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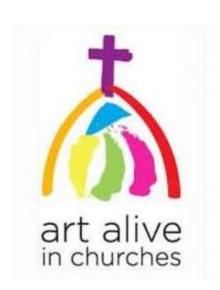
Interpreting Religious Heritage

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April 30, 2015





Interpreting Religious Heritage

An Interactive Qualifying Project submitted to the Faculty of WORCESTER POLYTECHNIC INSTITUTE in partial fulfilment of the requirements for the degree of Bachelor of Science

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Date: 30 April, 2015

Report Submitted to:

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This report represents the work of WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, please see http://www.wpi.edu/academics/ugradstudies/project-learning.html

Abstract

Churches in the city of London are an important part of the religious heritage of the UK, but they lag behind other popular heritage sites in terms of promotion and accessibility. The goal of this project was to identify ways to promote the religious heritage of the UK through improved access to and better curation of the art, artifacts, and architecture of churches. We conducted interviews with stakeholders in heritage and access, distributed a survey to members of a religious heritage organization, and visited numerous churches and other heritage sites in London and southeast England. To conclude, we recommend how church administrators and clergy, the Friends of the City Churches, and other religious heritage organizations can improve access to and promotion of religious heritage.

Executive Summary

The churches and religious sites of the United Kingdom are an important part of the heritage of the UK. British religious sites have served for thousands of years as places of worship and local community hubs. It is estimated that 80% of the churches in the United Kingdom are used for community purposes other than worship, and nearly half are used as venues for cultural outlets such as dance, music, and the arts ("National Churches Trust Survey," 2011). Churches have much to say about culture throughout the centuries and can be utilized as an important historical tool in education about the heritage of the United Kingdom. While some of the largest churches in the UK are represented well in this way, many smaller churches and religious sites are often overlooked. Large churches such as St. Paul's Cathedral, Westminster Abbey, and Canterbury Cathedral have over 1 million visitors each year, while smaller churches that are open to the public may only see a few thousand visitors over the course of a year (Association of Leading Visitor Attractions, 2013). Many of the smaller churches in the UK do not have the resources to cater to large numbers of tourists. Only half the churches in the UK are regularly open to the public, and even these churches lack the resources necessary to conserve, maintain, and promote the art, artifacts, and architecture in their care, ("National Churches Trust Survey," 2011). As a result, many churches and much of the religious heritage of the UK may go unnoticed by UK residents and tourists.

The overall goal of this project was to identify ways to promote religious heritage of the UK through improved access to and better curation and interpretation of religious architecture, artwork, and artifacts. Our team achieved this goal by completing the following objectives. We:

- 1. Determined the opinions of church watchers, church administrators, and representatives of religious heritage organizations on the importance of the churches in the city of London as heritage sites;
- 2. Analyzed how heritage sites in London currently curate the art, artifacts, and architecture in their care;
- 3. Identified barriers that exist in terms of accessibility to religious heritage for the disabled community and determined what can be done to overcome these barriers; and
- 4. Determined the opinions of the members of religious heritage organizations regarding access to and interpretation of religious heritage sites.

We worked closely with our sponsoring organization, Art Alive in Churches as well as the heritage organization, The Friends of the City Churches (FCC), to conduct interviews with key representatives of religious heritage and disabilities access organizations and museums, and survey members of some of the religious heritage organizations.

Findings

We interviewed 21 stakeholders from various religious heritage organizations and churches. Across the board, the stakeholders believed that the religious heritage of the United Kingdom is important. We found that 88% agreed that churches are not being promoted well enough to the general public as sites of heritage. A majority of stakeholders also mentioned that the churches are limited by funding and other resources, such as volunteers. A majority of the stakeholders agreed that technology should be incorporated into churches in some way, but 19% were completely opposed to the use of technology. Surprisingly, 16% of the stakeholders believed that current state of accessibility in the city churches is acceptable. On the other hand, 84% of stakeholders believed that at least some changes should be made to improve accessibility in churches.

Throughout our site visits, we found that heritage sites vary greatly in how they curate and interpret items in their care. The two museums we visited had more interpretive and curative resources than any of the churches viewed. However, St. Paul's Cathedral, Westminster Abbey, and Norwich Cathedral all offered a variety of resources for visitors. For the most part, and not surprisingly, the lesser known and smaller churches found in London and Cambridge were far behind the three large churches and the two museums.

During our visits to selected churches, we looked specifically at the accessibility of the churches, including physical access, intellectual access and lavatory access. Again, there was a difference between the museums and well-known large churches and the smaller churches found in London and Cambridge. Despite the use of ramps in some churches, only 44% had either level access to the entryway or an alternative entrance for individuals who could not use the stairs. Once inside the churches, 76% were level.

The city churches of London and Cambridge offered little in terms of resources to aid visitors with disabilities to interpret the artwork, artifacts, and architecture. For example, of the 16% of city churches that offered any type of tour, none of them offered guided tours for individuals with visual and hearing impairments, 12% of the city churches offered any sort of technology to aid

those with disabilities in interpretation and none of the city churches offered any interpretive information in large print or Braille.

Another important aspect of intellectual accessibility is the use of websites. Only 11% of church websites had an accessibility page listing the accessibility features of the church. Similarly, only 16% of church websites had any sort of information about the artwork within the church, and 9% of church websites presented either a virtual tour or 360 degree view of the church online.

Another detail we paid attention to was the lavatory facilities in the churches. Toilets in churches are generally not available for public usage due to security issues. Of the small churches, only 36% had toilets open to the public, and only 40% had accessible toilets.

From the interviews we conducted, we took away five main points in terms of what can be done to alter the churches, which are all listed buildings, to make them more accessible. These major points are as follows: (1) By law, churches, as public buildings, have an obligation to make reasonable adjustments in order to become more physically accessible to visitors; (2) altering a listed building is possible with good planning/design; (3) in some cases, changes cannot be made without destroying the fabric of a historic building; (4) well-updated websites with information on current exhibits and accessibility resources can be helpful for all visitors, as these websites can enable visitors to plan their trip in advance; and (5) disabilities awareness training may be useful so volunteers can empathize with visitors with disabilities.

Conclusions and Recommendations

Overall, the rich religious heritage displayed in the churches of the city of London is not fully accessible to all visitors. This is a result of a lack of promotion, limited interpretive materials, and barriers to access for the disabled community. All of these issues stem from the lack of resources that are available for the city churches. In response to these findings, we suggest measures to increase resources as well as simple ways to improve interpretation, and accessibility for people with disabilities to the administrators and members of the clergy at the London city churches. Local religious heritage organizations are also key proponents in the promotion of the religious heritage of the UK. The Friends of the City Churches, in particular, can improve the promotion of the city churches by adapting the role of the church watcher into the role of a guide. As a whole, we suggest that religious heritage better promote themselves by updating social media and websites, collaborating with other heritage organizations to plan events, and pairing with tourism boards to better market churches as a tourist destination.

Based on our findings, we made several recommendations to the City Churches administrators, the Friends of City Churches, and religious heritage organizations in general.

We recommend that the city churches' administrators and clergy:

- Take measures to increase church resources by directly asking for donations, joining incentive schemes like the Community Toilet Scheme, and developing interpretive materials for sale to visitors.
- Take measures to improve interpretation information by improving interpretive materials and signage.
- Take measures to improve access with the church by:
 - Improving physical access by installing temporary and permanent ramps and other accommodations necessary for the disabled;
 - o Improving intellectual access by providing improved websites and interpretive materials in large text, Braille, and audio formats; and
 - Making churches more welcoming by leaving doors open, installing glass doors if possible, and keeping lights on.
- Conduct programs with local communities.

We recommend that the Friends of the City Churches:

- Adapt the role of the church watcher by educating church watchers on the city churches so
 they can highlight important aspects of buildings they watch in to visitors, incorporating
 disabilities awareness training into the standard church watcher training, and collaborating
 with access teams at large churches and museums to hold the disabilities awareness
 training.
- Take measures to increase visitor numbers by incorporating better signage and better
 placement of that signage to promote the fact that churches are open with watchers
 available, increasing social media presence, extending church watcher hours, and creating
 themed, guided church tours.
- Improve internal communications by creating an electronic mailings list of members and volunteers to facilitate communication to and between members of the organization.

We recommend that religious heritage organizations in general:

- Better promote themselves by using social media accounts more often, keeping social media accounts updated, and providing more details and linkages on their websites.
- Network and collaborate with other heritage organizations and local tourism boards by promoting each other's events, co-sponsoring events, and planning open church events with tourism boards.

Acknowledgements

We would like to express our most sincere thanks to Jennie Hawks, Director of Art Alive in Churches, for her invaluable support and guidance during the project, and to St. Mary Abchurch and the Friends of the City Churches for providing the accommodations and office space for the length of the project time. We are also grateful to all the church watchers who took the time to answer our questions.

We would also like to thank all of the individuals we interviewed for contributing their time and opinions to our project:

- Lorna Allies, Retired Priest with Permission to Officiate in the Diocese of Norwich
- Dr. David Bowman
- John Brydon, Treasurer of Art Alive in Churches
- Sarah Crossland, National Support Officer at National Conservation Trust
- Barry Ginley, Access Consultant for the Victoria and Albert Museum
- Dr. Penny Granger, Trustee of Art Alive in Churches
- Lt. Colonel Ken Grapes
- Dr. Julian Litten, Chairman of Art Alive in Churches
- Klaus Miesenberger, Professor of Computer Science at JKU
- Rob Oakley, Head of the City Access Team
- David Parott, Reverend Canon of St Lawrence Jewry
- Becky Payne, Historic Religious Buildings Development Officer
- Alice Rankin, the Friends of the City Churches Administrator
- Sarah Robinson, Director of Conservation at Churches Conservation Trust
- Liz Simpson, Director of the Friends of the City Churches

Lastly, we thank Professors Dominic Golding and Patricia Stapleton for their help and guidance, and for contributing countless revisions and feedback on our many drafts and submissions.

Authorship

The group produced this report through a team effort that involved countless hours of research and writing. The primary authors and editors of each section are included in the table below:

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1. Introduction

A society's culture is the manifestation of the beliefs, values, knowledge, and traditions that are passed from generation to generation (Hofstede, 1997) by way of heritage, the legacy of that society. Heritage includes both physical and intangible elements that are inherited over time (UNESCO, 2014). The heritage of the United Kingdom is manifest in the many historical sites throughout the country, including museums, ruins, natural wonders, buildings, and churches.

The churches and religious sites of the United Kingdom are an important part of the heritage of the UK. British religious sites have served for thousands of years as places of worship and local community hubs, and as an essential part of life. To this day, churches remain a crucial part of communities throughout the UK. It is estimated that 80% of the churches in the United Kingdom are used for community purposes other than worship, and nearly half are used as venues for cultural outlets such as dance, music, and the arts ("National Churches Trust Survey," 2011). Given these factors, the churches of the UK have much to say about culture throughout the centuries and can be utilized as an important historical tool in education about the heritage of the United Kingdom. While some of the largest churches in the UK are represented well in this way, many smaller churches and religious sites are often overlooked. Large churches such as St. Paul's Cathedral, Westminster Abbey, and Canterbury Cathedral have over 1 million visitors each year, while smaller churches that are open to the public may only see a few thousand visitors over the course of a year (Association of Leading Visitor Attractions, 2013).

Unfortunately, many of the smaller churches in the UK do not have the resources to cater to large numbers of tourists. Only half the churches in the UK are regularly open to the public, and even these churches lack the resources necessary to conserve, maintain, and promote the art, artifacts, and architecture in their care, ("National Churches Trust Survey," 2011). As a result, many churches and much of the religious heritage of the UK may go unnoticed by UK residents and tourists.

The overall goal of this project was to identify ways to promote religious heritage of the UK through improved access to and better curation and interpretation of religious architecture, artwork, and artifacts. This project explored use of digital technologies in particular, which can help present the tangible aspects of religious heritage in a manner that is appealing to the general public and beneficial to people with disabilities. The group conducted surveys of the public and extensive interviews with various stakeholders in order to determine current and best practices in

the promotion,	curation,	and interpretation	of religious	heritage in	London,	with a special	l emphasis
on access for the	he disable	ed.					

2. Background

2.1 What is Heritage?

The concept of heritage can be challenging to grasp because it is ever-changing. Françoise Benhamou, an economist and professor at the University of Paris XIII, describes heritage as "a social construction whose boundaries are unstable and blurred" (2003). Despite its fluid and complex nature, heritage might be best described as "the legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations" (UNESCO, 2014). Heritage can be broken down into two categories: *tangible* cultural heritage and *intangible* cultural heritage. Tangible cultural heritage includes physical artifacts such as architecture, art, monuments, written works, and music. Values, traditions, religious beliefs, language, and general way of life, on the other hand, fall under the category of intangible cultural heritage (Castree, Kitchen, & Rogers, 2013). In this section, we discuss religious heritage in the United Kingdom and how it is currently being promoted, curated, and interpreted. We will also explore tourism and religious heritage in the United Kingdom, as well as the concept of open churches. Finally, this section will outline current issues that face religious heritage sites of the UK, with emphasis on accessibility for the disabled community, as well as non-disabled visitors.

2.1.1 The Religious Heritage Sector

One of the many subdivisions of cultural heritage is religious heritage. Religious heritage includes tangible and intangible cultural artifacts that have religious significance. The tangible aspects of religious heritage, such as art, scriptures, and other artifacts can be found in museums. However, many more of these tangible aspects are found in places of worship. For these reasons, local residents and tourists typically seek out churches to learn more about the religious heritage of a particular country or region. In the United Kingdom, churches are very much the center of religious heritage. In 2013, 73% of British adults visited a heritage site, including churches, abbeys, and cathedrals ("Who wants to come in?" 2015). According to an online survey conducted by ComRes in December of 2014, 79% of British people believe that churches are an important part of the UK's heritage and history ("British Love Churches," 2015). The Church of England claims that 14,500 of more than 16,000 churches in England hold special architecture or historical interest for tourists ("Facts & Stats," n.d.). Additionally, churches are a major focus of community

life and service. Around 68% of the people who responded to the ComRes survey consider churches to be an important part of the local community. Seventy percent believe churches provide valuable social and community facilities, and 57% believe churches should be more actively involved in the local community ("British Love Churches," 2015).

There are many churches and other sites of religious significance in the United Kingdom. For example, the Church of England has more than 16,000 places of worship ("A Christian presence," n.d.). The abundance of historical churches and grand cathedrals has always attracted visitors from all over the world; each year churches in the UK attract 35 million visits ("Who wants to come in?" 2015). According to research, about a quarter of all tourists to the UK come to see religious buildings and artifacts ("Best churches and cathedrals," n.d.). Daniel Olsen (2003) suggests that visitors who travel to religious sites have a primary goal of gaining religious experience, but some of them have the motivations of "visiting an element of their international, national, local, or personal religious heritage or to be educated about a particular site or cultural group."

Currently, only three religious sites in the UK with collections of church buildings are listed as World Heritage Sites: (1) Durham Castle and Cathedral; (2) Canterbury Cathedral, St. Augustine's Abbey, and St. Martin's Church; and (3) Westminster Abbey and St. Margaret's Church. Of these three religious sites, only Canterbury Cathedral and Westminster Abbey charge admission. Westminster Abbey and Canterbury Cathedral attract thousands, in some cases millions, of visitors each year and generate substantial revenues from admission fees. In addition to the revenue generated from charging admission, the large religious sites also receive additional money through donations, fundraising, and grants from heritage organizations. Westminster Abbey (pictured in Figure 2.1) charges £20 per adult visitor, but also receives millions of pounds through donations and fundraising each year ("Support the Abbey," n.d.). In 2013, fundraising alone generated £2.2 million for work on large conservation projects within the Abbey (The Dean and Chapter of Westminster, 2013). Like Westminster Abbey, Canterbury Cathedral can afford general maintenance plus larger conservation projects because of admission charges, grants, and donations. In 2014, Canterbury Cathedral had a total income of approximately £2.5 million. Of the £2.5 million, £1.1 million were passed on to the Dean and the Chapter of the cathedral for conservation work and general upkeep and £435,364 were added to a trust for the cathedral containing funds to remain operational for 18 months (Canterbury Cathedral Trust, 2014).



Figure 2.1: Westminster Abbey, one of the three UK churches that is a World Heritage Site ("Westminster Abbey," n.d.)

Unfortunately for the smaller churches, donations are sparse because they are not promoted as well as the large, popular churches such as St. Paul's Cathedral and Westminster Abbey. According to the Association of Leading Visitor Attractions (ALVA), Westminster Abbey, St. Paul's Cathedral, and Canterbury Cathedral attracted over 5 million visitors in 2013, which amounted to 95% of all visitors to ALVA member places of worship (2013).

clearly shows that the number of visitors drops off sharply beyond the top three most popular sites.

Table 2.1: Visits made in 2013 to select visitor attractions in membership with ALVA (Association of Leading Visitor Attractions, 2013)

Site	Total Visits	Charge/free
St. Paul's Cathedral	2,138,130	Free/Charge ¹
Westminster Abbey	2,020,637	Free/Charge
Canterbury Cathedral	1,001,266	Charge
St. Lawrence's Evesham	44,093	Free
St. Mary Magdelene Croome D'Abitot	42,511	Free
Holy Trinity Goodramgate York	38,155	Free
St. Mary the Virgin Shrewsbury	28,639	Free
St. Anthony's Roseland	26,691	Free
All Saints Kedleston	24,792	Free
Old Christ Church Waterloo	20,705	Free
St. James Cooling	15,253	Free
St. Nicholas Kings Lynn	13,482	Free

¹ Admission is free, but there are additional charges for programs

Needless to say, the top three religious sites also garner the major share of revenue for religious heritage tourism. Thus, smaller and lesser known churches need new ways to present themselves to the public to attract visitors who will be willing to pay admission or make donations. Many hope that encouraging the growth of religious tourism will ultimately help to sustain these less visited churches and thereby better preserve the UK's religious heritage (Rotherham, 2007).

2.1.2 Open Churches and Tourism

Accessing smaller churches that are rich in art, artifacts, and architecture is not always easy. The Diocese of London believes the best way for its churches to engage with the local community and the public is to open their doors and welcome people in ("Open Churches Toolkit," 2015). Many of the churches of London have the potential to become popular tourist destinations because they have splendid collections of architecture, historical artifacts, and craftsmanship, but many are limited by funds ("Why Open Up?" n.d.).

Eighty-five percent of the churches in England are Anglican and maintained by the individual, parochial church councils, which collectively spend on average £110 million on repairs ("Facts & Stats," n.d.). The general maintenance of churches is expensive. In order to pay for repairs and upkeep, some of the more important churches have a recommended voluntary admission charge, and some cathedrals have a fixed charge for admission. Under the terms of Ecclesiastical Exemption parish churches can, and often do, apply for grants from various heritage organizations. Because attracting paying visitors and securing grants can be difficult for the smaller churches, most congregations resort to a variety of other fundraising activities for maintenance projects ("Facts & Stats," n.d.).

In addition to these limited resources, there are concerns about sustaining tourism in churches. While religious heritage tourism has the potential to boost the economy and sustain religious heritage sites, it can come at a great cost to the communities where the sites are located. Communities not only have to maintain the sites that tourists visit, but they also have to provide proper infrastructure throughout the community to support the increased number of visitors. This is an expensive investment that can take years to pay off ("Understanding Tourism," n.d.).

On the other hand, tourism can increase revenue, especially in churches that charge admission. While there are some concerns about churches and cathedrals charging admission to visitors, Dr. Richard Chartres, the Bishop of London, notes, "Financial realities have made cathedral charging unavoidable" (2007). Churches are not funded by the state and the Heritage

Lottery Fund does not have enough money to preserve all of the churches in England, so revenue must be generated in some way. Donations, however, are not effective. According to Chartres, "Visitors from both home and abroad who, in their hundreds of thousands, enjoy our cathedrals and churches are benefiting from the heroic generosity of the few." An example of a cathedral that has not benefited from a donation system is Durham Cathedral. Approximately 600,000 people visit Durham Castle and Cathedral each year ("Durham Castle," n.d.), however, the amount of donations received at Durham Castle and Cathedral do not reflect this large visitor number. Based on the total amount of donations gained in 2012, the amount donated by each visitor that year was found to be just 32 pence. The amount of money brought in from visitors was enough to cover just twenty percent of the cathedral's running costs that year (Kasprzak, 2012). This system is unsustainable and justifies the shift toward admission charges in the churches of England (Chartres, 2007).

Another concern that churches have in regards to opening their doors to the public is compromising the spiritual environment. First, increased traffic in the church can cause the buildings to deteriorate more quickly ("Understanding Tourism," n.d.). This deterioration will increase the need for frequent maintenance, which can be disruptive to the congregations that normally hold services in the churches. Secondly, tourist activities and commercial development can alter and interfere with the church environment. According to Daniel Levi and Sara Kocher, "inappropriate tourist activities and commercial development around a heritage religious site can lead to the trivialization of the site," ("Understanding Tourism," n.d.). Churches are important aspects of religious heritage in the UK and their integrity should not be jeopardized when welcoming tourists. Finally, there are many debates at many religious heritage sites about whether to charge visitors. People who go to churches to attend services or worship find this unfair because they are not willing to pay to pray. Conflicts exist between the management and stakeholders on whether to operate with religious or financial goals (Olsen, 2006).

2.2 Promoting Religious Heritage

Organizations have sprung up to promote religious heritage: Art Alive in Churches (AAiC), the Churches Conservation Trust (CCT), and the National Churches Trust, to name a few. These organizations engage in a number of activities ranging from the development of resources, such as websites, to membership drives, to large exhibitions of culture, religious art, and artifacts.

2.2.1 Art Alive in Churches

There are multiple organizations in the United Kingdom that are dedicated to showcasing churches that have collections of artifacts. One such organization is AAiC, which aims to showcase the religious heritage (i.e., religious art, architecture, and artifacts) of several communities in the United Kingdom. AAiC aims to promote art and historical artifacts to public visitors by running long-weekend exhibitions. The themes of these exhibitions are related to church buildings and artifacts ("Art Alive in Churches," 2015). Visitors can learn more about art by touring around exhibitions in churches. AAiC also conducts educational programs in the schools of Norfolk, Suffolk, and Cambridgeshire to create connections between younger generations and the churches.

AAiC has worked on three major projects to showcase the religious heritage of England. The first project, "Animals," entailed a series of educational art workshops that took place in the churches of Norfolk in 2009. Between 2011 and 2012, AAiC again used the churches of Norfolk to show how the materials and tools of the medieval era, such as wood, stone, egg tempera, and enamel, were used to produce religious art. In 2013, Art Alive began to utilize digital technology to showcase religious heritage. Art Alive in Churches helped fund a project called "Art on the Wall," which created a searchable database of the remaining wall paintings from the medieval churches of Norfolk. AAiC's most recent project is titled "Momento Mori." This project involved collecting photographs of interesting World War One memorials from the counties of Norfolk, Suffolk, and Cambridgeshire ("Art Alive in Churches," 2015). More about Art Alive in churches can be found in Appendix I.

AAiC works alongside a larger European initiative, the Future for Religious Heritage, to promote and preserve religious artwork as part of European heritage ("Art Alive in Churches," 2015). There are other members of The Future of Religious Heritage organization that have similar missions, such as the Churches Conservation Trust.

2.2.2 The Churches Conservation Trust

The Churches Conservation Trust (CCT) cares for and repairs the churches entrusted to them by the Church Commissioners of the Church of England. They work with community groups, charities, social enterprises, Friends groups, and businesses and entrepreneurs "to create new life in these historic buildings, and to realize living and vital assets for people and their communities," ("Regenerating communities," 2015) The CCT regenerates churches in their care, and re-integrates them into the surrounding community so they can be more than just a place of worship. They have

converted countless neglected churches into heritage centers, conference venues, and community hubs. For the regeneration of All Saints Langport, the CCT made it a youth empowerment project: the entire project was "designed, managed, and led by young people," ("Langport All Saints," 2015).

Another project the CCT worked on turned St Paul's, Bristol, into a circus school. The Grade I building currently has a permanently rigged full-size flying trapeze rig. They worked with the circus Circomedia to make a bit for funding from the Heritage Lottery Fund. Images of the church before and after renovations can be found in Figure 2.2 and Figure 2.3 below:



Figure 2.2: St. Paul's Bristol before the renovation by the CCT ("A circus school?" 2015)



Figure 2.3: St. Paul's, Bristol after its conversion into a circus school ("A circus school?" 2015)

2.2.3 National Churches Trust

While the Churches Conservation Trust focuses on regenerating churches, the National Churches Trust is an organization that works to showcase the rich heritage of the United Kingdom, with an emphasis on religious heritage. It is a charity "dedicated to promoting and supporting church buildings of historic, architectural, and community value across the UK" ("About Us", 2015). Their aims are to maintain England's heritage of church buildings, to "inspire everyone to value and enjoy them," and to promote the benefit of church buildings to communities ("About Us", 2015). One of its recent promotion initiatives was "The UK's Favorite Churches." Sixty well-known entertainers, journalists, politicians, and academics picked their favorite churches, and the list was revealed by the National Churches Trust on their website. They also had a competition for "The UK's Best Modern Churches." The public, parishes, and architects nominated over 200 churches. Twenty-four churches were shortlisted, and the top ten winners chosen by judges were announced at a ceremony in November 2013 ("Promoting churches," 2015).

Many organizations such as Art Alive in Churches, the Churches Conservation Trust, and The National Churches Trust are working to promote churches and the religious heritage they embody. While this work is bettering the way churches are being accessed and interpreted, there are still barriers that are keeping potential visitors away from churches. One of the major remaining barriers is access for the disabled community.

2.3 Accessibility for Individuals with Disabilities

Over 11 million people in the United Kingdom are living with a disability ("Disability facts and figures," 2014). While the most common disabilities include those that limit physical movement, disabilities in the UK are defined as any "physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities," ("Disability Discrimination Act," 1995). In response to the Disability and Discrimination Act of 1995, numerous agencies and organizations have been working to raise awareness about the difficulties faced by the disabled community and have worked to promote access and equality for the disabled. However, there are still significant issues regarding access that the disabled community faces in the United Kingdom.

One of the many remaining barriers for the disabled is access to cultural resources, such as museums and churches. A 2012 survey found that disabled people in the UK were significantly less likely to attend cultural activities than those who had no disability ("Disability facts and figures," 2014). The lower attendance rates among the disabled could stem from a variety of reasons, but ease of access remains a major problem despite legislation requiring that the needs of those with disabilities should be fully considered in the curation of exhibits. In the case of museums, there are many areas in which access could be improved. For example, a 2003 survey showed that 34% of museums thought they provided full access for those with disabilities, yet only 11.5% of those museums offered any sort of 'touch tour,' and only 17% offered any sort of audio tour (Walters, 2009). Additionally, only 5.5% of museums offered sign language interpretation (Walters, 2009). It is important to note that this survey is now over ten years old, but barriers in accessibility at heritage sites, such as museums, remain. Often, gaps in accessibility are a direct reflection of a lack of funding or resources (Walters, 2009).

In terms of physical access, there are also legislative features that stand in the way, as many of the UK's heritage sites are listed buildings. Listed buildings are historical buildings that are legally protected against alteration, in order to preserve the integrity of their original structure ("Listed buildings," 2015). Therefore, adjustments to toilets and doorways are often not possible. Finally, many modern assistive technologies rely on mobile and digital platforms, which must be

carefully considered and maintained to remain inclusive for all visitors. The incorporation and preservation of assistive technologies presents a new and different set of access related constraints, such as which device to use, language features, and audio features (Lisney, Bowen, Hearn, & Zedda, 2013).

Churches experience similar resource and legislative constraints in making their buildings accessible to those with disabilities. However, churches in the UK are making efforts to move towards greater accessibility. After the Equality Act of 2010 was passed, organizations such as the Diocese of London have created provisional documents about how to make heritage sites and churches more accessible to the disabled community, while maintaining the cultural and architectural integrity of these buildings as required by their listed status ("Provision for people with disabilities," 2015). In order to make necessary changes possible, community grants have been organized by the National Churches Trust and awarded to churches throughout the UK. These grants, which totaled £1.3 million between 2008 and 2013, have helped churches to become more accessible to community members by installing features such as new, accessible toilets, automatic doors, ramps, and new flooring (Tulasiewicz, 2013). While these changes are beginning to improve physical access in churches, technology presents another route to improve how visitors are accessing the tangible heritage of the UK.

2.4 Technology: Accessibility and Curation

The incorporation of technology into churches can attract both individuals with and without disabilities. In museums, today's interactive and technologically-driven society has resulted in new approaches to curation and exhibit design. According to Tim Caulton, the former Head of Education and Interpretation at the Museum for Children in Halifax, "visitors are no longer satisfied simply gazing at worthy displays of exhibits in glass cases" (1998). For many museum visitors, the didactic approach to the curation and interpretation of exhibits is inadequate. People want to interact with and experience exhibits rather than just observing artifacts in display cases and reading text panels. Thus, a more constructivist approach is now being taken at many museums to engage patrons and promote active learning (Spock, 2004).

Churches are more similar to art and history museums than science or children's museums, due to the historical nature of the heritage items they possess. Because of this, integrating hands-on, interactive exhibits can be challenging, as the artifacts within churches are often delicate.

Additionally, the environment of a church is different from that of a museum due to the fact some church visitors are there to worship. Despite these challenges, it is possible for technology to be incorporated within churches. The key to doing so is to create a balance. Any technology that is integrated into an exhibit should be complementary to the art, artifact, or architecture that is being presented and it must be easy to use. It should also be incorporated sympathetically in a manner that is appropriate for the establishment in which it is being employed (Wyman, Smith, & Myers, 2011). The use of appropriate digital interpretation technologies in churches can reduce the need for paid tour guides and extravagant exhibit design. It can help create balance by supplementing the religious art, artifacts, and architecture that are on display and improving both physical and intellectual accessibility for all visitors.

Poria, Biran, and Reichel found that visitors to religious heritage sites "favor interpretation during their visit" (2009), meaning that interpretation is a "significant factor" in the visitor experience. Modern visitors to religious heritage sites yearn for the tools to be able to understand and connect with the art, artifacts, and architecture that are being presented to them (Poria et. al, 2009). A continually powerful tool to aid in the interpretation, promotion, and accessibility of religious heritage is technology.

Technology is transforming the way that heritage, art, and history are being promoted, interpreted, and accessed across the globe. The incorporation of technology into churches and museums is being done with the objective of providing the best possible visitor experience. The goal of technological installations is to help enhance the art, artifacts, and architecture being presented, so it is essential that the incorporation of technology be examined carefully. In terms of access, technology is an important tool to aid individuals with and without disabilities. There are many available technologies, ranging from simple to complex, which could improve access.

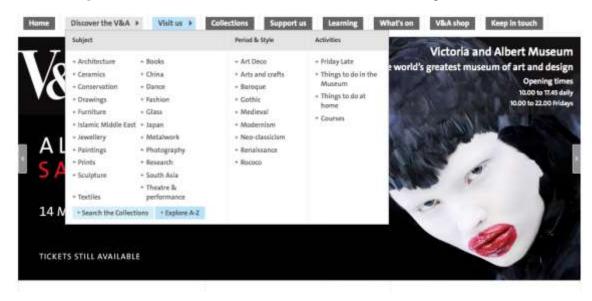
2.4.1 Websites

Websites for heritage sites are a helpful tool in providing a first glance at accessibility by communicating the available services and accessible information ("Access," 2011). An example of a well-constructed website that gives insight to the current exhibits and access features is the website for the Victoria and Albert Museum (V&A). Upon visiting the homepage, the "Visit Us" tab, one of the main tabs at the top of the page, produces information on the current exhibitions, as well as a direct link to the access features at the museum, as seen in Figure 2.4. Additionally, the "Discover the V&A" tab, another one of the main tabs seen to the left of the "Visit Us" tab,

produces information on all of the current galleries. The "Discover the V&A" tab can be seen in Figure 2.5.



Figure 2.4: The "Visit Us" tab of the V&A home screen ("V&A Home Page," n.d.)



 $\textit{Figure 2.5:} \ \text{The "Discover the V\&A" tab of the V\&A home screen ("V\&A Home Page," n.d.)}$

At the bottom of the homepage, as seen in Figure 2.6, there are more links that lead to information on what is happening at museum, along with another link to the "Disability & Access" page. The bottom of the homepage also provides multiple language options, as well as an interactive map of the museum. The interactive map of the museum shows where different galleries and exhibits are, as well as the facilities in each part of the museum. Figure 2.7 is an

image of the interactive map where the facilities tab has been selected. The facilities tab shows users where accessible toilets are, as well as where the lifts are throughout the museum.

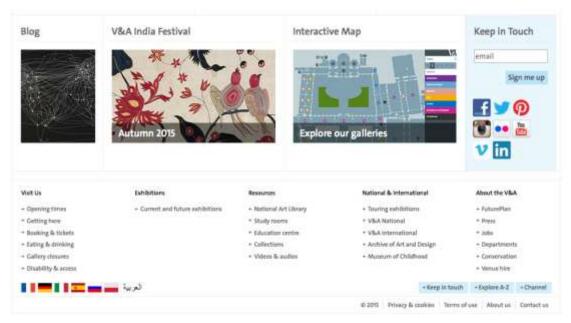


Figure 2.6: Links available at the bottom of the V&A home screen ("V&A Home Page," n.d.)



Figure 2.7: A screenshot of an interactive map of the V&A Museum ("V&A Explorer Map," n.d.)

Selecting either of the "Disability & Access" tabs presents the visitor with information on the available tours and tour schedule, as well as articles that have information on resources for specific disabilities, shown in Figure 2.8. Near the bottom of the page, there is a link to downloadable software that presents the website in audio format for visually impaired users.

The V&A Museum website presents many of the available features of the museum on the homepage or on a directly linked page. The easy access to information--such as the location of accessible bathrooms and lifts, the types of artwork being presented, and the available interpretive technologies--is important for visitors, whether they have a disability or not, so that they can cater their experience to what most interests them ("Accessibility," 2015).

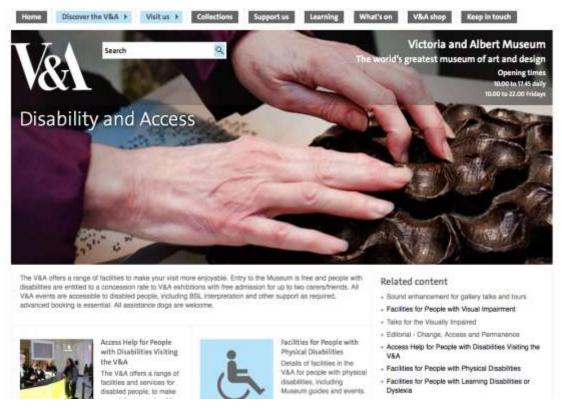


Figure 2.8: The "Disability and Access" page of the V&A museum ("Disability and Access," n.d.)

2.4.2 Interactive Technology

Technology currently being used to make heritage artwork and artifacts more accessible extends far beyond the use of websites. Visitors are looking for an experience where they can learn through interaction (Creed, Sivell, & Sear, 2013). To meet this desire, interactive technologies are being incorporated into heritage sites. An example of this is multi-touch tables, and example of which can be seen in Figure 2.9.



Figure 2.9: Savannah Touch Table from U-TOUCH ("Multi-touch Tables from U-TOUCH," 2015)

These tables are interactive displays where artifacts and digital content are laid out horizontally. Because these tables have many pieces displayed at once, multiple visitors can interact with the exhibit and with each other. The main benefit of using touch tables is visitor interactions with one another, as found in a case study done at The Hive. The Hive is the library at the University of Worcestershire, and is also a public history center. Here, it was found that using multi-touch tables engaged visitors with one another, and promoted visitor interaction through the "honey pot" effect (Creed et. al, 2013). The honey pot effect is a term used to describe the visitor behavior of becoming more interested in an exhibit when seeing others interacting with that exhibit (Creed et. al, 2013).

2.4.3 Digital Technology

Digital technologies are becoming increasingly more popular to make heritage more accessible and to aid in the curation of religious heritage. They can be used to immortalize and present art, artifacts, and architecture that may deteriorate over time (Lu, 2010). Digital technologies can range from simple audio and visual features to complex three-dimensional imaging and augmented reality presentations. Many museums and churches have started to utilize these technologies. One such museum is the Victoria and Albert Museum in London.

The V&A has incorporated accessibility features such as specially guided tours, Braille, handicap accessible entrances and walkways, and other basic accessibility features, but they have

also gone above and beyond in ways that other tourist destinations have not. For example, the V&A museum has made particularly large strides in the way of digital technology. Some of this technology includes radio receivers for use on talk tours, induction loops at each exhibit for hearing aid users, JAWS and MAGIC screen reader software available on computer terminals at various exhibits for visitors in need of visual aid, CCTV magnification software, downloadable audio descriptions of exhibits, and text-to-speech handheld scanners ("Disability and Access," 2015).

While the V&A is well-advanced in terms of technology to aid in accessibility, digital technology can still be taken further. Virtual imaging technology and augmented reality technology are cutting edge technologies that have the potential to display artifacts to visitors in a very realistic way. Virtual imaging technology can display reconstructed versions of damaged and deteriorated artwork, artifacts, and architecture, as seen by the reconstruction of an architectural element presented in Figure 2.10. Augmented reality technology has the capacity to place visitors in an "interactive virtual space, embedded into the physical world," (Girbacia, 2013). A study by Girbacia (2013) found that virtual imaging and augmented reality technologies can aid visitors in perception of heritage pieces by placing them in a virtually reconstructed environment.



Figure 2.10: An example of using virtual imaging to interpret architecture. In this image, the figure presented on the building is being generated using virtual imaging to show visitors what was once there (Girbacia, 2013)

A more common application of digital technology in museums is the use of mobile phones. In the last twelve years, smart phone usage in the United States has increased by 68%, and in 2013 adult smartphone users in the U.S. spent nearly 90% of their time on smartphones using apps (Taber, 2014). The United Kingdom has seen a similar rise in the use of smartphones. As of 2013,

62% of adults in the UK were using a smartphone, which was a near 10% increase from the previous year (Ofcom, 2014). The wide use of smartphones and applications provides an interesting route for museum technology that many are pursuing. In 2013, it was estimated that 50% of historical museums in the UK were utilizing mobile technology to inform visitors, with many more museums planning to introduce smartphone applications (Taber, 2014).

An example of a successful smartphone application used by a major museum is The Met App. This app, developed by the Metropolitan Museum of Art in New York City, allows visitors to access the exhibits and features of the Met from their own personal electronic devices. Access from personal devices can be a useful supplement to exhibits for an individual with a disability, as it provides details and customizable features to cater to that individual's needs ("The Met App," 2015). Additionally, The Met App includes "Accessibility" as one of its nine main tabs. Clicking the "Accessibility" tab presents the users with a list of various accessibility features throughout the museum, more information about accessibility at the museum and a link to related programs that The Met offers for disabled visitors.

2.4.4 Potential Constraints

Despite the potential improvements to the promotion, curation, and accessibility of religious heritage, there are many constraints involved with implementing technology. From a preservation standpoint, it is crucial that technologies serve to enhance the historical merit of culture sites and not overpower them. Therefore, careful consideration must be taken when determining what types of technology should be implemented at a heritage site.

Assistive technology presents many potential issues. First, any technology to assist members of the disabled community must follow guidelines presented by disabilities rights legislation. This includes the guidelines set forth by the Disability Discrimination Act and the Web Content Accessibility Guidelines (WCAG) (Kuzma, 2010). Additionally, assistive technology must be inclusive to all visitors, in order to reduce social barriers between disabled and non-disabled visitors (Foley & Ferri, 2012). Along the same lines, it is important that any technology meant to enhance the visitor experience is basic enough to be successfully used by all visitors. Finally, installations of technology will be limited by the resources that heritage sites have. In this case, many churches do not have the funding or manpower to incorporate and maintain complex technology, such as virtual imaging.

2.5 Conclusion

The churches of the United Kingdom have been utilized as places of worship and as community hubs for centuries. Due to their heavy community use, UK churches contain many works of art, artifacts, and architecture that are representative of the culture of this region. Despite this, many of the churches in the United Kingdom are not recognized for the important heritage pieces they house. A general lack of access to and within churches contributes to their dismissal by the general public as important aspects of heritage. In order to better represent the religious heritage sites of the United Kingdom, various avenues of technology are available that can help enhance the way that heritage pieces are accessed. Technology may be particularly helpful in terms of providing access to heritage sites for the disabled community. Thus, this project examines how the religious heritage of the United Kingdom can be better curated, accessed, and promoted by looking at how churches could be more open to visitors and by determining how various technologies can be used to overcome barriers in access.

3. Methodology

3.1 Overview

The overall goal of this project was to identify ways to promote religious heritage of the UK through improved access to and better curation and interpretation of religious architecture, artwork, and artifacts. Our team achieved this goal by completing the following objectives. We:

- Determined the opinions of church watchers, church administrators, and representatives of religious heritage organizations on the importance of the churches in the city of London as heritage sites;
- 2. Analyzed how heritage sites in London currently curate the art, artifacts, and architecture in their care;
- 3. Identified barriers that exist in terms of accessibility to religious heritage for the disabled community and determined what can be done to overcome these barriers; and
- 4. Determined the opinions of the members of religious heritage organizations regarding access to and interpretation of religious heritage sites.

Our research was conducted between March 16, 2015 and April 24, 2015 in the City of London, United Kingdom. We worked closely with our sponsoring organization, Art Alive in Churches as well as the heritage organization, The Friends of the City Churches (FCC), to conduct interviews with key representatives of religious heritage and disabilities access organizations and museums, and survey members of some of the religious heritage organizations. The tasks associated with each of our objectives are summarized in Figure 3.1 below.

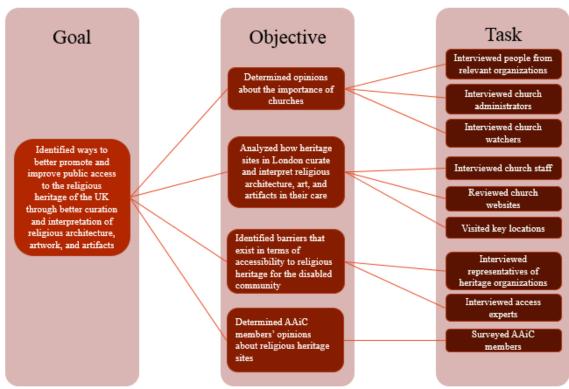


Figure 3.1: Objective Tree Chart

3.2 Interviews

Interviews with representatives of key organizations provided us with the information necessary to develop an understanding of the problem and provide recommendations to Art Alive in Churches. Because a majority of our objectives required the use of semi-structured interviews to gather information, our general interview protocol is described below.

3.2.1 Identifying Potential Interviewees

Initial interviewees were identified based on our background research and conversations with our sponsor. These interviewees include representatives from churches, religious heritage organizations, disabilities access organizations, and museums. Additional interviewees were identified via referral to create a snowball sample: each interviewee was asked to recommend three additional individuals we should interview.

3.2.2 Developing the Interview Script

Building on the background section and with suggestions from our advisors and sponsor, we developed a basic interview script. This script covered major topic areas relating to each of the objectives. In addition to this script, further questions were incorporated based on the individual

that we were interviewing, and the information we wanted to gather from them. Topics unique to each objective that were covered in interviews are listed under the respective objectives below. In order to pilot test the basic interview script, we conducted a preliminary interview with Professor Jeffrey Forgeng at the Worcester Art Museum on February 25, 2015.

3.2.3 Making Initial Contact

Potential interviewees were contacted via phone and email. An example email can be found in Appendix A below. Upon contact, a one hour time slot was set up to speak with the interviewees.

3.2.4 Conducting the Interviews

We conducted in-person, semi-structured interviews. All interviews were semi-structured in order to customize the questions of each interview to the interviewee, meaning that certain questions may have been omitted and new questions may have been asked based on the direction of the interview and the expertise of the interviewee. We conducted most of the interviews in person. If the individual/group to be interviewed could not find a time to meet us in person, we conducted the interview via Skype. Before each interview, the research team researched the background of the interviewee as well as the organizations s/he represents. The team also conducted preliminary research on the interviewee(s) to gain background information about the individual or group. This background information included the title/role of any individuals, mission statements and recent work of any organizations, and what experience the interviewee(s) had with religious heritage curation.

The interview was then conducted at the arranged time. At the beginning of the interview, the interviewe was read the preamble and project description indicated in Appendix B, explaining the purpose of the interview and the topics to be covered. This also included an overview of the project goals. The interviewee was asked for permission to quote them personally or via a pseudonym. We also explained that they had the right to review our final report before publication if they wish. In each interview, we looked to gain implicit consent rather than formal consent. During the interview, one of the team members acted as the leader of the interview, and one of the members acted as scribe. Scribe and leadership positions depended on the individual or organization being interviewed.

3.2.5 Analyzing Transcripts

All notes taken during the interviews were uploaded to a folder in OneDrive. Answers to interview questions were condensed and compiled into a Microsoft Excel worksheet so responses from different interviewees could be compared.

3.3 Objective 1: Determine Opinions about Churches in London as Heritage Sites

As mentioned, churches in the City of London have abundant art, artifacts, and architecture that are an important part of the heritage and history of the UK. Despite this, not all churches in the UK are welcoming to visitors. To evaluate the current state of London churches as heritage sites, we solicited opinions from members of two different target groups: representatives of religious heritage organizations and church staff at selected churches in London, Norwich, and Cambridge.

3.3.1 Representatives of Religious Heritage Organizations

Both based on the function of the various religious heritage organizations and recommendations of our sponsor, we identified key individuals from each group that we could interview. Individuals that we spoke to are listed in Table 3.1 below:

Organization	Contacts	Date Interviewed
Art Alive in Churches	Dr. Julian Litten FSA Dr. Penny Granger John Brydon	March 20 th March 18 th March 20 th
The Friends of the City Churches	Liz Simpson Alice Rankin	March 16 th March 20 th
Historic Religious Buildings Alliance	Becky Payne	April 14 th
National Churches Trust	Sarah Crossland	April 14 th
Churches Conservation Trust	Sarah Robinson	March 26 th

Table 3.1: People contacted from organizations

The team built on the topics raised in the background section and, in consultation with our sponsor, refined our preliminary interview questions. The general topics covered were related to interviewees' experiences in working with churches, and included their view of religious heritage in the UK, the problems they see with the way that religious heritage is curated, and how they think promotion, curation, and access to religious heritage can be improved. A set of interview

questions for the representatives of religious heritage organizations can be found in Appendix B. The protocol for the interviews is presented in Section 3.2 above.

3.3.2 Church Staff in the City of London, Norwich, and Cambridge

As was mentioned previously in the Background section, the ability of many churches to open and curate exhibitions is limited by available funds and staff. To understand opinions on churches as heritage sites and how well churches are being accessed, we conducted interviews with church administrators in addition to representatives of heritage organizations. We spoke to administrators at St. Lawrence Jewry, St. Botolph Aldgate, St. Stephen Walbrook, and St. Mary Abchurch because they were either present when we visited the church or recommended by other interviewees.

Following interviews with key individuals at these locations, the team approached staff and volunteers at other churches in the City of London, Norwich, and Cambridge who are either involved with AAiC or FCC.

The general topics we discussed with church staff and volunteers were related to the interviewee's experience working in an open church. These included visitor patterns they have seen, their opinion as churches as heritage sites, their opinion on the incorporation of technology in churches, and what they thought could be changed to better promote the religious heritage of the UK. Appendix B indicates basic questions that we asked.

3.4 Objective 2: Analyze How Heritage Sites in London Curate and Interpret Buildings, Art, and Artifacts

The second objective of this project was to analyze how selected heritage sites in London currently curate and interpret the religious buildings, art, and artifacts in their care. We selected a mixture of churches and museums to determine what heritage sites are doing well and what can be done better in terms of presentation and interpretation.

The museums on which we focused were the British Museum and the Victoria and Albert Museum. We chose to view these museums because of the wide variety of heritage items they house. To see what the large churches and cathedrals in the city of London had to offer in terms of interpretation, we visited Westminster Abbey and St. Paul's Cathedral. As for smaller churches in the city of London, we visited St. Olave Hart Street, St. Lawrence Jewry, St. Bride Fleet Street, and the 16 churches that are watched by the Friends of the City Churches church watchers. Figure

3.2 is a map of the City of London churches. The churches circled in red are the churches we visited. Their names are listed in Table 3.2.

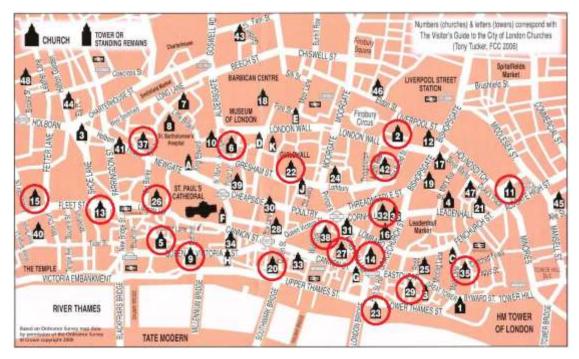


Figure 3.2: A map of the churches in the City of London (Original map provided by the Friends of the City Churches)

Table 3.2: Churches we visited in the City of London

Table 5.2. Charcies we visited in the City of London			
All Hallows London Wall	St. Dunstan-in-the-West	St. Mary-at-Hill	
St. Andrew by the Wardrobe	St. James Garlickhythe	St. Michael Cornhill	
St. Anne & St. Agnes	St. Lawrence Jewry	St. Olave Hart Street	
St. Benet Welsh Church	St. Magnus the Martyr	St. Sepulchre	
St. Botolph Aldgate	St. Martin Ludgate	St. Stephen Walbrook	
St. Bride Fleet Street	St. Mary Abchurch	Dutch Church	
St. Clement Eastcheap			

Outside of London, we evaluated the following churches in Cambridge and Norfolk: Great St. Mary's, Kings College Chapel, St. John's Duxford, St. Peter's Duxford, and Norwich Cathedral. The sample of churches outside of London were churches suggested by our sponsor. These churches were examined as a means of comparing the state of religious heritage in the city of London versus other parts of the United Kingdom that are not as urban.

This objective was fulfilled by visiting the sites of interest mentioned above. At each location, we gathered information on admission fees, tours that were provided, provisions for disabled visitors that had been made, the use of interpretive literature, and the use of digital technologies. Information was also gathered by reviewing the websites of each church and

museum. To make sure the same type of information was gathered from each site, we developed a checklist of information to identify and review on websites (Appendix C) and during site visits (Appendix D for churches, Appendix E for museums).

3.5 Objective 3: Identify Barriers that Exist in terms of Accessibility to Religious Heritage for the Disabled Community

The third objective of this project was to identify barriers that exist in terms of accessibility to religious heritage for the disabled community, and to determine what can be done to overcome these barriers. This objective was included in order to fully explore how interpretation of religious art can be made more accessible. We used site visits and interviews to make these determinations.

We used interviews as an important preliminary step in understanding the types of technology in place to help create better access for the disabled community and in understanding the barriers preventing access to religious heritage. We conducted interviews in order to better understand where access can be improved and what types of technology currently exists to improve access. Additionally, we addressed questions about the cost, knowledge requirements, mobility, and general feasibility of various digital and non-digital options. The key individuals we interviewed were Barry Ginley, Rob Oakley, Klaus Miesenberger, Sarah Robinson, and Geoffrey Hunter. As with the interviews for Objectives 1 and 2 (Sections 3.3 and 3.4), Appendix B has basic examples of interview questions; the interview protocol is laid out in the Interviews section 3.2.

Throughout the research process, we visited a few key locations in order to gain the best possible understanding of accessibility practices that may apply to accessibility within the churches of the UK. These locations included the British Museum, Victoria and Albert Museum, St. Paul's Cathedral, and Westminster Abbey, and the 19 city churches mentioned previously in Section 3.4. We selected this variety of sites to compare and contrast the current state of accessibility in museums, large churches, and small churches. At each of these locations, information was gathered based on the checklists presented in Appendix D and Appendix E.

3.6 Objective 4: Determine Opinions of Members of Organizations

To gain an understanding of the opinions and expectations about touring open churches, we conducted a survey of the members of AAiC. While this sample of the general public was slightly biased, as the people participating had all become members of these organizations and were likely

to have the same mindset, it allowed us to determine where and how access to and the interpretation of religious heritage sites can be improved.

We developed basic survey questions, based on our literature review and previous surveys posted by different organizations, such as the National Churches Trust. We also consulted with our project sponsor on their expectations for the survey, including and addressing any questions they would like included in the survey. We conducted a pilot run of the survey by giving it to our sponsor and to selected representatives of the organizations to be surveyed, in order to ensure that it was clear, comprehensible and would collect the information we needed. The survey covered a variety of topics, including:

- Participant's background (resident vs. tourist)
- Frequency of their visits to churches
- Opinion on exhibitions of religious/historical artifacts in churches
- Expectations for visiting churches
- Opinions on use of technology to curate and interpret the arts and artifacts in the religious heritage sites

The survey questions can be seen in Appendix E. The target sample size of the survey was the 17 members of Art Alive in Churches, all of whom were adult English speakers. Nine members responded and eight filled out the entire survey. We distributed the survey electronically, using Qualtrics. The surveys were self-completed and all responses were kept anonymous.

The survey preambles and survey questions are listed in Appendix F. To analyze the survey responses, the analytical features of Qualtrics and Microsoft Excel were used.

4. Findings and Discussion

4.1 Stakeholder Opinions of Religious Heritage

We interviewed 21 key stakeholders from various religious heritage organizations and churches. Across the board, the stakeholders believed that the religious heritage of the United Kingdom is important. Religious heritage is a significant part of the history of the UK, and both its tangible and intangible aspects should be preserved for future generations. Churches in particular are a key aspects of the tangible religious heritage of the UK. Because they have been a part of the community for centuries, they often present art, artifacts, and architecture from a variety of time periods. Churches can thus demonstrate how the community has evolved over time.

4.1.1 Promotion of Churches

Although churches are an important part of the religious heritage of the UK, many members of the public are not aware of their significance. 88% of stakeholders agreed that churches are not being promoted well enough to the general public as sites of heritage. Because the Church of England focuses mainly on gaining more worshippers, members of the clergy often do not work as assiduously as they might to promote the art, artifacts, and architecture found in their respective churches. A majority of stakeholders also mentioned that the churches are limited by funding and other resources, such as volunteers. Churches do not receive state funding, so individual parishes must fundraise and ask for donations in order to maintain the building itself. Churches that do not have active parishes must rely on volunteers who are interested in preserving the building to plan fundraisers. The maintenance of the buildings themselves thus takes priority over projects that make churches more visitor friendly. Churches need to realize that they can generate more revenue by attracting visitors. Making an investment in a project that will make the church more welcoming and accessible will draw in visitors, including some who are willing to make donations.

4.1.2 Opinions on the Use of Technology in Churches

Churches can be made more welcoming by engaging a wide range of age groups. As noted by many of the church watchers with the Friends of the City Churches, visitors to the city churches cover almost every demographic, but retirees comprise the largest share. In order to draw in and engage other age groups, some changes must be made within the city churches. One possible way to draw in younger visitors is to use digital technology in the curation and interpretation of the art, artifacts, and architecture found within the churches. The stakeholders we spoke to had varying

opinions regarding the use of technology within churches. The breakdown of opinions can be seen in Table 4.1, Figure 4.2, and Figure 4.2 below. A majority of the stakeholders agreed that technology should be incorporated into churches in some way, but 19% were completely opposed to the use of technology. Those who were opposed claimed that technology is disruptive to the spiritual environment of the church. The use of technology in the interpretation of objects within a church can also provide too much structure for the visitor, thus detracting from the personal experience of visiting a church.

Table 4.1: Opinions of 21 stakeholders on the use of technology for the curation and interpretation of art, artifacts, and architecture within churches

Stakeholder Opinion about the Use of	Number of
Technology in Churches	Stakeholders
In Favor of All Technology	7 (33%)
In Favor Non-Intrusive Technologies Only	10 (48%)
Opposed to All Technology	4 (19%)

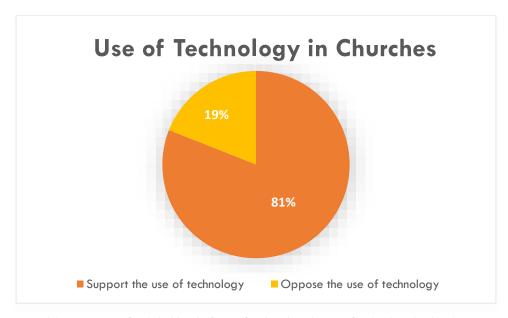


Figure 4.1: Percentage of stakeholders in favor of and against the use of technology in churches

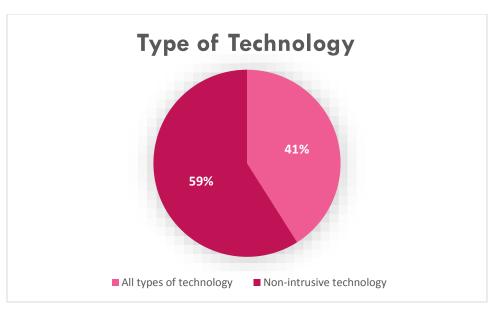


Figure 4.2: Of the stakeholders in favor of technology, the percentage of stakeholders who believe technology should be non-intrusive and the percentage who believe all technologies should be utilized.

The other 81% of stakeholders believed that technology could aid in curation and interpretation, but some indicated that there should be limitations on the types of technologies that can be used in churches. As shown in Figure 4.2 above, 59% of stakeholders said that only non-intrusive technologies would be appropriate for the church environment, while 41% supported the use of all technologies. Stakeholders who supported the use of non-intrusive technologies mentioned that visitors should use personal devices as opposed to touch screens so as not to disrupt the spiritual environment of the church. A few examples of platforms that can be utilized on personal devices are audio guides, apps, QR codes, and websites. Those who supported the use of all technologies believed that non-personal devices such as touch screens and projectors can be particularly helpful in conveying information and recreating imagery, especially if the church does not have WiFi available to download an app or view a website on a personal device.

4.1.3 Opinions on Accessibility in Churches

Another way to make churches more welcoming is to address the needs of all potential visitors. In particular, accessibility for the elderly as well as people with disabilities should be considered. The breakdown of stakeholder opinions on the current state of accessibility within churches can be seen below in Figure 4.3. Surprisingly, 16% of the stakeholders believed that churches are accessible in their current state. These stakeholders claimed that changes cannot and should not be made to churches to install ramps, lifts, and accessible toilets because they are historical buildings with listed status, with listed status interpreted as no changes can be made to

a building whatsoever. Overall, this group of stakeholders believed that disabled visitors can find a way to get into a church if they really want to see it. This attitude does not aid in the creation of an inclusive and welcoming environment.

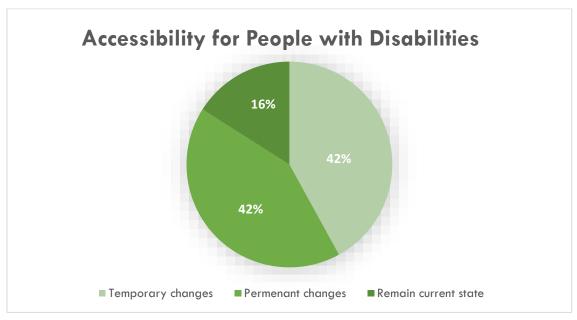


Figure 4.3: Percentage of stakeholders who believe that churches are accessible in their current state, temporary changes should be made to improve accessibility, and permanent changes should be made to improve accessibility

On the other hand, 84% of stakeholders believed that at least some changes should be made to improve accessibility in churches. Half of this group said that only temporary changes should be made, because churches are listed buildings that are challenging and sometimes impossible to alter. They suggested provisions such as temporary ramps and the use of alternate entry ways because churches do not have the resources to fund projects that improve accessibility. Some stakeholders also noted that investment in such projects may not be worthwhile if only a few people will be using additions such as permanent ramps and lifts. The other 42% of stakeholders believed that permanent changes should be made where possible. They expressed that although temporary provisions are a step in the right direction, more improvements can be made to create an inclusive environment within churches. In the case of some temporary ramps, individuals in wheelchairs cannot make it up or down without assistance because the grade is too steep. This is not helpful if a wheelchair bound individual chooses to visit a church alone. Additionally, many of these stakeholders noted that funding for conservation projects can be secured through the Heritage Lottery Fund and that improvements to accessibility can and should be a focus in such projects.

4.1.4 Survey

To gather more opinions about the opening of churches as sites of religious heritage, we attempted to conduct a survey of the members of our sponsoring organization, Art Alive in Churches, as well as members of the Friends of the City Churches. Unfortunately, we were not able to distribute the survey to members of FCC, as this organization does not have an accessible electronic mailing list. Due to the large number of members, distributing and collecting paper surveys within the limited timespan of our project was not feasible. As a result, we distributed online survey only to the 17 members of AAiC via email and collected 9 responses, all from residents of the United Kingdom over the age of 60 years old.

Although we did not have sufficient responses to draw substantive conclusions from the survey, the responses we received aligned with opinions of stakeholders. All 9 respondents believed that the religious heritage of the UK is important, but 8 of them, or 88%, indicated that the tangible aspects of religious heritage that are found in churches are not being promoted well enough to the public. This percentage, which is represented in Figure 4.4 below, is exactly the same as the percentage of stakeholders who believe that promotion of churches is lacking.

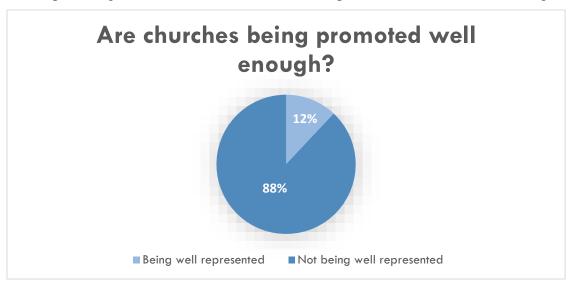


Figure 4.4: Opinions on the promotion of churches. The response distributions are the same for survey respondents and stakeholders.

Similar to the stakeholder interviews, we asked the members of AAiC how they felt about the use of technology for the interpretation of art, artifacts, and architecture at religious heritage sites. Eighty eight percent of the respondents were in favor of the use of technology as a mean of curation and interpretation. However, one respondent indicated that the implementation of technologies in small churches is unnecessary. Only one respondent completely disagreed with the

use of technology in churches because churches are places for worship and modern technology may take away the historical value of these sites.

With regard to accessibility of heritage sites, 62% of respondents indicated that churches are not as accessible as they should be due to the following reasons: (1) churches often remain locked when not in use for services; (2) admission charges, specifically for small churches, may drive visitors away; and (3) there is a lack of information about churches such as location maps and opening times. In terms of accessibility for the disabled community, 88% of the respondents thought churches are not easily accessible, especially for wheelchair users. Respondents asserted that the failure to accommodate the disabled and provide suitable facilities was a result of the lack of financial resources and restrictions on modifications to listed building status. As we mentioned earlier, however, heritage sites may be altered to make them more accessible for disabled communities by collaborating with local organizations and government agencies and by applying funds for reasonable changes.

4.2 The Current State of Curation and Interpretation of Religious Heritage Items

4.2.1 Curation and Interpretation in Museums

Through the duration of this project, the team visited multiple heritage sites to better understand how heritage items are curated and what is being done to aid visitor interpretation of these items. We visited various churches throughout London, Norwich, and Cambridge, as well as two major museums. In our site visits, we found that heritage sites vary greatly in how they curate and interpret items in their care. The British Museum and the Victoria and Albert Museum, the two museums we visited, did the most in terms of curation and offered the most interpretive aid to visitors. Both of these museums offered multiple types of tours, including tours for individuals with visual and hearing impairments. Additionally, each of the museums provided ample interpretive information about the various artworks in their possession. Interpretive information was included on text panels next to each object, and for many of the exhibits there was an interactive touch screen that also displayed interpretive information. Many of the touch screens associated with the various exhibits included a short quiz on the objects in that exhibit. Many of the exhibits also had audio features that would explain more significant pieces aloud via the touch of a button.

4.2.2 Curation and Interpretation in Well-Known Churches

The two museums had more interpretive and curative resources than any of the churches viewed. However, St. Paul's Cathedral, Westminster Abbey, and Norwich Cathedral all offered a variety of resources for visitors. At each location guided tours were available, as were guided tours for visually and hearing impaired visitors upon request. St. Paul's Cathedral and Westminster Abbey offered audio tours as well. At each of these locations, specific artworks, artifacts, and architectural features were not accompanied by interpretive plaques like the artwork within the museums was. However, some information was available on pamphlets provided by the churches.

4.2.3 Curation and Interpretation in City Churches

For the most part, the lesser known and smaller churches found in London, Cambridge, and Norwich were far behind the two large churches and the two museums the team viewed in terms of curation and interpretation. Among city churches, 76% had information in pamphlet, handout, or book form about the history and features of the church, 28% of the churches provided interpretive text plaques next to heritage pieces, 16% offered any type of tour, and only had 8% had any type of touch screen, television screen, or projector that was used for highlighting and interpretation of the features of the church. The numbers of churches that incorporated these methods of interpretation can be seen below in Figure 4.5.

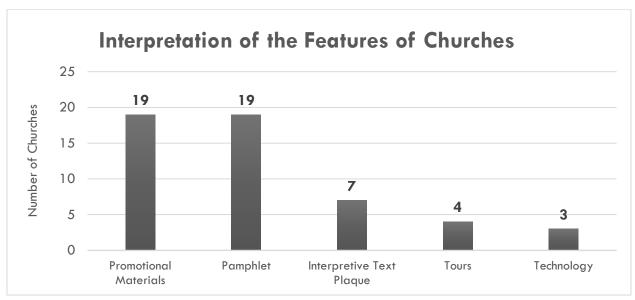


Figure 4.5: The number of churches that employed interpretive methods, out of a total of 25 churches

Within the watched city churches, the available church watchers were often a useful resource to help fill in where information was not available. Overall, the church watchers were knowledgeable about the history of the church and usually about the major artworks within the churches. However, on more than one occasion the church watchers were unable to answer our relatively simple and straightforward questions about the heritage items within the church, or about the involvement of the church with the community.

To summarize, we found that the city churches throughout the City of London and Cambridge were far behind museums and well known churches in terms of the curation of heritage pieces and interpretation resources for visitors. We also found that when the watchers were knowledgeable about the church they were watching, they were a valuable resource to help guide visitors through the important aspects of the city churches.

4.3 Access to and within Churches

During our visits to selected churches, we looked specifically at the accessibility of the churches, including physical access, intellectual access and lavatory access. The number of churches that had various accessible features can be seen in Figure 4.6.

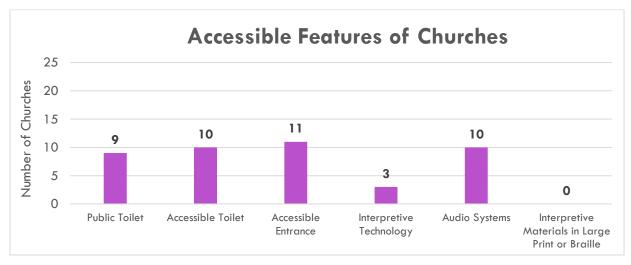


Figure 4.6: The number of churches that had accessible features, out of a total of 25 churches.

4.3.1 Physical Access to Churches

While visiting the heritage sites mentioned above, the team also made note of how accessible each site was to individuals with disabilities. Again, there was a difference between the museums and well-known large churches and the smaller churches found in London and Cambridge. Both the V&A and the British Museum had large signs indicating where lifts and accessible toilets could be found; they were also indicated on the map of the building. St. Paul's Cathedral had a large, temporary ramp installed at their north entrance and a lift installed at their south entrance for easier

access to the cathedral floor. Westminster Abbey was generally level inside and offered videos on the screen of the audio tour device for areas that were inaccessible. Great St. Mary's in Cambridge had a completely level entrance, so all individuals can enter without impediment. The church also installed a glass door instead of wooden door in order to encourage visitors to feel welcome and enter. Norwich Cathedral has a relatively level entrance. For the refectory, which is up a flight of stairs, they have installed a lift with call buttons at wheel chair height.

Some of the smaller churches in the City of London have made similar steps towards improving access. St. Martin Ludgate has installed a wheelchair lift, which can be accessed through a side entrance. The lift is pictured in Figure 4.7 below. Some churches, such as the Dutch Church and St. Mary at Hill, have temporary ramps that can be put into place upon request. Despite the use of ramps in some churches, only 44% had either level access to the entryway or an alternative entrance for individuals who could not use the stairs. Once inside the churches, 76% were level. A few churches had small steps into the pews, making it difficult for those in wheelchairs to stay with the people with whom they came to the church. To accommodate for the step up to the altar, St. Sepulchre installed a simple wooden ramp. This ramp can be seen below in Figure 4.8.



Figure 4.7: The lift at St. Martin Ludgate. (Photo taken by Lingyi Xu)



Figure 4.8: The temporary ramp leading up to the altar at St. Sepulchre without Newgate. (Photo taken by Lingyi Xu)

4.3.2 Intellectual Access to Churches

As previously mentioned, the city churches of London and Cambridge offered little in terms of resources to aid visitors with disabilities to interpret the artwork, artifacts, and architecture. For example, of the 16% of city churches that offered any type of tour, none of them offered guided tours for individuals with visual and hearing impairments, 12% of the city churches offered any sort of technology to aid those with disabilities in interpretation and none of the city churches offered any interpretive information in large print or Braille.

Another important aspect for intellectual accessibility is the use of websites. Well planned websites, such as the V&A museum website discussed previously, can aid visitors with disabilities in planning which churches to visit based on the information provided. From the results we generated from the website checklist, 21 of the smaller churches had websites. Despite the fact that almost all of the churches we viewed did have websites, many were missing information that is important in terms of access. For example, only 11% of church websites had an accessibility page listing the accessibility features of the church. Similarly, only 16% of church websites had any sort of information about the artwork within the church, and 9% of church websites presented either a virtual tour or 360 degree view of the church online. None of the church websites we viewed had downloadable maps of the church. The availability of information on the accessibility features of the church, as well as what visitors can see there are two important pieces of information for a disable visitor, in order to plan their trip.

4.3.3 Lavatories

Another detail the team paid attention to was the lavatory facilities in the churches. Toilets in churches are generally not available for public usage due to security issues. Of the small churches, only 36% had toilets open to the public, and only 40% had accessible toilets.

4.3.4 Alterations to Buildings to Make Them More Accessible

From the interviews we conducted, we took away five main points in terms of what can be done to alter the churches, which are all listed buildings, to make them more accessible. These major points are as follows: (1) By law, churches, as public buildings, have an obligation to make reasonable adjustments in order to become more physically accessible to visitors; (2) altering a listed building is possible with good planning/design; (3) in some cases, changes cannot be made without destroying the fabric of a historic building; (4) well-updated websites with information on current exhibits and accessibility resources can be helpful for all visitors, as these websites can enable visitors to plan their trip in advance; and (5) disabilities awareness training may be useful so volunteers can empathize with visitors with disabilities.

5. Recommendations and Conclusion

5.1 Introduction

Evidently, there are improvements that can be made in terms of how the religious heritage of the United Kingdom is being presented. Some of the issues we have identified through our research include a general lack of resources, limited promotion, a lack of interpretive information present in churches, and barriers to access within city churches. Each of these issues are multifaceted; there is no single solution that will change the way that religious heritage is being viewed. However, based on the completed research, there are viable solutions to address these concerns, which we recommend below.

5.2 Recommendations to the City Church Administrators and Clergy

There are around fifty churches in the square mile of the city of London alone. Many of these churches have been part of the community for centuries and therefore should not be viewed as places of worship alone. Each of these churches has a rich history that is worth sharing with the public. The following recommendations are intended to help administrators and clergy create welcoming and accessible environments within their churches.

5.2.1 Increasing Church Resources

The small city churches are particularly challenged when it comes to making the artifacts, artwork, and architecture that they possess accessible to all individuals because they lack the funding to do so. The city churches, as with many other churches throughout the UK, rely solely on donations to maintain themselves throughout the year. Typically, this money is just enough to maintain the buildings to keep them open. Once general maintenance costs are taken care of, there is very little to go into bettering interpretive features at the church. In order to help solve this issue, we suggest that the churches remain open as often as possible, be more direct when asking for donations, and join incentives such as the Community Toilet Scheme.

Churches would benefit from remaining open as much as possible because extended opening hours allow people more opportunities to visit. An increase in visitor numbers can, in turn, lead to the collection of more donations. Although there are some safety concerns that surround keeping churches open, the benefits outweigh the risks. According to a few of the stakeholders we spoke with, some insurance companies actually encourage churches to remain open by offering them lower insurance premiums. This may seem counterintuitive, but insurance companies offer such

an incentive because churches that lock their doors convey that they have expensive items that are worth stealing. By remaining open, churches can spend less money on insurance coverage and potentially gain money in the form of donations from additional visitors. This option may not be feasible for all churches in the city of London, but it should nevertheless be considered. At the very least, churches should consider extending their opening hours one day a week so that people who are working in the city of London have the opportunity to visit.

In terms of asking for donations, we suggest that churches be more assertive and direct. Many of the city churches did not have obvious donation boxes. Visitors will not give to a church if they cannot find a place to leave their donations. This issue can be avoided by creating easy to read signage and placing it sign near the donation box. Signs can simply ask visitors to donate or inform visitors of the church running costs, such as the sign at St. Stephen Walbrook pictured below in Figure 5.1. Along with the implementation of better signage, churches should have items that are available to visitors who donate, such as postcards, books, or even cups of coffee. Through these sales, churches will be able to generate more donations projects within the church and visitors will be able to leave with a tangible piece of their visit.



Figure 5.1: The donation sign found in the entry way of St. Stephen Walbrook (Photo taken by Lingyi Xu)

Finally, an external outlet that can increase donations to the city churches is the Community Toilet Scheme. The Community Toilet Scheme is a program run through the city of London where businesses and organizations can sign up to have their toilet open to the public. The city then "thanks" participating businesses and organizations by making a monetary donation to them. In 2014, the given donation was £600. While public use of church toilets can pose threats such as vandalism and theft, such issues can be avoided by assuring that volunteers or administrators are present in the church while the toilets are open for use. St. Lawrence Jewry has successfully opened

its toilets for public use and can be looked to as a model for other city churches who are interested in participating. Overall, we recommend that churches consider participating in The Community Toilet Scheme, as it can draw in money and visitors who would have otherwise overlooked the churches.

5.2.2 Improving Interpretive Information within Churches

To address the issue of the lack of interpretive material within the city churches, we suggest that the each church creates an information sheet that can either be passed out to visitors upon entry into the church. Many churches do not have available literature, or do not present information about the art, artifacts and architecture of the church. Churches should consider creating interpretive materials to provide information on important works of art, artifacts, and architecture for visitors.

Ideally, the information provided would resemble the pamphlet for St. Olave Hart Street, which is pictured in Figure 5.2 below. We have selected this pamphlet as an example for a few reasons. First of all, the pamphlet has a map with item numbers on it to guide visitors around the church. This is particularly helpful for visitors who are unfamiliar with the church layout. Secondly, the pamphlet includes images to highlight and give visitors a closer look at the most important and popular artifacts within the church. Finally, the pamphlet contains interpretive literature for each of the numbered items. There is just enough text to inform the visitors of what they are looking at, but not so much that it takes away from the visit to the church.

Churches that have limited resources may not be able to produce interpretive materials similar to the St. Olave Hart Street pamphlet. For these churches, we recommend creating more simple information sheets. A template for an information sheet that can be filled in and printed by volunteers or church administrators can be found in Appendix G. If churches cannot afford to print enough information sheets to distribute to all visitors, laminated information sheets can be provided for the duration of the visit. We suggest that all city churches meet at least this minimum level of interpretation.

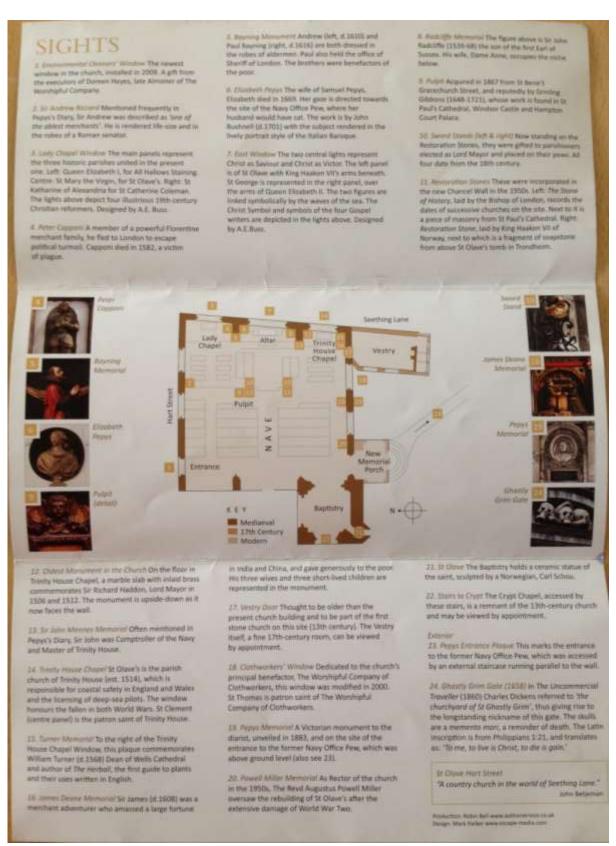


Figure 5.2: The information pamphlet available at St. Olave Hart Street (Photo taken by Lingyi Xu)

5.2.3 Improving Access within the City Churches

In our research, we encountered some negative responses regarding the alteration of churches physically and with technology to make them more accessible. We found that these negative attitudes are not a result of bad will, but a result of reluctance to make changes within churches. Taking all opinions into consideration, we have devised a set of recommendations to help churches improve accessibility.

First of all, we recommend that the city churches take measures to be more welcoming to visitors. Many of the city churches have large wooden doors that are closed even with the church is open. On warm days, churches should leave their doors open so people who pass by the church know that they can walk in and take a look around. We understand that this may pose a threat to church security, so churches should at the very least consider placing obvious signs that signify that the church is open and people are welcome to visit outside the front door if it cannot be opened. Another measure that churches should take to be more welcoming to visitors is to improve lighting within the building. In many of the city churches we visited, few to none of the lights were turned on. If a church does not receive much natural light through the windows, it appears to be dark and uninviting. We therefore suggest that churches turn on all or a majority of lights during visitor hours. Although it is expensive to keep churches lit throughout the day, better lighting can allow visitors to more clearly view the art, artifacts and architecture within the church and enhance the overall visitor experience. The replacement of current light bulbs with more efficient LED bulbs can cut down on the cost of electricity and should be pursued if cost is a concern.

To improve physical access to and within the buildings, we suggest that churches install temporary ramps where necessary. As public buildings, churches have the responsibility to provide reasonable accommodations for people with disabilities. Despite this, some of the city churches did not have ramps at the entry or where there are small steps within the building. Temporary ramps do not require approval, as they do not alter the fabric of the church building. Additionally, they are a cheaper alternative for churches that cannot afford physical building alterations.

In addition to being physically inaccessible, many of the city churches were also intellectually inaccessible. We therefore recommend that churches strive to implement large text, Braille, and audio interpretation for visually impaired individuals along with a standard pamphlet in a variety of languages. Unfortunately, the production of large text, Braille, audio, and multilingual materials can be expensive. Churches that cannot afford to make these materials

available to visitors should at minimum consider having volunteers on duty to describe items within the church to visually impaired visitors and interpretive materials that are heavy in visuals for non-English speakers and hearing impaired individuals.

A final recommendation we have to improve access to the churches for both the disabled community as well as non-disabled visitors is to improve church websites. Websites are an extremely important tool for forward-planning for visitors. Well-designed and updated websites should tell visitors about the current artwork, artifacts, and architecture being presented, as well as how these features can be accessed. Despite this, none of the city church websites have an accessibility page, and few have information on the artwork they possess. Website improvement, and linkage between the city church websites (all are available on a main site, i.e. the Friends of the City Churches website) would be a huge step in improving access. An example of a good website model to follow is the V&A Museum website. Although websites are a useful tool for forward planning, they can be expensive to develop and hard to maintain. To reduce the cost of website development, we recommend that churches use simple but aesthetically pleasing layouts, as they can convey just as much information as professionally developed sites. In terms of keeping websites updated, we recommend that churches reach out to the community to find individuals who have experience with creating websites and are willing to maintain the church website.

5.2.4 Conducting programs with local communities

Because churches are an important part of the community, our final recommendation to the city churches is to institute community programs, such as student programs, music programs, and art programs, if they have not already done so. Community programming often draws secular people into the church and reminds them that the church is not exclusively for the congregation that worships there. Unfortunately for the city of London, the surrounding community is mostly made up of businesses. However, some city churches have already gotten involved with their local communities by providing space for concerts and rehearsals or having programs with local primary schools. Good examples are community programs and school architecture projects in St. Botolph Aldgate and musical programs in St. Sepulchre without Newgate.

Some churches in the city of London may not have the space, resources, or volunteers to accommodate student, music, or art programs. For these reasons, we have devised an alternative recommendation to help the city churches reach out to their surrounding community. As mentioned above, the city of London is made up of mostly businesses rather than residential areas. Churches

can cater to this community by extending a personal invitation to employees of local businesses. There are people who work in the city of London who have no knowledge of its churches, so something as simple as inviting someone into a church can spark further interest.

5.3 Recommendations to the Friends of the City Churches

5.3.1 Adapting the Role of the Church Watcher

One of the most valuable tools available to aid visitors in gaining as much as possible from the city churches is human guidance. While the church watchers and the FCC as a whole care deeply about the city churches and the value of the information they hold, the church watchers could be better informed about the artwork and significance of each church. The current training for church watchers informs them of welcoming and emergency procedures, but does not instruct them in guiding visitors through the churches. The church watchers have the potential to be a valuable form of interpretation in the city churches. We therefore recommended that the role of the church watcher be slightly adapted so they are more than a greeter. With this, we suggest that the FCC provide slightly more extensive training for the watcher that includes education on the items within the churches they are watching in so they can better fill this new role. The new training should also incorporate a segment on disabilities awareness and accessibility so church watchers know about the accessible features of the church and how to cater to visitors with a variety of disabilities.

Since the FCC may not have the time and materials necessary to educate the watchers on disabilities and access, we suggest that the Friends of the City Churches pair with "access teams" (i.e., those staff responsible for promoting disabled access) at larger cathedrals, such as St. Paul's Cathedral, for disability awareness volunteer training. St. Paul's Cathedral, as one of the most popular heritage sites, has installed numerous disabled facilities and held disability-awareness training for its employees. Having disability-awareness training and knowledge about the significant features in the churches where they work can help not only church watchers, but also church administrators better establish a visitor-friendly environment.

5.3.2 Increasing Visitor Numbers

The second recommendation we have for the Friends of the City Churches is to take measures to increase visitor numbers within the city churches. This recommendation is multifaceted, with four potential steps to take.

The first facet of this recommendation is for the Friends of the City Churches to incorporate better signage in order to promote the fact that churches are open with watchers available. While the Friends of the City Churches do currently use signs to advertise their presence within a church, the use of these signs is inconsistent and often signs are placed within the doorway of the church instead of outside of the church. We suggest that the friends reconsider placement of open signs and use more signs around the local area of the church to draw in potential visitors. A constraint to consider when thinking about increased signage is cost. Printing more or new signs is dependent on the resources of the friends. Additionally, signs placed outside of the main entry of the church have the potential to be stolen or vandalized.

Second, we suggest that the Friends of the City Churches increase their social media presence. While the FCC does currently utilize twitter, we suggest that they also use outlets such as Facebook and Instagram. In addition to creating new accounts, we suggest that the Friends be sure to post frequently and in an engaging manner. Social media posts should include links to relevant organizations, events and websites, as well as hashtags, to reach as many potential visitors as possible. Social media can also create an outlet for the FCC to showcase some of the heritage items found within the city churches.

There are two potential issues with extended social media use by the FCC. The first is that keeping multiple social media accounts well updated will require extensive volunteer attention. The second is that volunteers and trustees within the FCC may not know how to use media outlets that they are not familiar with.

The third aspect of this recommendation is extension of church watcher hours. Currently, church watchers are available from 11 AM to 3 PM on weekdays in various churches throughout the city. We suggest that the FCC extend these hours beyond 5 PM for one day a week to enable potential visitors who are working to experience the churches while a watcher is available. In order to avoid having the same churches open late each week, the FCC should offer extended hours on a different day each week. Alternatively, another option would be to keep churches open with watchers available on Saturdays.

A potential issue with extended hours is that volunteers who would be willing to sit in a church for four hours a day may be unwilling to do so for eight. Separating the church hours into smaller shifts may make church watching more appealing to volunteers. Creating smaller shifts

also has the potential to increase volunteer numbers. It would also allow people who are free in the mornings but not the afternoons and vice versa to volunteer to be a church watcher.

Finally, we recommend that the FCC consider pairing with a tourist organization, such as the City of London Guides, to provide themed, guided church tours. The tour themes could be along the lines of architectural style, or location. The Friends of the City Churches can provide information about common themes on their website. They currently make cards (shown in **Error! Reference source not found.** below) that indicate what other churches are watched by the Friends on what days.

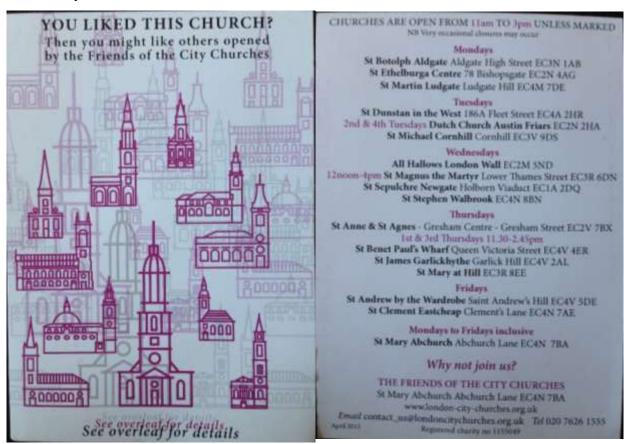


Figure 5.3: The info card with the schedule of the churches watched by the Friends of the City Churches (Photo taken by Lingyi Xu)

We suggest they also produce cards that have the same "themed" church information, such as: "Did you like this church? Then you might enjoy others like it!" Providing tours of multiple city churches in the same day would enable conservation of FCC volunteers, as the churches being toured would not necessarily need to be watched. Additionally, themed tours could help attract potential visitors who have interest in specific architectural styles, artists, city locations etc. The

only issue with having themed guided tours is that it would require extensive coordination and programming between the two organizations.

5.3.3 Improving Communications

As we mentioned in our findings above (Section 4.1.4), we were unable to distribute our survey to the members of FCC because they do not have an electronic mailing list, or a way to send something to all of their members at once quickly. Improved communications skills would better enable volunteers and trustees to coordinate with one another, making member programming and scheduling easier. To do this, we suggest that the FCC create an email list for their members and keep this list updated. This list can remain confidential within the organization, and therefore only be available to outside parties upon request, for the security of the members' personal information. While there may be a few volunteers who do not have emails, this email list will still make contacting most of the members of the organization en masse much easier.

5.4 General Recommendations to Religious Heritage Organizations

5.4.1 Promotion

Religious heritage organizations exist to promote all aspects of religious heritage to the general public. There are members of the public who do not have knowledge of the importance of churches in the heritage of the UK. To reach out to a wider audience, we suggest that all religious heritage organizations work actively to promote themselves to the public. Efficient means of doing so would be to create social media accounts, if they do not yet exist, and to keep social media accounts updated. Social media is especially important in the advertisement of heritage events to the public. Along with this, websites for heritage organizations should be detailed and well-maintained. It is essential that heritage organization websites have relevant and working links, in order to best connect themselves to external organizations and projects.

5.4.2 Networking and Collaboration

In addition to bettering promotion practices, we recommend that religious heritage organizations network and collaborate both with each other and with local tourism boards. Organizations can not only promote each other's events, but can also co-sponsor events. Through co-sponsoring, religious heritage organizations can hold more elaborate events that cater to a variety of audiences at a lower cost to each organization. Pairing up with tourism boards can also help religious heritage organizations reach out to a larger audience, especially in London. For

example, the FCC could reach out to the London Tourist Authority, the Churches Visitor and Tourism Association and the various borough councils to hold events that promote the city churches to the tourist population that London hosts each year. If events like this are held, religious heritage organizations can simultaneously increase membership and promote the religious heritage of the UK.

5.5 Conclusion

Overall, the rich religious heritage displayed in the churches of the city of London is not fully accessible to all visitors. This is a result of a lack of promotion, limited interpretive materials, and barriers to access for the disabled community. All of these issues stem from the lack of resources that are available for the city churches. In response to these findings, we suggest measures to increase resources as well as simple ways to improve interpretation, and accessibility for people with disabilities to the administrators and members of the clergy at the London city churches. Local religious heritage organizations are also key proponents in the promotion of the religious heritage of the UK. The Friends of the City Churches, in particular, can improve the promotion of the city churches by adapting the role of the church watcher into the role of a guide, taking measures to increase footfall in churches, and improving internal communications. As a whole, we suggest that religious heritage better promote themselves by updating social media and websites, collaborating with other heritage organizations to plan events, and pairing with tourism boards to better market churches as a tourist destination. It is our hope that through these recommendations, the general public can become more informed about the importance of churches in the religious heritage of the UK.

6. References

- *About us.* (2015). Retrieved February 15, 2015, from http://www.nationalchurchestrust.org/about-us
- Access: Improving Accessibility of Historic Buildings and Places. (2011). National Disability Authority: Government of Ireland. Retrieved March 1, 2015 from:
 - http://www.ahg.gov.ie/en/Publications/HeritagePublications/BuiltHeritagePolicyPublications/Access%20-
 - %20improving%20the%20accessibility%20of%20historic%20buildings%20and%20places%20%282011%29.pdf
- Accessibility. (2015). The Chapter of St. Paul's Cathedral. Retrieved February 1, 2015 from: https://www.stpauls.co.uk/visits/visits/visits/accessibility
- *Angel Awards*. (n.d.). Retrieved April 21, 2015, from https://www.historicengland.org.uk/news-and-features/angel-awards/
- Arfin, F. (n.d.). *Ancient Romans Invade England in July*. Retrieved April 21, 2015, from http://gouk.about.com/od/Best_Family_Attractions/fl/Ancient-Romans-Invade-England-in-July.htm
- *Art Alive in Churches*. (2015). Retrieved January 20, 2015, from http://www.artaliveinchurches.com/
- Art Alive. (n.d.). Retrieved March 1, 2015, from https://twitter.com/artalive1
- Association of Leading Visitor Attractions. (2013). *Latest visitor Figures*. Retrieved from http://www.alva.org.uk/details.cfm?p=423
- *Audio Tour of Netley Abbey*. (n.d.). Retrieved April 21, 2015, from http://www.english-heritage.org.uk/visit/places/netley-abbey/audio/
- Benhamou, F. (2003). Heritage. *Handbook of Cultural Economics*. Edward Elgar: Cheltenham/ALdershot, UK/Northampton, MA, USA. Retrieved from http://hdl.handle.net/1765/789
- Britain's best churches and cathedrals to visit. (n.d.). Retrieved February 3, 2015, from http://www.telegraph.co.uk/travel/9734984/Britains-best-churches-and-cathedrals-to-visit.html?frame=2423501
- Canterbury Cathedral, St Augustine's Abbey, and St Martin's Church. (n.d.). Retrieved February 15, 2015, from http://whc.unesco.org/en/list/496
- Canterbury Cathedral Trust. (2014). *Canterbury Cathedral*. Retrieved from http://www.canterbury-cathedral.org/wp-content/uploads/2014/09/CCT_Annual-Report-2014_August-2014.pdf
- Castree, N., Kitchen, R., & Rogers, A. (2013). *Heritage. In A Dictionary of Human Geography*. Oxford University Press. Retrieved February 4, 2015, from http://www.oxfordreference.com.ezproxy.wpi.edu/view/10.1093/acref/9780199599868.01.00 01/acref-9780199599868-e-807

- Caulton, T. (1998). Heritage: Care-Preservation-Management: Hands-On Exhibitions: Managing Interactive Museums and Science Centres. Abingdon: Routledge.
- *Charity framework.* (n.d.). Retrieved January 27, 2015, from http://apps.charitycommission.gov.uk/Showcharity/RegisterOfCharities/CharityFramework.a spx?RegisteredCharityNumber=1155011&SubsidiaryNumber=0
- Chartres, R. (2007). "The real scandal over cathedral charging." *The Telegraph*.
- A Christian presence in every community. (n.d.). Retrieved February 15, 2015, from https://www.churchofengland.org/about-us/facts-stats.aspx
- A circus school? Surely not. (2015). Retrieved April 22, 2015, from http://www.visitchurches.org.uk/Aboutus/Regeneratingcommunities/Projectsexamplesofourregenerationwork/AcircusschoolBristol/
- Creed, C., Sivell, J., Sear, J. (2013). *Multi-touch tables for exploring heritage content in public spaces*. Heritage and Cultural Learning Hub: The University of Birmingham. Retrieved March 1, 2015, from http://link.springer.com/chapter/10.1007/978-1-4471-5535-5/fulltext.html
- Diocese of London | Who wants to come in? (2015). Retrieved January 26, 2015, from http://www.london.anglican.org/support/buildings-property/open-churches-toolkit/who-wants-to-come-in/
- Diocese of London | Why open up? (n.d.). Retrieved February 5, 2015, from http://www.london.anglican.org/support/buildings-property/open-churches-toolkit/why-open-up/
- *Disability and Access.* (2015). Retrieved February 15, 2015, from: http://www.vam.ac.uk/page/d/disabilityand-access/
- *Disability Discrimination Act.* (1995). Retrieved February 1, 2015, from http://www.legislation.gov.uk/ukpga/1995/50/introduction
- Disability facts and figures. (2014). Department for Work & Pensions, Office for Disability Issues. Retrieved February 1, 2015, from https://www.gov.uk/government/publications/disability-facts-and-figures/disability-facts-and-figures
- *Durham Castle and Cathedral.* (n.d.). Retrieved February 15, 2015 from http://whc.unesco.org/en/list/370
- Facts & Stats. (n.d.). Retrieved February 15, 2015, from https://www.churchofengland.org/about-us/facts-stats.aspx
- Foley, A., Ferri, B. (2012). Technology for people, not disabilities: ensuring access and inclusion. *Journal of Research in Special Education Needs*, 12:4, 192-200. DOI: 10.1111/j.14713802.2011.01230
- Girbacia, F (2013). Virtual restoration of deteriorated religious heritage objects using augmented reality technologies. *European Journal of Science and Theology* (1841-0464), 9 (2), p. 223.
- Hofstede, G. (1997). Cultures and Organizations: Software of the mind. New York: McGraw Hill.

- Kasprzak, E. (2012, March 25). Concern Over Funding for Upkeep of England's Cathedrals. *BBC News*.
- Kuzma, J. (2010). Accessibility design issues with UK e-government sites. *Government Information Quarterly*, 27:2, 141-146. DOI:10.1016/j.giq.2009.10.004
- *Langport All Saints a youth empowerment project.* (2015). Retrieved April 22, 2015, from http://www.visitchurches.org.uk/newsaints-langport/
- Lisney, E., Bowen, J., Hearn, K., Zedda, M. (2013). Museums and technology: Being inclusive helps accessibility for all. *Curator*, *56:3*. DOI: 10.1111/cura.12034
- *Listed Buildings.* (2015). Retrieved March 31, 2015, from: http://www.cityoflondon.gov.uk/services/environment-and-planning/planning/heritage-and-design/listed-buildings/Pages/default.aspx.
- List of churches in London. (n.d.). Retrieved February 22, 2015, from http://www.upraise.co.uk/london_churches/List%20of%20churches%20in%20London.pdf
- Logos. (n.d.). Retrieved March 1, 2015, from http://www.wpi.edu/offices/marketing/logos.html LSeim. (2014, June 3). Study shows that secular Europe backs religious heritage! Retrieved
- April 1, 2015, from http://www.frh-europe.org/eu-poll-result/
- Lu, D., Pan, Y. (2010). Digital Preservation for Heritages: Technologies and Applications. Heidelberg: Springer.
- *Multi-touch Tables from U-TOUCH* | industrial, medical, retail and more. (2013, March 13). Retrieved March 31, 2015, from http://www.u-touch.co.uk/touch-tables/
- *National Churches Trust | British love churches, new opinion poll shows.* (2015, January 29). Retrieved February 3, 2015, from http://www.nationalchurchestrust.org/poll
- National Churches Trust Survey. (2011). National Churches Trust. Retrieved from: http://www.nationalchurchestrust.org/sites/default/files/resources/National-Survey-Report.pdf
- Ofcom. (2014). Adults' Media Use and Attitudes Report.
- Olsen, D. 2006. Management issues for religious heritage attractions. In D. Timothy & D. Olsen (Eds.) Tourism, religion and spiritual journeys (pp 104-118). New York: Routledge
- Open Churches Toolkit. (2015). Retrieved January 20, 2015, from http://www.london.anglican.org/support/buildings-property/open-churches-toolkit/
- Poria, Y., Biran, A., Reichel, A. (2009). Visitors' preferences for interpretation at heritage sites. *Journal of Travel Research 48*, 92-105. Retrieved March 1, 2015 from http://jtr.sagepub.com/content/48/1
- *Promoting churches, chapels and meeting houses.* (2015). Retrieved February 15, 2015, from http://www.nationalchurchestrust.org/how-we-help/promoting-churches-chapels-and-meeting-houses
- Regenerating communities. (2015). Retrieved April 22, 2015, from http://www.visitchurches.org.uk/Aboutus/Regeneratingcommunities/

- Rotherham, I. D. (2007). Sustaining Religious Tourism Infrastructures for Religious Tourists and Pilgrims within the UK. In R. R. Morpeth, *Religious Tourism and Pilgrimage Management: An International Perspective* (pp. 64-77). Wallingford: CAB International.
- Spock, D. (2004). Is it Interactive Yet? Curator, 369-374.
- Support the Abbey. (n.d.). Retrieved from Westminster Abbey: http://www.westminster-abbey-nthe-abbey
- Taber, Meg Miller (2014). *Use of Mobile Technology among Museum Visitors: A Case Study*. Thesis. Rochester Institute of Technology. Retrieved February 1, 2015, from http://scholarworks.rit.edu/cgi/viewcontent.cgi?article=9336/&context=theses
- Tulasiewicz, E. (2013). *Community Grants*. Retrieved April 10, 2015, from http://www.buildingconservation.com/articles/community-grants/community-grants.htm
- The Dean and Chapter of Westminster. (2013). Westminster Abbey 2013 Report To The Visitor Her Majesty the Queen. Retrieved from http://www.westminster-abbey.org/_data/assets/pdf_file/0004/83380/2634_WA_Annual_review_WEB.pdf
- *The Met App.* (2015). Retrieved February 15, 2015, from http://www.metmuseum.org/visit/met-app
- *UK driving lessons East / East Anglia*. (2009). Retrieved January 20, 2015, from http://www.drivinglessonsfinder.co.uk/driving-lessons-east-anglia.php
- Understanding Tourism at Heritage Religious Sites. (n.d.). Retrieved February 15, 2015, from http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1134&context=focus
- UNESCO. (2014). Tangible Cultural Heritage. Retrieved from http://www.unesco.org/new/en/cairo/culture/tangible-cultural-heritage/
- *V&A Home Page Victoria and Albert Museum.* (n.d.). Retrieved April 14, 2015, from http://www.vam.ac.uk/
- *V&A Explorer Map.* (n.d.). Retrieved April 14, 2015, from http://www.vam.ac.uk/digital/map/#l=1&c=levels
- Walters, Diana. (2009). Approaches in museums towards disability in the United Kingdom and the United States, Museum Management and Curatorship, 24:1, 29-46, DOI: 10.1080/09647770902731759
- *Welcome*. (n.d.). Landscape Institute of East England. Retrieved January 20, 2015, from http://www.landscapeinstitute.org/eastofengland/index.php
- *Welcome to Durham Cathedral.* (n.d.). Retrieved February 16, 2015, from http://www.durhamcathedral.co.uk/
- Wyman, B., Smith, S., Myers, D., & Godfrey, M. (2011). Digital Storytelling in Museums: Observations and Best Practices. Curator, 54:4, 461-468.

Appendix A Preliminary Email and Attachment

Email Script

Hello [insert potential interviewee name here],

My name is [insert team member name here] and I am a member of a student group from Worcester Polytechnic Institute in Worcester, Massachusetts, USA. My team is working with Art Alive in Churches to identify ways to promote religious heritage of the UK through improved access to and better curation and interpretation of religious architecture, artwork, and artifacts.

I am emailing you today to ask if you would be willing to speak with us about [insert objective here] during our time in London [insert specific dates if necessary]. We would greatly appreciate the opportunity to speak with you regarding these topics. Copied in this email is the email alias through which you can contact our entire team. I have also attached a document that briefly explained our project. Please let us know at your earliest convenience if and when you will be able to meet with us. We look forward to hearing from you!

Thank you,

[insert team member name here]

If the contact responded with "no" we asked him/her to refer us to a more relevant contact. If the contact responded with "yes" we scheduled an interview time and place and indicated that we would prefer a face-to-face conversation.

Attachment describing our project



The Re-Discovery of Religious Heritage today

The latest research (2014) from the network Future for Religious Heritage (FRH) highlights the importance Europeans place on the region's religious buildings and the art and artifacts they contain as essential parts of European cultural heritage and identity. Eighty-seven percent of respondents in a recent <u>survey</u> indicated this religious heritage needs to be better promoted, especially to tourists (LSeim, 2014). As part of a future, broader European initiative, Art Alive in Churches, an FRH member, is working with various other partners to bring the rich religious heritage of the UK to the attention of a wider public through new ways of curating and interpreting religious buildings, art, and artifacts.

A current pilot project with an American University (WPI) based on churches in London, aims to:

- Determine how selected organizations in London currently curate and interpret the religious buildings, art, and artifacts in their care;
- Evaluate best practices used in the curation and interpretation of cultural heritage that may
 be applied to religious heritage, including the innovative use of digital media and devices
 in particular; and
- Explore interpretive methods that may be particularly effective for people with visual, hearing, learning, and other disabilities to promote greater equality in access to and learning about religious heritage.

Two key questions are:

- What more could churches do to engage local people and visitors in a similar way to museums and art galleries?
- In particular, what should be done to encourage access for people with disabilities?



London Project Center:

WORCESTER POLYTECHNIC INSTITUTE (WPI)

Founded in 1865, WPI is a private technology-oriented university, located in Worcester, Massachusetts, with around 3,500 undergraduate students, 700 graduate students, and 220 full-time faculty members. WPI students pursue degree programs in engineering, the sciences, the humanities, and management. All WPI undergraduates must complete a third-year interdisciplinary research project called the "Interactive Qualifying Project," or IQP. By working in multidisciplinary teams to address problems related to technology, society, and human needs, students come to understand how their careers will impact, and be affected by, societal structures and cultural values. More than 50% of students go off campus to conduct their IQPs and to coordinate these activities WPI has established "Project Centers" in Europe, Central and North America, Africa, and the Asia-Pacific region.

Appendix B Interview Preamble and Sample Questions

Interview Preamble

Hello. (Everyone introduce themselves). We are a group of students from Worcester Polytechnic Institute in Worcester, MA USA. To fulfill our junior year project requirement, we are working with Art Alive in Churches to identify ways to promote the religious heritage of the UK through improved access to and better curation of religious architecture, artwork, and artifacts.

Thank you for agreeing to participate in this interview with us. The purpose of this interview is to help identify ways in which improvements to access and curation can promote the religious heritage of the UK. Keep in mind that participation in this interview is completely voluntary. Anything that you say during this interview will not be quoted without your permission. If you prefer, we can also quote you under a pseudonym instead of your name or title. If you do not feel comfortable answering a question, you may ask to move on to a different question. Notes will be taken throughout the interview, but recording devices will not be used without your consent. Thank you again for your time.

Sample Interview Questions

Representatives of Religious Heritage Organizations

- 1. When and why did you decide to become involved in [insert organization name]? How did you get to [position]?
- 2. Do you feel that the religious heritage of the United Kingdom is important? Why or why not?
- 3. Do you think that churches in the United Kingdom are promoted as well as they could be? Why or why not?
- 4. What do you think the barriers are in terms of the promotion of religious heritage sites in the United Kingdom?
- 5. Do you think heritage sites in the United Kingdom are accessible for individuals with disabilities? Do you think the use of technology could help solve this problem?
- 6. Do you think the use of technology can improve the way religious art, artifacts, and architecture are curated and interpreted?
- 7. Do you think the use of technology in churches take away from their historical value? Why?
- 8. Is there anything you hope to see us accomplish during our time here?
- 9. Are there any other people we can contact in order to obtain more information?

Representatives from Access Teams and Disabilities Rights Organizations

- 1. What is your role in [insert organization]?
- 2. What are some of the projects you have worked on as [insert role] at [insert organization] to improve accessibility in London?
- 3. What has been the outcome of these access focused projects?
- 4. In your opinion, do you think that the heritage sites of the United Kingdom are easily accessed?
- 5. If not, how do you think that accessibility in places like churches and museums can be improved?
- 6. Are there any specific technologies you have either worked with, or can think of, that can aid in improving access to UK heritage sites?

Church Watchers from FCC

- 1. When did you start volunteering as a church watcher?
- 2. Why did you decide to become involved with the Friends of the City Churches?
- 3. If you had to estimate the number of visitors you see in a day, how many would you estimate?
- 4. What is the most frequent age group of visitors that you see in a day?
- 5. Do you feel that the religious heritage, meaning religious art, artifacts, and architecture, of the City of London is important? Why?
- 6. Do you feel that the religious heritage, meaning art, artifacts, and architecture, of the churches of the City of London is promoted well enough?
- 7. How would you feel about alterations to the city churches in order to make them physically accessible to individuals with disabilities?
- 8. How would you feel about the incorporation of digital technologies, such as screens and audio technology, into churches?

Appendix C Website Information Checklist

Website Information Checklist * Required Where are you? * What is the name of the place you are currently? Is this a museum or a church? * Museum Church Other: Homepage What pages are available from the homepage?

Homepage

Can the text size be changed easily?

- No

Information Provided

Does the website provide information on any of the following?

- Current exhibits
- Available tours
- Disabilities services
- Maps depicting access
- Other:

Website Features

Does the website have any of the following features?

Can you view the website in multiple languages? Which one?

- Downloadable maps
- Virtual tours
- Other:

Languages

Submit

Appendix D Church Visit Information Checklist

Church Information Checklist

ondion information one

Where are you? * What is the name of t	e church you are currently at?
Charges	
Are there any fees ch	ged? What are they for?
Access to Church	
	acceptable physical access to the following locations?
The entrance of th	
Insides the church	
Other:	
other.	
Technology	
Does this location use	any of the following?
Speakers	any, an ange service regis
Screens	
Multi-touch techno	DQV
Other:	198A
LLI OTHER!	
Profitable Material	
Does this location sel	any of the following?
Postcards	
Books	
Pamphlets	
Other:	
10	
Information Provide	d
Does this location pro	ide any information on the history of the church or the artwork? If so, what about
The Toilet Situation	It accomplished to it multilate
is there a pathroom ri	it accessible? Is it public?

Appendix E Museum Visit Information Checklist

Site Information Checklist

Location Name	
Where are you?	
Visitation Numbers	
How many people visit this location a year?	
Tours	
Does this location provide any of the following?	
Guided tour	
Self-led tour	
Audio tour	
Sign-language tour	
Other:	
Charges	
Are there any fees charged? What are they for?	
CAN A MICHAEL TO COMPANY AND	
Interpretive Literature	
is there any literature available to help the visitor interpret the art/artefacts/building	itself? In what form? This
may include, but is not limited to, pamphlets available on site, text panels near the a	rt/artefact/building, text to
be found online, etc	
Handicap Provisions	
What handicap provisions are provided? These may include, but are not limited to, h	andicap ramps, braille on
text panels, signi-language and audio tours, etc.	
4	
Approved the Control of the Control	
Computer/Digital Interpretation	
Are there any digital interpretation methods used? If so, which ones?	

Appendix F Survey Questions



Thank you for agreeing to participate in our survey. The goal of this survey is to identify ways in which improvements to access and curation can promote the religious heritage of the UK. Participation in this survey is completely voluntary. All answers that you provide will remain anonymous. Any background information is purely for demographic purposes. You do not need to answer every question in this survey, however your input is valued.

Where are you fron	n?				
London			Elsewhere in Eur		
Somewhere else	in the UK		Other		
Please select your	age group.				
under 20	20-30	31-40	41-50	51-60	over 60
	ed a church in or c	athedral in the Unit	ed Kingdom? If no,	skip the next two qu	estions.
○ Yes ○ No					
When is the last tim In the last week	ie you have visited	a church or cathe	dral in the United Kir	ngdom?	
In the last week					
In the last 6 month	he				
	iis				
In the last yearOver a year ago					
Over a year ago					
When you last visite	ed a church or cath	edral, why did you	make your visit?		
 Worship/Religiou 	s reasons				
 Academic reason 	s				
Tourism					
Other:					
l .					
Do you think that cl	hurches in the UK a	are historically impo	ortant?		
Yes					
○ No					
Do you view church	nes as an important	aspect of commur	nities in the UK?		
O Yes	-				
○ No					

Do you think the artwork and artefacts within UK churches are important in terms of history and culture? O Yes
○ No
Do you think the architecture of UK churches is important in terms of history and culture?
Yes
○ No
In general, do you think churches are well represented in terms of history and culture?
○ Yes
○ No
Do you think religious sites in the UK are as important as museums in terms of history and culture?
O Yes
○ No
Do you think that heritage sites in the UK are as accessible as they should be?
○ Yes
○ No
If no, describe some of the issues you see with accessibility to heritage sites.
Do you think that there are issues in terms of accessibility for the disabled community in religious sites in the UK?
O Yes
○ No
If yes, describe some of the issues you see.
Have you ever visited a museum in the UK? If no, skip to question the next three questions.
Yes
○ No
Have you noticed the use of technology in museums that you have visted? If no, skip the next two questions.
O Yes
○ No
Did you like the use of technology in museums that you have visited?
Did you like the use of technology in museums that you have visited? Ores
O Yes
○ Yes ○ No
Yes No Please describe why or why not.
○ Yes ○ No
 Yes No Please describe why or why not. Do you think technology can be a useful tool for religious heritage curation?
 Yes No Please describe why or why not. Do you think technology can be a useful tool for religious heritage curation? Yes
○ Yes ○ No Please describe why or why not. Do you think technology can be a useful tool for religious heritage curation? ○ Yes ○ No

FINISH

Appendix G Church Information Sheet Template

Name of Church

Date Established

Address

Style of Church (Wren, Victorian, etc)

Major Artwork 1

- Name of piece
- Artist
- Date it was made
- Significance





Major Artwork 2

- Name of piece
- Artist
- Date it was made
- Significance



Information about the church

Major Artwork 3

- Name of piece
- Artist
- Date it was made
- Significance



Accessibility features

Nearest public toilet

Name of Church

Date Established

Address

Style of Church (Wren, Victorian, etc)



Information about the church

Accessibility features

Nearest public toilet

Major Artwork 1

- Name of piece
- Artist
- Date it was made
- Significance



Major Artwork 2

- Name of piece
- Artist
- Date it was made
- Significance



Major Artwork 3

- Name of piece
- Artist
- Date it was made
- Significance



Appendix H Church Accessibility Summary Chart

	Accessible	Accessible	Accessible		Interpretive	Audio or
Church Name	Entrance	Within	Toilet	Public Toilet	Technology	Guided Tours
All Hallows London Wall	×	√	×	✓	×	×
St. Anne & St. Agnes	×	✓	✓	✓	×	×
St. Benet Paul's Wharf	×	×	×	×	×	×
St. Botolph Aldgate	✓	✓	×	×	×	×
St. Clement Eastcheap	×	✓	×	×	×	×
St. Dunstan in the West	×	×	×	×	×	×
St. James Garlickhythe	✓	✓	✓	✓	×	×
St. Magnus the Martyr	✓	✓	X	×	×	×
St. Martin Ludgate	✓	✓	✓	✓	×	×
St. Mary Abchurch	×	×	×	×	×	×
St. Mary at Hill	✓	✓	✓	✓	×	×
St. Michael Cornhill	×	✓	×	×	×	×
St. Olave Hart Street	×	×	×	×	×	×
St. Sepulchre	×	✓	✓	✓	×	×
St. Stephen Walbrook	×	✓	×	×	×	×
The Dutch Church	✓	✓	✓	×	×	×
St. Andrew by the Wardrobe	×	×	✓	×	×	×
St. Lawrence Jewry	✓	✓	×	✓	✓	✓
St. Bride Fleet Street	×	✓	✓	×	✓	✓
Great St. Mary's	✓	✓	✓	✓	✓	✓
King's College Chapel	✓	✓	×	×	×	✓
All Saint's Jesus Lane	✓	✓	×	×	×	×
St. Peter's Duxford	×	✓	×	×	×	×
St. John's Duxford	×	×	×	×	×	×
All Saints Church (The Michaelhouse)	✓	√	✓	✓	×	×

Church Name	Interpretive Materials in Braille/Large Print	Accessibility Page on Website	Interpretive Info on Website
All Hallows London Wall	X	×	×
St. Anne & St. Agnes	X	×	×
St. Benet Paul's Wharf	×	×	×
St. Botolph Aldgate	×	×	×
St. Clement Eastcheap	X	×	×
St. Dunstan in the West	X	×	X
St. James Garlickhythe	X	×	X
St. Magnus the Martyr	×	×	X
St. Martin Ludgate	X	×	×
St. Mary Abchurch	X	×	X
St. Mary at Hill	X	×	X
St. Michael Cornhill	X	×	X
St. Olave Hart Street	X	×	✓
St. Sepulchre	X	×	X
St. Stephen Walbrook	X	×	X
The Dutch Church	X	×	X
St. Andrew by the Wardrobe	X	×	X
St. Lawrence Jewry	X	×	√
St. Bride Fleet Street	X	×	✓
Great St. Mary's	×	×	X
King's College Chapel	×	×	X
All Saint's Jesus Lane	×	✓	X
St. Peter's Duxford	×	×	X
St. John's Duxford	×	√	X
All Saints Church (The Michaelhouse)	×	×	X

Appendix I Sponsor Description – Art Alive in Churches

Art Alive in Churches (AAiC) is an organization that aims to showcase the religious heritage (i.e., religious art, architecture, and artifacts) of several communities in the United Kingdom. AAiC was founded in 2008, in Norfolk County, England (Figure II). Soon after, the organization expanded to include two other East Anglian counties, Suffolk and Cambridgeshire ("Welcome," n.d.), and is now considering expanding once again to work with the churches of London (Figure I2). Religion has played key roles in both the history and culture of Europe. Art



Figure I1: Counties of East Anglia ("Welcome," n.d.)

Alive in Churches works alongside a larger initiative, the Future of Religious Heritage, to promote and preserve religious artwork as a powerful resource regarding the heritage of the continent ("Art Alive," 2015).



Figure 12: Location of East Anglia ("UK driving," 2009)

Art Alive in Churches has worked on three major projects to showcase the religious heritage of England. The first project, "Animals," entailed a series of educational art workshops that took place in the churches of Norfolk in 2009. Between 2011 and 2012, AAiC again used the churches of Norfolk to show how the materials and tools of the medieval era, such as wood, stone, egg tempera, and enamel, were used to produce religious art. In 2013, Art Alive began to utilize digital technology to showcase religious heritage. In their project "Art on the Wall," Art Alive in Churches created a searchable database of the remaining wall paintings from the medieval churches of Norfolk. This

database includes details of the artists who painted the wall art, materials used, and why each painting was created. Along with this, the graffiti present in these churches was also recorded, in order to gain a clearer picture of the culture of the actual people who practiced in the churches. For this project Art Alive in Churches worked alongside two organizations, the East Anglian Wall Paintings Database and the Medieval Graffiti Survey. AAiC's most recent project is titled "Momento Mori." This project involved collecting photographs of interesting World War One memorials from the counties of Norfolk, Suffolk and Cambridgeshire. AAiC created a library of

the collected images, which were used as part of a church trail in August 2014. In 2015, AAiC plans to conduct a project to showcase the brass work throughout churches in East Anglia, in a project called "Brass in Abundance" ("Art Alive," 2015).



Figure 13: St. Andrew Holborn, one of the open churches in London ("Open Churches," 2015)

Unfortunately, accessing churches that are rich in art, artifacts, and architecture is not always easy. According to the Diocese of London, there are currently only six churches in the city of London that are open as exhibits of religious art and artifacts ("Open Churches," 2015), including St. Andrew Holborn (Figure I3). Some churches simply do not want to open their doors to the public in the first place because they believe they have nothing interesting to display ("Who wants to come in?" 2015). However, churches can be a popular attraction for tourists, local residents, and advocates of

religious heritage, especially with proper publicity. Many other churches in England are unlocked throughout the day to allow for visitors, but only a small number of these churches are able to actively cultivate tourists. Without organized exhibits and accommodations for visitors, especially visitors with disabilities, it can be hard for churches to attract visitors. The abilities of many churches to appeal to tourists and other visitors by promoting religious heritage are also limited by available funds and staff. Because churches are staffed mainly by volunteers, it can be challenging to find people who are willing to keep a church running for tours, create exhibits for artifacts, and maintain these exhibits, all while keeping everything within the church secure. Hiring a permanent staff to perform these tasks can be prohibitively expensive even for the larger and wealthier churches or diocese. In addition to financing the opening and maintenance of churches, additional money must be spent to assure that all visitors, including those with disabilities, can easily access whatever an open church has to offer. Creating a disability friendly environment can be both expensive and time consuming. Without proper staffing, accommodations, and publicity, most churches simply cannot function on the same level as a museum.

As a charity and non-profit organization, Art Alive in Churches aims to promote the arts and historical artifacts to public visitors by running long-weekend exhibitions. The themes of these

exhibitions are relating to church buildings and artifacts. According to Charities Commission, their mission statement is "to advance the education of the public in the arts and crafts of medieval times and in the heritage in ancient buildings, particularly churches in east Angelia particularly but not exclusively by public demonstrations and exhibitions, general publicity and enrolling the support of key local players such as local communities, local councils, educational institutions and any others relevant to the work of the charity".("Charity framework", n.d.) Visitors can learn more about arts by touring around the art galleries churches. In order to help future generations accumulate interests in history and



Figure 14: The Art Alive in Churches Logo ("Art Alive", 2015)

religious heritage, AAiC is also conducting educational programs in the schools of the local area to create connections between younger generations and the churches.

This project is meant to understand the limitations of those churches that do not have the resources to promote religious heritage to tourists and other visitor and also but also best practices that may be applied elsewhere. This project endeavors to find ways that public access to and awareness of England's religious heritage can be improved. It is Art Alive in Churches' mission to provide that service.

The trustees of Art Alive in Churches are formed by Dr. Julian Litten, FSA as the Chairman, Graham Prior, Barbara Hacker, and Dr. Penny Granger. Dr. Julian Litten, FSA is also a member of the management group of AAiC, with three other members: Jennie Hawks as the Director, Matthew Champion as the Project Consultant, and John Brydon as Hon Treasurer.

Members of the public who are interested in promoting arts and historical heritage in churches can be part of AAiC membership programs. Different levels of membership provide members with various benefits. An Annual General Member Meeting takes place each year in April. All members are welcome to participate in this meeting. AAiC also uses social media as a way to communicate with its clients and members. People who are interested in arts and historical heritage can follow them on Facebook or Twitter to get more information about exhibitions and current events.