ARTICLES

THE COMMODIFICATION OF PUBLIC LAND RECORDS

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The United States deed recording system alters the "first in time, first in right" doctrine to enable good faith purchasers to record their deeds to protect themselves against prior unrecorded conveyances and to provide constructive notice of their interests to potential subsequent purchasers. Constructive notice, however, works only when land records are available for public inspection, a practice that had long proved uncontroversial. For centuries, deed archives were almost exclusively patronized by land-transacting parties because the difficulty and cost of title examination deterred nearly everyone else.

The modern information economy, however, propelled this staid corner of property law into a computer age in which land records are electronically maintained and instantaneously accessible over the internet. That development transformed public land records into a marketable commodity independent of the deed recording system's notice-giving function. In response to booming demand for big data, content extracted from public land records (name, home address, marital status, among other personal information) is now actively traded on the internet and routinely purchased by commercial firms for targeted marketing and customer prospecting. Data from public land records are now more accessible than ever before, representing a win for transparency, but, as tragically illustrated by the recent high-profile attack against a federal judge, an erosion of privacy that can dangerously equip wrongdoers with ondemand entrée to personal information.

This Article provides the first scholarly account of the deed recording system's transformation from a notice-giving mechanism of property law to a primary supplier of commodified data for sale in the modern information economy. The Article surveys the traditional functions of deed recording, describes the recent migration of deeds from

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paper to electronic form as the predicate for commodification, and considers the implications of electronic disclosure for privacy, transparency, and the regulation of anonymous entity ownership. The Article concludes by appraising the efficacy of recent privacy reforms under consideration by Congress and state legislatures, and by outlining voluntary precautions that homeowners can implement under existing law.

INTRODUCTION			508
I.	TRADITIONAL FUNCTIONS OF DEED RECORDING		513
	A. History and M	echanics of Recording Statutes	514
	B. Interests Protec	ted by the System	517
	C. Entity and Tri	ıst Öwnership	518
	•	of Recording	
II. PUBLIC LAND RECORDS TODAY			520
	A. Private Title P	lants and the Computerization of	
		Records	
	B. Big Data and	Web Harvesting	528
		ses of Online Property Data	
III. POLICY IMPLICATIONS		ONS	536
	A. The Public Inte	erest	537
	B. Data Privacy C. The Move Toward Anonymously Owned Land:		538
	Privacy and P	itfalls	549
	1. Anonymo	us Title: Voluntary Precautions	550
	2. Entity Ow	mership and Money Laundering	
	Regulatio	ons	552
	3. The Impa	ct of Money Laundering Regulations	
	on Entity	Ownership	558
	4. Summary	-	560
CONCLUSION			560

INTRODUCTION

On Sunday, July 19, 2020, at approximately 5:00 p.m., a seventytwo-year-old attorney named Roy Den Hollander disguised himself as a Federal Express deliveryman and rang the doorbell of the New Jersey residence of United States District Court Judge Esther Salas.¹ Daniel

¹ See Neil Vigdor, Aimee Ortiz & Kevin Armstrong, Husband and Son of a Federal Judge Are Shot in New Jersey, N.Y. TIMES (July 19, 2020), https://www.nytimes.com/2020/07/19 /nyregion/shooting-nj-judge-esther-salas.html [https://perma.cc/KS97-F3PW]; Nicole Hong, William K. Rashbaum, Mihir Zaveri & Katherine Rosman, Suspect in Death of N.J. Judge's Son Is Linked to California Killing, N.Y. TIMES (July 22, 2020) [hereinafter Hong et al., Suspect], https://www.nytimes.com/2020/07/22/nyregion/roy-den-hollander-esthersalas.html [https://perma.cc/S2LT-5TMD]; Nicole Hong, Mihir Zaveri & William K. Rashbaum, Inside the Violent and Misogynistic World of Roy Den Hollander, N.Y. TIMES (July 26,

Anderl, Judge Salas's twenty-year-old son and only child, answered the door, whereupon Hollander pulled out a semiautomatic pistol and opened fire at pointblank range; Daniel's wounds were fatal.² When Mark Anderl, Judge Salas's husband, ran outside to see what had caused the commotion, Hollander shot Mark multiple times before fleeing the scene.³ Judge Salas was in the basement during the shooting and was not physically harmed.⁴ Mark survived the attack, but remained hospitalized weeks after the shooting.⁵ The next day, Hollander's body was found in the Catskills, where authorities believe he committed suicide.⁶

Hollander's ghastly targeting of Judge Salas's family was not a random act of violence. In 2015, Hollander appeared before Judge Salas as a litigant in a civil action challenging the male-only military draft on grounds of sex discrimination.⁷ In 2018, Judge Salas ruled in Hollander's favor, allowing his civil action to proceed beyond the pleadings, "but [Hollander] still ranted about her in his online writings, insulting her and claiming that she was a beneficiary of affirmative action."⁸ Despite her reputation as a well-respected and hard-working jurist, Hollander published baseless insults about Judge Salas, describing her as "a lazy and incompetent Latina judge appointed by Obama."⁹

Investigators quickly connected Hollander to another shooting in California that bore a chilling similarity to the tragedy in New Jersey.¹⁰ On July 11, 2020, an armed assailant disguised as a Federal Express deliveryman shot and killed fifty-two-year-old attorney Marc Angelucci outside his home in San Bernardino, California.¹¹ Apparently, Angelucci and Hollander were bitter rivals in the fringe movement advocating for the protection of "men's rights."¹² Authorities believe that Hollander may have been planning the assassination of other

4 See id.

5 See Tracey Tully, Judge Whose Son Was Killed by Misogynistic Lawyer Speaks Out, N.Y. TIMES (Aug. 3, 2020), https://www.nytimes.com/2020/08/03/nyregion/esther-salas-roy-den-hollander.html [https://perma.cc/VA8W-XWVW].

6 See Hong et al., Suspect, supra note 1.

7 See id.

- 8 See id.
- 9 See Rosa, supra note 2.
- 10 See Hong et al., Suspect, supra note 1; Rosa, supra note 2.

12 See id.

^{2020),} https://www.nytimes.com/2020/07/26/nyregion/roy-den-hollander-judge.html [https://perma.cc/A5PA-YAFH].

² See sources cited *supra* note 1; Amanda Rosa, *The Son of a N.J. Judge Was Killed. Here's What We Know.*, N.Y. TIMES (July 22, 2020), https://www.nytimes.com/2020/07/22 /nyregion/esther-salas-son-roy-den-hollander.html [https://perma.cc/DC7E-2C6W].

³ See id.

¹¹ See Hong et al., Suspect, supra note 1.

judges to avenge long-simmering grievances, a concern that had previously prompted the FBI to alert New York Chief Judge Janet M. DiFiore that Hollander possessed a document with her name and photograph in his car.¹³

In a heartrending video, Judge Salas explained how she believed Hollander obtained her family's home address:

[W]hat we cannot accept is when we are forced to live in fear for our lives because personal information like our home addresses can easily be obtained by anyone seeking to do us or our families harm. Unfortunately for my family, the threat was real. And the free flow of information from the internet allowed this sick and depraved human being to find all our personal information and target us. Currently federal judges' addresses and other information is readily available on the internet. In addition, there are companies that will sell your personal details that can be leveraged for nefarious purposes. In my case, the monster knew where I lived and what church we attended and had a complete dossier on me and my family. At the moment, there is nothing we can do to stop it. And that is unacceptable. My son's death cannot be in vain.¹⁴

* * *

The real property deed recording system, once a staid and uncontroversial corner of property law, is in the midst of a seismic transformation as public land records enter the internet age. Title documents recorded with a local register of deeds were always considered matters of public record, but when maintained offline in a municipal filing room, they were not available to members of the public without an in-person visit to city hall. Today, however, most public land records have been digitized and, in many cases, real property deeds and the personal identity data that they display are accessible via the internet. The internet, in turn, has made the ownership of real property more transparent, but, for homeowners, the widespread online dissemination of property deeds—and the ability of data brokers to extract personal information from those documents—represents a significant erosion of privacy.

The horrific attack against Judge Salas and her family offers a compelling justification for enhancing personal safety protections for individuals, including judges and other public officials, who interact with risky or dangerous segments of the population.¹⁵ But the online

¹³ See id.

¹⁴ Mercury, *Statement from U.S. District Judge Esther Salas*, YOUTUBE (Aug. 3, 2020), https://www.youtube.com/watch?v=sLWJPlAIPvE.

¹⁵ See U.S. MARSHALS SERV., DEP'T OF JUST., UNITED STATES MARSHALS SERVICE FY2020 ANNUAL REPORT 40 (2021) (noting 4449 "[i]nappropriate [c]ommunications

dissemination of data from public land records also implicates broader questions about the privacy interests and personal safety of millions of ordinary American homeowners: How, if at all, should the electronic publication of personal identity information extracted from public land records be regulated as a general matter? Judge Salas directed her criticism of the system at websites that publish and sell personal details, including home address information. The source of the information that led to her son's killing remains unclear, as many routine transactions have the potential to expose personal data to public view. But much personal information comes from digitized real property records supplied by the government itself through local deed recording registries. In fact, after centuries of maintaining a low profile as quiet custodians, local deed recorders are now at the vanguard of a newly booming industry that pays handsomely for electronic access to what has become known as "personally identifiable information" (PII) collected from publicly filed property deeds.¹⁶

There are many definitions of PII, but the term is generally understood to encompass "information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual."¹⁷ PII includes, for example, an individual's first and last name, home address information, telephone numbers, email addresses, information identifying personally owned property, age and date of birth, marital status, and family information.¹⁸ Publicly filed land records may contain several categories of PII, such as home

^{/[}t]hreats to [p]rotected [p]erson[s]" in fiscal 2019 and 4261 in fiscal 2020); Emily Roscoe & Charles Szypszak, *Privacy and Public Real Estate Records: Preserving Legacy System Reliability Against Modern Threats*, 49 URB. LAW. 355, 356–61 (2017) (describing the rising trend of retaliatory fraudulent liens filed against law enforcement officers and public employees); Jonathan Grant, Note, *Address Confidentiality and Real Property Records: Safeguarding Interests in Land While Protecting Battered Women*, 100 MINN. L. REV. 2577 (2016) (describing the privacy needs of domestic violence survivors with respect to residential address information); Jodi Wilgoren, *Electrician Says in Suicide Note That He Killed Judge's Family*, N.Y. TIMES (Mar. 11, 2005), https://www.nytimes.com/2005/03/11/us/electrician-says-insuicide-note-that-he-killed-judge's spouse and parent by a disgruntled litigant).

¹⁶ The phrase "personally identifiable information" is a misnomer because what is identifiable is the person, not the information, but the term, and the abbreviation PII, have become ubiquitous. *See, e.g., Rules and Policies—Protecting PII—Privacy Act*, U.S. GEN. SERVS. ADMIN. (Oct. 8, 2019), https://www.gsa.gov/reference/gsa-privacy-program/rules-and-policies-protecting-pii-privacy-act [https://perma.cc/RZ4D-TYFD].

^{17 2} C.F.R. § 200.79 (defining Personally Identifiable Information (PII)).

¹⁸ See, e.g., Examples of Personally Identifiable Information (PII), U.S. ARMY REC.'S MGMT. & DECLASSIFICATION AGENCY, https://www.rmda.army.mil/privacy/PII/PII-examples.html [https://perma.cc/ED4F-RDQ9].

address and marital status.¹⁹ That PII, as it turns out, is incredibly valuable because it can be used for targeted marketing and customer prospecting activities in what has grown into a \$49 billion market for big data.²⁰

The supply of PII collected from public records has increased rapidly to meet the demand. Local deed recorders, themselves, are now in the business of selling access to digitized public land records to commercial data brokers who, in turn, deploy artificial intelligence and search bots to collect and disseminate homeowners' PII. Title insurance companies, who amassed their own store of PII from public land records to improve the efficiency of title examination, also became active data marketers upon discovering that their existing warehouse of information could be repackaged and sold as big data. Critically, however, this free flow of information is a one-way street once an individual's name and home address are published online, the resulting electronic record is nearly impossible for a homeowner to remove from the internet.

Mostly unnoticed by the general public, and largely overlooked by property law scholars, the digitization of real property records, and the resulting commercialization of PII, represents the most significant development in generations for the American deed recording system. Originally conceived as a notice-based protection for land purchasers and lienholders, the deed recording system is now publicly accessible online and is used routinely for purposes not directly related to the sale or encumbrance of real property, such as commercial data mining, targeted marketing, and customer prospecting. We characterize this transformation as the commodification of public land records because, in the modern information economy, electronically accessible deeds have become valuable assets that are readily exchangeable and exploitable on the open market for big data. The commodification of public land records has, in turn, begun to alter the privacy preferences for some homeowners. Indeed, the hyper-transparency of property records coincided with a notable shift in the high-end real estate market where purchasers increasingly transact in the names of shell

¹⁹ For example, a tenancy by the entirety is a concurrent form of ownership created when "[a] husband and wife together take title to an interest in real property or personal property under a written instrument designating both of their names as husband and wife." N.J. STAT. ANN. § 46:3-17.2(a) (West 2021). Because the designation of both owners as husband and wife (or, in the case of a same-sex couple, as married spouses) is in the titling of the property, it will appear on the publicly recorded deed.

²⁰ Mark Albertson, *Software, Not Hardware, Will Catapult Big Data into a \$103B Business by 2027*, SILICONANGLE (Mar. 9, 2018), https://siliconangle.com/2018/03/09/big-data-market-hit-103b-2027-services-key-say-analysts-bigdatasv/ [https://perma.cc/UR6Y-EDVG] (2019 forecast).

companies rather than in their own names as individuals. Some buyers use anonymous entity ownership for privacy from the prying eyes of the press and commercial data brokers, while others use shell companies for less legitimate reasons, such as money laundering and creditor avoidance.

We contend that the commodification of public land records, coupled with the rise of anonymous entity ownership, raises challenging new questions about the traditional functions of the deed recording system. Individuals who record title to real property in their own name must tolerate the irrevocable online disclosure of their PIL. In contrast, homeowners who conceal their identity through anonymous entity ownership find themselves ensnared in the government's efforts to regulate financial crimes. Policymakers and scholars have yet to grapple rigorously with the many legal implications of commodifying public land records, including the social consequences of eroding the privacy of real estate ownership, the public interest in promoting real estate ownership transparency, the ability of law enforcement agencies to regulate financial crimes involving anonymously owned real estate, and the deed recording system's capacity to protect the interests of land purchasers and lienholders amid growing preferences for entity ownership. As we will explain, recent efforts by lawmakers in Congress and state legislatures to restrict the disclosure and online publication of PII belonging to judges and government officials reflect a commendable concern about the dangers of public access to personal data of public officials, but those reforms will be difficult to implement successfully and they do nothing to protect the privacy of ordinary homeowners seeking privacy of information concerning their personal residence.

The Article proceeds as follows: Part I explains the traditional function of public deed recording as a notification system designed to protect land purchasers and lienholders. Part II explores recent developments in the custodianship of real property records, including the privatization, digitization, and commercialization of information extracted from public land records. Part III examines the competing policy concerns surrounding the commodification of land records, including the role of privacy law in protecting personal information extracted from public land records, precautions that individuals can take to protect their information from disclosure online, and government efforts that restrict ownership privacy in its effort to combat money laundering.

I. TRADITIONAL FUNCTIONS OF DEED RECORDING

This Part describes the traditional functions of public deed recording, which served as a notification system to protect land purchasers and lienholders. We examine the history and mechanics of recording statutes, the property interests protected by the system of deed recording, the practice of recording title in the name of trustees, corporations, and anonymous legal entities, and the uniquely local nature of deed recording.

A. History and Mechanics of Recording Statutes

Real estate transactions in the United States have been a matter of public record since colonial times. England had no recording system when colonists arrived in Massachusetts, but, in 1640, the Massachusetts General Court enacted an ordinance designed to promote the security of land title.²¹ The ordinance provided that, so "that every man may know what estate or interest other men may have in any houses, lands, or other hereditaments," no deed would be valid against anyone except the grantor and his heirs "unlesse the same bee recorded."22 Under this ordinance, the government established a public forum for deed recording without assuming legal responsibility for regulating the quality of title. Grantees had a powerful incentive to record deeds publicly which, in turn, served the law's primary purpose: deterring title fraud by landowners attempting to sell the same property more than once.²³ The Massachusetts statute, and its focus on public recording as the source of superior title, served as the foundation for real property recording acts prevailing in all American states from coast to coast.²⁴ By 1893, the California Supreme Court considered the matter settled law: "[P]rovisions of recording acts are for the protection of subsequent purchasers and incumbrancers from the common grantor, and do not affect the rights of strangers to the

^{21 1} RECORDS OF THE GOVERNOR AND COMPANY OF THE MASSACHUSETTS BAY IN NEW ENGLAND, 1628–1641, at 306 (Nathaniel B. Shurtleff ed., Boston, William White 1853), *cited in* Joseph H. Beale, Jr., *The Origin of the System of Recording Deeds in America*, 19 GREEN BAG 335, 337 (1907).

²² Id.

²³ See Jackson v. Post, 15 Wend. 588, 594 (N.Y. Sup. Ct. 1836) ("The object of the recording acts is to prevent frauds—to prevent the person having title to land from selling it more than once, and thereby defrauding one or more of the purchasers."); see, e.g., Montgomery Cnty. v. MERSCORP Inc., 795 F.3d 372, 376 (3d Cir. 2015) ("The primary purpose of Pennsylvania's land recording statutes is 'to give public notice in whom the title resides; so that no one may be defrauded by deceptious appearance of title.'") (quoting Salter v. Reed, 15 Pa. 260, 263 (Pa. 1850))); Claflin v. Comm. State Bank, 487 N.W.2d 242, 248 (Minn. Ct. App. 1992) ("The purpose of the [Minnesota] recording act is to protect those who purchase real estate in reliance upon the record.").

²⁴ Beale, *supra* note 21, at 337; *see also* 1 JOYCE PALOMAR, PATTON AND PALOMAR ON LAND TITLES § 4, at 10 (3d ed. 2003) ("The effect to be given to the record in determining the priority of conflicting conveyances appears to have originated in the statutes of the Massachusetts Bay Colony.")

claim of title."²⁵ Thus, the act of recording an instrument affecting title to real property is, itself, "from the time of recording, notice to all subsequent purchasers, mortgagees and judgment creditors of the execution of the document recorded and its contents."²⁶

Public access to deeds, however, is not essential to a system of private property. Prior possession, rather than prior recording, served as the foundation of title in common law England.²⁷ Deeds were merely evidence of the transfer of the right to possession²⁸—evidence that a property transferor would present to a transferee, but not to the public at large. The transfer itself typically required livery of seisin, a ritual during which the transferor delivered a physical manifestation of the transferred land—a twig, or a clod of dirt—to the transferee.²⁹ Rooting title in possession, however, presented significant risks to a purchaser, who lacked the ability to authenticate the current possessor's title without a complete record of all prior possessors.³⁰ A public recording system reduced those risks by ensuring that a good faith purchaser would prevail over the holder of a prior unrecorded deed.³¹ Public access to deeds is also unnecessary in a system where government maintains an official, legally binding, registry of title to real property. For instance, the English Land Registration Act of 1925³² provided for registration of title, but restricted public access to title records within the registry.³³ In general, one could obtain registration information only by permission of the registrant.³⁴ As a safeguard against fraud, however, a purchaser had the right to inspect a title record to confirm representations made by the registrant.³⁵

By contrast, public access to deeds is essential under the peculiar American system in which no government entity maintains definitive

30 See Douglas Baird & Thomas Jackson, *Information, Uncertainty, and the Transfer of Property*, 13 J. LEGAL STUD. 299, 303–04 (1984) (comparing filing systems with possession-based property systems and concluding that filing systems reduce the uncertainty concerning transfer by permitting parties to discover the true owner more easily).

31 Id.

32 For more complete discussion of the Act, see C. Dent Bostick, *Land Title Registration: An English Solution to an American Problem*, 63 IND. LJ. 55, 90–101 (1988).

33 *See* Land Registration Act 1925, 15 & 16 Geo. 5, c. 21, § 112 (UK) ("[A]ny person registered as proprietor of any land or charge, and any person authorised by any such proprietor, or by an order of the court, or by general rule, but no other person, may inspect and make copies of and extracts from any register or document in the custody of the registrar relating to such land or charge.").

34 Id.

²⁵ Garber v. Gianella, 33 P. 458, 459 (Cal. 1893).

²⁶ See, e.g., N.J. STAT. ANN. § 46:26A-12(a) (West 2021).

²⁷ Henry W. Ballantine, *Title by Adverse Possession*, 32 HARV. L. REV. 135, 137 (1918).

²⁸ Id.

²⁹ See 1 PALOMAR, supra note 24, § 3.

³⁵ See id. § 110(1).

information about the state of title.³⁶ Under the American system, a prospective land purchaser must satisfy herself that the seller acquired acceptable title and did not convey any of that title to someone else. The purchaser therefore wants to see all relevant deeds to and from the seller. But the purchaser cannot ask the deed recording official to produce this information because deeds are not organized by land parcel. Instead, deeds are filed and maintained chronologically, so the purchaser must search the entire public record for deeds and other recorded documents related to the property in question.³⁷ The recording office maintains an index that pinpoints the location of chronologically filed deeds,³⁸ but, in most jurisdictions, the index is not organized by lot and block number.³⁹ Instead, the index is cataloged alphabetically by the names of grantors and grantees.⁴⁰ As a result, the purchaser must peruse the entire index for entries that contain the names of all grantors or grantees that appear in the seller's chain of title. The index entry reveals the physical location of the actual deed within the recording office.⁴¹ The purchaser must then go to the relevant location, typically a deed book, to examine the deed. Unlike the English Land Registration Act, however, the inspection of deeds is not limited to prospective purchasers of land. Indeed, recorded deeds are accessible to anyone interested in looking at them. Thus, the American recording system is premised on public access because once a person has access to the deed books, she has access to all deeds within the jurisdiction.

³⁶ For a now-classic criticism of the American system, and advocacy of a registration system, see Myres S. McDougal and John W. Brabner-Smith, *Land Title Transfer: A Regression*, 48 YALE LJ. 1125 (1939).

³⁷ State Recording Acts enumerate the types of instruments affecting title to real property that are entitled to be recorded. Such instruments typically include deeds, declarations of trust, long-term leases, mortgages, liens and encumbrances, assignments, discharges, cancellations, releases, options, condemnation orders, tax and environmental liability liens, restrictions governing the property's use, notices of settlement, maps, condominium master deeds, cooperative master declarations, and "any other document that affects title to any interest in real property in any way or contains any agreement in relation to real property, or grants any right or interest in real property or grants any lien on real property." *E.g.*, N.J. Stat. Ann. § 46:26A-2 (West 2021).

³⁸ See 1 PALOMAR, supra note 24, § 67 (noting that the index is an essential element of the recording system).

³⁹ Tract indexes do exist in a number of states. In those states, the index entry for a particular tract will direct the searcher to all documents related to that tract. *Id.*

⁴⁰ Id. (noting that in the majority of older states, tract indexes do not exist; deeds are indexed by grantor and grantee).

⁴¹ For a brief description of the process of using the indexes to search title, see Christopher L. Peterson, *Foreclosure, Subprime Mortgage Lending, and the Mortgage Electronic Registration System,* 78 U. CIN. L. REV. 1359, 1365–66 (2010).

B. Interests Protected by the System

The recording system's protections both include and extend beyond purchasers and prospective purchasers of fee interests in land. Since colonial times, recording statutes have required mortgagees to record in order to protect their interests against subsequent purchasers and mortgagees.⁴² Without mortgage lending, real property would be accessible only to the few people who could afford to pay cash. The public land recording system facilitates the use of land as collateral and opens the real estate market to a far wider audience.⁴³ Moreover, it is not only subsequent purchasers and mortgagees who benefit from recording of mortgages; potential unsecured lenders can check title records to determine how much equity a potential borrower might have in the borrower's real property, and therefore, how risky an unsecured loan might be.

The recording system also serves an important role in the regulation of easements by protecting individuals who record an easement and by providing reassurance to possessors whose title search reveals that they are not burdened by the obligations associated with an easement.⁴⁴ Once an easement is created by deed, the easement typically survives to benefit and burden subsequent owners, even though the easement is not repeated in subsequent deeds.⁴⁵ Absent recording, a subsequent owner would have no way of knowing whether an easement created decades prior remained binding. The requirement that express easements be recorded provides a mechanism for discovering old easements that were properly recorded, and for avoiding unrecorded easements.⁴⁶

⁴² In 1639, for instance, Connecticut decreed that "all bargains and mortgages of lands were to be put on record." BENJAMIN TRUMBULL, A COMPLETE HISTORY OF CONNECTICUT 115 (1818). In 1792, the Supreme Court of Pennsylvania contrasted English practice with Pennsylvania practice, noting that "[t]he law directs that mortgages shall be recorded within six months, and any man may discover the incumbrances, if he will take the trouble of searching the proper offices. If he will not, he must impute the consequences to his own laches." Evans v. Jones, 1 Yeates 172, 173 (Pa. 1792).

⁴³ See Peterson, supra note 41, at 1364–65.

^{44 &}quot;An easement creates a nonpossessory right to enter and use land in the possession of another and obligates the possessor not to interfere with the uses authorized by the easement." RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 1.2(1) (2000).

⁴⁵ Charles Szypszak, Public Registries and Private Solutions: An Evolving American Real Estate Conveyance Regime, 24 WHITTIER L. REV. 663, 669 (2003).

⁴⁶ See JON W. BRUCE AND JAMES W. ELY, JR., THE LAW OF EASEMENTS AND LICENSES IN LAND § 10:32 (1995). Similarly, upon modification or termination of an easement, the party benefited by the modification or termination must record a release in order to protect against claims by subsequent purchasers of the benefited land. See RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 7.15 (2000).

Because of the variety of interests subject to the recording system, it is no exaggeration to say that recording creates a network of information that allows market and legal participants in the land market to connect.⁴⁷ The public titling of land records, thus, creates a legal infrastructure that is indispensable to parties seeking to transact or protect an interest in real property.⁴⁸

C. Entity and Trust Ownership

Interests in land may be held by legal entities other than individuals, such as corporations, LLCs, partnerships, and trusts. These interests are indexed in the name of the legal entity or trustee, so the identity of the beneficial owner is not part of the public record. Title searchers may need to check other public records to verify the authority of a person executing a deed on behalf of a legal entity,⁴⁹ however, for purposes of title assurance, searchers generally have little reason to be concerned about the beneficial ownership of that entity.

Mortgages and liens, by contrast, are routinely sold or assigned by the original holder of the interest, so prospective purchasers and current fee owners must be capable of ascertaining parties with authority to release or renegotiate a mortgage or other lien on the property. When mortgage assignments are recorded promptly and properly, the current holder of the mortgage can be located by checking the public records. However, with the rise of mortgage securitization in the 1990s, the public recording of mortgage interests became opaque. Freddie Mac, Ginnie Mae, and a host of private leaders in the mortgage industry created the Mortgage Electronic Registration Systems, Inc. (MERS) to facilitate the private assignment of mortgages outside the public recording system.⁵⁰ Under the MERS system, the initial mortgagee would record the mortgage in the name of MERS as nominee, and subsequent transfers would be memorialized

⁴⁷ See Donald J. Kochan, Certainty of Title: Perspectives After the Mortgage Foreclosure Crisis on the Essential Role of Effective Recording Systems, 66 ARK. L. REV. 267, 275 (2013).

⁴⁸ See Peterson, supra note 41, at 1365.

⁴⁹ Typically, when the corporation is a seller, the buyer's title searcher will consult the records of the state Secretary of State to determine whether the corporation is in good standing and will examine the certificate of incorporation to determine whether there are limits on the corporation's authority to transfer property. *See, e.g.,* 21 N.J. PRAC., SKILLS AND METHODS § 27:11 (3d ed.). When a corporation held title earlier in the chain of title, a presumption may arise that transfer by the corporation was authorized. *See, e.g.,* 1 N.C. REAL ESTATE § 10:5 (3d ed.).

⁵⁰ See Nolan Robinson, Note, *The Case Against Allowing Mortgage Electronic Registration* Systems, Inc. (MERS) to Initiate Foreclosure Proceedings, 32 CARDOZO L. REV. 1621, 1621–22 (2011).

electronically within the MERS system, but not in the public records.⁵¹ As a result, a mortgagor seeking to pay off or renegotiate a mortgage might not be able to rely on a search of the public records to locate the current mortgagee.⁵²

In 2008, when the collapse of the subprime mortgage industry led to widespread financial crisis, litigation mushroomed over whether MERS had standing to foreclose mortgages held by its members.⁵³ Although MERS prevailed in many cases,⁵⁴ ultimately MERS determined that foreclosure in the MERS name would not be permitted, and that, before bringing a foreclosure proceeding, the current mortgage holder would have to record the chain of assignments in the recording office, restoring transparency about the mortgager's identity to the public record.⁵⁵

D. Local Nature of Recording

Deeds and other land records are typically recorded locally, generally at the county level. Before the recent computerization of records, the maintenance of separate indices for each county had advantages from a title search perspective: the searcher would have fewer index entries to examine than if the index included an entire state. Perhaps more importantly, local recording offices are easily accessible to those who are most likely to require access to public records such as individuals seeking to record documents promptly or perform a search title. In the parlance of a different era, it was critical that recording offices be no more than one day's horse ride away from any closing.⁵⁶

With the advent of computerized land records, which we discuss below, economies of scale could be achieved by recording at the state

⁵¹ Id. at 1622–23.

⁵² See MERSCORP, Inc. v. Romaine, 861 N.E.2d 81, 88 (2006) (Kaye, C.J., dissenting in part):

[[]L]ack of disclosure may create substantial difficulty when a homeowner wishes to negotiate the terms of his or her mortgage or enforce a legal right against the mortgagee and is unable to learn the mortgagee's identity. Public records will no longer contain this information as, if it achieves the success it envisions, the MERS system will render the public record useless by masking beneficial ownership of mortgages and eliminating records of assignments altogether.

⁵³ For a listing and discussion of cases, see 2 BAXTER DUNAWAY, LAW OF DISTRESSED REAL ESTATE app. 24A.

⁵⁴ Id.

^{55 2} DUNAWAY, *supra* note 53, § 24:20.10.

⁵⁶ See Tanya Marsh, Foreclosures and the Failure of the American Land Title Recording System, 111 COLUM. L. REV. SIDEBAR 19, 25 (2011) (arguing that "[i]t is no longer important that the recording office be located within one day's horse ride of the county limits").

or federal level.⁵⁷ But the traditional local system is politically entrenched because county clerks and other officials supervising the land recording system are typically elected officeholders who are unlikely to relinquish their duties voluntarily.⁵⁸ Fortunately, the county-based system does continue to offer some benefits, such as the ability of local officials to provide users with valuable advice.⁵⁹

Although American land records have always been open to the public, the intensely local nature of the recording system has limited the audience for these records largely to those the recording system was designed to benefit: prospective purchasers and lenders and their representatives. Local realtors and tax authorities had reason to consult the records for information about sales and sale prices,⁶⁰ but for national firms seeking to mine data for other purposes, the cumbersome process of visiting, on a regular basis, each county recording office across the country served as an effective deterrent.

II. PUBLIC LAND RECORDS TODAY

The modern functions of public land records have strayed dramatically from the original purpose of deterring fraud in the conveyance of real property. Today, access to public land records is increasingly privatized, digitized, and commercialized, largely in response to the meteoric growth in demand for personal data. This Part will examine the emergence of title insurance companies and their development of private "title plants," the digitization of public land records, and new technological innovations such as big data algorithms and web harvesters that enable commercial interests to profit from information extracted from public land records.

A. Private Title Plants and the Computerization of Public Land Records

Historically, the primary users of public land records were specialists, such as title abstractors and lawyers who had to compile the ownership history of a particular parcel in order to assure their clients

⁵⁷ See Charles Szypszak, Local Government Registers of Deeds and the Enduring Reliance on Common Sense Judgment in a Technocratic Tide, 44 REAL EST. L.J. 351, 355–56 (2015) (discussing statewide consolidation); Marsh, *supra* note 56, at 25 (arguing for federalization of recording system).

⁵⁸ Marsh, *supra* note 56, at 25.

⁵⁹ Szypszak, supra note 57, at 356.

⁶⁰ For instance, New York State imposes both a tax on real estate transfers, N.Y. Tax Law § 1402 (McKinney 2021), and a tax on the value of recorded mortgages. *Id.* §§ 253, 253-a to 253-y.

about the state of title.⁶¹ Sometimes, however, those specialists made mistakes. When courts held that the specialists were not liable for errors in judgment made during the process of abstracting title,⁶² a private market for title insurance slowly began to develop.⁶³ That market grew after World War I (largely because of the demands of institutional lenders),⁶⁴ and after World War II, title insurance became the norm for real estate transactions.⁶⁵

Some title insurance companies did more than search the public records as a prelude to underwriting individual title policies. In a trend driven primarily by the major firms, several title insurance carriers enhanced their search efficiency by developing proprietary databases of property information known as "title plants." Title plants are private deed banks that reproduce property data from the public record, but allow for better indexing and organization, and more complete information about the state of title.⁶⁶ Title plants have to be updated with a daily check of new public filings,⁶⁷ but once assembled, the data collector need not review public records for transactions already contained in the title plant.⁶⁸ Building and maintaining large

64 See Rosenberg, supra note 61, at 197.

65 See Quintin Johnstone, *Title Insurance*, 66 YALE L. J. 492 (1956) (noting large increase in title insurance since the mid-1940s, especially in urban areas); Sirmans & Dumm, *supra* note 63, at 294; Stewart E. Sterk, *Title Insurance: Protecting Property at What Price?*, 99 WASH. U. L. REV. 519, 524–27 (2021) (discussing development of the title insurance industry).

66 See 3 MILLER & STARR CALIFORNIA REAL ESTATE § 7:20 (4th ed. 2015), Westlaw MILCALRE (describing operation of title plant) [hereinafter 3 CALIFORNIA REAL ESTATE]. For a description of a title plant, see BARLOW BURKE, LAW OF TITLE INSURANCE § 12.01 (3d ed. Supp. 2018-2).

67 See BURKE, supra note 66, § 12.01 (noting that the title plant is "compiled and indexed on a daily basis from the public records relating to all real estate transactions filed with the Register of Deeds' office and other county offices in the county in which the title plant is to be used" (quoting McCaffree Fin. Corp. v. Nunnick, 847 P.2d 1321, 1323 (Kan. Ct. App. 1993)).

68 Because the title plant will include all past preliminary reports or searches on any parcel, the title company will typically start a new search with its last preliminary report or search, and will then update that report or search. 3 CALIFORNIA REAL ESTATE, *supra* note 66, § 7:20.

⁶¹ See Moses K. Rosenberg, Historical Perspective of the Development of Rate Regulation of Title Insurance, 44 J. RISK AND INS. 193, 196 (1977).

⁶² Watson v. Muirhead, 57 Pa. 161, 166 (1868) held that a professional abstractor's conduct "is not necessarily to be judged by the result. It is rather to be tested by considering what was the best light to be had at the time, and whether the error, if he committed one, was the result of an excusable mistake or of negligence."

⁶³ Pennsylvania enacted a statute authorizing title insurance in 1874 (six years after the Watson case was decided), and the first title insurance company was formed two years later. *See* G. Stacy Sirmans & Randy E. Dumm, *Title Insurance: An Historical Perspective*, 14 J. REAL EST. LIT. 293, 294 (2006).

databases of land records is highly labor intensive.⁶⁹ Those formidable costs led to consolidation in a title insurance industry now dominated by four companies that account for 85 percent of all title insurance policies nationwide.⁷⁰ Thus, all major title insurers maintain efficient and readily accessible databanks that contain information about title to and mortgages upon land throughout much of the country.

Although title insurers compiled title plants in pursuit of their core insurance business, they soon realized that they possessed information of great economic value to businesses in other industries that could benefit from PII contained in real property deeds. In the 1980s, some title insurers sought to commercialize this data by selling direct wholesale access to their title plants.⁷¹ And, as commercial data markets gained momentum, title insurance companies acted to develop title plants in areas they had not previously exploited. Their efforts, however, encountered opposition from local deed recording officials who initially resisted the bulk production of electronic land records on privacy grounds.

Two of the early privacy challenges, one in New York and the other in Kansas, involved Data Tree, LLC (Data Tree), a subsidiary of

⁶⁹ See Johnstone, supra note 65, at 507 ("Title plants are costly to maintain, for every day a large volume of instruments must be copied and transactions indexed if the plant is to remain current."). To spread the cost of title plants, title insurers sometimes agree to share title plant information. See, e.g., Safeco Title Ins. Co. v. Liberty Nat. Title Ins. Co., No. 88 C 1687, 1989 WL 11079 (N.D. Ill. Feb. 9, 1989) (discussing a sharing arrangement). Because title plants are valuable assets that can operate to restrain competition in local markets, they sometimes play a role in FTC approval of agreements by one title insurer to acquire another insurer or another insurer's business. See, e.g., Jad Chamseddine, FTC Wants Fidelity National to Sell Title Plants, CQ ROLL CALL WASH. MERGERS & ACQUISITIONS BRIEFING, Apr. 30, 2014, 2014 WL 1688451.

⁷⁰ See Edwards v. First Am. Corp., 798 F.3d 1172, 1178 (9th Cir. 2015) (noting that, in most states, title insurance is dominated by two or three companies); Press Release, Fed. Trade Comm'n, FTC Challenges Proposed \$1.2 Billion Merger of Title Insurance Providers Fidelity National Financial, Inc. and Stewart Information Services Corporation (Sept. 6, 2019), https://www.ftc.gov/news-events/press-releases/2019/09/ftc-challenges-proposed-12-billion-merger-title-insurance_[https://perma.cc/36H2-SXLQ]; cf. 1 JOYCE PALOMAR, TITLE INSURANCE LAW § 2.2 (3d ed. 2003) (noting that although local title insurers initially built title plants, "national underwriters today have amassed data from public records into their own electronic title plants that are searchable from anywhere").

⁷¹ First American Corporation, one of the "Big 4" title insurers, advertises a product called "Title Chain and Lien Report" that "is accessed directly from [First American's] title plants." *See DataTree*, FIRST AM. MORTG. SOLS., https://www.firstam.com/mortgage solutions/solutions/data-analytics/datatree.html [https://perma.cc/C86Q-FANW]; *Title Chain and Lien Report*, FIRST AM. DATA & ANALYTICS, https://dna.firstam.com/title-chain-and-lien-report-sample [https://perma.cc/E28S-CLV4]; *The Source of Confidence*, FIRST AM. DATA TREE, https://web.archive.org/web/20110708233737/http://www.datatree.com /about_us.asp (noting Data Tree's establishment in 1987).

First American Corporation, one of the "Big 4" title insurers.⁷² Data Tree claims to be

the nation's leading provider of business information by supplying businesses and consumers with the information and resources that affect the major economic events of peoples' lives such as getting a job; renting an apartment; buying a car, house, boat, or airplane; securing a mortgage; opening or buying a business; and planning for retirement.⁷³

Both cases reached the highest court of the state. In each case, Data Tree argued that it was entitled to electronic land records under the state's freedom of information law.⁷⁴ Although there were significant differences between the cases, they shared some common outcomes: courts in both actions held that Data Tree was not entitled to certain PII such as social security numbers, that Data Tree was entitled to non-confidential information including information pertaining to the ownership and encumbrance of real property, and that Data Tree would have to bear the recording office's cost of redacting confidential information.

In the New York case, Data Tree requested twenty years of real property filings in an electronic format from the Suffolk County, New York, County Clerk.⁷⁵ The county clerk denied Data Tree's request on the ground that "disclosure would constitute an unwarranted invasion of personal privacy due to the volume of the records requested and the commercial nature of Data Tree's business."⁷⁶ Data Tree then brought

Romaine, 880 N.E.2d at 13. New York's open public records mandate applies to "any information kept, held, filed, produced or reproduced by, with or for an agency or the state legislature, in any physical form whatsoever including, but not limited to, reports, statements, examinations, memoranda, opinions, folders, files, books, manuals, pamphlets, forms, papers, designs, drawings, maps, photos, letters, microfilms, computer tapes or discs, rules, regulations or codes." N.Y. PUB. OFF. LAW § 86(4) (McKinney 2021).

75 *Romaine*, 880 N.E.2d at 13 (Data Tree sought "[t]iff images or images in the electronic format regularly maintained by the County... on CD–ROM or other electronic storage medium regularly used by the County.").

⁷² See Data Tree, LLC v. Romaine, 880 N.E.2d 10, 13 (N.Y. 2007); Data Tree, LLC v. Meek, 109 P.3d 1226, 1230 (Kan. 2005).

⁷³ Meek, 109 P.3d at 1230.

⁷⁴ The New York Court of Appeals observed:

Data Tree is a national company that provides on-line public land records such as deeds, mortgages, liens, judgments, releases and maps, and maintains a database of nearly two billion documents, providing its customers with immediate electronic access to the information. Its customers are those entities who purchase, sell, finance and insure property. Data Tree obtains the public land records by requesting them from county clerks, or other public officials who have the responsibility of recording and archiving such documents, throughout the country.

⁷⁶ Id.

a civil action in state court to compel production. After years of litigation, the New York Court of Appeals held that the county clerk had failed to rebut the presumption in favor of disclosure under New York's open public records statute.⁷⁷ To overcome that presumption, the county clerk had to "articulat[e] a particularized and specific justification for denying access" based on "unwarranted invasion of personal privacy."⁷⁸ Noting the custodian's burden of establishing a disclosure exemption, the court emphasized that "Data Tree's commercial motive for seeking the records is . . . irrelevant in this case and constitutes an improper basis for denying the [Freedom of Information Law] request."⁷⁹ In deeming Data Tree's commercial motive irrelevant, the court explained that the state's freedom of information law did not permit the disclosure of public land records for the purpose of generating leads for direct solicitation calls, but that the statute did allow such disclosure for the general purpose of "commercial reproduction on line."⁸⁰ On remand, the Court of Appeals ordered the trial court to determine whether Data Tree's specific requests sought the disclosure of exempt PII, such as Social Security numbers and birthdates.⁸¹ Because the New York statute provides that a state agency may recover the actual cost of reproducing requested records,⁸² Data Tree would presumably be liable for the cost of redacting the PII to which it was not entitled.

In Kansas, a local district attorney investigated a series of unsolicited sales calls that some complainants believed came from Data Tree's marketing of PII extracted from public land records.⁸³ The district attorney eventually closed the investigation without any adverse finding against Data Tree, although the company voluntarily modified its public records requests to exclude some highly sensitive PII.⁸⁴ In 2002, Data Tree petitioned the Sedgwick County, Kansas, Register of Deeds for bulk production of land records and expressly excluded all "birth records, marriage certificates, and military discharges" from its

83 Data Tree, LLC v. Meek, 109 P.3d 1226, 1230 (2005).

⁷⁷ Id. at 15.

⁷⁸ Id. (first quoting Cap. Newspapers Div. of Hearst Corp. v. Burns, 67 N.E.2d 665, 667 (N.Y. 1986); and then quoting N.Y. PUB. OFF. LAW § 87(2)(b) (McKinney 2021)).

⁷⁹ Id.

⁸⁰ Id. at 16.

⁸¹ Id.

⁸² N.Y. PUB. OFF. LAW § 87(b) (McKinney) (entitling an agency to recover actual cost). Section 87(c) defines actual cost to include the "hourly salary attributed to the lowest paid agency employee who has the necessary skill required to prepare a copy of the requested record" or, if the agency's technology is inadequate, "the actual cost to the agency of engaging an outside professional service to prepare a copy of a record." *Id.*

⁸⁴ Id.

request.⁸⁵ The county register conditioned the production of records on Data Tree's execution of "an affidavit prohibiting the selling or offering for sale any lists of names and addresses derived from public records."⁸⁶ Data Tree initially objected but ultimately complied.⁸⁷

One month later, the Sedgwick County Register informed Data Tree "that many of the requested records contained personally identifying information such as social security numbers, mothers' maiden names, and dates of births which needed to be redacted from the records."⁸⁸ The Register stated that it would charge Data Tree \$22,050 for the cost of "converting the microfilm to digital information in order to remove or redact the portions that were confidential and not subject to release."⁸⁹ While the Kansas open public records statute did not expressly prohibit government officials from disclosing personal information, the Register claimed it was exercising discretion conferred by statute to exempt from disclosure "records containing information of a personal nature where the public disclosure thereof would constitute a clearly unwarranted invasion of personal privacy."⁹⁰

In response, Data Tree filed a civil action challenging the redaction surcharges in state court and, as in New York, litigated the dispute all the way up to the state supreme court. Like the New York Court of Appeals, the Kansas Supreme Court concluded that the county register could withhold information of a personal nature, including "social security numbers, mothers' maiden names, and dates of births."⁹¹ The court expressed general disapproval of the disclosure of real property deeds for commercial publication online, cautioning that "[t]he public interest to be served by releasing unredacted documents . . . to a data collection company which intends to sell this information for a profit is at best insignificant."⁹² But in holding that the county register did not abuse its discretion by requiring that personal information be redacted, the court left Data Tree with the right to obtain redacted records so long as the company was willing to bear the cost of redaction.⁹³

The distinction drawn by courts between the disclosure of public land records for the impermissible purpose of lead generation for direct solicitation and the permissible purpose of "commercial

85 Id.

86 Id.

87 Id.

88 Id. at 1231.

89 Id.

91 Id. at 1230, 1238.

93 Id. at 1240.

⁹⁰ Id. (quoting KAN. STAT. ANN. § 45-221(a)(30) (2005)).

⁹² Id. at 1238.

reproduction on line"⁹⁴ proved to be meaningless. Once land records are produced online, purchasers of that information cannot be prevented from using the data for the purpose of generating leads or other customer prospecting activities. Thus, while local deed recorders initially stood at the vanguard of opposition against the commercialization of data extracted from public land records, their opposition was neither effective nor long-lasting. Deed recorders soon realized that, with the advent of electronic filing, they could no longer maintain land records solely in hard copy and that, by digitizing their vast inventories of real property filings, they could generate revenue by charging users for electronic access. Deed recorders are now part of a growing cohort of state agencies that sell PII from public records for the purpose of generating governmental revenues.⁹⁵

Notably, fees generated by the sale of electronic access to the deed recording system played a critical role in financing the cost of digitizing real property deeds. Until recently, most county recording offices had avoided the burden and cost of computerizing public land records traditionally maintained in paper and microfilm media because they lacked the financial incentives that pushed title insurers to modernize their recordkeeping systems. As courts and other governmental agencies shifted to electronic filing procedures, the public began to expect local recording offices to follow suit. To that end, in 2004, the Uniform Law Commission promulgated the Uniform Real Property Electronic Recording Act (URPERA), which, among other reforms, expressly validated the electronic recording of public land records.⁹⁶

Drafters of the URPERA, which has since been enacted in thirtysix states,⁹⁷ anticipated that the shift to electronic land records would

⁹⁴ Data Tree, LLC v. Romaine, 880 N.E.2d 10, 16 (N.Y. 2007).

⁹⁵ See, e.g., Joseph Cox, The California DMV Is Making \$50M a Year Selling Drivers' Personal Information, VICE (Nov. 25, 2019), https://www.vice.com/en_us/article/evjekz/the-california-dmv-is-making-dollar50m-a-year-selling-drivers-personal-

information?_ga=2.179775204.1520908975.1599772629-202134210.1599772629 [https://perma.cc/F9X9-47UB] ("A document obtained by Motherboard shows how DMVs sell people's names, addresses, and other personal information to generate revenue.").

⁹⁶ UNIF. REAL PROP. ELEC. RECORDING ACT, prefatory note (UNIF. L. COMM'N 2004) ("The Uniform Real Property Electronic Recording Act was drafted to remove any doubt about the authority of the recorder to receive and record documents and information in electronic form. Its fundamental principle is that any requirements of state law describing or requiring that a document be an original, on paper, or in writing are satisfied by a document in electronic form.").

⁹⁷ Uniform Real Property Electronic Recording Act, UNIF. LAW COMM'N, https:// www.uniformlaws.org/committees/community-home?communitykey=643c99ad-6abf-4046-9da4-0a6367da00cc&tab=gropudetails [https://perma.cc/NT9T-6864].

be costly, but they abstained from recommending how local deed recorders should pay for those costs:

The establishment, and perhaps the operation, of an electronic recording system might be funded from the general taxes and revenues of the state or county. Because of the relatively large "front end" expenses needed to set up an electronic recording system, this approach might be very appropriate for that purpose. Whether the funding is to be by the county or the state is an issue that should be resolved prior to the passage of this act. A related question is whether the funding should cover the entire cost of setting up the system or only part of it with the remaining costs to be paid by recording and searching fees dedicated to the establishment of the electronic recording system.⁹⁸

Rather than seek state appropriations, many deed recorders contracted with private vendors on a revenue-sharing basis to pay for the cost of electronic conversion.⁹⁹ Under that model, deed recorders avoided expending scarce budgetary resources on the digitization of land records while also generating new revenue by charging users for online access.¹⁰⁰ Some municipalities implemented a hybrid model, providing free, limited access to electronic land records for individuals while charging a subscription fee for bulk downloading activity by commercial users.¹⁰¹

Counties are capturing a lot of revenue off this data because it is very valuable[.] I like to think of it like our timber. We don't just give away our timber. It's a resource for our taxpayers. We should be bringing some of that revenue back to the taxpayers... There is a lot of revenue potential here.

Shannon M. Geisen, *Fidlar Technologies Will Market, Sell Hubbard County Land Records,* PARK RAPIDS ENTER. (Nov. 28, 2018), https://www.parkrapidsenterprise.com/4534766-fidlartechnologies-will-market-sell-hubbard-county-land [https://perma.cc/V4TJ-MQBJ]. *See also* Venkat Balasubramani, *Company That Facilitates Digital Access to Public Records Uses CFAA to Block Scraper,* ERIC GOLDMAN: TECH. & MKTG. L. BLOG (Dec. 31, 2013), https:// blog.ericgoldman.org/archives/2013/12/company-that-facilitates-digital-access-to-publicrecords-uses-cfaa-to-block-scraper.htm [https://perma.cc/4RQQ-S5U3] ("[T]he fact that counties are allowed to erect what is essentially a paywall around public records is deeply disconcerting. The fact that Fidlar seems to overtly promote this as a revenue model to governmental entities is downright crazy.").

100 See Geisen, supra note 98 (describing a pilot program in which a corporate customer was "buying bulk data from the county"). The county recorder explained, "[Data purchasers] want the entire month or entire year in one shot on an FTP drive or Zip drive. They want a big download." *Id.*

101 New York City, for example, "restrict[s] the daily bandwidth utilization to 400 MB" and "restricts access to users of robots, automatic scripts and other methods that consume excessive bandwidth to download information." *See ACRIS: Bandwidth Utilization Restrictions*, N.Y.C. DEP'T OF FIN., https://wwwl.nyc.gov/site/finance/taxes/acris.page [https://perma.cc/94BP-N5SL]. "High-volume users should contact the City Register to establish data subscription services that have been specifically designed to support such traffic." *Id.*

⁹⁸ UNIF. REAL PROP. ELEC. RECORDING ACT, prefatory note (UNIF. L. COMM'N 2004).

⁹⁹ The Hubbard County, Minnesota deed recorder explained:

Private vendors, in turn, played a central role in the digitization and commercialization of public land records. Fidlar Technologies, for instance, is one of the leading vendors that provides hardware, software, and subscriber management services to approximately two hundred local deed recording agencies.¹⁰² In counties that contract with Fidlar, users seeking online access to public land records generally must interface with Fidlar's database management system. One of Fidlar's popular branded services, known as the "Laredo Program," charges subscribers a monthly fee for unlimited access to the county database for the purpose of searching and viewing property records, plus an additional fee for printing images of individual files.¹⁰³ Fidlar, in turn, splits the fee revenue with the county government.¹⁰⁴

In sum, having opened the door to electronic recordkeeping, many local deed recorders established a new source of revenue from the sale of electronic access to public land records, but, in doing so, they inadvertently compromised the privacy of individual homeowners. Once deed registers migrated from manual to electronic filing, land records became publicly accessible online and searchable by address or lot number without the need to identify a grantor or grantee.¹⁰⁵ As we explain in the next section, the digitization and electronic searchability of public land records have fed an insatiable demand for PII in the booming market for big data.

B. Big Data and Web Harvesting

The commercialization of homeowners' PII has been driven largely by the growing demand for big data, one of the most significant technological innovations to emerge from the dot-com collapse in 2001. "Big data" generally refers to computer algorithms that process enormous quantities of data for the purpose of predicting future

¹⁰² *See* Complaint, Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 4:13-cv-04021 (C.D. Ill., filed Mar. 11, 2013), 2013 WL 878345 at 1–2.

¹⁰³ *Id.* at 2–3

¹⁰⁴ Id.

¹⁰⁵ See Emily Bayer-Pacht, Note, The Computerization of Land Records: How Advances in Recording Systems Affect the Rationale Behind Some Existing Chain of Title Doctrine, 32 CARDOZO L. REV. 337, 339 (2010) (noting the trend towards searchable records in many counties); see also Teranet, About POLARIS [Province of Ontario Land Registration Information System], https://www.teranet.ca/registry-solutions/about-polaris/ [https://perma.cc/4MYE-RP4X] (describing the development of the first electronic land registration system in 1985); Wake County Register of Deeds, Why Data Is Available Online, http://www.wakegov.com/rod /help/land/Pages/Books/dataonline.aspx [https://perma.cc/XJ8A-8E6Y] (noting the online publication of property records beginning in 1999).

behavior.¹⁰⁶ Those algorithms aggregate and commodify vast data collections in ways that have proven immensely valuable in the modern information economy. In 2019, firms spent \$67 billion on big data for various commercial purposes, such as targeted advertising and consumer marketing services.¹⁰⁷ Much of that information comes from local governments, which supply PII revealed in property tax records, deeds, property liens, mortgages and mortgage releases, and foreclosure filings.¹⁰⁸ That information is, in turn, transformed into a commodity when it is extracted from the actual land record images and stored in database form so that it can be aggregated and processed by big data algorithms. To accelerate the data extraction and avoid labor costs associated with manual data entry, big data firms now use a process known as "web harvesting" to automate the electronic collection of relevant data fields.¹⁰⁹ Web harvesting utilizes bot technology to search for, collect, and assemble small pieces of information from the internet.¹¹⁰

¹⁰⁶ See Ariel Porat & Lior Jacob Strahilevitz, Personalizing Default Rules and Disclosure with Big Data, 112 MICH. L. REV. 1417, 1434–35 (2014) (citing Lior Jacob Strahilevitz, Toward a Positive Theory of Privacy Law, 126 HARV. L. REV. 2010, 2021 (2013)).

¹⁰⁷ See Shanhong Liu, Big Data and Analytics Software Market Worldwide 2011–2019, STATISTA (Aug. 3, 2021), https://www.statista.com/statistics/472934/business-analyticssoftware-revenue-worldwide/ [https://perma.cc/TF84-4F4B]; see also Porat & Strahilevitz, supra note 106, at 1435–36; Solon Barocas & Andrew D. Selbst, Big Data's Disparate Impact, 104 CALIF. L. REV. 671, 673 (2016).

¹⁰⁸ See Fed. Trade Comm'n, Data Brokers: A Call for Transparency and Accountability 11–12 (2014).

¹⁰⁹ *Cf.*, Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 810 F.3d 1075, 1078 (7th Cir. 2016) (noting that web harvesters are "not interested in the land records themselves, but rather the data in these records").

¹¹⁰ One commentator offers the following description of web harvesting technology: One such method is data (or web) scraping, which involves software applications, called "bots," that efficiently collect information from across the internet. By automating the web browsing process, scraping bots gather data in the same format as it appears on a user's computer screen. Scraping bots serve an indispensable function for internet companies ranging from analytics startups to the internet's most established firms. Search engines, such as Google and Bing, use web crawler bots to catalog public websites. Analytics startups draw insights for industries, ranging from finance to retail, using public data gathered by bots. Estimates show that bots account for nearly one quarter of all internet traffic, and they have contributed significantly to the web's development.

Ioannis Drivas, Comment, Liability for Data Scraping Prohibitions Under the Refusal to Deal Doctrine: An Incremental Step Toward More Robust Sherman Act Enforcement, 86 U. CHI. L. REV. 1901, 1903–04 (2019); see also Associated Press v. Meltwater U.S. Holdings, Inc., 931 F. Supp. 2d 537, 544 (S.D.N.Y. 2013) ("[Web] crawlers extract and download content from the websites. The downloaded content is organized into a structured internal format..."); Nandhini, Watch Out: How Real Estate Scraping Is Taking Over and Why They Matter, SCRAPEWORKS, https://scrape.works/blog/watch-real-estate-scraping-taking-matter [https://perma.cc/8KJD-T5P8].

Web harvesting of public land records is typically most profitable when electronic images can be captured or, better yet, relevant data can be extracted from deeds and liens without purchasing each underlying property filing on a per-unit basis. As described below, web crawlers are programmed to exploit fixed-price subscriptions that provide unlimited searching privileges without incurring fees for downloading each individual record. County governments, with the help of their electronic records management vendors, try mightily to thwart this practice because image download fees generate significant revenues from high-volume big data users when conducting this type of data query on an industrial scale. Recent litigation of disputes about web harvesting and the use of online subscription services offers a revealing account of how technology firms are commodifying real property information into big data.

A notable series of cases involved a harvester of land records known as Black Knight, which had previously operated under the name Lender Processing Services (LPS).¹¹¹ Black Knight, a subsidiary of title insurance giant Fidelity National Financial, Inc., collects land records on a "vast scale" and maintains "agreements to access public land title information with about 2,600 county recorders' offices nationwide."¹¹² Using software furnished by the counties' electronic records vendors, such as Fidlar, Black Knight harvests land records by generating a series of targeted queries and saving each document that it retrieves.¹¹³ It then sends the downloaded land records to India, where workers manually extract certain fields of information and enter

¹¹¹ See About Black Knight, Inc., BLACK KNIGHT, https://www.blackknightinc.com/about-black-knight/ [https://perma.cc/P548-7ENB] (noting the 2008 subsidiary spinoff of Lender Processing Services, Inc. by Fidelity National Financial, which later reacquired LPS and renamed the entity Black Knight Technologies).

¹¹² Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 82 F. Supp. 3d 844, 847 (C.D. Ill. 2015), *aff d*, 810 F.3d 1075 (7th Cir. 2016) ("Some counties used written contracts; others had sign-up sheets or other less formal means of arranging for access. Where counties priced access differently based on the number of minutes of time logged searching land records, LPS paid the counties the fee required for the maximum amount of time possible, or 'unlimited' time.").

¹¹³ *Fidlar Techs.*, 82 F. Supp. 3d at 848. A federal appellate court described three distinct features of Black Knight's web harvester:

First, the web-harvester allowed [Black Knight] to acquire records en masse rather than viewing or printing them one at a time. Second, the web-harvester allowed [Black Knight] to download or save records, an option not available in [Fidlar's] Laredo client. Third, [Black Knight's] web-harvester did not send any tracking data at all and did not register any print fees, even if [Black Knight] downloaded or saved a record.

Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 810 F.3d 1075, 1078 (7th Cir. 2016).

the data into a proprietary database.¹¹⁴ Finally, Black Knight packages the extracted data for sale to companies engaged in various commercial activities including mortgage lending, real estate sales, capital market investing, direct marketing, and insurance.¹¹⁵

Fidlar recently challenged Black Knight's web harvesting practice in a federal civil action that alleged that Black Knight's search protocol violated Fidlar's user agreement as well as federal and state prohibitions against computer fraud and tampering.¹¹⁶ Fidlar claimed that its subscription program was designed to charge for timed access to the database and, additionally, to impose print fees for each downloaded record.¹¹⁷ Black Knight purchased an unlimited time subscription, which did not include downloading privileges, and then used its web harvester to capture images of individual land records en masse without being detected by Fidlar's paywall.¹¹⁸ Fidlar claimed that the web harvester exploited a programming flaw that allowed Black Knight to obtain complete land records without incurring print fees for each individual filing.¹¹⁹ Black Knight countered that the user agreements that it entered into with the county governments and with Fidlar did not expressly prohibit web harvesting. It claimed further that Fidlar knew that two of Black Knight's competitors, CoreLogic and First American (Data Tree), were also using web harvesters to download land records in bulk without paying individual printing fees, "yet [Fidlar] did not do anything to stop it."120

¹¹⁴ *Fidlar Techs.*, 810 F.3d at 1078. There are also patented technologies that help automate the process of data mining information from property records. *See*, e.g., System and Method for Associating Aerial Images, Map Features, and Information, U.S. Patent No. 7,487,114 at [43] (issued Feb. 3, 2009) (describing "automated data source services that digitally record information and automatically transmit the information to data mining applications").

¹¹⁵ See Black Knight Technologies, LLC, *Industries*, https://www.sitexdata.com/Home /Industries [https://perma.cc/DZY5-EBGH].

Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 810 F.3d 1075, 1079 (7th Cir. 2016).
Id. at 1077–78.

¹¹⁷ *Ia*. at 1077–78.

¹¹⁸ *Id.* at 1078 (Black Knight "designed a 'web-harvester,' a computer program to download county records en masse. To create the web-harvester, [Black Knight] ran a number of standard record searches and used a 'traffic analyzer' to view the [Simple Object Access Protocol "SOAP"] calls sent from the client to the middle tier. [Black Knight] then identified the SOAP calls necessary to retrieve records and developed its own client, the web-harvester, to emulate those SOAP calls and send them to the middle tier. [Black Knight's] web-harvester only sent the SOAP calls necessary to retrieve records; it did not send other SOAP calls, such as those that track a user's activity. But every SOAP call did include [Black Knight's] unique identifier assigned by each county.").

¹¹⁹ Id.

¹²⁰ Id. at 1082.

Black Knight prevailed on summary judgment and successfully defended that ruling on appeal.¹²¹ The Seventh Circuit upheld Black Knight's use of its web harvester, finding that it did not breach the user agreement, violate the Computer Fraud and Abuse Act (18 U.S.C. § 1030) (CFAA), or trigger CFAA's civil remedy provision (18 U.S.C. § 1030(g)).¹²² Section 1030(a) (4) of the CFAA prohibits "knowingly and with intent to defraud, access[ing] a protected computer without authorization, or exceed [ing] authorized access, and by means of such conduct further [ing] the intended fraud and obtain [ing] anything of value."123 The Seventh Circuit held that no reasonable juror could find that Black Knight intended to defraud Fidlar because the evidence showed that Black Knight had used its web harvester "to accelerate its data acquisition efforts," not primarily for the purpose of evading print fees, and that operation of the web harvester had not been concealed from Fidlar's software.¹²⁴ "In fact, each of [Black Knight's] SOAP requests contained its unique identifier."¹²⁵ With this holding, web harvesting of public land records seems to be a legal practice governed only by the contractual terms of the vendor's user agreement and by the technological mechanisms installed by the vendor to enforce those terms. Thus, when a vendor fails to properly safeguard the paywall, web harvesters can lawfully outsmart the system to collect data without paying either the vendor or the county government.

Web harvesters must also exercise care in designing their search bots because they are contractually responsible for all of their activities on the electronic public records user interface. Programming defects, such as queries that inadvertently trigger print fees for each requested record, have proven to be costly mistakes for web harvesters and a windfall for county governments and their electronic records vendors. In 2012, for example, Data Tree used its web harvester to download

¹²¹ Fidlar Techs. v. LPS Real Estate Data Sols., Inc., 82 F. Supp. 3d 844 (C.D. Ill. 2015), *aff'd*, 810 F.3d 1075 (7th Cir. 2016).

¹²² *Fidlar Techs.*, 810 F.3d at 1084 ("Fidlar attempts to convert its failure to prohibit [Black Knight's] action by contract into an allegation of criminal conduct. Despite its extensive efforts to paint [Black Knight's] conduct as fraudulent in nature, Fidlar has not pointed to any evidence that would allow a reasonable jury to find that [Black Knight] believed its conduct was fraudulent.").

^{123 18} U.S.C. § 1030(a) (4). The CFAA's regulation of web collection activities, however, remains in flux. The Ninth Circuit recently rejected LinkedIn's invocation of the CFAA to terminate a web harvester's access to publicly available user profiles. hiQ Labs, Inc. v. LinkedIn Corp., 938 F.3d 985, 1005 (9th Cir. 2019), *vacated* 141 S. Ct. 2752 (2021) (mem.). The Supreme Court, however, recently held that the CFAA does not prohibit an authorized user from accessing restricted information for an improper purpose. Van Buren v. United States, 141 S. Ct. 1648 (2021).

¹²⁴ Fidlar Techs., 810 F.3d at 1080.

¹²⁵ Id. at 1080-81.

more than 68,000 land records in St. Clair County, Illinois.¹²⁶ But instead of subscribing to Fidlar's Laredo service, which provides unlimited untimed access for search query activity, Data Tree inadvertently subscribed to Fidlar's "Tapestry" service, which charges a fee for every search.¹²⁷ Under Fidlar's contract with St. Clair, Tapestry subscribers pay a fee of \$5.95 per search, of which Fidlar keeps \$3.70 for itself and remits \$2.25 to St. Clair.¹²⁸ At the end of Data Tree's billing period, "a representative of Fidlar called Data Tree to thank it for its business and [to] see if Data Tree would like to pay in installments" the outstanding \$404,719.50 invoice for searches in St. Clair County.¹²⁹ When Data Tree refused, Fidlar remitted \$153,045.25 to St. Clair for the county's share and sued Data Tree for the unpaid invoice.¹³⁰ Data Tree claimed that Fidlar's fees were unenforceable because the state's freedom of information act did "not allow counties to charge a fee for electronic access to public land records in excess of the cost of the recording medium."¹³¹ However, the court disagreed because, under the Illinois Uniform Real Property Electronic Recording Act, "the county board may adopt a fee for document detail or image retrieval on the Internet."¹³² Thus, the court found that St. Clair County had properly established its fees for electronic records retrieval under the statute and, consequently, that Fidlar was entitled to enforce its contract with Data Tree for the full amount of search charges incurred by Data Tree's web harvester.133

The *Fidlar* cases show that local deed recorders are now actively engaged in the business of selling electronic public land records to web harvesters and, further, that the acquisition of public land records by web harvesters is governed by private contracts and user agreements that are enforceable under state law. The deed recording system, with the help of private vendors and at the request of commercial data brokers, has come to embrace its new role of PII supplier in the market for big data.

C. Commercial Uses of Online Property Data

Information gleaned from public land records has long been exploited for commercial purposes unrelated to the purchase or

127 Id.

- 130 *Id.*
- 131 Id. at *6.
- 132 *Id.* at *7.
- 133 Id. at *10.

¹²⁶ Fidlar Acquisition Co. v. First Am. Data Tree LLC, No. 4:12-cv-04099, 2016 WL 1259377, at *3 (C.D. Ill. Mar. 29, 2016).

¹²⁸ Id. at *2.

¹²⁹ Id. at *3.

encumbrance of real property.¹³⁴ Before the digitization of land records and the advent of big data, businesses routinely engaged in the collection of PII, but they typically procured that information, not en masse on an industrial scale, but rather, on a transactional basis. For example, when a consumer applies for credit in connection with the purchase of a good or service, the lender might request (or otherwise obtain through an intermediary, such as a credit rating bureau) personal information extracted from a public land record necessary to evaluate the borrower's creditworthiness. The lender uses information about the consumer's interest in real property for a commercial purpose unrelated to the property itself, but the impetus for the inquiry is the desire to consummate a specific transaction at the consumer's request.

Big data, however, fundamentally altered the commercial utility of PII for large businesses. Rather than using information from land records in connection with individual real estate transactions, businesses could aggregate that data on an industrial scale and deploy algorithms that render PII collected from deeds commercially exploitable in myriad ways. As a result, individuals are now inundated by a relentless stream of unsolicited, highly customized, communications about products, services, and jobs in a seemingly endless stream of invitations to transact. Many of those solicitations are generated from PII, including the target's name, marital status, and home address, compiled from digitized public land records.

Another big data application involves the online sale of property ownership information to consumers searching the internet for PII belonging to a particular individual—the type of service denounced by Judge Salas. Several online data brokers offer background checking services that furnish customers with a comprehensive report of nearly all PII about a particular target that can be obtained from public sources. Consider, for example, the suite of services provided by Intelius, Inc., a big data broker owned by a private equity firm.¹³⁵ Intelius advertises a database spanning "over 20 billion available public records" and invites consumers to search for the "phone numbers, address history, age, birthdate, email addresses, social network profiles,

¹³⁴ The invocation of freedom of information laws to obtain and commercialize the contents of public records has become widespread in other business contexts. *See* Margaret B. Kwoka, *FOIA, Inc.,* 65 DUKE LJ. 1361 (2016) (surveying commercial uses for public records obtained from the SEC, FDA, EPA, DLA, FTC, and NIH under the federal Freedom of Information Act).

¹³⁵ *H.I.G. Capital Completes Acquisition of Intelius*, BUS. WIRE (July 7, 2015, 6:00 AM), https://www.businesswire.com/news/home/20150707005394/en/H.I.G.-Capital-Completes-Acquisition-Intelius [https://perma.cc/HD47-2NYW]; INTELIUS, https:// www.intelius.com [https://perma.cc/QVL6-VZXL].

[and] marriage & divorce records" of "someone in [their lives]."¹³⁶ Intelius promotes its service as a one-stop solution for public record queries, enabling its customers to "[a]void the hassle of having to track down each public record separately, and get the convenience of one comprehensive search."¹³⁷ Intelius states that it collects information, including real estate records, from public records maintained by "county, state and federal" courts and government offices.¹³⁸ Intelius also advertises proprietary technology that "analyze[s] public data to reveal possible relationships, even when official records aren't available."¹³⁹

A competing firm, MyLife.com, Inc., markets many of the same services as Intelius, but it also caters to consumers seeking to monitor their own online reputation and data footprint. One of the data sources from which MyLife claims to obtain PII is public land records.¹⁴⁰ MyLife's landing page advertises the following slogan: "Reputation is Everything. See & Improve Your Public Reputation Profile."141 MyLife assigns each person a "Public Reputation Score," an opaque numerical computation (scaled from 1.0 to 5.0) that the company claims is "based on background details, personal reviews and social media posts, and are constantly updated."¹⁴² Subscribers to MyLife's free service receive ominous emails claiming that "We Found a Negative Item on your Reputation Profile" and warning that "Negative Items on Your Reputation Profile can affect what people think of you."¹⁴³ Users can pay to lock their "reputation profile" or to improve their "reputation score."¹⁴⁴ Another paid service offered by MyLife allows users to compare their reputation scores.¹⁴⁵ MyLife's premium service, branded as "Public Record Remover," reveals "other

140 Screenshot of MyLife search (Sept. 10, 2020) (on file with authors).

141 MYLIFE, https://web.archive.org/web/20200820195746/https://www.mylife.com. 142 *Id.*

143 See E-mail from MyLife to Reid Weisbord (Dec. 20, 2020) (on file with authors); see

¹³⁶ INTELIUS, https://www.intelius.com [https://perma.cc/HD47-2NYW]; *Get Instant Public Records*, INTELIUS, https://www.intelius.com/public-records [https://perma.cc/5PSZ-658K].

¹³⁷ Id.

¹³⁸ Search Property Owners with Our Reverse Address Lookup, INTELIUS, https://www.intelius.com/reverse-address-lookup/ [https://perma.cc/M897-2DLE].

¹³⁹ Terms of Service, INTELIUS, (July 31, 2020) https://web.archive.org/web/20200814135558/https://www.intelius.com/terms-of-use/.

also Press Release, Fed. Trade Comm'n, FTC Alleges California Purveyor of Background Reports Misled Consumers to Think Its Reports on Individuals Might Contain Criminal and Other Records (July 27, 2020), https://www.ftc.gov/news-events/press-releases/2020/07/ftc-alleges-california-purveyor-background-reports-misled [https://perma.cc/YN5Q-75V9].

¹⁴⁴ MYLIFE, www.mylife.com [https://perma.cc/W6Z3-RX9Z].

¹⁴⁵ Id.

websites that are exposing your personal information online, putting you at risk of identity theft. With a MyLife Premium Membership, Public Record Remover helps make it possible to have your information removed from these third party websites with a single click."¹⁴⁶ It is unclear, however, whether this premium service includes removal of the member's personal information from MyLife.com.

Notably, both Intelius and MyLife are privately held firms, so even though the services that they provide rely on information collected from the public record, the companies themselves are not required to publicly disclose information about their own business operations.¹⁴⁷ Other competitors in this field include truthfinder.com, peoplefinders.com, beenverified.com, and spokeo.com. All of these firms include home address information drawn from public land records in their searching services.¹⁴⁸

III. POLICY IMPLICATIONS

This Part examines the policy implications of commodifying public land records. We begin by considering the public interests served by facilitating on-demand access to real property deeds on the internet and commodifying the PII contained therein. We then examine the role of privacy law in protecting personal information extracted from public land records. For reasons explained below, we conclude that the online disclosure of such information is virtually unregulated under current law and extraordinarily challenging to police even if lawmakers were willing to enact legal protections. We conclude by outlining the voluntary precautions that individuals can take to preserve the privacy of their residential addresses, and examining a significant policy concern with increased anonymization of property records: the potential use of real property as a vehicle for money laundering.

¹⁴⁶ *Frequently Asked Questions*, MYLIFE, https://www.mylife.com/help [https://perma .cc/RV35-E8GV].

¹⁴⁷ *H.I.G. Capital Completes Acquisition of Intelius, supra* note 133; MYLIFE, *supra* note 140; Yuri Nagano, *New State Law Pits Privacy Against Free Speech, Public Records and Data Brokers,* S.F. PUB. PRESS (July 1, 2019), https://sfpublicpress.org/news/2019-07/new-law-pits-privacy-against-first-amendment-public-records-data-brokers [https://perma.cc/M9E4-4QUD] ("Privately held MyLife, which is not subject to detailed public disclosures about its business....").

¹⁴⁸ Public Records Search, TRUTHFINDER, https://www.truthfinder.com/public-records / [https://perma.cc/8F8A-PHE8]; PEOPLEFINDERS, https://www.peoplefinders.com/ [https://perma.cc/7T99-S54P]; BEENVERIFIED, https://www.beenverified.com [https:// perma.cc/U776-3WE8]; SPOKEO, https://www.spokeo.com [https://perma.cc/2SH5-P9G6].

A. The Public Interest

As new commercial applications for big data continue to generate robust demand for online public land records, real property data is becoming a commodity traded in the booming market for personal information. As a supplier of that commodity, county governments are indeed benefitting financially from new sources of revenue. The commodification of public land records has significantly benefited county recording offices and the real estate buying public by financing the digitization of land records. By improving the transparency of real estate transactions, the digitization of public land records should ultimately reduce errors and delays in the real estate settlement process.¹⁴⁹ In particular, digitization has the potential to reduce the cost of (and ultimately eliminate the need for) title insurance although the structure of the title insurance market may continue to serve as a roadblock.¹⁵⁰

The *Fidlar* cases, however, raise questions about whether county recording offices are obtaining a fair share of the economic spoils from the commercialization of public land record data. Revenue sharing arrangements between county governments and their vendors call for a significant share of fees to be paid to the private vendor rather than the public kitty. In part, fees paid to those vendors are undoubtedly necessary to cover vendor costs and to provide a reasonable return on vendor investment. And the vendors themselves are competing on the market with title insurers who sell similar data culled from their own digitized records. That market competition reduces the revenue stream available to the counties' vendors-and ultimately the share paid to county governments. On top of that, private vendors have sometimes been inadequately savvy, failing to properly structure their subscriber agreements and online billing systems, allowing web harvesters to avoid paying for a significant share of their search activity. Taken together, these factors reduce the payouts available to county governments.

The public benefits derived from sale of real property data—data which is publicly available anyway—may justify the erosion of privacy generated by commercialization of that data. But if government

¹⁴⁹ Scholars have noted the benefits of increasing the transparency of public records in other contexts. Lynn LoPucki, for instance, argues that online transparency of court records tends to expose and reduce judicial corruption, enhance legislative control over courts, popularize the law, and increase the predictability of litigation outcomes. Lynn M. LoPucki, *Court-System Transparency*, 94 IOWA L. REV. 481, 494 (2009).

¹⁵⁰ See Bruce M. Owen, *Kickbacks, Specialization, Price Fixing, and Efficiency in Residential Real Estate Markets,* 29 STAN. L. REV. 931, 938–44 (1977) (describing how, even in 1977, when the industry was less concentrated than it is today, title insurers enlisted government regulation as a weapon in its effort to stifle the entry of new competitors).

officials realize too little benefit, the sale of public land records for commercial purposes unrelated to real estate transactions becomes more difficult to justify. In addition, the monetization of data from public land records is, in part, based on an assumption that title to residential real property will continue to be recorded in the owner's name. Privacy precautions, such as the titling of residential real estate in the name of an anonymous legal entity, is now fashionable in some high-end markets, but it remains an uncommon practice for the vast majority of homebuyers. As the wholesale disclosure of land records data continues to gain steam, however, the commercialization of that information may alter the recording preferences of homebuyers who prefer to maintain the privacy of their home address. If anonymous legal entity ownership becomes a widespread practice, then public land records will be stripped of the information that data brokers prize the most-PII that associates real property with the identity of the homeowner. Thus, the economic value of public land records might very well decline in the long run as individuals adapt to the hyper commercialization of personal information.

B. Data Privacy

As we explained above, digitization of the deed recording system propelled public land records from a state of relative obscurity to one of hyper transparency in which real property deeds are interminably exposed to purchasers of big data and the prying eyes of casual inquiry. The burdens of performing a manual title search at city hall no longer insulate property records from public access, and, indeed, purchasers of big data have accelerated the dissemination of that information to all corners of the internet.¹⁵¹ In other contexts, courts have recognized that "the compilation of otherwise hard-to-obtain information alters the privacy interest implicated by disclosure of that information."¹⁵² The relative inaccessibility of public records associated with significant burdens of data collection has come to be known as "practical

¹⁵¹ *Cf.* Will Thomas DeVries, *Protecting Privacy in the Digital Age*, 18 BERKELEY TECH. L.J. 283, 301 (2003) (describing how "[d]igital technology is turning the asset of open government into a privacy nightmare").

¹⁵² U.S. Dep't of Just. v. Reporters Comm. for Freedom of Press, 489 U.S. 749, 764 (1989). In *United States Department of Justice v. Reporters Committee for Freedom of the Press*, the Supreme Court held that FBI rap sheets maintained confidentially by the Department of Justice for more than 24 million persons (at the time) were exempt from FOIA disclosure to private third parties because the practical obscurity of individual police and court records, although otherwise available to the public, rendered the disclosure of a federal compilation of such information to be an "unwarranted invasion of personal privacy." *Id.* at 765.

obscurity."¹⁵³ In the context of public land records, the digitization of the deed recording system sounded the death knell for the practical obscurity that had long prevailed during the era of manual title examinations. Today, searchable access to public land records is no more burdensome than a Google query.

Now unshackled from the confines of practical obscurity, when real estate ownership information is published online, it becomes nearly impossible to delete because it is almost always archived and reproduced by internet bots, search engines, and other automated electronic systems.¹⁵⁴ Thus, a homeowner who records title in her name as an individual cannot prevent or revoke the online publication of her name and home address. With no ability to dissociate herself from the property online, she would have to physically relocate her personal residence and, if purchasing her new home, record title anonymously.

As a legal matter, the law does almost nothing to protect the privacy of land records filed with the local deed recorder. The relatively brief history of privacy law in the United States dates back to 1890, when Samuel Warren and Louis Brandeis published their landmark article on *The Right to Privacy*, and state courts began to recognize nascent privacy interests, including a cause of action for invasion of privacy, under common-law doctrines of tort law.¹⁵⁵ The Restatement (Second) of Torts, for example, explains that the tort of privacy invasion applies to the publication of "a matter concerning the private life of another... that would be highly offensive to a reasonable person, and is not of legitimate concern to the public."¹⁵⁶ But exactly which kinds of private matters, if published, would be

¹⁵³ See Woodrow Hartzog & Frederic Stutzman, *The Case for Online Obscurity*, 101 CAL. L. REV. 1, 21 (2013) (describing practical obscurity); *Reporters Comm.*, 489 U.S. at 762.

¹⁵⁴ One such internet archive, known as the Wayback Machine, "allows users to view archived webpages and their content as they existed at any given point. The Internet Archive uses, among its other tools, a WebCrawler to collect its data. A WebCrawler is an internet bot, which systematically browses the World Wide Web, typically for the purpose of web indexing. The data retrieved for the Internet Archive is stored on servers and indexed to make that information searchable by the public using the Wayback Machine." Tharpe v. Lawidjaja, 8 F. Supp. 3d 743, 776 (W.D. Va. 2014). *See also* Tom Zeller, Jr., *Keeper of Expired Web Pages Is Sued Because Archive Was Used in Another Suit*, N.Y. TIMES (July 13, 2005), https://www.nytimes.com/2005/07/13/technology/keeper-of-expired-web-pages-is-sued-because-archive-was-used-in.html [https://perma.cc/ZV7C-NAY8] ("The Internet Archive was created in 1996 as the institutional memory of the online world, storing snapshots of everchanging Web sites and collecting other multimedia artifacts.... The Internet Archive uses Web-crawling 'bot' programs to make copies of publicly accessible sites on a periodic, automated basis.").

¹⁵⁵ Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890).

¹⁵⁶ RESTATEMENT (SECOND) OF TORTS § 652D (1977).

highly offensive to a reasonable person? Courts have generally held that the publication of a person's full name and street address does not reveal "private" and "highly intimate or embarrassing facts about a person's private affairs, such that its publication would be highly objectionable to a person of ordinary sensibilities."¹⁵⁷ Under the "public records defense," courts have held that privacy interests do not attach to the name and address of a property owner when that information is already a matter of public record.¹⁵⁸ Other principles constraining the right of privacy include the First Amendment, which generally prohibits "sanctions on the publication of truthful information of public concern,"¹⁵⁹ and the "general [common-law] right to inspect and copy public records and documents, including judicial records and documents."¹⁶⁰

Today, the modern doctrines of privacy law are broader than their original common-law contours, but they still lack a coherent set of unifying principles. As Daniel Solove and Woodrow Hartzog describe, "Privacy law in the United States has developed in a fragmented fashion and is currently a hodgepodge of various constitutional protections, federal and state statutes, torts, regulatory rules, and treaties."¹⁶¹ Until the last few years, the collection of data for

159 Bartnicki v. Vopper, 532 U.S. 514, 534 (2001).

160 Nixon v. Warner Commc'ns, Inc., 435 U.S. 589, 597 (1978); Matter of Cont'l Ill. Sec. Litig., 732 F.2d 1302, 1308 (7th Cir. 1984) (explaining that the policy of allowing access to public records "relate[s] to the public's right to monitor the functioning of our courts, thereby insuring quality, honesty and respect for our legal system").

161 Daniel J. Solove & Woodrow Hartzog, *The FTC and the New Common Law of Privacy*, 114 COLUM. L. REV. 583, 587 (2014).

¹⁵⁷ Johnson v. Sawyer, 47 F.3d 716, 732 (5th Cir. 1995) (quoting Indus. Found. of the S. v. Tex. Indus. Accident Bd., 540 S.W.2d 668, 683 (Tex. 1976)). See also Tobin v. Mich. Civ. Serv. Comm'n, 331 N.W.2d 184, 189 (Mich. 1982) ("Names and addresses are not ordinarily personal, intimate, or embarrassing pieces of information."). Cf. Peter A. Winn, Online Court Records: Balancing Judicial Accountability and Privacy in an Age of Electronic Information, 79 WASH. L. REV. 307, 311 (2004) (noting that "courts tend to protect personal information when the purpose of access is not related to facilitating public scrutiny of the judicial process, but to exploiting information in judicial records for commercial or other purposes unrelated to public oversight of the judicial system").

¹⁵⁸ See Franchise Tax Bd. of California v. Hyatt, 407 P.3d 717, 734 (Nev. 2017), rev'd and remanded on other grounds sub nom. Franchise Tax Bd. of Cal. v. Hyatt, 139 S. Ct. 1485, 203 L. Ed. 2d 768 (2019) ("One defense to invasion of privacy torts, referred to as the public records defense, arises when a defendant can show that the disclosed information is contained in a court's official records. Such materials are public facts . . . and a defendant cannot be liable for disclosing information about a plaintiff that was already public." (citation omitted) (citing Montesano v. Donrey Media Grp., 668 P.2d 1081, 1085 (Nev. 1983))); Near E. Side Cmty. Org. v. Hair, 555 N.E.2d 1324, 1335 (Ind. Ct. App. 1990). Some states, however, have enacted statutory privacy protections governing certain types of public records. *See* Jordan v. Motor Vehicles Div., 781 P.2d 1203 (Or. 1989) (disclosure of vehicle owner's home address is exempt from open public records law).

commercial purposes, both online and offline, remained almost entirely unregulated by either federal or state law.¹⁶² On occasion, the Federal Trade Commission stepped in to police violations of a corporation's consumer data privacy policy that rose to the level of a deceptive or unfair trade practice, but that proved to be the limit of federal regulatory intervention.¹⁶³ Instead, the commercial collection of personal information has been largely governed by private agreement and contractual terms of service, which offered little protection against unauthorized disclosure.¹⁶⁴

Over the last few years, public support favoring more stringent privacy protections attracted the attention of lawmakers, with state legislatures taking the lead. In the first wave of data privacy legislation, states enacted statutory requirements that sought to enhance data security protections with respect to PII. Those statutes applied to individuals and businesses that maintain personal information belonging to third parties and generally required the implementation of reasonable precautions to prevent unauthorized disclosure or acquisition.¹⁶⁵ But, in a nod to the tort law public records defense, those laws expressly excluded from statutory protection personal information acquired from publicly available government records.¹⁶⁶ Thus, the first wave of reforms did not establish any privacy rights with respect to information extracted from public land records.

The next wave of privacy legislation targeted the commercial use of personal information by data brokers who collect PII for the purpose of selling or profiting from it. At the federal level, the proposed Data Broker Accountability and Transparency Act of 2018 would have granted consumers the right to opt out of data collection by commercial data brokers, but the bill failed to pass in Congress.¹⁶⁷

¹⁶² See id. at 594.

¹⁶³ See id. at 599.

¹⁶⁴ See id. See also Ari Ezra Waldman, Privacy Law's False Promise, 97 WASH. U.L. REV. 773, 777 (2020) (describing how the implementation of privacy protections by technology professions has become increasingly ineffective).

¹⁶⁵ See DEL. CODE ANN. tit. 6, § 12B-100 (2020) ("Any person who conducts business in this State and owns, licenses, or maintains personal information shall implement and maintain reasonable procedures and practices to prevent the unauthorized acquisition, use, modification, disclosure, or destruction of personal information collected or maintained in the regular course of business."); WASH. REV. CODE § 19.255.010 (2020); KAN. STAT. ANN. § 50-7a02 (2020); HAW. REV. STAT. § 487N-2 (2020).

¹⁶⁶ See DEL. CODE ANN. tit. 6, § 12B-101(7) (b) (2020) ("Personal information' does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records or widely-distributed media."); WASH. REV. CODE § 19.255.005(2) (b) (2020); KAN. STAT. ANN. § 50-7a01(g) (3) (2020); HAW. REV. STAT. § 487N-1 (2020).

¹⁶⁷ Data Broker Accountability and Transparency Act of 2018, H.R. 6548, 115th Cong., $\S 5(e)(2)$ (2018).

In contrast, efforts to regulate the data brokerage industry have gained more traction at the state level. In 2018, for instance, Vermont became the first state to enact a data broker consumer protection law, which, among other provisions, requires data brokers to register with the state annually and imposes a statutory duty to protect PII against unauthorized disclosure.¹⁶⁸ Like other data privacy laws, the Vermont legislation expressly exempts personal information obtained from publicly available government sources such as public land records.¹⁶⁹

Later that year, California enacted the Consumer Privacy Act of 2018, a sweeping piece of legislation that, for the first time, granted consumers the right to know which businesses collect their personal information, what information those business have collected, and whether their information has been sold or disclosed.¹⁷⁰ The California statute also gave consumers the right to prevent the sale of personal information by certain large businesses that "[derive] 50 percent or more of [their] annual revenues from selling consumers' personal information."¹⁷¹ As originally enacted, the California Consumer Privacy Act defined personal information to include data drawn from publicly available sources when used for a purpose "not compatible with the purpose for which the data is maintained and made available in the government records or for which it is publicly maintained."¹⁷² The plain language of that definition would have applied to personal information collected from public land records and prohibited the use of that information for commercial purposes unrelated to a real estate transaction.

Before the law went into effect, however, strong opposition from the business community pressured the legislature to repeal the socalled compatibility exception for information obtained from public sources.¹⁷³ Opponents, almost all of whom were industry stakeholders,

¹⁶⁸ See An Act Relating to Data Brokers and Consumer Protection, No. 171, 2018 Vt. Acts & Resolves 584 (codified as VT. STAT. ANN. tit. 9, §§ 2430, 2446–47, 2480b, 2480h (2020)); Katherine E. Armstrong, Vermont First State to Pass Data Broker Law, NAT'L L. REV. (June 4, 2018), https://www.natlawreview.com/article/vermont-first-state-to-pass-data-broker-law [https://perma.cc/6HAP-HTGU].

¹⁶⁹ VT. STAT. ANN. tit. 9, § 2430(10) (B) (2020) ("Personally identifiable information" does not mean publicly available information that is lawfully made available to the general public from federal, State, or local government records.").

¹⁷⁰ CAL. CIV. CODE §§ 1798.100, 1798.105, 1798.110 (West 2020).

¹⁷¹ CAL. CIV. CODE §§ 1798.120, 1798.140(c)(1)(C) (West 2020).

¹⁷² *Compare* CAL. CIV. CODE § 1798.140(o)(1)(K)(2) (2018) *with* Assemb. B. 375, 2017–2018 Reg. Sess. (Cal. 2018).

¹⁷³ *See* Memorandum from Mayer Brown LLP on Behalf of the Software & Info. Indus. Ass'n to the Cal. Gen. Assemb. (Jan. 24, 2019), https://web.archive.org/web /20201027040106/http://www.siia.net/Portals/0/pdf/Policy/Data%20Driven %20Innovation/Memo%20re%20CCPA.pdf?ver=2019-01-25-163504-003.

claimed that the regulation violated constitutional speech protections and was unconstitutionally vague because it failed to enumerate the many purposes for which the government maintains public records.¹⁷⁴ In 2019, just before the statute's effective date, the legislature relented by removing the compatibility exception and amending the statute to expressly exclude publicly available government records from the scope of statutory protection.¹⁷⁵ Following California's lead, other states recently introduced information privacy bills regulating the commercial data brokerage industry, but, like California, those bills expressly exempt information collected from publicly available government records.¹⁷⁶ Thus, despite growing public demand for data privacy, to date, neither Congress nor any state legislature has imposed statutory privacy protections that restrict the commercial use of personal information extracted from public land records, thereby leaving wholly unregulated one of the primary sources of information exploited by the booming big data industry.

Europe, by contrast, has been more aggressive in protecting consumers against commercialization of personal data. Operating outside the constraints of the U.S. Constitution's First Amendment,¹⁷⁷ the European Parliament, in 1995, issued a directive recognizing the right of "data subject[s]" to obtain "erasure or blocking" of data when processing of data about the subject does not comply with the directive's provisions.¹⁷⁸ In the leading case construing that directive, the European Court of Justice required Google Spain to remove search results that would lead an internet user entering the complainant's name to a sixteen-year-old newspaper announcement indicating accurately—that the complainant had been involved with attachment proceedings for the recovery of debts.¹⁷⁹ In holding that the complainant had a right to removal of the links to the article, the court

¹⁷⁴ See, e.g., id.

¹⁷⁵ Assemb. B. 874, 2018–2019 Reg. Sess. (Cal. 2019); CAL. CIV. CODE § 1798.140(o)(1)(K)(2) (2020) ("'Personal information' does not include publicly available information. For purposes of this paragraph, 'publicly available' means information that is lawfully made available from federal, state, or local government records.").

¹⁷⁶ See 2019 S.B. 418, 30th Leg., Reg. Sess. (Haw. 2019) ("'Identifying information' does not include publicly available information that is lawfully made available to the general public from federal, state, or local government records."); S.B. 957, 2020 Leg., 441st Sess. (Md. 2020); S.B. 120, 191st Gen. Court, Reg. Sess. (Mass. 2019); S.B. 2548, 2020 Leg., 135th Sess. (Miss. 2020).

¹⁷⁷ For an argument that the First Amendment protects search engine results, see Eugene Volokh & Donald M. Falk, *Google: First Amendment Protection for Search Engine Search Results*, 8 J.L. ECON. & POLY883 (2012).

¹⁷⁸ Council Directive 95/46, art. 14, 1995 O.J. (L 281) 31, 32 (EC).

¹⁷⁹ Case C-131/12, Google Spain SL v. Agencia Española de Protección de Datos, ECLI:EU:C:2014:317, ¶ 98 (May 13, 2014).

focused on the absence of a significant public interest in access to the information. $^{\rm 180}$

Europe has gradually expanded its "right to be forgotten," culminating in the General Data Protection Regulation (GDPR), which became effective in 2018.¹⁸¹ That regulation makes it unlawful to "process" personal data unless the processing falls into statutorily defined categories.¹⁸² Marketing is not one of those categories; the regulation imposes on data controllers the obligation to erase personal data—on request of the data subject—whenever the data are processed for direct marketing purposes.¹⁸³ Moreover, the right to be forgotten is no longer limited to Europe; other countries have embraced variations of the right in ways that would curtail commercial use of personal data.¹⁸⁴

Efforts in the United States have been far more limited, and have generally targeted those most vulnerable to misuse of PII. In Minnesota, victims of domestic violence or sexual assault who provide county recorders with statutory notice may prevent those recorders from disclosing real property records.¹⁸⁵ If a party needs that information for bona fide title examination purposes, the party must apply to the Secretary of State, who is authorized to "respond by an affirmation in writing that the property subject to the title examination is or is not the property subject to a program participant's real property notice."¹⁸⁶

¹⁸⁰ Id.

¹⁸¹ Council Regulation 2016/679, 2016 O.J. (L 119) 1, art. 17 [hereinafter GDPR]. For discussion of the expansion of the right, see generally Dawn Carla Nunziato, The Fourth Year of Forgetting: The Troubling Expansion of the Right to be Forgotten, 39 U. PA. J. INT'L L. 1011 (2018).

¹⁸² *GDPR*, *supra* note 181, art. 6. The GDPR defines "processing" as "any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction." *Id.* art. 4(2).

¹⁸³ *Id.* art. 21(2) (giving data subject the right to object to data processed for direct marketing purposes); *id.* art. 17(1)(c) (giving the data subject the right to obtain the erasure of data subjection to objection in article 21(2)).

¹⁸⁴ See Nunziato, supra note 181, at 1059–63 (discussing restrictions in Japan, Mexico, Colombia, Russia, and India).

¹⁸⁵ MINN. STAT. § 13.045(4a) (2020) prohibits county recorders from disclosing identity data of "program participant[s]." Program participants are defined to include "victim[s] of domestic violence, sexual assault, or harassment or stalking." MINN. STAT. § 5B.03(1)(2) (2020).

¹⁸⁶ MINN. STAT. § 13.045(4b) (2020). For more extensive discussion of the Minnesota provision, see Jonathan Grant, Note, *Address Confidentiality and Real Property Records: Safeguarding Interests in Land While Protecting Battered Women*, 100 MINN. L. REV. 2577, 2588–89 (2016).

Other states protect the privacy of law enforcement personnel but expressly permit disclosure of residential property information for the legitimate purpose of title examination. Idaho, for example, prohibits the disclosure of home address information for law enforcement officers who apply for this privacy protection,¹⁸⁷ but that information is not shielded from disclosure "[i]f requested by a financial institution or title company for business purposes."¹⁸⁸ Arizona permits a broader range of citizens to limit access to PII in the county land records. The Arizona statute protects public officials whose actions might raise the ire of disappointed citizens, and also persons protected under an order of protection or an injunction against harassment.¹⁸⁹ The Arizona statute, however, requires the applicant to file an affidavit with a judge asserting why she believes that life or safety is in danger and why restricting access will reduce the danger.¹⁹⁰ And, as in Idaho, the statute does not prohibit access by title insurers.¹⁹¹ Still other states provide statutory protection for PII of public officials without explicitly targeting land records. Florida, for instance provides similar protection for judges, public defenders, tax collectors, and a variety of public investigators.¹⁹²

Most recently, in New Jersey, where lawmakers were horrified by the violent attack against Judge Salas and her family, the legislature enacted a narrowly tailored privacy statute that requires government agencies to redact the home address information of state and federal judges from government records available for public inspection and prohibits the publication of that information online.¹⁹³ In announcing the signing of "Daniel's Law," named for Judge Salas's slain son, the New Jersey Governor's Office summarized the statute as "amend[ing] the Open Public Records Act . . . to exclude from the definition of a government (i.e., public) record the portion of any document which discloses the home address of any active or retired 1) judge, 2) prosecutor or 3) law enforcement officer."¹⁹⁴ Thus, Daniel's Law, like

¹⁸⁷ IDAHO CODE § 19-5803 (2021).

¹⁸⁸ IDAHO CODE § 19-5802(3) (2021).

¹⁸⁹ ARIZ. REV. STAT. ANN § 11-483(O) (4) (2021) (defining eligible persons); ARIZ. REV. STAT. ANN § 11-483(A) (2021) (authorizing request that public be denied access).

¹⁹⁰ Ariz. Rev. Stat. Ann § 11-483(B) (4) (2021).

¹⁹¹ Ariz. Rev. Stat. Ann § 11-483(M) (2021).

¹⁹² FLA. STAT. § 119.071(4)(d)(3) (2021) requires custodians of address information to maintain exempt status upon written request from a party protected under one of the many categories listed in § 119.071(4)(d)(2).

¹⁹³ See Assemb. B. 1649, 219th Leg., 2020 Sess. (N.J. 2020).

¹⁹⁴ Governor Murphy Signs "Daniel's Law," STATE OF N.J.: GOVERNOR PHIL MURPHY (Nov. 20, 2020), https://nj.gov/governor/news/news/562020/approved/20201120b.shtml [https://perma.cc/CV29-C3V5]. In 2015, the New Jersey legislature enacted a statute prohibiting "[a] State or local governmental agency [from] knowingly post[ing] or

the statutes in Idaho and Florida, does not specifically regulate the recording of real property deeds, but rather, the manner by which government records in general are subject to public disclosure. Daniel's Law also prohibits "[a] person, business, or association [from] disclos[ing] on the Internet, or re-disclos[ing] or otherwise mak[ing] available, the home address or unpublished home telephone number of" a judge "under circumstances in which a reasonable person would believe that providing that information would expose another to harassment or risk of harm to life or property."¹⁹⁵ The legislation includes a process through which judges may request the removal of home address information from the internet and provides civil remedies that may be imposed upon private actors who fail to comply with a removal request.¹⁹⁶

Without question, legislation in all of these states represents an earnest attempt to protect the privacy and personal safety of persons who, by reason of their positions, are likely to interact with risky or dangerous segments of the population. But it is unclear whether the recently enacted privacy protections would, in fact, meaningfully enhance the personal safety of those persons. For example, would the New Jersey bill actually prevent a local deed recorder from disclosing online a publicly recorded deed to a house owned in the individual name of a judge? Like the statutes in other states, the bill does not require the state to maintain a central database of government officials protected under Daniel's Law, so unless a judge affirmatively notifies the relevant custodian, how would the deed recorder know whether any given homeowner happens to be a judge? If a deed to a personal residence owned by a judge was previously digitized and warehoused electronically on the internet before the statute went into effect, would the deed recorder be obligated to locate and remove the deed from its online database? Even if the recording office succeeds in removing a digitized deed from the government's online database, a title company may have already incorporated the information into its private title plant. Would the title company reasonably be expected to know who is entitled to protection under the statute and, if so, what obligations would it have concerning the protected person's property records?¹⁹⁷

publish[ing] on the Internet the home address or unpublished home telephone number of any retired law enforcement officer or law enforcement officer without first obtaining the written permission of that law enforcement officer or retired law enforcement officer." N.J. STAT. ANN. § 47:1-17 (West 2020). Assembly Bill 1649 extends that protection to state and federal judges. *See* N.J. Assemb. B. 1649.

¹⁹⁵ N.J. Assemb. B. 1649.

¹⁹⁶ Id.

¹⁹⁷ *See* Roscoe & Szypszak, *supra* note 15, at 376–77 (noting that many public recording documents are duplicated in private title plants). Relatedly, other researchers have

Would data brokers be liable under the reasonable person standard for publishing home address information in the absence of actual notice that certain PII belongs to a judge protected by the statute? What would happen if a foreign data broker located outside the jurisdiction of U.S. courts failed to respond to a judicial request to remove PII from the internet notwithstanding the domestic civil remedies that could be imposed for lack of compliance?

However well-intended, we predict that reforms restricting the disclosure and online dissemination of PII extracted from public land records will prove difficult to implement whenever homeowners record title to a personal residence in their own name. Daniel's Law represents a commendable effort to secure the privacy of PII, but legislators should devote further consideration to the inevitable tension between privacy of homeownership and the notice-giving functions of the deed recording system. Minnesota, for example, has attempted to balance those interests, but its solution-designating the Secretary of State as the gatekeeper for public disclosure—is probably not scalable beyond the limited class of domestic violence survivors protected by the statute.¹⁹⁸ Likewise, lawmakers should consider whether ordinary homeowners who do not want information about their personal residence produced online should be subject to the same stringent public disclosure rules as government officials and harassment victims currently protected by statute.¹⁹⁹ We also encourage further debate about the tradeoffs of partially anonymized deeds, which could impair the ability of legitimate information seekers to ascertain the quality of title and undermine the recording system's capacity to deter title fraud.²⁰⁰

At the federal level, Senators Robert Menendez, Cory Booker, and Lindsey Graham recently proposed a complementary bill "[t] o provide for judicial security and privacy" that, if enacted, would be titled the "Daniel Anderl Judicial Security and Privacy Act of 2020" (the "Anderl

suggested that local deed recorders could enhance the privacy of residential address information by disabling the search-by-name function on their electronic public records platforms. Manya Sleeper, Divya Sharma & Lorrie Faith Cranor, *I Know Where You Live: Analyzing Privacy Protection in Public Databases*, PROC. 10TH ANN. ACM WORKSHOP PRIV. ELEC. SOCY 165, 165 (2011), https://www.cylab.cmu.edu/files/pdfs/tech_reports /CMUCyLab11015.pdf [https://perma.cc/BZY7-X6VH]. But disabling name searchability on the deed recorder's platform would not protect digitized public land records maintained by private title plants because data brokers who purchase those records could render them searchable by name.

¹⁹⁸ Roscoe & Szypszak, *supra* note 15, at 380 (noting administrative burden of expanding privacy protections).

¹⁹⁹ Id. (noting fairness concerns).

²⁰⁰ See id. at 384 (noting importance of complete records in the title examination process).

Act").²⁰¹ Endorsed by Judge Salas,²⁰² the Anderl Act provides special protections for judges' PII, which is defined to include the judge's home address, telephone number, email address, social security and driver's license numbers, bank account information, property ownership and tax records, birth and marriage records, vehicle registration information, and information pertaining to members of a judge's family.²⁰³ A judge would have the right to request that federal agencies remove PII from public display.²⁰⁴ However, because federal agencies are not primarily responsible for the disclosure of public records containing PII, the bill also authorizes the Attorney General to award grants to state and local government agencies which request funds for database upgrades that would facilitate the redaction or removal of a judge's PII from public display.²⁰⁵ With respect to private conduct, the bill would declare it "unlawful for a data broker to sell, license, trade, purchase, or otherwise provide or make available for consideration judges' personally identifiable information."206 As in New Jersey, the federal bill provides that, "[a]fter a person, business, or association has received a written request from an at-risk individual to protect the judges' personally identifiable information, that person, business, or association shall have 72 hours to remove the judges' personally identifiable information from the internet," a requirement that a judge would be authorized to enforce by private right of action.²⁰⁷ The bill would also appropriate funds to the Administrative Office of the United States Courts and the Marshals Service to establish a new threat management capability that would, among other intelligence functions, monitor the internet for the publication of PIL.208

Like the state legislation, the intent behind the proposed Anderl Act is nothing but good and directs necessary attention to a problem that has otherwise been overlooked by policymakers. Commendably, the bill attempts to respond directly and pointedly to the horrendous

²⁰¹ Daniel Anderl Judicial Security and Privacy Act of 2020, S. 4711, 116th Cong. (2020).

²⁰² Esther Salas, *My Son Was Killed Because I'm a Federal Judge*, N.Y. TIMES (Dec. 8, 2020), https://www.nytimes.com/2020/12/08/opinion/esther-salas-murder-federal-judges.html [https://perma.cc/8HC5-Q8]D].

²⁰³ Daniel Anderl Judicial Security and Privacy Act of 2020, S. 4711 § 3(7), 116th Cong. (2020).

²⁰⁴ *Id.* at § 4(a).

²⁰⁵ *Id.* at § 4(b).

²⁰⁶ Id. at $\{ 4(c)(1)(A) \}$

²⁰⁷ Id. at §§ 4(c)-(d). The bill also provides funding for judges to install a home intrusion detection system at their personal residence and training for judges on how to protect their information and personal safety. Id. at §§ 5–6.

²⁰⁸ Id. at § 7.

tragedy that befell Judge Salas and her family. But again, the Anderl Act is not likely to prevent the online circulation of PII extracted from public land records.²⁰⁹ The federal plan relies on county governments to request grants to pay for modification of their electronic database management systems. But counties are not obligated to seek a grant, and any county that does receive a grant would be required to undertake the challenging work of upgrading its systems and preparing official reports summarizing its implementation of protocols to secure judicial PII. Some county governments may choose to participate, but we predict that most will not.²¹⁰ Lastly, like the state legislation, since the stated purpose of the Anderl Act is to enhance security and privacy for federal judges, it does not address the privacy of PII for ordinary homebuyers concerned about the commodification of information recited on their real property filings.

C. The Move Toward Anonymously Owned Land: Privacy and Pitfalls

Web harvesters can obtain personal information from real property records only when those records include personal information. If a buyer purchases property not in her own name, but in the name of a legal entity—a corporation, and LLC, or a trust—the buyer can obtain a modicum of privacy protection. Perhaps in part for that reason, the last several decades have seen an increase in entity ownership of real property. That increase, however, has presented challenges for regulators because some buyers have used entity ownership—particularly ownership by anonymous shell companies as a vehicle to launder money. This section begins by exploring the methods by which a buyer can ensure anonymity, and then discusses the money laundering problem anonymity has helped generate, together with the implementation of new regulations designed to monitor money laundering in the real estate market.

²⁰⁹ We recently noted some of our concerns in the New Jersey Law Journal. Charles Toutant, *After Tragedies, Bills Aim to Hide Judges' Home Address. But Is That Even Possible in Internet Age?*, N.J. L.J. (Oct. 29, 2020), https://www.bloomberglaw.com/document /X96IAQ60000000?jcsearch=gmm45ideej#jcite [https://perma.cc/CJ3A-QP5G].

²¹⁰ In counties that do participate and successfully implement new systems to remove judicial PII from public display, judges would then face the daunting task (though aided by the Marshals Service) of locating all previously published references and demanding removal. Assuming a judge is able to ascertain contact information for each person or company responsible for publishing her PII, many offending data brokers may still fail to respond or comply while others may be located outside the United States and beyond the jurisdictional reach of its courts. A private action asserted against a party who fails to appear and cannot be located is unlikely to yield collectable damages or removal of judicial PII from the internet.

1. Anonymous Title: Voluntary Precautions

Prospective homeowners seeking to prevent the online publication of personal information can erect a veil of privacy by anonymizing their deed before recording title to property. Because everything published on the internet is automatically archived,²¹¹ title anonymity cannot provide meaningful protection for existing homeowners who have already recorded title in their own name if the deed has already appeared online.

A privacy precaution popular among homebuyers in the high-end residential real estate market is the acquisition of property in the name of an anonymous limited liability company established for the purpose of holding title to the personal residence. The name of the LLC bearing an anonymous moniker appears on the deed rather than the homeowner's actual name. The beneficial owner's identity is then recited on corporate documents that are not filed on the public record. Anonymous LLCs appeal to ultra-wealthy homeowners who have the financial capacity to purchase property in cash, but they are not feasible for homebuyers who require a traditional mortgage because banks do not typically underwrite conventional, owneroccupied residential mortgages for property titled in the name of a limited liability entity.²¹²

To avoid leaving an online footprint that publicly associates their name and home address, homebuyers who require a mortgage can record title using a revocable trust.²¹³ As the name implies, revocable trusts are donative instruments that may be unilaterally revoked or amended by the settlor.²¹⁴ So long as the trust remains revocable, the

212 See Ilyce Glink & Samuel J. Tamkin, Owning Real Estate Under an LLC Has Advantages, but It Can Be Costly, WASH. POST (Mar. 11, 2020), https://www.washingtonpost.com/business/2020/03/11/owning-real-estate-under-an-llc-has-advantages-it-can-be-costly [https://perma.cc/964R-HCS9] ("[T]he biggest issue you might have with an LLC is that lenders will consider your real estate ownership as an investment property. Once you fall into the investment-property bucket, the lending rules change and get more expensive. A person, a couple or a group of individuals who own a home, two-flat or even a four-flat building in their own name have the ability to obtain financing from the residential lending side of a particular lender. Once you have an LLC, the lender will send you to the commercial lending side of the bank.").

²¹¹ See supra note 154 and accompanying text.

²¹³ Some jurisdictions, such as Illinois and Massachusetts, recognize specialized types of land trusts that facilitate this form of anonymous ownership by a third-party trustee. *See* 765 ILL. COMP. STAT. 420/3 (2020) (setting forth recordation procedures under the Illinois Land Trust statute); Guilfoil v. Sec'y of Exec. Off. Health & Human Servs., 162 N.E.3d 627, 632 (Mass. 2021) (describing elements of the Massachusetts nominee trust).

²¹⁴ See UNIF. TR. CODE § 602(a) ("Unless the terms of a trust expressly provide that the trust is irrevocable, the settlor may revoke or amend the trust.").

settlor is treated as the functional owner of the trust corpus.²¹⁵ A revocable trust, therefore, can be drafted to replicate all of the features of homeownership for the duration of the settlor's lifetime. To do so, the settlor could appoint herself as trustee and beneficiary for life; then, upon the settlor's death, the trust should provide for the distribution of trust property to remainder beneficiaries. Under this structure, a revocable trust must name at least one beneficiary aside from the settlor because "[a] trust is created only if . . . the same person is not the sole trustee and sole beneficiary."²¹⁶ But again, the third-party beneficiaries need not be entitled to any trust property until after the settlor's death, so the settlor would retain full ownership and control during her own lifetime.

Banks are typically willing to underwrite residential mortgages for property titled in trust if the trust instrument meets several technical requirements.²¹⁷ First, the trust must be established by a settlor who is a living individual, and it must become effective during the settlor's lifetime.²¹⁸ Second, the trust must provide that the settlor reserves the right to revoke the trust during her lifetime.²¹⁹ Third, at least one person must be a settlor, trustee, and beneficiary of the trust.²²⁰ Fourth, at least one of the trustees must be a borrower.²²¹ Fifth, the trust must empower the trustees to mortgage the property for the purpose of securing a loan.²²² Sixth, the trust must identify the Seventh, the trust does not impair the lender's beneficiaries.²²³ rights.²²⁴ Eighth, the title insurance policy assures full protection to the trust and, without listing any exceptions arising from the trust's ownership of the property, states that title to the property is vested in the trustees.²²⁵ Some lenders may impose even more stringent requirements for recording title in the name of a trustee. However, banks that simplify or liberalize the underwriting of mortgages for

- 221 See id.
- 222 See id.
- 223 See id.
- 224 See id.
- 225 See id.

²¹⁵ See UNIF. TR. CODE § 603(b) ("To the extent a trust is revocable [and the settlor has capacity to revoke the trust], rights of the beneficiaries are subject to the control of, and the duties of the trustee are owed exclusively to, the settlor.").

²¹⁶ See UNIF. TR. CODE § 402(a)(5).

²¹⁷ See TD BANK, TRUST REVIEW QUESTIONNAIRE (2018) (on file with authors); CMG FIN., TRUST REVIEW CHECKLIST (n.d.), http://docs.cmgfi.com/forms/corr-trust-review-checklist.pdf [https://perma.cc/3DA4-T7ZZ].

²¹⁸ See CMG FIN., supra note 217.

²¹⁹ See id.

²²⁰ See id.

anonymously titled owner-occupied residential property may find that borrowers are willing to pay a premium for privacy.

Titling on the deed should reflect ownership of the property in the name of the trustees. Thus, to anonymize the beneficial owner's identity, the trust's moniker should not include the name of or otherwise identify the settlor. For example, a revocable trust established by Mary Poppins to acquire title to her new home located at 123 Cherry Tree Lane might be titled the "123 Cherry Tree Lane Revocable Trust," not the "Mary Poppins Revocable Trust." The settlor should also appoint at least one third-party trustee whose name will appear nonanonymously on the deed. Unless prohibited by the bank, the third-party trustee should be identified on the deed without reciting the name of the settlor/trustee. Thus, in the example above, Mary Poppins might appoint herself and her friend Bert as co-trustees. The deed would then be titled in the name of "Bert, as Trustee of the 123 Cherry Tree Lane Revocable Trust." The mortgage must be recorded with the deed, 226 so, again, unless prohibited by the bank, the mortgage should be signed in the name of the third-party trustee and not the settlor. While the settlor must be identified on and sign the promissory note,227 the note is not typically recorded with the mortgage.²²⁸

2. Entity Ownership and Money Laundering Regulations

The commodification of public land records is driving demand for anonymous entity ownership at a time when the federal government, after years of inaction, has redoubled its efforts to regulate entity-owned real estate with a heavier hand. While entity ownership of real estate can facilitate legitimate privacy objectives, it also increases the attractiveness of real estate as a device for money laundering. After all, anonymous entity ownership of any asset has the potential to facilitate money laundering. If a person suspected of criminal activity opens a bank or brokerage account, or buys property, in his own name, government investigators have a reasonable

²²⁶ A mortgage must be recorded with the deed because it is of no effect against subsequent bona fide purchasers and mortgagees without notice unless it is first recorded. *See, e.g.*, N.J. Stat. Ann. § 46:26A-12(c) (West).

²²⁷ See, e.g., CMG FIN., supra note 217; CMG FIN., LOAN PURCHASE PROGRAM SELLER'S GUIDE 33 (2020).

²²⁸ See Brandrup v. ReconTrust Co., 303 P.3d 301, 316 (Or. 2013) ("Because a promissory note generally contains no description of real property and does not transfer, encumber, or otherwise affect the title to real property, it cannot be recorded in land title records."); John Patrick Hunt, Richard Stanton & Nancy Wallace, *Rebalancing Public and Private in the Law of Mortgage Transfer*, 62 AM. U. L. REV. 1529, 1547 (2013) ("The real-property recording statutes do not apply to promissory notes.").

opportunity to discover the asset and to tie it to the underlying crime. But if the same person (or network of people) forms a corporation, an LLC, a trust, or another entity, and opens the account or buys the property in the name of the entity, investigators face increased difficulty in tying the funds or the property to the criminal activity.²²⁹

In enacting the Corporate Transparency Act of 2020,²³⁰ as we will explain in greater detail below, Congress attempted to ease the burden on investigators by requiring disclosure of beneficial ownership information by entities previously exempt from reporting requirements. The Act is the latest, and perhaps most significant, in a series of federal government steps designed to combat money laundering. The statute also has the potential to reduce anonymous ownership of real estate, but whether the statute ultimately has that effect remains to be seen.

Long before its most recent enactment, Congress made it substantially more difficult to launder money through financial institutions by effectively commandeering those institutions as agents of law enforcement. Pursuant to the Bank Secrecy Act of 1970, the Secretary of the Treasury requires financial institutions to provide currency transaction reports for payments, receipts, and transfers of currency in amounts greater than \$10,000.²³¹ Additionally, since 1992, Congress has required banks to file suspicious activity reports with the Financial Crimes Enforcement Network (FinCEN), a bureau of the Treasury Department.²³² Every financial institution must establish an

²²⁹ As Jennifer Shasky Calvery, a former director of the Financial Crimes Enforcement Network put it before a Congressional committee, "[b]eing able to identify who the real people are that are involved in a transaction is critical to our work to combat money laundering and terrorism, enforce sanctions, and stop other illicit abuses of the U.S. financial system." She emphasized that "shell companies can... be used to conceal the source, ownership, and control of illegal proceeds by concealing the identity of the natural people who control the entity." *See* Eric Naing, *FinCEN Head Touts Efforts to Expose Owners of Shell Companies*, CQ ROLL CALL WASH. BANKING BRIEFING, May 27, 2016, 2016 WL 3025431.

²³⁰ Corporate Transparency Act of 2020, Pub. L. No. 116-283, §§ 6401–03; 134 Stat. 3421, 4604–4624 (2020).

^{231 31} U.S.C. § 5313 (2012); 31 C.F.R. § 1010.310-.311 (2019).

²³² The bank must report a transaction in an amount greater than \$5000 when it suspects or has reason to suspect that the transaction "involves funds derived from illegal activities or is intended or conducted in order to hide or disguise funds or assets derived from illegal activities" or "has no business or apparent lawful purpose or is not the sort in which the particular customer would normally be expected to engage, and the institution knows of no reasonable explanation for the transaction..." 12 C.F.R. § 21.11(c) (4) (2019). Both the bank and the government must keep suspicious activity reports confidential. 12 C.F.R. § 21.11(k) (2019).

After enactment of the Patriot Act, regulations extended the obligation to file SARs to other financial institutions, including casinos, securities brokers and dealers, mutual funds, and insurance companies. 31 C.F.R. §§ 1021.320, 1023.320, 1024.320, 1025.320.

anti-money-laundering program that, among other requirements, designates a compliance officer and establishes an employee training program.²³³

Since 2018, FinCEN's "customer due diligence" regulations have required financial institutions to identify beneficial owners of entity clients. The regulations define beneficial owners to include any owners of 25% or more of the equity interest in the entity and also include a single individual with significant responsibility to manage or control the entity.²³⁴ Banks, securities brokers and dealers, and financial institutions must conduct ongoing monitoring to update customer information, including beneficial ownership of equity interests in entity customers.²³⁵

The stringent regulation of financial institutions led some criminal enterprises to consider alternative vehicles for money laundering.²³⁶ Real estate—particularly high-end real estate—has provided opportunities to launder large sums derived from criminal activity.²³⁷ For foreign investors in particular, the use of real estate in the United States to launder ill-gotten gains from crimes committed abroad has offered not only the anonymity of entity ownership, but

Criminal and civil penalties serve as the primary enforcement mechanisms for violation of financial institutions' violation of anti-money-laundering obligations. Willful violations of the statutes or regulations carry a criminal penalty of \$250,000. 31 U.S.C. \$5322(a). When the violation is failure to maintain an adequate compliance program, "a separate violation occurs for each day the violation continues and at each office, branch, or place of business at which a violation occurs or continues." 31 U.S.C. \$5322(c). In addition, a financial institution that violates a regulation with respect to a transaction is liable for a civil penalty in an amount equal to the amount of the transaction. 31 U.S.C. \$5321(a)(2).

The government has brought criminal proceedings against a number of banks for violations of anti-money laundering regulations. These prosecutions appear to result in deferred prosecution in return for an acknowledgment by the bank of insufficiency of its compliance efforts, together with a cash payment, most of which is designated a "forfeiture." *See, e.g.*, Press Release, U.S. Attorney's Office for the Southern District of New York, Manhattan U.S. Att'y Announces Crim. Charges Against U.S. Bancorp for Violations of the Bank Secrecy Act, U.S. DEP'T JUST., https://www.justice.gov/usao-sdny/pr/manhattan-us-attorney-announces-criminal-charges-against-us-bancorp-violations-bank [https://perma.cc/M8AQ-8L8D] (discussion of settlement with U.S. Bancorp structured as a \$75 million penalty and a \$453 million civil forfeiture).

234 31 C.F.R. § 1010.230(d).

235 31 C.F.R. § 1020.210(b) (5). In addition, the Patriot Act's "know your customer" law requires financial institutions to verify the identity of their accountholders upon the opening of a financial account. 31 U.S.C. § 5318(l)(l)-(2).

236 For a discussion of art as a vehicle for money laundering, see Alessandra Dagirmanjian, Note, *Laundering the Art Market: A Proposal for Regulating Money Laundering Through Art in the United States*, 29 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 687 (2019).

237 See Jeffrey R. Boles, Million Dollar Ghost Buildings: Dirty Money Flowing Through Luxury Real Estate Markets, 45 REAL EST. L. J. 476 (2017).

^{233 31} U.S.C. § 5318(h).

also the relative stability of U.S. law as a protection against attachment by a foreign government.²³⁸ Thus, while money laundering has not been the only reason for holding real estate in the name of an anonymous entity, FinCEN investigators became suspicious when they observed certain geographic markets known to be especially attractive to foreign buyers, such as New York and Miami, with an unusually high incidence of entity ownership. In 2015, for instance, 43% of the dollar volume of real estate purchases in Manhattan, and more than 33% in Miami-Dade County, were taken in corporate name.²³⁹ By contrast, even in Los Angeles County, which had the highest total dollar volume of corporate purchasers, the percentage was 16%—just under half the percentage in Miami.²⁴⁰

Until 2016, the real estate industry was largely immune from antimoney laundering regulation. Although the Patriot Act required all financial institutions, including persons involved in real estate settlements and closings, to establish an anti-money-laundering program,²⁴¹ FinCEN temporarily exempted certain financial institutions, including persons involved in real estate closings and settlements, from the requirement to establish an anti-moneylaundering program.²⁴² The exemption's stated purpose was to enable regulators "to study the affected industries and to consider the extent to which anti-money laundering program requirements should be applied to them, taking into account the specific characteristics of the various entities defined as 'financial institutions' by the BSA."243 Because banks and other lending institutions were already subject to anti-money-laundering regulations, the exemption effectively insulated only those transactions made without the aid of a financial institution-that is, all cash transactions.

In January 2016, FinCEN issued its first Geographic Targeting Order (GTO) directed at all-cash real estate transactions. Not surprisingly, the initial order was limited to high-value transactions in

²³⁸ See id. at 489-90.

²³⁹ C. Sean Hundtofte & Ville Rantala, *Anonymous Capital Flows and U.S. Housing Markets*, 31 tbl.3 (U. Miami Bus. Sch. Rsch. Paper, Paper No. 18-3, 2018), https://ssrn.com/abstract=3186634.

²⁴⁰ Id.

^{241 31} U.S.C. \S 5318(h)(1) ("In order to guard against money laundering through financial institutions, each financial institution shall establish anti-money laundering programs, including, at a minimum (A) the development of internal policies, procedures, and controls; (B) the designation of a compliance officer; (C) an ongoing employee training program; and (D) an independent audit function to test programs.").

²⁴² Financial Crimes Enforcement Network; Anti-Money Laundering Program Requirements for "Persons Involved in Real Estate Closings and Settlements," 68 Fed. Reg. 17569–71 (proposed Apr. 10, 2003) (codified at 31 C.F.R. Part 103).

²⁴³ Id.

Manhattan and Miami-Dade County, where the incidence of ownership by shell companies was particularly high.²⁴⁴ The order applied to "transactions of \$3 million or more in Manhattan and \$1 million or more in Miami-Dade [County]."²⁴⁵ The order imposed new obligations on title insurance companies, presumably on the theory that few money launderers would choose to forego title protection on expensive real estate purchases. Pursuant to the order, title insurers must identify all individuals who own, directly or indirectly, 25% of an entity that acquired covered property, and must obtain and record identifying documentation (a passport or driver's license) on each such individual.²⁴⁶

Although the initial GTO was to last for 180 days,²⁴⁷ FinCEN subsequently extended the order, expanded its coverage to additional geographical areas, and reduced the threshold transaction amount to \$300,000 in each of the covered areas.²⁴⁸ In addition to identifying beneficial owners of entity purchasers, the title insurer must file a currency transaction report on each covered transaction, and must keep all records for five years.²⁴⁹ The title insurer is also responsible for compliance by its employees and for transmitting the order to its agents.²⁵⁰ Finally, the title insurer is subject to criminal and civil penalties for violations of the order.²⁵¹

Although the GTOs have increased FinCEN's access to beneficial ownership information, they have not necessarily increased public

A 2015 investigation by the *New York Times* estimated that more than half of the \$8 billion in annual residential real estate transactions exceeding \$5 million per sale involved use of a shell company. Louise Story & Stephanie Saul, *Stream of Foreign Wealth Flows to Elite New York Real Estate*, N.Y. TIMES (Feb. 7, 2015), http://www.nytimes.com/2015/02/08 /nyregion/stream-of-foreign-wealth-flows-to-time-warner-condos.html?_r=0 [https://perma.cc/NN7A-GBBQ].

²⁴⁵ See Five Geographic Targeting Orders Best Practices, THOMSON REUTERS, https://legal.thomsonreuters.com/en/insights/articles/geographic-targeting-orders-best-practices [https://perma.cc/R8F[FP2]].

²⁴⁶ Id.

²⁴⁷ FinCEN Takes Aim at Real Estate Secrecy in Manhattan and Miami, FINCEN (Jan. 13, 2016), https://www.fincen.gov/sites/default/files/news_release/20160113.pdf [https://perma.cc/ABL7-PJLY].

²⁴⁸ On May 8, 2020, FinCEN issued an order covering the following areas: Bexar, Tarrant, and Dallas counties in Texas; Miami-Dade, Broward and Palm Beach counties in Florida; all five boroughs of New York City; San Diego, Los Angeles, San Francisco, San Mateo, and Santa Clara counties in California; the city and county of Honolulu; Clark County in Nevada; King County in Washington; Suffolk and Middlesex counties in Massachusetts; and Cook County in Illinois. *See* FINCEN, GEOGRAPHIC TARGETING ORDER, at 1–2 (May 8, 2020) https://www.fincen.gov/sites/default/files/shared/Generic%20Real %20Estate%20GTO%20Order%20FINAL%20508_2.pdf [https://perma.cc/M24Z-SJWG].

²⁴⁹ Id. at 2, 4.

²⁵⁰ Id. at 5.

²⁵¹ Id. at 5.

access. The Bank Secrecy Act exempts reports filed with FinCEN from disclosure under the Freedom of Information Act.²⁵² The governing statutes and regulations, however, do not explicitly preclude the covered business entity—the title insurance company—from disclosing information it collects about beneficial ownership. Whether that information would have value to marketers or others is an open question. Unlike banks and brokerage firms who have a continuing relationship with customers and who have a continuing obligation to keep beneficial ownership records current,²⁵³ title insurers usually have a one-shot relationship with customers and they have no obligation to update beneficial ownership information. Because beneficial ownership of entities can change quickly, the information maintained by title insurers may become too stale to be of value to marketers.

The Corporate Transparency Act of 2020 (CTA),²⁵⁴ enacted in December 2020 as part of the National Defense Authorization Act, imposes more stringent beneficial ownership reporting requirements for anonymous shell entities.²⁵⁵ The CTA targets shell companies with few actual business operations, entities referred to by the statute as "reporting compan[ies]."²⁵⁶ The CTA requires each "reporting company" to submit annually to FinCEN the name, date of birth, and address of each beneficial owner, as well as an identifying number from an "acceptable identification document" such as a passport or driver's license.²⁵⁷ Any person who exercises substantial control over the entity, or who owns or controls "not less than 25 percent of the ownership interests of the entity" qualifies as a beneficial owner.²⁵⁸ Like the Bank Secrecy Act, the CTA treats information disclosed to FinCEN as confidential, with disclosure permitted only for law enforcement purposes.²⁵⁹

Proponents of the CTA lauded its enactment,²⁶⁰ but the statute relies on potential wrongdoers to comply voluntarily with the new

^{252 31} U.S.C. § 5319. Indeed, FinCEN relied on the statute in denying a request by the authors for reports filed pursuant to the initial GTO. See letter on file with authors.

^{253 31} C.F.R. § 1020.210(b)(5) (Banks); 31 C.F.R. § 1023.210(b)(5) (securities brokers and dealers).

^{254 31} U.S.C. § 5336.

²⁵⁵ *See* William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283, § 6402, 134 Stat. 3388, 4604–05.

^{256 31} U.S.C. § 5336(a)(11) (defining "reporting company").

^{257 31} U.S.C. § 5336(a) (1) (defining "acceptable identification document"); 31 U.S.C. § 5336(b) (2) (A) (including the reporting requirements).

^{258 31} U.S.C. § 5336(a) (3) (defining "beneficial owner").

^{259 31} U.S.C. § 5336(c).

²⁶⁰ See Jeanne Whelan, Congress Bans Anonymous Shell Companies After Long Campaign by Anti-Corruption Groups, WASH. POST (Dec. 11, 2020), https://www.washingtonpost.com/us-policy/2020/12/11/anonymous-shell-company-us-ban/ [https://perma.cc/4Q2Z-SGZD].

reporting requirements. The CTA's disclosure mandate applies to every "reporting company," which it defines as any "corporation, limited liability company, or other similar entity" that satisfies the formal requirements for entity formation.²⁶¹ But that definition also contains more than twenty specific exclusions, including publicly traded companies,²⁶² banks,²⁶³ and companies with twenty or more employees and \$5 million in annual gross receipts.²⁶⁴ Thus, unlike prior legislation and the GTOs, which commandeered reputable financial institutions such as banks and title insurance companies to aid in reporting beneficial ownership information to the government, the CTA is directed largely at the reporting entities themselves. In fact, Congress directed the Secretary of the Treasury to revise its existing due diligence requirements for financial institutions to reduce burdens that might, in light of the statute, be "unnecessary or duplicative."265 In the end, the statute's effectiveness may be undercut by the absence of significant enforcement mechanisms. Although reporting violations carry civil penalties, a maximum fine of \$10,000, and up to two years of imprisonment,²⁶⁶ those penalties are directed at money launderers who, by definition, are already willing lawbreakers because the crime of money laundering involves the concealment of assets derived from the violation of some other law.²⁶⁷

3. The Impact of Money Laundering Regulations on Entity Ownership

If purchasers acquire real estate in entity form largely for investment or tax reasons, or to protect their privacy interests, neither the GTOs nor the Corporate Transparency Act would have much effect on patterns of property ownership. Disclosure to FinCEN would not change the investment or tax advantages of entity ownership, and, so long as FinCEN must keep the reports confidential, disclosure to FinCEN would not reduce the privacy incentives for entity ownership. A recent empirical study of the GTOs, however, painted a very different picture. Purchases by corporate entities nationwide fell significantly after the first announcement of the FinCEN policy, while

^{261 31} U.S.C. § 5336(a)(11) (defining "reporting company").

^{262 31} U.S.C. § 5336(a) (11) (B) (i).

^{263 31} U.S.C. § 5336(a) (11) (B) (iii).

^{264 31} U.S.C. § 5336(a) (11) (B) (xxi).

²⁶⁵ William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, supra note 255 6403(d), 134 Stat. 4624.

^{266 31} U.S.C. § 5336(h)(3).

²⁶⁷ See 31 U.S.C. § 5340 (defining money laundering as "the movement of illicit cash or cash equivalent proceeds").

there was no similar drop-off in total purchase volume.²⁶⁸ Before FinCEN's announcement of the policy, all-cash corporate acquisitions represented 10% of the dollar volume of nationwide purchases; after the announcement, that percentage plummeted to 2.5%.²⁶⁹ High-end housing prices—those most affected by the GTOs—dropped by 4.2% on an annual basis in counties subject to the GTOs compared to counties not covered by the orders.²⁷⁰ These numbers strongly suggest that the demand associated with shell entity buyers was driven in considerable measure by a desire for anonymity from the authorities.²⁷¹

The empirical evidence suggests that disclosure of beneficial ownership of entity purchasers may be an effective weapon against the use of real estate to launder money, but that evidence is not conclusive. For one, the GTOs appear to have provoked a modest increase in entity purchases without title insurance.²⁷² Because title insurers are the entities charged with identifying and reporting beneficial ownership, purchases without title insurance do not trigger disclosure to the government. Perhaps that increase can be explained by the purchase of entity-owned real estate by money launderers who are willing to forego title insurance and rely on other means of ascertaining the quality of title. Another option still available to money launderers would be to take title in the name of a third-party trustee, since trusts appear to fall outside the definition of "legal entities" covered by the GTOs.²⁷³ Preliminary data, however, suggests little or no increase in the use of trusts after implementation of the GTOs.²⁷⁴

Finally, although FinCEN's GTOs significantly reduced real estate purchases in the name of a covered entity, it did not stop entity purchasers in their tracks as one would expect if money laundering were the only reason for purchasing in entity form. Consistent with that finding, our own investigation of high-end Manhattan condominium purchases revealed a significant number of purchases in corporate form in the years following implementation of the GTO

274 Hundtofte & Rantala, *supra* note 239, at 22.

²⁶⁸ Hundtofte & Rantala, *supra* note 239, at 18.

²⁶⁹ Id.

²⁷⁰ Id. at 5. See also id. at 20.

²⁷¹ *Id.* at 6.

²⁷² *Id.* at 21–22. It is not clear whether the increase in purchases without title insurance is statistically significant. *Id.*

²⁷³ See FINCEN, supra note 248, at 4 (defining a covered legal entity as "a corporation, limited liability company, partnership or other similar business entity, whether formed under the laws of a state, or of the United States, or a foreign jurisdiction, other than a business whose common stock or analogous equity interests are listed on a securities exchange regulated by the Securities Exchange Commission ('SEC') or a self-regulatory organization registered with the SEC, or an entity solely owned by such a business.").

covering Manhattan.²⁷⁵ Many high-end buyers were apparently unconcerned about disclosure of their identities to the federal government, but nevertheless used the corporate form for less nefarious reasons either to obtain investment or tax benefits, or to protect their identities from web harvesters and the public at large. For these buyers, the Corporate Transparency Act is unlikely to deter use of entity ownership, but unlike the GTOs, the Act imposes the beneficial ownership reporting obligation directly on the buyers rather than on financial institutions and intermediaries.

4. Summary

Title to most residential real property is still recorded in the name of readily identifiable individuals, but a confluence of factors has led to increased anonymity in the public land records. Expanded restrictions on anonymous ownership may be a useful weapon in the fight against money laundering, and deputizing title insurers or other private parties as information collection agents may be the most efficient way to combat anonymity. But a broad-based requirement that beneficial ownership be reported to private parties could limit the value of entity ownership as a data privacy safeguard. For individuals concerned about the commodification of public land records, the use of anonymous entity ownership for the legitimate purpose of avoiding public recordation of the purchaser's PII is not foreclosed by FinCEN's GTOs or by the Corporate Transparency Act. However, all-cash buyers who purchase in the name of an entity should be advised that their transactions are not entirely anonymous, at least with respect to the government, and, at least, for now.

CONCLUSION

The online disclosure of public land records by local deed recorders pits the traditional notification functions of the deed recording system at odds with the privacy interests of homeowners. Before land records were computerized and published on the internet, the competing needs for disclosure and the relative privacy of PII, such as one's home address and marital status, existed in a *de facto* state of equilibrium. Access to public land records was difficult enough to deter widespread publication of the homeowner's information but simple enough to obtain by transactional parties with a legitimate need for the information. Recently, however, in response to growing demand for electronic filing and recordkeeping, many local deed recorders digitized their records with the help of private vendors and

²⁷⁵ Survey on file with authors.

now sell public land records online for a fee. Web-based access to those records, in turn, led to the commodification of data extracted from deeds for purposes unrelated to the recording system's noticegiving function. To feed the booming demand for big data, commercial data brokers deploy sophisticated bots to harvest homeowners' personal information, which is then sold and disseminated widely on Lawmakers in Congress and state legislatures have the internet. proposed measures to protect the privacy of PII for judges and other at-risk governmental officials, but they have yet to confront the big question of how to address the privacy of ordinary homeowners when public land records are now commodified and sold commercially by Prospective homebuyers seeking to prevent the online default. publication of personally identifiable deed content must now record title in the name of an anonymous corporate entity or trust, but government efforts to combat money laundering may limit the availability of those options in some areas. Existing homeowners concerned about data privacy face an even more dismal choice: they must either relocate from their current personal residence or tolerate the online sale and dissemination of their deed information.