

Centralizing Massachusetts Foreclosure Data by Developing a User-Friendly Database

Authors

Keval Ashara, Sam Gould, Caitlin Kuzma, Patrick O'Mullan

Advisors Dr. Chrysanthe Demetry Dr. Richard Vaz Sponsors Grace Ross Dr. Scott Jiusto

Sponsoring Organization The Massachusetts Alliance Against Predatory Lending (MAAPL)

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Abstract

This work addresses the legal and social dimensions of predatory lending and illegal foreclosure in Massachusetts. In collaboration with The Massachusetts Alliance Against Predatory Lending (MAAPL), we constructed a data system capable of centralizing state-wide foreclosure data. We requested data from all registries of deeds across Massachusetts and constructed a database to hold the data. We also created a user-friendly interface so that MAAPL volunteers, legal analysts, and others will be able to interact with the database. This report details the completed design, implementation, and documentation of the data system as well as suggestions for future work on the system. Our recommendations range from technical work on the database to analysis of legal stakeholder needs for court cases.

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Executive Summary

Introduction and Purpose

If one is at all familiar with predatory lending—the practice of lenders taking advantage of borrowers through hidden fees or subprime loan offers—they are likely to associate it with the 2008 financial crisis. In reality, predatory lending has been around for hundreds of years, and is still a major problem in the 21st century. Moreover, predatory lending is difficult to fight because its definition is highly contested and a great deal of evidence is needed to prove its presence. As one might imagine, predatory lending often leads to borrowers falling behind on payments and defaulting on their loans.

Predatory mortgage loans can lead to foreclosure, which is a long, complex, and confusing process. In Massachusetts, the foreclosure process is typically non-judicial, meaning that lenders and other foreclosing mortgagees self-regulate the process outside of the state court system. Although the process mainly relies on the good faith of parties such as banks, there are many documents filed during the process–such as Affidavits–which attempt to prevent illegalities. However, exploitation of the process is still possible, and due to the complex nature of foreclosure, is difficult to address. In Massachusetts, there are 21 different regional registries of deeds where foreclosure documents are filed. Although each registry has a website where documents and data may be accessed, there is no centralized database which enables analysis of this publicly available data.

The Massachusetts Alliance Against Predatory Lending (MAAPL) is one organization that fights predatory lending and illegal foreclosures through activities such as protesting auctions, buying foreclosed homes, and spreading information about the foreclosure process. One of MAAPL's long term goals is to prosecute serial offenders of predatory lending and illegal foreclosure by analyzing Massachusetts foreclosure data. However, it's currently impossible to analyze all of this data because it is spread throughout the state and stored in the registries of deeds.

The goal of this work was to design and implement a user-friendly database for MAAPL to enable aggregation, research, and analysis of Massachusetts foreclosure data. In addition to creating the database, we collected foreclosure data from various Massachusetts registries of deeds. By continuing to collect and centralize this data, MAAPL hopes to perform analysis that will support court cases against serial predatory lenders and address illegal foreclosures in Massachusetts.

Methods and Outcomes

To advance MAAPL's work, we pursued the following objectives:

- 1. Evaluating the current data management system
- 2. Collecting data from various registries of deeds
- 3. Implementing changes to the data management system
- 4. Generating an ongoing plan for the development of the data management system

Before creating the database, we first took a look at the work done by a previous research group in collaboration with MAAPL, which helped to guide the design of our database. We also consulted with some stakeholders to get a sense of how the database will be used, and what MAAPL's long term vision for it is. Also during this time, MAAPL helped us create a list of documents of interest, shown below with their descriptions, to inform the creation of our data request to various registries of deeds and the organization of the database.

- 1. Foreclosure Deed: documents who purchased the home; usually is directly followed by Affidavit of Sale and Advertisement.
- 2. Affidavit of Sale and Advertisement: usually attached to a Foreclosure Deed; proof the lender followed the law requiring a home to be advertised in the local news-paper for three consecutive weeks, and documentation of the auction.
- 3. Certificate of Entry and Possession Notice: certifies that a home has been entered by a bank representative without contest, which means the home is 'foreclosed by entry'.
- 4. **Power of Attorney:** document that grants one party the power of attorney of the other. In a broad sense, this means that the grantee can sign documents on behalf of the grantor.
- 5. Mortgage: a type of loan, with documentation (the mortgage and the note) created when a person buys a house by borrowing money from a lender; details the terms of how the borrower repays the lender.
- 6. Assignment of Mortgage: documents a transfer of documents, in this case a mortgage and note, between two parties.
- 7. Affidavit: written and signed sworn statement of fact by a party; several different types may be filed during a foreclosure, i.e. swearing that the foreclosing mortgagee possesses the mortgagor's note
- 8. Petition, Order of Notice, Complaint: several types may be filed during a foreclosure; a Notice to Cure starts the foreclosure process by alerting a homeowner they are in default; a Complaint or Order of Notice is filed in Land Court which requests the military status of the defendant.
- 9. **Pooled Mortgage:** data stored by the Securities and Exchange Commission which contains information about how mortgages are bought and sold as loans.
- 10. Tax Assessment Records: home valuation records stored by town assessor's offices.

These documents can all be connected to predatory lending and foreclosure, because most of them are filed during the foreclosure process. Understanding the intricacies and content of the documents not only helped us acquire data, but also helped inform the structure and fields of the database.

Data Collection

We sent a public records request to all 21 registries of deeds across Massachusetts. We requested indexed data and documents related to the foreclosure documents listed above from 2004 to the time our request was processed.

Table 1 shows the registries that provided us with data, what type of data each registry provided, and a short description of the data. In total, we received indexed data from 57%

of the registries and documents from 19% of the registries. The two most common reasons given for not providing the data requested were a lack of IT resources, and that the registries' websites would allow us to manually get the data ourselves. However, the websites for the registries of deeds limit downloads to a maximum of 2000 documents at a time, and our requests covered hundreds of thousands of documents in total.

	Indexed	Document				
Registry	Data	Images	Details			
	Received?	Received?				
Berkshire	Voc	No	Bocoived all indexed			
Middle	165	110	data from Socretary			
Berkshire	V	No	of the Common			
North	165	NO	wealth contractor			
Berkshire	Voc	No	wearth contractor			
South	165	110				
Bristol North	Yes	Yes	Received data on USB, Not indexed			
Dukes	Ves	Ves	Received indexed data and images,			
Dukes	105	105	images indexed in spreadsheet			
Franklin	Yes	No	Data from Secretary			
Hampshire	Yes	No	of the Common-			
Middlesex	Ves	No	wealth contractor			
North	105	110				
Middlesex	Yes	No				
South						
Nantucket	Yes	Yes	Received indexed data and images,			
	2.00	2.00	images indexed in spreadsheet			
			Gave access to downloading data			
Plymouth	No	No	through website, but the downloads			
, v			were inefficient and pdfs instead of			
			spreadsheets			
Suffolk	Yes	No	Data from Secretary of the			
TT <i>T</i>			Commonwealth contractor			
worcester South	Yes	No	Received labeled indexed data in			
South			CSV, It was entered into the database			
Worcester	Yes	Vag	neceived indexed data (unlabeled),			
North		res	put images of documents on an			
			external nard drive			

Table 1: Results of Public Records Request (abbreviated)

Database

To store the data from the documents deemed important to the foreclosure process, we created a database. This database, shown in Figure 1, was designed to relate most documents to the mortgage referenced in the document. Each mortgage has an ID comprised of unique identifiers: book, page, document number, and registry. Since each foreclosure case is associated with a mortgage, this unique ID for mortgages can be used as the ID of the foreclosure. This system allows for multiple foreclosures at the same address, as there are instances of that happening in the data we received.



Figure 1: Simplified Entity Relationship Diagram (ERD)

File System

In order to tie the indexed foreclosure information to the corresponding pdf documents, a file access hierarchy was designed so that individuals searching the database can directly access the relevant files relating to a foreclosure. A file system, depicted in Figure 2, was chosen instead of utilizing MySQL's pdf storage feature to ensure higher system performance.



Figure 2: Proposed File access hierarchy for document access through the database.

User Interface

A user interface was created to serve as a "portal" to the database and can be connected to a remote server where data is stored. Included in this interface is a form for searching the database based on certain fields of interest and a form for entering data into the database. Additionally, first steps were taken in implementing an automated data entry system for bulk file uploads. These features minimize the required technical knowledge of an individual using the data system and streamlines the frequent processes one might use the database for. The "portal" also contains a feature to export data from the database into a Comma Separated Value file format (.csv) for analysts to use in their research.

Recommendations

Future Development Guide

We created a Future Development Guide (Appendix B) with recommendations for the further development of the system, which we summarize here:

- 1. **Data Collection:** Automate data collection either by implementing Optical Character Recognition Software or scraping the websites of registries of deeds.
- 2. Front End Updates: Add functionality to the user interface, such as the ability to delete entries.
- 3. **Database Updates:** Add more documents, fields, and tables to the database as needed to fill gaps identified by our team and stakeholders.
- 4. File System Implementation: Implement the file hierarchy designed on the permanent server and connect file references to the database.
- 5. Security and Account Management: Ensure that the front end is secure and user accounts have different permission levels that are strongly enforced. This is a prerequisite before the front end can be made public and linked to other features such as a case intake form.

- 6. Bug Fixes & Code Refactoring: Address any major bugs, inefficiencies, or deficiencies in the system. There does not need to be a dedicated effort for this, but future developers should be cognizant of addressing major issues and refactoring the system to improve performance and readability.
- 7. **Data Cleaning:** Create a process to filter out extraneous data and standardize the format of the indexed data received from the registries of deeds.
- 8. **Data Entry:** Create more scripts to enter data in bulk from the registries of deeds into the database.
- 9. Legal Analysis: Tangential to the work on the data system itself, we recommend analysis be completed on the needs of legal analysts who will make use of this database. Work should be completed on identifying the legal process, designing an analysis pipeline, and ultimately implementing or finding an appropriate application to serve those needs.

Server Recommendations

The database is currently hosted using WPI resources. It is our recommendation that a more permanent server solution be found. From our discussions with key stakeholders and our own analysis, it appears a custom server is the preferred solution.

Data Recommendations

We recommend any future data requests be made directly to the Secretary of the Commonwealth's office. Nine of the registries that sent indexed data did so through a contractor through the Secretary of the Commonwealth's office. A few of the registries who did not send data because of a lack of IT resources suggested contacting the Secretary of the Commonwealth's office instead. This also presumably makes collecting the data easier as there should be one contact person and a bulk data hand-off.

1 Introduction

Many of those who default on their mortgage or are foreclosed upon are victims of predatory lending. Predatory lending occurs when a lender unfairly and maliciously takes advantage of a borrower. Indicators of predatory lending in the mortgage industry include: hidden fees, subprime loans, adjustable interest rates^{*} (especially a rate that only adjusts up), and balloon payments[†] at the end of the loan's life–all of which can drastically increase the overall loan repayment amount (O'Neil, 2018) (Ross, 2019b). As a separate industry, mortgage lending institutions arose outside of stricter traditional bank regulations beginning in the 1990s (Aaron, 2009); (Ross, 2019b). It is for this reason that the practices listed above are still so pervasive today. Although laws restricting predatory lending were tightened after the crash of the housing market and the subsequent foreclosure crisis in the late 2000s, current laws still have loopholes or are weakly enforced (Ross, 2019b). Furthermore, predatory lenders have an extensive history of targeting people of color, particularly Black and Latino people (Leffall, 2003) (Steil, Albright, Rugh, & Massey, 2018).

Many organizations, such as the Massachusetts Alliance Against Predatory Lending (MAAPL), exist with the mission to spread awareness of, and repair the damage caused by predatory lending practices and the foreclosure crisis. In order to do this, these organizations need to prove the existence of predatory lending and illegal foreclosures. Additionally, they intend to prove that specific communities have been targeted by predatory lenders. What makes this task difficult is that the definition of a predatory loan is contested, and while there may be a lot of anecdotal evidence from individual foreclosures, it is impossible to prove a pattern of predatory lending using evidence from just one case (Leffall, 2003). Data analysis of a large sample of documents relating to foreclosures across Massachusetts would be much more compelling, and may show an aggregation of illegal activity in the foreclosure process by lenders and mortgagees, or show trends of subprime loans targeting specific populations (Leffall, 2003) (Ross, 2019c). However, the data required to perform such analysis does not exist in a centralized location, but instead is scattered across 21 separate registries of deeds in Massachusetts.

If a central database[‡] containing all Massachusetts foreclosure documents existed, trends in foreclosure could be more easily identified through data analysis. In 2020, MAAPL sponsored the work of a research group in starting the development of such a system. This group created a proof of concept database to store indexed data from foreclosure documents with the intent of enabling analysis of said documents (Riley, Noel, Dionne, Campbell, & McCarthy, 2020).

Our work intended to take the proof of concept inherited from the previous research group and implement a fully functional data management system[§]. This system contains a working user interface[¶], a comprehensive database, and a large collection of data from 12 of the 21 Massachusetts registries of deeds. In addition to the data system, we provide detailed manuals, guides, and documentation to ensure that future developers will be able to continue working on the system without learning all the intricacies of it. This system and

^{*}Adjustable Interest Rate: An interest rate that can change over the course of the life of the loan.

^{\dagger}Balloon Payment: A large payment at the end of the life of the loan covering the remaining principal amount of the loan.

[‡]Database: A structure used to store large amounts of data in a centralized location.

[§]Data Management System: A system that not only holds data, but accounts for and manages the ways in which the system might function.

[¶]Interface: A medium which enables interaction with a complex system in a simplified manner.

corresponding documentation will enable MAAPL to immediately begin using its database.

2 Background

This chapter discusses several topics relating to predatory lending, foreclosure, and some related nonprofit organizations. We will begin by providing some background on what predatory lending is, its history and common victims, and the Massachusetts foreclosure process. Next, we mention how the government and nonprofit organizations work to combat the foreclosure crisis. Then, we present information relating to a Massachusetts nonprofit that is fighting illegal foreclosures and evictions by providing services to homeowners at a statewide level. Finally, we review the data management system that this organization currently has in place, and some next steps to ensure its stability.

2.1 Predatory Lending's History and Main Targets

Predatory lending occurs when lenders take advantage of borrowers through avenues such as disclosing hidden fees in fine print or, more commonly, offering subprime-higher interest-loans to (typically) high risk borrowers. A national study of subprime loans from 2004-2010 found that "although subprime loans are typically intended for borrowers who do not qualify for prime loans, research finds that between 10 and 40 percent of subprime [mortgage] borrowers could have qualified for lower-priced prime mortgages" (O'Neil, 2018). Subprime loans can be categorized as loans with an interest rate of 7% or more, or a mortgage that is more than 100% of the value of the home (Ross, 2019b). While a subprime loan does not necessarily signal predatory lending, the vast majority of predatory loans are subprime (Leffall, 2003). Aside from subprime loans, adjustable rate^{||} mortgages and balloon payments^{**} are also potential indicators of predatory lending (Ross, 2019b).

Predatory lending is difficult to fight because its definition is highly contested and the line between legal subprime loans and predatory loans is arguable (Leffall, 2003). How does one with little understanding of loans and finance recognize if they are receiving an unfair loan? In a case of predatory lending, the lender knows something about the loan that the borrower does not know or understand.

Although many predatory loans end up with the borrower defaulting on payments, lenders still make money from these loans because of the high interest rates that they charge the borrowers. Additionally, lenders can recover money from borrowers who have defaulted by foreclosing on borrowers' homes, which we will discuss more in the next section (Feb 20, 2008). While predatory lending is commonly associated with the 2008 housing crisis, abusive lending practices have been around for hundreds of years in the United States, primarily victimizing people of color (Geisst, 2017). Historical discriminatory practices–such as redlining^{††}–have systematically disadvantaged minority groups, resulting in predatory loans being more common in those communities (Steil et al., 2018). The consequences are seen today as the primary victims of predatory lending are still mainly Black and Latino people–regardless of class (Leffall, 2003).

The mortgage industry started out completely separate from the banking industry in the 1990s, which led to an expansion of predatory lending throughout the 2010s and into the 2020s. (Aaron, 2009); (Ross, 2019b). Due to the separation of mortgage lenders and banks,

An interest rate that can change over the course of the life of the loan

^{**}A large payment at the end of the life of the loan covering the remaining principal amount of the loan ^{††}The act of denying someone a loan or other service due to their occupancy in a low income area. Historically this practice has been used to deny African-Americans and other people of color loans and further segregate wealth and wealth production across racial lines.

mortgage lenders did not have to abide by the same regulations as bankers. In his article, "A Matter of Life and Debt," Jabulani Leffall notes several statistics pertaining to the demographics of predatory lending victims, including the fact that "from 1995 to 2001 the number of subprime purchase loans to African Americans rose 686%" (2003). Additionally, he notes that although White people procure the largest number of subprime loans, "African Americans are three times more likely than whites to receive a subprime loan," and even higher-income Black Americans are more likely to receive subprime loans than lower income White Americans (Leffall, 2003). These racial disparities are not localized as they are seen all over the country (Leffall, 2003). Leffall proposes a few reasons why these disparities may still exist, such as a lack of popularized prime lenders in Black communities, and the widespread use of profit-seeking "Ghetto Banks" in poorer communities (2003). Until there are targeted policy changes or widespread studies, predatory lending will continue to be a widespread issue with no foreseeable end.

2.2 How Predatory Lending Connects to Foreclosure

Subprime mortgages, a form of predatory loans, are so-called "doomed-to fail" mortgages because they often lead to foreclosure. In the 2008 Commonwealth v. Fremont Decision, Massachusetts ruled that predatory loans were illegal and set up borrowers to fail (Ross, 2019b). Foreclosure is a complex process that varies state-to-state, and in this study we focus on the process in Massachusetts. As we have previously noted, the mortgage loan industry is separate from the traditional banking industry. While traditional banks have strict regulations, the mortgage loan industry is less regulated, which can enable predatory lending practices. Based on her years of experience helping people through predatory lending and illegal foreclosure, Grace Ross-a lead organizer of the Massachusetts Alliance Against Predatory Lending (MAAPL)-believes that most homes purchased after 2002 have likely been over-appraised, leading to mortgages that are 120-140% of the actual value of the home (Ross, 2019b). Additionally, in the case of many undisclosed no-doc loans^{‡‡}, lenders may exaggerate the income of a borrower so that they are offered a larger loan that they would not normally qualify for (Ross, 2019b). Although the 2008 Commonwealth v. Fremont decision states that so-called "doomed to fail" subprime mortgages are illegal and banks must modify these types of loans, there is little enforcement of this decision (v. Fremont, 2008) (Ross, 2019b).

Two main categories of foreclosure are judicial and nonjudicial, the latter meaning that the foreclosure process occurs outside of the state court system. While there are multiple foreclosure processes in Massachusetts, the most popular is foreclosure by sale, a nonjudicial foreclosure process. In her series of videos targeted at victims of foreclosure, Grace Ross (Ross, 2019c) explains the complex process of foreclosure by sale by breaking it down into each step:

- 1. **Default and Cure:** If a borrower can not keep up with their mortgage payments as per the terms set by their mortgage, the lender can declare them in default. The lender must send a specifically-worded default letter to the borrower, which defines a right to cure period, typically 90 days. During this time, the borrower can find ways to get back on top of their mortgage payments, or renegotiate and modify their loan.
- 2. Active Military Service: After the cure period passes, the borrower must show up to Land Court for a test of active military service. If the borrower is an active military

^{‡‡}a loan which does not require employment documents from the borrower

service member, the foreclosure must be delayed. If not, the process continues. As this process is nonjudicial, the court summons letter may be the only time that the borrower will receive correspondence from a court.

- 3. Affidavits in Registry: Next, the bank submits one or two affidavits to the registry of deeds. The homeowner is not directly notified. These affidavits vary depending on the terms of the mortgage, and commonly establish that the bank has the mortgage and the note, and that the bank is swearing to follow Massachusetts law.
- 4. Notice of Sale and Auction: Afterwards, the formal foreclosure process begins, and the lender must advertise a notice of sale for three consecutive weeks through a local newspaper. The lender must also send a letter to the borrower giving at least two weeks' notice before the date that the borrower's residence will be auctioned off. This letter must include a copy of the lender's note, as well as some background information about the mortgage. The property is then auctioned off. At this time, the lender may also buy back the property.
- 5. **Post-Foreclosure Notices:** After the auction, the lender must give several specific kinds of notices to the borrower. If the standards for these notices are not met, the lender cannot evict the borrower while the lender still owns the property, and cannot collect any payment from the borrower.

As one may imagine, the foreclosure by sale process can be very difficult for a borrower who knows little about it. Grace Ross notes in her videos that although lenders have many obligations—since the process takes place outside of the courts and many borrowers do not understand the process—it is not rare for lenders to skip steps or not fully fulfil their duties (Ross, 2019c). It is also important to note that even though a property may be auctioned off, that does not mean that the borrower suddenly has to leave the residence, and also does not mean that the borrower has no chance to win back their property. In Massachusetts, ownership of property is separate from the right to occupy a home, and these two parts of law are very different. Post-foreclosure, the lender must legally evict the borrower as a tenant in housing court, where the legal rights of a tenant are much easier to protect. This facet of the law—that foreclosure does not mean eviction—is extremely important for borrowers to understand, as many people win post-foreclosure cases (Ross, 2019a).

Due to the complicated foreclosure and eviction process, homeowners who lack knowledge about the process can be taken advantage of. A lender can easily set a borrower up for failure by offering them a predatory mortgage loan that the borrower is unaware can be renegotiated according to Massachusetts law. Borrowers may be inclined to give up their entire case once they default on their mortgage payments, believing it is their fault that they were not able to keep up with payments. In reality, a borrower who fights all the way to court gives the court a chance to evaluate the predatory lender and win the property back.

2.3 Organizations That Fight Foreclosure

This section discusses a few organizations that work to combat the foreclosure crisis, predatory lending, and illegal foreclosures. We also comment on specific organizations in Massachusetts.

National and Regional Organizations

The 2008 housing crisis caused a spike in foreclosures as housing prices plummeted, resulting in mortgages being worth much more than the values of homes (Emmons, 2021). Over 3.1 million Americans have faced foreclosure since the beginning of this crisis, warranting the use of federal and non-profit programs to ease the conditions of the crisis (Christie, 2009).

Some of these programs are organized or sponsored by the federal government. (Bratt, 2017) researched the effectiveness in various federal housing assistance programs and claims that most were ineffective, failing to help as many people as projected. Since government programs are aimed at reducing mortgages by voluntary loan modifications that reduce the interest or principal amount of the loan, these programs reduce banks' profits from mortgages. This is what Bratt claims to be the largest problem with government programs: they ask banks to voluntarily reduce their profits to help with the ongoing effects of the 2008 mortgage crisis. The current government programs alone are not enough to address foreclosure.

There are also a few examples of nonprofit organizations working with financial institutions to provide loans to those facing foreclosure. One of these nonprofits is BlueHub Capital, an organization that works to prevent foreclosure in multiple states. It does this primarily through purchasing homes and selling them back to homeowners with a new mortgage. BlueHub Capital has "helped over 1,100 families avoid foreclosure while reducing their principal balances by about 30%, on average" (*BlueHub SUN*, 2021) through their BlueHub SUN program. Selling foreclosed homes to nonprofits instead of investors, banks, or hedge funds keeps homeowners in their homes and keeps properties from lying vacant.

There are many ways other nonprofits work to address the problem of foreclosure. Some provide legal advice from lawyers; others educate people about the process of foreclosure. Many grassroots organizations protest auctions to prevent foreclosed homes from being auctioned off, especially if the bank did not follow the steps necessary to auction the home (Khan, 2016).

Since the foreclosure process is complicated for borrowers who have no prior knowledge of the process, many predatory practices can happen during this process. This means that borrowers need someone to assist them. MAAPL is one Massachusetts organization working to help people in need by providing victims with legal advice and helping reclaim foreclosed homes, among other activities. MAAPL was founded by City Life / Vida Urbana (CL/VU), The Association of Community Organizations for Reform Now (ACORN), and the Green-Rainbow Party assisted by Boston City Councilor Chuck Turner to combat the foreclosure crisis in 2007 before the housing crisis of 2008 (*MAAPL History*, 2012). MAAPL has become a center for activist groups, legal representation, and other non-profit organizations fighting foreclosure and evictions in Massachusetts. It has lobbied for policy changes to increase the rights of tenants and has bought back hundreds of homes (*MAAPL History*, 2012).

Foreclosure Data in Massachusetts

It is largely recognized that foreclosure and eviction are common problems, but the statistics are difficult to find. (Porton, Gromis, & Desmond, 2020) claim that many surveys to assess the crisis are too targeted in scope, either in demographics or location. Another obstacle is that the court case files are not standardized in format. Desmond et al.'s study on eviction court cases from 12 states found that roughly 22% of the court cases had some form of inaccuracies (vague, missing, or false information) (Porton et al., 2020). Many states

run eviction and foreclosures through state housing court. When Desmond et al. compiled information from multiple states to assess eviction across the United States, the records from different states contained variation in exact information and format (Porton et al., 2020). It is important to minimize inaccuracies because inaccuracy increases bias which can skew analysis (Porton et al., 2020).

Organizations and researchers increasingly make use of large datasets to track patterns. (Porton et al., 2020) proposed that data collection and analysis can be used to combat and isolate incidents of predatory lending and eviction.

Although the various registries of deeds across Massachusetts store foreclosure documents as public information, their websites can be difficult to work with. The websites limit the amount of data downloaded at a time to a maximum of 2000 documents. The websites also do not show all results that match the search criteria. Some registries charge \$1 per page downloaded, and as a result, cost becomes a barrier to aggregating data.

MAAPL is working on creating a database that contains all available Massachusetts foreclosure and eviction data from the 21 registries in Massachusetts since one does not exist (*MAAPL History*, 2012). This database will contain indexed data from the documents relevant to foreclosure from the various registries of deeds as well as file references to where the documents can be found. The analysis that MAAPL performs on the data can then be used to defend victims of predatory lending and illegal foreclosure, and promote legislation protecting homeowners against these problems (Riley et al., 2020). The analysis of this data would also allow for the filing of lawsuits against perpetrators of illegal foreclosure and predatory lending.

2.4 Previous Work on MAAPL's Database

This section discusses MAAPL's current data system, what a previous research group accomplished, and where work is left to be done. We explain the need to expand on current methods of interacting with the system and a framework to do so, keeping in mind the initial user groups and stakeholders. Finally, we will discuss what principles are useful to evaluate system interfaces.

A 2020 study (Riley et al., 2020) conducted in collaboration with MAAPL resulted in an initial proof of concept for a database design, and mainly involved gathering related information in public records about foreclosures. The research group then contacted local municipalities and registries of deeds to obtain relevant data from 2014 to 2020 on foreclosure cases. The technical aspects of their work involved designing a relational database^{§§} to effectively store this data. They also developed a cleaning procedure^{*} to process the data before entering it into the database. Lastly, they developed a road-map for future work based on the needs of the MAAPL organization. The road-map is a combination of their iterative design suggestions and the defined needs of the data system based on MAAPL's goals.

The existing work completed by the previous research group affiliated with MAAPL on its database focused heavily on the design and implementation of a structure to hold data. However, a database requires more than just the actual data storage structure to be

^{\$\$}A type of database that stores information and how the information relates to other information stored in the database

 $^{^{*}}$ A procedure to systematically remove errors in data when putting it into a database or when performing analysis

useful. The database requires a larger system architecture*where the database fits in as one single, but important component. Such a system must be designed around the intended user base, meaning MAAPL will have to adopt a formal development strategy for long-term development and system sustainability. A development plan will not only enhance the quality of MAAPL's system, but make it easier for future projects to get to work with a minimal learning curve.

Many modern databases run on some form of Structured Query Language (SQL)[†]. This language makes use of specific query requests to perform a variety of tasks on a collection of data. A person who has no prior coding experience will struggle to interact with a SQL database if they do not understand the language and syntax needed to make requests to the database. In order to extract or input the information they want they must first learn the structure of SQL. As a result of this, public SQL databases make use of a front-end interface. This interface masks the inner workings of the system with intuitive visual choices, making it easy for non-technical users to interact with the database.

 $^{^{*}}$ A structure (akin to a house) that must not only have individual working components, but must take into consideration how they operate as a unit

[†]A programming language designed to manage variable amounts of data in an organized way

3 Methodology

Our goal was to further develop MAAPL's data management system and overall data management plan. In order to execute this goal, we created four objectives:

- 1. Evaluate the current data management system
- 2. Collect data from various registries of deeds
- 3. Implement changes to the data management system
- 4. Generate an ongoing plan for the development of the data management system

In this chapter, we explain how we modified the data management system through the use of these four objectives.

3.1 Evaluate the Current Data Management System

The purpose of this objective was to assess the state of MAAPL's current data management system. By doing this, we were able to better decide on the needs of the system and the priorities of different components. In this objective, we address the following research questions:

- 1. Who are the stakeholders, and what are their overall needs from the system?
- 2. How does the system compare to industry best practices and the ten heuristics^{*} for human-centered design[†]?
- 3. What are the strengths of the current system, and what needs to be changed?

Before starting any kind of analysis, we identified and interviewed the key stakeholders of the data system. Although the concerns of users entering data were a large focus of our project, we also had to consider the wider scope of the data system's purpose. This process consisted of discussions with MAAPL liaisons Grace Ross, the organizer of MAAPL; Scott Jiusto, a MAAPL collaborator; and Steve Floridia, a MAAPL IT volunteer. During these discussions, we talked about the overall goals of the system, examples of users, and prototypes of the system.

We also used materials from the previous study that created a database proof of concept for MAAPL (Riley et al., 2020) to further assess the overall needs of the data management system. These materials included a Future Development Guide and Guides for Public Data Collection. By reviewing these documents, we were able to see what the previous research team had in mind for the development of the database after the conclusion of their work.

^{*}Approach to a problem that gets accurate enough feedback in a short-term project (Heuristics - Definition and examples, n.d.)

 $^{^{\}dagger}\mathrm{A}$ design philosophy in which the ease of user accessibility is the primary consideration.

3.2 Collect Data from Various Registries of Deeds

Before implementing the data management system, we first had to assess the data that should be included in the system. From our discussions with stakeholders, we discovered that the database created by a previous research group was not as comprehensive as MAAPL intended it to be. Many documents that were of interest to MAAPL were not included in the previous database, such as mortgage deeds and assignments of mortgage, and needed to be added. MAAPL also wanted data from 2004 to present, whereas the previous research group requested data from 2014 to present. Additionally, many registries of deeds did not respond to the previous research group's data request (Riley et al., 2020).

Worcester County, Hampden County, and Plymouth County were of special interest to MAAPL because of their history with the 2008 housing crisis. Worcester is the largest county in Massachusetts (by land area) and also among the most impacted by the crisis. Hampden County contains Springfield, which was hit particularly hard. Finally, Plymouth County was selected as it was the overall hardest hit county in Massachusetts. MAAPL believes that the effects of the 2008 crisis on Plymouth are often overlooked as there is no major city in Plymouth. MAAPL also wanted a geographically diverse spread of data, since the economies across the state vary depending on location. Dukes County and Nantucket County were targets as they are small islands with unique local economies. We decided to reach out to all 21 registries in Massachusetts because it would not be significantly harder to contact 21 registries compared to contacting the few that MAAPL showed preference towards.

Since we reached out to 21 registries of deeds, we created an email script to request the data of interest. In order to create this script, we first referenced an email script created by a previous research team (Riley et al., 2020). Using this script as well as help from Grace Ross, we created a list of specific documents to request from each registry of deeds. This list of documents is shown below with additional annotations.

- 1. Foreclosure Deed: documents who purchased the home; usually is directly followed by Affidavit of Sale and Advertisement.
- 2. Affidavit of Sale and Advertisement: usually attached to a Foreclosure Deed; proof the lender followed the law requiring a home to be advertised in the local news-paper for three consecutive weeks, and documentation of the auction.
- 3. Certificate of Entry and Possession Notice: certifies that a home has been entered by a bank representative without contest, which means the home is 'foreclosed by entry'.
- 4. **Power of Attorney:** document that grants one party the power of attorney of the other. In a broad sense, this means that the grantee can sign documents on behalf of the grantor.
- 5. Mortgage: a type of loan, with documentation (the mortgage and the note) created when a person buys a house by borrowing money from a lender; details the terms of how the borrower repays the lender.
- 6. Assignment of Mortgage: documents a transfer of documents, in this case a mortgage and note, between two parties.

- 7. Affidavit: written and signed sworn statement of fact by a party; several different types may be filed during a foreclosure, i.e. swearing that the foreclosing mortgagee possesses the mortgagor's note
- 8. Petition, Order of Notice, Complaint: several types may be filed during a foreclosure; a Notice to Cure starts the foreclosure process by alerting a homeowner they are in default; a Complaint or Order of Notice is filed in Land Court which requests the military status of the defendant.
- 9. **Pooled Mortgage:** data stored by the Securities and Exchange Commission which contains information about how mortgages are bought and sold as loans.
- 10. Tax Assessment Records: home valuation records stored by town assessor's offices.

After researching Massachusetts Public Records Request Law and consulting with an IT employee from a registry of deeds, we created a concisely structured email script (Appendix A) to request data from each registry (A Guide to the Massachusetts Public Records Law, n.d.). This script includes specific language which complies with Massachusetts Public Records Request Law so that registries were legally required to respond to our requests within 10 business days with whether or not they could fulfil the request, and an estimated time to fulfill the request (A Guide to the Massachusetts Public Records Law, n.d.).

3.3 Implement Changes to the Data Management System

Before our work began, MAAPL's data system consisted of a database structure and some preliminary code written in Python^{*}, a popular programming language, to input data into the system. While a previous research group produced a proof-of-concept database structure, this structure required further development and revision–such as a user interface–so that non-technical users can interact with it. In this section, we propose a design philosophy for the long-term collaboration between MAAPL and system developers.

Database Development

The database structure was revised to account for all documents of interest discussed in the previous section. The previous research group did not request Mortgages, Assignments of Mortgages, Orders of Notice, and Affidavits related to foreclosure from the registries of deeds. For all documents, many new data points were identified as important for legal analysis which had to be added to the database structure. Additionally, indexed data from registries of deeds does not necessarily include all of the data that is relevant to legal analysis. For example, there is a large difference between "for value" and "for value paid" legally in these foreclosure documents. The registries of deeds do not include this distinction in their indexed data. In the future, volunteers from MAAPL will use documentation created by our team to manually input these fields. Additionally, for a court case, the specific documents referenced by the database must be provided as evidence. As a result, we created space in each database table to link the indexed data to the actual images of the documents by including a field that contained the name of the file in the storage system we created.

The database was created in MySQL, an open-source Structured Query Language (SQL)[†]. To load data into the database, we created Python scripts to generate SQL statements from

^{*}A widely used programming language that emphasizes readability of code.

[†]A programming language designed to manage variable amounts of data in an organized way.

the Excel spreadsheets of data provided to us by the registries. These scripts automate the process of adding the data from the registries to the database. SQL insert statements are uniformly structured with key words followed by the data points in order. Our script extracted the data line by line from the Excel spreadsheet, reordered it to match the database table order, and added blanks where the data did not exist in the spreadsheet. The script created one line of SQL code for each line in the spreadsheet. After the script generated the code necessary to add the data from the spreadsheet, we ran the code to add the data to the database. We were unable to do this for every registry since it required tailoring a different script to each format of indexed data the registries provided.

User Interface

We approached our work in creating a user interface using an iterative design framework. This framework involves assembling and iteratively updating a list of priorities for both the system and the larger project road-map.

In our framework, the system is thought of as a puzzle with many connected pieces, or components. Typically, software projects follow the "software development life-cycle." In this process, the software requirements are identified, the software is completely designed, then completely implemented, then tested. This also means each software component is created at the same time. This is a very linear process. A shortcoming of this approach is if anything is redesigned, the process goes back to square one.

Instead, we took a more iterative approach. Over the course of development, each component was designed as simply as possible and was thoroughly documented. Over time, each piece became more detailed. This way if demands grow for new features, or a component needs to be changed, changing one piece does not affect the usability* of others. Frameworks with similar approaches are widely used amongst professional developers and result in stable[†] systems that can more readily change hands between developers.

In our version of this system, the work completed by (Riley et al., 2020) was modified to new requirements and fits in as one component of a larger system. We built not only the database, but a user interface to perform most typical database interactions such as data entry[‡] and searching. We built simple, well-documented system structures that can be modular[§], scalable[¶], and sustainable^{\parallel}. This not only resulted in system organization that can easily scale with new developments, but also resulted in a reduced learning curve for future developers (such as student project teams and volunteers).

From the information available to us, the initial proof of concept database was hosted locally on the personal computers of the previous researchers. The majority of our development of this system architecture involved updating the database and implementing a web development framework^{**}. We used the Django framework^{††}–an intermediate-level framework written in Python–to facilitate our design and implementation of the database's user interface.

^{*}A metric for how easy or difficult it is to use an object for its intended purpose.

[†]Can handle change; Well understood system; Consistently operates as expected

[‡]The act of putting data into a location, in our context a database.

[§]Easy to modify; Easy to change.

[¶]Easy to expand upon; Easy to fit increased demand

 $^{{}^{\|} \}mbox{Requires little maintenance on completed parts; Has a clear path of development or method of maintaining.$

 $[\]ast\ast\ast$ For all intents and purposes, the same as Web Application Framework

^{††}A popular open-source web framework that helps assemble large applications.

Our team prioritized implementing the database structure into a larger web application framework^{*} and writing drivers, which communicate between the database and the user interface. Our next priority was building out an interface to make data entry as easy as possible. Ideally, users could upload Excel files directly to the database, and in the absence of an optical character recognition system[†] capable of automating document intake, there is an entry form for volunteers to manually add data to the database.

Practices to Guide System Development

While our development was guided by information from the stakeholders of the system, we also utilized common metrics to guide the design of our system to ensure it is useful. Some metrics used to guide the system development included documentation of code and object-oriented principles of design[‡]. Additionally, we used Nielsen's ten usability heuristics for user interface design to inform our construction of the interface. These heuristics were first developed in 1994, and have become industry rules-of-thumb for human-computer interaction (Langmajer, 2020) (in Research-Based User Experience, 2020). The ten heuristics are:

- 1. Visibility of system status
- 2. Match between system and the real world
- 3. User control and freedom
- 4. Consistency and standards
- 5. Error prevention
- 6. Recognition rather than recall
- 7. Flexibility and efficiency of use
- 8. Aesthetic and minimalist design
- 9. Help recognizing, diagnosing, and recovering from errors
- 10. Help and documentation (in Research-Based User Experience, 2020)

These heuristics helped us address problems that stakeholders and users may not recognize are present in the system. For example, one of the ten heuristics is "help recognizing, diagnosing, and recovering from errors." In order to evaluate the system through this heuristic, we used the database and asked ourselves related questions like 'If data is entered incorrectly, can the system recognize the error?' and 'Does the system alert the user if data is entered incorrectly?'. Then, we judged whether the database addresses this heuristic well, or if it still needs improvement in that area. By doing so, we were able to better gauge the compatibility of our interface with the average stakeholder such as a MAAPL volunteer, and record specific areas where future developers can advance system development. Since one of

^{*}A development framework with the intent of making it easy to develop web applications.

[†]A system that is programmed to recognize characters in images or PDF documents with the intent of transcribing that information into computer readable text.

[‡]Principles of design used when making effective programs in Object Oriented languages like Python.

our project goals is to improve the sustainability of the data management system, using development guidelines to assess the system–rather than just opinions of stakeholders–helped to standardize the system. This standardization and adherence to general practices will make it easier for future developers to further work on and improve the system.

3.4 Generate an Ongoing Plan for Development of the Data Management System

While developing the overall data management system, we also created a plan to continue advancing the system. Our team assessed what the system still needs, such as an analysis component. We created a priority list of work left to be done, and the technical knowledge needed to complete it. This objective was guided by the following questions:

- 1. What improvement tasks can we accomplish during our project, and what are the highest-priority tasks for future development groups?
- 2. How do we leave an effective code base to build on?
- 3. How do we use documentation to ensure that the system works without our direct involvement after the project is completed?

As is mentioned in Section 3.1, we created a list of the data system's existing functions so we can see which aspects of the system need adjustment and which aspects can be left as-is. This list helped our team categorize which aspects of the system needed attention first during our project, and which tasks could be left for future development. Additionally, we commented on each element of the list with some suggestions and resources for future development.

Documentation was one of the most critical aspects of our project. We created documentation by commenting our code, creating user guides (Appendix C and D), and writing a future development guide (Appendix B). Commenting our code is intended to make the code easier for future technical developers to understand. The user guides provide directions on how to use our user interface and how to interact with the database. The future development guide assembles relevant information to various development projects, which is intended to reduce the amount of training and preparation time.

In order to ensure the sustainability of the data system, our team worked towards establishing relationships with various Massachusetts registries of deeds. In doing this, our team hopes that MAAPL has the ability to collect relevant information and documents that the database needs.

4 **Project Outcomes**

In this chapter we present the results of our data collection efforts, an overview of the software we created to hold the centralized data, and a description of the interface we implemented to access the data easily. We also identify remaining gaps and challenges where future improvements can be made.

4.1 Data Collection from Registries of Deeds

We collected data from 12 of the 21 Massachusetts registries of deeds. This section will contain a summary of the data we received, and some of our recommendations for future data acquisition.

Results

After sending our email to each registry of deeds, we were met with varying degrees of success. Some registries responded to our request saying that they could not fulfill it due to time, personnel, technology, or other constraints. Other registries sent us data within a week, and the rest were able to complete our request within 2-3 weeks. We were also contacted by a consultant to the Secretary of the Commonwealth's Registry of Deeds division, who aided us in gathering data from nine registries. Table 2 describes our results in detail.

MAAPL was focused primarily on receiving data from the Northern Worcester Registry of Deeds, Worcester Registry of Deeds, Hampden Registry of Deeds, and Plymouth Registry of Deeds, as these counties were hit particularly hard by the 2008 housing crisis. We received indexed data from two of these registries (Worcester North and Worcester South) and images of documents from one of those registries (Worcester North). In addition, we received data from 10 other registries, and images from Nantucket and Dukes.

Registry	Indexed Data Received?	Document Images Received?	Details
Barnstable	No	No	N/A
Berkshire Middle	Yes	No	Received all indexed data
Berkshire North	Yes	No	Commonwealth contractor
Berkshire South	Yes	No	
Bristol Fall River	No	No	N/A
Bristol North	Yes	Yes	Received data on USB, Not indexed
Bristol South	No	No	N/A
Dukes	Yes	Yes	Received indexed data and images, images indexed in spreadsheet
Essex North	No	No	N/A
Essex South	No	No	Communicated with this registry, due to extenuating circumstances was not able to fulfill request
Franklin	Yes	No	Data from Secretary of the Commonwealth contractor
Hampden	No	No	N/A
Hampshire	Yes	No	Data from Secretary of the
Middlesex North	Yes	No	Commonwealth contractor
Middlesex South	Yes	No	
Nantucket	Yes	Yes	Received indexed data and images, images indexed in spreadsheet
Norfolk	No	No	N/A
Plymouth	No	No	Gave access to downloading data through website, but the downloads were inefficient and pdfs instead of spreadsheets
Suffolk	Yes	No	Data from Secretary of the Commonwealth contractor
Worcester South	Yes	No	Received labeled indexed data in csv, it was entered into the database
Worcester North	Yes	Yes	Received indexed data (unlabeled), put images of documents on an external hard drive

Table 2: Results of Public Records Request

Challenges

Although we gathered a lot of data from most of the registries, we ran into many challenges. The biggest challenge we faced was receiving extremely varied types of data. While we requested indexed data as well as the documents associated with this data, only two registries were able to provide us with images of the documents. The different database formats of each registry also proved to be a challenge, as some registries had no problem looking up data for us and sending everything we requested in spreadsheet form, while others were only able to provide us with some of the requested documents in nonstandard file formats. Another difficulty with these requests was the sheer size of the data, so we needed to mail a USB or set up a Google Drive folder to acquire data from some registries. Overall, we never got exactly what we wanted. Some registries were not able to properly sort through the data types in their database, so they sent us far more data than we had requested. Other registries did not index all of the documents we requested, and could only send us some data from a few of the documents we requested.

4.2 Construction and Implementation of the Database

Data is useless without context. The database we created not only holds data we gathered from the registries of deeds, but also associates the documents together to provide context. This section discusses the structure and implementation of the database.

Database Structure

The database is structured to hold data from the following documents, which are stored in registries of deeds unless otherwise specified:

- 1. Foreclosure Deed: documents who purchased the home; usually is directly followed by Affidavit of Sale and Advertisement.
- 2. Affidavit of Sale and Advertisement: usually attached to a Foreclosure Deed; proof the lender followed the law requiring a home to be advertised in the local news-paper for three consecutive weeks, and documentation of the auction.
- 3. Certificate of Entry and Possession Notice: certifies that a home has been entered by a bank representative without contest, which means the home is 'foreclosed by entry'.
- 4. **Power of Attorney:** document that grants one party the power of attorney of the other. In a broad sense, this means that the grantee can sign documents on behalf of the grantor.
- 5. Mortgage: a type of loan, with documentation (the mortgage and the note) created when a person buys a house by borrowing money from a lender; details the terms of how the borrower repays the lender.
- 6. Assignment of Mortgage: documents a transfer of documents, in this case a mortgage and note, between two parties.
- 7. Affidavit: written and signed sworn statement of fact by a party; several different types may be filed during a foreclosure, i.e. swearing that the foreclosing mortgagee possesses the mortgagor's note
- 8. Petition, Order of Notice, Complaint: several types may be filed during a foreclosure; a Notice to Cure starts the foreclosure process by alerting a homeowner they are in default; a Complaint or Order of Notice is filed in Land Court which requests the military status of the defendant.

- 9. **Pooled Mortgage:** data stored by the Securities and Exchange Commission which contains information about how mortgages are bought and sold as loans.
- 10. Tax Assessment Records: home valuation records stored by town assessor's offices.

The database is a relational database. This means that it associates different pieces of information across different database tables. The database is structured to associate all tables to a specific mortgage, as can be seen in Figure 3. Each mortgage has a mortgage ID generated from the book, page, document number, and registry it is stored in. All other document tables have a column that stores the mortgage ID of the related mortgage. As a result, all documents related to the same foreclosure contain the same mortgage ID.



Figure 3: Simplified Entity Relationship Diagram (ERD)

Databases are formatted so that each row in a table is one object. For example, one row in the mortgage table is one unique mortgage. Each column is a particular piece of information, such as the ID of the mortgage. This ID is generated from the book, page, document number, and registry the document is assigned by the registry of deeds. The combination of these data points is enough to uniquely identify each mortgage. For other tables to refer to a specific mortgage, they have a column that stores the ID of the related mortgage. This is represented in the simplified Entity Relationship Diagram (ERD) as arrows pointing from a given table to the mortgage table. Power of Attorney documents are not related to any specific document because the associated grantors and grantees can be banks or people involved in any of the documents. If the Power of Attorney table contained references to specific tables, there would have to be multiple versions of power of attorney–bank to bank, bank to person, person to person, etc. Since it is simpler to have one Power of Attorney table, the people and banks involved in Power of Attorney documents must be cross-referenced against the associated documents by users.

Database Implementation

The database was implemented using MySQL, an open-source Structured Query Language (SQL)*. The database is hosted on a server that the user-interface interacts with, which keeps the database backed up in a secondary location. In Appendix D, a detailed breakdown of the database structure can be viewed. The tables contain a combination of data points from the indexed data and data points regarding specific information in the document. Each document is given either a book and page number or a document number in the registry of deeds. There are two types of land in Massachusetts: recorded land, which comprises a majority of Massachusetts, and registered land, which has more regulations. A document with a book and page number is a document regarding recorded land, and a document with a document number is a document regarding registered land.

The data that we received from different registries was not uniformly structured, and needed to be cleaned before it could be entered into the database. There are two main ways the data is structured: having each document be represented by one row in the spreadsheet, or having one row per party involved in a document. For example, one mortgage that had two mortgagors and one lender would either have one row in the spreadsheet, or three rows: one row for each mortgagor and one row for the bank.

There are some gaps in the data we were able to load into the database. As previously discussed, many fields of the database contain information that is not indexed by the registries, such as how many times the word "assigned" was mentioned in the advertisements in Affidavits of Sale. As a result, when we loaded data into the database from the indexed data from the registries of deeds, many fields were left blank. Another limitation of the database is the amount of extraneous data provided by the registries. The data provided by each registry contained all Power of Attorney documents and Mortgages generated from 2004 to the time our request was processed, not just the Power of Attorney documents or mortgages related to foreclosure cases. Some registries also sent data containing additional documents not in our request. This required our team to filter out extraneous data before entering data into the database.

Since each registry structured their indexed data differently, we were unable to put all of the data we received into the database. This is because entering it will require writing scripts for each document type and for each registry. The database currently contains

^{*}A programming language designed to manage variable amounts of data in an organized way.

Worcester South's data, as it was the largest and most thoroughly labeled data we received. Its inclusion added over 100,000 entries to the database.

4.3 The User Interface for Search and Data Entry

The graphical user-interface, written using Django–a Python web framework– allows users to interact with the database without using SQL, streamlining the procedure of obtaining or entering information. This component is crucial in considering the types of users the system will have, such as MAAPL volunteers doing manual data entry.

Search

One of the main functions of the user-facing front-end application is searching the database. Figure 4 depicts the search form that allows users to filter through foreclosure-related data.

III MAAPL Database Po	ortal Search Database					MAAPL_Admin 🙆 👻
	MAAP Search MAAPL R	L Databa	se Portal			
	Document Inf	ormation				
	Book Page	Document Number	Registry	Docun	nent Type	
				×	···· · · · · · · · · · · · · · · · · ·	
	Address Infor	mation				
	Street Number	Street Name		Town/	City	
	Search Records					

Figure 4: Image of the search system on the user interface.

The search function accepts common traits among documents in order to filter through the various sets of data within the database. This makes it easier for the user to do a wide search of all the relevant information, allowing them to be as specific as they need to be. Results appear tabulated by document type on the results page. This process makes it much easier for a user to search and find data quickly. The search feature also utilizes an 'export to csv' feature to enable analysis of the data. This feature creates a Comma Separated Value file format (.csv), a common file format that can be easily read by other applications (such as Excel) and used for analysis.

Data Entry

Normally a user would have to write SQL insert statements to enter items into a database. Likewise, a user would also have to write SQL query statements to retrieve items from a database. We aimed to reduce this complexity by utilizing interactive forms to handle data input and output. These forms do not require any prior knowledge of the SQL language, nor our system on the part of the user. Using these forms, one can easily input data into the database. One of these forms is pictured below in Figure 5. In this form each of the different fields that can be entered into the database are labeled. For the types of data that require specific entry, like the registry that the document is from, there is a dropdown menu for the selection with multiple choices so a user does not have to worry about specific spelling.

MPL Database Portal Search Database Enter Data					
MAAP Input Data to Ma Seat boomer type fractioner Deal	L Datak APL Records	oase Po	ortal		
Street Number:	Street Name:			Town:	
Registered vs. Record Ls it Registered or R	ed: tecorded? 👻	Book:	Page:	Docume	nt Number:
Registry: Teo Registry selecte	1	Does it say "amoun	t paid"?		
Parchaier 1 First Name Last Name/Compar Signer	Purchaser : First Nar Last Narr File Name:	2 me ve/Compar MI	Purchaser 3 First Name Last Name/Compan	MI	Purchaser 4 First Name Last Name/Compar MI
First Name Last Nome Titike/Engloyer Gulank	M				

Figure 5: Image from the data entry interface.

User Accounts

The system makes use of an authentication system for user accounts. This feature will allow MAAPL to restrict access to critical aspects of the database to only those who are system administrators. The authentication system also enables MAAPL to create administrator accounts to manage the system. Making use of accounts also means that volunteers must sign in to access any feature on the database, even non-administrator features.

4.4 Documentation

This section describes a number of different types of documentation created to help others interact with the database and continue working on it:

- Annotated foreclosure documents can help users and system developers by highlighting where pertinent information can be found in the documents requested from registries of deeds
- The future development guide explains what parts of the system need to be improved or added
- The database documentation details each piece of data stored in the database, along with an explanation of how the database works with the front end
- User manuals assist anyone using our system in the current state and for developers interacting with the code directly.

Annotated Documents

Based on assistance from Grace Ross, we annotated several foreclosure-related documents. These documents, shown in Appendix F, will assist future users of the database who are manually inputting data into the database from foreclosure documents. Each field of data is highlighted and clearly labelled in each document, so users who are not familiar with foreclosure documents will be able to quickly recognize what needs to be recorded. An excerpt of an annotated Complaint document is shown below in Figure 6, where fields of data such as "case number" are clearly highlighted and labeled. Besides assisting future users, these annotated documents can also be used by MAAPL to help clients read their foreclosure documents, or by future developers to better understand the organization of the database.



Figure 6: Excerpt from an annotated complaint document.

Database Documentation

This document explains the thought process behind the implementation of the database, and detailed descriptions of the fields in the database. It contains simplified Entity Relationship Diagrams, highlighting specific tables in the database and how they connect. It also documents our assumptions made in the structure of the database. For example, one assumption made in our database is that book, page, and document number combinations are unique to each registry. Therefore, the unique identifier for documents is a combination of book, page, document number, and registry.

User Manual

We created a user manual for MAAPL volunteers to understand how to interact with the data management system. The manual contains a guide explaining all of the features in the front-end user interface, what they do, and how to use them. Instructions include creating an account, searching the database, and entering data into the database.

Documented Code

We are leaving code documentation for future developers as well as learning resources that we utilized in developing the system. This includes documentation not only of our user interface, but the database code and scripts used to populate the database. Full documentation on the code will be available at the Github repository we have used to develop the system.

5 Recommendations

We viewed our work as a starting point for many future projects. Therefore, it was important to us to create a comprehensive set of recommendations. This chapter details some of the specific recommendations we have for future developers and MAAPL, varying from technical modifications to the database to data acquisition strategies.

5.1 Future Development Guide

We created a Future Development Guide (Appendix B) with recommendations for the further development of the system, which we summarize here:

- 1. **Data Collection:** Automate data collection either by implementing Optical Character Recognition Software or scraping the websites of registries of deeds.
- 2. Front End Updates: Add functionality to the user interface, such as the ability to delete entries.
- 3. **Database Updates:** Add more documents, fields, and tables to the database as needed to fill gaps identified by our team and stakeholders.
- 4. File System Implementation: Implement the file hierarchy designed on the permanent server and connect file references to the database.
- 5. Security and Account Management: Ensure that the front end is secure and user accounts have different permission levels that are strongly enforced. This is a prerequisite before the front end can be made public and linked to other features such as a case intake form.
- 6. **Bug Fixes & Code Refactoring:** Address any major bugs, inefficiencies, or deficiencies in the system. There does not need to be a dedicated effort for this, but future developers should be cognizant of addressing major issues and refactoring the system to improve performance and readability.
- 7. **Data Cleaning:** Create a process to filter out extraneous data and standardize the format of the indexed data received from the registries of deeds.
- 8. **Data Entry:** Create more scripts to enter data in bulk from the registries of deeds into the database.
- 9. Legal Analysis: Tangential to the work on the data system itself, we recommend analysis be completed on the needs of legal analysts who will make use of this database. Work should be completed on identifying the legal process, designing an analysis pipeline, and ultimately implementing or finding an appropriate application to serve those needs.

The future development guide was created to provide MAAPL and future developers with suggested tasks to ensure the success and longevity of its new data system. This guide is intended to be read by any person regardless of technical skill or detailed understanding of foreclosure, and will reduce the learning curve for future developers. In addition, it compartmentalizes and organizes all future work into smaller, manageable projects that can operate simultaneously or individually.
5.2 Server Recommendations

The database is currently hosted using WPI resources. It is our recommendation that a more permanent server solution be found. From our discussions with key stakeholders and our own analysis, it appears a custom server is the preferred solution.

The first option we considered was the Amazon Web Services: Relational Database Services. The minimum price is \$0.017 per hour which totals out to about \$12.24 per month (Services, 2007). The minimum requirements were deemed appropriate for the database we created, and at first, this seemed like a good option. However, MAAPL wants the database to be stored "in-house" so any form of online computation or storage would not be feasible.

The next possible idea was using a server rack like those found on server farms. This seemed promising as each server in a server rack costs about \$100 to \$250 on Amazon. MAAPL could also add or remove servers as they see fit. The problems with this option are:

- 1. The server rack would have a lot of parts
- 2. Ventilation and cooling cost money
- In-Rack^{*}, Room Level[†], or both types of fire suppression systems may be required (Control Fire Systems, 2018; Robin, 2020).

Due to the long term costs associated with the creation and upkeep of a mounted server rack, as well as the necessity of outside help to set up and calibrate the server rack, we believe that a server rack would not be the best option.

Our recommendation is a custom server. A custom server can be thought of as a very powerful desktop computer with high computing, processing power, and storage without high graphical computation capabilities. Looking at the custom server company Puget Systems, we found that a lower end custom server is about \$1000-\$2000. An extremely high end custom server is about \$4000-\$5000. While this is a much higher cost compared to the other two options, it would be a one time purchase for potentially decades of computing capabilities. As a custom server is just one system, it would require little to no setup and calibration. It would also have lower costs compared to a rack-mount server while remaining physically in-house.

5.3 Data Request Recommendations

We recommend any future data requests be made directly to the Secretary of the Commonwealth's office. Nine of the registries that sent indexed data did so through a contractor through the Secretary of the Commonwealth's office. A few of the registries who did not send data because of a lack of IT resources suggested contacting the Secretary of the Commonwealth's office instead. Contacting the Secretary of the Commonwealth's office directly also presumably makes collecting the data easier as there should be one contact person and a bulk data hand-off.

^{*}fire suppression system within the server rack itself, flooding the rack with fire retardant foam or heat suppressing chemicals if needed

 $^{^{\}dagger}$ fire suppression system installed in the same room as a server rack, which uses heat suppressing chemicals

6 Conclusions and Potential Impact

As discussed earlier, the foreclosure crisis is a widespread problem with a history rooted in racism. Organizations such as MAAPL try to help homeowners keep their homes and influence policy around lending and foreclosure. Consensus among historians suggests that in the history of policy change, successful movements require advocacy coalitions: grassroots movements of regular people volunteering their time to advocate for a cause (*The Advocacy Coalition Framework*, 2017). No one project, person, nor organization can address the crisis alone. This chapter reframes our work within the context of the foreclosure crisis.

6.1 Institutional and Organizational Power Disparities

As we have noted previously, regulations on mortgage lenders are comparatively weaker when compared to regulations on traditional banks. Additionally, the foreclosure process is non-judicial, complex and hard to combat on a case by case basis. To compound this disparity further, the most common victims of predatory lending and foreclosure are primarily Black and Latino people, who are additionally burdened by other systemic problems (Leffall, 2003).

Nonprofit organizations such as MAAPL run on the generosity of their volunteers with little to no backing from large institutions. Therefore, they are only as influential as the sum of their constituents. However, technology can help to facilitate communication and organization within these groups. MAAPL's data system helps to level the playing field between MAAPL (and its constituent organizations) and the lenders it seeks to combat by expanding the reach and impact of MAAPL's work.

6.2 Expanding the Toolbox

Organizations such as MAAPL are undertaking the lengthy, complicated process of attempting to gain restitution for those affected by the foreclosure crisis. The separate aspects of our project–the front-end, the database, the documentation, and the data collection operations–all aimed to address critical areas for improvement to enhance MAAPL's organizational mission. Each component of the project was designed to assist MAAPL in a specific dimension of their work. In this section, we will tie our work back to its potential impact for MAAPL.

Centralizing and Democratizing the Data

In order to prosecute predatory lenders, MAAPL needs to prove in a court of law that some loans were predatory. This requires a significant amount of data and data analysis. Current database systems, web frameworks, and hosting technologies enable storage of the data and easy access for MAAPL's analysis.

While foreclosure records such as the documents we collected are classified as public information, the process of obtaining this information was complicated, time consuming, and had a variety of positive and negative outcomes. By collecting relevant data from 2004 to the present, we have begun the process of increasing access to this information for MAAPL and other organizations like it. This centralization of information further reduces barriers to making change by removing the metaphorical "middle-man" that is the registry of deeds, enabling MAAPL to directly access and analyze information.

Bridging the Gap, Technical to Grassroots Volunteer

The next crucial area where this work enhances MAAPL's power is in bridging the gap between the complexities of a large data management system and a general user about whom we cannot assume any level of technical experience. Collecting large amounts of foreclosure data within the state is of little use if there is no place to store it. Furthermore, this data is not useful if there is no easy way for anyone to access it. While information can be centralized, it is not democratized if people have no understanding of how to access it.

The user interface and documentation play key roles in breaking down this knowledge barrier which restricts access to essential information. The interface primarily serves the purpose of streamlining access to the wide variety of data we collected in the form of standardized intuitive search and data entry forms. The documentation was created to address any user who would be unfamiliar with these types of interfaces. The user interface and its documentation increase accessibility of the database to the average volunteer at MAAPL. This access increases the capacity of MAAPL volunteers who can use the database to chip away at disparities through data entry and analysis, resulting in more people making a larger overall impact.

Protecting and Nurturing the Project Development

As stated before, grassroots organizing is notoriously difficult and can be very time intensive. The future development guide–contained in Appendix B–provides guidance for further progress on MAAPL's data management system. We designed the future development guide with the intent to assist MAAPL organizers' understanding of the system they are inheriting from our work and how to move forward with it. We hope that this guidance can help MAAPL work towards fully utilizing the database and taking every advantage provided by such a system.

6.3 The Long Fight

As we have stated many times and indicated in our documentation, this work is one component of a larger project which requires many hands to accelerate its development. We have suggested improvements, modifications, and new features to the data system, as well as other efforts that would make use of the database without directly modifying the system. It is our hope that our work enables MAAPL to advance its capabilities in the long fight against predatory lending and illegal foreclosure.

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Appendix A: Registry Data Request Email

Subject line: Massachusetts Public Records Request for Research Project

Your Honorable Register [INSERT NAME HERE],

We are a student research team at Worcester Polytechnic Institute (WPI) contacting you to make a formal Massachusetts public records request for our research project. The focus of our research is to establish a data system that will enable analysis of foreclosure data and lending practices in Massachusetts. [Customization]

We are hoping that you can help or refer us to someone who can assist us with our request. We would need the data by the end of April. We are looking for documents relating to individual foreclosures of recorded and registered land, specifically:

- Foreclosure deeds, affidavit of sale, and related advertisements
- Possession (certificate of entry) notices
- Power of Attorney (Certificates of Appointment) related to the above documents
- Mortgage, assignments, and affidavits related to the above documents
- Petitions/Orders of notice or complaints related to the above documents

We would be grateful for this data in whatever form is available. We can provide a physical memory stick or hard drive for the data to be placed onto, or we could arrange to have it transferred via an online storage system (such as Dropbox or Google Drive), if that is preferable.

If you have any further questions or need clarification about this request, please feel free to contact us via phone or email (listed below). Additionally, our project advisors–WPI professors Dr. Rick Vaz, Dr. Chrys Demetry, and Dr. Scott Jiusto–are copied on this email if you want to contact them directly.

Thank you very much, WPI Foreclosure Data Team Keval Ashara, Sam Gould, Caitlin Kuzma, Patrick O'Mullan gr-foreclosure-data-d21@wpi.edu

Appendix B: Future Development Guide

MAAPL Data System Future Development Guide

Keval Ashara, Sam Gould, Caitlin Kuzma, Patrick O'Mullan

OVERVIEW

This document is a guide to future development of the MAAPL data management system and serves as our primary source of recommendations. It outlines the path forward in development as we see it. We recommend several different projects to further development of the system. In this document, we first provide a brief overview of the topics you will find in the subsequent development guide. The description of the system is current as of May 2021. We describe the state of the system, different areas of potential development, and the recommended skill sets for each area of development.

CURRENT STATE OF THE SYSTEM (EXCERPT FROM EXECUTIVE SUMMARY)

Introduction and Purpose

If one is at all familiar with predatory lending-the practice of lenders taking advantage of borrowers through hidden fees or subprime loan offers-they are likely to associate it with the 2008 financial crisis. In reality, predatory lending has been around for hundreds of years, and is still a major problem in the 21st century. Moreover, predatory lending is difficult to fight because its definition is highly contested and a great deal of evidence is needed to prove its presence. As one might imagine, predatory lending often leads to borrowers falling behind on payments and defaulting on their loans.

Predatory mortgage loans can lead to foreclosure, which is a long, complex, and confusing process. In Massachusetts, the foreclosure process is typically non-judicial, meaning that lenders and other foreclosing mortgagees self-regulate the process outside of the state court system. Although the process mainly relies on the good faith of parties such as banks, there are many documents filed during the process–such as Affidavits–which attempt to prevent illegalities. However, exploitation of the process is still possible, and due to the complex nature of foreclosure, is difficult to address. In Massachusetts, there are 21 different regional registries of deeds where foreclosure documents are filed. Although each registry has a website where documents and data may be accessed, there is no centralized database which enables analysis of this publicly available data.

The Massachusetts Alliance Against Predatory Lending (MAAPL) is one organization that fights predatory lending and illegal foreclosures through activities such as protesting auctions, buying foreclosed homes, and spreading information about the foreclosure process. One of MAAPL's long term goals is to prosecute serial offenders of predatory lending and illegal foreclosure by analyzing Massachusetts foreclosure data. However, it's currently impossible to analyze all of this data because it is spread throughout the state and stored in the registries of deeds.

The goal of this work was to design and implement a user-friendly database for MAAPL to enable aggregation, research, and analysis of Massachusetts foreclosure data. In addition to creating the database, we collected foreclosure data from various Massachusetts registries of deeds. By continuing to collect and centralize this data, MAAPL hopes to perform analysis that will support court cases against serial predatory lenders and address illegal foreclosures in Massachusetts.

Methods and Outcomes

To advance MAAPL's work, we pursued the following objectives:

- 1. Evaluating the current data management system
- 2. Collecting data from various registries of deeds
- 3. Implementing changes to the data management system
- 4. Generating an ongoing plan for the development of the data management system

Before creating the database, we first took a look at the work done by a previous research group in collaboration with MAAPL, which helped to guide the design of our database. We also consulted with some stakeholders to get a sense of how the database will be used, and what MAAPL's long term vision for it is. Also during this time, MAAPL helped us create a list of documents of interest, shown below with their descriptions, to inform the creation of our data request to various registries of deeds and the organization of the database.

- 1. Foreclosure Deed: documents who purchased the home; usually is directly followed by Affidavit of Sale and Advertisement.
- Affidavit of Sale and Advertisement: usually attached to a Foreclosure Deed; proof the lender followed the law requiring a home to be advertised in the local newspaper for three consecutive weeks, and documentation of the auction.
- Certificate of Entry and Possession Notice: certifies that a home has been entered by a bank representative without contest, which means the home is 'foreclosed by entry'.
- 4. **Power of Attorney:** document that grants one party the power of attorney of the other. In a broad sense, this means that the grantee can sign documents on behalf of the grantor.
- 5. **Mortgage:** a type of loan, with documentation (the mortgage and the note) created when a person buys a house by borrowing money from a lender; details the terms of how the borrower repays the lender.
- 6. Assignment of Mortgage: documents a transfer of documents, in this case a mortgage and note, between two parties.
- 7. Affidavit: written and signed sworn statement of fact by a party; several different types may be filed during a foreclosure, i.e. swearing that the foreclosing mortgagee possesses the mortgagor's note
- Petition, Order of Notice, Complaint: several types may be filed during a foreclosure; a Notice to Cure starts the foreclosure process by alerting a homeowner they are in default; a Complaint or Order of Notice is filed in Land Court which requests the military status of the defendant.
- 9. **Pooled Mortgage:** data stored by the Securities and Exchange Commission which contains information about how mortgages are bought and sold as loans.
- 10. Tax Assessment Records: home valuation records stored by town assessor's offices.

These documents can all be connected to predatory lending and foreclosure, because most of them are filed during the foreclosure process. Understanding the intricacies and content of the documents not only helped us acquire data, but also helped inform the structure and fields of the database.

Data Collection

We sent a public records request to all 21 registries of deeds across Massachusetts. We requested indexed data and documents related to the foreclosure documents listed above from 2004 to the time our request was processed.

In total, we received indexed data from 57% of the registries and documents from 19% of the registries. The two most common reasons given for not providing the data requested were a lack of IT resources, and that the registries' websites would allow us to manually get the data ourselves. However, the websites for the registries of deeds limit downloads to a maximum of 2000 documents at a time, and our requests covered hundreds of thousands of documents in total.

Database

To store the data from the documents deemed important to the foreclosure process, we created a database. This database, shown in Figure 1, was designed to relate most documents to the mortgage referenced in the document. Each mortgage has an ID comprised of unique identifiers: book, page, document number, and registry. Since each foreclosure case is associated with a mortgage, this unique ID for mortgages can be used as the ID of the foreclosure. This system allows for multiple foreclosures at the same address, as there are instances of that happening in the data we received.



Figure 1: Simplified Entity Relationship Diagram (ERD)

File System

In order to tie the indexed foreclosure information to the corresponding pdf documents, a file access hierarchy was designed so that individuals searching the database can directly access the relevant files relating to a foreclosure. A file system, depicted in Figure 2, was chosen instead of utilizing MySQL's pdf storage feature to ensure higher system performance.



Figure 2: Proposed File access hierarchy for document access through the database.

User Interface

A user interface was created to serve as a "portal" to the database and can be connected to a remote server where data is stored. Included in this interface is a form for searching the database based on certain fields of interest and a form for entering data into the database. Additionally, first steps were taken in implementing an automated data entry system for bulk file uploads. These features minimize the required technical knowledge of an individual using the data system and streamlines the frequent processes one might use the database for. The "portal" also contains a feature to export data from the database into a Comma Separated Value file format (.csv) for analysts to use in their research.

MAAPL Database Portal									MAAPL_Admin 🕥 👻
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Figure 3: Image of the search system on the user interface.

PROJECT AREA: DATA COLLECTION

There are many gaps in the data acquired as of writing this guide. In total, 12 registries of deeds sent indexed data in CSV's and only four registries of deeds supplied the associated document images. Out of the four registries that sent the document images, only two associated the images to the indexed data. The indexed data also does not contain all data points of interest. Additionally, data about securitized trusts and pooled mortgages from the Securities and Exchange Commission (SEC) and assessed values of homes from town assessor's offices is missing from the database. A dedicated effort to adding data to the database would enable better analysis of the foreclosure data. There are many avenues to pursue to collect more data for the database.

Recommended Skills: Varying skills are needed depending on approach. For OCR and web scraping, developers will need technical skills. However, when collecting data from other sources, there is more flexibility in methods.

Areas for Work

Implement Optical Character Recognition

Motivation

Pulling the data directly from the document images can lead to much more detailed database entries. There is an abundance of data that is on each document of interest to MAAPL that is not indexed, such as handwritten notes. This could also be used to associate document images to the indexed data in the database.

Information

Steve Floridia is working on implementing Textract to input data into the database. Future developers will have to decide if they would rather use the Textract key-value interface or full raw text. Either way, this also involves translating the Textract output into SQL insert statements to add data to the database.

Implement Web-Scraping to Pull Data and Documents From the Registry Websites

Motivation

Many registries did not send our team data, with the response that the data we are looking for is on their websites. Manually pulling the data of interest was deemed too time consuming.

Information

The registries of deeds have websites where the public can search for and view many documents stored at the registry of deeds. Most registries do not charge for this. Creating a web-scraping script would enable the collection of indexed data and document images from registries that did not provide them. This could also be used to get documents that are not currently in the database. Document images could be used for manual entry, or could be put through OCR software as described in the previous project.

Collect Data From Other Data Sources

Motivation

As of May 2021, the database contains data that was indexed by the registries of deeds. Data from the SEC and town assessor's offices is also important for analysis. Additional data from the registries of deeds from where our team's data ended to present for future developers would also be of use.

Information

Future developers should make data requests from the various sources identified. They should make use of the Freedom of Information Act, as the data we are interested in is public information. In our References section is a good guide to public records law in Massachusetts by Secretary of the Commonwealth William Galvin

(https://www.sec.state.ma.us/pre/prepdf/guide.pdf).

PROJECT AREA: TECHNICAL FRONT-END IMPROVEMENTS

The data system has a user interface that allows users to input data to the database, search data, and export data, but it has many limits. As of May 2021, there is no ability to update or delete existing records in the database. There are other limits to the functionality of the system that should be addressed. Adding more functionality would enable further and more varied use of the database. This project involves adding functions or aspects to the user interface that were identified as good future additions.

Recommended Skills: experience with HTML, CSS, JavaScript, Python, and the Django Framework.

Areas for Work

Address Missing Functionality in the Interface

Motivation

There are identified missing functionalities in the front-end interface that need to be addressed in future work.

Information

The missing functionalities include:

- Ability to edit entries
- Ability to review manual data entry before submitting
- Ability to delete entries
- Ability to only grab selected entries for csv download
- Ability to connect documents together
 - 1. Reference mortgages by looking up a mortgage from any document
- 2. Reference foreclosure deed from affidavit of sale or vice versa
- Ability to view all assignors & assignees from an assignment
- Ability to view all sellers & sponsors from a pooled mortgage

Add New Aspects to the Interface

Motivation

Part of MAAPL's goal for this system is to open it to the public allowing searches of state-wide foreclosure data as well as assisting victims of predatory lending and foreclosure with their case intake form.

Information

- Integration of MAAPL's case intake form
 - * This may require implementing or finishing MAAPL's case intake form. This would involve creating relations in the database to associate the case entry form to other data in the database.
- Creating public website and connecting to database
 - * This requires cyber-security improvements, because the system as it stands is not ready to be public-facing.

- Connect the files to the database application This requires the file system holding the document images to be implemented.
 - Each document in the database has a field called "FileName" that can be used to store the location of the file in MAAPL's storage system. Two functions could be added to the user interface to connect the file system:
 - 1. Create the ability to view the pdf from the user interface search results. This could be by clicking on the "FileName" field or having a "view file" button that opens the pdf.
 - Create the ability that when the "download" button is pressed, the user can also download a .zip file containing all the documents that are in the .csv file.

PROJECT AREA: USABILITY IMPROVEMENTS TO USER INTERFACE

We initially intended to run user trials on our system. However, the scope of the project became too large. As a result, we had to try to construct an interface that would allow input and searches, but we were unable to obtain any constructive feedback.

Recommended Skills: experience with HTML, CSS, JavaScript, Python, and the Django Framework.

User Study to Revise User Interface

Motivation

The system needs to be as easy as possible for several key stakeholders: MAAPL volunteers, who are uploading the data either manually or in bulk; legal analysts, who will be searching for data and extracting it; and (eventually) victims of predatory lending looking to obtain resources to fight foreclosure.

Information

- 1. Conduct user studies on the existing interface
 - We recommend getting MAAPL volunteers from a variety of backgrounds, such as some potential legal analysts and volunteers who might do data entry. We also recommend a combination of think-alouds and surveys. The think-alouds can provide in-depth information, but usually are run with about 5 volunteers. Surveys can be applied more broadly, but rarely give detailed feedback.
- 2. Note difficulties users have and feedback from user studies
- 3. Make quality of life improvements based on user feedback as well as our following suggestions:
 - Make the first tabulated table appear automatically
 - Find a different way to navigate the tabs instead of a scrolling bar, having two becomes confusing
 - Add a search bar for key words in the data search.

PROJECT AREA: DATABASE UPDATES

The data system has a database that can store foreclosure data. Different shortcomings and missing information in the database have been identified, but we were unable to address this due to time restrictions.

Recommended Skills: We recommend experience in Structured Query Language (SQL). In particular, experience in MySQL is preferred, but it is likely that knowledge of other SQL languages will be transferable.

Address Missing Database Information

Motivation

The following is a list of all identified missing pieces of the database, whether that be documents, specific fields, or tables to relate different entities. In addition to adding the following pieces, the database could be optimized, and more constraints and triggers could be added, such as a trigger that updates other tables when an entry is deleted.

Information

- Missing Documents
 - * Other types of Assignments may be of interest to add to the database, i.e. Assignment of Bid, Conditional Assignment of Leases and Rents (which is attached to the mortgage)
- Missing Fields
 - * General fields that apply to multiple tables
 - Every time an authority document is referenced, the registry should also be recorded.
 We made the assumption that the authority document would be in the same registry as the document where it is referenced, but we discovered this is not true of all authority documents, adding authority document fields to lots of things. There may also be multiple authority documents referenced in a given document (see below).
 - · Document ID
 - This would make it easier to reference other documents in the future. This would also give every document an ID, which would standardize the documents.
 - * Foreclosure Deed
 - · Mortgagors
 - · Original mortgagee
 - · Current mortgagee
 - * Affidavit of Sale
 - Buyer
 - · Assignment data in advertisement
 - * Power of Attorney
 - · Authority document
 - * Registry Affidavit
 - Mortgagee
 - · Title of affiant
 - * Tax Assessment
 - · Address
 - * Assignment of Mortgage
 - · Signer organization/employer

Missing Tables

* Comment Table

- MAAPL suggested every document should have a comments section, our idea to implement this is to store a comments table that stores the ID or book, page, document number, registry of the document along with comments. This way there's not a large field that is usually empty in every document.
- * Authority Document Table
 - · Add the ability to have multiple authority documents

PROJECT AREA: INTEGRATING THE FILE SYSTEM

Implement the file hierarchy designed on the permanent server and connect file references to the database. There are two main parts to this file system. First, all document images should be in the same format. We have chosen pdfs.

Recommended Skills: A general understanding of file systems in modern computers. This area of work would pair well with "Technical Front-End Improvements". We recommend this area is completed tangentially with another project area.

Create the file system

- · Convert all document images to pdfs
 - Many documents received from the registries of deeds were in the ".tiff" file format. Many files were also named in such a way that they couldn't be opened by many computers (for example 0078.001.tiff was read as a ".001" file format by Windows computers, which is not an image format). We created a script to get rid of the periods from file names, and compile all images of a document into a single pdf when possible.
- · Implement the file structure as intended
 - We created a draft of the file structure for MAAPL's use. This structure should be implemented on MAAPL's server so that the documents are standardized and in the same place.

PROJECT AREA: SECURITY AND ACCOUNT MANAGEMENT

There will need to be a more dedicated effort into ensuring the front end is secure. This involves making sure that user account generation is restricted to users that have approval from MAAPI, user accounts have different permission levels that are strongly enforced, and generally improving the system's security so that the application can be public facing. This is a prerequisite before the front-end can be made public and linked to other features such as a case intake form.

Recommended Skills: Previous experience in computer networks, cyber-security, server systems, Python and the Django Framework are highly recommended for this project.

Some different ways we believe accounts can be restricted

- · Secure the account system
 - Some different ways we believe accounts can be restricted:
 - 1. Two-factor authentication
 - 2. Restrict to valid MAAPL emails
 - This means only allowing people to create accounts with emails through MAAPL's email system. Additionally, people should have to confirm their account through an email to that email address.
 - 3. Restrict the ability to add new accounts to system admins
- · Restrict certain actions to certain types of accounts
 - Different ideas for restrictions
 - * Public accounts are allowed to search and download, but not edit the database in any way
 - * Restrict deletion to higher-level accounts
- · Generally secure the system before making the system public

PROJECT AREA: BUG FIXES AND CODE REFACTORING

Time should be taken by future developers to address any major bugs, inefficiencies, or deficiencies in the system. There need not be a dedicated effort for this, but future developers should be cognizant of addressing major issues and refactoring the system to improve performance and readability.

Recommended Skills: General computer science experience, especially in Python or other object-oriented languages, the Django Framework, and to a lesser extent HTML, CSS, and JavaScript are recommended.

Areas for Work

- Refactor the code
 - There is a lot of repetition between different classes and objects. Applying object-oriented techniques of abstraction and inheritance would reduce repetition. This is a good idea because making a change in repeated code has to be repeated in every place the code repeats.
 - · Refactor queries to make code more readable and more efficient
- · Identify, document, and attempt to fix any bugs encountered during development

PROJECT AREA: DATA CLEANING

S

Create a process to filter out extraneous data and standardize the format of the indexed data received from the registries of deeds. Many registries gave extraneous data, such as death certificates, that our database does not hold. Cleaning the data provided by the registries can make data entry simpler.

Recommended Skills: Experience with a scripting language such as Python.

suggested filtering and cleaning	
Delete or otherwise filter out unneeded document types	
 Many registries have slightly different ways of labeling the documents. Additionally, there may be typos in the document labels, so be sure to account for those 	
Locate and delete apostrophes or other problematic symbols if needed	
Delete or otherwise filter out documents that do not have enough identifying information	
 Some foreclosure documents do not have enough data to put into the database. For example, some foreclosure deeds don't have an address listed. 	
Delete or otherwise filter out repeated entries	
Liqually due to types, compatings a registry will have multiple optrice for the same decument. For	

- Usually due to typos, sometimes a registry will have multiple entries for the same document. For example, there were two entries for a foreclosure deed, one had the full address and one was missing the street number. Another example is sometimes there are typos for different parties involved. One mortgage had two entries because each entry had a slightly different spelling of the mortgagor's last name.

PROJECT AREA: DATA ENTRY

Create more scripts to bulk enter data from the registries of deeds into the database. We created scripts to convert the indexed data from the Worcester Registry of Deeds into SQL insert statements. There is one script for each type of document in the database. These scripts can be used as a basis to create scripts to enter data from registries.

Recommended Skills: Experience with a scripting language such as Python.

Areas for Work

Limits of Current Script

- Power of attorney has just the first grantor and grantee since the script exploded exponentially
- Assignments might label more than just assignment of mortgage, all go to assignment
- Complaints might label more than the complaints we care about, all are inserted into our complaint/order of notice table

Edit the scripts to pull data from a different format

- Must account for the different column names

PROJECT AREA: LEGAL ANALYSIS

The overarching goal of creating the data management system is to enable legal analysis. To conduct legal analysis, first the needs of legal analysts should be identified. This effort also involves research into the legal process of prosecuting illegal foreclosure. The goal is to create an analysis pipeline of the data, whether that is through creating an application or analysis process. Recommended Skills: Good research skills, communication skills, and documentation skills are highly recommended for this project. Build an Application Based on Pipeline Established in Previous Avenue Recommended Skills: Coding experience, especially in building applications Predicted workflow of application 1. Takes exported csv from user interface as input 2. Runs analysis on the data - We expect designing this analysis will require input from legal analysts, along with research 3. Flag important statistics 4. Display information in graphics and tables - Some ideas of graphics to display: $\star\,$ Integrate with GIS to show the suspicious cases on a map, with different demographic information * Statistics deemed important to legal analysis Develop an Analysis Pipeline for Legal Experts · Evaluate legal needs from stakeholders Design a pipeline for analysis to be constructed - This could be instructions explaining how to run the analysis, an Excel function that receives data

and does calculations, or any other format deemed appropriate

Create a recommended future development guide for an application or refinement of the pipeline

Appendix C: User Guide



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Pu	urpose and Scope of this Guide	1
1	Users1.1Accounts & Registration1.2Profile Page	3 3 6
2	Searches 2.1 The Search Form	8 10 12 12 13
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Purpose and Scope of this Guide

This guide is designed to introduce the novel MAAPL data system at a level that can be easily understood by a user of any technical background. Since this guide will not go into heavy technical detail, it will almost entirely focus on the user interface and it's features. Volunteers should reference this guide when they encounter any confusion while trying to make use of the system.

1 Users

1.1 Accounts & Registration

The MAAPL database portal requires a user to have an account in order to query data from and input data to the database. When first accessing the portal, users will be prompted to log-in. New users should click register to create their accounts. All accounts are linked to a profile where a user can customize and update their information ¹. We will discuss the profile page in more detail later. Below are instructions for creating an account with the MAAPL database portal.

Registering f	or a MAAPL Account
Step 1: Navigate log in im ing you t	to the MAAPL database portal. You should be prompted to mediately. You should select one of the two options prompt- o register pictured below.
	SMARL Database Portal togo

¹This was included for the purpose of potentially creating a forum for MAAPL volunteers and staff to update one another on information.



Chapter 1



Chapter 1

1.2 Profile Page

This section will familiarize the user with the aspects of the user profile.

What is The User Profile?

The user profile is a feature attached to each user's account that provides them a page where they can customize several fields.

- Profile Picture
- Username
- Email

As of this time there is no option for a user to alter their password. The MAAPL IT will need to establish a password recovery system email. It is unclear if this feature will be complete by the time a user reads this manual.

	MAAPL Voluntoor	
	MAAFL_VOlunteer@maapl.org	
Profile Information		
Username*		
MAAPL_Volunteer		
Required. 150 characters or fewer. Letters,	digits and @/./+/-/_ only.	
Email*		
MAAPL_Volunteer@maapl.org		
Image* Currently: default.jpg Change:		

Chapter 1



Chapter 1

2 Searches

2.1 The Search Form

This section will familiarize the user with the search function. The search form enables users of the MAAPL portal to search and filter specific information located inside the database.

What Can I Search?

Users can search the following documents currently available in the database.

- Foreclosure Deed
- Affidavit of Sale and Advertisement
- · Certificate of Entry and Possession Notice
- Power of Attorney
- · Mortgage and Mortgage Riders
- Assignment of Mortgage
- Affidavit
- · Petition, Order of Notice, Complaint
- Pooled Mortgage
- Tax Assessment Records

IVI/	AAF	'L Databa	se Portal		
Search	MAAPL F	Records			
Docu	ment In	formation			
Book	Page	Document Number	Registry	Document Type	
				×	~
Addre		mation		Town /City	
Addre Street N	lumber	Street Name		TOWIT/ City	

Finding and Using the Search Form Step 1: Look at the navigation bar, Next to the "MAAPL Database Portal" title, there is an option to search the database, select that option. 🖽 MAAPL Database Portal Search Database Enter Data Step 2: Once you have navigated to the search page, you should see the search form pictured above in the "Search Form" figure. Below you will see a list of all fields followed by an explanation. • Book Number (TEXT FIELD): The book number of interest. • Page Number (TEXT FIELD): The page number of interest. • Document Number (TEXT FIELD): The number of the document of interest. • Registry (DROP-DOWN MENU): The registry the data came from. • Document Type (DROP-DOWN MENU): The type of foreclosurerelated document.

Chapter 2



2.1.1 Extra Fields involved with Mortgage

The system also has specialized fields that appear when searching for a mortgage specifically. In order to access these fields, a user needs to select the Mortgage document from the "Document Type" dropdown. After this is selected, a new set of fields will appear.

ΜΔΔΡΙ	Database Pr	ortal	
Search MAAPL Rec	ords	ortar	
Document Infor	mation		
BOOK Page	ocument Number Registr	У 	Mortgage
Address Inform	ation		
Street Number	Street Name		Iown/City
Start Date Year(Range)	FHA? Checkb	ooxes? Paragraph C?
Mortgagor First Name Last Name	Mortgagor (Second) First Name MI Last Name MI	Mortgagee First Name Last Name/Compan MI	Lender First Name Last Name/Compan MI

Chapter 2

The additional fields included in the expanded search form for mortgages are:

- Mortgage Start Year (RANGE SLIDER): Starting year of the mortgage.
- FHA? (DROP-DOWN Y/N): Has federal housing assistance loan.
- Checkboxes? (DROP-DOWN Y/N): If there are checkboxes checked off on the mortgage (usually indicating riders).
- Paragraph C? (DROP-DOWN Y/N): Indicates if MERS is the Mortgagee.
- Mortgagor (3-TEXT FIELD): Name (First, M.I., Last) of the mortgagor.
- Mortgagor (Second) (3-TEXT FIELD): Name (First, M.I., Last) of the second mortgagor.
- Mortgagee (3-TEXT FIELD): Name (First, M.I., Last/Company Name) of the mortgagee. Sometimes an individual is the mortgagee and other times it is an institution or company, in the second case, only provide the company name in the last-name field (leaving the first and middle initial fields blank).
- Lender (3-TEXT FIELD): Name (First, M.I., Last/Company Name) of the mortgagee. Sometimes an individual is the lender and other times it is an institution or company, in the second case, only provide the company name in the last-name field (leaving the first and middle initial fields blank).

If any of these terms are unclear to you, please refer to the annotated documents for clarification.

Chapter 2

2.2 The Results Page

This section will familiarize the user with the results page. The results page is displayed immediately after a search. It contains a list of tabulated results separated by document type. Users can select the filter button to further refine their search. Each table also has an export to csv option for extracting data from the database.

Results Pa	age								
	0								
	MA	AP	L Data	base F	ort	al			
	Search	Results							
		_							
	Filte	rs							
	Mortgage	Riders	Foreclosure Deed	Affidavit of Sale	Notice	Certificate of Entry	Power of Attorney	Registry Affidavit	

2.2.1 Filtering Searches

Searches can be filtered by selecting the "Filter" button located on the results page. Once selected the search filters will appear with your previous search filters, allowing you to modify your search further.

Filtering a S	earch
Step 1: Select th	ne "Filter" button pictured below.
	MAAPL Database Portal Search Results
Step 2: Notice t regular	he menu drop down, select fields as you normally would in a search and click search.

Chapter 2

MAADI D.I.I.		
MAAPL Datab	ase Portal	
Search Results		
≡ _{Filters}		
Document Information		
Book Page Document Number	Registry	Document Type
		×
Address Information		
Street Number Street Name		Town/City

2.2.2 Exporting Data to CSV File Format

Once a user has narrowed down their results to their liking, they are able to export their results into a comma separated value (CSV) document¹ for further analysis. As of this version of the interface, results can only be downloaded by document type. So a download must be initiated for each document of interest.



¹This is a commonly used document in data analysis as there are many tools build for it.

Chapter 2


Chapter 2

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3 Data Entry

3.1 The Data Entry Form

As it stands, the only ways to enter data into the database for volunteers is manually by looking at documents and typing in the relevant information¹.

What Can I Enter to the Database?
Users can enter manually any of the following documents into the database.
Foreclosure Deed
Affidavit of Sale and Advertisement
Certificate of Entry and Possession Notice
Power of Attorney
Mortgage (with corresponding Riders)
Assignment of Mortgage
Affidavit
Petition, Order of Notice, Complaint
Pooled Mortgage

Tax Assessment Records

¹Currently there is limited capacity to bulk upload entries to the database using scripts, however this has not yet been developed enough to implement in the front end for users.



Chapter 3

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III MAAPL Detabase Porta	Search Database Enter Data MAGAPL Database Input Date to MARPL Records Select Document Type Margae Marg	Portal	WAAR, Adam
Refer to the fields and w An Example: Fore	e annotated docu here to find them closure Entry For	uments to understand in the pdf files. m	d the various
MAA Input Data to	PL Database Pc	ortal	
MAA Input Data to Select Document	PL Database Pc	ortal	
MAA Input Data to Select.Document Foreclosure De	PL Database Pc	ortal	
MAA Input Data to Select Document Foreclosure Do Street Numher:	PL Database Pc MAAPL Records type ed Stret Name:	ortal	
MAA Input Data to Select Document Foreclosure De Street Number:	PL Database Pc MAAPL Records Type ed Street Name:	ortal	
MAA Input Data to select Documen Foreclosure De Street Number: Registered vs. R Is it Registered	PL Database Pc	Page: Document Number:	
MAA Input Data to Select Document Foreclosure De Street Number: Registered vs. R Is it Registered Registry:	PL Database PC	Page: Document Number:	
MAAA Input Data to Select Document Foreclosure Do Street Number: Is it Registered Registered vis. R Is it Registered No Registry : No Registry se	PL Database PC MAAPL Records t Type ed Street Name: ecorded: g or Recorded? uppes it say "amount poes it say "amount poes it say "amount	Page: Document Number:	
MAAA Input Data to Select Document Foredosure Do Street Number: Registered vs. R Is it Registered Registry: No Registry se	PL Database Pc MAAPL Records t Type eed Street Name: econded: d or Recorded? Unces It say "amount poes It say "amount Null	Page: Document Number:	
MAAA Input Data to Select Document Foreclosure Do Street Number: Registered vs. R Is it Registered Registry: No Registry S Purchaser 1 First Norm	PL Database Pc	Page: Document Number: paid*?	
MAAA Input Data to Select Document Foreclosure De Street Number Registered vs. R Is it Registered Registry: No Registry: No Registry 1 First Name Last Name/Co	PL Database Pc MAAPL Records trype ed Street Name: ecorded: d or Recorded? Does it say "amount poes it say "amount Null Purchaser 2 First Name mpan MI	Parchaser 3 Purchaser 4 First Name Last Name/Compan MI Last Name/Compan MI	
MAAA Input Data to Select Documen Foredosure Do Street Number: Registered vs. R. Is it Registered Registry: No Registry se Purchaser 1 First Nome Last Name/Co Signer	PL Database PC	Page: Document Number: paid?? Parchaser 3 Purchaser 4 First Name Last Name/Compan ML Last Name/Compan ML	
MAAA Input Data to Select Document Foreclosure Do Street Number: Street Number: Is it Registered vs. R Is it Registered Registry: No Registry Se Purchaser 1 First Name Last Name/Co Signer First Name	PL Database PC	Parchaser 3 Purchaser 4 First Name Last Name/Compan MI Last Name/Compan MI	
MAAA Input Data to Select Document Foreclosure De Street Number: Street Number: Is it Registered Registered vs. R Is it Registered Registery : No Registry se Purchaser 1 First Name Cast Name/Cast Signer First Name Last Name	PL Database PC	Parchaser 3 Parchaser 4 Past Name Last Name/Compan MI Last Name/Compan MI	
Input Data to Select Document Foreclosure De Street Number: Registered Vs. R Is it Registered Registry se Purchaser 1 First Name Last Name Last Name Last Name Last Name	PL Database PC	Parchaser 3 Purchaser 4 Pist Name Last Name/Compan MI Last Name/Compan MI	

Chapter 3

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Appendix D: Database Explanation Database Explanation

Overview

This document explains the structure of the database created for a 2021 research project at WPI in coordination with MAAPL. The database was created using MySQL. The code is an appendix in the same report as this document. The code that generates the insert statements to the database is also an appendix in that report. In this document, we will first discuss our assumptions, then we will describe the structure in relation to the documents that contain the relevant information.

The database was designed to have the mortgage deed table be the central table to relate documents. We assume that each foreclosure is related to one mortgage, and that each mortgage has one foreclosure associated with it. We make this assumption because we assume that a foreclosure ends in three ways: the homeowner renegotiates the mortgage, the homeowner catches up on payments, or the foreclosure process ends with the house being sold. If the homeowner renegotiates the mortgage, a new mortgage document will be entered into the registry of deeds. If a homeowner catches up on payments, it should mean there are not duplicate documents from the same time period. If a foreclosure process ends with the house being sold, then there is a new mortgage associated with the property. We cannot assume that the address is enough to distinguish mortgages since there are cases in which there are more than one foreclosure at a property in the timeframe our database covers.

We chose to store names as one string because according to the indexing standards of Massachusetts, registries are to store the names of parties as last name or company, first name, and middle initial. Many registries index this data as one field. We decided our database would store the names as one field. Some registries store first name, middle initial, and last name, but other registries store them in the format "last name, first name middle initial". Since it is simpler to format the separate names into one field, we decided to store our names as one field.

Figure 1 shows the simplified entity-relationship diagram (ERD). We created a simplified ERD and this document because the database structure is too complex to show in an ERD as the previous research team created (McCarthy et. al, 2020). The arrows represent foreign key references. The tables that are referenced by other tables have IDs, all calculated as follows: "book-page-document number-registry". This was the simplest way to store the foreign key references in other tables. The arrow points from the table referencing the foreign key to the table containing the field referenced.



Figure 1: Simplified Entity-Relationship Diagram

As shown in the diagram, most tables are not referenced by other tables. That means that section of the database can be changed without affecting the rest of the database. For example, the Notice table only references the Mortgage table and nothing references the Notice table. That means it can be easily changed without changing the rest of the database. We decided on this structure not only because foreclosures can be identified by mortgages, but also so that pieces of the database that we did not fill could be updated by future groups.

We decided to keep track of the registries and not just the towns because it would be useful to sort by registry to see if there are any patterns in the data received by registry. Not every registry indexes all the same data. For example, Dukes provided images of all files. They indexed the file names of the images along with the rest of the data provided. However, Middlesex North did not provide images of the data, so the file names for Middlesex North are blank.

The affidavit of sale is usually in the same pdf as the foreclosure deed. We decided to separate them into two different tables because they are two different forms included in the same packet. Additionally, the affidavits of sale had the most data points out of any of the tables

in the database. The advertisements of the auction are included in the affidavit of sale because the advertisements did not contain enough relevant information to warrant a separate table.

There are also tables for assignors, assignees, sellers, and sponsors as shown in Figure 1. These tables exist because there is a variable number of assignors and assignees in each assignment, and a variable number of sellers and sponsors in each pooled mortgages document. Since these relationships can be classified as a many-to-one relationship, these relationships have tables that contain the name of the assignor, assignee, seller, or sponsor, and the primary key of the associated table.

Feedback from our sponsors has revealed shortcomings of the database. For example, authority documents. Some documents have two authority documents, but the database only has space for one authority document per affidavit or assignment of mortgage document. Additionally, we made the assumption that the authority document would be in the same registry as the document referencing it. We have since found examples of documents where the authority document is recorded in a different registry. A field for the registry of the authority document should be added in the future to account for this.

Another improvement to the database our sponsors expressed interest in was adding a comments field to every table. We believe it makes more sense to have a "comments" table that stores the ID of a document and the comments associated with the document. This way, there is not a large character field on every table that is largely kept blank.

Mortgage ID	Any fields highlighted in this color refer to the ID of a mortgage, both in the mortgage table and as a reference to a mortgage from a different table
Pool ID	Any fields highlighted in this color refer to the ID of a pooled mortgages document, both in the pooled mortgage table and as a reference to a pooled mortgage from a different table (sellers to pool and sponsors to pool)
Assignment ID	Any fields highlighted in this color refer to the ID of an assignment, both in the assignment table and as a reference to an assignment from a different table (assignee to assign and assignor to assign)
Foreclosure Deed ID	Any fields highlighted in this color refer to the ID of a foreclosure deed, both in the foreclosure deed table and as a reference to a foreclosure from the affidavit of sale table

Legend

Mortgage



Figure 2: Simplified ERD highlighting Mortgage

• Mortgage Table Fields

ID - character string

- Primary key, calculated from book and page or document number, registry
- Book and page or recorded, document number for registered
- We calculate this so less repeated information stored in other tables
- PoolID character string
 - ID from pooled mortgages
- o Book integer
 - Book number from the registry
 - Page integer

0

- Page number from the registry
- DocNum integer
 - Document number from the registry
 - StreetNum character string
 - (in case it's unit x or 12b or something along those lines)
- StreetName character string
 - "Main St Apt 20" part of the address
- Town character string
 - Town part of the address
- Registry character string
 - Registry the document is from

- StartDate date
 - Start date of the mortgage
 - Date signed
- MatureDate date

- Date the mortgage must be paid back by
- Borrower1 character string
 - Format: last first middle
 - This is the format that the registries store the data
- Borrower2 character string
 - Format: last first middle
 - Mortgagee character string
 - Usually for MERS
 - Format: last first mi
- Lender character string
 - The bank that is involved in the mortgage
 - Format: last first mi
- LenderDescription character string
 - I.e. ""Lender" is a California Corporation organized and existing under the laws of California" -> important info is category (corporation) and state (california)
- Amount decimal number
 - Amount the mortgage is for
- MIN character string
 - Character string because there's dashes in it
 - MIN number associated with mortgage, MERS
- FHAbox character flag
 - This is a y/n/NULL
 - "is there an FHA box under "mortgage" line?"
- OtherMortgage
 - ID of the other mortgage
 - second mortgage with the same origination date
 - This is a foriegn key reference to a different mortgage
- ParaC
 - This is a y/n/NULL
 - "is there a paragraph c?"
- Sus
 - This is a y/n/NULL
 - A flag for whether or not a mortgage is suspicious as laid out in a document Grace Ross provided
 - NULL means assessment/analysis has yet to be run
- Checkboxes
 - This is a y/n/NULL
 - "are any of the checkboxes on the second page checked off?"
 Checkboxes indicate different riders which may apply to the mortgage

- Comments
 - Handwritten notes on document
- Standard character
 - This is a y/n/NULL
 - Y if 'Fannie Mae/Freddie Mac UNIFORM INSTRUMENT' on the bottom/in footnote
- FileName character string
 - Name of the file(s) that contain the images of the document
- RegVRec int
 - 0 for registered
 - 1 for recorded

Mortgage Riders



Figure 3: Simplified ERD highlighting Mortgage Riders

Riders Table Fields

MortID - character string

- Part of primary key
- Primary key of the mortgage that the rider is associated with
- Title character string
 - Part of primary key
- Amount decimal amount
 - Amount of payment in case of balloon rider
 - Amount of pre-pay penalty in case of adjustable rider
- ChangeFreq decimal amount
 - In case of adjustable rate
 - Frequency of percent change
 - Unit: months
- StartRate decimal amount
 - In case of adjustable rate
 - Starting interest rate
 - Stored as 1.5 if percent is 1.5%
- SecondRate decimal amount
 - In case of adjustable rate
 - Max interest rate
 - Stored as 1.5 if percent is 1.5%

- InitChangeRate decimal amount
 - In case of adjustable rate
 - Initial change rate
 - Stored as 1.5 if percent is 1.5%
- InitChangeDate date
 - In case of adjustable rate
 - Date of the first change in rate
- InterestOnly character
 - y/n/NULL
 - "Interest only option?"
- PickAPay character
 - y/n/NULL
 - If yes for interest only, is there a pick-a-pay option?
- NegAmor character
 - y/n/NULL
 - Negative Amortization?

Home Valuation Data



Figure 4: Simplified ERD highlighting Tax Assessment Records

- TaxAssessment Table Fields
 - MortID character string
 - Primary key
 - ID of associated mortgage
 - Year1Prev integer
 - 1 year pre mortgage date, ie. 2008
 - Year1PrevVal decimal amount
 - Value of house one year prior
 - Year2Prev integer
 - 2 years prior to mortgage
 - Year2PrevVal decimal amount
 - Value of the house one year prior
 - Year3Prev integer

- 3 years prior to the mortgage
- Year3PrevVal decimal amount
 - Value of the house 3 years prior

Power Of Attorney



Figure 5: Simplified ERD highlighting Power of Attorney

PowerOfAttorney

- DateOfSig date
 - Part of primary key
 - GrantorOfPoA character string
 - Part of primary key
 - Format: last first middle if person, otherwise company name
 - First grantor listed
 - GrantorTitle character string
 - Title of the grantor
 - IndivWPoA character string
 - "Individual with Power of Attorney"
 - Part of primary key
 - Format: last first middle if person, otherwise company name
 - First grantee listed
 - NumGrantor integer
 - Number of grantors on doc
 - NumGrantee integer
 - Number of grantees on doc
 - LocaleOfSig character string
 - Address it was signed in relation to
 - Should probably split into different pieces
 - FileName character string
 - Name of the file(s) that contain the images of the document

Pooled Mortgage



Figure 6: Simplified ERD highlighting Pooled Mortgages

PooledMortgages

- ID character string
 - Unique generated ID
 - Primary key
- o StartDate date
 - Start date of the document
- o CloseDate date
 - Closing date of the document
 - GovState character string
 - Governing law state
- Trustee character string
 - Name of the trustee
 - Format: last first mi
- SubDate date
 - Substitution date
 - When they set up a pool they are supposed to get the mortgages in between the cut off date and the closing date. However, they are allowed an amount of substitution mortgages that they can substitute for a mortgage that's in there. A lot will have a date (usually 24 months later) where after that date they can't make any more substitutions

- MasterServicer character string
 - Name of the master servicer
 - Format: last first mi
- Lender character string
 - Name of lender
 - Format: last first mi
- Depositor character string
 - Name of depositor
 - Format: last first mi
- DeposWarranty character flag
 - This is a y/n/NULL
 - "depositor warranty?"
- ReqNoteEndorse character flag
 - This is a y/n/NULL
 - "required for note endorsement?"
- DeposStateReg character flag
 - This is a y/n/NULL
 - "must depositor be registered in the state of the mortgage?"
- SusWording character flag
 - This is a y/n/NULL
 - Mentions "predatory", "subprime", "high cost", or "hoepa"?"

SellersToPool

- PoolID character string
 - ID from pooled mortgages
 - Part of Primary Key
- SellerName character string
 - Format: last first middle
 - Part of Primary Key
- SponsorsToPool
 - PoolID character string
 - ID from pooled mortgages
 - Part of Primary Key
 - SponsorName character string
 - Format: last first middle
 - Part of Primary Key

Assignment of Mortgage



Figure 7: Simplified ERD highlighting Assignment

• Assignment of Mortgage

- ID character string
 - Primary key
 - Calculated from book, page, document number, registry
 - Format: book-page-docnum-registry

MortID - character string

- ID of mortgage that the foreclosure involves
- o Book integer
 - Book number from registry
- Page integer
 - Page number from registry
- DocNum integer
 - Document Number from registry
- Registry integer
 - Registry where this data is stored
- SignerName character string
 - Name of the person that signed the assignment
 - Format: last first mi
- SignerTitle character string
 - Title of the signer

- SignerAttInFact character
 - This is a y/n/NULL
 - "is signer attorney in fact?"
- EntityNom character string
 - MERS as "entity nominee for" _____
- Note character
 - This is a y/n/NULL
 - Was it assigned with the note?
- ForValue character
 - This is a y/n/NULL
 - "for value or for consideration?"
- Value dec

0

0

- The amount of the "for value" value
- MarkedConfirm character
 - This is a y/n/NULL
 - "marked confirmatory?"
- Beneficiary character string
 - Party named beneficiary of assignment
 - Format: last first mi
- NotaryName character string
 - Name of the notary
 - Format: last first mi
- NotaryCounty character string
 - County of notarization
 - NotaryState character string
 - State of notarization
- o DateSigned date
 - Date that the assignment was signed
- AssignMortgage- character
 - This is a y/n/NULL
 - "assigning the mortgage?"
- BenInterest character
 - This is a y/n/NULL
 - "all beneficial interest?"
- o AuthBook integer
 - Book number of the authority document
- AuthPage integer
 - Page number of the authority document
- AuthDocNum integer
 - Document Number of the authority document
 - FileName character string
 - Name of the file(s) that contain the images of the document

- RegVRec int
 - 0 for registered
 - 1 for recorded
- AssigneeToAssign
 - ID character string
 - Assignment ID
 - Part of Primary Key
 - Assignee character string
 - Name of assignee
 - Format: last first mi
 - Part of Primary Key
- AssignorToAssign
 - ID character string
 - Assignment ID
 - Part of Primary Key
 - Assignor character string
 - Name of assignor
 - Format: last first mi
 - Part of Primary Key

Registry Affidavits



Figure 8: Simplified ERD highlighting Registry Affidavits

RegAffidavit

0

0

0

MortID - character string

ID of mortgage that the foreclosure involves

- o Book integer
 - Part of primary key
 - Book number from registry
 - Page integer
 - Part of primary key
 - Page number from registry
- DocNum integer
 - Part of primary key
 - Document number from registry
 - Reg character sting
 - Part of primary key
 - Registry
- StreetNum character string
 - Character string to account for cases like "12b"
- StreetName character string
 - "Main St Apt 2" portion of address
 - Town character string
 - Town portion of address
- NotaryName character string

Format: last first mi

- NotaryCounty character string
 - County of notarization

0

0

- NotaryState character string
 - State of notarization
 - AffiantName character string
 - Format: last first mi
- AffiantOrg character string
 - Organization the affiant is apart of
 - Ie is this a bank representative? For what bank?
- o AuthBook integer
 - Book number of the authority document
- AuthPage integer
 - Page number of the authority document
- AuthDocNum integer
 - Document Number of the authority document
 - Follow35B character
 - This is a y/n/NULL
 - Is affiant swearing to compliance with Mass General Laws Chapter 244 Section 35B? -> Claims loan offered?
- Follow35C character
 - This is a y/n/NULL
 - Is affiant swearing to compliance with Mass General Laws Chapter 244 Section 35C?" -> Mortgagee claims note?
- MortgageeNote character
 - This is a y/n/NULL
 - "Is the affiant swearing that mortgagee holds the note?"
- OrigNote character
 - This is a y/n/NULL
 - "is the affiant swearing to see the original note?"
- OrgServicer character
 - This is a y/n/NULL
 - "is the affiant organization the servicer?"
 - PersonalKnowledge character string
 - Personal knowledge entered by anyone in MAAPL
- LawyerCert character
 - y/n/NULL
 - Whether or not a lawyer certified this
- Type character string
 - Type of registry affidavit
 - eaton/pinti/35B
- FileName character string
 - Name of the file(s) that contain the images of the document
- RegVRec int
 - 0 for registered
 - 1 for recorded

Foreclosure Deed



Figure 9: Simplified ERD highlighting Foreclosure Deed

ForeclosureDeed

0

- ID character string
 - Primary key
 - calculated from book, page, document number, registry
- MortID character string

ID of associated mortgage

- o Book integer
 - Book number from registry
- Page integer
 - Page number from registry
- DocNum integer
 - Document Number from registry
- Registry character string
 - Registry where this data is stored
- StreetNum character string
 - Character string to account for cases like "12b"
 - StreetName character string
 - "Main St Apt 2" portion of address
- Town character string
 - Town portion of address

- Lender character string
 - The current holder of the mortgage/seller associated with the foreclosure, typically the lender
- SignerName character string
 - Format: last first mi
- SignerTitle character string
 - Title of the signer, such as attorney or vice president
 - Also includes the organization of the signer
- Paid character
 - This is y/n/NULL
 - Does it say "amount paid"?
- Purchaser1 character string
 - Name of purchaser
 - Format: last first mi
- Purchaser2 character string
 - Name of purchaser
 - Format: last first mi
- Purchaser3 character string
 - Name of purchaser
 - Format: last first mi
 - Purchaser4 character string
 - Name of purchaser
 - Format: last first mi
- FileName character string
 - Name of the file(s) that contain the images of the document
- RegVRec int

- 0 for registered
- 1 for recorded

Affidavit of Sale



Figure 10: Simplified ERD highlighting Affidavits of Sale

• AffidavitOfSale

- DeedID character string
 - ID from foreclosure deed
 - Part of primary key
- Book integer
 - Book number from registry
 - Part of primary key
- Page integer
 - Page number from registry
 - Part of primary key
- DocNum integer
 - Document Number from registry
 - Part of primary key
- Registry character string
 - Registry where this data is stored
 - Part of primary key
- StreetNum character string
 - Character string to account for cases like "12b"
- StreetName character string
 - "Main St Apt 2" portion of address

0

0

- Town character string
 - Town portion of address
 - AuctioneerName character string
 - Format: last first mi
 - Name of the auctioneer
- AuctioneerLicense character string
 - License number of the auctioneer
 - AuctionDate date
 - Date of the auction
- AffiantName character string
 - Format: last first mi
 - Name of affiant, person signing the document
- AffiantLawFirm character string
 - Law firm of the affiant, person signing the document
- DateSigned date
 - Date the affiant signed the document
- ForecloseLawFirm character string
 - Law firm foreclosing the property
- Consideration decimal number
 - Amount the property sold for
- MortgageeOnRec character string
 - Mortgagee on record
 - Format: last first mi
- NotaryName character string
 - Format: last first mi
 - Name of notary
- NotaryCounty character string
 - County of notarization
- NotaryState character string
 - Abbreviation (ie MA,NH)
 - OriginalMortgagee character string
 - Original mortgagee
 - Format: last first mi
- HighBid character

0

- This is a y/n/NULL
- Whether or not the purchaser was the highest bidder
- Postponements integer
 - Number of times the auction was postponed
- FirstAdDate date
 - First advertisement date
 - NewspaperName character string
 - Name of the newspaper the advertisements were in
- NumMentions integer
 - number of times "assigned" is mentioned in ad

- o AuthBook integer
 - Book number of the authority document
- AuthPage integer
 - Page number of the authority document
- AuthDocNum integer
 - Document Number of the authority document

Orders of Notice, Petitions, Complaints



Figure 11: Simplified ERD highlighting Orders of Notice

Notice

0

MortID - character string

ID from associated mortgage

- o Book integer
 - Book number from the registry
 - Part of primary key
- Page integer
 - Page number from the registry
 - Part of primary key
- DocNum integer
 - Document number from the registry
 - Part of primary key
- Registry character string
 - Registry document is from
 - Part of primary key
- StreetNum character string
 - Character string to account for cases like "12b"
- StreetName character string
 - "Main St Apt 2" portion of address
- \circ Town character string
 - Town portion of address

- DateEntered date
 - Date entered into the registry
- CaseNum character string
 - Number of the case in land court, i.e. "19 SM 001151" (may only be present on complaints)
- InterestInMort character
 - This is a y/n/NULL
 - "does it say interest in the mortgage?"
- ClaimedMortgagee character string
 - Mortgagee on the mortgage (person or company)
 - Format: last first mi
- FileName character string
 - Name of the file(s) that contain the images of the document
- RegVRec int
 - 0 for registered
 - 1 for recorded

Certificate of Entry



Figure 12: Simplified ERD highlighting Certificates of Entry

CertOfEntry

MortID - character string

ID from associated mortgage

- Book integer
 - Book number from the registry
 - Part of primary key
- Page integer
 - Page number from the registry
 - Part of primary key
- DocNum integer
 - Document number from the registry
 - Part of primary key
- Registry character string
 - Registry document is from
 - Part of primary key
- StreetNum character string
 - Character string to account for cases like "12b"
- StreetName character string
 - "Main St Apt 2" portion of address
- Town character string
 - Town portion of address

- Notary1
 - Name of a notary
 - Format: last first mi
- Notary2
 - Name of a notary
 - Format: last first mi
- Witness1
 - Name of a witness
 - Format: last first mi
- Witness2
 - Name of a witness
 - Format: last first mi
- Lender
 - Bank foreclosing the property
- DateOfEntry
 - Date of entry of property
- DateRecorded
 - Date certificate is entered into the registry
- BankRep
 - Bank representative
 - Format: last first mi
- FileName character string
 - Name of the file(s) that contain the images of the document
- RegVRec int
 - 0 for registered
 - 1 for recorded

References

McCarthy, J., Riley, J., Dionne, N., Noel, S., & Campbell, T. (2020). Developing a data system to address foreclosures in Massachusetts. Worcester: Worcester Polytechnic Institute.

Appendix E: Annotated Documents



MASSACHUSETTS ALLIANCE AGAINST PREDATORY LENDING 2021

Annotated Foreclosure Documents

Updated as of May 2021

Author Caitlin Kuzma

13 May, 2021

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Purpose

While the main purpose of these documents is to inform MAAPL database users manually entering data from foreclosure documents, these documents may also be helpful to MAAPL IT volunteers and database developers, or people currently going through the foreclosure process.

The documents are annotated with the following colors:

- Red: highlights and annotates data of interest for data entry (or other purposes)
- Yellow: highlights document titles
- Green: indicates additional notes, such as language that may suggest a certain section of interest or data point
- Blue: indicates the word "assigned" in advertisements
- Orange: indicates assignor/assignee pairs in advertisements

Disclaimer: These documents were not annotated by nor have been reviewed by an attorney. These documents do not contain legal advice, and are for informational purposes only.

Annotated Documents with Additional Notes

Following is a collection of one example of each of the following types of foreclosure document: Complaint, Power of Attorney, Certificate of Appointment (Power of Attorney), Affidavit, Certificate of Entry, Assignment of Mortgage, Foreclosure Deed, Affidavit of Sale, Advertisement, and a Mortgage with riders.

While these documents are unrelated, they are ordered the way that a registry of deeds may receive them in. Additionally, these documents are fairly standard examples of the types of foreclosure documents located in each registry of deeds. However, there are many different versions of these documents, so the green highlight provides extra information about where to find data of interest. For example, while the Book Number of a document is not always located in the top right corner of a document, it can be found easily by looking for "Bk:".



Abigail Chmielecki, Esq. - BBO# 693868 Orlans PC P.O. Box 540540 Waitham, MA 02454 (781) 790-7803
From the Office of :	19 SM 001151
Orlans PC	
PO Box 540540	
Waltham, MA 02454	2 ⁷ 77777777777777777777777777777777777
Telephone No. (with extension):	(781) 790-7800
Office File no. (If Available):	18-016014

LAND COURT USE ONLY

Under the provisions of the Servicemembers Civil Relief Act, this cause came on to be heard and thereupon, upon consideration thereof, it appearing to the Court that the Defendant(s) is/are not entitled to the benefits of said Act, it is hereby

ORDERED and ADJUDGED that the Defendant is/are not entitled to the benefits of the Servicemembers Civil Relief Act, as of the definition of the allowance of Plaintiff's motion for judgment.

By the Court.().

Attest:

(SEAL)

Deborah J. Patterson, Recorder

* TRUE COPY ATTEST: Deborah S. Pueterson RECORDER Power of Attorney



POWER OF ATTORNEY - grantor 1

grantee 1 -

POWER OF ATTORNEY of gravitor 1 KNOW ALL MEN BY THESE PRESENTS, that U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004 NCMI, with an address of c/o PHH Mortgage Corporation successor by merger to Ocwen Loan Servicing, LLC 1661 Worthington Road, Suite 100, West Palm Beach, FL 33409 does hereby constitute and appoint Orhans PC, with an address of PO Box 540540, Waltham, MA 04254, and each of its officers, directors, employees, agents and/or assigns, its true and lawful attorney-in-fact for it and in its name, place and stead, (the "Law Firm") (1) to take any and all steps which are customary and reasonably necessary to the commencement and completion of judicial and nonjudicial forcelosure proceedings, including making peaceable and unopposed entry on the premises described in the mortgage, for the purposes of foreclosing the mortgage, bidding on its behalf at the foreclosure sale and executing a Memorandum of Sale in connection therewith; (2) to make, execute, acknowledge and deliver all contracts, orders, assignments of bid, foreclosure deed(s) and affidavit(s), proofs of claim and court pleadings; (3) to convey the property described in such mortgage, including reasonably necessary to accomplish such conveyance and (4) to make, execute, acknowledge and deliver any other certificates, wittings, assurances and other instruments, including receiving and endorsing any others on its behalf which may be required in connection with any of the foregoing. The rights, powers and authority of said attorpay in feet herein generated theil memoranee at the

kE: 73 O'Callaghan Way, Lynn, MA 0190 address

The rights, powers and authority of said attorney-in-fact herein granted shall commence and be in full force and effect as the date hereof until the filing at the Registry District of the Land Court or the recording with the Registry of Deeds in which the Power of Attorney is filed or recorded as applicable of a revocation of authority under this Power of Attorney relative to the Law Firm, while hereby ratifying and confirming any and all of the enumerated actions herein, taken by the Law Firm prior to the date hereof. Any party dealing in good faith with the Law Firm shall be entitled to rely upon a photostatic copy of this instrument and upon the statement or certificate of the Law Firm that this Power of Attorney is still in force and effect, has not been revoked and that the party acting hereunder as an officer, director, employee, agent or assignee of the Law Firm has been duly authorized by the undersigned and by the Law Firm. No party dealing with the Law Firm shall be required to look to the application of anything paid or transferred to it nor shall any person dealing with the Law Firm be required to determine the existence of any facts justifying the exercise by the Law Firm of the authority granted pursuant hereto.

Mortgage from Maria Rojas to National City Mortgage Co. dated March 31, 2004 ("Mortgage") and recorded with the Essex County (Southern District) Registry of Deeds at Book 22618, Page 230 for property located at: 73 O'Callaghan Way, Lynn, MA 01905

18-016014/189/POWOA_DR

IN WITNESS WHEREOF, the said U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1, By its attorney in fact NewRez LLC f/k/a New Penn Financial, LLC d/b/a Shellpoint Mortgage Servicing By its attorney-in-fact PHH Word gate Corporation successor by merger to Ocwen Loan Servicing LLC, aforesaid has caused its corporate seal to be hereto affixed and these presents to be signed and acknowledged in its name and behalf by Carrie Priebe Context assess at the reunto duly authorized, this day of ate of signature 2020. See Limited Power of Attorney recorded U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1 By its attorney in fact New Res. LLC f/k/a New New Trust Power Control Contr reference to authority + doc? yes, need to hand search Penn Financial, LLC d/b/a Shellpoint Mortgage Servicing By its attorney-in-fact PHH Mortgage Corporation successor by merger to Ocwen Loan Servicing LLC Name Camb Priebs Title: Contract Management Coordinator RE: 73 O'Callaghan Way, Lynn, MA 01905 STATE OF Florida COUNTY OF Palm Beach lu MAAAAAAAAA Notary Public State of Florida Carlene Reid My Commission FF987298 Example 504/28/2020 Signature of Notary Public Carlene Name of Notary Public: Carlene Notary Commission Expiration Date: ______ Personally known: ______ OR Produced Identification: ______ Type of Identification Produced: _____ Carlene Reid **** 2 Exp. 4/28/20 Mortgagor: Maria Rojas Property Address: 73 O'Callaghan Way, Lynn, MA 01905 File Number: 18-016014 Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 18-016014/189/POWOA_DR

Certificate of	Appointment
	SOLESSEX #275 BK.39606 Pg:214 SOLESSEX #275 BK.39606 Pg:214 eRecorded registry Book # Page #
	(= power of attorney) CERTIFICATE OF APPOINTMENT
grantor 1 ← address • reference to authority s doc? yrs, need to hand search	 Orlans PC, acting under a Power of Attorney for U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1, hereby constitutes and appoints John McMillan, as its agent for it and in its name, place and stead to make entry upon the premises located at 73 O'Callaghan Way, Lynn, MA 01905, covered by a Mortgage from Maria Rojas to National City Mortgage Co. dated March 31, 2004 ("Mortgage") and recorded with the Essex County (Southern District) Registry of Deeds at Book 22618, Page 230 for the purposes of foreclosing said mortgage for breach of the conditions thereof. Further, Orlans PC, hereby ratifices and confirms any and all of the actions taken by the appointee prior to the date hereof. Executed as a sealed instrument as of this 2021. See Power of Attorney recorded herewith For signatory authority, see Delegation of Authority and Appointment recorded with the Plymouth County Registry of Deeds at Book 2081A Page 157.
RE: 73 O'Callaghan Way, I	COMMONWEALTH OF MASSACHUSETTS MIDDLESEX, SS On this day of, 20 @, before me, the undersigned Notary Public, personally appeared Abigat Chinelecki, Esq., Employee Authorized Signatory, Real Property of Orlans PC, and proved to me through satisfactory evidence of other preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for its stated purpose as the free act and deed of Orlans PC. On the preceding or attached document, and acknowledged to me that he/she executed the same for the precedent of the precedent o

Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 189/18-016014/FORD_DR

	Bk: 56500 Pg: 100
	2016 00147169 _Bk: 56500 Pg: 100
	Page: 1 of 1 12/21/2016 11:34 AM WD + type: 35B \$ 35C
	Book # AFFIDAVIT PURSUANT TO M.G.L. Ch. 244, §§ 35B and 35C
	Property Address: 42 Kinnicutt Road aka Kinnicut Road, Worcester, MA 01602
regist	Wortgage: Nancy Aharon-Georgevich and Thomas Georgevich to Mortgage Electronic Registration Systems, Inc. as nominee for, People's Choice Home Loan, Inc., its successors and assigns, dated May 4, 2006 recorded at Worcester County Registry of Deeds in Book 38912, Page 1 on May 5, 2006.
	The mortgage was assigned to U.S. Bank National Association, as trustee for Structured Asset Securities Corporation Mortgage Pass-Through Certificates, Series 2006-BC2 on May 17, 2012 by assignment recorded at Worcester County Registry of Deeds in Book 49004, Page 366 on May 22, 2012.
	Foreclosing Mortgagee: U.S. Bank National Association, as trustee for Structured Asset Securities Corporation
	mortgager assi mough cerunicales, series 2000-022
~	i ne undersigned, Kishia Givens under oath deposes and says as follows:
r, MA 01602	 I am an officer of Wells Fargo Bank, N.A. ("Wells Fargo"), where I hold the office of Vice President Loan Documentation. Wells Fargo is a duly authorized agent for U.S. Bank National Association, as trustee for Structured Asset Securities Corporation Mortgage Pass- Through Certificates, Series 2006-BC2 and the loan servicer for the mortgage referenced characteristics of the service of the se
cester	adove. La affiant organization is servicer? yes
a Kinnicut Road, Wor	2. In the regular performance of my job functions, I am familiar with business records maintained by Wells Fargo for the purpose of servicing mortgage loans. These records (which include data compilations, electronically imaged documents and others) are made at or near the time by, or from information provided by, persons with knowledge of the activity and transactions reflected in such records, and are kept in the course of business activity conducted regularly by Wells Fargo. It is the regular practice of Wells Fargo mortgage servicing business to make these records. As a result of my review of the business records, I have acquired personal knowledge of the matters stated herein.
d ak	talk to an entry a start of the business records of Wells Force I cartify that
ress: 42 Kinnicutt R	 a. ISI Wells Fargo complied with MGL Ch. 244 § 35B. — claims loan offered ? yes (claims ch. 348 Complied With?) MGL Ch. 244 § 35B is not applicable to the above mortgage. Wells Fargo did not send notice pursuant to MGL Ch. 244 § 35B because notice was sent to the borrower pursuant to MGL Ch. 244 § 35B is not applicable because the loan is not a "certain mortgage loan" as the property securing the mortgage debt is not occupied by the obligor.
Property Add	 b. On this date, U.S. Bank National Association, as trustee for Structured Asset Securities Corporation Mortgage Pass-Through Certificates, Series 2006-BC2 is ⊠ the holder of the promissory note secured by the above mortgage. — Mor
	Signed under the pains and penalties of perjury this 13 th day of December, 2016.
	Wells Fargo Bank, N.A. as Servicing Agent for U.S. Bank National Association, as trustee for Structured Asset Securities Comparing Mortgage Pass-Through Certificates. Series 2006-BC2
lawy affia autho L	per cert? No (see: example affidavit w/ Lawyer Cert) Int saw original note? No Drity doc? No (i.e. "See Power of Attorney (ecorded") gives signer the outhority to sign, usually noted near the signature gives signer the outhority to sign, usually noted near the signature By: Kishia Givens Vice President Loan Documentation → affiant title Wells Fargo Bank, N.A. → affiant organization 12/13/2016
	State of South Carolina County of York
	Sworn and subscribed before me on this 13 th day of December, 2016, by Kishia Givens Vice President Loan Documentation
	DORIS R PHILLIPS Notary Public for South Carolina Commission Expires 10/16/2017
	004-MA-V2 16-011291

Example Affidavit w/ Lawyer Certification

Bk: 49970 Pg: 10



Bk: 49970 Pg: 10 Page: 1 of 2 11/16/2012 02:08 PM WD

REBA Form No. 57 Affidavit Regarding Note Secured by Foreclosed Mortgage (see note on page a)

AFFIDAVIT UNDER G.L. c. 183 Sec. 5B

Property Address: 50 Whisper Drive, Worcester, MA 01609

Re Mortgage from Bruce H. Boguslav and Linda E. Boguslav to Mortgage Electronic Registration Systems, Inc. as nominee for Fremont Investment & Loan dated December 2, 2005:

[X] recorded in Worcester County (Worcester District) Registry of Deeds in Book <u>37944</u>, Page <u>42</u>.
[] filed in ______ Registry District of the Land Court as Document No. _____ and noted on Certificate of Title No.

The undersigned, Elonna ASHUROUN	, having	personal	knowledge	of	the	facts	herein
tated, under oath deposes and says as follows:							

1. I am:

S

304 Cambridge Rd Woburn, MA 01801

Ablitt / Scofield

[Check One] [An officer of BLB Trading, LLC, where I hold the office of MANAGING Discret

[] A duly authorized agent of BLB Trading, LLC, per the vote appended hereto, which remains in full force and effect as of the date hereof.

 Based upon my review of the business records of BLB Trading, LLC, I certify that on this date BLB Trading, LLC is: [Check One]

X the holder of the promissory note secured by the above mortgage.

[] the authorized agent of the holder of said promissory note.

Signed under the penalties of perjury this <u>9</u>TH day of <u>August</u>, 20<u>1</u>2 Moretgage assigned from Moretgage Electronic Registration Systems, Inc. to GMAC Moretgage Corporation, Recorded October 24, 2006 at Book <u>40023</u>, Page 205: as furtherassigned from GMAC Moretgage L.L.C. FKA GMAC Moretgage [Name] <u>Elonua</u> <u>Asturpora</u> Corporation to ACT Properties, L.L.C. Recorded] [Title] <u>MANAFINF STEPCOPE</u> January 8, 2009 at Book <u>43657</u>, Page 5: as further assigned from ACT Troperties, L.L.C. to TA Protections I.L.C. Recorded February 1, 2012 at Book <u>48486</u>, Page <u>362</u>; as further assigned from PA Portfolio Investors, L.C. to BLB (**CHD**. COOS Teading, L.L.C., Recorded February 1, 2012 at Book <u>48486</u>, Page 364.

Bk: 49970 Pg: 11 State of Connecticut: County of Fairfield August 9, 2012 Fairfield, 9, ss. Then personally appeared the above named <u>Elonna</u> <u>Achurov</u>, proved to me through satisfactory evidence of identification, which was perso hally Known, to be the person whose name is signed on this document, and who swore or affirmed to me that the contents of this document are truthful and accurate to the best of (his) (her) knowledge and belief, as [Title] of [C] as aforesaid. Commissiond otary Pu Co CERTIFICA $\frac{MM}{PL}$, hereby certify that I am an attorney at law with offices at $\frac{PL}{L}$, and that the facts stated in the foregoing affidavit are relevant to the title to the premises therein described and will be of benefit and assistance in clarifying the chain of title thereto. * this type of affidavit is not stored in the database, [Name] Menina E. Cohen but this is what a lawyer certificate (on an affidavit) looks like Comments See: Eaton v. Federal National Mortgage Association, 462 Mass. 569 (2012) and REBA Title Standard

No. 79. See: G.L. c. 244, §35C (Effective _____, __, 2012)

Adopted October 29, 2012

ATTEST: WORC. Anthony J. Vigliotti, Register

103

Certificate of Entry

;>	Registry (South Essex)
	(Standard) SO.ESSEX #157 Bk:37737 Pg:466 CERTIFICATE OF ENTRY SOURCE/2019 11:03 POSNIPS 1/1 date of entry date recorded in registry Book # Page #
ink rep	WE HEREBY CERTIFY that on June 13, 2019, we were present and saw <u>CLT2ACAUL</u> , agent of Brock & Scott, PLLC, attorney for the present holder of that certain mortgage given by John J. Hart, to Mortgage Electronic Registration Systems, Inc. as nominee for Freedom Mortgage Corporation, and now held by Carrington \rightarrow bonh/lene Mortgage Services, LLC, said mortgage dated September 24, 2008, and recorded in the Essex County (Southern District) Registry of Deeds in Book 28055, Page 221; all of the premises, described and covered by said Mortgage, by virtue of and in execution by the Mortgagee, make an open, peaceable and unopposed entry on the premises described in said Mortgage, for the purpose, by him declared, of foreclosing said Mortgage for breach of the conditions thereof on Property described as 37 Murray Street, Lynn, MA 01905. Witness Signature
	RICHALL DAUTAUD Witness 1 Prin Name Witness Signature AARON SCUPETRIAN, Witness 2
	COMMONWEALTH OF MASSACHUSETTS
	Essex, ss. June 13, 2019 witness a Then personally appeared the above named <u>DrougeD Avtra b6</u> and <u>Aaroop 201wtBubo</u> , who proved to me through satisfactory evidence of identification, which was resigned on the proceeding or attached document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of their knowledge.
	Notary Public Notary Public MATTILES J.)412 notary Printed Name My Commission Expires: APPL 3, 2024
	Box 15 5 Mathew J, KATZ Notary Public Commonwealth of Massachusetts My Commission Explose April 3, 2026 18-15749 FC01



RA110

Bk: 46854 Pg: 39 IN WITNESS WHEREOF, the undersigned by its duly elected officers and pursuant to proper authority of its board of directors has duly executed, sealed, acknowledged and delivered this assignment. date signed 26-2016 Date: NRZ PASS-THROUGH TRUST IV, U.S. BANK NATIONAL ASSOCIATION AS TRUSTEE, ITS SUCCESSOR AND ASSIGNS un (samusall) BY: STEVE ALLISON itness Name: JON Signer« Title: AUTHORIZED SIGNATORY title + PRETIUM MORTGAGE CREDIT PARTNERS I POA was recorded in Suffolk county MA on LOAN ACQUISITION, LP AS ATTORNEY-IN-FACT FOR NRZ PASS-THROUGH TRUST IV, s authority document will often be noted 7/13/15 near the signature, as it gives the signer the U.S. BANK NATIONAL ASSOCIATION AS Signer ET E 59860 B 54752 P 138 authority to sign (POA=Power of Attorney) Book Page in fact? yes A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT MINNESOTA → notary state HENNEPIN → notary county State of County of On 2-2(6.1(______, before me, THU VAN WITTMANN, a Notary Public, personally appeared STEVE ALLISON, AUTHORIZED SIGNATORY of/for PRETIUM MORTGAGE CREDIT PARTNERS I LOAN ALLISON, AUTHORIZED SIGNATIONAL OWN FIGHTOR HORITORIONOL CREDIT FRANKLASS FIDIAL ACQUISITION, LP AS ATTORNEY-IN-FACT FOR NRZ PASS-THROUGH TRUST IV, U.S. BANK NATIONAL ASSOCIATION AS TRUSTEE, ITS SUCCESSOR AND ASSIGNS, personally known to me, or NATIONAL ASSOCIATION AS INCOLES IN SUCCESSOR AND ASSIGNS, personary known to life, of who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERUITY under the laws of the available of the same in the state of the laws of the same in the same in the same in the laws of the which the person(s) acted, executed the instrument. I certify under PENALTY OF PERUITY under the laws of the same in the same interval of the same in the same i State of MINNESOTA that the foregoing paragraph is true and correct. I further certify STEVE ALLISON, signed, sealed, attested and delivered this document as a voluntary act in my presence. Witness my hand and official seal. The Van Wittmans (Notary Name): THU VAN WITTMANN -> notary My commission expires: 1/31/2018 THU VAN WITTMANN Notary Public State of Minnesota My Commission Expire Jonuory 31, 2018 ires

2267787

RA111

Bk: 46854 Pg: 40

EXHIBIT "A"

Closing date:	October 8, 2003
Borrower(s):	Elentce S. Umana
Property Address:	81 Thorny Lea Terrace, Brockton, Massachusetts 02301

A certain lot of parcel of land situated in Brockton, Flymouth County, Massachusetts, on the northering side of the right of way which is an extension of Thorney Lea Terrace bounded and described; vizt

Beginning at said right of way at the southeast corner of the granted promises as a point 35 bet westerly of Lot 14 as shown on the plan of Thorney Lea Terraco and running north 86 tiegrees 2P west by said right of way 117 feet more or less to land of LeRoy E. Fisher et ux; there on 06, 2, 55 west by land of said Fisher, 1.19 feet thence north 11 00 west by land of said Fisher, 104.67 feet to a stone bound; thence north 77 23' east by a portion of the end of Titlon Avenue, and land of Arthur C. Makepeace et ux, 152.23 feet; thence southerly by land of Alfred Campanell about 144.85 feet to the point of beginning. Heing the westerly portion of a lot shown on plan entitled, "Plan of land in Brockton surveyed for Edward P. Neasay, Trustee, May 19, 1950, Hayward and Hayward, Surreyors."

Being the same premises conveyed and more particularly describes in a deed dated December 29, 1998 and recorded with the Plymouth County Registry of Dates 28 Book 16995, Page 059.

2267787

The foregoing is a true copy from the Plymouth County Registry of Deeds. Book 46854 Page 38 Attest: John R Bocfley Jr. Register

RA112

Standard	Foreclosure Deed, Affidavit of Sale	e, and Advertisement
L LEGANA KANAN SASARI KARA KANA KAN	Bk: 58156 Pg: 214	
		MASSACHUSETTS EXCISE TAX Worcester District ROD #20 001
2017 Bk: 58156 Pg:	0013/323 214	Date: 12/07/2017 03:34 PM Ctrl# 176926 05897 Doc# 00137323
Page: 1 of 4	12/07/2017 03:34 PM WD	Fee: \$257.64 Cons: \$56,274.00
Bootta	MASSACHUSETTS FORECLOSURE DEED BY C	OR POR ATION
	MASSACHOLDING FORECLOUCKE DEED DT C	
current holder of mortgage/	U.S. Bank National Association, as Trustee for SASCO Mortgage Loa Livingston Avenue, St. Paul, MN 55107	n Trust 2006-WF3, at 60
	a national association duly established under the laws of the United Sta	tes of America
	the current holder of a mortgage	
mortgagor	from Caroline J. Rellstab	
original	to Mortgage Electronic Registration Systems, Inc., as nominee for Unit	on Capital Mortgage
mortgagee	Business Trust, its successors and assigns	registry of deeds
	dated November 23, 2005 and recorded with the Worcester County (W Deeds at Book 37871 Page 329, on November 23, 2005 by the power and every other power for FIFTY-SIX THOUSAND TWO HUNDREI DOLLARS AND 00/100 (\$56,274.00) paid, grants to U.S. Bank Nation SASCO Morgage Loan Trust 2006-WF3 c/o Wells Fargo Bank, N.A., Mill, SC 29715, the premises conveyed by said morgage.	Torcester District) Registry of conferred by said mortgage D SEVENTY-FOUR Ial Association, as Trustee for 3476 StateView Blvd Fort Purchaser 1
	* See Limited Power of Attorney recorded with Worcester County 55318, Page 136	Registry of Deeds in Book
01562	U.S. Bank National Association, as Trustee for SASCO Mort by Wells Fargo Bank, N.A., as Attorney in Fact	gage Loan Trust 2006-WF3
Massachusetts (Mame: Tina Richardson \longrightarrow Signer Title: Vice President Loan Documentation Company: Wells Fargo Bank, N.A. Date: 11/28/2017	
Spencer,	address	
ole Street,	North Carolina Wake County	<u> </u>
RE: <mark>27 Mar</mark>	I, Standard Public of Wald Coun Carolina, do hereby certify that Tina Richardson personally came befa acknowledged that she is the Vice President Loan Documentation of and that she, as Vice President Loan Documentation, being authorized foregoing on behalf of the corporation, as attorney in fact on behalf of Association, as Trustee for SASCO Mortgage Loan Trust 2006-WF3 U.S. Bank National Association, as Trustee for SASCO Mortgage Loan	ty and State of North ore me this day and Wells Fargo Bank, N.A., I to do so, executed the FU.S. Bank National as the free act and deed of an Trust 2006-WF3.
	Witness my hand and official seal, this 28 th day of November K Denise Dunn Notary Public My commission expires August 30, 2020 Walk My Commission	Denise Dunn TARY PUBLIC ke County, NC n Expires August 30, 2020
	046-MA-V9 File Number: 14-019089/326/MISC 15	(I) A

reaistru:	Worcester Bk: 58156 Pg: 215
samu (forec	e as preceeding document Book # Page # losure deed)
affiant name	offentimes directly hollowing - Affidavit of Sale the related foreclosure deed I,Jessica DaSilva, Esq., Employee, Authorized Signatory, Real Property of Orlans PC, successor by merger to Orlans Moran PLLC, Attorney in Fact for U.S. Bank National Association, as Trustee for SASCO Mortgage Loan Trust 2006-WF3, ("Lender") named in the foregoing deed, make oath and say that the principal, interest and other obligations mentioned in mortgage from above referred to were not paid or tendered or performed when due are prior to the arela and that this office any and the thild or the light day. 15t lab. 15t
newspaper name	of January, 2017, on the 20th day of January, 2017 and on the 27th day of January, 2017, in the Spencer New Leader Stonebridge Press, a newspaper with general circulation in Spencer, a copy of which is attached hereto as Exhibit A.
562	This office has complied with Chapter 244, Section 14 of Massachusetts General Laws, as amended, by mailing the required notices by certified mail, return receipt requested.
Cert MA 015	This office has complied with Chapter 209, Section 18.21A of Code of Massachusetts Regulations, as amended, by mailing the required certification and supporting documentation by certified mail, return receipt requested.
RE: 27 Maple Street, Spen	Pursuant to said notice at the time and place therein appointed, the sale was postponed by public proclamation upon the mortgaged premises to March 15, 2017 at 3:00 PM and thereupon, the sale was postponed by public proclamation upon the mortgaged premises to May 15, 2017 at 3:00 PM and thereupon, the sale was postponed by public proclamation upon the mortgaged premises to July 14, 2017 at 3:00 PM and thereupon, the sale was postponed by public proclamation upon the mortgaged premises to September 12, 2017 at 3:00 PM and thereupon, the sale was postponed by public proclamation upon the mortgaged premises to October 20, 2017 at 3:00 PM and thereupon, the Lender sold the mortgaged premises at public auction by Christine M. A suction date
Buyer consideration/ purchase amount	Parcher, a licensed auctioneer of Towne Auction Company LLC to the third highest bidder U.S. Bank National Association, as Trustee for SASCO Mortgage Loan Trust 2006-WF3 c/o Wells Fargo Bank, N.A., Attn: 3476 StateView Blvd, Fort Mill, SC 29715, for the sum of FIFTY-SIX THOUSAND TWO HUNDRED SEVENTY-FOUR DOLLARS AND 00/100 (\$56,274.00), paid, being the third highest bid therefore at said auction, John Avella the highest bidder at said auction having defaulted, Hossein Khalili the second highest bidder at said auction having defaulted; the third highest bidder having performed in accordance with the terms of said auction.
	See Power of Attorney recorded herewith → need to hand search documents with bordering book+page/doc # if not listed
authority doc? yes book, page, fegistry	For signatory authority, see Delegation of Authority and Appointment recorded with the Suffolk County Registry of Deeds at Book 58527 Page 111 forme Jessica DaSilva, Esq., Employee, → title of officint Authorized Signatory, Real Property of Orlans PC, successor by merger to Orlans Moran PLLC
	Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 14-019089/326/MISC
	046-ма-v5



Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 14-019089/326/MISC

046-MA-V5

Bk: 58156 Pg: 217

advertisement attached? yes EXHIBIT "A"

ATTACHED TO AND FORMING A PART OF THE FORECLOSURE DEED FOR PROPERTY AT 27 Maple Street, Spencer, MA 01562

original mortgagee

RE: 27 Maple Street, Spencer, MA 01562 "assigned" mentioned 2 times # assignor/assignee pairs? 2

OF SALE OF REAL ESTATE By virtue and in execution of the By virtue and in execution of the Power of Sale contained in a certain Mortgage given by Caroline J. Relistab to Mortgage Electronic Registration Systems, Inc., as nominee for Union Capital Mortgage Business Trust, its successors and assigns, dated November 23, 2005 and recorded with the Meancher County (Workerter November 23, 2005 and recorded with the Worcester County (Worcester District) Registry of Deeds at Book 37871, Page 329 subsequent-ly assigned to U.S. Bank National Association, as Trustee for Structured Asset Securities Corporation Trust 2006-WF3 by Mortgage Electronic Registration Systems, Inc. by assign-ment recorded in said Worcester County (Worcester District) Registry ment recorded in said Worcester County (Worcester District) Registry of Deeds at Book 43730, Page 37 and subsequently assigned to U.S. Bank National Association, as Trustee for SASCO Mortgage Loan Trust 2006-WF3 by Mortgage Electronic Registration Systems, Inc., as nominee Registration Systems, Inc., as nominee for Union Capital Mongage Business Trust, its successors and assigns by assignment recorded in said Worcester assignment recorded in said Worcester County (Worcester District) Registry of Deeds at Book 53317, Page 148; of which Mortgage the undersigned is the present holder for breach of the conditions of said Mortgage and for the purpose of toreclosing same will be sold at Public Auction at 3:00 PM on February 3, 2017 at 27 Maple Street, Spencer, MA, all and singular the premises described in said Montgage, to wit: A certain parcel of land with the build-ings thereon and all the privileges and appurtenances thereto belonging situated in Spencer on the east side

MORTGAGEE'S NOTIC

of Maple Street and being shown on Plan of House Lot in Spencer dated April 23, 1946 by E.A. Chamberlin, said plan to be recorded herewith and Trustee for SASCO Mortgage – be more particularly bounded and Trust 2006-WF3 Thence N. 83 degress West continuing by said wall and part of the way eighty (80) feet to the place of beginning. Being the same premises conveyed to the Mortgagor by Deed dated May 19,

Return to

Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 14-019089/326/MISC

2004 and recorded with the worcester District Registry of Deeds in Book 33657, Page 253. The premises are to be sold subject to and with the benefit of all easements, The premises are to be sold subject to and with the benefit of all easements, restrictions, building and zoning laws, liens, attorney's fees and costs pursu-ant to M.G.L.Ch.183A, unpaid taxes, tax titles, water bills, municipal liens and assessments, rights of tenants and parties in possession. <u>TERMS OF SALE:</u> A deposit of FIVE THOUSAND DOLLARS AND 00 CENTS (\$5,000.00) in the form of a certified check, bank treasurer's check or money order will be required to be delivered at or before the time the bid is offered. The suc-custe a Foreclosure Sale Agreement immediately after the close of the bidding. The balance of the purchase price shall be paid within thirty (30) days from the sale date in the form of a certified check, bank treasurer's check or other check satisfactory to Mortgagee's attorney. The Mortgagee reserves the right to bid at the sale, to reject any and all bids, to continue to reject any and all bids, to continue the sale and to amend the terms of the sale by written or oral announce-ment made before or during the fore-closure sale. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled only to a return of the deposit paid. The purchaser shall have no further recourse against the Mortgagor, the Mortgage or the Mortgagee's attorney. The description of the premises contained in said mort-gage shall control in the event of an error in this publication. TIME WILL BE OF THE ESSENCE. Other terms if any, to be announced at the sale. U.S. Bank National Association, as said plan to be recorded herewith and Trustee for SASCO Mortgage — being more particularly bounded and Trust 2006-WF3 described as follows: Beginning at Present Holder of said Mortgage, the most westerly corner of the parcel By its Attorneys, herein described on the easterly line ORLANS MORAN PLLC — foreclosing law firm of said Maple Street: Thence N. 40 PO Box 540540 degrees East by said easterly line of Waltham, MA 02454 Maple Street eighty-one (81) feet to Phone: (781) 790-7800 the point at a stone wall; Thence S. 14-019089 82 degrees East by a stone wall and January 13, 2017 land of William Forest one hundred five January 20, 2017 wall; Thence S. 04th another stone January 27, 2017 wall one hundred (100) feet to a point; Thence N. 83 degreess West continuing auctioneer license number? N/A

ATTEST: WORC. Anthony J. Vigliotti, Register

Standard Mortgage with Riders



look for this banner at the bottom of the page

Bk 16119 Pg 4 #72286



(I) "Applicable Law" means all controlling applicable federal, state and local statutes, regulations, ordinances and administrative rules and orders (that have the effect of law) as well as all applicable final, non-appealable judicial opinions.

(J) "Community Association Dues, Fees, and Assessments" means all dues, fees, assessments and other charges that are imposed on Borrower or the Property by a condominium association, homeowners association or similar organization.

(K) "Electronic Funds Transfer" means any transfer of funds, other than a transaction originated by check, draft, or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument, computer, or magnetic tape so as to order, instruct, or authorize a financial institution to debit or credit an account. Such term includes, but is not limited to, point-of-sale transfers, automated teller machine transactions, transfers initiated by telephone, wire transfers, and automated clearinghouse transfers.

(L) "Escrow Items" means those items that are described in Section 3.

(M) "Miscellaneous Proceeds" means any compensation, settlement, award of damages, or proceeds paid by any third party (other than insurance proceeds paid under the coverages described in Section 5) for: (i) damage to, or destruction of, the Property; (ii) condemnation or other taking of all or any part of the Property; (iii) conveyance in lieu of condemnation; or (iv) misrepresentations of, or omissions as to, the value and/or condition of the Property.

(N) "Mortgage Insurance" means insurance protecting Lender against the nonpayment of, or default on, the Loan.
 (O) "Periodic Payment" means the regularly scheduled amount due for (i) principal and interest under the Note, plus (ii) any amounts under Section 3 of this Security Instrument

plus (ii) any amounts under Section 3 of this Security Instrument.
(P) "RESPA" means the Real Estate Settlement Procedures Act (12 U.S.C. §2601 et seq.) and its implementing regulation, Regulation X (24 C.F.R. Part 3500), as they might be amended from time to time, or any additional or successor legislation or regulation that governs the same subject matter. As used in this Security Instrument, "RESPA" refers to all requirements and restrictions that are imposed in regard to a "federally related mortgage loan" under RESPA.

(Q) "Successor in Interest of Borrower" means any party that has taken title to the Property, whether or not that party has assumed Borrower's obligations under the Note and/or this Security Instrument.

TRANSFER OF RIGHTS IN THE PROPERTY

This Security Instrument secures to Lender: (i) the repayment of the Loan, and all renewals, extensions and modifications of the Note; and (ii) the performance of Borrower's covenants and agreements under this Security Instrument and the Note. For this purpose, Borrower does hereby mortgage, grant and convey to MERS (solely as nominec for Lender and Lender's successors and assigns) and to the successors and assigns of MERS, with power of sale, the following described property located in the

COUNTY of HAMPDEN [Type of Recording Jurisdiction] registry of deeds Borrower Initials: DAL AKT MASSACHUSETTS-Single Family-Famile Mae/Freddie Mac UNIFORM INSTRUMENT - MERSocMagic CFOURDER 800-849-1362 Page 2 of 13 www.docmagic.com

(extrancovs pages skipped) Λ Λ Λ Λ Λ Λ 20

| ∨ ∨ ∨ ∨ ∨ ∨ Bk 16119 Pg 14 #72286

entitled to collect all expenses incurred in pursuing the remedies provided in this Section 22, including, but not limited to, reasonable attorneys' fees and costs of title evidence.

If Lender invokes the STATUTORY POWER OF SALE, Lender shall mail a copy of a notice of sale to Borrower, and to other persons prescribed by Applicable Law, in the manner provided by Applicable Law. Lender shall publish the notice of sale, and the Property shall be sold in the manner prescribed by Applicable Law. Lender or its designee may purchase the Property at any sale. The proceeds of the sale shall be applied in the following order: (a) to all expenses of the sale, including, but not limited to, reasonable attorneys' fees; (b) to all sums secured by this Security Instrument; and (c) any excess to the person or persons legally entitled to it.

23. Release. Upon payment of all sums secured by this Security Instrument, Lender shall discharge this Security Instrument. Borrower shall pay any recordation costs. Lender may charge Borrower a fee for releasing this Security Instrument, but only if the fee is paid to a third party for services rendered and the charging of the fee is permitted under Applicable Law.

24. Waivers. Borrower waives all rights of homestead exemption in the Property and relinquishes all rights of curtesy and dower in the Property.

BY SIGNING BELOW, Borrower accepts and agrees to the terms and covenants contained in this Security Instrument and in any Rider executed by Borrower and recorded with it.

ALTON KING, JR. Jerri G. Mays. Sug TERRI A. MAYES-KING (Seal) (Seal) -Borrower -Borrower (Seal) (Seal) -Borrower -Borrower (Seal) (Seal) -Borrower -Borrower Witness Witness:

MASSACHUSETTS--Single Family--Fannie Mae/Freddie Mac UNIFORM INSTRUMENT - MERSocMegic CRomons 800-549-1382 Form 3022 01/01 Page 12 of 13 www.docmagic.com

G. Barrett

(Witness to both)

Peter

Bk 16119 Pg 15 #72286

Commonwealth of Massachusetts

County of Hampden	
On this 8th day of August, 2 personally appeared TERRIA. MAYES	006 , before me, the undersigned notary public, -KING and ALTON KING, JR.
proved to me through satisfactory evidence of ic	dentification, which were Mass Drivers License.
to be the person whose name is signed on the prec signed it voluntarily for its stated purpose.	, veding or attached document, and acknowledged to me that (he) (she)
(as partner for a corporation)	•
(as	for , a corporation)
(as attorney in fact for the principal)	,
🗋 (as	for
	, (a) (the)

ry Public

PETER G. BARRETT Notary Public Commonwealth of Massachusetts My Commission Expires November 30,7201g (Printed Name)

(Seal)

My commission expires: <u>November 30, 2012</u>

MASSACHUSETTS--Single Family--Fannie Mae/Freddie Mac UNIFORM INSTRUMENT - MERocomagic 275000008 800-649-1362 Form 3022 01/01 Page 13 of 13 www.docmagic.com

Bk 16119 Pg 16 #72286

MIN: 1000285-1000109374-3

Loan Number: 1000109374

Doc ID#:

ADJUSTABLE RATE RIDER

(PayOption 11th District Cost of Funds Index - Payment Caps)

THIS ADJUSTABLE RATE RIDER is made this 8th day of AUGUST 2006 , and is incorporated into and shall be deemed to amend and supplement the Mortgage, Deed of Trust, or Security Deed (the "Security Instrument") of the same date given by 2006 the undersigned ("Borrower") to secure Borrower's Adjustable Rate Note (the "Note") to COMUNITY LENDING, INCORPORATED, A CALIFORNIA CORPORATION ("Lender") of the same date and covering the property described in the Security Instrument and located at:

49 MEMERY LANE, LONGMEADOW, MASSACHUSETTS 01106 [Property Address]

THE NOTE CONTAINS PROVISIONS THAT WILL CHANGE THE INTEREST RATE AND THE MONTHLY PAYMENT. THERE MAY BE A LIMIT ON THE AMOUNT THAT THE MONTHLY PAYMENT CAN INCREASE OR DECREASE. THE PRINCIPAL AMOUNT TO REPAY COULD BE GREATER THAN THE AMOUNT ORIGINALLY BORROWED, BUT NOT MORE THAN THE MAXIMUM LIMIT STATED IN THE NOTE.

ADDITIONAL COVENANTS: In addition to the covenants and agreements made in the Security Instrument, Borrower and Lender further covenant and agrees as follows:

A. INTERESTRATE AND MONTHLY PAYMENT CHANGES

The Note provides for changes in the interest rate and the monthly payments, as follows:

2. INTEREST Initial Interest rate

(A) Interest Rate

(A) interest value (Principal until the full amount of Principal has been paid.] will pay interest at a yearly rate of 1.000 %. The interest rate I will pay may change. The interest rate required by this Section 2 is the rate I will pay both before and after any default described in Section 7(B) of the Note.

→ Initial change date (B) Interest Rate Change Dates The interest rate I will pay may change on the 1st day of OCTOBER 2006 , and on that day every month thereafter. Each date on which my

interest rate could change is called an "Interest Rate Change Date." The new rate of interest will become effective on each Interest Rate Change Date. The interest rate may change monthly, but the monthly payment is recalculated in accordance with Section 3. [≥] change rate: 1 (month)

(C) Index

Beginning with the first Interest Rate Change Date, my adjustable interest rate will be based on

Page 1 of 5

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of members of the Federal Home Loan Bank of San Francisco (the "Bank"), as made available by the Bank. The most recent Index figure available as of the date 15 days before each Interest Rate Change Date is called the "Current Index".

If the Index is no longer available, the Note Holder will choose a new index that is based upon comparable information. The Note Holder will give me notice of this choice.

(D) Calculation of Interest Rate Changes

Initial change rate

^bhighest rate

(U) Calculation or interest kate Changes Before each Interest Rate Change Date, the Note Holder will calculate my new interest rate by adding FOUR AND 150/1000 percentage point(s) 4.150 % ("Margin") to the Current Index. The Note Holder will then round the result of this addition to the nearest one-eighth of one percentage point (0.125%). This rounded amount will be my new interest rate until the next Interest Rate Change Date. My interest will never be greater than 9.950 %. Beginning with the first Interest Rate Change Date, my interest rate will never be lower than the Margin.

3. PAYMENTS

(A) Time and Place of Payments

I will make a payment every month.

I will make my monthly payments on the 1st day of each month beginning on OCTOBER 1, 2006 . I will make these payments every month until I have paid all the Principal and Interest and any other charges described below that I may owe under this Note. Each monthly payment will be applied as of its scheduled due date and will be applied to interest before

Principal. If, on SEPTEMBER 1, 2036, I still owe amounts under this Note, I will pay those amounts in full on that date, which is called the "Maturity Date." I will make my monthly payments at 610 JARVIS DRIVE, SUITE 200, MORGAN HILL, CALIFORNIA 95037 Balloon payment

or at a different place if required by the Note Holder.

substantial payment (unknown amount) at end of life of loan

rider

(B) Amount of My Initial Monthly Payments Each of my initial monthly payments until the first Payment Change Date will be in the amount of U.S.\$ 3,216.40 unless adjusted under Section 3 (F).

(C) Payment Change Dates

My monthly payment may change as required by Section 3(D) below beginning on the 1st day of OCTOBER, 2007 , and on that day every 12th month 1st thereafter. Each of these dates is called a "Payment Change Date." My monthly payment also will change at any time Section 3(F) or 3(G) below requires me to pay a different monthly payment. The "Minimum Payment" is the minimum amount Note Holder will accept for my monthly payment which is determined at the last Payment Change Date or as provided in Section 3(F) or 3(G) below. If the Minimum Payment is not sufficient to cover the amount of the interest due then negative amortization will occur.

regotive nortization? yes

I will pay the amount of my new Minimum Payment each month beginning on each Payment Change Date or as provided in Section 3(F) or 3(G) below.

Borrower Initials: OMS_AKJ PayOption COFI ARM Rider FE-5314 (0511)

Page 2 of 5

Bk 16119 Pg 18 #72286

(D) Calculation of Monthly Payment Changes

At least 30 days before each Payment Change Date, the Note Holder will calculate the amount of the monthly payment that would be sufficient to repay the unpaid Principal that I am expected to owe at the Payment Change Date in full on the maturity date in substantially equal payments at the interest rate effective during the month preceding the Payment Change Date. The result of this calculation is called the "Full Payment." Unless Section 3(F) or 3(G) apply, the amount of my new monthly payment effective on a Payment Change Date, will not increase by more than 7.5% of my prior monthly payment. This 7.5% limitation is called the "Payment Cap." This Payment Cap applies only to the Principal and Interest payment and does not apply to any escrow payments Lender may require under the Security instrument. The Note Holder will apply the Payment Cap by taking the amount of my Minimum Payment due the month preceding the Payment Cap bate and multiplying it by the number 1.075. The result of this calculation is called the "Limited Payment." Unless Section 3(F) or 3(G) below requires me to pay a different amount, my new Minimum Payment will be the lesser of the Limited Payment and the Full Payment. I also have the option to pay the Full Payment for my monthly payment.

(E) Additions to My Unpaid Principal

Since my monthly payment amount changes less frequently than the interest rate, and since the monthly payment is subject to the payment limitations described in Section 3 (D), my Minimum Payment could be less than or greater than the amount of the interest portion of the monthly payment that would be sufficient to repay the unpaid Principal I owe at the monthly payment date in full on the Maturity Date in substantially equal payments. For each month that my monthly payment is less than the interest portion, the Note Holder will subtract the amount of my monthly payment from the amount of the interest portion and will add the difference to my unpaid Principal, and interest will accrue on the amount of this difference at the interest rate required by Section 2. For each month that the monthly payment is greater than the interest portion, the Note Holder will apply the payment as provided in Section 3 (A).

(F) Limit on My Unpaid Principal; Increased Monthly Payment

My unpaid Principal can never exceed the Maximum Limit equal to ONE HUNDRED FIFTEEN AND 000/1000 percent (115.000%) of the Principal amount I originally borrowed. My unpaid Principal could exceed that Maximum Limit due to Minimum Payments and interest rate increases. In that event, on the date that my paying my monthly payment would cause me to exceed that limit, I will instead pay a new monthly payment. This means that my monthly payment may change more frequently than annually and such payment changes will not be limited by the 7.5% Payment Cap. The new Minimum Payment will be in an amount that would be sufficient to repay my then unpaid Principal in full on the Maturity Date in substantially equal payments at the current interest rate.

(G) Required Full Payment

On the 5th Payment Change Date and on each succeeding fifth Payment Change Date thereafter, I will begin paying the Full Payment as my Minimum Payment until my monthly payment change gate. I also will begin paying the Full Payment as my Minimum Payment on the final Payment Change Date.

FE-5314 (0511)

Page 3 of 5

Bk 16119 Pg 19 #72286

(H) Payment Options

After the first Interest Rate Change Date, Lender may provide me with up to three (3) additional payment options that are greater than the Minimum Payment, which are called "Payment Options." I may be given the following Payment Options:

Interest only option? yes

PICK & PAY? NO

(i) Interest Only Payment: the amount that would pay the interest portion of the monthly payment at the current interest rate. The Principal balance will not be decreased by this Payment Option and it is only available if the interest portion exceeds the Minimum Payment.

(ii) **Fully Amortized Payment:** the amount necessary to pay the loan off (Principal and Interest) at the Maturity Date in substantially equal payments.

(iii) 15 Year Amortized Payment: the amount necessary to pay the loan off (Principal and Interest) within a fifteen (15) year term from the first payment due date in substantially equal payments. This monthly payment amount is calculated on the assumption that the current rate will remain in effect for the remaining term.

These Payment Options are only applicable if they are greater than the Minimum Payment.

B. TRANSFER OF THE PROPERTY OR A BENEFICIAL INTEREST IN BORROWER

Section 18 of the Security Instrument entitled "Transfer of the Property or a Beneficial Interest in Borrower" is amended to read as follows:

Transfer of the Property or a Beneficial Interest in Borrower. As used in this Section 18, "Interest in the Property" means any legal or beneficial interest in the Property, including, but not limited to, those beneficial interests transferred in a bond for deed, contract for deed, installment sales contract or escrow agreement, the intent of which is the transfer of title by Borrower at a future date to a purchaser.

If all or any part of the Property or any Interest in the Property is sold or transferred (or if Borrower is not a natural person and a beneficial interest in Borrower is sold or transferred) without Lender's prior written consent, Lender may require immediate payment in full of all sums secured by this Security Instrument. However, this option shall not be exercised by Lender if such exercise is prohibited by Applicable Law. Lender also shall not exercise this option if: (a) Borrower causes to be submitted to Lender information required by Lender to evaluate the intended transferee as if a new loan were being made to the transferee; and (b) Lender reasonably determines that Lender's security will not be impaired by the loan assumption and that the risk of a breach of any covenant or agreement in this Security Instrument is acceptable to Lender.

To the extent permitted by Applicable Law, Lender may charge a reasonable fee as a condition to Lender's consent to the loan assumption. Lender may also require the transferee to sign an assumption agreement that is acceptable to Lender and that

Borrower Initials: MK J PayOption COFI ARM Rider FE-5314 (0511)

Page 4 of 5

Bk 16119 Pg 20 #72286

obligates the transferee to keep all the promises and agreements made in the Note and in this Security Instrument. Borrower will continue to be obligated under the Note and this Security Instrument unless Lender releases Borrower in writing. If Lender exercises the option to require immediate payment in full, Lender shall give Borrower notice of acceleration. The notice shall provide a period of not less than 30 days from the date the notice is given in accordance with Section 15 within which Borrower must new all sums secured by this Sective Instrument If Borrower which Borrower must pay all sums secured by this Security Instrument. If Borrower fails to pay these sums prior to the expiration of this period, Lender may invoke any remedies permitted by this Security Instrument without further notice or demand on Borrower.

BY SIGNING BELOW, Borrower accepts and agrees to the terms and covenants contained in this Adjustable Rate Rider.

Servi a. Mayer. true	
alto Ling 1	-Borrower
ALTON KING, JRY	-Borrower
	-Borrower
	-Borrower

PayOption COFI ARM Rider FE-5314 (0511)

Page 5 of 5

Bk 16119 Pg 21 #72286

EXHIBIT A

Certain real estate situated in Longmeadow, Hampden County, Massachusetts, being known and designated as Lot No. eighteen (18) as shown on a plan of lots recorded with Hampden County Registry of Deeds in Book of Plans 309, Page 128; said lot being more particularly bounded and described as follows:

SOUTHEASTERLY, SOUTHERLY and SOUTHWESTERLY	by Memery Lane, one hundred (100) feet;
SOUTHEASTERLY	by Lot No. nineteen (19) as shown on said plan, two hundred forty and 76/100 (240.76) feet.
NORTHERLY	by land now or formerly of William Realty trust, a total distance of four hundred forty-three and 92/100 (443.92) feet; and
SOUTHWESTERLY	by Lot No. seventeen (17) as shown on said plan, two hundred forty-eight and 17/100 (248.17).

Subject to Restrictive Covenant in favor of Department of Environmental Panning restricting wetland alteration under instrument dated October 9, 1995 and recorded in the Hampden County Registry of Deeds in Book 9296, page 359.

Subject to Order of Conditions under Wetland Protection Act by Longmeadow Conservation Commission dated September 26, 1995 and recorded as aforesaid in Book 9269, Page 154.

Subject to Declaration of Maintenance Covenant dated November 3, 1989 and recorded as aforesaid in Book 7505, Page 266, as amended by instrument dated December 28, 1992 and recorded as aforesaid in Book 8301, Page 422.

Subject to easement granted to New England Telephone and Telegraph Company and Western Massachusetts Electric Company under instrument dated January 23, 1996 and recorded as aforesaid in book 9373, Page 471.

Subject to fence easement rights granted to Longmeadow Mall Limited Partnership under instrument dated September 14, 1998 and recorded as aforesaid in Book 10473, page 403.

Being the same premises conveyed to the grantors herein by deed dated January 2, 2003 and recorded in the Hampden County Registry of Deeds in Book 12845, Page 5.

DONALD E. ASHE, REGISTER registry - HAMPDEN COUNTY REGISTRY OF DEEDS WESTFIELD SATELLITE OFFICE

Additional Document Examples

The following documents are additional examples of Affidavits, Assignments of Mortgage, and two examples of full suites of foreclosure documents. These examples lack the additional green notes, but have important information highlighted and annotated in red.

Affidavits

The previous section containing documents with additional notes has an example of a 35B&35C Affidavit. This section contains examples of 35B, Pinti, and Eaton/Pinti Affidavits.

Some information about different types of affidavits:

- 35B: refers to Massachusetts General Law Chapter 244, Section 35B. Generally, the affiant swears that the requirements of 35B have been complied with, or that 35B is not applicable. 35B requires that a notice of the right to pursue a mortgage loan modification is sent to the borrower.
- 35C/Eaton/Note: refers to Massachusetts General Law Chapter 244, Section 35C. Generally, the affiant is swearing that the foreclosing mortgagee possesses the note or is the authorized agent of the holder of the note.
- Pinti: generally, states that the affiant swears that 1) the notice of default required under the terms of the foreclosure mortgage was sent by a specified time, or 2) that all notices were made in compliance with terms of the mortgage.
- 35B&35C: refers to Massachusetts General Law Chapter 244, Sections 35B and 35C. As listed above, 35B relates to the notice of the right of the borrower to pursue a mortgage loan modification. Likewise, 35C relates to the possession of the note by the foreclosing mortgagee.

For more detailed information, see: malegislature.gov

	Affidavit Bk: 53678 Pg: 242	
周圍開	教報 単級語 報報 新聞 開催 Book # Page #	
WBN	2015 00039746	
Bk: 5367 Page: 1	58878 Pg: 242 pe: 1 of 1 05/05/2015 11:11 AM WD AFFIDAVIT REGARDING COMPLIANCE WITH	: 35 B
	Property Address: 32-34 Edgewater Ave, Shrewsbury, MA 01545 مال مال مال مالغان مۇلاردى	
regist	Mortgage: Mortgage from Keith W. McKenzie and Paulette McKenzie to Option One Mo Corporation, a California Corporation, dated January 15, 2004 and recorded with the Worce (Worcester) Registry of Deeds at Book 32681, Page 225, assigned to HSBC Bank USA, Na Association, as trustee for ACE Securities Corp. Home Equity Loan Trust, Series 2004-OP Pass-Through Certificates by assignment recorded in said Registry of Deeds in Book 45773	rtgage ester County tional I Asset Backed , Page 244.
	Foreclosing Mortgagee: HSBC Bank USA, National Association, as trustee for ACE Sect Home Equity Loan Trust, Series 2004-OP1Asset Backed Pass-Through Certificates	urities Corp Mortgao
	The undersigned, Marjorie Timmerman, having personal knowledge of the facts	herein stated.
	under oath deposes and says as follows:	,
	 I am; [] An officer or employee of Foreclosing Mortgagee, where I hold the office of 	
	X An officer or employee of a duly authorized agent of Foreclosing Mortgagee.	
Edgewater Ave, Shrewsbury, ma 01545	2. In my capacity as <u>Contact neare</u> (title), I am familiar with the business records c Servicing, LLC as they relate to servicing of the Mortgage Loan which is the subjet affidavit. Oeven Loan Servicing, LLC's records are reliable because they are kept ordinary course of business by persons who have a business duty to make such recorder the loan come from another entity, those records were recorded. To the extent records in the ordinary course of its servicing business, have been incorporated into and ma part of Oeven Loan Servicing, LLC's business records, and have been relied on by Servicing business to make and maintain these records. I have personal knowledge of orth in this affidavit based upon my review of Oeven Loan Servicing, LLC's busin maintained in connection with the Mortgage and the related Mortgage loan account repayment the Mortgage secures.	f Ocwen Loan et of this → affinit in the organization rds. The service ords related to yes vicing, LLC intained as Ocwen Loan tgage of the facts set tess records whose reconal Knowledd talk to on advoc
/ Address: 32-3	3. Based upon my review of the business records of Ocwen Loan Servicing, LLC, I ce [] The requirements of M.G.L. c.244 sec.35B have been complied with. [] G.L. C244 Section 35B is not applicable to the above mortgage. → claims loan Signed under the pairs and penalties of parimy, this 21(day of Apr). 2015	betore answer rtify that: n offered ? No (loan was not offered
roperty	Signed under the pains and penalties of perfury and <u>events</u> and <u>events</u> .	
ŗ.	lawyer cert? No By: Mp.	
	offiant sow original ? No Name: Marjorie Timmerman	
	Outwofity boc? No Title: Oowen Loan Servicing, LLC as servicer for USA, National Association, as trustee for / Securities Corp. Home Equity Loan Trust, OPI Asset Backed Pass-Through Certificat	r HSBC Bank r HSBC Bank ACE affiavnt Series 2004- organizati es
,	COUNTY Bolo Becco county of notarization	
	On this 24^{H} day of 400^{H} , 20, 15, before me, the undersigned notary public, per appeared <u>Marjorie Timmerman</u> , proved to me through satisfactory evidence of iden which were <u>Personally Known To Me</u> , to be the person who signed the preceding or attat document in my presence, and who swore or affirmed to me that the contents of the docume and accurate to the best of home knowledge and belief.	rsonally tification, ched nt are truthful
	Notes Public State of Forder Holly Christian My Commission FF 19349 Notary Public Holly Christian My Commission Expires: Physical My Commission Expires: Physical Notary Public My Commission Expires: Physical My Christian My Christia	

and the second second

Pinti Affidavit

Bk: 59260 Pg: 327

Worcester South District Registry of Deeds Electronically Recorded Document

This is the first page of the document - Do not remove

Recording Information

Document Number Document Type Recorded Date Recorded Time : 85314 : AFF : August 15, 2018 : 12:04:31 PM : 59260 / 327 : 4 : 1093348 : \$75.00 Recorded Book and Page Number of Pages(including cover sheet) Receipt Number Recording Fee

fegistry ← Worcester South District Registry of Deeds Anthony J. Vigliotti, Register 90 Front St Worcester, MA 01608 (508) 798-7717



AFFIDAVIT OF COMPLIANCE WITH CONDITIONS PRECEDENT TO ACCELERATION AND SALE type: Pinti - "Pinti Affidavit"

> address

 Property Address:
 127 Worcester Street, North Grafton (Grafton), Massachusetts 01536

 Mortgagor:
 Robert W. Rezuke and Sharon L. Rezuke

 Mortgage Information:
 Robert W. Rezuke and Sharon L. Rezuke

 Mortgage Information:
 Robert W. Rezuke and Sharon L. Rezuke to Mortgage Electronic

 Registration Systems, Inc. as nominee for Drew Mortgage Associates, Inc., dated November 15, 2002 recorded with the Worcester County (Worcester District) Registry of Deeds at Book 28155, Page 1

by assignment from Mortgage Electronic Registration Systems, Inc. to Chase Home Finance LLC dated March 10, 2008 and recorded with said registry on March 18, 2008 at Book 42572 Page 280 and by assignment from JPMorgan Chase Bank, National Association successor by merger to Chase Home Finance LLC to MTGLQ Investors, LP dated August 18, 2017 and recorded with said registry on August 25, 2017 at Book 57633 Page 188

Foreclosing Mortgagee: MTGLQ Investors, LP ---- mortgagee

affiant a

The undersigned, **Diana L. Shaner**, having personal knowledge of the facts herein stated, under oath deposes and says as follows:

 I am an officer or employee of Rushmore Loan Management Services, LLC, a duly authorized agent of Foreclosing Mortgagee, where I hold the office or title of <u>Assistant Secretary</u>.

Rushmore Loan Management Services, LLC is the current servicer of the abovereferenced mortgage loan.

2. In the regular course of my job responsibilities, I am familiar with Rushmore Loan Management Services, LLC 's business processes and procedures and the methods by which Rushmore Loan Management Services, LLC 's business records are made and maintained. I have acquired personal knowledge of the information contained in this affidavit as a result of my review of Rushmore Loan Management Services, LLC 's business records are made and maintained. I have acquired personal knowledge of the information contained in this affidavit as a result of my review of Rushmore Loan Management Services, LLC 's business records are made and maintained. I have acquired personal knowledge of the information contained in this affidavit as a result of my review of Rushmore Loan Management Services, LLC 's business records are made and data

talk to an advocate before answering business records pertaining to the above-referenced mortgage, which include data compilations, electronically imaged documents, and servicing and loan payment histories.

200802-0355

Page 1 of 3 /HLO Pinti Servicer/Rezuke, Robert

Bk: 59260 Pg: 329

affiant saw original? No claims loan offered? No mortgagee claims note? No

These records are reliable because they are made at or near the time of the activity and transactions reflected in the records, by or from information transmitted by persons with knowledge of the activity and transactions, and are kept in the course of Rushmore Loan Management Services, LLC 's regularly conducted business activities. To the extent records related to the loan come from another entity, those records have been integrated into and are now a part of Rushmore Loan Management Services, LLC 's business records maintained in the ordinary course, and have been relied on by Rushmore Loan Management Services, LLC . It is the regular practice of Rushmore Loan Management Services, LLC to make and maintain these records as part of its mortgage servicing obligations and operations.

- 3. Based upon my review of the business records of Rushmore Loan Management Services, LLC, I certify that prior to the date when the notices were mailed and published pursuant to M.G.L. Chapter 244, Section 14: [Check One]
 - ✓ Notice(s) of Default to Mortgagor(s) has/have been given by the then holder of the note secured by said mortgage or its duly authorized agent in strict compliance with the terms and conditions precedent in the mortgage to acceleration and sale contained in the mortgage;
 - Notice(s) of Default to Mortgagor(s) were not required to comply strictly with the notice requirements set forth in the mortgage because the notices were sent on or before July 17, 2015;
 - The mortgage contains no notice requirements.

200802-03*5

Page 2 of 3 /HLO Pinti Servicer/Rezuke, Robert

Bk: 59260 Pg: 330

Signed under the pains and penalties of perjury this $\underline{251}^{M}$ day of $\underline{1000}^{M}$ 2018 authority doc? No Chara Affiant Signature: / Neu Print Name: Diana L. Shaner title of affiant **Assistant Secretary** Title: organization of affiant Rushmore Loan Management Services, LLC Texas [COMMONWEALTH/STATE] OF County of nllas , SS notarization On this 25th day of <u>Diana L. Shaner</u>, 2018, before me, the undersigned notary public, personally appeared <u>Diana L. Shaner</u> (name of document signer), proved to me through satisfactory evidence of identification, which were <u>Diana L. Shaner</u>, to be the person who signed the preceding or attached document in my presence, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief. **\$** Notary Public Arthur R. Finley III Print Name lawyer cert? No My Commission Expires: 3-1-2-01-2

STATES 3-1-2012

200802-0385

Page 3 of 3

HLO Pinti Servicer/Rezuke, Robert /HLO Pinti Servicer/Rezuke, Robert

Eaton/Pinti Affidavit		
BK: 60846 Mg: 243		
	BK: 60845 Pg: 243 BK: 60845 Pg: 243 CBK: 60845 Pg: 243	
	Page #	
	Affidavit Degarding Note Secured By Martgage Being Foreelessed	
"Eaton/Pinti"		
Control F hill	Property Address: 29 Nome Street, Worcester, Massachusetts 01605	
	د مفادوع Mortgage: William N. Quartey and Doris M. Quartey to Mortgage Electronic Registration Systems, Inc., as nomines for Americal's Wholesela I and at its successors and assigns dated October 21, 2005 and reported with the	
Coniston	Worcester County (Worcester District) Registry of Deeds at Book 37647, Page 248.	
12913119	Assigned to: Bank of New York, as Trustee for the Certificateholders CWALT, Inc. Alternative Loan Trust 2005- 66, Mortgage Pass-Through Certificates, Series 2005-66 by assignment recorded in Said Registry of Deeds in Book	
	45236, Page 221.	
	Foreclosing Mortgagee: The Bank of New York Mellon, f/k/a, the Bank of New York as Trustee, on behalf of the registered holders of Alternative Loan Trust 2005-66, Mortgage Pass-Through Certificates, Series 2005-66	
Affiant Motig		
	The undersigned. Bertha Vanessa Acosta having personal knowledge of the facts herein	
	stated, under oath deposes and says as follows:	
	 I am a <u>Document Control Officer</u>, of Select Portfolio Servicing, Inc. ("SPS") attorney-in-fact and duly authorized agent for The Bank of New York Mellon, <i>flk/a</i>, the Bank of New York 	
. FF: A street	as Trustee, on behalf of the registered holders of Alternative Loan Trust 2005-66, Mortgage Pass-Through Certificates, Series 2005-66, the Foreclosing Mortgagee.	
ATTIANT DI GANI	 As a mortgage servicer, SPS collects payments from borrowers and maintains up-to-date electronic records concerning the loans it services in its electronic record-keeping system. I have access to SPS's business records. 	
	including the business records for and relating to the subject loan. I make this affidavit based upon my review of those records relating to the Borrower(s)'s loan and from my own personal knowledge of how the records are	
	kept and maintained. The loan records are maintained by SPS in the course of its regularly conducted business activities and are made at or near the time of the event, by or from information transmitted by a person with	
	personal knowledge. It is the regular practice to keep such records in the ordinary course of a regularly conducted business activity.	
	3. To the extent that the business records of the loan in this matter were created by a prior servicer, the prior	
	servicer's records for the loan were integrated and boarded into Sr's systems, such that the pror servicer's records concerning the loan are now part of SPS's business records. SPS maintains quality control and verification procedures a part of the barding process to ansure the accuracy of the boarded records. It is the	
	regular practice of SPS to integrate prior servicers' records into SPS's business records, and to rely upon the accuracy of those boarded records in providing its loan servicing functions. These prior servicer records are	
	integrated and relied upon by SPS as part of SPS's business records.	
	 Based upon my review of SPS's business records, I certify that as of the date when the Notice of Sale relating to the above-referenced mortgage were mailed and published and up to and including the foreclosure sale date, 	
	The Bank of New York Mellon, <i>It</i> /Ja, the Bank of New York as Trustee, on behalf of the registered holders of Alternative Loan Trust 2005-66, Mortgage Pass-Through Certificates, Series 2005-66 was	
mortgagee claims note? Yes "Ithe holder of the promissory note secured by the above-referenced mortgage.		
	the authorized agent of the holder of the promissory note secured by the above-referenced	
all and and	morgage.	
lawuer cert	2 No	
	16-014730 MA005.J004	
	36	

Bk: 60845 Pg: 244			
claims loan offered? No (N/A to this type of affidavit)			
5. Based upon my review of SPS's business records, I c	ertify that prior to mailing the Notices of Sale:		
If the Notice(s) of Default to Mortgagor(s) were seprecedent in the mortgage to acceleration and sale. a. The Notice(s) specified the action requires the Notice(s) specified the action requires the Notice(s) specified in the Notice default must be default at the beneric during be default by the Mortgage (for the property secured by the Mortgage without Sale and any other remedies permitted in Lender shall be entitled to collect all exabove, including but not limited to rease down and the mortgage contains no conditions. Signed under the pains and penalties of perjury this	It in strict compliance with the terms and conditions further certify: gor(s) on August 22, 2016 and specified the default. red to cure the default. than 30 days from the date of Notice being mailed to the cured. s) that failure to cure the default on or before the date seleration of the sums secured by the Mortgage and sale s. s) of the right to reinstate after acceleration and the right existence of a default or other defense to acceleration s) that if the default is not cured on or before the date option may require immediate payment in full of all further demand and may invoke the Statutory Power of by Applicable Law. The Notice further informed the penses incurred in pursuing the remedies provided mable atometrys' fees and conditions precedent in as sent on or before July 17, 2015. precedent in the mortgage to acceleration and sale. f_{-} day of		
ر notary state STATE OF UTAH م notary county COUNTY OF SALT LAKE) y Persona	lly Known		
Subscribed before me on this <u>6</u> day of <u>July</u> <u>Berlyna Vanesca Acceta</u> , <u>a</u> Inc., proved on the basis of satisfactory evidence to be th who swore or affirmed to me that the contents of the dow knowledge and belief. Witness my hand and official sea <u>Augusta</u> Notes Public <u>Army Norton</u>	in the year 2019 by <u>Decame a Control Officer</u> of Select Portfolio Servicing, the person whose name is subscribed to this instrument and aument are truthful and accurate to the best of his/her <u>AMY NORTON</u> Notory Public Store of Utah Comm. Exp:: Feb. 15, 2021 Comm. Number: 693626		
16-014730	MA005.J004		
ATTEST: WORC. Kathryn A. Toomay, Register			

Assignments

Following are three examples of "Assignment of Mortgage"s, with data of interest highlighted and annotated in red.

Note that all of the Assignments which are contained in this document are "Assignment of Mortgage"s. Other types of Assignments, such as "Assignment of Leases and Rents" and "Assignment of Bid" are different documents. As of May 2021, MAAPL's database only records information from "Assignment of Mortgage" documents.




	30
Redacted	
Prepared By and Return To: Heather Neal Collateral Department Meridian Asset Services, Inc. 780 94 th Avenue N., Suite 102 St. Petersburg, FL 33702 (727) 497-4650 Space above for Recorder's use Space above for Recorder's use *** Electronic Recording *** Doc#: 00033336 BK: 46854 Pg: 41 Page: 1 of 3 Recorded: 04/27/2016 03:47 PM ATTEST: John R. Buckley, Jr. Register Plymouth County Registry of Deeds	
Nalve/consideration? yes ASSIGNMENT OF MORTGAGE Norked as confirmatory? No FOR GOOD AND VALUABLE CONSIDERATION, the sufficiency of which is hereby acknowledged, the undersigned predimentation of the sufficiency of which is hereby acknowledged, the softwares is CO PRETIUM MORTGAGE CREDIT MANAGEMENT, 120 SOUTH SIXTH STREET, 8:100, MINNEAPOLIS, MN S5402, (ASSIGNOR), does hereby grant, assign and transfer to WILMINGTON action of the software o	
Legal Description: SEE EXHIBIT "A" ATTACHED Property more commonly described as: 81 THORNEY LEA TERRACE, BROCKTON, MASSACHUSETTS 02301	
date signed N WITNESS WHEREOF, the undersigned by its duly elected officers and pursuant to proper authority or its board of directors has duly executed, scaled, acknowledged and delivered this assignment. authority doc? Date: 3/21/16 No Signer company Signer company Signer company Title: AUTHORIZED SIGNATORY title without authorized Signatory title without authorized Signatory title without authorized Signatory	
EXHIBIT. Bar Contraction of the second secon	
40 RA30	

Bk: 46854 Pg: 42

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT

State of $MINNESOTA \rightarrow notary state$ County of $HENNEPIN \rightarrow notary country$

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On 3.2.1.16 before me, THU VAN WITTMANN, a Notary Public, personally appeared STEVE ALLISON, AUTHORIZED SIGNATORY offor RETIUM MORTGAGE CREDIT PARTNERS I LOAN ACQUISITION, LP, personally known to me, or who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity. upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of MINENSOTA that the foregoing paragraph is true and correct. I further certify STEVE ALLISON, signed, sealed, attested and delivered this document as a voluntary act in my presence.

Witness my hand and official seal.

Thu Van Wittmann

(Notary Name): THU VAN WITTMANN → notary My commission expires: 1/31/2018



,

Assignments - Example 3

Bk: 44552 Pg: 143 When Recorded Return To: BOOK and Bk: 44552 Pg: 143 Page: 1 of 1 JPMorgan Chase Bank, NA C/O Nationwide Title Clearing, Inc. 2100 Alt. 19 North page # Recorded: 07/22/2014 11:30 AM ATTEST: John R. Buckley, Jr. Register Plymouth County Registry of Deeds Palm Harbor, FL 34683 registry Loan No 660175134A Reference Loan No 23105899 marked as confirmatory? No ASSIGNMENT OF MORTGAGE Contact JPMORGAN CHASE BANK, N.A. for this instrument 780 Kansas Lane, Suite A, Monroe, LA 71203, telephone # (866) 756-8747, which is responsible for receiving payments. , opsigned 1 FOR GOOD AND VALUABLE CONSIDERATION, the sufficiency of which is hereby acknowledged, the undersigned, JPMORGAN CHASE BANK, NATIONAL ASSOCIATION, WHOSE ADDRESS IS 700 KANSAS LANE, MC 8000, MONROE, LA, 71203, (ASSIGNOR), by these presents does convey, grant, assign, transfer and set over the described Mortgage, with all interest secured thereby, all liens, and any rights due or to become due thereon to NRZ PASS-THROUGH TRUET IV, US. BANK NATIONAL ASSOCIATION AS TRUSTER, WHOSE ADDRESS IS 60 LIVINGSTON AVENUE, ST. PAUL, MN 55107, ITS SUCCESSORS AND ASSIGNS, (ASSIGNEE). assigning the mortgage hearing the date 1008/2003 made and executed by ELENICE S. UMANA AND FRANK L. value/consideration? all beneficial assignee 1 interest? No with note? No Said Mortgage bearing the date 10/08/2003, made and executed by ELENICE S. UMANA AND FRANK L. UMANA, mortgagor(s), to WASHINGTON MUTUAL BANK, FA, mortgagee, and was recorded in the Office of the Register of Titles and County Recorder for PLYMOUTH County, Massachusetts, in Book 26809, Page 82 and Instrument # 202005. and Instrument # 223969. Property is commonly known as:81 THORNEY LEA TERRACE, BROCKTON, MA 02301. IN WITNESS WHEREOF, the said corporation has caused these present to be executed in its name by its signer title (Vice President on 06/27/2014 (MM/DD/YYYY). JPMORGAN CHASE BANK, NATIONAL ASSOCIATION Jate signed be beneficiary? N/A By: Judy & Dackson Judy & Jackson Vice President authority doc? No signer is attorney in fact? No STATE OF LOUISIANA PARISH OF OUACHITA On OCI 2712014 (MM/DD/YYYY), before me appeared The Control of the compensative series and the series of the compensative series of the compensat notary state + and county notary EVA REESE OUACHITA PARISH, LOUISIANA LIFETIME COMMISSION NOTARY ID# 17070 Keu EV4 Rege Notary Public - State of LOUISIANA Commission expires: Upon My Death No Mortgage Broker was involved in the placing of this loan. Mortgage Broker's Name: Address: , , License: No Mortgage Loan Originator was involved in the placing of this loan. Mortgage Loan Originator's Name: Address: . . License: Instrument Prepared By: Judy & Jakan JPMorgan Chase Bank, N.A., 780 Kansas Lane, Suite A, Monroe, LA, 71203 JPCAR 24063278 *C* -- NPL9 T2514062908 [C-1] FRMMA1 RA108

Full Document Suites

Following are two examples of abbreviated foreclosure document suites. Each suite includes examples of: Complaint/Notice, Power of Attorney, Affidavit, Certificate of Entry, Assignments, Foreclosure Deed with Affidavit of Sale and Advertisement, and Mortgage documents. While these two document suites are not in a standard form, they are additional examples of the order that registries may receive documents in. Each suite is also associated with one foreclosure case, so they show the relationships between foreclosure documents.

Foreclosure Suite 1



From the Office of :	19 SM 001151
Orlans PC	(The number of the second s
PO Box 540540	
Waltham, MA 02454	
Telephone No. (with extension):	(781) 790-7800
Office File no. (If Available):	18-016014

LAND COURT USE ONLY

Under the provisions of the Servicemembers Civil Relief Act, this cause came on to be heard and thereupon, upon consideration thereof, it appearing to the Court that the Defendant(s) is/are not entitled to the benefits of said Act, it is hereby

ORDERED and ADJUDGED that the Defendant is/are not entitled to the benefits of the Servicemembers Civil Relief Act, as of the Defendant is/are not entitled to the allowance of Plaintiff's motion for judgment.

By the Court.().

Attest:

(SEAL)

Deborah J. Patterson, Recorder

* TRUE COPY ITTEST: Deborah S. Putterson RECORDER First four pages probably have address - use same as in previous associated (complaint) doc f Page 5 or 12

> Document drafted by and RECORDING REQUESTED BY: Shellpoint Mortgage Servicing 55 Beattie Place, Ste 110 Greenville, SC 29601



SPACE ABOVE THIS LINE FOR RECORDER'S USE

LIMITED POWER OF ATTORNEY

grantor 1

The trusts identified on the attached Schedule A (the "Trusts"), by and through U.S. Bank National Association, a national banking association organized and existing under the laws of the United States and having an office at 60 Livingston Avenue, EP-MN-WS3D, St. Paul, MN 55107, not in its individual capacity but solely as Trustee ("Trustee"), hereby constitutes and appoints NewRez LLC, fik/a New Penn Financial, LLC, di/a Shellpoint Mortgage Servicing ("Servicer"), and in its name, aforesaid Attorney-In-Fact, by and through any office at popointed by the Board of Directors of Servicer, to execute and acknowledge in writing or by facsimile stamp all documents customarily and reasonably necessary and appropriate for the tasks described in the items (1) through (12) below; provided however, that (a) the documents described below may only be executed and delivered by such Attorneys-In-Fact if such documents are required or permitted under the terms of the related servicing agreements, (b) all actions taken by Servicer pursuant to this Limited Power of Attorney must be in accordance with Federal, State and local laws and procedures, as applicable and (c) no power is granted hereunder to take any action that would be either adverse to the interests of or be in the name of U.S. Bank National Association in its individual capacity. This Limited Power of Attorney is being issued in connection with Service's responsibilities to service certain mortgage loans (the "Loans") held by the Trustee. These Loans are secured by collateral comprised of mortgages, deeds of trust, deeds to secure debt and other forms of security instruments (collectively the "Poerty") and the Notes secure directy. Please refer to Schedule A attached hereto.

- 1. Demand, sue for, recover, collect and receive each and every sum of money, debt, account and interest (which now is, or hereafter shall become due and payable) belonging to or claimed by the Trustee, and to use or take any lawful means for recovery by legal process or otherwise, including but not limited to the substitution of trustee serving under a Deed of Trust, the preparation and issuance of statements of breach, notices of default, and/or notices of sale, accepting deeds in lieu of foreclosure, evicting (to the extent allowed by federal, state or local laws) foreclosing on the properties under the Security Instruments by judicial or nonjudicial foreclosure, actions for temporary restraining orders, injunctions, appointments of receiver, suits for waste, fraud and any and all other tort, contractual or verifications in support thereof, as may be necessary or advisable in any bankruptcy action, state or federal suit or any other action.
- Execute and/or file such documents and take such other action as is proper and necessary to defend the Trustee in litigation and to resolve any litigation where the Servicer has an

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≠grantee 1

Page #

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obligation to defend the Trustee, including but not limited to dismissal, termination, cancellation, rescission and settlement.

- Transact business of any kind regarding the Loans, as the Trustee's act and deed, to contract for, purchase, receive and take possession and evidence of title in and to the Property and/or to secure payment of a promissory note or performance of any obligation or agreement relating thereto.
- 4. Execute, complete, indorse or file bonds, notes, mortgages, deeds of trust and other contracts, agreements and instruments regarding the borrowers and/or the Property, including but not limited to the execution of estoppel certificates, financing statements, continuation statements, releases, satisfactions, reconveyances, assignments, loan modification agreements, payment plans, waivers, consents, amendments, forbearance agreements, loan assumption agreements, subordination agreements, property adjustment agreements, management agreements, listing agreements, purchase and sale agreements, and execution of deeds and associated instruments pertaining to mortgages or deeds of trust, and execution of deeds and associated instruments, if any, conveying the Property, in the interest of the Trustee.
- Endorse on behalf of the undersigned all checks, drafts and/or other negotiable instruments made payable to the undersigned.
- Execute any document or perform any act in connection with the administration of any PMI policy or LPMI policy, hazard or other insurance claim relative to the Loans or related Property.
- 7. Execute any document or perform any act described in items (3), (4), and (5) in connection with the termination of any Trust as necessary to transfer ownership of the affected Loans to the entity (or its designee or assignee) possessing the right to obtain ownership of the Loans.
- 8. Subordinate the lien of a mortgage, deed of trust, or deed or other security instrument to secure debt (i) for the purpose of refinancing Loans, where applicable, or (ii) to an easement in favor of a public utility company or a government agency or unit with powers of eminent domain, including but not limited to the execution of partial satisfactions and releases and partial reconveyances reasonably required for such purpose, and the execution or requests to the trustees to accomplish the same.
- Convey the Property to the mortgage insurer, or close the title to the Property to be acquired as real estate owned, or convey title to real estate owned property ("REO Property").
- 10. Execute and deliver any documentation with respect to the sale, maintenance, preservation, renovation, repair, demolition or other disposition, of REO Property acquired through a foreclosure or deed-in-lieu of foreclosure, including, without limitation: permits, remediation plans or agreements; certifications, compliance certificates, health and safety certifications, listing agreements; purchase and sale agreements; grant / limited or special warranty / quit claim deeds or any other deed, but not general warranty deeds, causing the transfer of title of the property to a party contracted to purchase same; escrow instructions; and any and all documents necessary to effect the transfer of REO Property.

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- 11. Servicer has the power to execute additional limited powers of attorney and delegate the authority given to it by U.S. Bank National Association, as Trustee, under the applicable servicing agreements for the Trusts listed on Schedule A, attached.
- 12. To execute, record, file and/or deliver any and all documents of any kind for the purpose of fulfilling any servicing duties, including but not limited to those listed in subparagraphs (1) through (11), above, where Trustee's interest is designated, stated, characterized as or Includes any reference to one or more of the following: "Indenture Trustee", "Owner Trustee", "Delaware Trustee", "Successor Trustee", "Successor in Interest", "Successor to "Successor by Merger", "Trustee/Custodian", "Custodian/Trustee" or other similar designation.

Trustee also grants unto Servicer the full power and authority to correct ambiguities and errors in documents necessary to effect or undertake any of the items or powers set forth in items (1) to (12), above.

In addition to the indemnification provisions set forth in the applicable servicing agreements for the Trusts listed on Schedule A, attached, Servicer hereby agrees to indemnify and hold the Trustee, and its directors, officers, employees and agents harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever incurred by reason or result of the misuse of this Limited Power of Attorney by the Servicer. The foregoing indemnity shall survive the termination of this Limited Power of Attorney and the related servicing agreements or the earlier resignation or removal of the Trustee for the Trusts listed on Schedule A

Witness my hand and seal this 2nd day of July, 2019. - date of signature

NO CORPORATE SEAL

Kristi Redman Clapp) Witness: Kristi Redman Clapp mule all Witness: Eneida Murillo

Attest: Alex E. Fuentes, Trust Officer

On Behalf of the Trusts, by U.S. Bank National Association, as Trustee

John L. Linssen, Vice President Jam / Weety Timothy G. Matyi, Vice President By: _

By:

File Number: 2020-00003543 Seg: 7

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CORPORATE ACKNOWLEDGMENT

State of Minnesota

County of Ramsey

On this 2nd day of July, 2019, before me, the undersigned, a Notary Public in and for said County and State, personally appeared John L. Linssen, Timothy G. Matyi, and Alex E. Fuentes, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons who executed the within instrument as Vice President, Vice President, and Trust Officer, respectively of U.S. Bank National Association, a national banking association, and acknowledged to me that such national banking association executed the within instrument pursuant to its by-laws or a resolution of its Board of Directors.

WITNESS no hand and official seal. Th V Signature: $\overline{}$ Brad J. Weber

Brad J Weber NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 2024 à.

...

My commission expires: 1/31/2024

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Schedule A

U.S. Bank, National Association, as Trustee for Ameriquest Mortgage Securities Inc., Floating Rate Mortgage Pass-Through Certificates, Series 2001-2

U.S. Bank National Association as Trustee for RFMSI 2004-PS1

U.S. Bank National Association as Trustee for RFMSI 2006-56 U.S. Bank N.A., as Trustee for the benefit of the registered holders of the Mortgage-Backed Pass-Through Certificates, Series 2002-AR25

U.S. Bank N.A., as Trustee for the registered holders of Asset Backed Certificates, Series 2005-HE4 U.S. Bank N.A., as Trustee for the registered holders of Mortgage-Backed Pass-Through Certificates, Series 2002-AR28

U.S. Bank N.A., as Trustee for the registered holders of Mortgage-Backed Pass-Through Certificates, Series 2003-AR15

U.S. Bank N.A., as Trustee for the registered holders of Mortgage-Backed Pass-Through Certificates, Series 2003-AR18

U.S. Bank N.A., in its capacity as Trustee for Morgan Stanley Dean Witter Capital I Inc. Trust 2001-NC4, Mortgage Pass-Through Certificates, Series 2001-NC4

U.S. Bank N.A., in its capacity as Trustee for the holders of Morgan Stanley Dean Witter Capital I Inc. Trust 2002-HE1 Mortgage Pass-Through Certificates, Series 2002-HE1

U.S. Bank N.A., in its capacity as Trustee for CSFB Home Equity Pass-Through Certificates, Series 2004-AA1 Trust, CSFB Home Equity Pass-Through Certificates, Series 2004-AA1

U.S. Bank N.A., in its capacity as Trustee for CSFB Home Equity Pass-Through Certificates, Series 2005-FIX1 Trust, CSFB Home Equity Pass-Through Certificates, Series 2005-FIX1

U.S. Bank N.A., in its capacity as Trustee for the benefit of the Certificateholders of Home Equity Mortgage Trust Series 2006-5 and the registered holders of Home Equity Mortgage Pass-Through Certificates, Series 2006-5

U.S. BANK NATIONAL ASSOCIATION as Trustee for the registered holders of ABFC 2007-WMC1 Trust Asset Backed Funding Corporation Asset Backed Certificates, Series 2007-WMC1

U.S. Bank National Association as trustee, for the registered holders of CSMC Asset-Backed Trust 2007-INC1 OSI, CSMC Asset-Backed Pass-Through Certificates, Series 2007-INC1 OSI

U.S. Bank National Association as Trustee, successor in interest to Wachovia Bank, N.A. as Trustee for Merrill Lynch Mortgage Investors Trust, Mortgage Pass-Through Certificates, Series 2005-A6 U.S. Bank National Association, as Indenture Trustee for Bayview Financial Asset Trust 2008-A

U.S. Bank National Association, as Indenture Trustee for SASCO Mortgage Loan Trust 2004-GEL2 Mortgage Backed Notes, Series 2004-GEL2 U.S. Bank National Association, as successor in Interest to Bank of America National Association,

successor by merger to LaSalle Bank National Association, as Indenture Trustee for Terwin Mortgage Trust 2004-EQR1

U.S. Bank National Association, as successor in interest to Bank of America National Association, successor by merger to LaSalle Bank National Association, as Trustee for Ownit Mortgage Loan Trust, Mortgage Loan Asset-Backed Certificates, Series 2006-3

U.S. Bank National Association, as successor in interest to Bank of America National Association, successor by merger to LaSalle Bank National Association, as Trustee for Ownit Mortgage Loan Trust, Mortgage Loan Asset-Backed Certificates, Series 2006-4

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(etc.) NNNNNN 50

Page 1 of 12 STATE OF IOWA, COUNTY OF BLACKHAWK, SS: I, Sandie L. Smith, Recorder of said County, hereby ID: 009688590012 Type: GEN prded: 05/26/2019 at 10:07:17 AM Amt: \$52.00 Page 1 of 12 ok Hawk County Iova JIE L. SMITH RECORDER certify that this is a true copy of the official document as recorded in the Recorder's Office in Book and Page or Document No. 2020 - 00003543 -11-2020-00003543 Sandie L. Smith, County Recorder Sandie S. Smith 8-28-19 (DATE) (Recorder) SO.ESSEX #271 Bk:39605 Pg:2 03/04/2021 12:48 PM POW Pg 1/3 addless : use same as previous document or hand search documents with bordering book + page or document number (73 o'callaghan Way, Lynn) eRecorded Book # Page # registry Document drafted by and After Recording Return Document To: PHH Mortgage Corporation 5720 Premier Park Dr Bldg 3 West Palm Beach, FL 33407 Attn: Record Services Hely LIMITED POWER OF ATTORNEY KNOW ALL MEN BY THESE PRESENTS, that pursuant to the authority granted under that certain Imited power of attorney attached as Exhibit A (the "Limited POX"). NewRez LLC, fk/a New Penn Financial, LLC, d/b/a Shellpoint Mortgage Servicing (the "Company"), in its capacity as Servicer, having a place of business at 75 Beattie Place, Suite 300, Greenville, SC 29601, does hereby further constitute and appoint PHH Mortgage Corporation successor by merger to Ocwan Loan Servicing LLC, a Delaware limited liability company ("PHH Mortgage"), having an office at 1661 Worthington Rd, Ste. 100, West Palm Beach, FL 33409, by and through its offense line ward having and the service and the service in the service service and the service » grantor 1 grantee 1 officers, its true and lawful Attorney-in-Fact, in its name, place and stead and for its benefit, in connection with the Subservicing Agreement, dated as of August 17, 2018, by and between New Penn Financial, LLC d/b/a Shellpoint Mortgage Servicing and Ocwen Loan Servicing, LLC , ("Agreement"). Pursuant to the authority granted under the Limited POA, the Company hereby further grants its authority and power to execute any and all such instruments and to do and perform all and every act and thing necessary and proper to carry into effect the powers granted by or under this limited Power of Attorney as fully as the undersigned might or could do under the limited POA, and hereby does ratify and confirm all that PHH Mortgage shall lawfully do or cause to be done by authority hereof. The undersigned also grants unto said Attorney-in-fact, subject to the foregoing limitations, the full power and authority to correct minor ambiguities and errors in documents necessary to effect the above, for the purpose of performing all acts and executing all documents in the name of the Company necessary and incidental to the servicing of said loans, including but not limited to: 1. Foreclosing delinquent loans or discontinuing such foreclosure proceedings, including, but not limited to, the execution of notices of default, notices of sale, assignments of bids, and assignments of deficiency judgments, and appearing in the prosecuting bankruptcy proceedings; Selling, transferring or otherwise disposing of real property acquired through foreclosure or otherwise, including, but not limited to, executing all contracts, agreements, deeds, assignments or other instruments necessary to effect such sale, transfer or disposition, and U.S. Bank (PHH merger) File Number: 2020-00003543 Seq: 1 100 of (62)

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- receiving proceeds and endorsing checks made payable to the order of the Company from such proceedings;
- 3. Facilitation of an eviction according to the state law of occupants for properties;
- 4. Preparing, executing, and delivering satisfactions, cancellations, discharges, lost note instruments, or full or partial releases of lien, subordination agreements, modification agreements, assumption agreements, substitutions of trustees under deeds of trust, and UCC-3 Continuation Statements;
- 5. Endorsing promissory notes and executing assignments of mortgages, deeds of trust, deeds to secure debt, and other security instruments securing said promissory notes in connection with loans for which PHH Mortgage has received full payment of all outstanding amounts due on behalf of the Company;
- Endorsing insurance proceeds checks and mortgage payment checks to the order of the Company; and
- Any and all such other acts of any kind and nature whatsoever that are necessary and prudent to service the loans in accordance with the Agreement.

The Company further grants to PHH Mortgage full power and authority to do and perform all acts necessary for PHH Mortgage to carry into effect the power or powers granted by or under this Limited Power of Attorney as fully as the Company might or could do with the same validity as if all and every such act had been herein particularly stated, expressed and especially provided for, and hereby ratifies and confirms all that PHH Mortgage shall lawfully do by virtue of the powers and authority granted and contemplated hereby, and all that PHH Mortgage has previously done pursuant to or in connection with the Servicing Agreement or any Limited Power of Attorney previously granted by the Company to PHH Mortgage. This Limited Power of Attorney shall be in full force and effect as of July 11, 2019 until revoked or terminated by the Company.

Nothing herein shall give the attorney-in-fact hereunder the right or power to negotiate or settle any suit, counterclaim or action against the Company. The Company shall have no obligation to inspect or review any agreement or other document or item executed by the attorney-in-fact hereunder on behalf of the Company pursuant to this Limited Power of Attorney and as such, the attorney-in-fact hereunder expressly acknowledges that the Company is relying upon such attorney-in-fact to undertake any and all necessary procedures to confirm the accuracy of any such agreement, document or other item.

Third parties without actual notice may rely upon the exercise of the power granted under this Limited Power of Attorney, and may be satisfied that this Limited Power of Attorney has not been revoked by the Company, unless a revocation has been recorded in the public records of the jurisdiction where this Limited Power of Attorney has been recorded, or unless such third party has received actual written notice of a revocation.

U.S. Bank (PHH merger)

File Number: 2020-00003543 Seq: 2

, Page 3 of 12	
· .	
	NewRez LLC, f/k/a New Penn Financial, LLC, d/b/a Sheilpoint Mortgage Servicing (Company)
	By: Mere dith Prarket
	Name: Meredith Prickett
	Title: Assistant Secretary
	Date: July 11, 2019
	Witness:
	Witness:Eve Merimer

STATE OF SOUTH CAROLINA

COUNTY OF GREENVILLE

On this 11 day of July in the year 2019 before me, the undersigned, personally appeared Meredith Prickett, personally known to me to be the person who executed the within instrument as Assistant Secretary, on behalf of NewRez LLC, f/k/a New Penn Financial, LLC, d/b/a Shellpoint Mortgage Servicing, and he acknowledged that said instrument is the act and deed of NewRez LLC, f/k/a New Penn Financial, LLC, d/b/a Shellpoint Mortgage Servicing, and that he, being authorized to do so, executed and delivered said instrument for the purposes therein contained.

Sworn to (or affirmed) and subscribed before me this 11 day of July, 2019.

Official Seal Julius Drayton, Notary Public IRES 31/2027 Greenville County, South Carolina My commission expires: 1/31/2027 CARO

U.S. Bank (PHH merger)

File Number: 2020-00003543 Seq: 3



18-016014/189/EATA_DR





18-016014/189/EATA_DR



18-016014/189/EATA_DR



- grantor 1 POWER OF ATTORNEY

grantee 1 +

Constitute and appoint Orlans PC, with an address of PO Box 540540, with an address of CP PHH Morgage Corporation successor by merger to Oewen Loan Servicing, LLC 1661 Worthington Road, Suife 100, West Palm Beach, FL 33409 does hereby constitute and appoint Orlans PC, with an address of PO Box 540540, Waltham, MA 02454, and each of its officers, directors, employees, agents and/or assigns, its true and lawful attorney-in-fact for it and in its name, place and stead, (the "Law Firm") (1) to take any and all steps which are customary and reasonably necessary to the commencement and completion of judicial and nonjudicial foreclosure proceedings, including making peaceable and unopposed entry on the premises described in the morgage, for the purposes of foreclosing the mortgage, bidding on its behalf at the foreclosure sale and executing a Memorandum of Sale in connection therewith; (2) to make, execute, acknowledge and deliver all contracts, orders, assignments of bid, foreclosure deed(s) and affuduvi(s), proofs of claim and court pleadings; (3) to convey the property described in the mutents, including receiving and endorsing any other instrument or concent entown and deliver any other certificates, writings, assurances and other instruments, including receiving and endorsing any checks on its behalf which may be required in connection with any of the foregoing.

Steppo Steppo RE: 73 O'Callaghan Way, Lymn, MA 01905

The rights, powers and authority of said attorney-in-fact herein granted shall commence and be in full force and effect as the date hereof until the filing at the Registry District of the Land Court or the recording with the Registry of Deeds in which the Power of Attorney is filed or recorded as applicable of a revocation of authority under this Power of Attorney relative to the Law Firm, while hereby ratifying and confirming any and all of the enumerated actions herein, taken by the Law Firm prior to the date hereof. Any party dealing ingood faith with the Law Firm shall be entitled to rely upon a photostatic copy of this instrument and upon the statement or certificate of the Law Firm that his Power of Attorney is still in force and effect, has not been revoked and that the party acting hereunder as an officer, director, employee, agent or assignee of the Law Firm has been duly authorized by the undersigned and by the Law Firm. No party dealing with the Law Firm shall be required to look the application of anything paid or transferred to it nor shall any person dealing with the Law Firm of the authority granted pursuant hereto.

Mortgage from Maria Rojas to National City Mortgage Co. dated March 31, 2004 ("Mortgage") and recorded with the Essex County (Southern District) Registry of Deeds at Book 22618, Page 230 for property located at: 73 O'Callaghan Way, Lynn, MA 01905

18-016014/189/POWOA DR

IN WITNESS WHEREOF, the said U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1, By its attorney in fact NewRez LLC f/k/a New Penn Financial, LLC d/b/a Shellpoint Mortgage Servicing By its attorney-in-fact PHH Mortgage Corporation successor by merger to Ocwen Loan Servicing LLC, aforesaid has caused its corporate seal to be hereto affixed and these presents to be signed and acknowledged in its name and behalf by Carrie Priebe Control and acknowledged in its name and behalf by Carrie Priebe Control Market Market Market Market Control and Control an See Limited Power of Attorney recorded U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1 By its attorney in fact NewRez LLC f/kA New Penn Financial, LLC d/b/a Shellpoint Mortgage reference to authority + doc? yes, need to hand search Servicing By its attorney-in-fact PHH Mortgage Corporation successor by merger to Ocwen Loan Servicing LLS Camo Piebo J Title: Contract Management Countinator RE: 73 O'Callaghan Way, Lynn, MA 01905 STATE OF Florida The foregoing instrument was acknowledged before me by means of Physical presence or [] online notarization, this [2 day of ______2020, by ______2020, by ______2020, by ______2020, by ______2020, by _____2020, by ____2020, by _____2020, by lu mmm NotaryPublicStateorFloada Carlene Rein My Commission FFsat7288 Causes Partial28(D2) Signature of Notary Public Name of Notary Public: Carlene Notary Commission Expiration-Date: ______ Personally known: _______ OR Produced Identification: ______ Type of Identification Produced: _____ Carlene Reid ~ Exp. 4/28/20 Mortgagor: Maria Rojas Property Address: 73 O'Callaghan Way, Lynn, MA 01905 File Number: 18-016014 Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 18-016014/189/POWOA_DR

		SOESSEX#275 BK:39905 Pg:214 SOId2221 248 PM/APPP Pg:11 registry Book # Page #
		(=power of attorney)
		CERTIFICATE OF APPOINTMENT
reference to authority doc? yes, need to hand search	Jrontor 1 ← Address ←	Orlans PC, acting under a Power of Attorney for U.S. Bank National Association, as Trustee for Citigroup Mortgage Loan Trust Inc. Mortgage Pass-Through Certificates Series 2004-NCM1, hereby constitutes and appoints John McMillan, as its agent for it and in its name, place and stead to make entry upon the premises located at 73 If Cantee 1 O'Callaghan Way, Lynn, MA 01905, covered by a Mortgage from Maria Rojas to National City Mortgage Co. Adted March J1, 2004 ("Mortgage") and recorded with the Essex County (Southern District) Registry of Decak at Book 22618, Page 230 for the purposes of foreclosing said mortgage for breach of the conditions thereof. Further, O'lans PC, hereby ratifics and confirms any and all of the actions taken by the appointee prior to the date hereof. Executed as a sealed instrument as of this 2010 O'lans PC See Power of Attorney recorded herewith Por signatory authority, see Delegation of Authority and Appointmer recorded with the Pyrmouth County Registry of Decds at Book Orlans PC By: By: Abigail Chnielecki, Esq., Employee, Authorized Signatory, Ral Property
	RE: 73 O'Callaghan Way, Ly	MIDDLESEX, SS More than the second of the second

Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 189/18-016014/FORD_DR





Assignee 1 - Ever Zavala and Jose Argueta, as Tenants in Common 73 O'Callaghan Way, Lynn, MA

This Assignment is made without recourse, and subject to all terms and conditions contained in the said Memorandum of Sale, and Additional Terms, and Notices of Mottgagee's Sale of Real Estate.

Witness my signature this 31st day of January 2020

ref to authority doc? no

By Samuel Roman L name of party who signed title: N/A

Commonwealth of Massachusetts

Norfolk SS.

January 31, 2020 -> date signed

On this 31st day of January 2020, before me, the undersigned notary public, personally appeared Samuel Roman, who proved to me through satisfactory evidence of identification, which was a MA ID, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

(Affix Seal) Notary Signature commission expires: 4.27.23 Mg notary AVI LISS, ESQ. Notary Public IONWEALTH OF MASSACHUSETTS Ay Commission Expires April 27, 2023 - state of notarization Му



Same book, page, and registry as foreclosure deed





Return to: Orlans PC P.O. Box 5041 Troy, MI 48007 File Number: 18-016014/189/FORD_DR

(nonstandard) MORTGAGE, SECURITY AGREEMENT, AND ASSIGNMENT "No Mortgage Broker or Mortgage Loan Originator was involved in the Mortgage"

MIN? N/A

lender? N/A

maturity

date

address

mortgagee

THIS MORTGAGE, SECURITY AGREEMENT, AND ASSIGNMENT is granted this start date - March 04, 2021 to East Cambridge Savings Bank (hereinafter, the "Mortgagee") a banking corporation duly organized by law and having a usual place of business at 292 Cambridge Street, Cambridge, MA 02141 by Jose Argueta and Ever Zavala (hereinafter the "Mortgagor") in consideration of the mutual covenants contained herein and benefits derived herefrom, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Mortgagor agrees to the following terms and conditions:

ARTICLE 1 - GRANT OF MORTGAGE INTEREST

To secure the Mortgagor's prompt, punctual, and faithful payment and performance of all and each of the Mortgagor's present and future Liabilities (as that term is defined in Section 3-1 herein) to the Mortgagee, including, without limitation, those arising under a certain Commercial Real Estate Promissory Note dated March 04, 2021 in the original principal amount of Two Hundred Forty-One Thousand Eight Hundred Seventy-Five and 00/100 (\$241,875.00) DOLLARS, due and payable on or before March 04, 2022, and any extensions, renewals, substitutions, modifications, or replacements thereof (hereinafter, the "Note"), the Mortgagor hereby grants, mortgages, assigns, and transfers to the Mortgagee with MORTGAGE COVENANTS, the Collateral (as that term is defined in Section 3-3 herein). The Mortgagor intends to convey and hereby does convey to the Mortgagee with MORTGAGE COVENANTS (to be included within the Collateral), the premises conveyed to the Mortgagor by Deed dated Ferrary 7, 2020, and filed with the Essex South Registry of Deeds and attached as Exhibit "A".

ARTICLE 2 - GRANT OF SECURITY INTEREST AND ASSIGNMENT

2-1. Security Interest. To secure the Mortgagor's prompt, punctual, and faithful payment and performance of all and each of the present and future Liabilities to the Mortgagee, including, without limitation, those arising under the Note, the Mortgagor hereby grants to the Mortgagee a continuing security interest in and to, and assigns to the Mortgagee, the Collateral. 2-2. Financing Statement. This Agreement is intended to take effect as a security

73 O'Callaghan agreement and is to be filed with the above described Registry of Deeds in lieu of a financing statement pursuant to Massachusetts General Laws Chapter 106 (hereinafter, the "UCC") Section 9-402.

Power of Attorney. The Mortgagor hereby irrevocably constitutes and 2-3. appoints the Mortgagee as the Mortgagor's true and lawful attorney for the purpose of signing and

-1-

(etc.) 67

FHA box? No checkboxes? No (N/A) Fannie/Freddie form? NO Interest only option? No Any riders ? No Negative amortization? No

registiy SO.ESSEX #279 Bk:39605 Pg:221 03/04/2021 12:48 PM MTG\Pg 1/21 Book H

-> description ofmortgagee

> amount of the mortgage

÷

111111

IN WITNESS WHEREOF, the Mortgagor has executed this Agreement as a sealed instrument on the date first above written.

gueta Ever

COMMONWEALTH OF MASSACHUSETTS

ESSEX, SS.

On this Fourth Day of March, 2021, before me, the undersigned notary public, personally appeared <u>Jose Argueta and Ever Zavala</u>, proved to me through satisfactory evidence of identification, which were drivers' licenses, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose,

J.Vasapolli Esquire, Notary Public Commission Expires: //-J7-J076

	11	Ĺ
٢	S John J. Vasapoin	
١	Notary Public, Commonwealth of Machadroseus	۱
1	My Commission Expires November 21, 2020	1

-20-



Foreclosure Suite 2

 For an order of notice ordering the defendant(s) to appear and answer this complaint if defendant(s) is/are now, or recently have been, in the active military service and claim the benefits of the Servicemembers Civil Relief Act. 2. For a judgment declaring that the Defendant(s) is/are not entitled to the benefits of the Servicemembers Civil Relief Act. NO A. v A Attorney for the Plaintiff Neil W. Heiger, Esq. 18 SM 005144 BBO#.: 632701 Date: August 3, 2018 From the Office of: Shechtman Halperin Savage, LLP 1080 Main Street Pawtucket, Rhode Island 02860 Telephone No.: 877-575-1400 Office File No. 6021030 LAND COURT USE ONLY Under the provisions of the Servicemembers Civil Relief Act, this cause came on to be heard thereupon, upon consideration thereof, it appearing to the Court that the Defendant(s) is/are not entitled to the benefits of said Act, it is hereby **ORDERED** and **ADJUDGED** that the Defendant(s) Defendant(s) is/are not entitled to the benefits of the Servicemembers Civil Relief Act, as of $\mathcal{L}\mathfrak{h}, \mathcal{H}, \mathcal{H}, \mathcal{H}, \mathcal{H}$ the date of the allowance of Plaintiff's motion for judgment. By the Court. Attest: Nebarah D. Deborah J. Patterson (SEAL) Y Recorder A TRUE COPY ATTEST: Deborah J. Pasterson RECORDER



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.	CALIFORNIA ALL – PURPOSE
CERT	IFICATE OF ACKNOWLEDGMENT
, State of California County of Orange On _July 2 ^{ml} , 2019_ before me, Kameron This Ostermann, who proved to me on the basis c subscribed to the within instrument and acknowl capacity, and that by his signature on the instrum person acted, executed the instrument.	sell, Notary Public, personally appeared, _Elizabeth A of satisfactory evidence to be the person whose name is ledged to me that she executed the same in her authorized nent the person, or the entity upon behalf of which the
I certify under PENALTY OF PERJURY und	er the laws of the State of California that the foregoing
WITNESS my hand and official seal. Signature Kameron Thissell	NAMETION ADDISON THISSELL Netary Public - California Orașe Courty Hy Comm. Expres Jun 5, 2023
ADDITIONAL O	PTIONAL INFORMATION
DESCRIPTION OF THE ATTACHED DOCUMENT - 4293 (Tile or description of matched document) (Tile or description of matched document continued) Number of Pages Document Date (Addisional information) CAPACITY CLAIMED BY THE SIGNER Individual (a) (Addisional information) CAPACITY CLAIMED BY THE SIGNER Individual (b) Other	<text><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></text>







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July	, 2019.		
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c c	Carrin	igton Mortgage Services, LLC	
	Name:	Elizabath & Octormona	
	Title:	Vice President, Carrington Mortgage Services,	, LLC
			signer
State of	_	2010	comp
, \$S.		, 2019.	
On this day of	<u> </u>	, 2019, before me,	
the undersigned notary public, personally	y appeared	(nar	me & title).
proved to me through satisfactory evider	nce of identifica	ation, which was [] personal knowled	lge or []
free act and deed of Carrington Mortg	age Services, I	urc	
free act and deed of Carrington Mortg	age Services, I	Notary Public Printed Name: My Comm. Expires	
free act and deed of Carrington Mortg See Attache File No.: 18-15749	age Services, I	Notary Public Printed Name: My Comm. Expires	
free act and deed of Carrington Mortg See Attache File No.: 18-15749 CHAPTER 183 SEC	age Services, I	Notary Public Printed Name: My Comm. Expires ED BY CHAPTER 497 OF 1969	
free act and deed of Carrington Mortg See Attache File No.: 18-15749 CHAPTER 183 SEC Every deed presented for record sh office address of the grantee and a recital of the other consideration thereof, if not delive total price for the conveyance without dedu thereon. All such endorsements and recitals shall not affect the validity of any deed. No compliance with the requirements of this se	age Services, I C C C C C C C C C C C C C C C C C C C	ED BY CHAPTER 497 OF 1969 ve endorsed upon it the full name, residence te full consideration thereof in dollars or th is concetary sum. The full consideration shal as or encumbrances assumed by the grantee d as part of the deed. Failure to comply with s shall accept a deed for recording unless it	e and post the nature of 11 mean the or remaining th this section is in
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	A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is ttached, and not the truthfulness, accuracy, or validity of that document.	CALIFORNIA ALL – PURPOSE	
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	CER	TIFICATE OF ACKNOWLEDGMENT	
SI	ate of California		
C O SI C P	ounty of Oran, July 2 nd , 2019before me, Kameron Th stermann, who proved to me on the basis biscribed to the within instrument and acknow upacity, and that by his signature on the instru- erson acted, executed the instrument.	issell, Notary Public, personally appeared, _Elizabeth A of satisfactory evidence to be the person whose name is ledged to me that she executed the same in her authorized ment the person, or the entity upon behalf of which the	
I	certify under PENALTY OF PERJURY un	der the laws of the State of California that the foregoing	
p V	aragraph is true and correct. /TTNESS my hand and official seal.	KANGON ADDISON THISELL KOLOY PAULS' California Yongo Courty My Court, Spate Jun 5, 1021 (Seal)	
3	Kameron Thissell		
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	DESCRIPTION OF THE ATTACHED DOCUMENT <u>fc Outo</u> <u>-423</u> (Title or description of attached document continued) (Title or description of attached document continued) Number of Pages <u>Document Date</u>	INSTRUCTIONS FOR COMPLETING THIS FORM of calculated and complete and configurations and contains the appeard advect completed in classification and contains the paperby completed and attacked on the discusses. The and contains the accuracy is not avoid the accuracy of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories accuracy is not avoid to a structure of the advectories of the advectories and the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories of the advectories challenges of the advectories of	
	(Additional information) CAPACITY CLAIMED BY THE SIGNER Individual (s)	mont also be fee sums date the architecture in completed. The outry public must prior be to per sums as in proper Mello. Prior the sum of the	
	Corporate Officer Crain Partmet(*) Attorney-in-Fact Truste(s) Other	 The noticy and apprecision must be cut and protocollipationing' preformation to methods of the second seco	
		 cecporate officer, indicate the title (i.e. CEO, CFO, Secretary). Securely attach this document to the signed document 	
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Exhibit "A"
Property Address: 37 Murray Street, Lynn, MA 01905
ALL THAT CERTAIN PROPERTY SITUATE IN LYNN, COUNTY OF ESSEX, COMMONWEALTH OF MASSACHUSETTS, BEING MORE PARTICULARLY DESCRIBED IN A DEED RECORDED 07/02/1996 IN BOOK 13643, AT PAGE 545, AMONG THE LAND RECORDS OF THE COUNTY SET FORTH ABOVE.
KNOWN AS: 37 MURRAY ST

Same book #, page #, registry as foreclosure deed



	Carrington Mortgage Services, LLC By: Name: Title: <u>Uree President, Carrington Mortgage Services, LLC</u>
State of	title of
Then personally appeared the abor proved to me through satisfactory eviden to be to who swore or affirmed to me that the cor best of (his) (her) knowledge and belief,	we named
See Attached	Notaty Public Printed Name:
	My Comm. Expires:









State of California County of Orange Subscribed and sworn to (or affirmed) before me on this 16th day of July 2019, by Letxy Sosa proved to the on the basis of satisfactory evidence to be the person who appeared before me.	A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.	CALIFORNIA JURAT
County of Orange Subscribed and sworn to (or affirmed) before me on this 16th day of July 2019, by Letxy Sosa proved to ne on the basis of satisfactory evidence to be the person who appeared before me.	State of California	
Subscribed and swom to (or affirmed) before me on this 16th day of July 2019, by Letxy Sosa proved to me on the basis of satisfactory evidence to be the person who appeared before me. Image: Description of the basis of satisfactory evidence to be the person who appeared before me. Image: Description of the basis of satisfactory evidence to be the person who appeared before me. Image: Description of the attracted boundary of the basis of satisfactory evidence to be the person who appeared before me. Image: Description of the ATTACHED DOCUMENT Image: Description of the ATTACHED DOCUMENT Image: Document Date Image: Do	County of Orange	
me on the basis of satisfactory evidence to be the person who appeared before me. Image: Control of the conthe control of the control of the control of	Subscribed and sworn to (or affirmed) before n	ne on this 16th day of July 2019, by Letxy Sosa proved to
Correct of a standard document continued: Correct of a stan	me on the basis of satisfactory evidence to be th	e person who appeared before me.
Lisa Nix Joname of notary OPTIONAL INFORMATION DESCRIPTION OF THE ATTACHED DOCUMENT Minimum Contracted document Image: Contred document </th <th>he</th> <th>USA NX USA NX Oracy Public - California Orace County wy Comm. Expires Cott 11, 2022 (Notary Scal)</th>	he	USA NX USA NX Oracy Public - California Orace County wy Comm. Expires Cott 11, 2022 (Notary Scal)
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and the second s	G name of notary	L INFORMATION INSTRUCTIONS FOR COMPLETING THIS FORM The wording of all Journa completed in California ofter Journary 1, 2008 unst be in the form of a set of end within the Journ T



(etc.) |^^/ 85

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	SO.ESSEX #162 BK:37737 Pg:510 Ge/OB/2019 11:03 ABSCT Pa 1/2 registry Book # Page 1
Confi	rmatory assignment? No (Assignment of Mortgage
	Woburn (City) MA (State) June, 77, 2019
for va	lue/consideration? yes a pame of assignor
	For good and valuable consideration, I, Siddharth Gehlot hereby assign my bid and all of its right,
	title and interest in and to and under a Memorandum of Sale of Real Property by Auctioneer,
	dated June 13, 2019 in connection with premises situated at 37 Murray Street, Lynn, MA 01905,
MA.	which is the subject of a mortgage given by John J. Hart to Mortgage Electronic Registration
, uny	Systems, Inc., as nominee for Freedom Mortgage Corporation, and now held by Carrington
. П	Mortgage Services, LLC, said mortgage dated September 24, 2008 and recorded in the Essex
reet	County (Southern District) Registry of Deeds in Book 28055, Page 221, said mortgage was
LOCUS: 37 Murray Sti	assigned from Mortgage Electronic Registration Systems, Inc., as nominee for Freedom Mortgage
	Corporation to JPMorgan Chase Bank, National Association by assignment dated April 2, 2013
	and recorded with Essex County (Southern District) Register of Deeds in Book 32374, Page 314,
	said mortgage was assigned from JPMorgan Chase Bank, National Association to Carrington
	Mortgage Services, LLC by assignment dated January 4, 2014 and recorded with Essex County
	(Southern District) Registry of Deeds in Book 33153, Page 355 ; to:
,	
(Sozia

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-> assignce Photo ,MA OI9115 soft Terrace, Bach 38 This Assignment is made without recourse, and subject to all terms and conditions contained in the said Memorandum of Sale, and Additional Terms, and Notices of Mortgagee's Sale of Real Estate. authority doc? No By Siddharth G - name of party who signed state of notarization County of notarization a , 2019 --- date signed 19 Middlesex, SS. (County) Juna (June 19, 2019) _ 2019, before me, the undersigned notary public, June On this <u>19</u> day of _ personally appeared Siddharth Gehlot, proved to me through satisfactory evidence of ____, to be the person whose name is identification, which were Driver's transe signed on the preceding or attached document, and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose. DANTING LIU Notary Public nmonwealth of Massachusetts mmission Expires March 16, 2023 name of notary Commo Notary Signature My commission expires: March 16, 2023

Resources

Grace Ross, personal communication, April, 2021.

Massachusetts Foreclosure Review Guide. (2017, February) CATIC.

Section	Primary Author(s)	Editor(s)	
Abstract	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Executive Summary	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Introduction	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Background Section 2.1	Caitlin	Keval, Patrick, Sam	
Background Section 2.2	Sam	Caitlin, Keval, Patrick	
Background Section 2.3	Patrick	Caitlin, Keval, Sam	
Background Section 2.4	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Methodology Section 3.1	Caitlin	Caitlin, Sam	
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Methodology Section 3.3	Patrick, Sam	Caitlin, Patrick, Sam	
Methodology Section 3.4	Keval	Caitlin, Patrick, Sam	
Outcomes Section 4.1	Caitlin	Caitlin, Keval, Patrick, Sam	
Outcomes Section 4.2	Sam	Caitlin, Keval, Patrick, Sam	
Outcomes Section 4.3	Keval, Patrick	Caitlin, Keval, Patrick, Sam	
Outcomes Section 4.4	Caitlin, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Recommendations	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Conclusions	Patrick	Caitlin, Keval, Sam	
Appendix A	Caitlin, Keval, Patrick, Sam	Caitlin, Keval, Patrick, Sam	
Appendix B	Patrick, Sam		
Appendix C	Patrick		
Appendix D	Sam	Caitlin	
Appendix E	Caitlin		

Appendix F: Authorship

Patrick and Keval collaborated on writing the user interface code. Sam wrote the database code and Python scripts to load data into the database.