

# Preventative Conservation & Maintenance Theory; its Application to the Hereford City Conservation Area

## Part 1 – Main Text

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*Source: The Author*

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**JS** Conservation Management  
& Town Planning Ltd  
t: 07741091719  
e: [john@jsconservationplanning.com](mailto:john@jsconservationplanning.com)  
w: [www.jsconservationplanning.com](http://www.jsconservationplanning.com)

## Abstract

This research explores the evolution and theory of preventative maintenance and conservation; and applies it to a local level via a Heritage at Risk (HAR) Survey of the Hereford City Conservation Area (CA). The research begins by looking and analysing the evolution of preventative maintenance and conservation; from the times of the Egyptians and Mesopotamians over 2000 years ago, through to the renaissance; where ideas changed to maintenance as a result of ideologies of 'romantic restoration.' It was then that we saw the beginning of the 'maintenance for maintenance sake' ideology, which was spearheaded by the Society for the Protection of Ancient Buildings (SPAB), who are still an active group involved with the promotion and teaching of preventative maintenance and conservation today.

Today, we live in a world where preventative maintenance and conservation plays a stronger role, and this research analyses how preventative maintenance and conservation is interpreted in policy, law and via attempts from international organisations, such as UNESCO, to develop a standard set of preventative conservation principles which can be applied by everyone throughout the world down to a local level. There are also many ways of undertaking preventative maintenance and conservation, and this research explores case studies from the Monumentumwacht model; to the HAR model, the use of mobile phone applications; to SPAB and their Maintenance Week, and related of guidance and training opportunities.

The research is then supported by undertaking a HAR Survey of the Hereford City CA, which is found in Appendix 1, and the results analysed as part of this research. From undertaking the review and analysis of where we have come from; the policy and law being implemented; the various case studies and having analysed a real HAR survey example undertaken by the Author; the research concludes with recommendations on how we as a society can further the cause of preventative maintenance and conservation so that our heritage assets can be enjoyed by many generations to come.

**Keywords:** Preventative Maintenance and Conservation; Heritage at Risk;

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## Abbreviations

CA	Conservation Area
CoE	Councils of Europe
DCLG	Department for Communities and Local Government
EU	European Union
FMB	The Federation of Master Builders
HAR	Heritage at Risk
ICOMOS	International Council on Monuments and Sites
LOTS	Living Over The Shops project
MOH	Maintain Our Heritage
NPPF	National Planning Policy Framework
POW	Place of Worship
PPS	Planning Policy Statement
PRT	Princes Regeneration Trust
PRECOM <sup>3</sup> OS	The UNESCO body for Preventative Conservation, Maintenance and Monitoring of Monuments and Sites
SPAB	Society for the Protection of Ancient Buildings
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UWE	University of West England
VAT	Value Added Tax

## Limitations and Further Reading

Part 2 (Appendix 1) of this research contains a Heritage at Risk (HAR) survey of the Hereford City CA. The survey was undertaken in April 2014 and therefore reflects an opinion based upon this particular point in time. It is acknowledged that buildings have a maintenance cycle and any photos taken may not accurately reflect the point in the maintenance cycle when the issue is rectified soon after the survey was undertaken.

The survey contains an assessment of buildings taken from a public viewpoint on the ground, and unless stated, does not contain an assessment of the interior of the building, nor contains assessments from height. Where assessments from height are required, this is recommended and a probable cause and personal opinion is given by the Author. It should be noted that assessing buildings from height or assessing the interior of a building can lead to further more accurate determinations of problems and measures to correct any risks identified regarding loss of historic fabric. The recommendations given in this research do not contain an assessment of whether planning permission, building permission, or Listed Building consent is required. If considering any recommendations contained in this report, advice should first be gained from discussions with a Conservation Officer from Herefordshire Council. The Author will not be held responsible or liable for any effects and/or damage to buildings and their contents or by persons carrying out any works in accordance with the recommendations contained within this report.

Although the English Heritage HAR guidance was strictly followed, an interpretation of this guidance was utilised by the Author in terms of Occupancy. Where a building such as a war memorial was not capable of being occupied, this was assessed as 'N/a.' On four occasions a building (which was occupied) had a separate listing for the wall which was part of this property. In this particular circumstance, the decision was taken by the Author to assess the wall as having the same 'occupancy' and maintenance regime as the building in which the wall was under the same ownership.

A divergence was also taken from the English Heritage Guidance in relation to photographs of buildings. Normally photographs in HAR surveys are undertaken for identification purposes only which is often seen as a missed opportunity to document the risk by photographic evidence. However in this study, the opportunity was taken, and the risk was photographed. This approach was taken as it is considered that by doing this; the risk can be visually documented and monitored in the future.

All owners of POWs were contacted and asked if they could supply a Quinquennial Inspection Report, which is normally undertaken every 5 years to assess the condition of the POW. The Author was only able to gain access to 2 out of 6 Quinquennial Inspection Reports. As the Author is not an Engineer or an Architect, opinions were not able to be given regarding structural stability of a POW, or the condition of the roof.



## Introduction

Buildings, structures and monuments are part of everyone's life. They can provide us with basic needs such as shelter, warmth, somewhere to purchase goods or somewhere where we can earn a living, relax or keep fit. They also can form part of a historical event, battle or part our collective memories and experiences; from buildings we may worship in; have a pint in; remember as part of our childhood; demonstrate our social history; or allow an insight into societies that walked the earth once upon a time.

For these associations, the buildings, structures and monuments we experience remain a crucial part of our understanding of the world. The buildings which still exist have the advantage that they are tangible assets which in many cases we can touch, look at and appreciate. In order to preserve these assets, in England we list the best examples of these buildings which are considered to be of special architectural or historical significance and place them in the Listed Buildings Register and refer to them as 'Listed Buildings' or 'listings.'

It should seem obvious then that everyone would want to preserve and maintain Listed Buildings for everyone to enjoy, however this is not the case. The movement to protect the historic fabric of buildings of architectural and historic significance is only a movement of the late 19<sup>th</sup> Century where there were writers and critics to the Victorian restorations occurring at the time. It was then where we saw the formation of organisations such as SPAB. We have unfortunately lost a number of buildings before this time, and will still continue to do so unless there is a dramatic change, education and understanding of the importance of Listed Buildings within the community and how we can go about preserving and maintaining them.

The role of maintenance in the preservation of buildings of historical and architectural significance has long been recognised as an essential component of the conservation and preservation of buildings. The need for 'maintenance for maintenance sake' stems from early as the renaissance where the maintenance of a building was compared to the maintaining of health in a person. The message of preventative conservation still shines through today and is seen through many conservation bodies such as SPAB and international conventions held over the past century such as the Charter of Athens (1931), the Venice Charter (1964), recommendations from the Council of Europe as well as the Burra charter; which will be examined in greater detail throughout this research.

These international conventions and policy have influenced law and guidance which we use today such as British Standard 7913:2013 – '*Guide to the Conservation of Listed Buildings;*' *Planning (Listed Buildings and Conservation Areas) Act 1990*; and policies within the *National Planning Policy Framework (NPPF)*; regarding the conservation of Listed Buildings during any works involving planning permission; to name a few.

The message of maintenance and preventative action unfortunately does not always penetrate to the grass roots level of the Listed Building owner. As a result, we still have many 'buildings at risk' in the United Kingdom with the real potential that these important buildings, structures and monuments may be lost forever.

There are a number of reasons why this may be the case, for example, from absentee and fragmented ownership issues; vacancy and under-occupancy of a building; the expense in undertaking repairs; poor workmanship; a lack of knowledge and education; to just simple ignorance. To combat these issues there are also a number of successful projects which have taken place around the world which demonstrate best practice in preventative maintenance. The most well-known is an organisation called Monumentumwacht (Monument Watch), which operates in Flanders, Belgium and across the Netherlands and is viewed by many professionals as the benchmark in preventative maintenance and monitoring.

Closer to home, a number of organisations such as SPAB have a firm grasp upon education and skills building through their National Maintenance Week and Faith in Maintenance project. We will look at these and other organisations in more detail to see if there are any lessons to be learnt in order to apply these methods into the local context of Hereford City where a HAR assessment will be undertaken in conjunction with this research (Appendix 1).

The UK has also trialled similar programs to Monumentumwacht such as a pilot study run in Bath by the organisation 'Maintain Our Heritage' (MOH), in association with the University of West England. This provides an interesting analysis of the application of a similar preventative maintenance program which enables lessons to be learnt from a local UK based model. There are also other UK models to analyse, such as the HAR Register, developed by English Heritage which has seen success in publicising and promoting the at risk register and the need to care and remove identified buildings from the at risk register. English Heritage are also trialling the use of a mobile phone application as part of the HAR Survey. Recently, English Heritage has also published a report on the findings of 19 Heritage at Risk Surveys from across the UK which provides a useful analysis of the HAR Register as well as lessons learnt.

This research will concentrate on the roles of education, monitoring, and occupancy which are considered by the Author to be the three most positive actions in reducing heritage at risk. However, these actions come alongside pressures to finance such programs, possible subsidies as well as Government support, or legislation which would ideally include a statutory 'Duty of Care' for Listed Buildings.

However, with the move towards new technology and connectivity within the public domain, this may prove to be a new way of better understanding the issues around why buildings become 'at risk.' It is hoped that by assessing new avenues of education and preventative actions; that a methodology can be formalised for reducing this risk at the local level within the Hereford City CA.

In order to demonstrate the positive aspects of monitoring and recording, a survey of all the listings within the Hereford City CA will be undertaken to understand if there are any buildings at risk (Appendix 1), and from this survey, along with lessons learnt from overseas and other UK areas; identify ways in order to reduce this risk so that future generations can continue to enjoy the significant heritage assets which we experience today.

### Research Aims

- To explore the concept of 'preventative maintenance and conservation,' including its history, definition, psychology, its place in society and experiences in different countries and circumstances;
- To examine current legislation and Government guidance and its effects on encouraging preventative maintenance and conservation;
- To assess past practices and case studies, including pilot projects into preventative maintenance and conservation, and lessons learnt;
- To undertake a Heritage at Risk survey of the Hereford City CA and document the findings in order to start the process of preventative maintenance and conservation; and
- To discover ways in which Listed Building owners as well as society can better appreciate the significance of Listed Buildings and the need for preventative maintenance and conservation.

## 1. Section 1: Literature Review and Theory of Preventative Conservation

Instead of this Literature Review detailing the arguments for and against the theory of preventative maintenance and conservation of historic assets; this research concentrates on where we have come from and where we are heading. As Stubbs (2009) eloquently states:

*'The long list of reasons for architectural conservation is widely recognised today as outweighing the arguments against it. Added to this is the confluence of concerns about heritage protection from within the allied field of museology, archaeology and historical studies, and the parallel interests of environmental protection and energy conservation' (pp241).*

The policies, practices and procedures which we know today regarding the conservation of historic assets may have been set over the past 200 years; however the actual theory of maintenance and preservation of buildings and structures has existed long before then, albeit for different purposes. Jokilehto (1986) believes that the theory of building conservation can be split into four different directions or approaches over our history:

- *The Traditional Approach:* Which has probably existed as long as society, in which historic structures are preserved so long as they continue to have use values, or because there is no specific reason for their destruction. This is the case for 'special monuments' which have memorial or symbolic universal value such as the pyramids or the statue of a god. However, in this approach the motivation behind the preservation and maintenance of the monument was keeping intact of the value of the monument via renovation and renewal, which rarely showed signs of concern for the material substance;
- *The Romantic Restoration:* During the Italian Renaissance, Italian humanists and artists of the 14<sup>th</sup> and 15<sup>th</sup> Centuries recognised historic objects in their aesthetic form, as nostalgic remains of the past, of Roman greatness and also of Christianity. Ancient sculptures, buildings, archways and monuments were models to be learnt from, imitated, and surpassed. Buildings and monuments were preserved as a reflection of national identity and evidence of the success of a country at a particular moment of time. The preservation of particular buildings and monuments also reflected the spiritual values of society, where the Church maintained its buildings and structures as they wanted to show their superiority over other faiths such as paganism;
- *The conservation and re-evaluation approach:* In the 17<sup>th</sup> and 18<sup>th</sup> Centuries, ideas were further developed where the substance of a historic object gained more value than just the form of the object, such as by Joann Joachim Wincklemann who insisted in a distinction between the original and restored work of art in order not to falsify the artistic values of the work. This is where the concept of anastylosis was deemed acceptable, whereby reconstruction of a ruined historic object is carried out utilising original architectural elements to the greatest degree possible; and

- *The anti-restoration movement:* During the mid-late 18<sup>th</sup> Century in England, there was increasing criticism from antiquarians against the restoration of medieval churches. This criticism was supported in other countries such as in France by Victor Hugo and A.N.Didron in the 1830's and from Ferdinand Von Quast in Prussia. In England, the definition of preventative conservation developed with writings from William Morris and John Ruskin, who emphasised the historic significance of past craftsmanship and the impossibility to reproduce a historical object in another historic context (Jokilehto 1986: 7-9).

## 1.1 Origins of Preventative Maintenance

### 1.1.1 The Traditional Approach to Preventative Maintenance & Conservation

The theory of preventative maintenance has existed as long as human society has, however the aim behind the maintenance of building and structures has evolved to consist of different values. The origins behind maintenance stemmed from a need to protect a monument or building as it had spiritual or cultural significance such as many of the statues in Egypt of gods or pyramids which still remain today. Jokilehto (1986) directs us to the statue of Ramses II, at the Great Temple of Abu-Simbel constructed in 3 BC, which

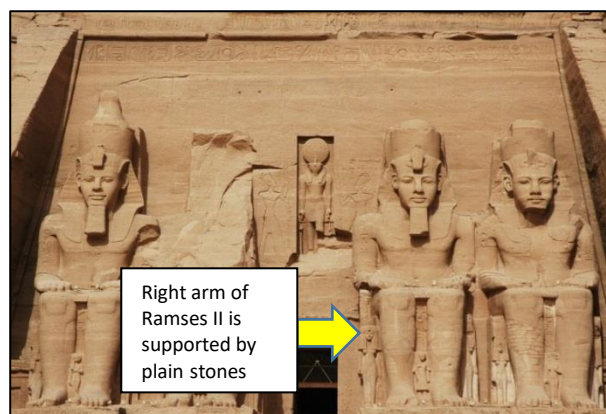


Figure 1 – Statue of Ramses II at the Great Temple of Abu-Simbel, Egypt (Source: [www.panoramio.com](http://www.panoramio.com))

was given simple stone blocks to support the right arm which was in danger of collapse (1986:24) (Figure 1).

As long as the building continued to have value, it was maintained. However in the case of the statues of Ramses II, it is interesting to note that the methodology behind restoring was not to deceive, but to utilise a simple method of repair which enabled stone blocks to support for the arm, whilst maintaining the integrity of the figure.

Stubbs (2009) also follows this approach in his research and directs us to Mesopotamia, where it was a religious obligation to maintain and restore sacred mud-brick Ziggurats which date from 2100BC (Figure 2). Sumerian deities believed that the sites had been used since the beginning of time which necessitated their continuation and maintenance (pp160).



Figure 2 – The Ziggurat at Ur-Nammu at Ur, which dates from circa 2100BC (Source: <http://www.studyblue.com>)

## 1.2 Preventative Conservation During the Renaissance

### 1.2.1 The Romantic Restoration and Preventative Maintenance and Conservation

During the Renaissance period, a number of analogies between human beings and buildings were presented in the maintenance and conservation of monuments and buildings. One of the more important renaissance writers on architecture, L.B. Alberti, stated that in the repair of buildings that the Architect needed a good knowledge of the causes of the faults. The Architect was like a medical doctor, he had to understand the disease to be able to cure it. Alberti also states that the fundamental reason for decay was man's negligence and carelessness; and that he was also an advocate for a maintenance service for public buildings to be financed by the state (Jokilehto 1986: 17).

Similarly to Alberti, an Italian artisan and architectural theorist of the 15<sup>th</sup> Century, Antonio di Pietro Averlino (known as Filarete) in his '*Treatise on Architecture*' states that a building has the same life of a man that:

*'it will get sick when it does not eat, that is when it is not maintained, and will slowly fall into decay, like a man without food, then it will die. So behaves a building and if it has a doctor when it is sick, that is a master who will repair and cure it, it will be in good health for a long time'* (Filarete 1972: 29).

Although over a thousand years later, maintenance was still playing a role in the conservation of buildings and monuments, with an increasing awareness that a building is more like a living organism, rather than walls, a roof and some bricks and mortar. Value systems were beginning to change, and along with this, the meaning of preventative maintenance and conservation was changing from not just preserving monuments and spiritual places, but the value of an ordinary building; and the need to preserve this.

## 1.3 Preventative Conservation During the 17<sup>th</sup> -19<sup>th</sup> Centuries

### 1.3.1 The Anti-Restoration Movement and Preventative Maintenance and Conservation

In 1854 at Crystal Palace, John Ruskin gave a speech to campaign for an association to be formed that would maintain active watchers to monitor monuments and buildings in important towns and document the state of monuments with a yearly or half yearly report of their changes or any changes proposed. Ruskin also proposed that a fund should be set up to buy threatened properties and assist owners in maintaining them whilst the association would also give influence to prevent unnecessary restoration and destruction (Jokilehto 1986: 312). Although in 1855 the Executive Committee proposed conditions for a fund, the fund was met with large opposition from the Church, who saw the restoration of churches as essential to preserving their use and this association would threaten this. This action by the Church in effect quashed the association with only a few repairs ever being completed.

William Morris (Figure 3) was also of Ruskin's school of beliefs in that the conservation of a building must be done in accordance with a strict need not to falsify buildings, but respect and conserve them as stated in his article which was published in The Athenaeum in 1877:

*'those who make the changes wrought in our day under the name of Restoration, while professing to bring back a building to the best time of its history, have no guide but each his own individual whim to point out to them what is admirable and what contemptible; while the very nature of their task compels them to destroy something and to supply the gap by imagining what the earlier builders should or might have done. Moreover, in the course of this double process of destruction and addition, the whole surface of the building is necessarily tampered with; so that the appearance of antiquity is taken away from such old parts of the fabric as are left, and there is no laying to rest in the spectator the suspicion of what may have been lost; and in short, a feeble and lifeless forgery is the final result of all the wasted labour'* (Morris 1877).



Figure 3 – William Morris (1834 – 1896) One of the Founders of SPAB. (Source: [www.literaryplaces.co.uk](http://www.literaryplaces.co.uk))

It was from this article that the Society of Protection for Ancient Buildings (SPAB) was formed and now has Morris' article as its manifesto. The pressure group formed in response to the Victorian restorations which were occurring to a number of buildings in the 19<sup>th</sup> Century. Although aimed at stopping the unsympathetic restoration of buildings; an important point to take from the manifesto, is that the letter also makes reference to the importance of maintenance in the conservation of a building:



*'It is for all these buildings, therefore, of all times and styles, that we plead, and call upon those who have to deal with them, to put Protection in the place of Restoration, to stave off decay by daily care, to prop a perilous wall or mend a leaky roof by such means as are obviously meant for support or covering, and show no pretence of other art'* (Morris 1877).

SPAB, which was starting to gain many influential members, began to gain recognition in the conservation of buildings with success at saving a number of churches in York which were proposed for demolition by the Archbishop (Jokilehto 1986:320). SPAB continued to hold conferences in London and in 1896 and resolved that *'a register of ancient buildings would minimise the treat to such edifices'* ([www.spab.org.uk](http://www.spab.org.uk)). This can be seen as the precursor of what we know today as the Listed Building Register, which became law under the Town and Country Planning Act in 1949. Although property owners were not legally obligated to adhere to the requests from SPAB, the organisation continued to develop guidance, bringing out its first publication on repair and maintenance titled *'Notes of the repair of ancient buildings'* in 1903 ([www.spab.org.uk](http://www.spab.org.uk)).

In terms of statutory protection of buildings, SPAB after lobbying for 10 years, were behind the 1882 Ancient Monuments Act, which sought protection for 62 monuments, which were mainly pre-historic historic assets such as stone circles, tombs and burial mounds (Jokilehto 1986: 321).

Until the 20<sup>th</sup> Century the preservation of architectural heritage was a national responsibility, until cross boundary communication between countries via the formulation of the League of Nations after the First World War and UNESCO after the Second World War. The communication between nations led to organisations such as the International Museums Office which organised a conference in Athens in 1931 to discuss the concept of international heritage. This led to a number of international conferences such as the Venice Charter, and the Burra Charter, which will be discussed further in Section 2 – 'Putting the Guidelines and Legislation into Practice.'



## 1.4 Preventative Maintenance & Conservation Today

Today, there is limited research on preventative maintenance and conservation, however research and funding within this field is building momentum. Van Balen, & Vandesande (2013) see many common denominators from discussions and arguments given and conferences held for the concept of preventative maintenance and conservation, in particular:

*'Preventive conservation helps conserving authenticity as it avoids damage and interventions are minimized. For the same reasons it is considered cost effective. It is also argued that it empowers society at large to take care of its*

*heritage maintaining it as the responsibility for preservation is widened to a larger fraction of society. Preventive action, illustrative for preventive conservation, aims at avoiding damage (at least reducing its speed). It requires understanding the risks that may cause unwanted effects as damage. It aims at contributing to primary and secondary objectives and it aims at sharing responsibility and at empowering stakeholders'* (Introduction: iv).

Stubbs (2009) also maintains a similar definition of 'preventative conservation' which he sees originating from the care and conservation of objects; however is also relevant to building conservation:

*'All actions to be taken to retard deterioration and prevent damage to cultural property through the provision of optimal conditions of storage, use and handling'* (pp125).

The comparisons with medicine which were identified in the Renaissance also continue to be relevant today and are further defined by Della Torre (2013), who defines 'preventative conservation' in line with the three classes of prevention defined in medicine:

- *'Primary prevention: means to avoid the causes of the unwanted effect (damage);*
- *Secondary prevention: means of monitoring that allow an early detection of the symptoms of the unwanted effects (damage);*
- *Tertiary prevention: means that allow avoiding further spread of the unwanted effect (damage) or the generation of new unwanted (side) effects (damage)'* (pp123).



Figure 4 – Blocked guttering is one of the most common forms of lack of maintenance (Source: Historic Scotland)



Figure 5 – A chimney collapses onto the pavement in Bo'ness, Scotland during bad weather in January 2012 (Source: Historic Scotland)

Although information and research on preventative maintenance and conservation is limited, the psychology behind what makes a Listed Building owner care for their building is more limited. Leather et al. (1998) undertook research in England in order to discover the psychology behind why a homeowner maintains their building. Some of the findings of the research highlighted that the majority of home owners in England do not have savings for the maintenance of their building, or a proper maintenance schedule for the building. Furthermore, Leather et al identifies that the maintenance and repair of a building is normally reactive and that when diagnosis is made, it is often done informally by persons who may be in the building trade, but have no experience or qualifications in historic building conservation.

The findings of Leather et al (1998) were further tested in a survey undertaken by the University of West England (UWE) as part of the pilot project in Bath 2004, which will be looked at further in this research in Section 2.5. The project also had a component where UWE conducted a survey of 1000 Listed Buildings, telephone interviews with 20 survey respondents and focus groups of owners to understand the motivation and relationship with preventative maintenance. Some of the findings from the survey were as follows:

- Although home owners were aware of their statutory and perhaps moral duty in maintaining the significance of a Listed Building, they generally prioritise work and maintenance from a functional perspective, rather than a cultural perspective. In saying this, owners tend to repair their building because it is their home, rather than a need to preserve the historic fabric or significance;
- The majority of the respondents saw 'maintenance' and 'repair' as interchangeable concepts;
- Maintenance of a Listed Building is not influenced by the listing, but is influenced similarly to what influences a home owner to maintain any house;
- The overwhelmingly majority of interviewees did not put funds aside for future maintenance and repair;
- An overwhelmingly amount of respondents said that they felt that advice to owners on their legal obligations in owning a Listed Building and how and where to seek advice on maintenance and repair was very poor;
- Most respondents felt that a specialist in historic buildings was not necessary and would either fix the issue themselves or contact a builder, without qualifying whether the builder has experience with Listed Buildings;
- A majority of respondents expressed a high or medium level of interest in a similar program to Monumentenwacht (Section 2.5); however would not be prepared to pay anything for the service or unrealistically low amounts;
- The majority of respondents had little awareness of philosophical principles of conservation; and
- Value is seen more in the appearance of the building rather than preserving the historic fabric of the building (MOH 2004a).

## 2. Section 2: Putting the guidelines and legislation into practice

This next section looks at the formulation and different types of guidelines and legislation which look at preventative maintenance and conservation. Beginning with the formulation of a standard set of guidelines from a worldwide stage, we then look at European guidelines and how these standards have filtered into the guidelines and legislation at a national level (England). We then look at 4 case studies to show the different ways that preventative maintenance and conservation has been enacted 'on the ground,' and undertake a Heritage at Risk Assessment for the Hereford City CA (Appendix 1).

### 2.1 Guidelines and Legislation: International

#### 2.1.1 The Athens Charter 1931

The Athens Charter was drafted by Le Corbusier at the 4<sup>th</sup> Assembly of the International Congress on Modern Architecture, and was published anonymously in Paris in 1941. One of the General Principles of the Charter places maintenance as a crucial part of the formulation of the concept of 'international heritage:'

*'Whatever may be the variety of concrete cases, each of which are open to a different solution, the Conference noted that there predominates in the different countries represented a general tendency to abandon restorations in toto and to avoid the attendant dangers by initiating a system of regular and permanent maintenance calculated to ensure the preservation of the buildings (Le Corbusier 1931).'*

The Athens Charter is seen as one of the first attempts for the gathering of experts and ideas from across the globe to formulate a standard set of principles to care and maintain our architectural heritage.

#### 2.1.2 The Venice Charter 1964

With the Athens Charter gaining momentum by increasing debate around conservation practices, it was during 1957 in Paris, that the First Congress of Architects and Specialists of Historic Buildings gave a recommendation that any countries which lack a central organisation for the protection of historic buildings, should establish such a body. It was also stated that all member states of UNESCO should join the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), based in Rome. A second congress was held in Venice in 1964 where a set of 13 resolutions was drawn up forming what we know now as The Venice Charter, which superseded the Athens Charter. In Article 4 the Venice charter states that: *'It is essential to the conservation of monuments that they be maintained on a permanent basis'* (ICOMOS 1964).

The Charter also goes on to explain that an appropriate use of a building facilitates the maintenance of the building in Article 5:

*'The conservation of monuments is always facilitated by making use of them for some socially useful purpose'* (ICOMOS 1964).

### 2.1.3 The Burra Charter

Although a charter for Australia, the Burra Charter (1979) has had a large impact upon guidelines and methodology for the protection and preservation of historic assets across the globe, with also the introduction of the concept of 'cultural heritage.' It is noted that concept of preventative maintenance continues to feature such as presented in the following chapters of the Charter:

*'Article 15. Maintenance means the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction.'*

*Article 16. Maintenance is fundamental to conservation and should be undertaken where fabric is of cultural significance and its maintenance is necessary to retain that cultural significance' (Burra Charter 1979).*

### 2.1.4 UNESCO - Preventive Conservation, Maintenance and Monitoring of Monuments and Sites

The area of preventative maintenance and conservation is a growing one and recently in 2008 saw the establishment of the UNESCO Chair on Preventive Conservation, Maintenance and Monitoring of Monuments and Sites (PRECOM<sup>3</sup>OS). The group aims to bring together specialists in conservation from across the globe in order to help educate and share ideas on the role of maintenance and conservation for historic assets ([www.precomos.org](http://www.precomos.org)). The group has so far published research relating to preventative conservation and have organised seminars to bring experts together. In their most recent publication on a seminar held in 2013, PRECOM<sup>3</sup>OS comment that:

*'monitoring when installed in an early analysis phase also helps to identify the real behaviour of historic structures, buildings or sites when subjected to various types of stress (mechanical, environmental, indoor climate, tourism, use). Proper monitoring in those cases can help to calibrate mathematical or conceptual models that describe that behaviour. Having a better calibrated model will reduce the levels of uncertainty and therefore will contribute to minimizing needed interventions' (Van Balen, & Vandesande 2013: v).*

It is hoped that the formulation by UNESCO of a body to deal with preventative maintenance can enable and lead to an international forum for conservation professions from around the world to join together and influence conservation policy and guidance on a national and local level.

This view of the beneficial nature of a common world view of heritage conservation was shown by Ken Taylor, a visiting fellow at the Australian National University who commented that by setting international standards for conservation allows organisations to:

*'Impose a common stamp on culture across the world...[as] their policies create a logic of global cultural uniformity to impose good standards of 'good behaviour' (Logan 2005: 419). In other research Taylor also further comments that 'universal and global standards can overwhelm local values and practices' (Taylor 2005: 420).*

## 2.2 Guidelines and Legislation: Europe

The need to standardise the guidelines and practices within countries has also filtered down into Europe; particularly from the signing of agreements from The Councils of Europe (CoE) and the European Union (EU). In 1950, post war destruction led to the European Cultural Convention which was an agreement to promote the reciprocal appreciation and respect for each of the countries heritage assets and acknowledge the concept of 'European Heritage' (Stubbs 2009, 286).

The EU and The Councils of Europe have had a great influence on world heritage policy, having been involved with UNESCO and ICOMOS, and the publication and involvement in setting worldwide standards and international charters such as the Athens Charter and Venice Charter.

The Council of Europe also publish guidelines such as '*Guidelines on Cultural Heritage: Technical Tools For Heritage Conservation And Management, 2012*' which aims to provide:

*'understanding of heritage in its wider context: heritage comprises a wide array of features and a spectrum of values that describes its significance both to local communities and the wider European community' (CoE 2012: Foreword).*

The guidelines define 'maintenance' as:

*'works which enable the physical preservation of the heritage against destructive forces and its sustainability through appropriate use. The aim of maintenance is conservation of heritage' (CoE 2012: 67).*

## 2.3 [Guidelines and Legislation: Great Britain](#)

Although there are currently a number of conferences and seminars aimed at increasing awareness of preventative maintenance and conservation, it is important to highlight what can be found in planning and building policy as well as associated guidance. A number of practice notes and projects have been run with historic buildings in order to develop the concept of preventative maintenance and conservation. The following section details alphabetically a summary of some of the most up-to-date legislation and guidance available which contribute to how we perform maintenance, and our knowledge and understanding on preventative conservation:

### 2.3.1 [Building Regulations and British Standard 7913:2013 – Guide to the Conservation of Listed Buildings](#)

The 2013 British Standard on the *Conservation of Listed Buildings* is the second edition of the original version which was published in 1998, and which is legislated under the Building Regulations from the Building Act 1984. Various Building Regulations are related to Listed Buildings and control their re-use and modification, such as Part M which looks at the accessibility of a building; and Part L which looks at conservation of fuel and power. It is important to note that there are some exemptions to the compliance of a Listed Building to the Building Regulations as the conservation of significant historic fabric lies at the heart of any decision relating to a Listed Building.

The British Standard provides a whole chapter dedicated to maintenance and guidance to enable the proper management of a Listed Building, particularly when changing the use of the building or modifying the structure. Importantly, the standard promotes the use of a 'Maintenance Strategy' which should involve a:

*'Maintenance Plan [which] should have a cyclical programme. Normally this includes routine daily, weekly and twice yearly activities to keep the fabric clear, and services with other more detailed works on a longer term cycle of one year to five year.'* (7.3).

The British Standard also reinforces the concept of preventative maintenance where the Maintenance Plan should:

*'specify preventative rather than corrective action with minimum intervention, and repair over replacement'* (7.2).

The standard also highlights the importance of regularly carrying out smaller jobs such as clearing rainwater goods and looking for cracks and slipped slates to avoid larger problems:

*'Typical problems such as ground and structural settlement, insect attack, fungal and rot infections lead to the destruction of fabric and loss of structural stability and integrity. Examples of this are blocked rainwater goods and drainage systems, missing sections of roofing, structural sections vulnerable to exposure, open masonry joints, cracked render, unventilated and inappropriately serviced spaces'* (7.3).

### 2.3.2 National Planning Policy Framework and the Historic Environment Planning Practice Guide.

The National Planning Policy Framework (NPPF) was published in March 2012 as part of the Conservative Government's reforms to streamline the town planning system. Previously the conservation of the historic environment was addressed through 'Planning Policy Statement 5' (PPS5) with companion guidance 'The Historic Environment Planning Practice Guide.' Since the adoption of the NPPF, the policies of PPS5 have been superseded, however the Planning Practice Guide remains part of Government guidance. However with these reforms, the conservation of the historic environment remains a key aim. This is indicated in the NPPF at §126 which states that:

*'Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance' (2012: 30).*

The Historic Environment Planning Practice Guidance supports and defines the policies of the NPPF and highlights the important role that maintenance plays in the conservation of historic buildings:

- *'It is important that any use is viable, not just for the owner but also for the future conservation of the asset. Viable uses will fund future maintenance (§89);*
- *Good conservation of heritage assets is founded on appropriate routine management and maintenance. Such an approach will minimise the need for larger repairs or other interventions and will usually represent the most economical way of sustaining an asset (§148); and*
- *Maintenance is essential to conserve the original fabric in good order and to safeguard design intentions. Breaks in maintenance may lead to failure of elements and necessitate repairs or sometimes restoration' (§157).*

On the 11<sup>th</sup> July 2014, English Heritage published a consultation on three new draft good practice advice notes for town planning and planning for heritage which will supersede the Historic Environment Practice Guidance. The draft guidance for consultation is split into three guidance notes:

- *Historic Environment Good Practice Advice Note 1: The Historic Environment in Local Plans;*
- *Historic Environment Good Practice Advice Note 2: Decision-Taking in the Historic Environment; and*
- *Historic Environment Good Practice Advice Note 3: The Setting of Heritage Assets.*

It is worthy of note that the draft guidance also reinforces planning for maintenance as described in Paragraph 9 of the Advice Note 1:

*'A positive strategy in the terms of NPPF paragraphs 9 and 126 is not a passive exercise but requires a plan for the maintenance and use of heritage assets and for the delivery of development within their setting for*



*the maintenance and use of heritage assets and for the delivery of development within their setting that will make a positive contribution to local character and distinctiveness’ (English Heritage 2014: 3).*

The guidance note also encourages a maintenance plan for Listed Buildings in association with negotiations over planning obligations and contributions.

### 2.3.3 Planning (Listed Buildings and Conservation Areas) Act 1990

The Planning (Listed Buildings and Conservation Areas) Act 1990 enables statutory bodies such as Local Authorities to take action against persons or groups that own Listed Buildings and that are shown to be allowing them to fall into disrepair. Although this is not a ‘duty to care,’ the legislation gives authorities the right to access a site to ‘ascertain whether any such building is being maintained in a proper state of repair’ (§88 (2)d). The legislation also enables the Secretary of State to intervene in order to allow works to ‘preserve unoccupied buildings in Conservation Areas’ (§76).

### 2.3.4 The Town and Country Planning (General Permitted Development) (Amendment and Consequential Provisions) (England) Order 2014

Partly due to the research undertaken from the Living Over The Shops (LOTS) project, town planning legislation includes the changing of use of the upper floors of a retail premises for residential accommodation without the need for planning permission (DCLG 2014). This means that the principle of using upper floors of a retail premises for residential is established, which makes it easier to only need to negotiate with the Council on material alterations to the building, which will still require Listed Building consent (if a Listed Building) or Conservation Area consent (if in a Conservation Area).



## 2.4 Historic Environment Bodies/ Guidance & Research (Great Britain)

There are a number of organisations involved with the preventative conservation of historic buildings and fabric; and a number of these organisations publish guidance and assist with the providing of information and education of the community to the positive benefits of preventative maintenance and conservation. There are too many organisations to list them all; however below a number of bodies are listed alphabetically in order to give an insight into their involvement with preventative maintenance and conservation.

### 2.4.1 Cadw

Cadw are the Welsh Government's statutory adviser to the historic environment. Cadw also publish a range of guidance notes and advise owners how to care for the historic environment. Cadw have also launched a website called '*Maintenance Matters*.' The website provides a handy guide to the aspects of maintaining a building in accordance with Cadw's Principles of Maintenance:

- *'Understand your building;*
- *Understand the causes of decay;*
- *Minimum intervention;*
- *Use tried and trusted materials and techniques; and*
- *Keep a record'* (<http://cadw.wales.gov.uk/?lang=en>).

### 2.4.2 English Heritage

English Heritage is officially known as the Historic Buildings and Monuments Commission for England and is the Government's statutory adviser on the historic environment. In 2008, English Heritage published a set of guiding principles in order to provide policy and guidance in decision making on all aspect of assets which make up the historic environment. The six overarching principles are as follows:

- *'Principle 1: The historic environment is a shared resource;*
- *Principle 2: Everyone should be able to participate in sustaining the historic environment;*
- *Principle 3: Understanding the significance of places is vital;*
- *Principle 4: Significant places should be managed to sustain their values;*
- *Principle 5: Decisions about change must be reasonable, transparent and consistent; and*
- *Principle 6: Documenting and learning from decisions is essential'* (English Heritage 2008: 7).

English Heritage are involved in not only setting policy and guidance for the Historic Environment, but are involved in decision making regarding significant alterations, particularly to Grade I and Grade II\* buildings, and also have a portfolio of properties in which they manage and provide public access to. English Heritage is also involved in leading the Heritage at Risk project, which will be discussed further below. The six conservation principles as described above filter through English Heritage's work, and it is important to

note that maintenance plays a key role in the management of the historic environment. We can see the important role of maintenance at paragraph 111 of their conservation policies where:

*'The conservation of significant places is founded on appropriate routine management and maintenance'* (English Heritage 2008: 51).

#### 2.4.3 Federation of Master Builders (FMB) – Cut the VAT Campaign

The FMB was established in 1941 to protect and lobby for the interests of small and medium sized building firms. The FMB created the campaign 'cut the VAT' which has a direct impact on Listed Buildings throughout the UK. Currently, an alteration to a Listed Building would not be subject to paying Value Added Tax (VAT), however, any works which involve the repair and maintenance of a Listed Building incurs VAT of 20% (<http://www.hmrc.gov.uk/vat/sectors/builders/construction.htm>). Although this issue affects all buildings; the VAT is essentially a tax on preventative maintenance and repair and can act as a financial barrier rather than incentivising the repair and maintenance of a Listed Building. The campaign group have also undertaken research which indicates that:

- *'In the central scenario a reduction in the rate of VAT from 20% to 5% would result in a 5% increase in demand for housing renovation and repair work across the private and social housing sectors;*
- *This means that by 2020, approximately 95,480 extra jobs could be created across the whole UK economy alongside a boost in total output of £15.1bn following this reduction in VAT to 5%;*
- *During 2015 it is likely that an additional 31,950 UK full-time equivalent jobs would be created in the construction sector assuming a 5% increase in demand and a shift from the informal to the formal economy;*
- *Although there would be total base VAT loss to the Treasury of £1.6bn in 2015, it is estimated that £2.1bn would be generated in the wider economy;*
- *A VAT reduction on housing renovation and repair could provide a £15.1 billion stimulus to the wider UK economy and 95,480 extra jobs by 2020; and*
- *Similar VAT reductions have resulted in an increase in consumer demand and employment in the Isle of Man and the Netherlands'* (FMB 2014).

#### 2.4.4 Historic Scotland

Historic Scotland fulfils a similar role in Scotland as English Heritage does in England. Historic Scotland also publishes a range of guidance notes; most relevant to the maintenance theme is their guidance titled *'Maintaining your home: A short guide to homeowners.'* The guidance aims to inform homeowners of how to maintain their home as well as to look out for various signs which can mean problems for buildings. In the introduction of this guidance it states that:

*'By adopting a planned approach to maintenance the homeowner can avoid the need for unplanned emergency repairs and will also have a property that maintains its original character and retains or even enhances its value'* (Historic Scotland 2007: 1).

Along with this, Historic Scotland have introduced a *'Traditional Building Health Check Scheme'* which aims to:

*'see Historic Scotland, working in partnership with CITB-Construction Skills Scotland, pilot a scheme of independent inspections to identify issues with Traditional Buildings, that when addressed will stimulate the repair and maintenance market, through using appropriately skilled and qualified contractors to undertake any work identified (<http://conservation.historic-scotland.gov.uk/home/skills/healthcheckscheme.htm>)*.

The website also offers training placements for traditional skills and offers bursaries and grants to educate people. Further information on the pilot scheme in Stirling which inspired the Traditional Building Health Check Scheme is explored in the sub-section 2.4.10.

#### 2.4.5 Living Over The Shops Project (LOTS)

The LOTS project was initiated through a grant in 1989 with the aim of working with housing authorities, Local Government and private owners in order to utilise under-used space on the upper floors of commercial buildings, typically within the town and city centres of the UK. Research undertaken by the LOTS group estimated that this under-used space was enough to house at least 500,000 people throughout the UK (Cornerstone Architecture Magazine 2006: 35).

Research undertaken by South Bank University found that the primary reason for vacancy was associated with the complex ownership patterns of commercial property, with approximately 80% of commercial property owned by absentee owners and the reluctance of commercial property owners to manage sub-tenancies, particularly when these were residential. Although predominantly focused on housing people, the research also highlighted that a benefit of utilising upper floor space meant that the occupancy of the building gave greater security and that the building could be better monitored and maintained, which has benefits for the historic fabric of the building (South Bank University 1997).

Although the project has ceased as it does not have any funding, the LOTS group had some successes, with 10,000 people housed during their 15 years of operation. There have also been some successes in the legislative realm with changes to the town planning permitted development order which now allows the conversion of upper floors of commercial buildings to flats without the need for planning permission. However, prior approval may be needed from the Local Authority in cases such as contamination and flooding (DCLG 2014).

#### 2.4.6 Maintain Our Heritage (MOH)

MOH was formulated in 1998 at the 25<sup>th</sup> Anniversary of the formation of Monumentumwacht in the Netherlands. MOH gained a number of grants to run a pilot project for a year in Bath, with a similar methodology to that of Monumentumwacht (The pilot project is explained further in the next sub-section 'Putting the Methodology into Practice'). MOH's mission statement states:

*'Maintain Our Heritage believes we need a new, long-term, sustainable strategy for the care of our historic environment, with pre-eminence given to maintenance. We need a change in attitude toward maintenance amongst the authorities, the conservation movement and owners' ([www.maintainourheritage.org](http://www.maintainourheritage.org)).*

Since the pilot project in Bath, MOH now runs *GutterClear* which is a maintenance service for the churches of Gloucestershire. The group have also published articles and guidance on maintenance such as *'Putting it off: How Lack of Maintenance Fails Our Heritage, 2004.'* In this research MOH highlight that maintenance of historic buildings:

*'is most beneficial in conservation terms when it is preventative, that is, intended to remove the need of repair.*

*Maintenance:*

- *Keeps up a building's appearance; extends its life , and safeguards its investment value;*
- *Reduces or eliminates the cost and disruption to occupants that flow from failures and occasional large-scale restoration;*
- *Is sustainable, using fewer new materials involving less extraction, processing and transport; and*
- *Retains historic fabric; and provides a business activity that is steady and counter cycle, bringing jobs all year round in all parts of the country.'* (pp4)

#### 2.4.7 National Trust

The National Trust is a conservation charity which began in 1895, which originally was formed to protect, maintain, and open to the public, large country houses and estates. Although the trust still manages some 300 country houses, it also manages woodlands, mills, archaeological remains, ruins and also significant collections, paintings and interiors (<http://shop.nationaltrust.org.uk/about-us/i2>).

The National Trust also publish guidance into the appropriate care of historic buildings such as *The Manual of Good Housekeeping*, or more technical publications such as *Historic Buildings Maintenance: A Practical Handbook 2011*, which was originally written by Jürgen Klemisch in 2006 for German buildings and has been adapted to the UK. Klemisch (2011) highlights that effective building maintenance requires the recognition of factors which can shorten the life of a building such as:

- *Vacancies;*
- *Neglected Maintenance;*

- *Wear and Tear;*
- *Lack of, or wrongly implemented care measures;*
- *Incorrect Ventilation; Dilapidation due to limited lifespan of incorporated materials;*
- *Environmental action; Infestation/infection by vermin, fungi etc;*
- *Building defects; and*
- *External decay agents.*(Klemisch 2011: 9)

The research undertaken by Klemisch in association with 3 other architects enabled the formulation of the 'Building Maintenance Logbook,' which is a set of templates which can be used by conservation specialists to monitor and maintain a building. The logbook is a useful set of procedures which applies a standard which can be adopted and translated throughout the world.

#### 2.4.8 Princes Regeneration Trust (PRT)

The PRT is part of the Prince of Wales group of charities whose vision is:

*'that redundant historic sites, at risk of demolition or decay, are rescued, reused and regenerated for the benefit of the surrounding community'* (<http://www.princes-regeneration.org/about-us>).

The PRT publishes guidance notes in order to educate the community about the historic environment, and has created the Sustainable Heritage Toolkit. The toolkit consists of 21 steps mainly aimed at Government departments in managing and disposing of heritage assets. Step 2 'Maintain your building and carry out periodic surveys' is perhaps one of the crucial points where the trust comments:

*'The best way to avoid many of the difficulties associated with the disposal of heritage assets, and to prevent many local authorities from having to dispose of heritage assets they own in the first place, is through better ongoing maintenance.... Postponing maintenance is a false economy and poor asset management.'* (<http://www.princes-regeneration.org/sustainableheritage/toolkit/step-2-maintain-your-building>)

#### 2.4.9 Society for the Protection of Ancient Buildings (SPAB)

As already highlighted in this research, SPAB have played a large role in the formulation of maintenance regimes and the changing of public perception and culture where it relates to the historic environment. SPAB have published a number of books, advice and guidance notes relating to the care of the historic environment, and also undertake training courses as further discussed in Case Study 3. What resonates through all the books and guidance notes is the manifesto of William Morris which sits at the heart of what the group practices. Perhaps a suitable quote regarding maintenance comes from SPAB's 'Good Maintenance Guide for Places of Worship, 2008' which reiterates a quote from John Ruskin, speaking of Rouen Cathedral in 1859:

*‘Take proper care of your monuments and you will not need to restore them. A few sheets of lead put in time upon the roof, a few dead leaves and sticks swept in time out of a water course, will save both roof and wall from ruin. Watch an old building with an anxious care; guard it as best you may, and at any cost, from every influence of dilapidation’* (SPAB 2008, 9).

#### 2.4.10 Stirling Heritage Trust: A Scottish ‘Monument Watch:’ The Case for a Preventative Maintenance Scheme for Traditional Buildings in Scotland.

In Scotland there is no national strategy or ‘duty of care’ to maintain and properly protect the fabric of historic buildings (Stirling City Heritage Trust 2012: 8). Historic Scotland’s Technical Conservation Team commissioned a pilot study by Stirling City Heritage Trust in order to investigate whether a planned maintenance scheme along a similar methodology to Monumentumwacht can be implemented in Scotland, as it is considered that there is an urgent need for a proactive building maintenance program.

The report illustrates that in Scotland, approximately 60% of all buildings have disrepair to critical elements of the building which make it wind and water tight. Figures also showed that disrepair increased to 76% for traditional buildings, with over 90% of these buildings being in private tenure. (Stirling City Heritage Trust 2012: 8). The report sets the following 10 recommendations:

- **‘Recommendation 1:** *The Monumentenwacht model should be used as the basis for a proactive maintenance service in Scotland and adapted to suit the Scottish context;*
- **Recommendation 2:** *A pilot exercise of no less than 5 years is undertaken in order to trial the proactive maintenance service and test agreed aims and objectives;*
- **Recommendation 3:** *A 2-tier model should be established (national and Local);*
- **Recommendation 4:** *The service should be impartial, with voluntary membership;*
- **Recommendation 5:** *The educational role of the service should be considered in respect of providing advice and information on maintenance, repair; Engaging professionals, property managers and contractors, the ‘green agenda,’ Property management and property legislation;*
- **Recommendation 6:** *Historic Scotland should lead the pilot and fulfil the role of ‘national organisation;’*
- **Recommendation 7:** *The capacity of individual local authorities to take part and contribute to a proactive maintenance scheme should be investigated further;*
- **Recommendation 8:** *The pilot should be operated in one (or more) of Scotland’s town or city centres where there is an established grant initiative;*
- **Recommendation 9:** *The pilot should be financed on the basis of a not for profit model in the first instance. Lobbying should continue for a reduced VAT rate on maintenance and repair; and*
- **Recommendation 10:** *Support stakeholder colleagues to investigate a registration scheme for construction operatives and companies in parallel with the pilot service’* (Stirling City Heritage Trust 2012: 157).

## 2.5 Case Studies in Preventative Maintenance & Conservation

This next section gathers together the research, policy, guidelines, history and theory of preventative maintenance and conservation as discussed, in order to look at four case studies to examine the ways in which preventative maintenance and conservation can be delivered. Case Studies such as Monumentumwacht, run throughout the Netherlands are seen as the benchmark of preventative conservation. Monumentumwacht has also been trialled in the UK in a pilot project at Bath and can be seen as more hands-on and proactive process. There are also other methods of looking at preventative maintenance and conservation such as the Heritage at Risk register which tends to have a more of a 'name and shame' process in order to stir public opinion into making sure buildings are maintained and taken off the 'at risk' list. The HAR Register is changing with the trialling of a mobile phone application. The SPAB national maintenance week is also proactive about raising and encouraging awareness, education and community involvement in maintenance which is an essential outcome. Although this research acknowledges a number of other processes, below is a small amount of case studies to highlight the different ways preventative conservation can be installed into society and their implications and results.

### 2.5.1 Case Study 1: Monumentenwacht, The Netherlands & Flanders, Belgium

Formed in 1973 in the Netherlands, and later during the 1990's it was replicated in Flanders, Belgium; Monumentenwacht is a non-Government organisation whose aim is to prevent the deterioration of historic buildings. The motto for the organisation is '*prevention is better than cure*' and preventative conservation is carried out by a group of employees who visit Listed



Figure 6 – Monumentumwacht (Source: [www.monumentumwacht.nl](http://www.monumentumwacht.nl))

Buildings and systematically undertake regular inspections of Listed Buildings to perform minor repairs and give advice and recommendations on maintenance to the owner or housekeeper.

In 2002, the organisation had 52 teams inspecting, monitoring and maintaining 15,000 Listed Buildings and structures with a 95% subscription rate. Although owners subscribe to the service, it is heavily subsidised by the Government with the average cost of one team at €112,000 per annum and Government subsidies of between 75% - 90% of overall labour costs (Luijendijk 2001).

The key behind the scheme is that it has full Government support and subsidies. The Government offers subsidies for Listed Building repair and restoration only if owners have subscribed to Monumentenwacht, and it also becomes difficult for an owner to sell their property if it has not been regularly inspected by Monumentenwacht.



Monumentenwacht spoke at their 1<sup>st</sup> Conference held in 2001 and state that a result of their organisation that:

*‘owners of historic buildings have become more aware of the financial and cultural-historical benefits of regular maintenance. As a result of this awareness, the owners have become more committed and increasingly follow the maintenance recommendations. This has led to an improvement in the general condition of the historic buildings’* (Monumentenwacht 2001:5).

The Monumentenwacht system evokes Della Torres (2013) principles of preventative conservation as it involves a systematic condition and monitoring survey, which can be seen as a ‘Secondary Prevention’ measure; it provides education and awareness to the owner and developing ways to address the issues to support ‘Primary Prevention,’ and includes small maintenance measures such as gutter cleaning in order to prevent further damage.

Monumentumwacht still operates today and its successes have been replicated in other places around Europe, such as France, and even the UK, such as in Bath, England, and more recently the methodology has been assessed by the Stirling Heritage Trust, Scotland.

### 2.5.2 Case Study 2: Monumentenwacht in England: A Pilot Project at Bath, by Maintain Our Heritage, 2003

Maintain Our Heritage (MOH) was formed in 1998 after a seminar which celebrated 25 years of Monumentenwacht. The MOH group were keen to implement a similar system in England, and set about gathering funding for a pilot project in Bath. In 2003 the pilot project commenced and ran for a year with a Monumentenwacht-type system where a number of specialist conservation employees would carry out Listed Building inspections, provide information to home owners as well as small routine maintenance.

A target was set of 72 buildings in 6 months, however this was extended to 12 months. Initially there was a very slow take-up of the service, however the MOH group eventually achieved 72 buildings, as well as offering churches a reduced rate of £50. The range of costs of an inspection was dependent upon the complexity of the building, but was between £150-£700; however 69% of charges were in the region of £150-£225. The actual cost of each inspection without subsidy would have cost on average £1100 (MOHa 2004).



Figure 7 – MOH Bath Pilot (Source: <http://www.maintainourheritage.co.uk/pdf/pilot.pdf/index.php>)



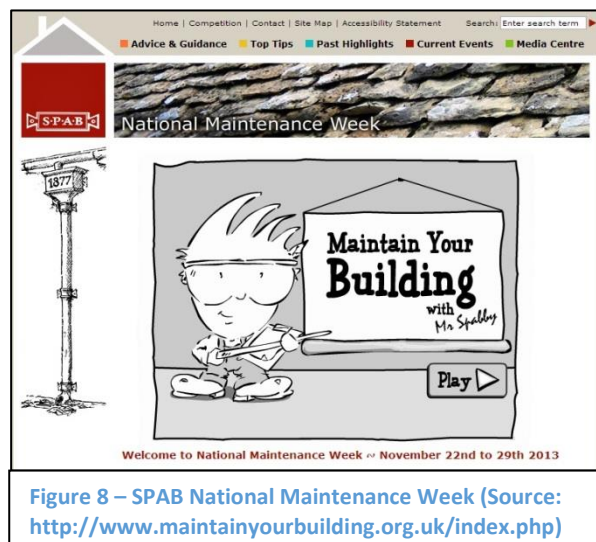
A total of 17 post-service questionnaires were received, which although demonstrated that the service was well received and that there was demand for the service, only 52% of respondents stated that they would use the service again in a year's time at a similar or higher cost. The report of the pilot project in Bath viewed the project as necessary and worthwhile, however felt that customers were *'unwilling to pay a realistic and economic price that would allow the development of a sustainable long term service'* (MOH 2004). A summary of the lessons learnt can be seen in the following paragraph:

*'MOH also acknowledged that a year was not long enough to establish a market for a new product. Marketing was disproportionately expensive in relation to number of properties inspected. Interest accumulated towards the end of the year long pilot, however the inspectors were already at full stretch and the inability to scale-up the pilot or continue the time frame meant interested owners were turned away. This could be considered a fundamental difficulty of a 'pilot' scheme. In other countries Monument Watch schemes have been adopted and then rolled out, even if this means starting small'* (Stirling City Heritage Trust 2012: 103).

### 2.5.3 Case Study 3: SPAB Faith in Maintenance and National Maintenance Week

As highlighted throughout this research, SPAB has been prolific in preventative maintenance and conservation and could be labelled as one of the 'founding fathers' of preventative conservation for the past 150 years. More recently, SPAB have utilised social media to formulate the *'Maintain Your Building'* website, which not only provides advice on maintaining a building, but also introduces *National Maintenance Week* and the *Faith in Maintenance* project.

National Maintenance Week is in its 12<sup>th</sup> year and is held at the end of November, a particularly important time when winter is approaching and generally where problems start to take place in Listed Buildings. During this week, presentations and advice are held around the country in order to provide knowledge and guidance to those who are responsible for the care and maintenance of buildings. One of the ways this is conveyed is by SPAB's 'Buildings MOT,' which has been framed in a similar manner to a vehicle MOT, and is a simple annual checklist of things to undertake such as gutter clearing, checking for loose slates, or cracks to get your building ready for the winter ahead.



The Faith in Maintenance project is partly funded by the Heritage Lottery Grant Scheme and is a series of 1 day courses which provide education and guidance regarding Places of Worship. Over 14,500 places of

worship in the UK are Listed Buildings, and represent approximately 45% of Grade I Listed Buildings ([www.English-heritage.org.uk](http://www.English-heritage.org.uk)). By enabling not only the managers of church buildings, but educating members of the community in order to help understand these buildings enables better maintenance and much needed volunteering opportunities to maintain Places of Worship in the community and across the country.

#### 2.5.4 Case Study 4: The Heritage at Risk Register and Heritage at Risk Survey

As outlined throughout this research, monitoring and maintenance is seen to be a key to preserving historic assets for future generations. As Van Balen, & Vandesande 2013 state:

*‘Timely identification and correction of defects on historic buildings and in heritage sites can prevent major consequential damage, which may lead to heavy investments in order to bring the Listed Building back into a good state of conservation. A monitoring system can prevent historic fabric from deteriorating (unnoticed) to such an extent that costly and major repairs become necessary.’* (introduction: iii)

Since 2008, English Heritage have been actively involved in publicising ‘Heritage at Risk’ (HAR) however the maintaining of registers of buildings at risk has been taking place for a number of decades. The HAR register is published each year by English Heritage, and is an assessment of the condition and occupancy of a building to determine whether there is a risk of losing significant fabric. Due to the resources involved in assessing all Listed Buildings (estimated to be around 500,000), The HAR survey only details the Grade II Listed Buildings in London, and Grade I and Grade II\* buildings in the rest of England. The HAR survey has proven to be a useful tool in order to publicise the buildings at risk and has gained attention and publicity in all forms of media from news broadcasts on Television, radio and newspaper.

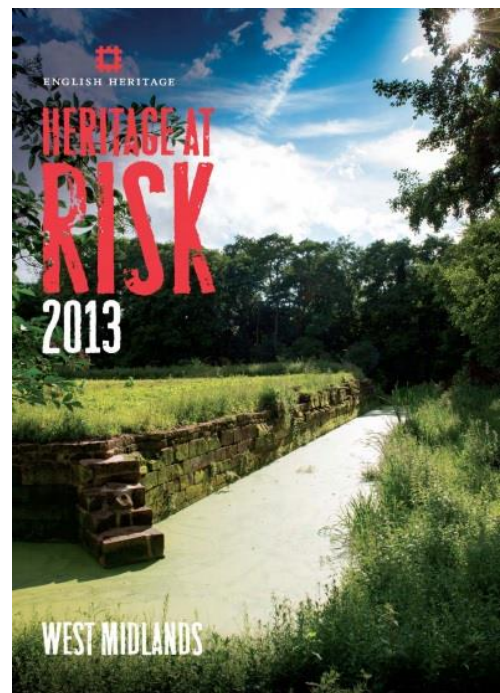


Figure 9 – English Heritage at Risk Register  
(Source: <http://www.english-heritage.org.uk/publications/har-2013-registers/>)

Currently the statistics relating to HAR are as follows:

- In 2013, there were a total of 5,700 Grade I and II\* Listed Buildings, monuments, landscapes, battlefields, ship wrecks which are at risk on the HAR Register;
- In 2012, there were 5,813 entries on the HAR register, indicating a reduction of sites at risk;
- The cost of repair and bringing buildings back into use is increasing;
- Of the 3,208 listed places of worship assessed nationally, 536 are on the POW HAR Register;

- 3,265 (16.5% of England's 19,792 scheduled monuments) are on the HAR Register; and
- 55% of buildings on the 1999 HAR Register have since been rescued and removed;

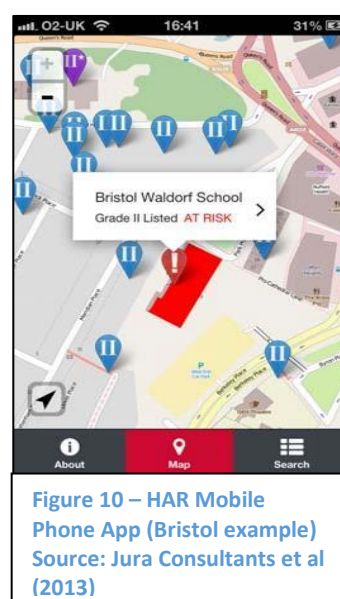
([www.http://www.english-heritage.org.uk/caring/heritage-at-risk/findings/](http://www.english-heritage.org.uk/caring/heritage-at-risk/findings/) )

There has been a total of 19 pilot projects around England outside of London where Grade II Listed Buildings have also been assessed which is detailed in the 2013 study by Jura Consultants et al. Each of the pilot projects had differences in that some were carried out by volunteers, consultants, and/or students; and therefore knowledge varied accordingly from specialists in conservation to those with some knowledge of conservation to no knowledge at all. The findings of the 19 pilot studies is summarised as the following:

- 4.2% of the 4,500 buildings surveyed were considered to be at risk;
- The most common problems of the buildings surveyed were the condition of doors, windows, walls, gutters and rainwater goods;
- The occupancy of buildings was an important issue, with approximately 6% of at risk buildings either vacant or not in use; and 7% were partly occupied;
- No single model tested through the pilots (such as students, consultants or volunteers) provided more accurate data than the rest;
- It was seen that the development of a good monitoring system and accurate data is via effective training and development;
- 45% of volunteers who took part had little or no surveying experience;
- 73% of respondents (82) said the project had definitely helped them to understand the factors that results in Listed Buildings being at risk; and
- 68% of respondents would volunteer for a similar project again (Jura Consultants et. al 2013).

One of the difficulties with the HAR approach is that often a building is placed onto the HAR Register at a point that is too late. A building 'at risk' means that a building has real risk of being lost, and this loss increases the chances that funding is allocated to resolve the problem which could be seen as 'rewarding neglect.' In many cases, more money and extensive repairs are required than would have been needed if a scheme of maintenance grants were offered to keep the buildings in good repair in the first place.

However, one of the positive actions that has resulted from the HAR Register is being progressed at Worcester City Council. Worcester City undertook a HAR survey with the use of trained volunteers and has seen some positive successes in motivating and retaining volunteers to not only undertake the original HAR assessment, but to maintain the cycle of assessments. In order to continue to manage and



update the register, English Heritage are offering funding to implement a mobile phone application which has been trialled in Bristol and North Yorkshire Moors and is hoped to improve the information gathered to update the HAR Survey. Worcester are currently applying to be one of pilot authorities to engage with the new HAR mobile phone application (Pers Comm 2014c).

## 2.6 Implementation

As can be seen by the evolutionary and ever changing reasoning to conservation and preventative maintenance, it is very difficult to understand and cover the history comprehensively. Perhaps Pannekoek (2009) best defines this where he states:

*'Preservation for religious reasons is as old as the first rudimentary tomb. Preservation for aesthetic reasons is as old as civilisation. But 'preservation for preservation's sake,' because an object is old, regardless of its religious or aesthetic content, is a thing very much of today.'*(pp 30)

Taking into account what we have learnt so far throughout this research, a number of useful lessons can be learnt from a review of literature as well as the exploration of different case studies which utilise different methodologies, but with a similar overall purpose. From analysing the case studies we can see that there are a number of issues to be analysed.

Firstly, Case Studies 1-2 look at the Monumentumwacht system which was shown to take time to develop. Many residents were likely to have been unsure of the new system and would have rather waited to see what happens prior to taking it up. In this case 'word of mouth' was found to be one of the most useful forms of communication. Hence the reason for a further pilot study in Scotland should take no less than 5 years to enable the project to form a base which cannot really be achieved in a single year as experienced by the Bath project.

Monumentenwacht (Case Study 1) is also heavily subsidised by the Government and was allowed to run into debt initially before the project sustained itself. The pilot project in Bath (Case Study 2) was not. This is perhaps a crucial difference, as these projects do take a while to gain ground, and are less likely to succeed without financial support from the Government. The Government also plays an important role by using regulatory requirements to change the way in which society operates and considers heritage. MOH highlight this concern by stating that the:

*'Government should promote a UK wide debate on integrating maintenance into policy and practice'*  
and that the:

*'Government should legislate to introduce a 'duty of care' or enable Local Authorities to introduce a minimum maintenance code to require owners to maintain Listed Buildings'* (MOH 2004c).

For Case Study 1, there is clear Government support and subsidies for Monumentenwacht in the Netherlands, there is also the mechanism for costs savings with regard to the repair of Listed Buildings once owners have subscribed to this service. In Bath, the home owner was given a report which tells them what needs to be fixed, but there is no incentive of 'Duty of Care' to maintain their property. The report by Stirling Heritage Trust and research by the Federation of Master Builders have explored possible incentives which could be made here in the UK such as making alterations to the VAT system. Listed building owners currently have to pay the full rate of 20% VAT for costs involved in maintaining their building. MOH considers that this should be rectified stating that:

*'owners should be entitled to financial incentives and advisory and technical support...Government should consider a change in emphasis to encourage owners to maintain buildings, not just restore poorly maintained buildings. VAT anomalies must be removed'* (MOHc 2004).

Currently VAT is seen as a 'tax on maintenance,' whereas 'new builds' do not have to pay this. This also has ramifications for the empty spaces above shops which could be converted into dwellings, which would enable better monitoring and maintenance of underused spaces. Although planning restrictions have been relaxed to allow the change of use from shop to residential, the conversion of the space above a shop would still be subject to VAT.

The research into developing a Monumentenwacht type study in Scotland highlighted the 'duty of care' argument which does not exist in Scotland or England, and that without this legislative backing, it becomes increasingly difficult to place the responsibility of an owner to maintain their building. There is a process for enforcing against a property owner where neglect is present, however this is a last resort, and often never occurs as a result of dwindling public resources to fund such enforcement action, and the enforcement is done at a reactive time when the building is perhaps beyond saving or costs more money that it would have done if a proactive and preventative approach was taken.

Although one denominator all of the Case Studies have in common is the raising of public awareness, community involvement, and education. This public awareness can be implemented into a society by Case Study 3 which looks at education and guidance through training days, and Case Study 4 HAR Registers which has benefits of increasing public awareness regarding the state of our heritage and the public campaigning which comes along with this. However we also see the downsides of this in that funding is allocated to a HAR building in a way which rewards neglect. Perhaps it would be better to fund or incentive maintenance grants as a way of preventing the building from being at risk in the first place. The HAR register is something which will be looked at in greater detail in this research by applying this system in the Hereford City CA, the results of which are shown in Appendix 1 and analysed in greater detail in the following sections.

A review of the literature, case studies, legislation and theory has led the Author to the following outcomes:

1. There is much research and a developing knowledge base that preventative maintenance and conservation is better than 'reactive conservation' which often comes too late;
2. Government legislation and funding needs to play a stronger role in preventative maintenance; particularly when it comes to incentivising preventative maintenance through reduced VAT and via a regulatory framework in ensuring a 'duty of care' for historic assets;
3. We need to move away from a system which rewards neglect to one that incentivises and rewards preventative care and maintenance with a focus on a 'duty of care;'
4. Better occupancy of buildings not only increases much needed housing for people, but is an important factor in the monitoring and maintenance of a building;
5. Education of society and community involvement is key to formulating a preventative conservation strategy, and that societal changes do not happen overnight, with education, funding and support needed over the long term before results and changes to attitudes can begin to be seen;

Figure 11 – Outcomes of the Research and Literature Review (Source: The Author)

### 3. Section 3: Methodology of the Heritage at Risk Survey

The following two sections bring forward the HAR Survey which was analysed in Case Study 4. This section looks at the methodology of undertaking a HAR Survey which was undertaken in April 2014 by the Author within the boundaries of the Hereford City CA, Hereford, West Midlands (See Appendix 1). The next Section 4 will analyse the results of this study.

There are a total of 281 listings in the Hereford City Conservation area, however this contains many more buildings as some listings contain 2 or more buildings of special architectural or historic significance. There are three different types of assessment of risk which have been undertaken as part of this research:

- Buildings at Risk HAR survey: This survey is carried out on all listing entries which are not SAM's or Places of Worship;
- Scheduled Ancient Monuments HAR survey: This survey is applicable to any listings which also are SAM's. As the SAM listing overrides the Listed Building listing, an assessment is taken on whether to undertake the SAM survey or the Listed Building survey. Where a listing is also a SAM, the HAR Study will also include a SAM Assessment; and
- Places of Worship HAR survey: A specific survey is undertaken for places of worship. This survey has different categories which assess the level of use as well as having more components to assess given the general larger nature and condition of churches and their age.

#### 3.1 The Building HAR Survey

A total of 275 of the 281 listings were assessed using the Building HAR survey. Each of the applicable listings in the Conservation Area is visited and a photo is taken of the building from a public vantage point to identify the buildings as well as visual documentation. The exterior of the listing is then assessed and interior where specified. The buildings survey itself contains a number of elements:

- Assessing the occupancy of the building;
- Looking for signs of neglect;
- Assessing and making a judgement of the condition of the building, and for any signs of deterioration to the building, such as the roof, guttering, brickwork, windows, doors; and
- Seeing if the building is suffering from heritage crime, such as vandalism, anti-social behaviours etc.

The listings are assessed in accordance with the guidelines and definitions for HAR surveys, see <http://www.english-heritage.org.uk/content/imported-docs/f-j/guidance-BAR-survey-GII-pilots.pdf> for more details.

The information is then compiled into the following chart shown in Figure 12 in order to assess the overall category of risk to be afforded to each listing.



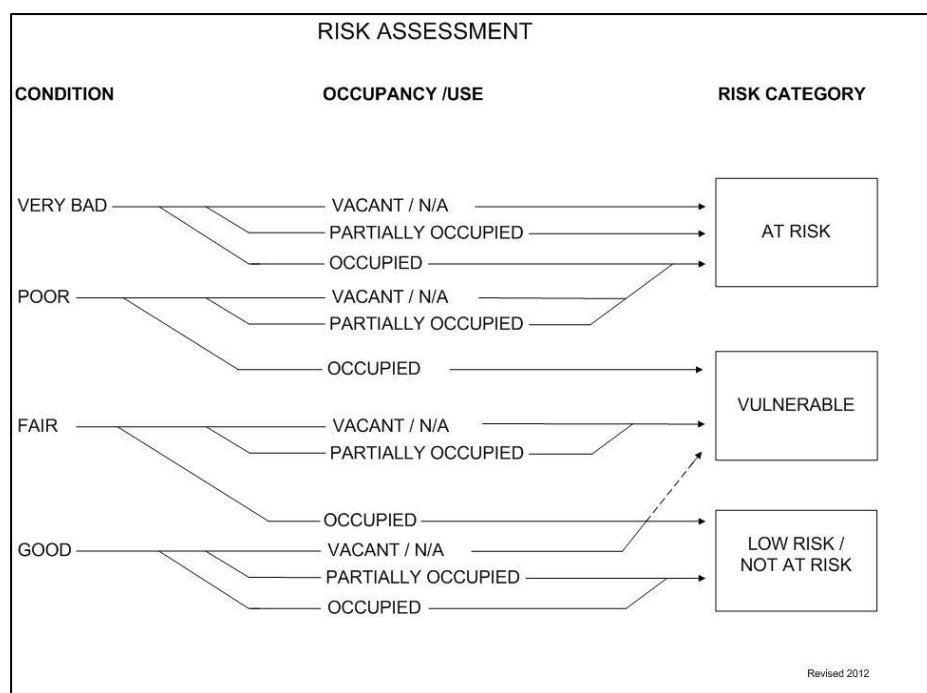


Figure 12 – Overall risk assessment for listing (Source: English Heritage)

After each listing is assessed, the findings are shown in Appendix 1 and discussed with the Herefordshire Council's Senior Conservation Officer, and Grade I and II\* listings are additionally discussed with English Heritage. The results are then analysed as shown in Appendix 2.

### 3.2 The Places of Worship HAR Survey

The POW HAR Survey is different to the buildings survey as there are a number of other important issues to consider with POW. Many POW are amongst the highest grading of listings, as well as generally being older, taller buildings with more ornate and intricate elements which are susceptible to loss. The POW survey concentrates the assessment to the following:

- Level of use;
- Denomination/Faith; and
- Condition which comprises the elements of Higher Level Stone/Brick; Roof; Rainwater Goods; Structural Stability; Interior; and Window tracery

The HAR Survey for a POW is assessed purely on the basis of condition, however any components rated as 'Poor' or 'Very Bad' will result in the building being placed 'at Risk' on the POW HAR Register:

**'Poor' or 'Very Bad'** overall condition is recorded as **'High Risk'**

**'Fair'** overall condition as **'Medium Risk'**

**'Good'** overall condition as **'Low Risk'**

Figure 13 – POW HAR Assessment outcomes (Source: The Author)



### 3.3 The SAM HAR Survey

Figure 14 shows the SAM HAR survey. There were 7 listings which were fully or part of the 3 SAMs in the Hereford City CA (Remains of Blackfriars Priory; City Walls; Wye Bridge). The SAM HAR survey contains a flowchart where it indicated that in each of the 7 instances, a 'Building HAR Survey' is the most appropriate form of HAR survey.

Once starting at 1, the assessor goes through the survey until they reach a risk, or instruction to go to the Buildings HAR survey. The assessor then considers the trend and the current management of the monument (improving, stable, declining) and adjusts the risk accordingly. Then the assessor makes a judgement of whether the risk score accords with their professional judgement about overall risk to the monument.

YES	SAM HAR Survey	NO
<b>Built Structures</b>		
Go to 2	1. Does a building or built structure form a significant component of the site?	Go to 7
Assess under buildings HAR survey	2. Is the building/ structure in reasonable repair?	Go to 3
High Risk	3. Is an important part of the building/structure at risk of collapse?	Go to 4
High Risk	4. Has the building/structure suffered from recent and significant vehicle damage, vandalism, dumping, burning etc?	Go to 5
Medium Risk	5. Does the building/structure exhibit signs of moderate decay or loss?	Go to 6
Medium Risk	6. Do trees, scrub, or other vegetation pose a significant threat to the building/structure?	Go to 7
<b>Water Components</b>		
Go to 8	7. Does the monument have a significant wetland/ water component?	Go to 10
High Risk	8. Has there been any significant change in its water levels recently?	Go to 9
Medium Risk	9. If it dries out seasonally, is this affecting the monument's significance?	Go to 10
<b>Arable</b>		
Go to 11	10. Is the monument under arable/ arable rotation or affected by arable clipping?	Go to 15
High Risk	11. Does the monument survive as an earthwork or strong soil-mark?	Go to 12
High Risk	12. Is the monument deep-ploughed or the ploughing depth unknown?	Go to 13
High Risk	13. Is the monument on a steep slope?	Go to 14
Medium Risk	14. Is the monument on a medium to gentle slope?	Go to 15
<b>Erosion and burrowing</b>		
Go to 16	15. Does the monument suffer from a significant amount of burrowing, and/or erosion by plants, animals, people, vehicles or natural phenomena?	Go to 18
High Risk	16. Is the burrowing or erosion extensive and/or affecting an important part of the monument?	Go to 17
Medium Risk	17. Is the burrowing or erosion extensive and/or affecting an important part of the monument?	Go to 18
<b>Vegetation</b>		
Go to 20	18. Is a significant part of the monument covered by or within an area of woodland, scrub or bracken?	Go to 25
Medium Risk	19. Is the monument a large boundary-type earthwork eg. Cross-ridge dyke	Go to 20
High Risk	20. Is the monument covered by bracken?	Go to 21
High Risk	21. Is the monument under short rotation coppice?	Go to 22
Medium Risk	22. Is the monument under actively worked plantation?	Go to 23
Medium Risk	23. Is the monument covered by scrub?	Go to 24
Medium Risk	24. Is the monument covered by a moderate amount of unmanaged woodland, scrub or bracken?	Go to 25
<b>Human and other factors</b>		
High Risk	25. Does the monument have a recent history of anti-social behaviour	Go to 26
Medium/high Risk	Is the monument vulnerable for any other reason? Eg owner issues, utility companies,	Complete

Figure 14 – SAM HAR Survey (Source: English Heritage)

## 4. Section 4: Findings, Discussion and Interpretation of the HAR Survey of the Hereford City CA.

Once the Heritage at Risk Survey in Appendix 1 was carried out, the listings were placed in a table and analysed as shown in Appendix 2. By analysing the data, we can gain an understanding of the different factors which cause a building to be 'at risk' and also understand the general condition of the listings that make up the Conservation Area. The analysis of the listings will first look at a general overview of the 275 listings (which excludes POWs), a separate analysis on the 6 POWs, then Grade I, Grade II\* and Grade II listings individually. The English Heritage pro-forma (<http://www.english-heritage.org.uk/content/imported-docs/f-i/guidance-BAR-survey-GII-pilots.pdf>) defines what is meant by terminology such as 'Good' which is shown in inverted commas and arises from the definitions given in the standard English Heritage HAR survey pro-forma. Issues which were identified were categorised by the Author and are defined in the Glossary.

### 4.1 Findings of the Overall Listings

#### 4.1.1 Overall - Analysis of Listings

As shown in Figure 15 below, out of the total of 281 listings (which includes POWs) within the Hereford City CA, 86% of the listings are Grade II, 13% of the listings are Grade II\* and 1% of the listings are Grade I. When compared to the average of listings out of 374,081 from England, similar percentages can be seen with 92% of listings in England are Grade II, 5.5% are Grade II\* and 2.5% are Grade I listings (<https://www.english-heritage.org.uk/caring/listing/listed-buildings/>).

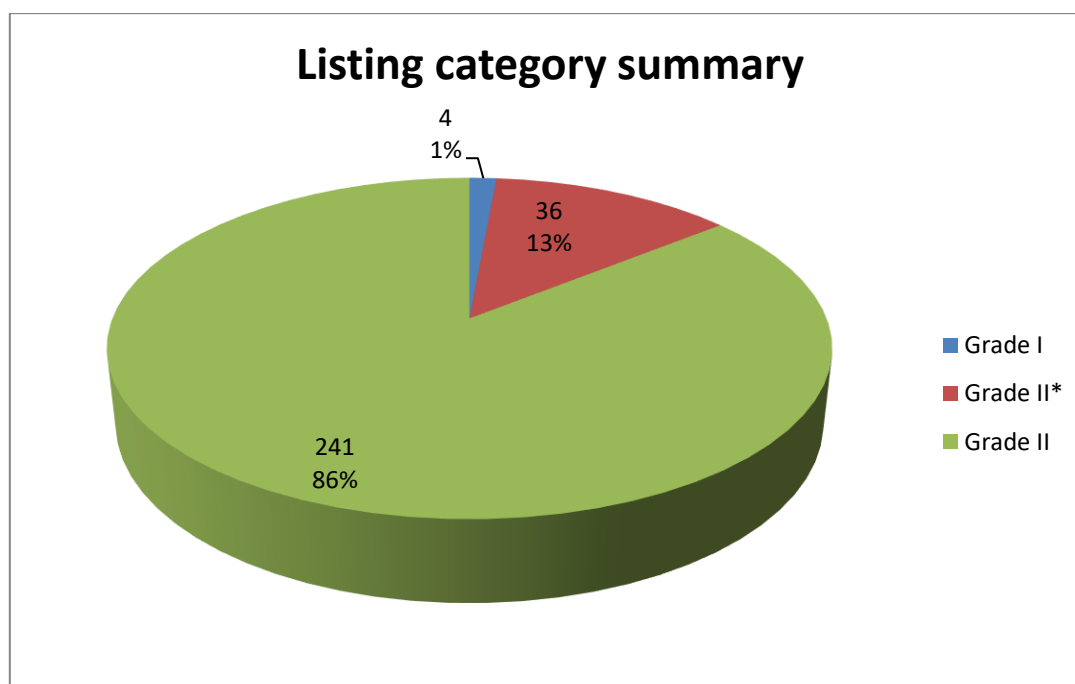


Figure 15 – Summary of the listings in the Hereford City CA (Source: The Author)

#### 4.1.2 Overall - Condition

As shown in Figure 16, out of the 275 listings (excluding POWs), a majority (85%) of the listings were considered to be in 'Good' condition, 13% of listings were in 'Fair' condition, and only 2 buildings (0.07%) considered to be in 'Poor' condition; and a further 2 buildings considered to be in 'Very Bad' condition.

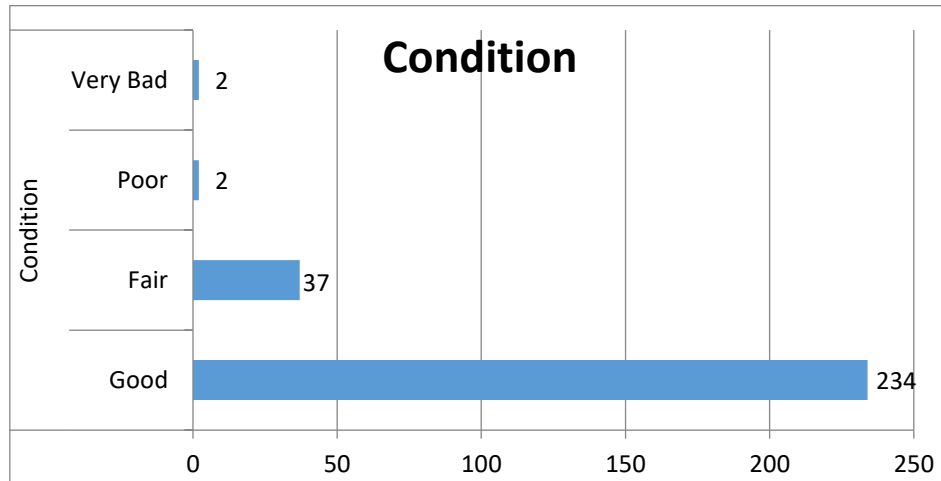


Figure 16 – Overall condition of buildings within the Hereford City CA (Source: The Author)

#### 4.1.3 Overall - Issues Identified

A total of 137 of the 275 (49%) listings had no identified issues. Of those which had issues, the highest frequency of problems identified as shown in Figure 17 were problems with the 'Façade' present in 49 listings, problems with 'Weed Growth' present in 42 listings and problems with 'Windows' identified in 35 listings.

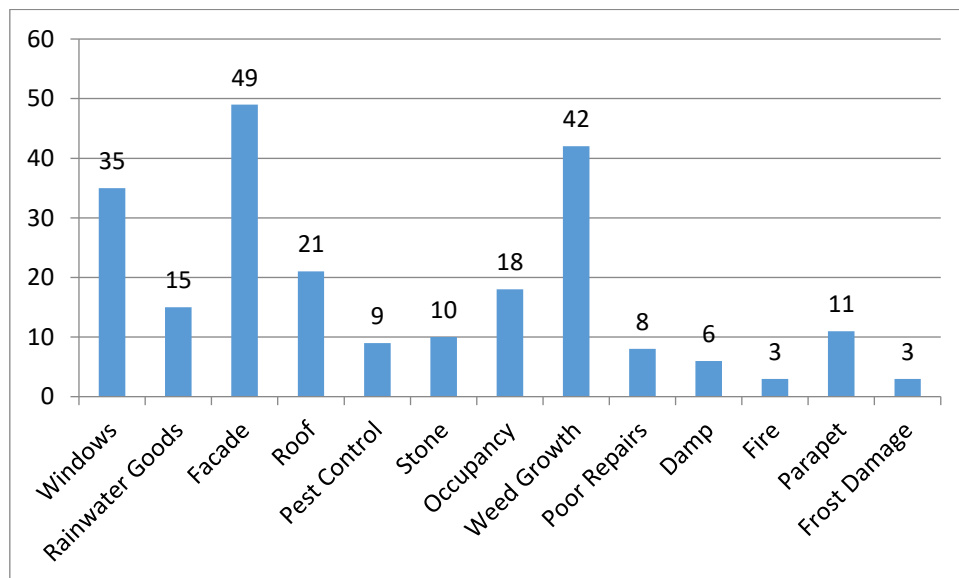


Figure 17 – Main problems assessed with listings in the Hereford City CA (Source: The Author)

#### 4.1.4 Overall - Occupancy

Overall, the majority of listings were shown to be 'Occupied,' with 242 of the 275 listings being assessed under this category. However it should be noted that buildings, for example, a 3 story retail premises which is occupied on the ground floor and uses the above 2 floors for storage would still be classified as 'Occupied.' There is an argument that in this circumstance that there is an under-occupancy of the building which could heighten levels of risk, however this was not part of the assessment. As shown in Figure 18, a total of 12 listings (4%) were considered to be 'Part Occupied' and 8 listings were considered to be entirely 'Vacant' (3%). A total of 13 listings such as monuments, phone boxes etc are not possible to be occupied, hence being categorised as 'Not Applicable' (4%). However, where a wall/railing and the attached building have separate listings (which occurs on 4 occasions), the walls/railings have been categorised in accordance with the occupancy of the building.

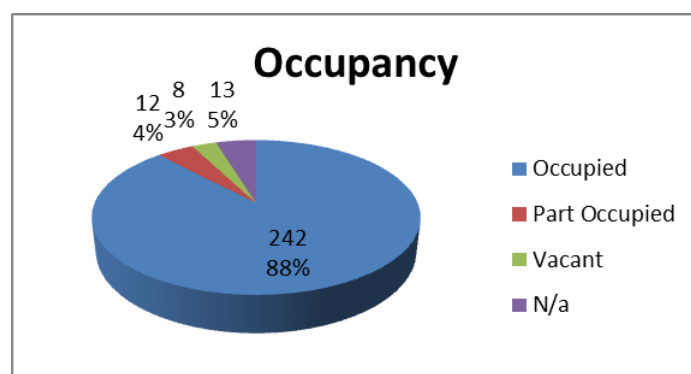


Figure 18 – Occupancy of the listings within Hereford City CA (Source: The Author)

#### 4.1.5 Overall - Heritage Crime

Heritage crime as shown in Figure 19 was not a very prevalent issue within the Hereford City CA, with only seven incidences over 6 listings. The most frequent heritage crime was 'Graffiti,' which occurred on 5 listings. The other two categories of heritage crime occurred on two individual listings where a stone tablet was missing (and had not been replaced as requested by the Council) from the facade of the Grade II, 23 St. Martins St (SM12); and the other being 'Anti-Social Behaviour' which has damaged some of the stonework of the Grade II\* Remains of the Blackfriars Priory (WS3).

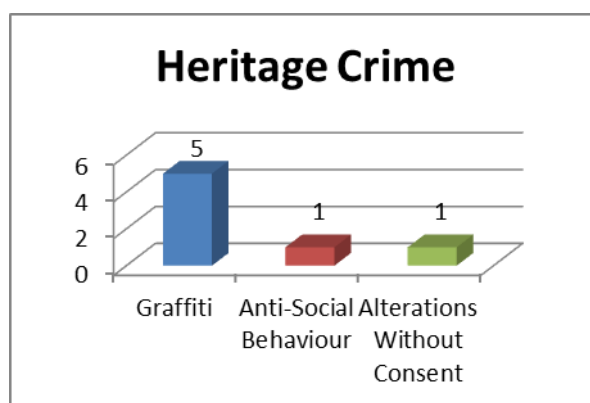


Figure 19 – Heritage crime (Source: The Author)

#### 4.1.6 Overall - Ownership

The overall ownership details of the 275 listings (excluding POWs) were difficult to obtain, as many of the listings in the Hereford City CA were commercial premises and staff did not know who owned the building. A number of ownerships were identified by assessing town planning and building records. As shown in Figure 20 the three highest categories of ownership were 'Private' (50%); 'Multiple Ownership' (24%); and 'Commercial Company' (12%). Other popular owners of listings in Hereford were the Hereford Cathedral School who owns 5% of the listings in the Hereford City CA and Local Government who own 4%.

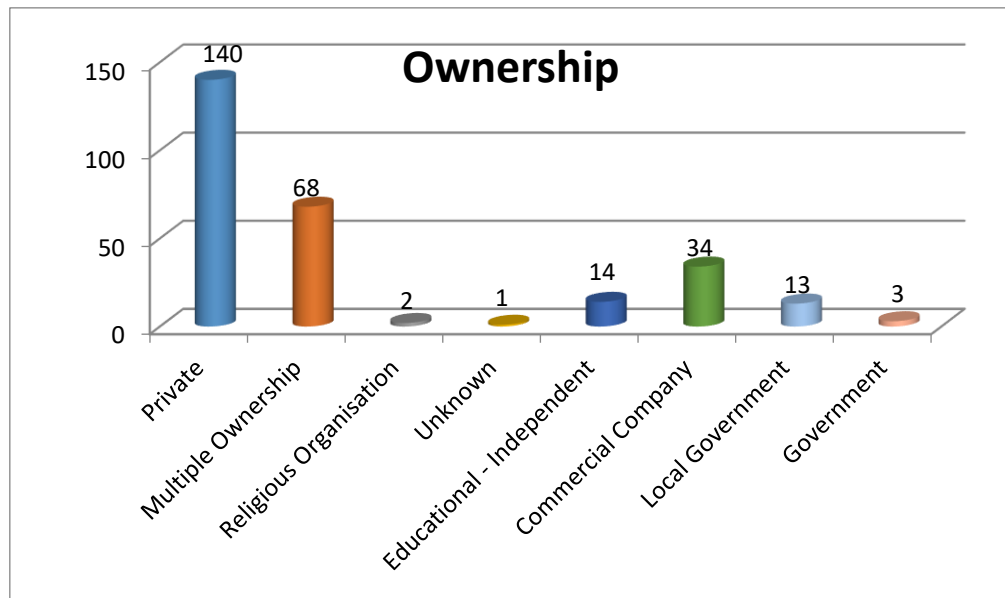


Figure 20 – Ownership of the listings within the Hereford City CA. (Source: The Author)

#### 4.1.7 Overall - Heritage at Risk

The last HAR assessment completed in 2013 for Grade I and Grade II\* listings showed that there were two listings within the Hereford City CA 'at Risk,' being the Farmer's Club, Whitchurch St (WS4), and the Church of St Francis Xavier, Broad St (BD12) (English Heritage 2013). In 2014 the current Building HAR survey showed that these two listings have had substantial works and as a result of this survey (Appendix 1), the two buildings are recommended to be taken off the Heritage at Risk register. This now means that no listings of Grade I and Grade II\* are 'at Risk' within the Hereford City CA under the Buildings at Risk register (Excluding POW). Currently there are 5.4% of Grade I and Grade II\* listings on the West Midlands HAR Register (excluding places of Worship) and also 4.1% of listings nationally (excluding POW) (English Heritage 2014).

A HAR survey of Grade II listings has never been undertaken in Hereford City CA, however it was found that 3 of these Grade II listings are currently 'at Risk.'

When assessing all listings (excluding POW) against the matrix as shown in Figure 12, a total of 197 (71%) of listing were assessed as 'Not at Risk;' 62 (22%) of listings were assessed as 'Low Risk;' 16 (6%) of the listings were categorised as 'Vulnerable' and 3 (1%) of listings were assessed as 'at Risk.' It should be noted that the 'Vulnerable' category contains 13 listings such as monuments, bridges and listings which are unable to be occupied, in which the matrix places these listings as 'Vulnerable,' even though they may be in 'Good' condition. However, this highlights the additional need to upkeep and maintain monuments and those heritage assets which do not have occupancy.

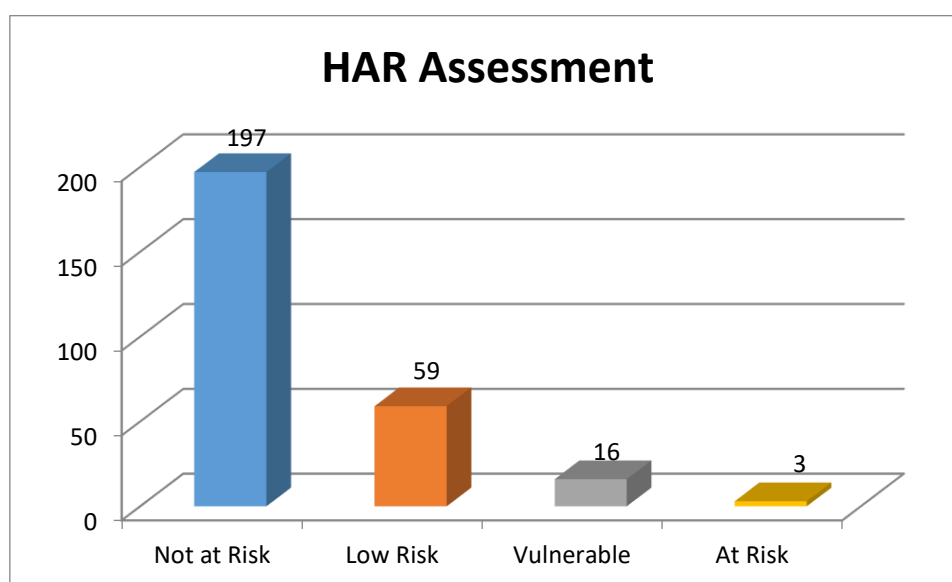


Figure 21 – Heritage at Risk Assessment of the Hereford City CA (Source: The Author)

## 4.2 Findings of Grade I listings

This next sub-section assesses Grade I buildings separately. Within the Hereford City CA, there are a total of 3 Grade I listings (excluding POWs).

### 4.2.1 Grade I – Condition

As shown in Figure 22 below, out of the 3 Grade I listings, 1 of the listings was in 'Fair' condition, and the remaining two listings were in 'Good' condition.

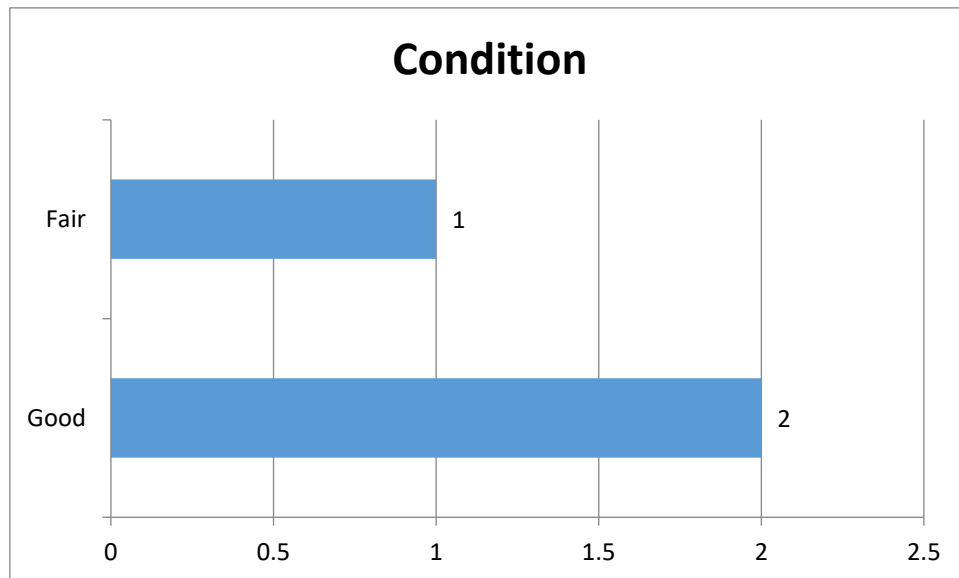


Figure 22 – Condition of Grade I listings within Hereford CA (Source: The Author)

### 4.2.2 Grade I – Issues Identified

As shown in Figure 23 below, only one occurrence of each issue of Stone, Weed Growth, Pest Control, and the Roof occurred. Listings such as the Old House, St Peter's Street (SS1) had issues with both the roof being badly weathered and pigeons nesting in the façade which can cause problems to the historic fabric. Only one building, Wye Bridge (SM1), did not have any issues identified.

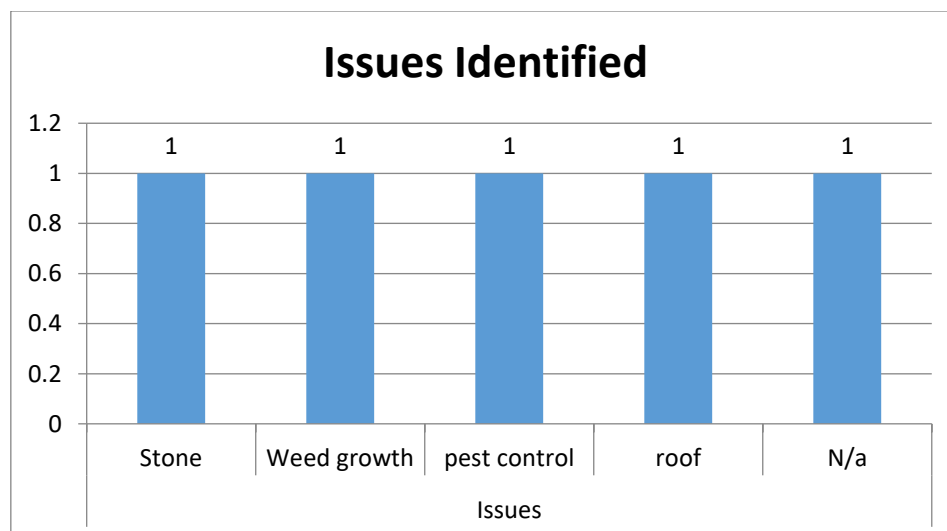


Figure 23 – Issues Identified to Grade I Listings in the Hereford City CA (Source: The Author)



#### 4.2.3 Grade I – Occupancy

Only two of the three listings were capable of occupancy, with one the listings being the Wye Bridge (SM1) which is incapable of being occupied, however it is well used by pedestrians and motorists and as a result is well maintained. The remaining two listings were ‘Occupied’ and consisted of a Museum (SS1), and a College (CC7).

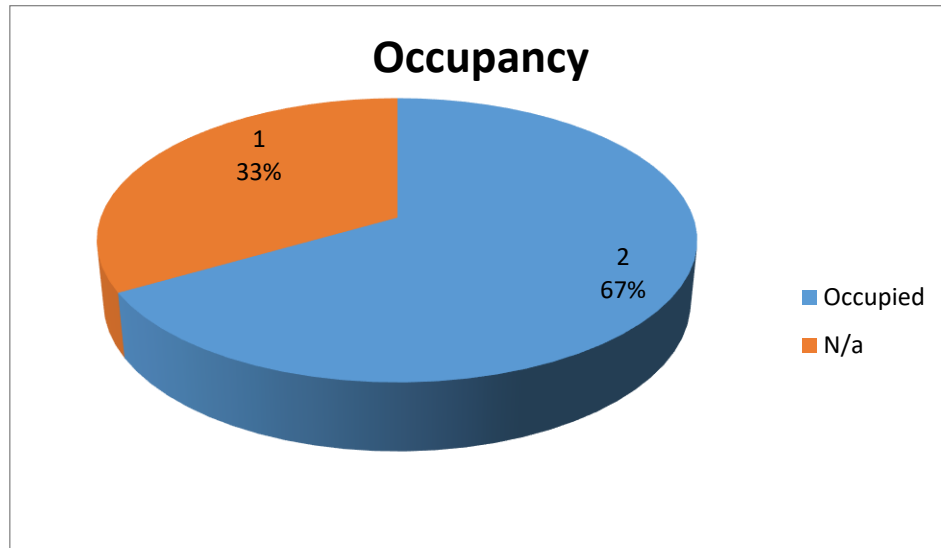


Figure 24 – Occupancy of Grade I listings in the Hereford City CA (Source: The Author)

#### 4.2.4 Grade I – Ownership

As shown in Figure 25 below, the three listings are owned by three bodies, being the Church of England (College of Vicars Choral; CC7); The Highways Agency (The Wye bridge; SM1) and the Old House (SS1), which is a Herefordshire Council owned Museum.

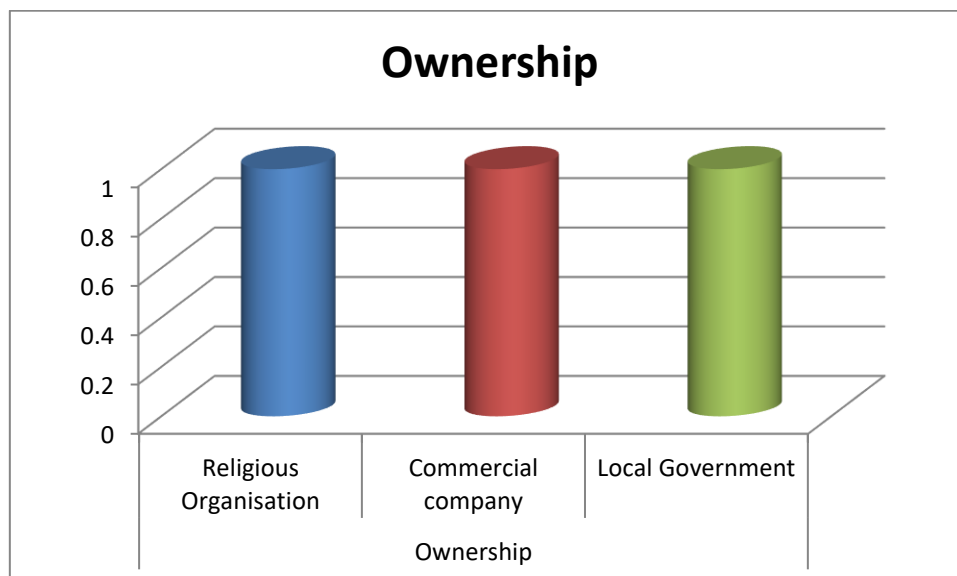


Figure 25 – Ownership of Grade I listings in the Hereford City CA (Source: The Author)

#### 4.2.5 Grade I - Heritage Crime

There were no identified occurrences of 'Heritage Crime' to Grade I listings.

#### 4.2.6 Grade I - Heritage at Risk Assessment

As shown in Figure 26 below, two of the three listings were categorised as 'Low Risk,' with some maintenance issues as shown in Figure 23 which require attention. The Wye Bridge (SM1) was assessed as being in 'Good' condition with no issues, however it is rated as 'Vulnerable' as it does not have the ability to be occupied, which escalates its HAR categorisation as shown in Figure 12.

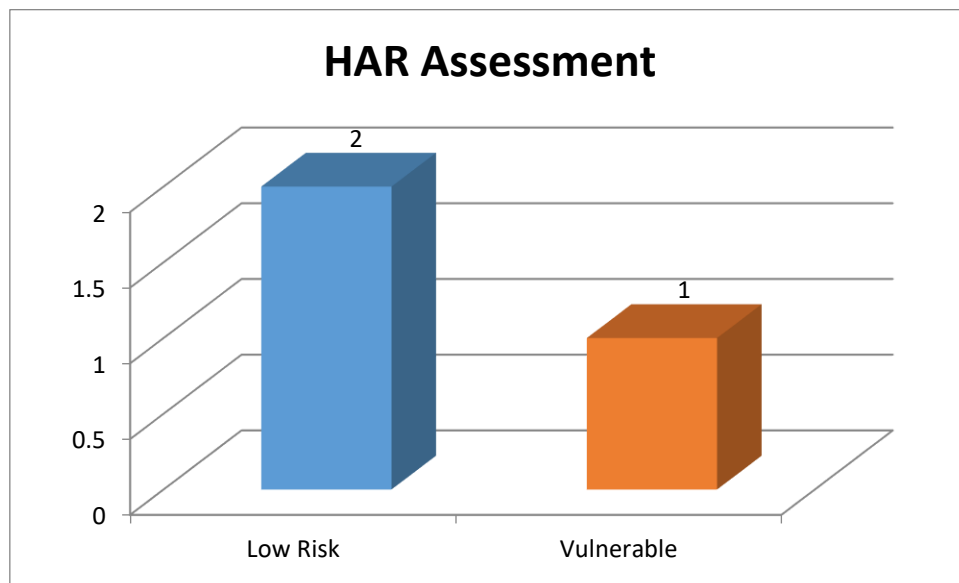


Figure 26 – HAR Assessment of Grade I listings in the Hereford City CA (Source: The Author)

### 4.3 Findings of Grade II\* Listings

This next sub-section assesses Grade II\* buildings separately. Within the Hereford City CA, there are a total of 33 Grade II\* listings (excluding POWs).

#### 4.3.1 Grade II\* - Condition

As shown in Figure 27 below, out of the 33 Grade II\* listings, 81% (27) of the listings were in 'Good' condition. Only one of the listings; the St. Owens Chambers and attached railings (SO7); was rated in 'Poor' condition with many issues present as discussed in the HAR survey at Appendix 1. The remaining 5 listings were considered to be in 'Fair' condition.

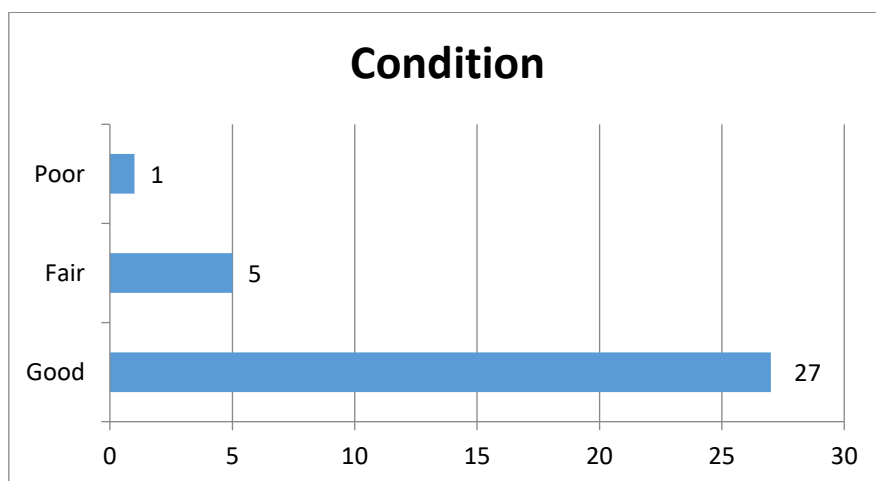


Figure 27 – Condition of Grade II\* Listings in the Hereford City CA (Source: The Author)

#### 4.3.2 Grade II\* - Issues Identified

A total of 18 listings (54%) were assessed as not having any issues. As shown in Figure 28, those listings that did have issues identified, 'Weed Growth' (21%), issues with the 'Facade' (15%) and issues with the 'Stone' (12%) were the most common issues arising. Problems with 'Windows,' 'Pest Control' and 'Parapets' were also identified in 6% of the Grade II\* listings.

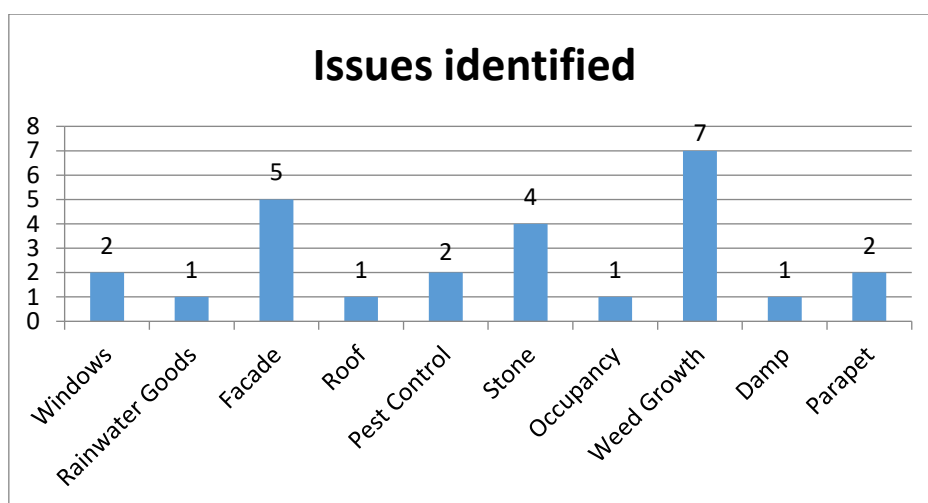


Figure 28 – Issues Identified for Grade II\* Listings in the Hereford CA (Source: The Author)

#### 4.3.3 Grade II\* - Occupancy

As shown in Figure 29, the majority of listings (88%) were assessed as being 'Occupied.' Three of the listings (9%) were not capable of being occupied such as the Nelson's Column (CG4), Blackfriars Preaching Cross (WS2) and the remains of Blackfriars Priory (WS3). One of the listings, Aubrey's Almshouses, Berrington St (BS2) consists of 3 former almshouses, two of which are currently empty, however tenants are being sought.

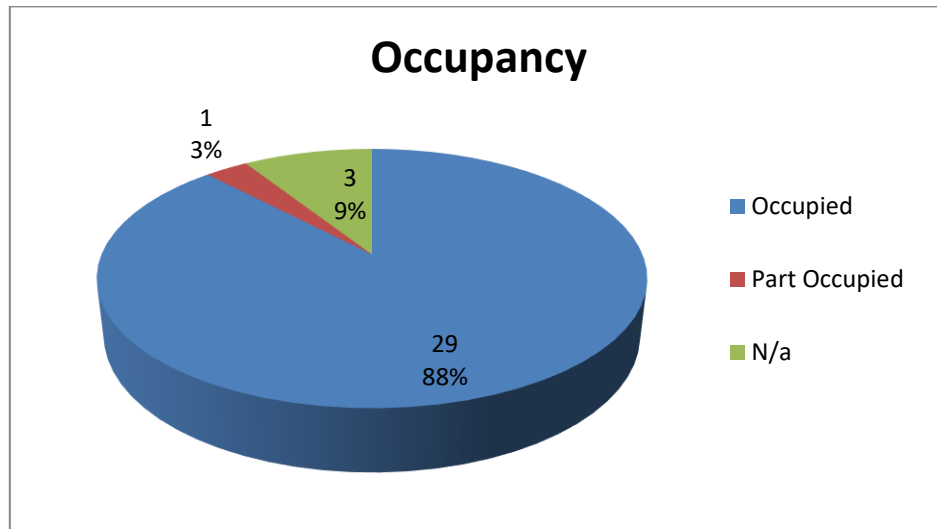


Figure 29 – Occupancy of Grade II\* listings in the Hereford CA (Source: The Author)

#### 4.3.4 Grade II\* - Ownership

Figure 30 shows that private ownership accounted for 45% of the Grade II\* listings. This was followed by 'Local Government' (18%) and 'Commercial Companies' who owned 15%.

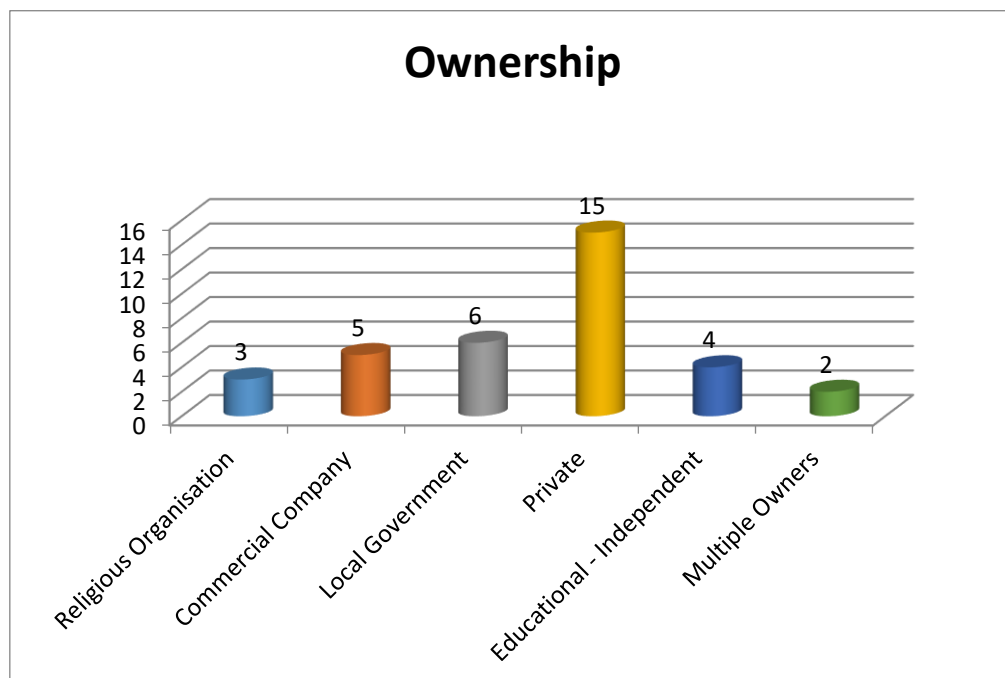


Figure 30 – Ownership of Grade II\* Listings in the Hereford City CA (Source: The Author)

#### 4.3.5 Grade II\* - Heritage Crime

Figure 31 shows that only three incidences of 'Heritage Crime' were occurring to Grade II\* listings in the Hereford City CA. Two of the incidences occurred to the remains of the Blackfriars Priory (WS3) which suffers from 'Graffiti' and 'Anti-Social Behaviour.' This has resulted in stones being deliberately dislodged, graffiti and barriers such as locked gates within the structure being forced open. The remains of the Blackfriars priory does not benefit from active surveillance, being located to the rear of Coningsby Hospital which is accessed by a path off Widemarsh St. This seclusion results in the anti-social behaviour. The other incidence of Heritage Crime was graffiti occurring to 60 St. Owen Street (SO15).

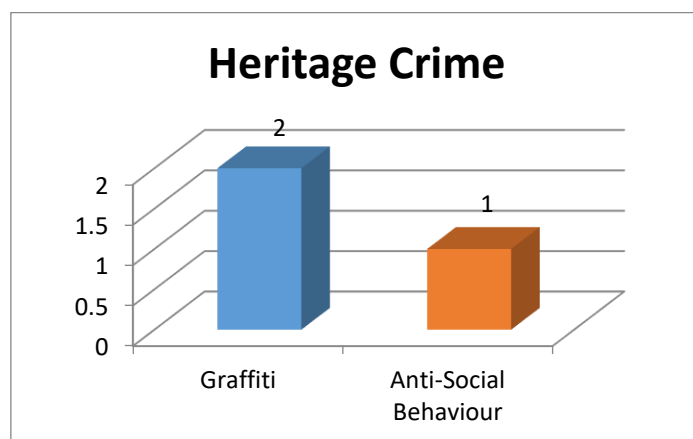


Figure 31 – Heritage Crime Occurring to Grade II\* Listings in the Hereford City CA (Source: The Author)

#### 4.3.6 Grade II\* - Heritage at Risk Assessment

As shown in Figure 32, the majority (75%) of Grade II\* listings were assessed as 'Not at Risk.' Three out of the 4 listings which were considered to be 'Vulnerable' (Blackfriars preaching cross - WS2; Remains of Blackfriars Priory - WS3; and Nelsons Column - CG4) were unable to be occupied. The St. Owens Chambers (SO7) was listed as 'Vulnerable' as it was assessed as being in 'Poor' condition with a number of issues occurring such as birds nesting in holes under the eaves, damp and moss problems along the laneway, blocked guttering and slipped slates.

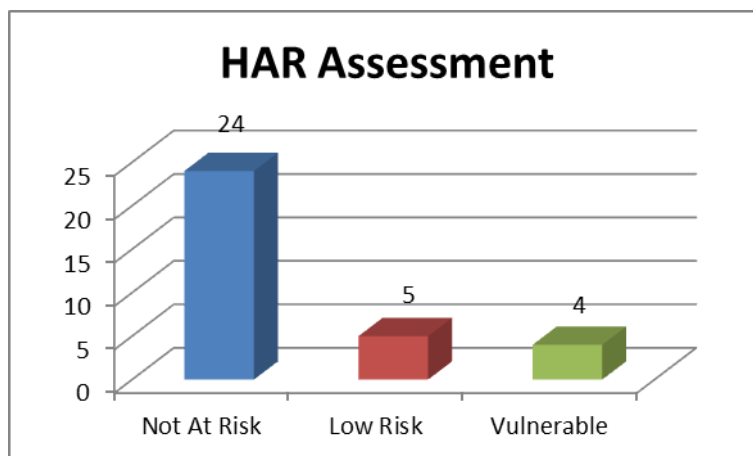


Figure 32 – HAR Assessment of Grade II\* Listings (Source: The Author)

#### 4.4 Findings of Grade II Listings

This next sub-section assesses Grade II buildings separately. Within the Hereford City CA, there are a total of 239 Grade II listings (excluding POWs).

##### 4.4.1 Grade II – Condition

Figure 33 shows out of a total of 239 Grade II listings, that the majority of listings (84%) were in 'Good' condition. Two of the listings (HT10: 16& 17 High Town; HT11: 18 High Town) were assessed as 'Very bad' as these listings have been subject to a fire, where much of the heritage fabric has been destroyed as discussed in Appendix 1. A barn located along East St (ES8) was assessed as being in 'Poor' condition, having encountered a number of problems, such as fire and resulting dereliction as discussed in Appendix 1.

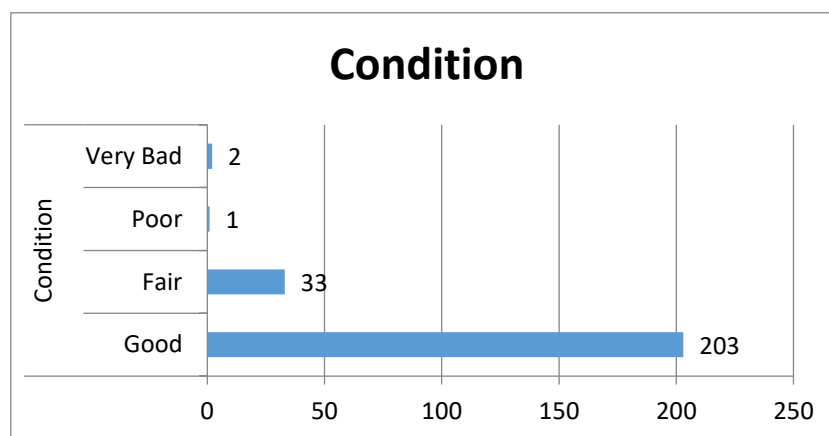


Figure 33 – Condition of Grade II Listings in the Hereford City CA (Source: The Author)

##### 4.4.2 Grade II – Issues Identified

A total of 114 listings (47%) of listings did not have any identified issues. As shown in Figure 34, the three most common issues identified included 'Weed Growth' (14%); 'Facade' problems (13%) and issues with 'Windows' (13%). 'Occupancy' (8%) and 'Roof' issues (7%) were also frequently identified. A total of 3 listings encountered problems with 'fire,' a quite serious, and luckily infrequent issue which has resulted in a loss of significant fabric.

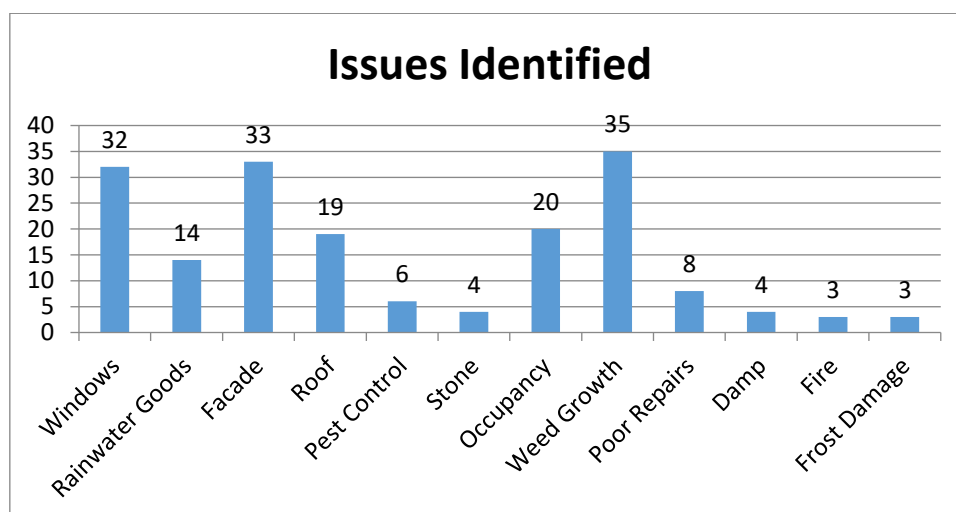


Figure 34 – Issues Identified for Grade II Listings in the Hereford City CA (Source: The Author)

#### 4.4.3 Grade II – Occupancy

As previously detailed, Occupancy was one of the more frequently occurring issues identified within the Hereford City CA. As shown in Figure 35, 211 of the listings were ‘Occupied,’ whereas 11 were ‘Part Occupied’ and 9 listings were ‘Vacant.’ The Grade II listings also contain many monuments and structures which are unable to be occupied, a total of 9 of these were identified.

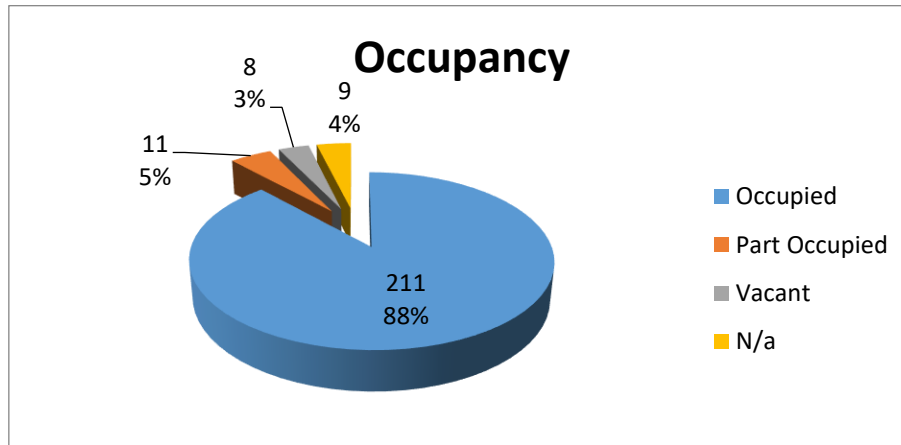


Figure 35 – Occupancy of Grade II Listings in the Hereford CA (Source: The Author)

#### 4.4.4 Grade II – Ownership

As shown in Figure 36, the majority (52%) of Grade II listings were under ‘Private Ownership,’ with ‘Multiple Owners’ (27%) and ‘Commercial Companies’ (11%) also occurring frequently.

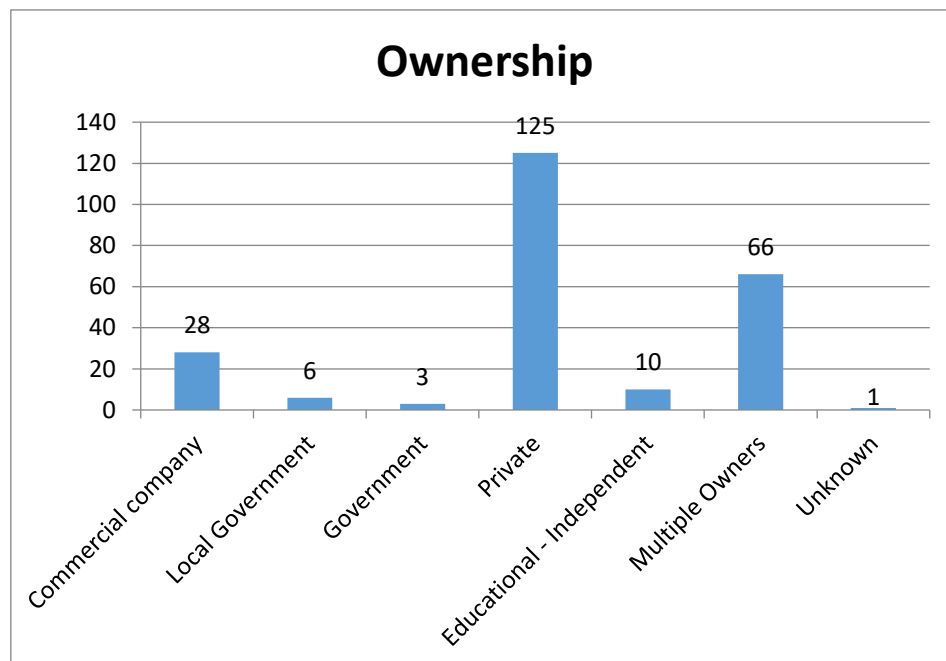


Figure 36 – Ownership of Grade II Listings in the Hereford City CA (Source: The Author)



#### 4.4.5 Grade II - Heritage Crime

Although a low amount, the Grade II listings also had the most frequencies of Heritage Crime as shown in Figure 37. 'Graffiti' on Grade II listings was the most common with three occurrences. At Norfolk House, St. Martin's St (SM11); a stone tablet which was previously attached to the façade had not been replaced as requested by the Council, after it had fallen down.

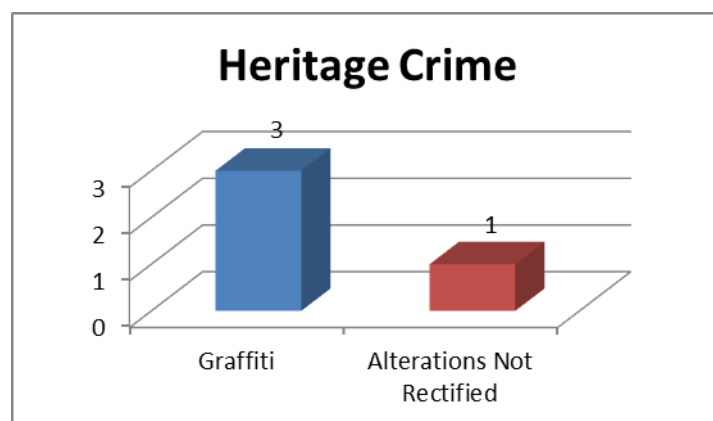


Figure 37 – Heritage Crime Occurring to Grade II Listings in the Hereford City CA (Source: The Author)

#### 4.4.6 Grade II – Heritage at Risk Assessment

The Grade II listings contained the only buildings considered to be 'at Risk,' being - 16& 17 High Town (HT10); 18 High Town (HT11); and a barn located along East St (ES8) as shown in Figure 38. Both the buildings in High Town, which are next to each other suffered from a major fire a number of years ago, with a significant amount of historic fabric damaged. Although both buildings were given Listed Building and planning consent a number of years ago, no works have taken place, other than scaffolding to stabilise the remaining components of the building. Hence both these buildings have been rated (B) – 'at Risk,' with a plan of action. The third building to be categorised 'at Risk' is a barn along East St which is in a derelict state and has seen a fire also. The building is not water tight with holes in the walls and is unoccupied which further threatens this building. As a result of all the issues identified, this listing has been assessed as 'at Risk' (A) as the Council have currently not been approached with a plan of action to rectify the problems of this listing.

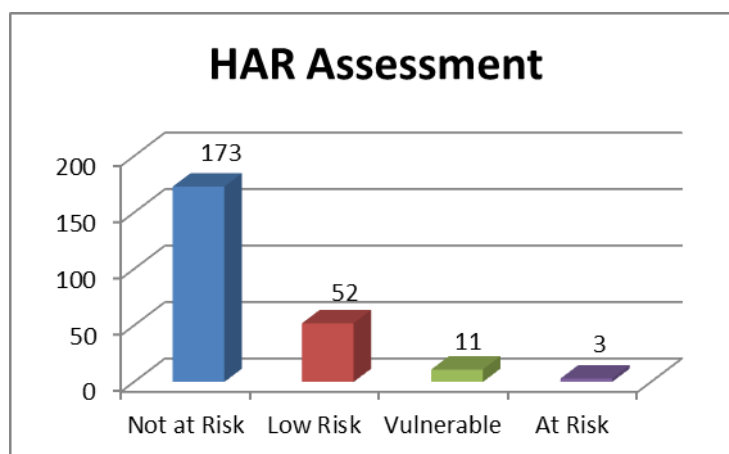


Figure 38 – HAR Assessment of Grade II Listings in the Hereford City CA (Source: The Author)

#### 4.5 Findings of the Place of Worship HAR Survey

This sub-section analyses POWs under the separate POW HAR survey as detailed in Section 3.2. There were a total of 6 listed POWs within the Hereford City CA.

##### 4.5.1 Places of Worship - Listing Summary

As shown in Figure 39, a higher proportion of POW listings are Grade I and II\*, with 4 in these categories, and 2 listings in the Grade II category.

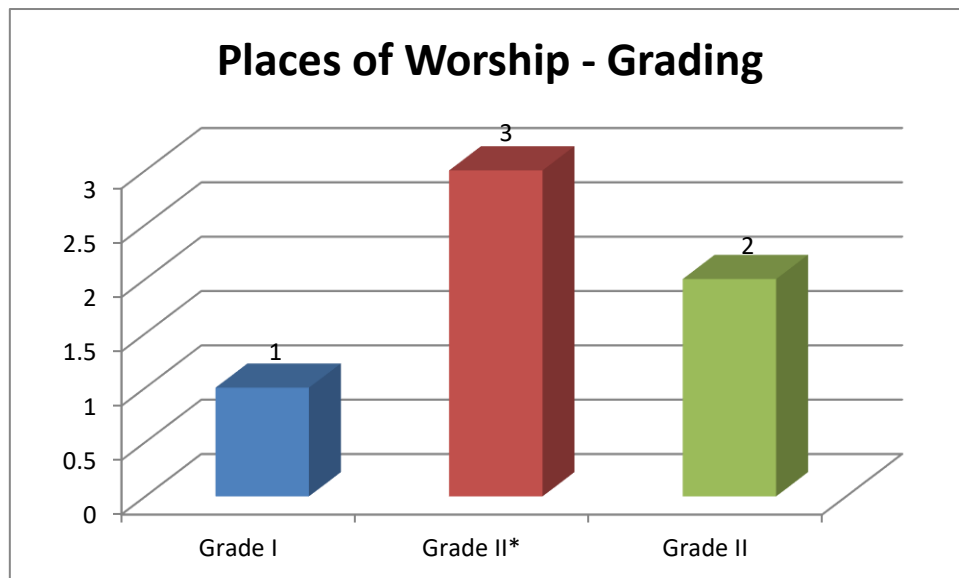


Figure 39 –Places of Worship Listing Grading in the Herford City CA (Source: The Author)

##### 4.5.2 Places of Worship - Denomination/ Faith

As shown in Figure 40, half of faiths practicing in Listed Buildings in the Hereford City CA are from the 'Church of England.' There are however a number of other faiths practicing in Listed Buildings, such as 'Anglican,' 'United Reform,' and 'Roman Catholic.'

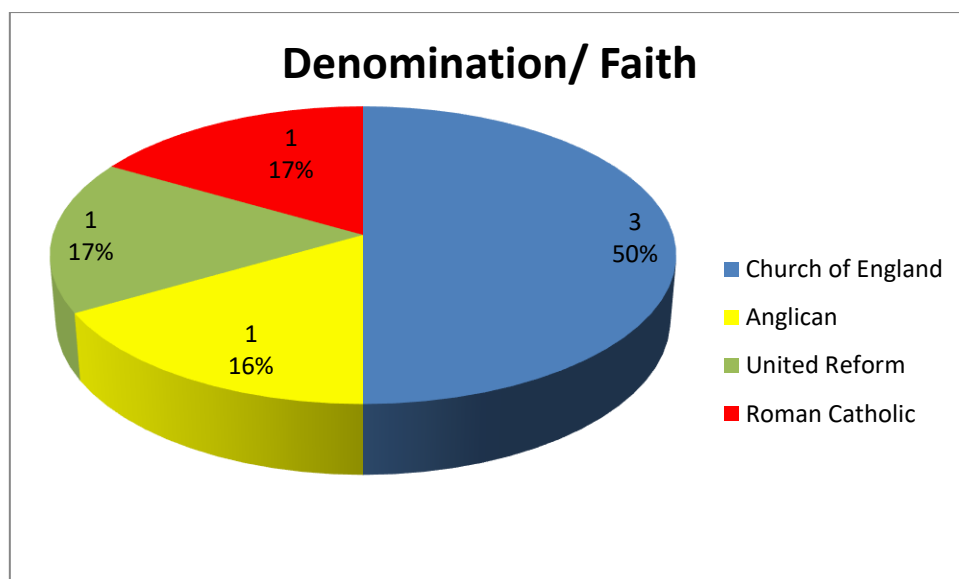


Figure 40 – Denomination/ Faith of POW in Hereford City CA (Source: The Author)

#### 4.5.3 Places of Worship - Level of Use

The majority of POWs within the Hereford City CA maintain a level of use that is 'Full Time,' with 5 out of the 6 POWs being within this category. However, The Church of All Saints on High Street (HS1) has partially changed its use by the installation of a café which runs full time, with a limited amount of services in the Nave, which still remains a POW. This POW was still categorised as 'Full-Time' although it is acknowledged that the religious function of the building has decreased. The only POW to be categorised as 'Frequent' use was the Eignbrook United Reform Church, Eign St (EN1), which has a limited amount of services a week, with the building being closed at other times.

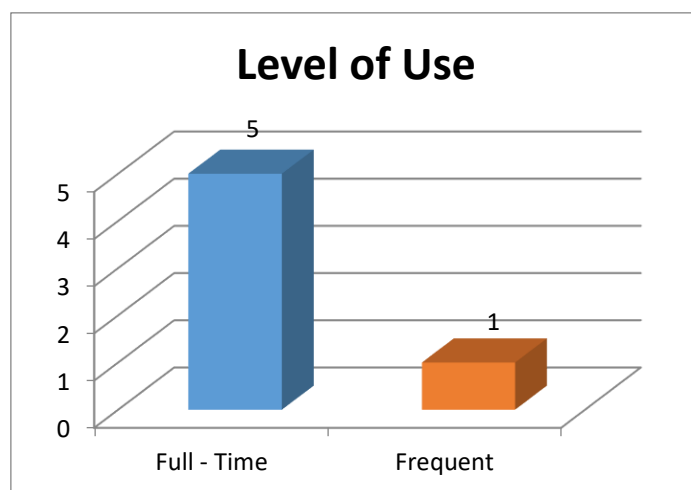


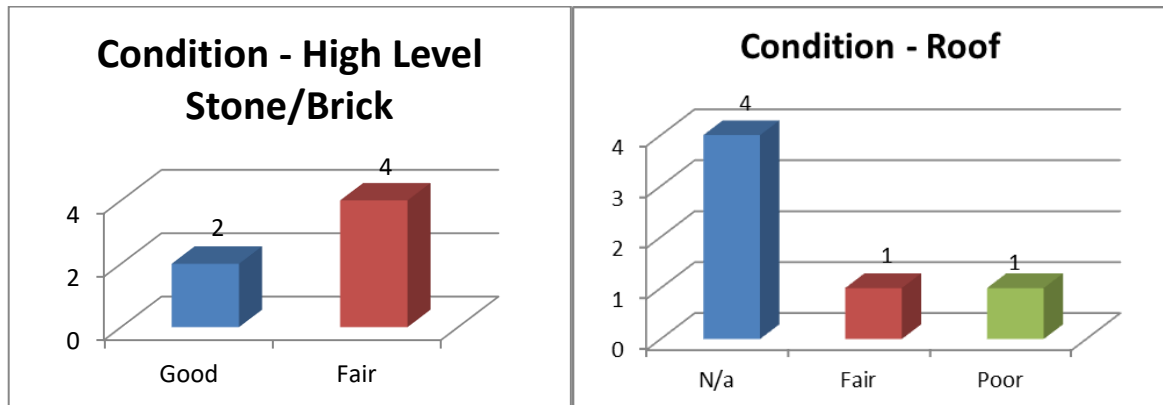
Figure 41 – Level of Use of POW in the Hereford City CA (Source: The Author)

#### 4.5.4 Places of Worship – Condition

When assessing the condition of a POW, the best source of information to inform the assessment is the Quinquennial Inspection Report, which is a condition report completed every 5 years by an Architect or Engineer. Only Quinquennial Inspection Reports were obtainable from two of the Church of England Churches; at St. Peter's, St. Peter's Square (SP1) and All Saints, High St (HS1). For the remaining four POWs, these were not obtainable and hence the assessment was purely a visual inspection. The condition of a POW is usually a problem which is prudent to monitor as it is very easy for a POW to encounter problems which threaten the historic fabric due generally to their height, intricacy of carving, construction methods and age. Four out of the 6 POWs are constructed of stone and this is their finish. Eignbrook Church (EN1) is constructed of brick, and the Roman Catholic Church on Broad St (BD12) is finished in Stucco.

Figures 42 and 43 show the condition of the high level stone/brick and also the condition of the roof. Roof inspections were only able to be analysed on the two churches with Quinquennial Inspection Reports. Only the Church of St. Peter, St Peter's Square (SP1) was rated as 'Poor' due to the roof of the North Aisle and Chancel urgently needing repair (Hook Mason 2012). As such, the Church of St. Peter would be required to be placed on the 'at Risk' Register for POW. High level stone was

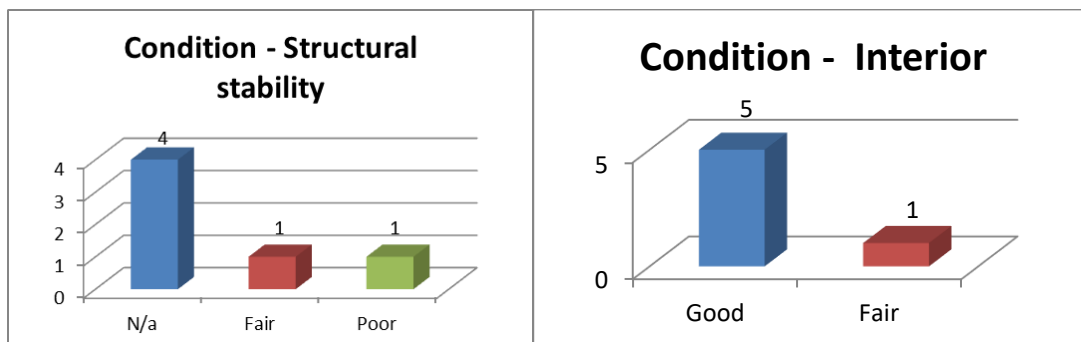
assessed from the ground level (except for the two POWs with Quinquennial Inspections Reports) and this resulted in four of the POWs being assessed as ‘Good’ and 2 POWs being assessed as ‘Fair.’



Left: Figure 42 – High Level Stone (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

Right: Figure 43 – Roof (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

Structural stability is normally assessed by an engineer or architect, hence only two POW are shown in Figure 44. The structural stability at the Church of St Peter and St. James, St Peter’s Square (SP1) was shown as ‘Fair,’ and All Saints Church, High St (HS1), was assessed as being ‘Poor,’ hence it is required that this element places the POW ‘at Risk.’ The condition of the interior in five out of the six POWs were assessed as ‘Good,’ whereas All Saints Church, High St (HS1), was assessed as being ‘Fair.’



Left: Figure 44 – Structural Stability (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

Right: Figure 45 – Interior (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

Given the intricacy of much of the window tracery in historic churches, they are very susceptible to loss of historic fabric. The listed POWs in Hereford CA showed that half of the POWs were assessed as being in ‘Good’ condition and the remaining half being in ‘Fair’ condition.

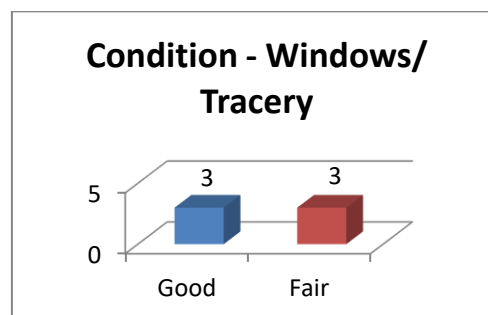


Figure 46 – Windows/Tracery (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

#### 4.5.5 Places of Worship HAR Survey

As mentioned in the Methodology section, the HAR survey is based upon the condition of the POW, taking into account the condition and making a judgement of the overall condition. As shown in Figure 47, half of the POW were considered to be in overall good condition and are given the category of 'Low Risk' and the remaining half were considered to be in 'Fair' Condition, and hence were categorised as 'Medium Risk' in accordance with the English Heritage matrix (Figure 13). Two of the churches (SP1) and (HS1) had elements of condition which were rated as 'Poor' and hence these buildings are recommended to be added to the POW HAR Register.

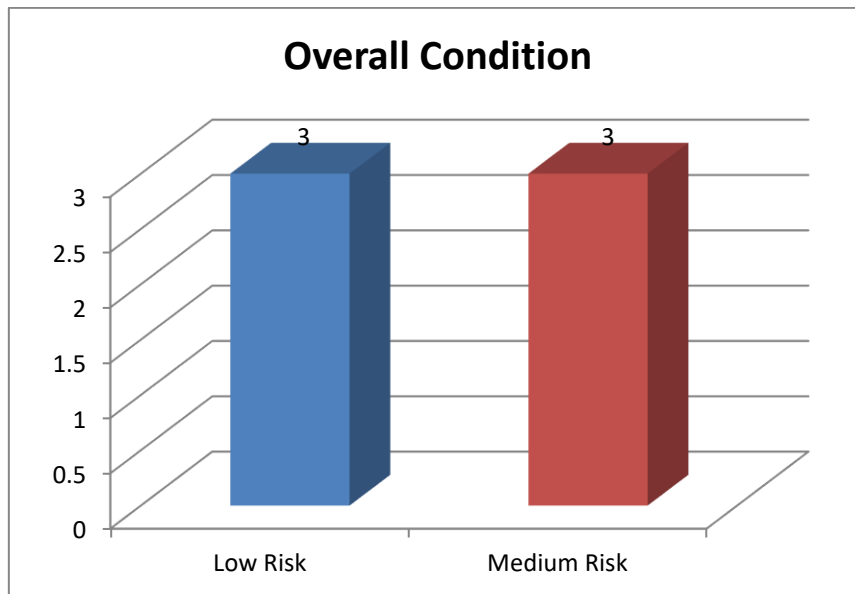


Figure 47 – Places of Worship HAR Assessment (Source: The Author; Hook Mason 2012; Caroe & Partners 2012)

## 5. Section 5: Overall Conclusions & Recommendations

### 5.1 Conclusions

Throughout this research we have assessed and explored preventative maintenance and conservation by analysing the development, current policy and the implementation of various methodologies. We began by analysing the history of preventative conservation, to a time over a thousand years ago where maintenance was carried out as a result of the significance of use which applied predominantly to spiritual and religious buildings such as those associated with tombs and the afterlife.

We then looked at the evolution of preventative maintenance and conservation which evolved during the renaissance by protecting beauty; and the formulation of pressure groups such as SPAB during the 19<sup>th</sup> Century who have played a leading role in preventing the unsympathetic restoration and destruction of buildings of historic interest. SPAB have also played a leading role in shaping the views and evolution of preventative conservation in today's society.

Today we have the legislative framework set by the world stage with UNESCO conventions on heritage, to European conventions and the formulation of a standard set of principles which filter down into the local level and are enacted throughout town planning and building legislation.

The implementation side of things is showing the most evolution with four case studies being explored; from the formulation of Monumentumwacht, which is the benchmark for 'hands-on' preventative conservation; to the less proactive, but equally as effective Heritage at Risk survey, which was implemented through the Hereford City CA, and is found in Appendix 1. The HAR survey has been ground breaking in terms of community involvement, particularly with success seen in Worcester where the community have taken the task to hand and now play a lead role in identification and raising public awareness about heritage assets (Pers. Comm 2014c). As a result of these studies, we have seen the evolution of social networking and the use of mobile phone applications which allow a constant maintenance and updating of condition from members of the public and is soon to be trialled in locations across the UK.

We also looked at the evolution of 'hands on' preventative conservation on a local level such as the implementation of a Monumentumwacht system in Bath, England, and the setting of the groundwork for a similar approach to be trialled in Scotland with current research from Historic Scotland and the City of Stirling Heritage Trust.

However, we also came across hurdles and discovered issues which still need to be debated, such as the amount of time for which these pilot projects are funded before deciding on whether to continue to implement them. We have also seen some unfortunate losses due to under-funding such

as the LOTS project, and the short Monumentumwacht study in Bath which was too short to enable awareness of the program, and also was not backed by legislation which assists Listed Building owners.

We also touched upon the negative implications of the VAT on the preventative conservation of historic buildings and the lack of a statutory ‘duty of care.’ All of this is what the Author feels is holding back the role of preventative conservation in today’s society and for future generations.

By understanding the theory and where we have come from, in Section 2.6 we formulated five outcomes of this research:

<b>Outcomes from a review of literature, legislation and Case Studies.</b>
1. There is much research and a developing knowledge base that preventative maintenance and conservation is better than ‘reactive conservation’ which often comes too late;
2. Government legislation and funding needs to play a stronger role in preventative maintenance; particularly when it comes to incentivising preventative maintenance through reduced VAT and via a regulatory framework in ensuring a ‘duty of care’ for historic assets;
3. We need to move away from a system which rewards neglect to one that incentivises and rewards preventative care and maintenance with a focus on a ‘duty of care;’
4. Better occupancy of buildings not only increases much needed housing for people, but is an important factor in the monitoring and maintenance of a building;
5. Education of society and community involvement is key to formulating a preventative conservation strategy, and that societal changes do not happen overnight, with education, funding and support needed over the long term before results and changes to attitudes can begin to be seen;

Figure 48 – Outcomes of the Research and Literature Review (Source: The Author)

In order to explore a sample of the issues affecting the listings, we then took one of the Case Studies, The HAR Survey, and conducted the study in the Hereford City CA. Although the study showed that the Hereford City CA was performing well, in that 2 buildings previously on the HAR Register had been removed, by conducting the Grade II survey as well, 3 buildings ‘at risk’ were identified. There were a number of lessons we can learn from this study. Items of simple maintenance such as clearing gutters, repainting windows and maintaining the facade of a building were consistently occurring issues from Grade I buildings down to Grade II buildings. Although a number of the buildings surveyed were in good condition, around half of owners of listings are still not receiving the message.

Although this may be for a variety of reasons, such as absentee landlords or a building might be part of a trust where there is no ‘face’ to ownership; there is really no excuse to allow a building to fall to ruin. There can never be too much guidance out there, and perhaps a few better performing legislative repercussions such as the ‘Duty of Care’ whereby a component could be that a property owner cannot sell their listing building unless it is shown to have had a constant cyclical maintenance schedule, similar to what we saw with the Monumentumwacht model.



Perhaps one of the most important things to take away from this research is that research is growing; we are increasing our knowledge; we are providing many positive actions; and it has been shown that there are many people and groups willing to get involved in preventative maintenance and conservation. We also have the ability to change how we do things, from a legislative perspective to the property owner who has just purchased a Listed Building. We have the tools, we just need now to put them to good use.

## 5.2 Recommendations

The following recommendations are a result of this research:

Recommendation	Actions:
<b>1. Government action, legislative and policy changes</b>	<ul style="list-style-type: none"><li>• Implement a 'Statutory Duty of Care' for Listed Buildings and penalties for non-conformance;</li><li>• Exempt Listed Building owners from paying VAT for maintaining Listed Buildings;</li><li>• Introduce subsidies, grants and Government loans which enable unused / under-used upper floors to be used and converted into dwellings;</li><li>• On the sale and transfer of a Listed Building, that it is compulsory that the new owners are given guidance/ and or training opportunities to educate them on the practicalities of owning a Listed Building and the need for preventative maintenance;</li><li>• Invest long term in pilot projects which enable new ways of understanding our heritage, such as Monumentumwacht, mobile phone applications etc;</li><li>• Reward organisations and conservation groups which are providing training regarding good maintenance through grants, subsidies etc; and</li><li>• Provide funding in order to undertake more Grade II HAR Assessments throughout the country.</li></ul>

Figure 49 – Recommendation 1. Government Action, Legislative and Policy Changes (Source: The Author)

Recommendation	Actions:
<b>2. Community Involvement</b>	<ul style="list-style-type: none"><li>• Develop partnerships between Local Authorities and heritage orientated community groups such as via civic trusts, universities, conservation trusts so that a common goal of preventative conservation can be achieved in the long term; and where both groups benefit from their involvement;</li><li>• Invest in pilot projects such as mobile phone applications which allow the community to be involved in the assessment of condition of listings within their neighbourhood; and</li><li>• Provide resources, funding and assistance to encourage communities to undertake heritage at risk surveys for all grading of listings across the country and the continued maintenance of the Heritage at Risk survey on a preferably annual basis;</li></ul>

Figure 50 – Recommendation 2. Community Involvement (Source: The Author)

Recommendation	Actions:
<b>3. Education</b>	<ul style="list-style-type: none"><li>• Provide training opportunities for the community in preventative conservation and the undertaking of Heritage at Risk assessments;</li><li>• Provide incentives (such as subsidised course fees) which encourage owners of Listed Buildings to undertake training opportunities for the care and maintenance of Listed Buildings;</li><li>• Encourage awareness of preventative maintenance and conservation through leaflets, social media, and expand Maintenance Week across the country;</li></ul>

Figure 51 – Recommendation 3. Education (Source: The Author)

Recommendation	Actions:
<b>4. Recommendations for the Buildings HAR pro-forma</b>	<ul style="list-style-type: none"> <li>• Include an additional categorisation between 'low risk' and 'vulnerable' as it would appear there is quite a big jump between these categories;</li> <li>• Structures which aren't able to be occupied should not automatically be categorised as 'Vulnerable' even though they are well maintained and uses;</li> <li>• The 'Occupancy' category should be changed to 'level of use' as this would take into account listed structures such as monuments which are well used and maintained, but are not capable of occupancy, and therefore should not be automatically categorised as 'Vulnerable;'</li> <li>• A separate category could be used to assess the under-use of a building, such as utilising upper floors for storage where it would be better to have these spaces occupied.</li> <li>• Photos should not only be taken for identification purposes, but to identify the risk also so that this can be documented and monitored.</li> </ul>

Figure 52 – Recommendation 4. The HAR Pro-Forma (Source: The Author)

Recommendation	Actions:
<b>5. Recommendations for the Hereford City CA</b>	<ul style="list-style-type: none"> <li>• To approve this document and place this study on the Council's website to inform property owners of the assessment and be able to give assistance to owners of buildings as a result of comments made in the study;</li> <li>• To undertake an inventory of property owners of listings to enable better communication and notice issues with regard to absentee owners;</li> <li>• To undertake an assessment of the Conservation Area's retail premises to see if any underused upper floors could be brought into better use;</li> <li>• To look at further English Heritage funding available which would enable the creation of a volunteer strategy in order to recruit volunteers to undertake further updating (at least on a 3 year basis) of this HAR study, such as involvement of the Civic Society, Woolhope Club, local conservation groups;</li> <li>• Seek future opportunities such as being part of an English Heritage pilot project to undertake a web based app which allows users to contribute to the updating of the study by recording the condition of buildings;</li> <li>• Engage with property owners who have shown to have their buildings assessed as 'at risk' and 'vulnerable' to ensure the buildings are brought back into a better condition and avoid them being added to the 'at Risk' register.</li> </ul>

Figure 53 – Recommendation 5. The Hereford City CA (Source: The Author)

Recommendation	Actions:
<b>6. Recommendations as a result of the HAR Survey</b>	<ul style="list-style-type: none"> <li>• Inform English Heritage to the assessment of the Former Farmers Club (WS4) and St Francis Xavier Church, Broad St (BS12) which show that these buildings should be taken off the Buildings at Risk Register;</li> <li>• Inform English Heritage of the assessment in which the Church of St. Peter, St. Peter's Square (SP1); and All Saints Church, High Street (HS1) should be placed on the POW HAR Register;</li> <li>• Inform English Heritage that a total of 3 Grade II Listed Buildings (HT11; HT12; ES8) were assessed as 'at Risk' within the Hereford City CA.</li> </ul>

Figure 54 – Recommendation 6. As a result of the HAR Survey

## Glossary

In assessing the findings from the HAR Survey, (Appendix 1) the various issues encountered were placed into the following categories for ease of analysis. The definitions of these words in the context of this report are described as follows:

Category	Definition in the context of this report
Damp	Unwanted water build-up or staining on the inside or exterior of a wall as a result of water penetration or condensation
Facade	A failure of any of the materials which make up the façade (excluding windows), such as cracks to brickwork and render; holes; missing elements.
Fire	Fire damage to the structure
Frost Damage	Frost attack occurs to brickwork and mortar which is a result of expansion of a brick during falls and rises in temperature, normally occurring in older brickwork. Frost damage is normally evident by spalling, with the brick face or mortar flaking and crumbling away.
Occupancy	Where a building is part-occupied or vacant
Parapet	Where buildings with parapets have flaking paint and water staining on the parapet, which is a sign that either the parapet gutter is blocked, or water is penetrating via the roof or parapet, such as through a failed coping
Pest Control	Where a building is experiencing invasion by animals, such as nesting birds.
Poor Repairs	Where a previous repair has been undertaken incorrectly or with the incorrect materials
Rainwater Goods	Missing, rusted and failed guttering and downpipes
Roof	Elements of roof failure, such as missing components or broken slates
Stone	Problems with structures constructed of stone, such as deterioration, laminating, missing or flaking stone
Weed Growth	Invasive weed growth either in the façade of the structure, or in the guttering, roof etc.
Windows	Deteriorating, cracked and broken windows, window frames and sills.

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