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Roger Williams University
School of Architecture, Art, and Historic Preservation

Creating a Religious Properties Database for The City of New Bedford:
An Analysis of Best Practices and Available Systems

A Capstone Project Presented to
the Graduate School of
Roger Williams University

In Partial Fulfillment of
The Requirements for the Degree of
Master of Historic Preservation

by
Elizabeth C. Cardarelli
May 2014

Signatures

Creating a Religious Properties Database for The City of New Bedford:
An Analysis of Best Practices and Available Systems

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Executive Summary

The city of New Bedford has sixty historic congregations with historic buildings. With the decline of congregations maintaining the buildings has become exceptionally difficult. Maintenance does not just imply the restoration of these buildings, it often refers to paying the heating and electric bills. Due to the extensive number of historic religious congregations in New Bedford, the City Department of Planning, the Waterfront Historic Area League, Inter-church Council of Greater New Bedford, and Partners for Sacred Places have all joined together to assist these congregations in maintaining their important presence within their communities. These institutions provide outreach to their surrounding communities as well as many other benefits. At a workshop held in April of 2013, with many of the congregations and representatives from each of the leading organizations, the idea of community partners was discussed. The idea of allowing nonprofit organizations and community members to rent empty spaces in a congregation's building was agreed to be beneficial. As the attendees discussed further the concept of a database was continually brought up. It was decided that a database listing each historic religious building and the available rental space they could provide to the public would simplify the search for community partners.

This policy analysis was written to provide the city of New Bedford, the Waterfront Historic Area League, Inter-church Council of Greater New Bedford, and the congregations with possible database systems to consider in creating their historic religious properties database. It also provides the best methodology to use when choosing a database. Deciding on who will be involved in the choosing process, determining a budget, and listing

the mandatory requirements the database should provide are all important to consider in the decision making process.

There are many possibilities when considering the creation of a property database. A custom database may be created, however, this option is the most expensive. There are many real estate and property management “off the shelf” systems that are used to inventory property. These systems are best used by real estate agents as they help keep an agent organized with their clients, listings and events. Many of these products do not have online search engines for the use of the public. Venue rental databases are the best option for New Bedford’s needs. The Spaces system provided by Fractured Atlas and the system being created by Partners for Sacred Spaces fit the known requirements set by New Bedford. Each system inventories the institution and their available rental space, though Spaces does not require a historic architectural features and property conditions inventory. Spaces is open to the public via an online search engine and provides the contact information to potential short term renters. The Partners for Sacred Spaces system will be open to the public, but will also serve to match long term renters with congregations.

SECTION 1: INTRODUCTION

Attendance in religious congregations across the nation has seen a vast amount of decline in the last thirty years. The decline in congregations makes it difficult for religious institutions to pay for the upkeep of their buildings as well as be central figures within their communities. Many congregations have been forced to close their doors and sell their buildings. New Bedford, Massachusetts, has not escaped this phenomenon. There are approximately sixty historic religious properties located within New Bedford, and each is dealing with a dwindling congregation and a diminishing role in their surrounding community.

In 2009, the Trinity United Methodist Church, located on County Street in New Bedford, was put up for sale. The congregation of some twenty people could no longer afford to keep their 1858 building running and now rents a space in which they hold their Sunday services.¹ The same issues that led to the close of Trinity United Methodist Church plague other New Bedford congregations, and the community, city, Inter-Church Council of Greater New Bedford, and the Waterfront Historic Area League (WHALE) have become involved with the issue.

In April 2013, the city of New Bedford, WHALE, and the Inter-Church Council of Greater New Bedford held a workshop for “caretakers of older churches and synagogues.” The workshop was titled, “Preserving Religious Properties.” Robert Jager, the executive director of Partners for Sacred Places, was the keynote speaker. After his presentation on the “Halo Effect” a conversation was held between the congregations. It was decided that a

¹ Sherman, Natalie. “For church properties, finding a path to the future comes at a premium.” The Standard-Times. 3 February 2013.

database should be formed listing New Bedford's sacred properties and their available rental space. This database would be made available to community partners and businesses looking for space to rent. This database would be a stepping stone in bringing parishes back into playing central roles in the New Bedford community. The database should "identify the amount and type of space that may be available to lend, rent, or share with other congregations and non profit or community organizations."² It is hoped that the application of a database will serve "as part of a strategic plan for organizations to use for marketing and implementation of space sharing."³ The City of New Bedford and The Waterfront Historic Area League (WHALE) want the database to also serve as an inventory of architectural significance and property conditions for these historic sacred places.

The purpose of this policy analysis is to recommend the best possible solution to New Bedford's need for a religious property database. Within this report the best practices for databases dealing with property management will be analyzed for consideration by New Bedford's Office of Planning, as well as insight into how best to manage and maintain a property database.

² Louro, Anne. "Call for Projects Spring 2013: Application for CPC Project Assistance." CPC: Community Partnerships Center at Roger Williams University. page 2.

³ Anne Louro. page 2.

SECTION 2: LITERATURE REVIEW

2.1 Introduction

A database, as defined by [businessdictionary.com](http://www.businessdictionary.com), is a

systematically organized or structured repository of indexed information... that allows easy retrieval, updating, analysis, and output of data. Stored usually in a computer, this data could be in the form of graphics, reports, scripts, tables, text, etc., representing almost every kind of information.⁴

In an *Introduction to Database Systems* a database is defined as “a collection of related data from which users can efficiently retrieve the desired information. A database can be anything from a simple collection of roll numbers, names, addressees, and phone numbers... to a complex collection of sounds, images, and even video or film clippings.”⁵

Databases were invented to replace book and paper files of business information and to assist in extracting needed information much faster. Besides storage and retrieval, databases have other operations; they are able to add, update, and delete data.⁶ This is all done with the Database Management System (DBMS). A DBMS is an “integrated set of programs used to create and maintain a database.”⁷ The main objective of the DBMS is to “provide a convenient and effective method of defining, storing, retrieving, and manipulating the data contained in the database.”⁸ The DBMS also secures the database from unauthorized users and provides techniques for data sharing amongst multiple users.

Using a database system has many advantages, which are detailed in *Introduction to*

⁴ “Database definition.” <http://www.businessdictionary.com/definition/database.html>.

⁵ *Introduction to Database Systems*. ITL Education Solutions Limited. http://books.google.com/books?id=y7P9sa2MeGIC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q=vertical%20market%20&f=false. pages 1 and 2.

⁶ *Introduction to Database Systems*. page 2.

⁷ *Introduction to Database Systems*. page 2.

⁸ *Introduction of Database Systems*. page 2.

Database Systems. Such advantages include centralized data management, controlled data redundancy, and data sharing. For a full list of database system advantages and their definitions look to Appendix A.

Information in a database is held in files, and a database may contain more than one file. Examples of files held by a database used to assist a business are personnel, department, and payroll files.⁹ Files are then broken down into records, which apply in the case of a business to an individual person. Therefore a record contains the person's name, age, address, social security number, and anything else deemed necessary for their record. Records are further broken down into fields. The fields are the columns that separate the different pieces of information about a person and "are set to hold specific types of data."¹⁰ Fields may be named "first name," "last name," "social security number," "address," et cetera.

There are three generations of database systems, they are: 1. The hierarchal and network data model, 2. The relational data model, and 3. The object-oriented and object relational data model. The second generation, relational data model, is the most commonly used database model, according to Ralph F. Grove in his book, *Web Based Application Development*. Mr. Grove states that the relational data model is the most commonly used "because of its simplicity, standardization of use, and available software."¹¹ RDBMS (Relational Database Management Systems) "provide a system for storing data as well as an

⁹ Glinos, Demetrios. "Chapter 8: Database Fundamentals." (presentation based on "Chapter 8: Database Fundamentals: Course Technology Cengage Learning Instructor Resources for Succeeding with Technology." 4th Ed.) <http://www.cs.ucf.edu/~glinos/Resources/cgs2100-L8-DGG.pdf>. page, 8.

¹⁰ Demetrios Glinos, presentation page, 7.

¹¹ Grove, Ralph F. *Web Based Application Development*. Chapter 8: Databases. Jones and Bartlett Publishing. Sudbury, MA: 2010. <http://books.google.com/books?id=FBIsSbHANxAC&pg=PA145&dq=web+based+databases&hl=en&sa=X&ei=1eg-U4KDJ8rXyAHUyoCYDQ&ved=0CF8Q6AEwBTgK#v=onepage&q=web%20based%20databases&f=false>. page 145.

interface for accessing the data from various standard programming languages.”¹² The term relational refers to the “concept of a relation in mathematics, which is the basis for relational database theory.”¹³

Databases relational, hierarchal, or object-oriented have become integral in the operation of most businesses. Because of their importance there are many companies that provide database systems. There are two varieties of database options for customers seeking a DBMS: general purpose database systems and special purpose databases systems. Special purpose database systems are also known as vertical market or niche database systems. General purpose databases are available for use by anyone and for any use. The fields can be manipulated to fit the needs of the user. General purpose databases that are available via the Internet include; Vertabelo, FileMaker, and Intuit QuickBase. Special purpose database systems are created “for specific purposes or special industries.”¹⁴ In essence a special purpose database is designed expressly to fit the needs of a certain target market, such as real estate agents.

There are many types of property or real estate databases. There are those that specialize in the needs of a property sales agent; others that help landlords manage their property, renters, and maintenance needs; and those that list properties and their taxes for a municipal or state assessor’s office.

¹² Grove, page 146.

¹³ Grove, page 146.

¹⁴ Stair, Ralph and George Reynolds. *Principles of Information Systems*. Cengage Learning, Course Technology. Boston, MA: 2010. <http://books.google.com/books?id=TIQCvdWQkfEC&pg=PA201&lpg=PA201&dq=special+purpose+database+systems&source=bl&ots=t5R14-VnZx&sig=PqPaNgCdXEeUzvBtI4qqV7o5nmo&hl=en&sa=X&ei=7EZVU9PUBKa6yQGC44GgAQ&ved=0CEIQ6AEwAQ#v=onepage&q=special%20purpose%20database%20systems&f=false>. page 201.

A database with the purpose of assisting the management of real estate indexes the properties listed to be sold by an agent. With that property the price, square footage, and location are listed. A real estate database also keeps the agent's files and clients in order, so the agent can easily view his or her client's needs and wants in his or her search for property. The city of New Bedford is in need of a real estate database because it wants to list its historic religious properties and the available rental space for the greater community to view. In this way community members who need a space to run meetings and programs are able to easily view the availability of a space and contact the necessary people. The location of an available space is particularly important in this instance, as community members tend to want to keep their programs close to their homes.

Equally, a database meant for use by a property owner, such as a landlord, will assist a landlord in keeping track of his or her many duties, duties such as reminders for rent payment and late payment notices, and the maintenance of a building. The database will also file lease agreements, so that they can be easily procured if needed. Again, depending on the needs of a property owner a database can be assembled by needed use.

There are many real estate and property management databases available to realtors or landlords willing to purchase a plan to help them organize their properties and clients. It all depends on how much a real estate agent or landlord is willing to spend and what they need out of a database. Many database companies also offer upgrades, which allow a database user the ability to expand or change their database as their needs grow. Companies who produce real estate/ property management databases are:

1. BostonLogic- Creates website databases for real estate agents. The company is particularly concerned with the users experience, and attempts to make a potential

buyer's experience as easy as possible while searching through an agent's website.

The systems offered also allow an agent to track clients, schedule appointments and follow-ups, prioritized work with tasks, and plan and track events such as property showings.¹⁵

2. RealtyJuggler™- This system is for a real estate agent's use only. It allows an agent to update and track clients, track commission and expenses, upload scanned contracts and other documentation, and reminds the real estate agent when they should reach out to past clients.¹⁶

3. Buildium Property Managed- The system was designed to assist landowners in maintaining their rental properties, and track their renters. The system allows a landlord to keep track of work orders, send rent payment reminders, and upload contracts and documents.¹⁷

Property databases are also used by the government assessor offices at the state and municipal levels. These databases manage parcels and list their current owners, parcel ID, zoning, location, last sale date, the sale price, grantor, tax rates, and value. Often sketches or pictures are added for further reference. These parcel databases are able to be viewed by the public and updated yearly. New Bedford has an online parcel lookup via the city's website and assessors office page. To look up a parcel, a visitor to the site may use one of several fields. These include a parcel ID, owner name, land use commission (LUC), or street name. Other city and states with user lookup sites are;

¹⁵ "Sequoia System Real Estate Website Platform." BostonLogic. <http://www.bostonlogic.com/sequoia-system-real-estate-solutions>.

¹⁶ "Features: Real Estate Software" RealtyJuggler. <https://www.realtyjuggler.com>.

¹⁷ "Features" Buildium- Property Managed. <http://www.buildium.com/property-management-features/>

1. State of Tennessee: Real Estate Assessment Data
2. Maryland: Department of Assessments and Taxation Real Property Data Search
3. City of Cambridge, Massachusetts: Property Database

Databases used purely for the compilation of religious properties are rather rare in the United States. The Preservation Alliance of Philadelphia put together an “Inventory of Historic Religious Properties in Philadelphia: An Assessment of Significant and At Risk Houses of Worship.” The purpose of this inventory was to “gather and develop data on the significance and status of the city’s religious properties.”¹⁸ The hope was that by documenting Philadelphia’s historic religious properties with an emphasis on historical and architectural information, real estate information, and demolition permits, the project would strengthen the data of concerned advocacy groups in addressing the issue of declining religious properties. They also hoped to identify those historic properties that were not listed on the historic register and flag those properties in risk of deterioration or demolition.¹⁹ However, this project is a survey, and the information is published as a piece of literature, not an online database.

The United Kingdom has produced archives that are the closest to a religious property database. The University College London has produced the English Monastic Archives, which is designed to be a research tool. The site, according to the background information, “enables scholars to conduct many different sorts of searches and should inaugurate a renaissance of research on English monasteries and the many other related

¹⁸ Lester, Molly. “Inventory of Historic Religious Properties in Philadelphia: An Assessment of Significant and At-Risk Houses of Worship.” A Report Prepared for: The Preservation Alliance of Greater Philadelphia. University of Pennsylvania, School of Design: 2011. page 2.

¹⁹ Molly Lester. page 2.

topics in social, economic, cultural and religious history.”²⁰ The English Monastic Archives is separated into three categories religious houses, properties, and archives. From the properties database a researcher may search the database from several different fields, see Figure 1. Those fields are:

Figure 1: The English Monastic Archives Properties Database from University College London’s website.²¹

1. House-specific properties (There is a drop down bar, from which a researcher may choose a specific house.)

²⁰ “Project Information: Background.” http://www.ucl.ac.uk/history/research_projects/monasticarchives/info.

²¹ “Properties Database.” UCL English Monastic Archives. <http://www.ucl.ac.uk/history2/englishmonasticarchives/property/index.php>.

2. County or property type (You must choose only one.)
3. A given parish (You must give parish name.)
4. Specific property (You must give property name.)
5. All the properties of a specific type with in a given county (You must give county and property type.)
6. Properties of a given house by type (You must give house name and property type.)²²

The Church of England also provides a database of parishes. They currently list “16,500 churches and 53,000 services.”²³ The site is meant to help people find parishes to attend for services and other community events. There are three different search fields to choose from:

1. Quick Search, see Figure 2, which asks the searcher to “enter a place for a list of suggestions or a post code to use the parish finder.”²⁴



Figure 2: The Quick Search link for the Church of England’s Parish Finder website.²⁵

²² “Properties Database.” [UCL English Monastic Archives](http://www.ucl.ac.uk/history2/englishmonasticarchives/properties/index.php). University College London. <http://www.ucl.ac.uk/history2/englishmonasticarchives/properties/index.php>.

²³ “Parish Finder.” [The Church of England](http://www.achurchnearyou.com). <http://www.achurchnearyou.com>.

²⁴ “Parish Finder.”

²⁵ “Parish Finder.”

2. Find Churches, see Figures 3 and 4, which asks the searcher to provide place, county, country, or diocese. It also provides other criteria to pare down the search. These criteria include: visitor parking, live music, and autism aware/accessible, to name a few.

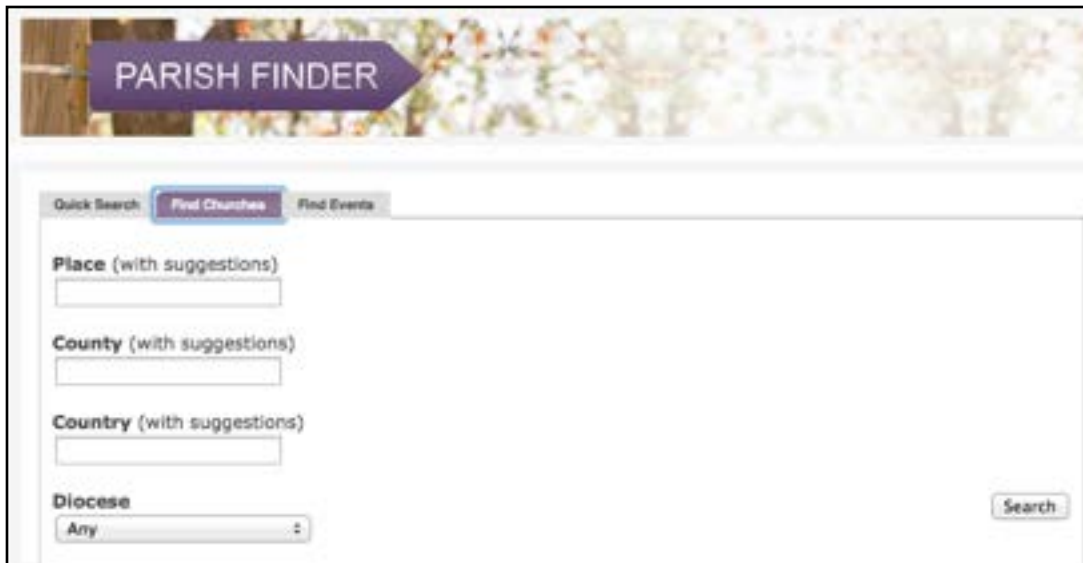
The image shows a screenshot of the 'PARISH FINDER' website. At the top, there is a purple arrow-shaped banner with the text 'PARISH FINDER'. Below this, there is a 'Quick Search' section with two tabs: 'Find Churches' (which is selected and highlighted in purple) and 'Find Events'. The main search area contains four input fields: 'Place (with suggestions)', 'County (with suggestions)', 'Country (with suggestions)', and 'Diocese'. The 'Diocese' field is a dropdown menu currently showing 'Any'. A 'Search' button is located at the bottom right of the search area.

Figure 3: The Find Churches link on the Church of England's Parish Finder website.²⁶

²⁶ "Parish Finder."

<input type="checkbox"/>  Visitor Parking	<input type="checkbox"/>  Accessible Parking	<input type="checkbox"/>
<input type="checkbox"/>  Toilet Facilities	<input type="checkbox"/>  Accessible Toilets	<input type="checkbox"/>
<input type="checkbox"/>  Accessible Public Phone	<input type="checkbox"/>  Assistance Dogs Welcome	<input type="checkbox"/>
<input type="checkbox"/>  Ramped Access	<input type="checkbox"/>  Interpretive Sign Language	<input type="checkbox"/>
<input type="checkbox"/>  Hearing Loop	<input type="checkbox"/>  Braille Hymn Books / Orders of Service	<input type="checkbox"/>
<input type="checkbox"/>  Large-Print Hymn Books / Orders of Service	<input type="checkbox"/>  Baby Changing Facilities	<input type="checkbox"/>
<input type="checkbox"/>  Autism Aware / Accessible		
<input type="checkbox"/>  Live Music	<input type="checkbox"/>  Youth Group	<input type="checkbox"/>
<input type="checkbox"/>  Bell Ringing	<input type="checkbox"/>  Choir	<input type="checkbox"/>
<input type="checkbox"/>  Floodlighting	<input type="checkbox"/>  Organ	<input type="checkbox"/>
<input type="checkbox"/>  Wall Paintings	<input type="checkbox"/>  Stained Glass	<input type="checkbox"/>
<input type="checkbox"/>  Guided Tours	<input type="checkbox"/>  Guidebooks	<input type="checkbox"/>
<input type="checkbox"/>  Cafe / Restaurant	<input type="checkbox"/>  Shop	<input type="checkbox"/>
<input type="checkbox"/>  Brass Rubbing	<input type="checkbox"/>  Hall for Hire	<input type="checkbox"/>
<input type="checkbox"/>  Back to Church Sunday	<input type="checkbox"/>  Sunday School	<input type="checkbox"/>
<input type="checkbox"/>  Book of Common Prayer Services	<input type="checkbox"/>  Fairtrade Parish	<input type="checkbox"/>

Figure 4: Extra Criteria for the Find Churches Link.²⁷

²⁷ "Parish Finder."

3. Find Events, see Figure 5, asks a searcher to provide the place, county, country, or diocese, and a keyword. It also provides criteria to pare down the search to the type of event for which a searcher is looking.

The image shows a screenshot of the 'Find Events' search form on the Church of England's Parish Finder website. The form is titled 'PARISH FINDER' and has three tabs: 'Quick Search', 'Find Churches', and 'Find Events'. The 'Find Events' tab is selected. The form includes the following fields and options:

- Place (with suggestions)**: A text input field.
- County (with suggestions)**: A text input field.
- Country (with suggestions)**: A text input field.
- Diocese**: A dropdown menu with 'Any' selected.
- Keyword e.g. Christingle**: A text input field.
- Event Type Filters**: A list of checkboxes with corresponding colored buttons:
 - FAMILY FRIENDLY
 - CRECHE
 - SUNDAY SCHOOL
 - SIGN LANGUAGE
 - BCP
 - COMMON WORSHIP
 - INCENSE
 - COFFEE
- Include all events**: A radio button that is selected.
- Include services / acts of worship only**: A radio button.
- Exclude services / acts of worship**: A radio button.

There are two 'Search' buttons: one on the right side of the form and one at the bottom right.

Figure 5: The Find Events link on the Church of England's Parish Finder website.²⁸

Neither of these sites is used for the rental or purchase of property, but they do provide well-organized archives of properties and their locations, along with what services they provide.

²⁸ "Parish Finder."

Another option is a venue rental program. These programs archive rental properties and keep a calendar of when the spaces are available for rental. They also keep track of the cleaning and maintenance of the spaces. Timeshares use systems like these to rent out vacation properties and make sure they are cleaned before the next guests arrive. Vacation RentPro and Fractured Atlas's Spaces Program are two examples of venue rental database programs.

Databases have information entered into them by an individual or group of individuals as data is acquired. This is done by filling out set fields, or by creating new fields as needed, depending on the database system being used. With advances in technology with the "cloud," data is able to be entered from more than one apparatus. Tablets, smartphones, laptops, and desktop computers are all able to be used to enter data into an online database. All that is required is a password into the online application. Most programs available make use of the "cloud" so that information can be updated frequently.

2.2 Actors

As in any community project there are several stakeholders involved in the formation of this religious property database. New Bedford's Office of Planning, the Waterfront Historic Area League (WHALE), the Inter-Church Council of Greater New Bedford, the individual historic religious congregations, the community and possible community partners, and Partners for Sacred Places are all actors in this project.

2.2.1 The City of New Bedford's Office of Planning

The City of New Bedford's Office of Planning website states that it is,

responsible for providing sound, unbiased planning practices, resulting in the implementation of short and long-term plans and policies for the City of New

Bedford. The Planning Office administers the local and state regulations regarding land use and land reuse, oversees the site plan review process for construction projects and reviews proposed signage for compliance with the city's sign ordinance. The Planning Department also provides staff, support to the Planning Board, Historical Commission, Zoning Board of Appeals, the City Council, and other city departments, boards and commissions as needed.²⁹

New Bedford takes a particular interest in its historical environment and thus the Planning Department has to provide staff and support to the Historical Commission. Anne Louro is the designated Preservation Planner for the City of New Bedford. It was her duty to work with WHALE and the Inter-Church Council of Greater New Bedford to put together the preservation workshop in 2013. As the preservation planner, Anne Louro, will continue to work in the database development project, as it was Mayor Jon Mitchell who jumped into action when the idea was presented at the workshop.

2.2.2 The Waterfront Historic Area League

The Waterfront Historic Area League was established in 1962 as a nonprofit organization dedicated to preserving New Bedford and the surrounding area's historic architectural heritage. Their mission is "to foster historic preservation and continued use of the city's architectural heritage, so to enhance community and economic vitality in New Bedford, MA."³⁰ They achieve this by advocating demolition as a last resort, nominating historic buildings for the National Register, creating a "10 Most Endangered List," promoting demolition delay by-laws, advocating for the restoration of buildings, and promoting the value of reuse.³¹ WHALE also educates the public on the importance of each item they advocate as well as provide services to help the community achieve their goals of

²⁹ "About Us." New Bedford Planning Department. <http://www.newbedford-ma.gov/Planning/planning.html>.

³⁰ "History." Waterfront Historic Area League. <http://www.waterfrontleague.org/history/>.

³¹ "Advocacy." Waterfront Historic Area League. <http://www.waterfrontleague.org/advocacy/>.

preservation. WHALE assists building owners, or those concerned with the preservation of a building, in nominating buildings for the National Register, or applying for historic tax credits, which can be daunting to layperson. In their support for the reuse and preservation of historic buildings, the threat to religious buildings did not go unnoticed by the organization. They were involved in the planning of last April's workshop and now offer a Sacred Places: New Partners/New Dollars Program, which is being funded through grants from The Island Foundation, the National Trust for Historic Preservation, and the Community Foundation.³²

2.2.3 The Inter-Church Council of Greater New Bedford

In 1939, the Inter-Church Council of Greater New Bedford was formed. For the last seventy-five years they have been “acting as a channel for community outreach in promoting ecumenical cooperation, social, economic and racial justice, service to those in need and addressing public issues.”³³ Today there are forty-seven congregations partaking in the ministry of the Inter-Church Council. The Inter-Church Council has a less preservation-centric view of the religious properties rental database. The council sees this opportunity as a way to re-bridge the gap between the surrounding community and the congregations. It gives back the original purpose of the congregations, which is community outreach. In an article in the *SouthCoast Times* by Auditi Guha, Reverend David Lima, the executive minister of the council, was quoted saying, “Churches see it as their mission to

³² “Sacred Places; New Partners/New Dollars Program.” *Waterfront Historic Area League*. 19 November 2013. <http://www.waterfrontleague.org/2013/11/sacred-places-new-partnersnew-dollars-program/>

³³ “The Inter-Church Council of Greater New Bedford Brochure.” About Us: Inter-Church Council of Greater New Bedford Website. http://www.iccgnb.org/images/ICC_Brochure-Cross_2010_-_PDF.pdf page 2.

help the community and the donations they receive help keep the churches running.”³⁴

Reverend David Lima agreed to a phone interview in which he stated that the council has been working with the City of New Bedford and WHALE the last two years to spearhead efforts in the preservation of the historic religious congregations.³⁵

2.2.4 The Congregations

Most important, the individual congregations are key stakeholders in the creation of this program. They have to be willing to share their space with the surrounding community. Of the sixty sacred, historic properties in New Bedford, around thirty are interested in being involved with the religious properties rental database. Hopefully, once the database is up and running, and the remaining thirty congregations see the benefit, they will be willing to share their space with community partners. The eligible congregations are:

1. Christian Revival Temple
2. St. Anthony’s Church
3. First Congregational Church of Lunds Corner
4. People’s Christian Church of New Bedford
5. Our Lady of Fatima Roman Catholic Church
6. Second Spanish Church of God
7. St. Kilian’s Roman Catholic Church
8. Calvary Assembly of God Portuguese Church

³⁴ Guha, Auditi. “SouthCoast churches open their doors to community groups to stay afloat.” *SouthCoast Times*, published: 5 January 2014 12:00AM. <http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/20140105/NEWS/401050324/0/SEARCH>.

³⁵ Reverend David Lima (executive minister of The Inter-Church Council of Greater New Bedford) in a phone call with the author, 3 March 2014.

9. St. Andrew's Episcopal Church of New Bedford
10. Universal Church
11. Mt. Carmel Roman Catholic Church of Fall River
12. Re-Organized Church of Latter Day Saints
13. South Baptist Church of New Bedford
14. Tifereth Israel Congregation
15. St. Martin's Parish
16. Sons of God Apostolic Baptist Church
17. St. John The Baptist Parish
18. St. James Roman Catholic Church of Fall River
19. St. Martin's Episcopal Church
20. South Primitive Methodist Church
21. Ahavath Achim Synagogue
22. Trinity Methodist Church
23. Haven Baptist Church
24. Bethel AME Church
25. St. Lawrence Roman Catholic Church of Fall River
26. North Baptist Church
27. Southern Northeast Conference Association of Seventh Day Adventists
28. Union Baptist Church
29. St. Hedwig Roman Catholic Church of Fall River
30. St. Joseph Roman Catholic Church of Fall River
31. Immaculate Conception Roman Catholic Church of Fall River

32. First Congregational Society (Universal Unitarian)
33. First Church of the Nazarene
34. Redeeming Family Church
35. Church of God of Prophecy
36. New Life Tabernacle United Pentecostal Church
37. St. Paul Methodist Church of New Bedford
38. Worship Center
39. St. Francis Catholic Church of Fall River
40. Holy Family Holy Name Roman Catholic Church of Fall River
41. Our Lady of Perpetual Help Roman Catholic Church of Fall River
42. Academy of the Immaculate
43. Our Lady of Purgatory
44. Church of Jesus Christ of All Nations
45. Portuguese Church of The Nazarene
46. Pilgrim United Church of Christ
47. Northeast Conference Association of Seventh Day Adventists
48. Spanish Church of God
49. Our Lady of the Assumption Roman Catholic Church of Fall River
50. Grace Episcopal Church of New Bedford
51. Asamblea De Iglesias Christianas
52. First Portuguese Baptist Church
53. Primitive Methodist Church
54. Immanuel Baptist Church

- 55. First Baptist Church of New Bedford
- 56. Dartmouth Baptist Church
- 57. New Bedford Friends Meeting House
- 58. Our Lady's Chapel
- 59. The Salvation Army Corps Community Center
- 60. Seaman's Bethel

2.2.5 Community Partners

The community and community partners are equally important to this program. By partaking in the rental of space they are providing monetary assistance to these congregations, allowing them to remain open and provide community programs.

2.2.6 Partners for Sacred Places

Partners for Sacred Places is also an important stakeholder in this program. It was the ideas presented by Partners for Sacred Places, which brought about the idea for a rental database. Partners for Sacred Places is a nonprofit organization, based out of Philadelphia, that specializes in the preservation of sacred places and the reuse of that space. The organization preaches community partners, because the program allows the congregations to keep their space for its intended purpose and returns the congregation to a more prominent role in community life. Partners for Sacred Places calls this "The Economic Halo Effect."³⁶ It is their belief that a congregation has an economic impact on its surrounding area. An active congregation brings up the property value of its immediate area, and halos out to a larger portion of its city. In a collaborative study done by Partners for Sacred Places and the University of Pennsylvania School of Social Policy and Practice, completed in 2010,

³⁶ "Determining the Halo Effect of Historic Congregations." Partners for Sacred Places. <http://www.sacredplaces.org/wp-content/uploads/2011/12/Halo-Effect-White-Paper-1-9-13.pdf>. page 1.

data collected was concerning the economic impact of houses of worship. They discovered “that twelve Philadelphia congregations contributed fifty-two million dollars in annual economic value to the city of Philadelphia, for an average of \$4.3 million per congregation.”³⁷ It was determined that there are three comprehensive areas in which a congregation is an economic benefit to their surrounding community: “1) through direct spending; 2) the value of day care and K-12 educational programs; and 3) a range of catalyzing or leveraging economic values, such as Open Space, Magnet Effect, Individual Impact, Community Development and Invisible Safety Net.”³⁸ Open Space refers the premium put on urban green spaces, which congregations often provide to the community via playgrounds, or well-landscaped space. The Magnet Effect alludes to how “urban congregations attract resources and volunteer labor to the city.”³⁹ These volunteer laborers, who work within the surrounding neighborhood of the congregation, spend their money at local businesses and subsequently help the local economy. Individual Impact is delivered by the congregation to the community by providing “one-on-one services.”⁴⁰ These services include clergy mediation for marriage, suicide, and other personal problems and programs that prevent addiction, such as Alcoholics Anonymous. Community Development means that “congregations with older buildings often provide office space to start-up organizations and businesses, many of which go on to generate growing value for the community.”⁴¹ By renting space to these start-up organizations not only is the

³⁷ “Determining the Halo Effect of Historic Congregations.” page 1.

³⁸ “Determining the Halo Effect of Historic Congregations.” page 1.

³⁹ “Determining the Halo Effect of Historic Congregations.” page 2.

⁴⁰ “Determining the Halo Effect of Historic Congregations.” page 2.

⁴¹ “Determining the Halo Effect of Historic Congregations.” page 2.

congregation providing the community with new economic value, they are also raising money to care for their space, which, as seen above, is incredibly valuable to the community. This study has caused many congregations to consider renting their available space, and inspired this project.

2.2.6.1 Working together

Over the last two years New Bedford's Planning Department, WHALE, and the Inter-Church Council of Greater New Bedford have been working together to solve the issue of preserving the city's sixty historic religious sites. Their preservation plan is not only to keep the buildings from deterioration and demolition, but also from being sold. They would like the religious buildings to maintain their original purpose of housing congregations that reach out to the greater community. To do this they partnered with Partners for Sacred Places to conduct a workshop on how to preserve New Bedford's historic sacred places. This workshop was held in April of 2013, at Grace Episcopal Church, one of the listed historic religious buildings. At this seminar the importance of congregations to their surrounding community was discussed, as well as best practices for raising funds to continue the maintenance of these buildings, not only for restoration, but also for paying the bills. One suggested practice was the use of community partners. Community partners are nonprofit or for profit organizations located within the community that need space to rent. Many congregations already rent space to nonprofit organizations or to community members who need space to run an event. To make the availability of space more accessible to the greater community the idea of a database listing the existing rental spaces was discussed and agreed upon. The job of compiling this information was given to the New Bedford Office of Planning.

2.3 Resources

There are many “off the shelf” databases for the purpose of assisting in real estate. However, they are meant to assist realtors in organizing their clients and listings. Many of these databases do not have the capability for potential clients to search through a realtor’s listings. RealtyJuggler™ is one such program. The system provided by RealtyJuggler allows a realtor and his or her team to update and organize their listings and clients from the internet-based “cloud” system. The program also reminds realtors of when they should send out flyers or contact a past client again.⁴² That way the realtor is always in contact with their clients. Programs such as Vertabelo, Intuit QuickBase, and FileMaker are database systems that allow a person to create an internet-based database according to their needs. Unfortunately these systems do not allow community searches of the database via a community search field. In an interview with an Intuit QuickBase representative, he stated that for there to be a search field a third party contractor would have to be hired.⁴³

2.3.1 BostonLogic and other real estate/property managing databases

BostonLogic provides many different special purpose database system packages for real estate agent, and property owner, looking for such a device. They provide an online search page for clients. The Sequoia System is utilized to help real estate agents “generate buyer, seller, and renter leads and clients.”⁴⁴ Sequoia helps make a realtor’s site rate higher on search engines, such as Google. It also connects the realtor’s website to Google maps

⁴² “Real Estate Software: Features.” RealtyJuggler. <https://www.realtyjuggler.com>.

⁴³ John Hicks (Intuit QuickBase Representative) in a phone call with the author, 17 March 2014.

⁴⁴ “Sequoia System Real Estate Website Platform.” BostonLogic. <http://www.bostonlogic.com/sequoia-system-real-estate-solutions>

and education.com, which educates the searcher on the community in which they are looking for property.⁴⁵

LogicRentals is the program supplied by BostonLogic for rental properties. This is once again a tool for realtors. Their website states, "Through a secure web-based login, realtors can manage their rental listings, landlords, parking spaces, unit keys, and more. Search your rental listings by price, location, number of bedrooms, among the list of variables."⁴⁶ The rental program also offers these features: easy-to-use rental listings search, easy update interface, storage of landlord and building owner information, and the ability to create a Craig's List advertisement.⁴⁷ The price of the programs varies depending on need. The Personalized Design Theme, which is the cheapest option is for "brokerages that need to get a new website launched as quickly as possible and at minimum expense."⁴⁸ By using the stock imagery, fonts, and colors provided by BostonLogic, a brokerage is able to get their website up and running within a day. Then as they grow they can raise the money for a broader package. For a full list of packages and starting costs for BostonLogic's products see Table 1. BostonLogic's programs are best used for longterm rentals and vacation rentals, but is not helpful for event or short term renting. If New Bedford and the religious institutions were looking for longterm renters, and the management of those spaces, BostonLogic's programs may work.

⁴⁵ "Sequoia System Real Estate Website Platform." BostonLogic. <http://www.bostonlogic.com/sequoia-system-real-estate-solutions>. video.

⁴⁶ "LogicRentals." BostonLogic. <http://www.bostonlogic.com/rental-office-software>.

⁴⁷ "LogicRentals." <http://www.bostonlogic.com/rental-office-software>.

⁴⁸ "Personalized Design Themes." BostonLogic. <http://www.bostonlogic.com/personalized-real-estate-website-design>.

Package	Starting Cost
Premium Real Estate Design	\$10,500
Mimic Design Theme	\$7,500
Modified Design Theme	\$3,500
Personalized Design Theme	\$600

Table 1: BostonLogic's available packages and starting costs.⁴⁹

Buildium- Property Managed is a database which specializes in helping landlords manage their rental properties. Within the program, landlords are able to schedule maintenance repairs, billing dates and billing reminders, and file contracts. The system provided by Buildium provides renter portals for each renter. This allows a renter to track his or her payments, submit and track maintenance requests, and allows the landlord to share important documents such as lease agreements.⁵⁰ This type of property management database and others similar to it do not provide what New Bedford is looking for. There would be no online search base for potential renters. This database is for the sole purpose of organizing a landlord's properties and his or her duties.

2.3.2 Venue rental databases

There are options available for space rental that do not fall under the real estate database option. Fractured Atlas is an organization who's mission is to "empower artists, arts organizations, and other cultural sector stakeholders by eliminating practical barriers to artistic expression, so as to foster a more agile and resilient cultural ecosystem."⁵¹ What

⁴⁹ "Real Estate Website Design." BostonLogic. <http://www.bostonlogic.com/real-estate-website-design>.

⁵⁰ "Tenant and rental owner portals." Buildium-Property Managed. <http://www.buildium.com/features/tenant-portals-rental-owner-logins/>.

⁵¹ "About Us: Our Mission." Fractured Atlas. <http://www.fracturedatlas.org/site/about/>.

this means is that Fractured Atlas is interested in helping artists (visual, performing, literary, design, media, et cetera) which are individuals or groups making an impact on their community. This includes assisting the artists in finding spaces to perform or show their work. Fractured Atlas created their Spaces Program to help “artists and venues find each other.”⁵²

The space directories are set up by cities, towns, or states with the help of the Fractured Atlas Spaces team. Currently Atlanta, Austin, The Bay Area of San Francisco, Boston, Chicago, Los Angeles, Michigan, Minnesota, New York City, Philadelphia, Toronto, and Washington, D.C., have directories. When searching for a space there are several options from which a potential client to choose. The directory asks that the client select an option for a use of space under the “I Need Space for...” section of the site. The choices include: any, performance, rehearsal, special event, class, audition, photo shoot, video/film shoot, screening, reading, meeting, studio art, exhibition, audio recording, and live/work. A visitor to the site may also search by artistic discipline: dance, music, theatre, film, or visual art. The option to search by rate, location, and size is also available.

Once the search is narrowed a list of rental options is made available. When a potential client chooses to view a space they are taken to another page where the space’s approved usages are listed, as well as the booking policies: hours of operation, rental policy, cancellation policy, et cetera; features: space dimensions, space features, technology, flooring, seating capacity, and more; equipment; and other: parking, accessibility, audience services, and miscellaneous. Rates are also made available, should the renter wish the rates to be made available. Some renters charge according to event, and thus do not list a rental

⁵² “Find Space Now.” Technology Programs. Fractured Atlas. <http://www.fracturedatlas.org/site/technology/spaces>.

price. With the upgraded spaces system the renter is able to show an availability calendar. This does not show who is renting, just that a time and day is not available for rental. A map is also available for potential clients to view to see if the rental space is in their desired area. Should it be desired by the renter, they have the option of having a third party booking engine. The booking engine is able to “manage requests for rental, secure online payment, accept credit cards at the door, and send auto reminders to renters.”⁵³

The cost of using Fractured Atlas’s Spaces Program is anywhere between \$3,500 and \$200,000.⁵⁴ In a phone conversation with Lisa Niedermeyer, the program director, she stated that the cost depends on the needs of the community. She also stated that they helped create a page specifically for Jewish rental properties within the Atlanta directory. This cost the Jewish Federation of Greater Atlanta around \$5,000. When discussing New Bedford’s plan Ms. Niedermeyer said that they could easily set up a New Bedford directory with a low thousands’ cost. It seems that the Boston directory will become a Massachusetts’ directory in the next year or so, thus New Bedford could have a page branching from the Massachusetts directory. The cost would be in the branding of the page. However, this page would not be only for the listing of religious rental spaces, it would be open to all venues, as it costs nothing to the renter to list their information on the directory.

⁵³ “Spaces 2.0.” Technology Programs. Fractured Atlas. <http://www.fracturedatlas.org/site/technology/spaces>.

⁵⁴ Lisa Niedermeyer (SpaceFinder Director) in a phone call with the author, 26 March 2014.

2.3.3 Religious properties special purpose database system

Recently Partners for Sacred Places has entered the gamut in providing a database to inventory historic religious spaces. They received funding from the John D. and Catherine T. MacArthur Foundation and are working on developing “an interactive website to catalog houses of worship.”⁵⁵ They are creating this database with the help of Fractured Atlas. In a phone interview with Amy Schachman, who is leading this project for Partners for Sacred Places, she stated that the initial database should be up and running by May of this year. The goal is to inventory the space and conditions, which would include “square footage, ceiling height, floor type, heating/cooling, internet/cell service, building conditions, et cetera.”⁵⁶ They would also list the equipment available, access and parking, the mission and work style, institutional capacity, community engagement, heritage, photos, and floor plans.⁵⁷ Each institution would also be able to create custom fields on their profile page, “to allow clients and congregations to track additional features, qualities or assets.”⁵⁸ Partners for Sacred Places plans to then use these profiles for “research, advocacy, property management and as a critical tool for the identification of space sharing partners.”⁵⁹ Amy Schachman called it the “eHarmony®” for sacred places and community partners.⁶⁰ In this program “organizations and artists interested in working with sacred places would

⁵⁵ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.” Partners for Sacred Places: At the intersection of heritage, faith, and community.

⁵⁶ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

⁵⁷ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

⁵⁸ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

⁵⁹ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

⁶⁰ Amy Schachman (Director, Research and Policy Associate Director, Chicago Office Partners for Sacred Places) in a phone call with the author, 10 April 2014.

complete profiles outlining their space needs, mission, work style, organizational capacity and interests in working with houses of worship.”⁶¹ Partners for Sacred Places hopes that through this system matches will not only be based on space needs but also in “mission, vision, and values.”⁶² To read more about Partners for Sacred Spaces religious properties database system turn to Appendix B.

New Bedford also has the option of hiring a database and website design company to create a personalized database and search engine. However, the cost would be hefty, and New Bedford would need to decide exactly what they want to be visible to the public and who should be in charge of updating the database.

2.4 Institutions

When creating a database, whether through an “off the shelf” system or specialized creation, there are many individuals involved in the creation processes. In New Bedford’s case, because the city is dealing with property belonging to independent entities, each institution is a stakeholder and must be involved in the creation process. These separate institutions are going to have to voice their opinions concerning what information is released for public viewing.

When New Bedford decides who will be heading the collection of information they must also be involved. In this case the City of New Bedford is leading the way in collecting the rental space information. Information such as square feet, capacity, photographs of the space, policies set by the institutions, and rental fees, are all being collected. New Bedford’s

⁶¹ “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

⁶² “Creative Sacred Placemaking: Space Sharing with Houses of Worship.”

involvement makes them a key stakeholder in the planning and possible maintenance of this new database.

The database company, either supplying an “off the shelf package” or creating a custom design, will also be involved in the design of the database. Each database is unique, even those that are “off the shelf.” The information held in the database is specific to each organization running such a database and thus field names must be changed to suit needs. The database company will also train those in charge of maintaining the database, assist in the maintenance, and help upgrade the database when that time comes. The company chosen will also offer customer service and usually 24/7 assistance. Customer service, assistance, and training are important benefits, as staff will change and training will have to reoccur.

2.5 Consensus

Since there are so many stakeholders involved in the planning of this particular database, consensus between the parties must be reached. The stakeholders must meet to discuss what information is necessary for the database and, of that information, what will be shown to the public. They must also decide who will maintain and update the database as the information changes. Will the City of New Bedford be charged with maintenance? Maybe each individual property will be able to manage their own data. Or, will they decide to hire a third party to take care of the database and data page updates? The issue of cost must also be discussed. How much money are the stakeholders willing to spend for this database to be created? Once those issues are sorted out it is possible to consider the companies and programs for the database. Contacting each company and giving them a

clear idea of what is wanted in the database will help those companies give the stakeholders as precise a quote as possible.

2.6 Best practices

Choosing a database is an important decision for any group. Implementing a database system changes the way the group operates. Databases are meant to make operations easier by recalling needed information speedily. With that in mind there are several factors that are necessary to consider when choosing a database system. Those include: deciding who is involved in the decision process, deciding what information is necessary, developing a criteria for analysis, deciding on a budget, and deciding who will update the system, how the database will be implemented, and the expansion of the database. Using a case study done on the State of Iowa's process for implementing a data warehouse system, by Franklin Maxwell Harper, and a methodology for choosing donor databases devised by Robert L. Weiner, a technology consultant, the best practices for implementing a database may be deciphered.

Franklin Maxwell Harper's article "Data Warehousing and the Organization of Governmental Databases," published in *Digital Government Principles and Best Practices*, studies the policies used by the state of Iowa in creating a data warehouse to serve the databases used by the Criminal and Juvenile Justice Planning Department, Department of Human Services, and the Department of Revenue and Finance.⁶³ A data warehouse, according to Harper, "is a technology architecture designed to organize disparate data

⁶³ Harper, Franklin Maxwell. "Data Warehousing and the Organization of Governmental Databases." Digital Government Principles and Best Practices. Ed. Alexei Pavlichev and G. David Garson. Idea Group Publishing. Hershey, PA: 2004. page 244.

sources into a single repository of information.”⁶⁴ In essence, a data warehouse is a database for databases, and thus choosing to implement a data warehouse is much like choosing a database system, only much more expensive. Robert L. Weiner’s methodology for choosing a donor database follows a similar pattern to that implemented by the State of Iowa. Weiner’s firm, Robert L. Weiner Consulting: Strategic Technology Advisory to NonProfits and Educational Institutions, specializes in assisting nonprofits and educational institutions in donor databases. Even though New Bedford isn’t looking for a donor database the firm’s resource page provides insight into choosing a database to fit a nonprofit’s needs. Mr. Weiner provides a list of questions and strategy ideas which create a methodology that may be used by any institution to decide on a database system.

2.6.1 What is needed in a database?

Both Harper and Weiner agree that the first step is assessing what is needed from the database system. Databases can be very expensive, so the purchase of a system must be justified. Weiner gives a list of questions to be asked in the assessment of needs:

1. How many people will use the system?
2. How many records will be held within the system?
3. Who will provide technical support?
4. What are you tracking?
5. What are your security needs?
6. What do you need the database to tell you?⁶⁵

2.6.1.1 Who will use the system and how much will it hold?

When considering how many people will be using the system a government entity, according to Harper, must consider how many agencies will be involved. In the case of the

⁶⁴ Franklin Maxwell Harper. page 237.

⁶⁵ Weiner, Robert L. “Looking for Databases in All the Right Places.” The Nonprofit Quarterly: Fundraising Supplement. Fall 2004. http://www.rlweiner.com/weiner_articles/weiner_npq_article.pdf. pages 2-3.

State of Iowa, they originally built their program for use by three different government departments. However, they constructed their program so that it could evolve and accept new entities over time. Harper calls this “long-term data with flexibility,” or the “ability of the architecture to grow in size and change directions over time.”⁶⁶ As Iowa began implementing their new program other departments became interested, and “about thirty additional state agencies agreed to participate or provide data sources.”⁶⁷ According to Robert Weiner, choosing how many people may use the system is important because “some systems limit the number of simultaneous users. Others charge more as you add users.”⁶⁸ The space available to hold records may also cost more, depending on how much space is needed.

2.6.1.2 Technical support

Technical support is a vitally important component to running a database system. Not many municipal governments have IT departments on staff. Training a staff member in technical support takes time, and a training manual must be initiated to train the person who will replace that person once they leave. Weiner states that it is best “not to choose a system that will require full-time, on-site technical support,” if you don’t have the in-house technical support.⁶⁹ It is possible to outsource the database, so that it is run by professionals. According to Harper, “outsourcing a data warehouse to a Business Intelligence Service Provider (BISP) is an approach that can reduce a governmental

⁶⁶ Franklin Maxwell Harper. page 243.

⁶⁷ Franklin Maxwell Harper. page 244.

⁶⁸ Robert L. Weiner. page 2.

⁶⁹ Rober L. Weiner. page 3.

agency's expenditures on infrastructure, free capacity on in-house systems, and result in better quality software and equipment."⁷⁰

2.6.1.3 What information is being tracked?

The information being tracked differs from one group to another, and thus is individualized per database. In Weiner's example, because he deals with nonprofit fundraising, most of his clients are tracking "major gifts, membership, and proposal tracking," along with the relationships between each of those records.⁷¹

2.6.1.4 Security

Security is vitally important in the running of a database system. First it must be decided who will have access to the database, and who will have access to update the system. Security levels may be added to the database depending on the access level of an employee. Inexpensive database systems usually only have two security levels.⁷² The more levels of security you need the more expensive the system becomes. In the Iowa case study user access policies and security of the data sources were implemented. They decided to limit public access to the databases to "select reports published on their website."⁷³ However, they are open to the possibility of allowing public access to select database systems in the future.⁷⁴ This will require new security measures, so that the public do not have the ability to update or change the data.

⁷⁰ Franklin Maxwell Harper. page 241.

⁷¹ Robert L. Weiner. page 2.

⁷² Rober L. Weiner. page 2.

⁷³ Franklin Maxwell Harper. page 244.

⁷⁴ Franklin Maxwell Harper. page 244.

2.6.1.5 What information do you need from the database?

Is it necessary for the database to analyze trends, or does it just need to produce spreadsheets? Those are a couple of questions to ask when choosing a database program. In addition it must be decided how the information is to be presented. The cost varies depending on need.

2.6.1.6 Deciding what is mandatory

After answering the questions above it is important to decide which programs are absolutely mandatory for the running of your business and which would be helpful to have, but not crucial. By deciding which programs are necessary it makes it easy to single out vendors that will not fit the needs, therefore time is not necessary to consider them.⁷⁵ It is, however, important to keep the future open to adding those extra programs. Harper believes it is important to implement a database system in stages, setting “small manageable goals” to be met over time.⁷⁶ Databases should evolve in iterations, adding programs as they are deemed necessary by the staff and as money allows. By following this protocol the temptation to go over budget or over schedule is prevented.⁷⁷ Smaller evolutions also allow the slow acceptance to the change and allows other departments time to feel comfortable in joining the project.⁷⁸

2.6.2 Budget

After the prior questions have been considered a budget may be established. Weiner suggests creating a “ballpark budget,” which will be refined over the progression of the

⁷⁵ Robert L. Weiner. page 3.

⁷⁶ Franklin Maxwell Harper. page 243

⁷⁷ Franklin Maxwell Harper. page 243

⁷⁸ Franklin Maxwell Harper. page 243

project.⁷⁹ By collaborating with several different entities, as Iowa did among the three government departments, they were able “to spread hardware and programming costs across several agencies, thus reducing the per-agency cost.”⁸⁰ Early collaboration also allows for continued collaboration as the project grows and entices other groups, further reducing costs. Iowa also filled out a state project evaluation form. This form illustrated that the project was based on “solid business needs” and contained a detailed breakdown of costs in Return on Investment, security, and privacy policies.⁸¹

2.6.3 Which vendors to consider

The process of selecting a database begins once consensus has been reached concerning the needs and wants of the DBMS, and a budget has been set. Extensive research must be done on individual vendors to make sure their programs fit your needs. By searching the vendor websites and calling to speak to representatives, it is possible to get a clear understanding of what their program does, and whether it will suit. It is also possible to get a cost range during these conversations. Once the preliminary research has been done a list of possible vendors must be made. From there Requests for Proposals (RFPs) may be sent to the program vendors. When proposals are received it will become easier to compare the vendors, understand the costs, and continue researching.

2.6.3.1 Requests for proposals

Requests for Proposals is a major step in narrowing the search for a software vendor. RFPs are documents sent to vendors that pose questions concerning their product and the database needs, and how much it will cost. The vendor’s response determines

⁷⁹ Robert L. Weiner. page 3.

⁸⁰ Franklin Maxwell Harper. page 240.

⁸¹ Franklin Maxwell Harper. page 244.

whether to proceed to a demonstration of their product. The trick to garnering unambiguous answers, according to Weiner, is to describe the organization and the problems which the group is trying to solve.⁸² He then suggests focusing on the mandatory requirements you are sought in a database. Asking if the vendor's product provides these needs will further narrow the search and easily provide comparisons from one vendor to another.

2.6.3.2 Comparing vendors

After receiving RFPs and deciding which vendors have possible solutions, it is appropriate to ask for demonstrations. Demonstrations may be given personally or from an online video conference. It is important not to ask for just a broad demonstration. The demonstration should showcase the features that were mandatory. After a demonstration is given it is important to get feedback from all employees or participating partners. Weiner states that it is always possible to request a second demonstration or a conference with the vendor to discuss any questions that were not inquired during the first demonstration.⁸³

2.6.3.3 Understanding all of the costs

Before choosing a database program it is important that the cost of the product is fully understood. According to Weiner, "the price of the software is just one aspect, and often the smallest part, of the 'total cost of ownership.'"⁸⁴ Software conversion, server replacement, and employee or user training may all be costs that were previously uninvoked thoughts. Maintenance is also an important cost to consider. Annual software

⁸² Robert L. Weiner. page 4.

⁸³ Robert L. Weiner. page 5.

⁸⁴ Robert L. Weiner. page 5.

maintenance and updating has a price, and it is important to find out how much that will cost every year. It is wise to inquire to the price of maintenance and updates in the RFP.

2.6.3.4 Continued research

Weiner suggests continuing to research the operations of the qualifying database program systems. Contacting other organizations who use the same program, gleaning information about how it works for them, and how “hassle free” the program’s customer service is are important issues to figure out before making a purchase.

Once a purchase has been made it is important to maintain research on how well the program is working for employees and other users. The state of Iowa began using their data warehouse program through a series of test pilots. From these pilots they were able to fix issues in security and train a handful of people to become experts in the program use. With confident pilot-tested employees the other employees, became less wary about using the new system. The state of Iowa also continues to interview employees and conduct surveys on how well the system is working, so that issues are managed.⁸⁵

2.7 Why this is important to Historic Preservation

The rental of space provided by religious properties is not immediately identifiable as historic preservation. However, by allowing community members to rent unused space, the religious institutions are able to tap into a new source of income. This income will allow the religious institutions, with their declining memberships, to stay open and provide services to their greater community. Moreover, a building in use is more likely to be maintained and won’t suffer from abandonment. Partners for Sacred Spaces explains a religious institution’s impact on its surrounding community as the “Halo Effect.”

⁸⁵ Franklin Maxwell Harper. page 244.

Additionally, historic preservation's mission is not limited to the physical maintenance of buildings. It is about maintaining traditional community settings. By providing community partners with the space to start their businesses, those businesses aren't forced to seek cheaper office space outside of their communities. Thus, the local economy is given a boost, and the urban community is preserved.

SECTION 3: METHODOLOGY

3.1 Introduction

Using the methods implemented by the State of Iowa and the methods suggested by technology consultant, Robert L. Weiner, a method for assessing and choosing a database vendor may be created for New Bedford's purposes. The City of New Bedford, WHALE, Inter-Church Council of Greater New Bedford, and the congregations wish to create a database in which the historic congregations of New Bedford may list their available rental space. They want interested non profit and community organizations, and "homeless" congregations to be able to view this database and contact the property owners to lease the spaces. At an historic preservation level the conditions and architectural significance of the spaces and buildings would also be listed. Though New Bedford is not attempting to create a data warehouse or fundraising database, however the same methods apply. New Bedford must decide who is involved in the appointment process, what information is necessary, the budget; analyze vendors; and create an evolving plan for their database, along with various other decisions.

3.2 Who is involved with the development?

New Bedford is presented with a unique scenario in the number of organizations involved in the database project. Each religious institution will either want direct involvement in the development or, at the least, wish to be consulted during the development. There are sixty historic religious properties in New Bedford; which is quite a number of opinions to consider. It may be practical to take a survey of which congregations have available rental space and are interested in having their information put into a public access database. Once the participants are narrowed down, a meeting can be held with

representatives from each congregation concerning the database program and what functions are believed to be needed.

The city of New Bedford's Preservation Planner, Anne Louro, will more than likely serve as the lead in this project. A development committee will need to be formed to assist her in the consideration of program needs, budget, and vendors. The committee will need to be kept at a workable size. Too many people involved will cause the development stage to take too much time. WHALE and the Inter-Church Council of Greater New Bedford will want to be involved as well. The Inter-Church Council may be an excellent representative for many of the participating congregations. WHALE, as an historic preservation society, will be able to provide insight to program needs concerning preservation. They recently started a Sacred Places: New Partners/New Dollars grant program, so the league has a good understanding of current community partner possibilities and their needs.

3.3 Deciding on necessary features

Once a committee is appointed, discussions over what the database should provide to both the religious institutions and the public should be considered. Things to consider include:

1. How to retain records for up to sixty institutions?
2. How many users can be made managers, and how many are able to update the files?
3. Is there a public access application?
4. Is there a cloud component to the system?
5. Is it possible to expand the program if more institutions wish to become involved?

6. Are image files a possibility? Image files such as JPEG (Joint Photographic Expert Group) and TIFF (Tagged Image File Format), are the most common image files.⁸⁶

If it is desired to show images of the properties in a record field of the database then the database must have the capacity to allow the use of JPEGs or TIFFs.

7. Are there yearly updates? How much do those cost?

Deciding what information needs to be collected is also important. Are simply the space dimensions, provided equipment, and contact information wanted? Is it necessary to provide information concerning the conditions of the room? Is there a fixed price to the room rental, and should it be listed? Are images to be a part? It is important to consider what information should be provided to the public, so that decisions concerning database management can be decided.

3.4 Who will be charged with updating the database?

There are many questions to be asked concerning this decision. Should one organization run the updates on this program, or should each religious institution be able to update their own record? If it is decided to have one organization run the updates on the program, then which organization should that be? Will they need to hire someone to run the program? How many members of the organization will have access to managing the program?

3.5 The budget and choosing a database program

Who is paying for this program? Following the route taken by the state of Iowa, all participating parties must assist in paying for the program. This may hinder participation,

⁸⁶ "The 5 Types of Digital Image Files: TIFF, JPEG, GIF, PNG, and RAW Image Files, and When to Use Each One." *Ivan Expert: Mac and Mobile Blog*. 14 May 2010. <http://www.ivanexpert.com/blog/2010/05/the-5-types-of-digital-image-files-tiff-jpeg-gif-png-and-raw-image-files-and-when-to-use-each-one/>.

so limiting needs to fit a smaller budget may be a proactive step. Once a budget is set it will become a key component in choosing a program.

3.6 Developing a criteria/method for analyzing alternative policies

After deciding on program needs the committee should research vendors and write Requests for Proposals to send to the chosen vendors. If the vendors match the required functions and are priced within the perimeters of the budget, then it is possible for them to move on in the decision process.

Those vendors who matched need and budget may then provide demonstrations on the use of their program. It is important to have all members of the development committee present at these demonstrations. After a demonstration a conversation should be held amongst the committee members discussing their thoughts on the program. Notes should be taken, so that when all the demonstrations have been viewed a comparison may be made.

3.7 Implementing the database

Once a program is purchased it is time to implement the database. If one institution is running the database, and updating the program, then they will have to collect the necessary information from the religious institutions. If it is decided that each religious institution should be in charge of their own record, then someone from the development committee must be put in charge of overseeing their progress. It may be necessary to set a deadline for when the institutions must have their information updated.

3.8 Expanding the database

Given that it is New Bedford's goal to preserve all of their historic religious institutions, it may become necessary to entice more reluctant congregations into joining

the database. After a year of having the the database up and running a survey should be held and published concerning the economic success. Once the previously reluctant congregations see the success it is likely that they will want to join. Since this is likely to occur, database expansion must be planned for from the very beginning, and space should be left available to new participants. The development committee should continue to meet to discuss how the database is working, and to make appropriate changes as needed.

SECTION 4: RECOMMENDATIONS

New Bedford is looking to create a database that will store pertinent information concerning the rental spaces belonging to the historic religious properties in the city. Since this database is supposed to help renters find rental space it is appropriate for there to be an application allowing the public to search the site from the internet. Also, because there are so many institutions involved it is more practical to have individual record profiles for each institution to update. By creating individual access to one record that will be taken care of by that individual institution, the cost of creating the job of database manager is subtracted from the total cost of the database. The only issue becomes the task of reminding the religious institutions to produce their records by a certain date.

With these issues in mind the most practical programs for New Bedford to consider are those vertical market programs that function for the sole purpose of managing rental venues, or more specifically, the rental properties of historic institutions. New Bedford should determine what functions they wish their database program to perform, decide on a cost range they intend to follow, and consider the best vertical market options. The two vertical market programs described in this report, Spaces by Fractured Atlas and the matching program by Partners for Sacred Places, should be heavily considered throughout the development process.

If it is decided that New Bedford will implement Spaces by Fractured Atlas a potential renter, when visiting the site, will be greeted with a map of the city with the available rental spaces listed in alphabetical order below. To the side of the page is a search field. The site visitor may search by keyword or name, region, space needs, availability, rates, location, or size. A potential will then be presented with his or her options. By

clicking on one of the available rental spaces the site visitor will be taken to that rental space's rental page. This page gives a description of the organization which owns the space and then lists space usage, an availability calendar, booking policies, room features, available equipment, and rental rates. These fields are all listed for the convenience of the potential renter, so they are able to make an educated decision based on their needs. To the side of the page is a map of the location of the rental site, so that the potential client may easily view the proximity of the rental space. Above the location map is a "Contact Space Manager" button. If a potential renter decides they want to rent the space they are viewing they click on this button and they are directed to a new page. The majority of this page is taken up by a "Send Message to Space Manager" application. By filling out the required fields and pressing send the renter is sending a request to rent. The required fields are: use of space, total number of people, date, start and end time, and finally the personal information of the renter. If the renter wishes to speak directly to the space owners the contact's name, phone number, and email address are located to the side of the page. This system, provided by Fractured Atlas, allows the renter to make an educated decision about where he or she would prefer to rent without having to visit numerous locations. The system provided by Partners for Sacred Places is still in the development phase. However, they are working closely with Fractured Atlas, so it is possible that it will look very similar to the Spaces program. Unlike the Spaces program the Partners for Sacred Places Program will list architectural significance and property conditions, as they are promoting the preservation and restoration of sacred places via community partner rental.

SECTION 5: CONCLUSION

The city of New Bedford is rich in historic architecture, especially historic religious architecture. With the decline of congregations these historic religious institutions, which represent New Bedford's heritage, are threatened with neglect and deterioration. By embracing the impact the community and community partners have on the economic success of a congregation the threat of deterioration and demise of a congregation may be alleviated. Creating a database that serves as an inventory of New Bedford's historic religious institutions and their possible rental space, and as a device through which community members and partners may find possible rental space is a primary step in helping these congregations maintain themselves. Using a system that is specifically for the inventory of historic religious spaces and connecting those spaces with possible community partners in need of rental space is an excellent way to bolster community support of the religious institutions and bolster the economy of the congregations. The congregations are then able to continue their community outreach, which was their original purpose, without worrying about making ends meet.

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Appendices

Appendix A: Advantages to the Database System as provided by Introduction to Database Systems published by ITL Education Solutions Limited, pages 3- 4.

1. *Centralized Data Management*- In the database approach, the data is stored at a central location and is shared among multiple users. This central management system provides the following advantages.
2. *Controlled Data Redundancy*- Various files are integrated and each logical data item is stored in a central location. This eliminates replicating the data item in different files, and ensures consistency and saves storage space.
3. *Enforcing Data Integrity*- Various integrity constraints are identified by database designer during database design. Some of these data integrity constraints can be enforced automatically by the DBMS, and others may have to be checked by the application programs.
4. *Data Sharing*- data can be shared among multiple users or application programs. Moreover, new applications can be developed to use the same stored data. Due to shared data, it is possible to satisfy the data requirements of the new applications without having to create any additional data or with minimal modification.
5. *Ease of Application Development*- The application programmer needs to develop the application programs according to the users' needs.
6. *Data Security*- Since the data is stored centrally, enforcing security constraints is much easier. The DBMS ensures that the only meant of access to the database is through an authorized channel. Hence, data security checks can be carried out whenever access is attempted to sensitive data. To ensure security, a DBMS provides security tools such as user codes and passwords.
7. *Multiple Use Interface*- In order to meet the needs of various users having different technical knowledge, DBMS provides different types of interfaces such as query languages, application program interfaces, and graphical user interfaces (GUI) that include formed-style and menu-driven interfaces. A form-style interface displays a form to each user and user interacts using these forms. In menu-driven interface, the user interaction is through lists of options known as menus.
8. *Backup and Recovery*- The DBMS provides a backup and recovery subsystem that is responsible for recovery from hardware and software failures. For example, if the failure occurs in between the transaction, the DBMS recovery subsystem either reverts back the database to the state which existed prior to the start of transaction or resumes the transaction from the point it was interrupted so that its complete effect can be recorded in the database.

9. *Program-data Independence*- The independence between the programs and the data. It allows changing the structure of the database without making any changes in the application programs that are using the database. To provide a high degree of data independence, the definition of the description of the database structure and various constraints on the data are stored separately in the DBMS catalog. The information contained in the catalog is called the metadata.
10. *Data Abstraction*- The property of DBMS that allows program-data independence. Data abstraction allows the database to provide an abstract view of the data to its users without giving the physical storage and implementation details.
11. *Support Multiple Views of Data*- A database can be accessed by many users and each of them may have a different perspective or view of the data. A database system provides a facility to define different views of the data for different users. A view is a subset of the database that contains virtual data derived from the database files but it does not exist in physical form. That is, no physical file is created for storing the data values of the view; rather, only the definition of the view is stored.

Appendix B

Included with permission from Partners for Sacred Places.

PARTNERS FOR SACRED PLACES

At the intersection of heritage, faith, and community

Creative Sacred Placemaking: Space Sharing with Houses of Worship

Introduction

Sacred places are community assets. Decades of research by Partners for Sacred Places, Ram Cnaan at the University of Pennsylvania and Robert Putnam at Harvard University has demonstrated the varied and vital roles that houses of worship play in their neighborhoods.

Congregations are providers of social services, repositories of social capital, magnets for spending, venues for the arts, incubators of small businesses, employers of local residents and purchasers of local goods and services; they are engines of community and economic development.

The Economic Halo Effect, Partners' latest research conducted in collaboration with the University of Pennsylvania, indicates that the average annual economic contribution of a historic house of worship is more than \$2 million.

Space Inventorying

As awareness of the value of sacred places grows and the threat of church closures looms, Partners for Sacred Places is increasingly fielding interest from municipal governments, preservation organizations, and denominational bodies for resources to help them inventory, understand, protect and leverage their stock of sacred places.

In response, with funding from the John D. and Catherine T. MacArthur Foundation, Partners for Sacred Places is developing an interactive website to catalog houses of worship. In keeping with Partners holistic approach to working with sacred places, each house of worship's profile will include:

- *Space & Conditions:* square footage, ceiling height, floor type, heating/cooling, internet/cell service, building condition, etc.
- *Equipment:* Lighting, furniture, amenities (shower, kitchen, restrooms, etc.), instruments,



St. Luke's Church of Logan Square & Ayako Kato

Ayako Kato, a dancer and choreographer, staged a series of site-specific dances to Bach's Cello Suite in the sanctuary of St. Luke's Church of Logan Square.



Our Lady of Peace & The Hoofers

A tap dance company for seniors that helps promote a healthy, active lifestyle. They rehearse at the parish and perform throughout South Chicago.



People's Church & National Pastimes Theatre

National Pastimes Theatre shares previously underutilized space for theater, dance, and music.

audio and visual equipment, etc.

- *Access & Parking*: proximity to public transportation, accessibility, exclusive and shared use policies
- *Mission & Work Style*: vision and values, strategic priorities, desired outcomes and impact of programs and ministries
- *Institutional Capacity*: operations, finance, staffing, leadership structure, membership and attendance
- *Community Engagement*: experience with and interest in working with local stakeholders
- *Heritage*, congregation founding and background, connection to significant events and prominent individuals in local history
- *Photos & Floor Plans*
- *Custom Fields*: to allow clients and congregations to track additional features, qualities or assets

Space Matching

Once inventoried, sacred places' profiles can be used for research, advocacy, property management and as a critical tool for the identification of space sharing partners.

For decades, houses of worship have opened their doors to artists, social service providers, nonprofit organizations, and government agencies. As congregation membership levels dip and facility and capital costs increase, space-sharing partnerships can be an important source not only of revenue, but also of renewed energy and hope.

To facilitate these partnerships, Partners is creating a website that will serve as an eHarmony® for sacred places and community partners. Organizations and artists interested in working with sacred places will complete profiles outlining their space needs, mission, work style, organizational capacity and interests in working with houses of worship. With information from both parties, potential matches will be identified not only based on compatibility of space needs and square footage, but a marriage of mission, vision and values.

Contact Us

To learn more about the range of resources that Partners can provide to inventory sacred places and identify space-sharing partners, please contact Amy Schachman at aschachman@sacredplaces.org.



MacArthur
Foundation



City of Evanston & Partners for Sacred Places

In 2013, the Evanston City Manager's Office hired a fellow to inventory underutilized space in the Evanston's houses of worship. With training and support from Partners' staff, in just under six months, the City was able to identify seventeen churches interested in space sharing, amounting to more than 132,000 square feet of underutilized space. In 2014, Partners and the City's Community Arts Liaison will host a local cohort of our *Arts in Sacred Places* training to help facilitate matches between local artists and houses of worship.



Landmarks Illinois, City of Chicago, Preservation Chicago & Partners for Sacred Places

In 2012, in the aftermath of the demolition of a historic synagogue turned Baptist church, Partners collaborated with Landmarks Illinois, the City of Chicago Historic Preservation Division and Preservation Chicago to inventory endangered religious properties in the City. The resulting data, which includes photos, informal building condition assessments and congregational capacity evaluations, will help all stakeholder organizations work together to better serve historic houses of worship in Chicago.

