Real Estate
Problems Blockchain Doesn’t Solve
By Paul Peterson

Blockchain might improve the services provided by county recorders. But its limitations need to be recognized.

Recent articles in national and local publications have discussed the use of blockchain technology to supplement or even replace record-verification methods currently used by the title insurance industry and by county-level recorders of deeds.¹ There is an extended discussion of blockchain on the Cook County Recorder's website, which sets forth the perceived promises and problems with implementing blockchain.² As the recorder's website notes, blockchain arose from the creation of the digital currency bitcoin and allows for recording unalterable, transparent transactions. For titles, blockchain may allow for the secure linking together of a public notice, an abstract of title, and specific property information.

In the future, blockchain also may allow for the creation of private keys or passcodes that would be required to record a document against property and therefore make unauthorized conveyances more difficult. Ultimately it may create a bearer-asset token that gives the owner of the token ownership of the property. A recent article stated another benefit of blockchain is its capacity to gather all information relevant to a transaction into one connected record, which currently is not done.³

But whether blockchain can be an effective technology for certainty of land titles or a suitable replacement for title insurance remains to be seen for several reasons, including:

1. Blockchain does not prevent all frauds. Unlike title insurance, blockchain does not provide insurance against loss from, or cost of, defense related to fraud or forgery, including misuse of passcodes (also referred to as private keys) given to children, caregivers, or trusted officers of an entity;

2. The recorder does not have the authority to check the authority of a party signing on behalf of a trust, a partnership, a corporation, or other entity;

3. Blockchain technology itself does not resolve any uncertainty or disagreement as to the legal effect or meaning of a document it archives;

TAKEAWAYS:

- Blockchain arose from the creation of bitcoin and allows for recording unalterable, transparent transactions. For titles, blockchain may allow for the secure linking together of a public notice, an abstract of title, and specific property information.

- Blockchain may dramatically reduce the cost of processing mortgage applications and provide for transparent, secure transactions and efficient recordkeeping. But the strengths and limitations of blockchain should be better understood before replacing a title system that has been in place for more than 140 years in Illinois.

- Blockchain may not prevent all frauds. Unlike title insurance, blockchain does not provide insurance against loss from, or cost of, defense related to fraud or forgery, including misuse of passcodes (referred to as private keys) given to children, caregivers, or trusted officers of an entity.
4. Purchasers, lenders, lender’s assignees, and mortgage-backed security purchasers would still require standard American Land Title Association (ALTA) title policies together with endorsements covering both record and nonrecord items from regulated underwriters with statutory reserves and public financials;

5. The grantor/grantee index, not tract indexes used by blockchain, is the official record providing constructive notice to third parties in Illinois;

6. Memorandums of judgments, state and federal tax liens, municipal liens, bankruptcy filings in Cook County, and terrorist lists set up by the federal Patriot Act are all against named parties who may or may not be the owner of the real estate in the county records;

7. For 175 years, Illinois has held that a party with notice of the unrecorded rights of another takes subject to those unrecorded rights, whereas blockchain would change those unrecorded rights;

8. Blockchains would have to reflect the setting aside of titles on recognized grounds, including nonrecord notice, lack of proper service in a judicial proceeding, or adverse possession even when those adverse parties did not have private keys; and

9. Any encumbrance or defect that challenges a clean title, such as bankruptcy, federal tax, child support, civil litigation, divorce, equitable, and other adverse liens.

Blockchain can reduce some, but not all, fraud

One reason for the interest in blockchain is to prevent fraudulent transfers of title. Blockchain promises less fraud by requiring the last grantee to use a numeric code or private key to record new deeds and mortgages. The private key is intended to show that the new document is, in fact, from the prior grantee of record. While a private key may reduce forgery, a private key may be given to a trusted child or advisor-or an abusive caregiver. Is the deed from the widow who produces her private key a conveyance pursuant to a valid agreement that the caregiver gets the property if the caregiver takes care of the widow for the rest of her life? Or, is the caregiver extorting a helpless, confused widow?

As discussed later, title insurance insures against loss if the title is not as stated. It also provides a defense to that title at the underwriter’s expense. A prudent attorney and most institutional lenders require that insurance.

Fraud based on a lack of authority

The recorder does not have the authority to check the grantor’s authority. Take, for example, a deed from a successor trustee of a revocable living trust set up by an elderly couple. Were the spouses competent and under no undue influence when they set up the living trust? (See 760 ILCS 5/8.5 for an extensive list of the considerations of whether a trust is valid and whether a trustee has the authority to convey. Add in determining whether the successor trustee is validly the successor trustee.)

Trusts are not the only entities that raise authority questions. Consider partnerships and corporations. If a property is the sole asset of the partnership, you should have the consent of all partners to convey. If this is the sole asset of the corporation, you should have board-of-director approval. If conveying real estate is in the ordinary course of business, who has the authority for the corporation to convey? What if it is outside the ordinary course of business? Again, what authority does the recorder have to check the authority of the individuals signing the deed to convey on behalf of the entity? A private key by itself does not ensure such transactions are valid.

A forged deed or a forged release is invalid. Conveyances, however, are not the only source of fraud. I have seen numerous forged or "unauthorized" releases of mortgages. Will lenders be issued (and lose) their own private keys for their mortgages? Is
possess the key tantamount to ownership of the mortgage. How can the record be corrected in an immutable blockchain?

What does the information mean? What of documents created before the start of the blockchain?

A stated purpose of blockchain is to gather information into one spot. How far back will the information go? If it starts in the 1980s with the 22nd transfer of title since the federal patent of title, how will someone know that the 22nd grantor had good title? Will the information include covenants, restrictions, and easements contained in deeds, leases, covenants, or plats of a subdivision—either prior to or after the start of blockchain—that can be enforced against the purchaser? What releases of lien are valid? Who decides what this all means?

Blockchain reminds me of abstracts. Abstracts show the documents that affect title. Abstracts also should reflect liens, covenants, and conditions including those contained in a deed. But there may be undetected competency, fraud, or forgery problems in that abstract. Hence, the need for title insurance.

Lenders want insurance, not just information

ALTA-form title insurance policies do not only insure against loss if title is not as insured, including loss due to nonrecord items such as forgery, fraud, undue influence, duress, incompetency, or incapacity. They also provide and pay for a defense if title is not as insured. They have 10 basic coverages for owner and loan policies and four additional coverages for loan policies, including insuring the validity and priority of the loan, many of which cover items not ascertainable from the public record. Numerous additional endorsements cover issues like loss from covenants and restrictions, encroachments, or defined zoning issues.

Can blockchain be used as the official title finding? Will a recorder be willing to issue the coverages and endorsements currently given under ALTA policies? Will a county be willing to indemnify the legal owners for claims against the blockchain and set up reserves sufficient to cover losses? If the recorder insures title and issues endorsements, what legal staff and what underwriting will be required on a county-by-county basis to understand the coverages and endorsements, evaluate the facts of the transaction, and issue those coverages and endorsements?

Legislative efforts to make blockchain the public record

Pro-blockchain legislation was introduced but not passed in the 100th Illinois General Assembly. Bills sought to make Illinois a pure-notice-recording state, require recording of all liens against real estate with the recorder, and provide for the use of blockchain technology in transactions and proceedings.

The grantor/grantee index and constructive notice

The purpose of recording a deed, mortgage, or other document is to put the world on constructive notice of one's interest in a piece of real estate. A person with constructive notice of the document record is treated as if he or she knew of that document, whether or not they had actual knowledge of that document. The official record giving constructive notice to third parties in Illinois is the grantor/grantee index. Each county recorder is required to post recordings of documents indexed by the identities of the grantor and grantee.

If a document is shown in the grantor/grantee index, the judgment index, or the lien index but is not specifically posted against the parcel in question, documents in those indexes will still affect the parcel. Even if there is a mistake in typing the permanent tax number on the deed, if the deed can be found in the grantor/grantee index the deed still imports constructive notice and the law treats all third parties as if they had been given that document as long as it is possible to identify the property from the legal description or possibly by its common address.

When liens are filed by name, not by property

Illinois House Bill 5594, which was re-referred to the Rules Committee and never brought up for a vote, would have required all documents affecting real estate to be recorded with the recorder of deeds of the county in which the real estate is located. Such
a statute would not overrule relevant federal statutes and possibly current state statutes. State liens posted by name include memorandum of judgment, state income tax liens, and Medicaid liens. Federal statutes include federal revenue liens as well as the listing of terrorists and other individuals and entities based upon sanction lists maintained by the federal Office of Foreign Assets Control (OFAC).

Memorandum of judgments² are filed by name with the recorder of deeds and affect all real estate that is owned or hereafter acquired by the judgment debtor. In theory, the recorder could search the grantor/grantee index for all property owned by the judgment debtor. But how far back would that search cover? Removing the ability of a memorandum of judgment to affect future acquired property would deprive judgment creditors of a powerful tool. Further, how many different John Smiths have judgments against them? And is the John Smith who has the judgment or lien against him the same John Smith that owns the property in question?

Currently state-revenue liens and possibly state-Medicaid liens are posted by name—not necessarily by property-on a website maintained by the Illinois Department of Revenue. Again, how do you find real estate owned by John Smith from a name index? And how do you tell whether the John Smith on the revenue lien is the same John Smith that owns the real estate?

An Illinois statute will not overrule federal statutes. OFAC maintains lists of parties and entities with whom parties are prohibited from dealing. These lists are searchable on the OFAC website.⁸ The mere filing of a bankruptcy of a party is constructive notice of the bankruptcy proceeding in the county in which the bankruptcy court is located. An automatic stay is imposed upon the filing of the bankruptcy. Included in the powers of a federal bankruptcy trustee is the ability to avoid transfers or sell or mortgage property.

Race-notice vs pure-notice statutes

Illinois House Bill 5188, another bill that died this year in the House's Rules Committee, sought to add the sentence, "This Section is a pure notice recording statute" to 765 ILCS 5/30, which, for 175 years, has been construed as a race-notice statute. First, there is the question of what that amendatory language does to titles that have been decided under the existing statute. Second, there is the issue of whether we want to go from the race-notice statutory system that is used by a majority of states, including Washington, D.C., to a pure-notice system. An understanding of recording systems is necessary.

There are three different statutory systems dealing with the rights of parties who record their documents first and how those rights are affected if the first party to record has either actual knowledge or constructive knowledge of the conflicting rights of third parties. "Powell on Real Property" defines a notice system as one where "priority is given to a subsequent purchaser who acquires an interest without notice of the prior interest" and a race-notice system as one where "priority is given to a subsequent purchaser who acquires an interest without notice of the prior interest, but only if the subsequent purchaser also records that subsequent interest before the owner of the prior interest records that prior interest."⁹ Powell goes on to note that it is often difficult to categorize and differentiate recording statutes. At times, it is up to the state supreme court to decide what the statute means. In 1843, the Illinois Supreme Court decided that the similar predecessor to the current 765 ILCS 5/30 was a race-notice statute¹⁰ and the courts have followed the ruling ever since. The acquiescence of the Illinois legislature to this line of cases, rewarding the diligent for 175 years, clearly defines what the statute means.

Wikipedia provides a fitting example illustrating a problem with the notice-type statute:

Under a notice statute, a subsequent purchaser for value wins if, at the time of conveyance, that subsequent purchaser had no actual or constructive notice of the prior conveyance. In short, a subsequent bona fide purchaser wins. Thus, if Oscar purports to sell a piece of land to Al for $100,000, and the next day purports to sell exactly the same piece of land to Bob for another $100,000, then Bob will own the land so long as he was not aware of the prior sale to Al. However, note that if Al records his interest before Bob’s purchase, this recordation will be deemed to give Bob constructive notice. If Bob purchases the land without notice, and Al then records his prior purchase before Bob records his own purchase, then Bob will still prevail in ownership of the land. The benefit of a pure notice statute is that it encourages Al to record quickly, but if Al records after Bob's purchase, Bob has only limited incentive to record his conveyance immediately. This can leave the land records incomplete for an indeterminate amount of time and could cause Al to make improvements of which he might be divested by Bob’s later recorded deed.¹¹
The equities afforded to parties under the different systems and the rights of parties as described in "Powell on Real Property" should be considered before deciding to change a system long defined by court decisions and justified as rewarding the diligent. This caselaw and the logic supporting it have been accepted by the Illinois legislature for 175 years.

**Blockchain title transfers from someone other than the last grantee**

There are numerous instances where title changes take place without the actions of the last grantee. The most common is when a sole title owner dies. Others include sales by a bankruptcy trustee, a deed pursuant to a mortgage foreclosure, and adverse possession. More recently, a spate of cases has set aside sheriff's deeds issued pursuant to mortgage foreclosures based upon service defects that the courts decided violated federal or state constitutional due process. How blockchain will handle these transactions is unclear.

**Enabling blockchain statutorily**

Illinois has its own statute validating electronic documents and electronic signatures. It is currently looking into the issue of electronic notarization. Does Illinois need a separate blockchain statute? Or, is blockchain better covered by existing Illinois statutes? Ohio just passed an enabling statute for blockchain by simply amending its electronic document statute. That Ohio amendment essentially added two sentences, providing "[a] record or contract that is secured through blockchain technology is considered to be in an electronic form and to be an electronic record" and "[a] signature that is secured through blockchain technology is considered to be in an electronic form and to be an electronic signature."

Blockchain is best described as evolving. Incorporating blockchain into the existing statutory framework for electronic documents and signatures avoids setting up different legal and technical standards for electronic documents and signatures and allows the legislature to deal with evolving improvements and problems with the law and the technology in one place. Note that bitcoin, which is a global phenomenon based upon blockchain technology, seems to be operating without a specific blockchain enabling statute.

**Conclusion**

Blockchain may evolve into a tool used by recorders. However, as this article points out, there are numerous issues that must be dealt with if blockchain is to be a useful tool for real estate. Saying there are obstacles to blockchain that must be eliminated to enjoy blockchain's benefits sounds good—until you start to examine what benefits blockchain provides and why obstacles to a perfect blockchain system exist.

Blockchain will not eliminate all sources of fraud or defective conveyances. Blockchain may not check the authority of individuals signing on behalf of entities or whether an entity has proper authority to convey. Blockchain will not eliminate rights of parties that claim to be heirs or devisees, are under adverse possession, or are shown on the grantor/grantee index but not on the tract index. Changing Illinois from a race-notice to a pure-notice state will require a significant shift in the rights of known but unrecorded parties—including parties in possession. An Illinois statute will not override lien provisions of the Federal Tax Code, the powers of a federal bankruptcy trustee, or the prohibitions against dealing with named parties from the various lists that have grown out of the original Patriot Act. Deleting the recently enacted state-income tax—and now the Medicaid-lien index, which is posted by name, not by property, and is maintained by the Illinois Department of Revenue—should be discussed. There will be opposition from creditors to changing memorandums of judgments that currently are posted by name and affect all real estate now or hereafter acquired. Not even discussed above is how a recorder would deal with a lost, private blockchain key.

This article is not intended to reject blockchain. Indeed, blockchain may dramatically reduce the cost of processing mortgage applications. But the need for insurance over loss from title not being as stated and the coverages over record and nonrecord items given by title insurance, including the validity and priority of a mortgage, should be recognized. The strengths and limitations of blockchain should be better understood before trying to dramatically change the laws of Illinois in favor of a system that is based on an index that does not import constructive knowledge in Illinois, may not check the authority of entities conveying property, and does not fit with existing indexes filed by name.

Many software developers ask themselves, "What problem am I trying to solve? And is a blockchain necessary to solve it?" My position is that the blockchain used by the recorder as a title-finding mechanism may very well create additional unforeseen
problems, whereas the solution of title insurance is already in place and has been for more than 140 years.

Paul Peterson is a vice president and senior underwriter for the Fidelity Family of Title Insurers, vice-chair of ISBA's Construction Law Section Council, and a member of ISBA's Real Estate Law Section Council.

Paul.peterson@fnf.com

ISBA RESOURCES >>


1. Marc Shaw, *Will the Power of Blockchain Mean the End of Title Insurance Companies in 20 Years?*, Forbes Community Voice (June 22, 2018).


4. HB 5188 (seeking to add the sentence "This Section is a pure notice recording statute" to 765 ILCS 5/30). The sentence would have contradicted the prior language of section 30 of the Conveyancing Act and 175 years of caselaw construing the meaning of section 30, which has consistently been called a race-notice statute.

5. HB 5594 (seeking to provide that "All claims against real estate shall be recorded in the office of the recorder of the county in which the real estate is located").

6. HB 5553.

7. 735 ILCS 5/12-101; see also id. at § 5/12-650 et seq.


9. Powell on Real Property, § 82.02.


12. Electronic Commerce Security Act, 5 ILCS 175/1 et seq.

13. Ohio 132nd General Assembly, Substitute Senate Bill Number 220.

© Illinois State Bar Association