GETTING ONE STEP CLOSER TO A COMMERCIAL EMORTGAGE:

U.S. LAW AND NOT TECHNOLOGY IS PREVENTING THE COMMERCIAL MORTGAGE MARKET FROM TRANSITIONING TO A PAPERLESS EMORTGAGE

ZAKARY KESSLER*

I. INTRODUCTION ................................................................. 449

II. ELECTRONIC TRANSACTIONS AND THE COMMERCIAL MORTGAGE ................................................................. 452
   A. OVERVIEW ................................................................. 452
   B. ELECTRONIC TRANSACTION STATUTES ...................... 455
   C. ELECTRONIC TRANSACTION TECHNOLOGY .............. 458

III. CREATING THE eMORTGAGE ........................................... 458
   A. OVERVIEW ................................................................. 458
   B. INDUSTRY STANDARDS .............................................. 460
   C. PRELIMINARY INROADS INTO PAPER COMMERCIAL MORTGAGES: eVAULTS .......... 462
   D. ALL GROWN UP: CLOSING AN eMORTGAGE .............. 464

IV. THE MISSING PIECE: eRECORDING .................................. 467
   A. STALLED IMPLEMENTATION OF eRECORDING ......... 467
   B. PROPOSED CHANGES TO SPUR GROWTH IN eRECORDING ................................................................. 470

V. CONCLUSION ................................................................... 473

I. INTRODUCTION

Any homeowner readily, and quite loudly, decries the process of

* 2013 Juris Doctor Candidate, University of Colorado Law School. I would like to thank my wife Kelli, my parents, and my wonderful daughter Reagan for all the love and support.
executing the mountain of standardized forms required to close the
typical residential mortgage, and commercial property owners utter the
same complaints when executing commercial mortgages. This Note
analyzes the way that the mortgage process is embracing the Internet,
albeit halfheartedly, as a transaction vehicle. Residential mortgage
brokers control the entire origination and loan closing process, and they
ensure that the borrower properly signs the forms promulgated by each
state. Conversely, commercial mortgages typically require detailed,
unique, and painstakingly negotiated contracts. Akin to its residential
cousin, closing a commercial mortgage also requires a mound of paper
and an extensive process. The typical commercial mortgage features a
real estate professional or otherwise skilled investor with experience in
negotiating complex transactions as the borrower and ultimate controller
of the whole process. The process of closing a commercial mortgage
replaced the public feudal transfer ceremony of livery of seisin long
ago.1 A commercial mortgage transaction securing a loan from an
“institutional lender,” like the Federal Home Loan Mortgage Corporation
(“Freddie Mac”) or the Federal National Mortgage Association (“Fannie
Mae”), still typically generates paper copies of documents that at times
total several hundred pages.2 These volumes of paper represent legal and
technical progress from feudal times, but the process fails to take full
advantage of the commercial and technological progress ushered in
through the Internet. In the more than two decades since legal and
technology scholars began heralding a revolutionary change from paper
documents and signatures that were recorded personally by hand to
digital versions recorded online, very little has changed in these key
pieces of the commercial mortgage transaction in the U.S.3 This failure
to embrace the advantages of electronic transaction processes in
commercial transactions stands in stark contrast to some of the headway
that has been made in transitioning to an electronic mortgage in the
residential finance industry.4 Major U.S. residential loan originators have
made the transition to these electronic mortgages, and they openly

1. See U.S. v. Schurz, 102 U.S. 378, 398 (1880) (explaining the details and history of
the public ceremony that served as proof of transfer of ownership of real property).
2. The underwriting checklist for the typical institutional commercial mortgage for a
multifamily property requires the production of several reports and forms. Additionally, these
checklists can vary in their requirements over time, so the exact date of the checklist is often
important to the specific mortgage transaction. FREDDIE MAC, EXHIBIT 1: UNDERWRITING
CHECKLIST 1-2 (2011), CHECKLISTS SECTION 1.1 CONVENTIONAL CHECKLISTS 1-4 (2012),
available at
http://www.freddiemac.com/multifamily/resources/Exhibit_1.1_Conventional_UW_Checklist.
pdf (standard delivery referring to the interest rate terms of the mortgage).
3. See id.
4. See generally FANNIE MAE, GUIDE TO DELIVERING EMORTGAGE LOANS TO FANNIE
market this option to residential borrowers. The transition to electronic residential mortgages is far from complete, and obstacles remain to fully implementing electronic residential mortgages. Significant differences exist between commercial and residential mortgages, so examining the transition to an electronic residential mortgage only illuminates some of the reasons why electronic commercial mortgage implementation lags behind its residential sibling. More broadly, this Note examines the series of reasons why the commercial mortgage market has failed to adopt electronic commercial mortgages.

First, this Note examines the legal enforceability of electronic transactions and signatures, while relating these legal elements to the practical business necessities of the commercial mortgage industry. In Part II, this Note evaluates the advances in secure document delivery and storage systems, digital document properties, and electronic signatures that have allowed these advances to make electronic mortgage (“eMortgage”) transactions more compelling to savvy market participants than they were at the turn of the millennium. In Part III, this Note analyzes the remaining barriers to recording and recognition of these documents and determines that the current state of the law is insufficient to help commercial eMortgages gain meaningful traction in the industry. After demonstrating that the law is currently insufficient to entice industry participants to move forward with eMortgages, Part IV of this Note proposes potential changes to the law that will help create a legal environment that will recognize, enforce, and even favor the commercial eMortgage.

As a representative example of the inner workings of the typical commercial mortgage transaction, this Note focuses on mortgages secured by multifamily apartment properties. Apartment community mortgages are a helpful lens for this examination because of the large amounts of publicly accessible information on the loan origination process. Furthermore, Freddie Mac and Fannie Mae originate “conventional” mortgages that are held in the lender’s portfolio after...
origination, which makes these lenders very representative of the entire commercial real estate lending market. Conventional loans are typically held until maturity on the balance sheets of almost every type of financial institution involved in the commercial real estate lending market. Fannie Mae and Freddie Mac also originate mortgages predetermined for securitization in the capital markets. When securitized, Fannie Mae and Freddie Mac group these mortgages into pools as collateral for Commercial Mortgage Backed Securities (“CMBS”). Financial institutions trade these CMBS bonds like other commercial debt securities.

II. ELECTRONIC TRANSACTIONS AND THE COMMERCIAL MORTGAGE

A. OVERVIEW

eMortgages do not eliminate any of the relevant documents used in creating a traditional commercial mortgage. The two are functionally and legally equivalent. However, eMortgages hold an inherent advantage over their paper accumulating counterparts by facilitating the electronic creation, signing, and recording of the relevant documents. Borrowers, bankers, and attorneys need never leave their computers to complete the transaction.

The commercial and residential mortgage processes are nearly identical in critical respects. Since the two processes are generally analogous, this Note sometimes uses examples from the residential process to illustrate similar situations in the commercial mortgage processes. Just as the Internet has produced advantages in originating residential mortgage transactions, it will do so in the commercial mortgage market. As its single greatest advantage, the use of electronic documents achieves a reduction in transaction and information costs in generating a commercial mortgage. In many ways, the typical commercial mortgage transaction gets more than halfway to an eMortgage because the parties use electronic markups of the promissory note, deed of trust, and other documents when they originate a traditional commercial mortgage. Third parties already deliver several reports

8. See FANNIE MAE, supra note 7; FREDDIE MAC, supra note 7.
9. The author worked extensively as an analyst for commercial real estate finance transactions prior to attending law school and is relying on personal experience of assisting in the closing of more than forty commercial mortgages. These transactions were with the
electronically to the originating lender and borrower that are required by regulators, like the Phase I environmental reports.10

Like residential mortgages, commercial mortgages were once local or regional transactions. Historically, rational and prudent investment in commercial mortgages required a local connection to the financed property.11 The lender and borrower needed to understand the specific characteristics of the property and local market in order to make intelligent investment decisions.12 Only proximity to the property provided the parties with the critical information.13 Once information became more accessible due to the explosion of travel and technology, capital began to flow over greater distances. By 2010, more than $68.8 billion in multifamily commercial mortgages were originated by more than 2,548 different lenders.14 This represents a dollar volume increase of 31% from 2009; 51% of the dollar volume was originated by the top 1% of lenders.15 No longer is the transaction a simple, local affair; rather, the land, lender, and borrower may all be in different states or countries while creating increasingly complex financing structures.16

Commercial mortgages are critical to the U.S. and global economies. Prior to the financial crash in 2008, commercial real estate mortgages experienced a nearly decade long period of tremendous growth in the volume and dollar amount of transactions.17 This growth in outstanding mortgages was mimicked by growth in the market value of commercial real estate that also peaked in 2008 and began a sharp decline in 2009.18 While the trend in overall commercial mortgage originations turned sharply negative with the onset of the financial crisis, the crisis ground one sector of the market, CMBS, to a complete halt. The sheer number and dollar volume of commercial mortgages
demonstrates their importance to the U.S. and global economies, and reducing these transaction costs will greatly improve this economic sector.

CMBS served as a significant source in the increase in commercial mortgage debt outstanding and its relative impact on the U.S. economy. The bundling and resale of commercial mortgages into CMBS peaked in 2007 with a total issuance of $228.6 billion. In the first quarter of 2000, outstanding commercial mortgage debt stood at $1.5 trillion, and it grew by 127% to a peak of $3.4 trillion in the first quarter of 2009. Experts note that there were “[a] number of factors [that] led to the growth of debt, including rising property values, increased supply and the success of CMBS as a financing tool.” Even as the industry has begun a process of contraction through the deleveraging of commercial properties, the sector represented a 21.7% share of Gross Domestic Product (“GDP”). This percentage represents a significantly higher percentage of U.S. GDP than the 17.3% average over the prior 30 years, but it remains well below the peak of 24.3% in the first quarter of 2009. As these numbers prove, commercial mortgage debt acts as a significant part of economic output in the U.S., and reductions in the costs of originating, recording, servicing, and insuring these investments should allow commercial mortgage sector to boost the pace of economic recovery.

The tremendous growth in the volume and the market dominance wielded by “institutional lenders” helps push the industry to seek practical and legal solutions that will create nationally standardized mortgage systems. Commercial real estate properties and mortgages occupy approximately “12.4% of the $52.8 trillion investable universe,” which makes this sector “the third largest asset class in the U.S.” Due to this size and the ability to provide diversity in cash flows, capital appreciation, and significant risk-adjusted returns, global capital markets continue to elevate the level of investment in originating and

19. Id. at 4.
21. Id.
22. Id. at 4.
23. Id.
26. Id.
securitizing commercial mortgages over the long term.27

B. ELECTRONIC TRANSACTION STATUTES

The first step in transitioning to commercial eMortgages requires the adoption of legal standards for executing, enforcing, recording, and securely storing each mortgage’s electronic documents. There is a broad legal framework in place that is available to accomplish this goal.

Several federal and state statutes provide the legal framework for evaluating the market viability of commercial eMortgages. There are two statutes that represent the basis for creating and accepting electronic documents throughout the commercial mortgage process. The Uniform Electronic Transactions Act (“UETA”)28 and the Electronic Signatures in Global and National Commerce Act (“E-Sign”)29 give the same force and effect to electronic signatures and recording as traditional methods if the parties have agreed to the use of such methods.30 One of these two laws applies in each state. E-Sign was enacted in 2000, but as of 2007, this legislation had done little to transform the typical mortgage from an “inefficient and paper-intensive” process.31 Going forward, E-Sign seems unlikely to serve as a foundation for the widespread implementation of electronic signatures for commercial eMortgages. These acts and the substantive counterparts enacted in the states provide the main definitions of what “counts” as an electronic signature or document.32

UETA will prove more reliable and better tailored to meet the needs of enforcing and embracing electronic signatures in commercial mortgage transactions. Possibly recognizing the speed and variety of technological change, the drafters of UETA provided many forms of data that would qualify as an “electronic signature” if so designated by the parties.33 Specifically, the forms listed were “an electronic sound, symbol, or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record.”34 This variety allows for technology to match the business needs of commercial mortgage industry participants, and it allows the industry to

27. Id. at 1.
28. See Uniform Electronic Transactions Act [hereinafter UETA], 7A pt. 1 U.L.A. 211, 211-99 (2002). All references to UETA will be to the uniform version unless otherwise designated.
31. Id. at 296.
32. See generally UETA §2.
33. See id. §2(8).
34. See id.
implement standards that reflect the various security and efficiency benefits of certain media compared to others.

UETA also seeks to harmonize and equate electronic signatures with physical signatures, so that they are simultaneously recognized and interchangeable in the law.35 Under UETA, the parties may also agree to limit what documents and signatures that they will accept electronically.36 In the face of disagreement between the parties, the one seeking to enforce the signature carries the burden of proof.37 Broadly, UETA provides for electronic record retention that preserves the essential elements of physical record retention.38 It accomplishes the retention of original records by providing that the electronic record must be accessible in the future in a form that is the same as what would be considered an “original” paper form.39 When comparing electronic documents to their paper counterparts, each are enforced differently. Enforcement of the former requires access to and control of the digital document, and enforcement of the latter requires physical possession of an “original.”40 Proof of control of the electronic documents becomes extremely important in the commercial mortgage context because of the need to prove ownership of the mortgage following a transfer or sale, which occurs most frequently when loans are sold into pools for securitization as CMBS.

UETA provides market participants with an effective safe harbor for proving their ownership and control of an eMortgage.41 The safe harbor establishes the legal effect of the electronic record so long as it is deemed authoritative and the parties and electronic records involved are authenticated.42 Again, since the legal framework establishes a need for ongoing access, security, and verification of the electronic mortgage record, the eMortgage requires industry changes far beyond the closing table. These deep changes will be slow in their advance, but this seems to fit the longstanding trend against rapid change in U.S. real property and mortgage law. This is important during the transition from paper documents to electronic documents because there will be a period where

35. See id. §2 cmt. 7.
36. See id. §5(d).
37. See id. §9(a).
39. Id.
41. Id. at 44.
42. Id.
trust must be built by the parties that these agreements are sufficient over time to protect their investment. Without changes in the legal and economic status quo, commercial eMortgages will continue to gain prominence at the pace of a trickle rather than a flood.

The pace of change is painstakingly slow and is reflected in the ability to get electronic documents accepted for recording in many states. The Uniform Real Property Electronic Recording Act ("URPERA") has been adopted in at least eighteen states; it provides that eMortgages are recordable and enforceable even when the signatures are digital. In fact, URPERA was specifically created to help reassure borrowers and lenders in mortgage transactions that their electronic documents and signatures were recordable and valid. While UETA and E-Sign permit the use of electronic signatures when notarization is required, URPERA establishes the specific framework and standards for electronic notarization of the promissory note, deed of trust, and other documents that together constitute the commercial mortgage. The requirements are practical in that the seal or other physical memorial of the notary’s assent to the presence and identity of the signer is no longer required.

UETA and E-Sign contain additional protections to ensure the negotiability of the commercial mortgage note, whereby the parties to the transaction and the electronic records they create exist in a parallel system. This system satisfies the Uniform Commercial Code requirements for a promissory note to be a negotiable instrument if in paper form. Most importantly to the parties of the transaction, this system ensures that “the information concerning obligors and the holder of the rights to enforce the obligations may be stored electronically” and will not “affect their rights or liabilities” regardless of whether the original transaction “was concluded with paper documents or electronic records.” Since the legal effect of electronic signatures and documents under UETA is based on protecting the documents against a denial of their enforceability because of their electronic form, courts are instructed to look to the intent of the parties and perform the substantive analysis in the same manner as if the transaction was completed though paper. In the analysis, context is imperative, and the facts and circumstances involved in the creation of the electronic document or signature are

44. Fry et al., supra note 30, at 299 n. 21.
45. Id. at 300-01.
46. Id. at 301.
47. Id. at 302.
48. Id.
49. Id.
50. See UETA §(7) cmt. 2 (2002).
These systems of law work to remove the law’s reliance on the need for an “original” to memorialize the transaction as part of the public record or to enforce the provisions of the deal by changing the law to give full legal effect to electronic documents as executed without requiring one, single “original” source.52

C. ELECTRONIC TRANSACTION TECHNOLOGY

Technology industry leaders have found that electronic documents require effective security parameters in order for transaction participants in any industry to trust the validity of the documents.53 Security measures embedded in or directly tied to the document best ensure electronic document security.54 Many proactive organizations currently employ solutions focused explicitly on the document itself.55 These solutions focus on control of the document by encrypting access, tracking activity and use permissions for the documents, and protecting the integrity of the document as if it were an original paper copy.56 Digital signatures embedded in the document or directly attached to it help assure that the document has not been changed, originated by the actual counterparty, and evidence of assent and agreement to the document.57

III. CREATING THE eMORTGAGE

The legal and technological framework detailed in Part II of this Note merely set the stage for the creation and execution of eMortgages. The commercial mortgage origination process must be adapted and applied to this framework. This Part III broadly canvases the way this framework changes how a commercial mortgage is created when it is created as an eMortgage and not its paper equivalent.

A. OVERVIEW

UETA, E-Sign, and URPERA erected the basic structure of the legal framework for enforcing commercial eMortgages. Legislators intentionally omitted compliance standards and technological methods
for accomplishing these electronic transactions. The commercial mortgage industry began collaborating with technology experts to assign industry-wide technological standards for creating, securing, and storing eMortgages. Mortgage industry experts define an eMortgage as “[a] mortgage where the critical loan documentation, at a minimum the promissory note, is created, executed, transferred, and ultimately stored electronically.” The commercial mortgage industry has gravitated toward an electronic mortgage process because of the obvious cost advantages over creating and overnight shipping of hundreds of pages of documents for each transaction. Shipping costs for these documents are not insignificant. Of greater importance is the fact that these documents do not stay at the closing location, and they must be able to move post-closing. These documents must be collected into a file and follow the “mortgage” through to a location for servicing, future sale or assignment, or even securitization. For standard “permanent” commercial mortgages, this mortgage file will need to be kept together and available for interested parties for the ten year life of the loan. Document custody, security, and file management on such a large scale has pushed the commercial mortgage industry to embrace electronic creation, storage, and handling of documents as a method of cost containment and investment security. Industry participants have so fully embraced the use of technology in the post-closing arena, that efficient electronic document management and security have become integral to a firm’s survival in a post-2008 lending crisis environment.

---

58. See Fry et al., supra note 30, at 304.
60. In a hypothetical transaction from Denver to Houston, it would cost approximately $20 to send 0.5 lbs. of documents via FedEx for 2nd day delivery. See generally Get Rates & Transit Times, FEDEX, https://www.fedex.com/ratefinder/standalone?method=getQuickQuote (last visited Oct. 23, 2011).
61. The items contained in an underwriting checklist are collected prior to and at closing, and these documents become the loan file that will need to be maintained by the loan servicer and other interested parties throughout the life of the loan. See FREDDIE MAC, CONVENTIONAL CASH PURCHASE PROGRAM STANDARD DELIVERY: FULL UNDERWRITING CHECKLIST 1-2 (Oct. 7, 2011), available at http://www.freddiemac.com/multifamily/pdf/Exhibit_1.2_CC_full_std_10-07-11.pdf (referencing standard delivery in relation to the interest rate terms of the mortgage).
63. See id.
not instant, accessibility to closed loan documents for authorized users. The ability to verify the authenticity of the electronic documents and the accompanying electronic signature helps to prevent fraud, borrower confusion, and decisional delays due to the use and shipment of paper.

B. INDUSTRY STANDARDS

This legal framework also requires widespread industry buy-in in order to be an effective tool in creating an environment that encourages the adoption of commercial eMortgages. The leadership in the commercial mortgage industry is working hard to craft these industry standards to help drive this necessary buy-in. Within the legal framework created by UETA, E-Sign, and URPERA, the Mortgage Bankers Association of America (“MBA”) has been at the forefront of creating a “vendor-neutral environment” for both commercial and residential mortgages through its Mortgage Industry Standards Maintenance Organization, Inc. (“MISMO”). MISMO and eMortgages are key technology initiatives for the industry, and they are highlighted as a part of the continued embrace of technology going forward in today’s difficult credit environment. The MISMO standards’ effectiveness require a critical mass of market participants who accept the standards and begin using them. If the secondary market will not accept digitally executed commercial mortgages in sufficient numbers to allow issuers to pool together commercial mortgages from a variety of lenders, the transition to these eMortgages will die before it establishes firm roots in the market.

Traditional residential mortgages contain two features that make them particularly amenable to industry wide technical standards in electronic form: mortgages are highly regulated and mostly standardized instruments. The business also features high-volume and repetition. Both of these factors lead to the industry pushing technology to reduce the transaction costs and standardization of terms and forms to ensure compliance in each new transaction. This critical mass is essential because of the secondary mortgage market’s presence as the main driver

64. See Brenda Clem, Senior Director, Equifax, Presentation at the Nat’l Tech. in Mortg. Banking Conference & Expo, eMortgage 101: Getting Started 36 (Mar. 28, 2011).
65. See id. at 40-42.
69. Id.
70. Id. at 360.
for demand for new institutional mortgage originations. As of March 2013, MISMO had more than 100 industry leading subscribers participating at some level in using or creating the MISMO standards.71 Seeing so many active participants in developing standards for the commercial eMortgage is not surprising because the cost advantages to market participants remain too compelling to ignore. This participation can ensure that the standards fit a broad range of functionality and needs of different participants in the commercial eMortgage process, from originators to CMBS purchasers.72 With broad buy-in from the industry, commercial mortgage market participants can be assured that adoption of the technical standards is much less risky since “there’s a crowd heading in the same direction.”73

As stated above, UETA, E-Sign, and URPERA protect parties to a transaction that have explicitly agreed to transact electronically. This agreement coupled with widespread adherence to common standards ensures that the parties can achieve the cost advantages of repeating the standard electronic steps for each new transaction.74 The parties’ attorneys must pay specific attention to ensure that the consent to transact electronically has been obtained and memorialized.75 Retaining this proof of agreement to the electronic mortgage process is essential in proving the validity of the note and other documents associated with the eMortgage under the structure set up by UETA.76 This proof must conform with proof of a signature in paper form because UETA treats an electronic signature as equivalent to a traditional written one.77 Since originators begin to harvest the myriad of advantages of eMortgages following the transition period, the solid legal and practical foundations created by these laws serve as the critical infrastructure going forward through the process.

As parties expand their use and understanding of these new standards, they should eventually have an important role in shaping the commercial eMortgage transaction.78 According to MISMO, the use of its standards allow participants to “save time, reduce costs[,] and improve data accuracy and transparency while passing cost savings to consumers.”79

72. See generally Clark, supra note 68, at 347.
73. See id.
74. See id. at 354.
76. Id.
77. Id.
78. See Clark, supra note 68, at 357.
C. PRELIMINARY INROADS INTO PAPER COMMERCIAL MORTAGES: eVAULTS

The first step in implementing MISMO standards is creating a system where eMortgage originators can store “originals” of the electronic transaction documents. This storage system is essential because the origination of the eMortgage is the first day in the life of the loan. Throughout the rest of the loan’s life, a multitude of parties need access at various times to all of the documents created at origination, and without an eMortgage, this requires access to the huge original paper file. In light of the crushing paper burden, eMortgages provide relief in that servicers can simply maintain an electronic vault (“eVault”) filled with the electronic mortgage records without the gigantic warehouses full of paper. Lenders have realized over the past decade that each new transaction represents a tiny piece of their ongoing data management and warehousing activities. The eVault issues are so important to the process of transitioning to commercial eMortgages that MISMO has set out broad recommendations for what it would consider an effective eVault system. Many of the current requirements that investors place on those controlling and keeping mortgage documents will have counterparts in an eVault system. This extension of these security requirements to eVaults is intuitive. With a paper mortgage, a lender wants to protect those documents in a safe, fire resistant building while maintaining strict controls on access to the building. With the eMortgage, the lender maintains the same concerns regarding system security and maintaining extremely limited access to the digital documents. An effective eVault will combine secure data storage, access to authorized personnel, and integration with the systems used in the original closing process of the commercial mortgage transaction.

Even if the change to commercial eMortgage origination is slow for a particular vendor, eVaults, once implemented, create uniformity in the management of post-closing documents. While lenders still originate traditional mortgages, eVaults add value with hybrid functions to capture traditional paper mortgages. Several suitable hybrid eVaults are in
place in many title companies and counties across the country, and they
are used to store a graphic image of the paper documents that are
scanned by the recorder as they are recorded.87 The availability of these
images has allowed many counties to make public property records
available online by offering users access to copies of paper documents
via computer images.88 However, this hybrid system is inherently limited
because the graphic images of the paper documents do not have
embedded data that would allow the system to correctly categorize and
index the document to the corresponding property.89 In the end, these
counties have a manually intensive process that requires indexing by
hand and uploading to the electronic system, likely reducing any
potential cost savings that could be derived from a truly electronic
recording ("eRecording") system.

eRecording gains significant functionality by providing secure
access to documents that are electronic, signed electronically, are
considered evidence of an original agreement, and are considered written
notification or assent to disclosures that are required by law.91 Since the
major benefits of eRecording include the quicker return of the eMortgage
to the closing agent, commercial lenders will be able to move this
document into the eVault for storage or sale more efficiently.92 The
synergies create advantages by establishing a platform where it is easy
for users to access the eMortgage while the system securely monitors the
integrity of the documents within.93 Those seeking to create these
systems are not left totally in the dark because the government-sponsored
entities ("GSE") have published standards for their eMortgages. The
UETA standards discussed above drive the development of eVault
interfaces.94

While the UETA standards drive the design of eVault interfaces,
industry leaders are working to create eVault standards that accomplish a
different but related goal. Many industry leaders, like Fannie Mae and
Freddie Mac, are currently developing eMortgage and eVault standards
with the goal of spurring eMortgage origination. Freddie Mac’s standards
for eMortgage storage and access post-closing have been in development

87. Gaudio, supra note 11, at 276.
88. Id.; see, e.g., Boulder County Public Records, BOULDER COUNTY CLERK &
visited Nov. 18, 2011) (providing users with an interface for searching property records).
89. Gaudio, supra note 11, at 276.
90. eRecording is a system for electronic submittal of all of the necessary electronic
mortgage documents.
91. See MISMO, supra note 81, at 15.
92. Stonefield, supra note 24, at 215.
93. See MISMO, supra note 81, at 12.
94. See id. at 10-11.
since they first published them in their eMortgage Handbook in 2005.\textsuperscript{95} These standards are a means to an end in establishing a method for eMortgage originations acceptable to the lending giant. Under UETA, one of the most important parts of any eVault system is the ability to store information, at will, depending on what is deemed important information according to the purpose of the underlying document.\textsuperscript{96} Any sound eVault will also contain a protocol for ensuring the description, location, and holder of the authoritative copy of the eMortgage.\textsuperscript{97} The properly designated authoritative copy protects parties to the transaction by providing the corresponding legal protections to the holder in due course, much in the same way one is protected as the holder of the executed original paper document.\textsuperscript{98} Thus, a significant synergy and cost savings from the entire eMortgage process is not properly recognized until one accounts for the way that eMortgages allow document custodians to streamline and update their processes to provide ease of storage and access with increased security. To fully embrace the value created by eVaults fully, originators must use all electronic commercial mortgage origination systems that provide secure and streamlined disclosures; electronic executions, signatures, and acknowledgements of mortgage documents; and electronic transfer and recording of these documents.

\textbf{D. ALL GROWN UP: CLOSING AN eMORTGAGE}

While eVaults help pave the way away from the traditional paper-based mortgage, mortgage originators, title companies, and county recorders will need to embrace additional technologies to implement commercial eMortgages fully. Commercial eMortgages will require secure electronic mortgage documents that can be drafted, signed, delivered, recorded, and stored digitally. Without endorsing any specific technology or service provider, MISMO has promulgated standards and formal guidance or “white papers” covering each important part of this drafting and closing process.\textsuperscript{99} Furthermore, “eMortgage

\textsuperscript{95.} See id. at 10.
\textsuperscript{96.} See id. at 9.
\textsuperscript{98.} Id.
\textsuperscript{99.} Several documents have been placed on the MISMO website that can be downloaded for free. These documents describe the specifications that MISMO recommends for the eMortgage. See Commercial Specifications, MISMO, http://www.mismo.org/specs/commercial-specs.htm (last visited Nov. 17, 2011); eMortgage Specifications, MISMO, http://www.mismo.org/specs/emortgage-specs.htm (last visited Nov.
implementations are complex, requiring compliance with federal[,] state[,] and local laws[,] evolving industry standards[,] and secondary market investor requirements.”100 Adoption of an eMortgage system that complies with these MISMO standards creates a legally compliant eMortgage system for the lender that is of better quality, and features the desired reduction in costs and time in new mortgage originations.101

The cornerstone of the MISMO standards is the development and endorsement of SMART102 documents for eMortgages. The SMART document is a format that “links data, the visual representation of the form, and signature.”103 This link format ensures that the document being created and secured as the “original” is in fact what is represented on the computer screen and electronically signed by the borrower.104 The MISMO SMART document employs XML and XHTML to create an electronic document with a “header” section that contains all of the information about the document itself including the version and whether the document has been signed.105 Furthermore, there is a data section containing the substantive information conveyed by the words in the document like the address and amount of the mortgage debt.106 The information in both the data and the header sections is in XML format, and the XHTML of the view section tells the document how to display this substantive information to the user viewing the various documents of the eMortgage.107 Once the SMART document is ready to be signed by the parties, it is embedded with the capability to be signed digitally, and “this digital signature ‘wraps the SMART Doc and acts as a tamper seal” ensuring the “integrity of the document contents.”108 These technologies create a complete, all-electronic, and secure equivalent of a paper-based original commercial mortgage.

When using these secure systems and technology, electronic signatures for eMortgages are secure and flexible. Each eMortgage can be signed by several parties and subparts of individual documents can also be signed separately from the document in its entirety.109 Prior to

17, 2011).
100. Tank & Supik, supra note 75, at 1.
101. See id.
102. SMART stands for Secure, Manageable, Achievable, Retrievable, and Transferrable. MBA, supra note 97, at 7.
103. MISMO, SMART DOCUMENT TECHNOLOGY OVERVIEW 2 (2002), http://www.mismo.org/specifications/emortgagespecifications.htm (follow “SMART Doc Technology Overview v1.0” hyperlink; users must complete the free registration to download the PDF report).
104. Id.
105. Id. at 5.
106. Id.
107. Id.
108. Id.
109. Id. at 4-5.
applying a secure electronic signature to an eMortgage, a user will verify
his or her identity through a secure web-based system similar to those
commonly used for online banking transactions. 110 The electronic
signature on an eMortgage SMART document provides two distinct
features: authentication and tamper evidence. 111 For authentication, the
digital signature is accompanied by an electronic certificate that verifies
the identity of the sender of the signed document. 112 The XML signature
also allows the recipient of a signed document to verify whether the
document has been changed after the authenticated user “signed” the
document. 113 When used with data encryption, this tamper evident seal
protects the original character of the signed document by allowing a
recipient to verify whether document data has changed since the
document was signed. 114

There are several existing technologies that provide security for
electronically generated and signed documents. Public Key Infrastructure
(“PKI”) is the “most widely accepted form of encryption and protection
of document integrity.” 115 PKI encryption technology is based on
embedding data keys within an electronic document that can only be
accessed if the correct “private key” is matched to the corresponding
“public key.” 116 The document cannot be reconstructed once encrypted
without the user matching both keys. 117 This security method is “multi-
layered and complex, making it extremely difficult to break.” 118 PKI
encryption has proven effective technology for ensuring the security of
electronic documents and signatures. 119 Freddie Mac requires that the
tamper evident seal certifies that the view and data sections of the
eMortgage XML SMART document are identical. 120 Further PKI seals
and XML SMART document technologies applied to commercial

110. See generally MISMO, REMOTE ELECTRONIC AUTHENTICATION IN THE MORTGAGE
112. Id.
113. Id.
114. Id.
115. MBA, supra note 97, at 6.
116. Id.
117. Id.
118. Id.
119. Id.
120. Fry et al., supra note 30, at 310.
eMortgages require that the digital certificates be industry verified and accredited. With these technologies applied to commercial eMortgages, borrowers and originators trust that these electronic documents are secure and represent the actual transaction between the parties.

The MBA has created an organization to accredit certificate suppliers according to each supplier’s ability to conform to the required encryption, identification, and accessibility of their certificates. Digital signatures ensure the authenticity and integrity of the data encompassed in the eMortgage SMART document. Combined with eVaults, eMortgages are designed to be efficient and secure while allowing borrowers and other transaction participants to sign “original” electronic documents. Sophisticated commercial borrowers will embrace the eMortgage closing process because of the security and ease of use of the eMortgage documents and electronic signatures.

Once the commercial eMortgage is closed, it is able to be transferred quickly and securely to the eVault; however, there is a gaping hole in the process when it comes time to record the eMortgage. So far, the process of creating, executing, and delivering an eMortgage has been electronic. Counsel and the title companies could do all of their respective drafting and research digitally. The borrower can sign the document electronically, and the eMortgage can be securely delivered to the commercial lender’s eVault. Much of the time and cost savings generated by performing all of these tasks electronically would be wasted if, after closing, the lender or title company was forced to print and send traditional copies of the eMortgage to the county clerk and recorder for recording. This lack of effective means for eRecording of eMortgages is the last major impediment to the industry moving from the traditional commercial mortgage to a commercial eMortgage.

IV. THE MISSING PIECE: ERECORDING

A. STALLED IMPLEMENTATION OF ERECORDING

Although commercial lenders currently have widespread incentive to create “hybrid” eVaults that can accept both traditional and eMortgages, they do not have sufficient incentive to transact exclusively through eMortgages because there is a legal and practical breakdown at the recording phase of the mortgage transaction process. In 2003, the MBA acknowledged two major factors that were impeding the implementation of eRecording: first, there are states and local
jurisdictions that have failed to enact the legal framework necessary for counties to accept eMortgage documents, and second, there are significant up-front costs for counties to obtain the necessary technology to establish eRecording. Some estimates are approximately $80,000 per county in up-front costs. Additionally, even in the jurisdictions that have eliminated the legal barriers to eRecording, the systems were designed as “hybrids” that only have the technical capability of accepting images of executed “original” paper copies of the mortgage documents. These jurisdictions will also face significant up-front costs in transitioning to true eRecording. In light of these costs and the economic downturn since 2008, it is not surprising that the pace of implementation of eRecording, where legal, has been slow.

More recently, commercial mortgage industry participants have recognized that they could not work alone to solve the remaining legal and systematic issues preventing the implementing eRecording. More broadly, the Public Records Industry Association (“PRIA”) sees itself as bridging the gap between “two interdependent segments of the American economy,” and this positive approach leads to hope that universal eRecording can be achieved in the near future. Much like MISMO in the commercial mortgage industry, PRIA is actively working to develop and promulgate industry standards for counties to use in implementing eRecording. In spite of the fact that recording offices are not solely focused on cost savings and efficiency like other market participants because they are focused on ensuring the validity and reliability of the property recording system, many of these bureaucrats have embraced the switch to eRecording. These recorders will continue to face an uphill battle to implement these changes because many of them “face new costs without new funding; unknown, conflicting, and changing technical standards, equipment requirements; and operating protocols; and a lack of clear legal authority under state law.” Much of the focus of the MISMO and PRIA standards will help alleviate the technological and equipment-based difficulties.

The process has been generally slow for more than a decade. As

124. See MBA, supra note 97, at 7.
125. See Stonefield, supra note 24, at 233.
126. See MBA, supra note 97, at 8.
127. See eMortgage Specifications, supra note 99 (describing collaboration with PRIA to develop and implement eRecording industry standards).
129. Id.
130. Stonefield, supra note 24, at 223.
131. Id. at 223-24.
of September 2011, there were only 700 counties using eRecording out of a total of approximately 3,300 throughout the U.S.\footnote{Id.} The pace has been increasing, with the number of counties using eRecording more than tripling after 2006.\footnote{Id.} For those who have implemented eRecording, the programs have been widely successful and have produced the advertised time and cost savings for market participants.\footnote{Id.} Colorado is an unusual example because it uses eRecording in every county and 100% of the population has access to eRecording.\footnote{Press Release, PRIA, Colorado Attains 100 Percent Engagement (Apr. 11, 2011), available at http://www.pria.us/files/public/News/Press_Releases/PRIA/2011/Colorado_Reaches_100_Per cent.pdf (last visited Nov. 17, 2011) (also noting that Hawai'i was unusual in the same way by reaching the 100 percent plateau).} By using this designated funding, Colorado rapidly increased the speed at which eRecording was implemented.\footnote{Id.} However, in spite of the several vendors and technology providers competing in the marketplace,\footnote{There are several vendors providing the secure Internet-based portals for users to upload documents and county employees to retrieve, record, and return the documents. These interim systems are critical for the phase of implementation during which counties must maintain both electronic and traditional paper property records. See, e.g., CORP. SERV. CO., http://www.erecording.com/ (last visited Jan. 31, 2012); SIMPLIFILE, https://simplifile.com/eRecording/index.jsp (last visited Jan. 31, 2012); ERXCHANGE, https://www.erxchange.com/UI/About.aspx (last visited Jan. 31, 2012).} the costs of implementing eRecording systems continue to impede the majority of counties from adopting them.\footnote{Cost information from vendors is generally unavailable. Considering that the Colorado legislature specifically designated funds to implement the systems, significant implementation costs exist.} At a time where there are shrinking state budgets and competing funding needs, it will be unlikely to see other state legislatures approach the adoption of eRecording with the same bravado as the Colorado statewide funding plan. In order for eRecording to succeed nationwide, states must duplicate this effort across the country, implementing the necessary funds and legal framework for eMortgages to be accepted through the necessary eRecording technology.\footnote{See Stonefield, supra note 24, at 224.} One source of funds that would pay for implementation of eRecording is to divert a percentage of overall recording fees to pay for implementing eRecording systems. The title companies could serve as another source of payment for eRecording implementation through the enactment of a
dedicated levy on title companies for the closing services that they perform. Title insurance companies are very profitable and payout a significantly lower percentage of their total revenue in claims than do other types of insurance, like automobile insurance. State insurance commissioners who regulate title insurance companies could ensure that a short-term levy on title insurance premiums is not passed through to consumers by highlighting the cost savings to the insurance companies over the long term. Additionally, these cost savings must eventually reduce the premiums paid by the property owner for these recording services.

B. PROPOSED CHANGES TO SPUR GROWTH IN eRECORDING

In order to change the legal framework to improve the speed of broad eRecording implementation, policy makers must entertain a balanced approach to incentivize this transition. Since commercial parties are sophisticated and extremely cost conscious, albeit traditionalist, it is unlikely that they will oppose implementation of eRecording. Over the long term, eRecording generates economies of scale and process automations that make it unlikely that the bureaucracy responsible for recording will save tremendous amounts of public resources. This direct reduction in costs is in addition to the indirect benefits to the public land records of enhanced “accessibility and searchability” that will likely include tract-based indexing of property records in addition to the traditional grantor-grantee indexing that is most commonly used currently. Integration of the eRecording database across county lines within a state will also provide for more extensive and complete title searches that will give prospective lenders or purchasers even greater certainty that the borrower or seller is conveying an interest that they actually own.

In light of these advantages and the uptick in adoption of eRecording over the past five years, it appears that the implementation of eRecording on a national scale might continue to move quickly. New counties that embrace eRecording can springboard upon the experiences of the jurisdictions that have been working with eRecording. Still at this pace of growth, it will be another decade before all counties allow

143. See Stonefield, supra note 24, at 225 (explaining possible consumer hostility to electronic mortgage documents and recording).
144. See id. at 228.
145. Id. at 230.
146. Id. at 231.
147. See Gaudio, supra note 11 at 299 (discussing the role of MISMO and PRIA in moving the eRecording process forward).
eRecording: too slow considering the nature of the changes in these transactions created by technology over the same timeframe.

A continued emphasis on a decentralized approach to implementation may possibly lead to the most practical implementation of eRecording.\footnote{See Stonefield, supra note 24, at 237.} The use of state and local task-forces to implement these policy changes have the benefit of creativity and a close fit to the individual needs of each jurisdiction.\footnote{Id. at 231.} Conversely, now that there are counties in at least thirty-eight states that have implemented eRecording,\footnote{E-Recording Network, SIMPLIFILE, https://simplifile.com/eRecording/customers-network.jsp (last visited Dec. 22, 2012) (providing a service map for that company’s service in at least 38 states).} communication between these jurisdictions should allow for a broad and quick implementation of the system in the remaining jurisdictions by focusing on the best practices as related by each jurisdiction. Additionally, national pressure in the form of new federal legislation could force states to consider using a percentage of their recording fees to implement the required eRecording technology to enter into conformity with the rest of the nation.\footnote{Stonefield, supra note 24, at 238-39.}

On a smaller scale, it would be more prudent for each state legislature to implement minimum standards for all of the state’s recording offices. States that have unified systems across recording offices allow citizens and other information seekers to access digital copies of mortgage documents through these eRecording systems. The price of access to these documents should be less than that charged for paper copies of records at the various Recorders’ offices because there is no longer a need for the recorder to search for the document or create a paper copy for the patron. States that have not enacted the necessary laws for eRecording need to be the focal points of industry group communication in order to determine the cause of their failure to legalize and implement eRecording.

The role of title companies in the commercial mortgage process could allow them to stand firmly in the way of such optimism. Title companies, especially the five giants that recently controlled more than 92% of the U.S. title insurance market,\footnote{Letter from Orice M. Williams, Dir. of Fin. Mkts. & Cmty. Inv., Gov’t Accountability Office, to Spencer Bachus Ranking Member, Comm. On Fin. Servs., U.S. House of Representatives (Apr. 13, 2007), available at http://www.gao.gov/new.items/d07401.pdf.} risk losing their oligarchic role that they have enjoyed for several decades.\footnote{See Bruce M. Owen, Kickbacks, Specialization, Price Fixing, and Efficiency in Residential Real Estate Markets, 29 STAN. L. REV. 931, 936-37 (1977) (characterizing title insurance practices at the time as oligarchic).} Profits in the industry rose 386% between 1995 and 2004 alone, and profits remain exceptionally
high in spite of the recent economic downturn.\textsuperscript{154} Aside from a reduction in the fees title companies receive for handling the transfer of loan documents from the closing to the recorder’s office, title companies suffer tremendous loss in value of their internal title plants once property records become openly and cheaply accessible by the public online. The title plants created and maintained by the title insurance companies may be their most significant asset, and the title companies have spent years and significant amounts of money growing these internal title records to maintain their dominance in the market to the exclusion of attorneys.\textsuperscript{155}

Once fully implemented, eRecording will cause all property records to become digitized and searchable over the coming decades. This searchability will cause title companies to lose the advantage that was created by their private searchable title plants, which will change their business models forever. In spite of the substantial risk that eRecording will drastically change their business model, many title insurance companies are crafting ways to add value to the eRecording process.\textsuperscript{156} Title insurance companies are reaping the benefits of standardization and cost savings of eRecording in residential mortgage transactions\textsuperscript{157} By implementing eVaults for their internal title plant systems, the title companies enjoy cost savings in addition to the use of these systems for eRecording because these systems also make their title searches and resulting title insurance policies less expensive as well.\textsuperscript{158} By adapting to this change instead of trying to impede the technological change, these title companies need not sacrifice their role in the real estate transaction and should still reap the benefits of the cost savings created by eRecording. The risks to the insurer are controllable, making title insurance companies profitable over the long term regardless of whether there are pressures to reduce their fees following the complete integration of eRecording across the U.S.\textsuperscript{159} In addition to the immediate cost benefits, their expanded role in providing real estate transactional closing services will secure demand for their services all while operating under a business model featuring eRecording. In spite of the incentive to fight change, the title insurance industry actively supports the adoption of


\textsuperscript{157} Id.


\textsuperscript{159} See Christie, supra note 142.
eRecording, and the industry trade group, the American Land Title Association, is an active member of PIRA and MISMO. Still, title insurance companies act half-heartedly in their embrace of this transition as evidenced by their failure to secure nationally uniform implementation of eRecording.

Rather than pursue a policy requiring a uniform change to state recording statutes as the primary means of achieving universal eRecording, the federal government and state lawmakers can exercise sufficient informal policymaking tools to push the transition forward. For example, Federal regulators and Congress can change the requirements placed on originators by the mortgage giants Freddie Mac and Fannie Mac. Due to their overwhelming market position, the lenders easily impose underwriting and delivery requirements on banks and other originators. If the originators fail to follow the technical guidelines, they risk losing the ability to have Fannie Mae and Freddie Mac purchase their loans. Further options remain for state legislators to mandate a more centralized system for eRecording across all of their counties. This type of system requires a partnership between county recording offices and the secretary of state. The advantages of using a single eRecording vendor across the state significantly outweigh the minor preferences and nuances followed by each recorder’s office.

V. CONCLUSION

Clearly, technology problems do not prevent commercial eMortgages from becoming widespread reality. Borrowers and lenders are clamoring for the cost savings associated with keeping the commercial mortgage process electronic; they prefer not to have to execute and record paper documents after spending months negotiating a transaction electronically. However, a lack of pressure to conform to eRecording prevents additional progress in the adoption of eMortgages. Policy makers must choose between greater national uniformity of recording laws, or they can allow states and individual counties to continue to meander through the process haphazardly. In addition to the benefits to lenders and borrowers, commercial eMortgages generate significant cost savings for title insurance companies and recorders. Commercial eMortgages coupled with eRecording fulfill a key governmental objective of providing clear and easy access to public land records at the lowest possible cost. Rather than remain stuck in the past wasting time and money on a paper based process, policy makers must align the technical advances made by the law through UETA and

UERPA with the economic reality by properly incentivizing this transition. Failure to create this missing legal piece is like requiring modern mortgage financiers to trade in Excel for the abacus.
2013] GETTING ONE STEP CLOSER TO A COMMERCIAL eMORTGAGE 475