall, the condition profile of the listed building stock has changed very little since the 2013 report. There has been an increase in the number of buildings in a 'very bad' condition, but this change is again small and reflects a deterioration in a number of problem buildings. The proportion of the buildings in a 'good' condition has improved for all grades. The changes in the condition and, indeed, the risk profile does suggest that whilst at risk buildings continue to be addressed (for example work carried out in the Swansea area over the last year or so has had a significant effect on reducing risk and vulnerability), there may be an underlying slipping of maintenance levels. This is dealt with further in a later section of the report.

Occupancy Profile

There has been a small increase in the levels of vacancy across the stock as a whole and for all grades other than grade I. The measure of occupancy used in the survey is relatively coarse, but the data shows a trend of a reduction of occupancy levels in some buildings. In some cases, previously partly occupied buildings are now completely vacant. When coupled with the overall increase in full occupancy across the stock as a whole, the data points to a split, with buildings in some areas seeing increased use whilst others, due to their location or type, are seeing a significant reduction in use. The increase, albeit small, in vacancy levels is an issue which should be addressed wherever possible.

KEY INFORMATION

The proportion of **Buildings at Risk** has fallen between 2013 and 2015 from 8.92% to **8.54%**.

The proportion of buildings in a **'good'** condition has increased between 2013 and 2015 from **53.02%** to **55.27%**.

The proportion of vacant buildings has increased slightly between 2013 and 2015, 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 some clusters of commercial buildings are increasing. Area-based projects to tackle this may be required.

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

The headline reduction in risk and vulnerability may be masking an underlying, but small, reduction in condition levels. This needs to be monitored carefully over the coming years as initial observations suggest that there may be a change in maintenance patterns, perhaps related to more challenging economic conditions. *(This change is not necessarily recorded by the risk assessment methodology, but is evident from the HAA and KPI analysis.)*

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 HAA¹ 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	2013	2015	% Change
No significant decline	46.01	48.19	4.73
Slow rate of decline	11.62	10.72	-7.78
Very slow rate of decline	12.85	12.44	-3.23
Little or no decline	12.79	13.31	4.08
Short-term action reqd.	7.73	6.77	-12.39
Medium-term action reqd.	3.32	2.91	-12.27
Rapid decline likely	2.91	2.95	1.29
Complete loss possible	1.50	1.58	5.49
Decline rate may increase	1.26	1.14	-9.87

Defect Category Assessment (from HAA Assessment)						
Defect Category	At Risk		Vulnerable		Not at Risk	
	2013	2015	2013	2015	2013	2015
No significant work required	0.00	0.07	0.88	0.76	59.38	60.67
Reduced maintenance levels	0.96	1.31	13.20	13.86	14.16	13.41
Maintenance backlog building up	3.52	3.59	34.44	35.64	8.47	7.65
Secondary item maintenance building up	0.44	0.52	10.55	8.94	14.62	15.36
Serious lack of maintenance	3.89	3.66	12.01	11.06	2.14	1.86
Major repairs required to many items	18.16	16.03	10.12	11.01	0.19	0.19
Ongoing general decline	7.41	6.76	10.74	10.83	0.89	0.74
Very poor general condition	19.27	20.52	0.07	0.08	0.00	0.00
Full refurbishment required	6.15	5.46	5.38	5.26	0.13	0.12
Structurally unsound	16.83	18.54	0.00	0.00	0.00	0.00
Some critical items require replacement	10.90	10.05	2.06	2.25	0.00	0.00
Many items require replacement	12.45	13.49	0.55	0.29	0.00	0.00

The data shows a somewhat mixed picture, with changes in a number of the divisions. There has again 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 very 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 Snowdonia National Park does not yet have 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 73.85 (< 2013). This means that 73.85% 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 KPI figure has fallen slightly between 2013 and 2015. This fall relates to a reduction in maintenance levels and overall spending on buildings.

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

KPI:	Grade I	81.72 (2013 : 87.91)
	Grade II*	75.13 (2013 : 76.91)
	Grade II	73.61 (2013 : 74.71)

¹ The 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 buildings.

Between 2013 and 2015 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

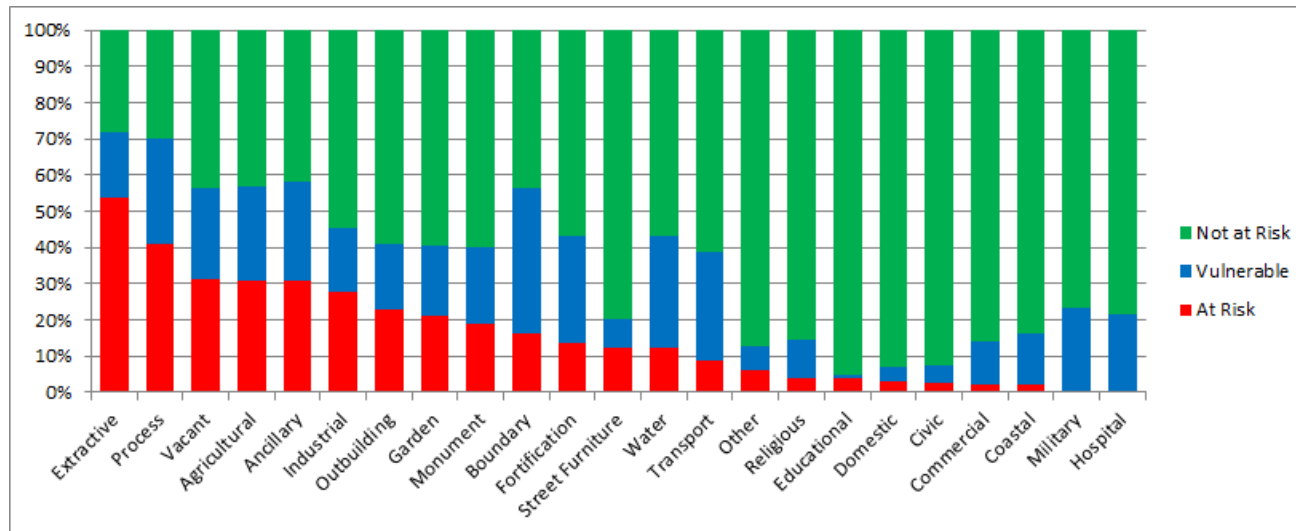
Agricultural, extractive/industrial and secondary buildings face the most significant issues.

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

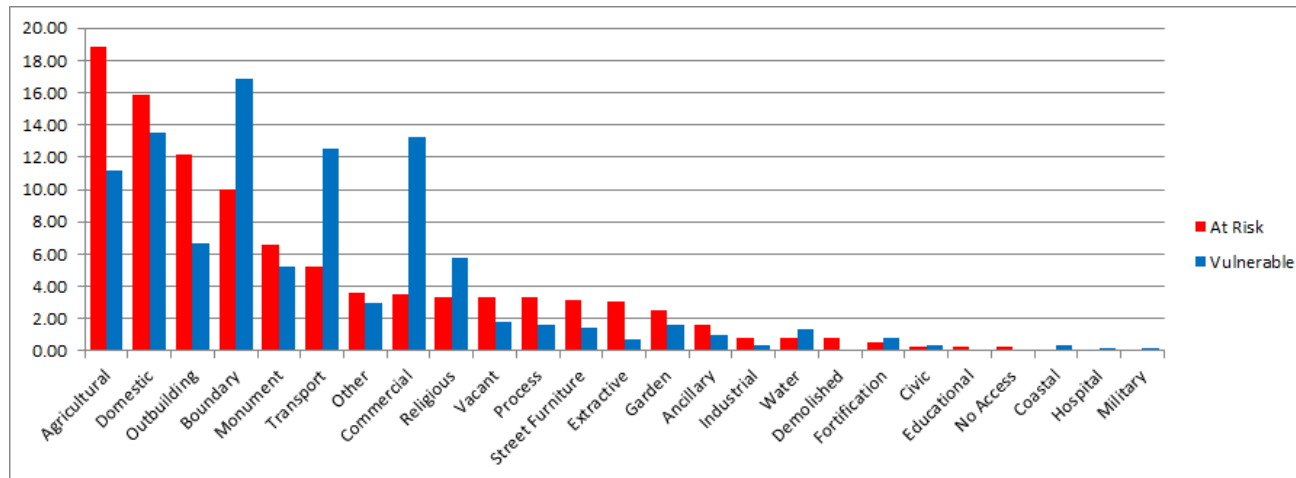
Levels of maintenance to commercial buildings in economically challenged areas has been cut back. This may lead to increased levels of risk in this group.

Boundary structures such as walls and gates are often neglected, leading to **high levels of vulnerability.**

% distribution of 'at risk' and vulnerable buildings (2015)



Risk distribution by building type group (2015)



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.

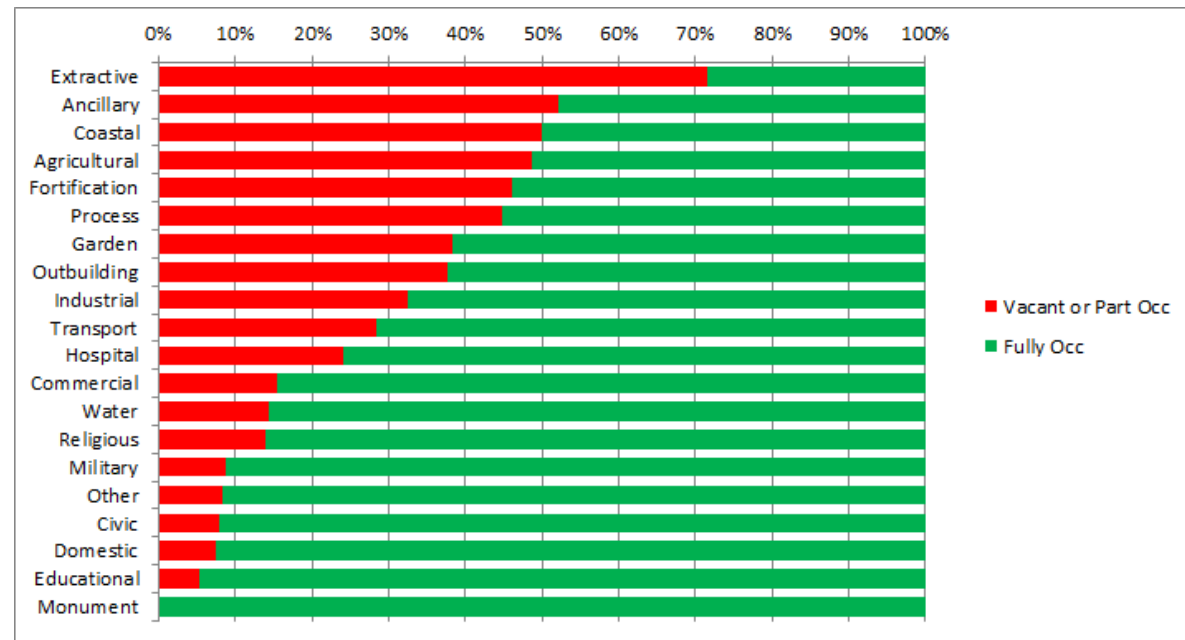
By looking at the like-for-like changes for building types in particular survey areas a number of clear trends can be seen. These can be summarised as follows:

Whilst overall between 2013 and 2015 levels of occupancy of commercial buildings have stayed similar across Wales, there are regional variations with some groups of commercial buildings seeing significant reductions in the level of their use. This may lead to clusters of vacant or partly occupied buildings being created. The recent financial pressures are having a clear negative effect in some trading areas.

Overall, there has been stabilisation of maintenance to minor structures such as telephone kiosks, a group which in most cases now sees very little use. There is evidence of local communities taking responsibility for these structures in some rural locations.

Whilst there has been little change in the risk profile of agricultural buildings, an increasing number of comments relating to the difficulties of using and maintaining such buildings in conjunction with modern farming methods have been noted.

% distribution of occupancy for main building type groups (2015)



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 in the past. The pace of this work appears to be slower at present.

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

Work has been carried out to repair defective parapets of a number of stone arch bridges. The size of these structures together with the use they see still means that they can be prone to impact damage.

The level of use of many of the chapels across Wales is still falling. Between 2013 and 2015 a number have closed.

Since 2013 further chapels have been lost to fire.

Former quarrying and mining buildings (extractive) present a major problem. The location and scale of such buildings often make 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. However, the way in which survey cycles are organised does mean that some data in this section has a variation in time base. Cross checks are made to ensure its overall validity where possible.

In addition to the spatial plan areas, all parts of Wales have been given a morphological 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

There are clear differences between the regions. In many cases this reflects the variation in the make-up of the building stock.

1 Few surveys have been carried out in these areas between 2013 and 2015. This data is due to be fully updated during the 2016 cycle.

Analysis of Risk Status of Listed Buildings by Spatial Plan Area (2013 versus 2015)									
Spatial plan area	At Risk (%)			Vulnerable (%)			Not at Risk (%)		
	2013	2015	Trend	2013	2015	Trend	2013	2015	Trend
North-West Wales ¹	9.57	9.21	↘	14.48	13.73	↘	75.96	77.05	↗
North-East Wales ¹	8.82	8.80	↘	14.05	14.05	→	77.13	77.15	↗
Central Wales	8.39	8.49	↗	13.35	11.90	↘	78.26	79.61	↗
Pembrokeshire Haven	8.13	8.16	↗	14.66	12.44	↘	77.20	79.40	↗
Swansea Bay	11.16	11.22	↗	17.40	16.15	↘	71.44	72.63	↗
South-East Wales	9.02	7.52	↘	13.35	10.84	↘	77.63	81.64	↗

% Defect Category Assessment by Spatial Plan Area 2015						
Defect Category	Spatial Plan Area (High values in bold)					
	NWW	NEW	CW	PH	SB	SEW ¹
No significant work required	45.01	45.32	45.79	49.89	45.05	54.61
Reduced maintenance levels	13.13	12.59	12.87	12.66	12.49	11.61
Maintenance backlog building up	11.68	11.68	10.70	10.83	12.55	9.64
Secondary item maintenance building up	13.12	13.23	14.06	13.70	12.28	12.11
Serious lack of maintenance	3.71	3.82	3.59	2.59	3.81	2.11
Major repairs required to many items	2.97	3.36	2.93	1.97	4.34	2.36
Ongoing general decline	2.77	3.03	2.85	2.17	2.28	1.77
Very poor general condition	1.53	2.03	1.78	1.72	2.28	1.45
Full refurbishment required	1.34	1.24	1.30	1.21	1.06	0.86
Structurally unsound	1.97	1.46	1.52	1.38	1.48	1.40
Some critical items require replacement	1.16	1.17	1.22	1.21	1.38	1.05
Many items require replacement	1.61	1.07	1.39	0.68	1.01	1.02

% Occupancy Assessment by Spatial Plan Area 2015						
Occupancy Category (excludes structures)	Spatial Plan Area (High values in bold)					
	NWW	NEW	CW	PH	SB	SEW ¹
Vacant	8.72	7.04	6.32	6.76	11.47	5.87
Partly Occupied	9.74	8.50	8.68	8.86	9.21	6.79
Fully Occupied	81.53	84.45	85.00	84.37	79.32	87.34

The overall risk profile across the plan areas is a little unusual in that whilst all areas have seen a reduction in the proportion of the buildings at risk, some have also seen an increase in the proportion at risk. The changes are, in general, very small and often relate to the movement of buildings from the vulnerable category to the at risk one. This tends to suggest that dealing with buildings at the lower ends of the vulnerable group may be a more cost-effective way of reducing the overall proportion at risk rather than waiting until problems have become greater. In addition, the fuzzy boundaries between the plan areas make like-for-like comparisons somewhat limited in value.

Pembrokeshire Haven and South-East Wales have the lowest levels of risk. The Swansea Bay area has the highest proportion of buildings at risk.

The KPI assessment (*for areas with up-to-date data*) shows a little more variation than has been seen in previous years. This measure is a very good early indicator of decline and it shows that there has been a clear reduction in general maintenance levels and some reductions in occupancy between 2013 and 2015. The reduction in maintenance has been clearly visible during building inspections. The figure for Central Wales is now the lowest, but it must be remembered that this area has a high proportion of the more problematical building types.

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 continuing to develop in the most densely populated areas. This needs to be

Analysis of Risk Status by Morphology Designation 2015 ¹						
Morphology Designation	Risk Profile for Morphology Type			% Difference from All Wales Value		
	At Risk	Vulnerable	Not at Risk	At Risk	Vulnerable	Not at Risk
Urban > 10000 population – Less Sparse	6.32	11.27	82.40	-26.00	-7.62	3.96
Urban > 10000 population – Sparse	4.71	9.09	86.20	-44.85	-25.49	8.76
Town & Fringe – Less Sparse	6.22	11.65	82.13	-27.17	-4.51	3.62
Town & Fringe – Sparse	6.96	6.96	89.02	-18.50	-42.95	12.31
Village, Hamlet & Isolated – Less Sparse	12.64	15.47	71.89	48.01	26.80	-9.30
Village, Hamlet & Isolated – Sparse	11.43	13.98	74.60	33.84	14.59	-5.88

Distribution of Risk Status by Topography Designation 2011 ²						
Morphology Designation	Risk Distribution for Morphology Type			Risk Distribution for Morph. Group		
	At Risk	Vulnerable	Not at Risk	At Risk	Vulnerable	Not at Risk
Urban > 10000 population – Less Sparse	16.97	21.16	23.81	18.57	23.33	26.97
Urban > 10000 population – Sparse	1.61	2.17	3.17			
Town & Fringe – Less Sparse	10.28	13.47	14.62	16.74	21.29	30.02
Town & Fringe – Sparse	6.46	7.82	15.40			
Village, Hamlet & Isolated – Less Sparse	27.35	23.43	16.76	64.69	55.39	43.01
Village, Hamlet & Isolated – Sparse	37.33	31.96	26.25			

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.

KPI Assessment	
Spatial Plan Area	KPI
North-West Wales ³	72.74
North-East Wales ³	75.73
Central Wales	72.90
Pembrokeshire Haven	75.40
Swansea Bay	73.04
South East Wales	75.35

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.

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 The data for these areas is due to be largely updated during 2016, which may result in a change to the KPI figure.

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, a negative figure shows an overall improvement for the relevant group between the two most recent survey cycles) 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 ¹	North-East Wales ¹	Central Wales ¹	P'brokeshire Haven	Swansea Bay ²	South-East Wales
Agricultural	2.63	2.21	4.61	2.44	3.99	-0.69	2.11
Ancillary	1.97	0.69	1.83	5.66	-0.32	0.15	-1.02
Boundary	1.69	0.40	1.00	1.07	-0.07	11.39	0.47
Civic	0.25	0.10	0.21	0.04	-0.10	0.03	0.43
Coastal	0.22	0.29	-2.13	0.48	0.10	1.40	-0.69
Commercial	0.57	0.15	0.59	0.61	0.16	0.85	0.56
Domestic	0.77	0.77	1.26	0.86	0.44	0.43	0.40
Educational	0.20	0.26	0.52	0.42	-0.19	-1.82	0.37
Extractive	0.92	-0.50	1.40	4.46	-0.24	-0.65	1.58
Fortification	1.92	2.07	0.96	6.25	0.70	0.73	-0.59
Garden	0.50	-0.30	0.64	0.19	-1.37	-0.83	2.26
Hospital	-0.47	-0.59	0.00	-1.10	-0.56	-0.19	-0.56
Industrial	0.83	0.33	1.22	-0.85	-0.18	-1.21	1.95
Monument	0.25	-0.23	0.68	0.40	-0.51	0.20	0.27
Other	1.34	3.37	2.48	2.29	-1.00	0.51	0.84
Outbuilding	2.84	4.67	5.62	3.06	1.21	0.11	0.94
Process	2.09	2.88	5.09	1.62	0.33	2.57	0.43
Religious	0.37	0.54	0.98	0.32	0.53	-0.24	0.11
Street Furniture	0.83	-0.23	-0.02	1.79	1.87	2.81	-0.33
Transport	1.36	0.31	2.14	1.38	0.16	2.06	1.52
Vacant	8.47	11.87	3.53	8.53	4.58	17.91	5.22
Water	1.48	-0.47	2.66	2.64	0.51	2.94	-0.62
All Types		0.91	1.59	1.18	0.53	1.41	0.59

1 Significant parts of these areas are to be resurveyed during 2016. Ahead of this, the data should be treated with caution.

2 This area has a low proportion of agricultural and ancillary buildings.

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 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.

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.

Overall, there has been a small increase in the prevalence of non-traditional materials in all areas and for Wales as a whole.

Non-Traditional Material Analysis (NTMI) 2015		
Spatial Plan Area	NTMI Assessment	NTMI Area / NTMI Wales
	Score ¹	Score ²
North-West Wales	7.029	0.73
North-East Wales	4.874	1.05
Central Wales	5.705	0.85
Pembrokeshire Haven	5.680	0.85
Swansea Bay	10.559	1.58
South-East Wales	8.193	1.23
All Wales	6.677	
<small>1 - % of buildings in group with some non-traditional materials</small>		
<small>2 - Measure of average proportion of non-traditional materials in any building</small>		

Non-Traditional Material Analysis by Building Type 2015					
Spatial Plan Area	NTMI Score ¹				
	Domestic	Commercial	Civic	Religious	Educational
North-West Wales	7.09	8.36	0.00	1.25	14.28
North-East Wales	10.19	8.53	1.79	1.96	9.62
Central Wales	8.59	3.29	1.01	3.03	12.24
Pembrokeshire Haven	896	5.61	3.33	3.66	0.00
Swansea Bay	19.35	10.27	6.38	13.39	13.33
South-East Wales	16.65	5.81	8.91	8.06	12.82
All Wales	10.52	5.75	4.78	4.86	10.90

KEY INFORMATION

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

There has been a small increase in the presence of non-traditional materials between 2013 and 2015.

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

Conservation Areas¹

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 2015						
Grade	In Conservation Area (%)			Not in Conservation Area (%)		
	At Risk (AR)	Vulnerable (V)	Not at Risk (NAR)	At Risk (AR)	Vulnerable (V)	Not at Risk (NAR)
I	3.77	10.04	86.19	5.45	10.12	84.44
II*	3.89	9.65	86.46	9.01	12.57	78.42
II	3.61	9.27	87.13	12.69	15.07	72.89
All Wales	3.63	9.30	87.07	12.30	14.81	72.89

Analysis of Occupancy Distribution of Listed Buildings 2015						
Grade	In Conservation Area (%)			Not in Conservation Area (%)		
	Vacant	Part Occ	Full Occ	Vacant	Part Occ	Full Occ
I	1.27	4.46	94.27	5.32	7.45	87.23
II*	3.90	7.63	88.47	8.76	8.67	82.57
II	3.82	5.68	90.49	9.62	11.26	79.12
All Wales	3.79	5.78	90.44	9.49	10.98	79.53

% Defect Category Assessment for Risk Categories 2015								
Defect Category	In Conservation Area (%)				Not in Conservation Area (%)			
	All	AR	V	NAR	All	AR	V	NAR
No significant work required	51.55	0.00	0.97	59.10	43.02	0.09	0.67	58.87
Reduced maintenance levels	15.39	3.18	21.70	15.22	11.16	0.94	10.55	13.01
Maintenance backlog building up	9.72	6.14	40.74	6.55	11.99	3.09	33.54	9.11
Secondary item maintenance building up	16.54	1.82	10.89	17.76	11.91	0.27	8.14	14.65
Serious lack of maintenance	1.97	7.05	8.86	1.02	4.08	3.00	11.96	2.66
Major repairs required to many items	1.24	17.50	6.20	0.04	4.10	15.74	13.04	0.32
Ongoing general decline	1.06	6.36	6.47	0.27	3.58	6.84	12.67	1.18
Very poor general condition	0.56	15.45	0.00	0.00	2.66	21.51	0.11	0.00
Full refurbishment required	0.63	6.82	3.63	0.05	1.66	5.19	5.94	0.19
Structurally unsound	0.40	10.91	0.00	0.00	2.46	20.04	0.00	0.00
Some critical items require replacement	0.50	12.50	0.53	0.00	1.62	9.57	2.97	0.01
Many items require replacement	0.45	12.27	0.00	0.00	1.75	13.73	0.41	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.

Overall, the Conservation Area analysis for the stock as at 2015 is very similar to that for 2013 with no significant changes noted.

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.