LIFE, DEATH, AND REVIVAL OF ELECTRONIC WILLS LEGISLATION IN 2016 THROUGH 2019

ABSTRACT

Paper files, written signatures, and filing cabinets seem to be relics of a time before the Internet and smart devices. Most things in life today can be completed electronically and simply stored in the cloud. Society's ever-increasing dependence upon electronics makes it natural for people to expect the ability to execute and store their wills electronically. However, states have hesitated to support electronic wills legislation, and proposed legislation has raised concerns regarding fraud and hacking, as well as a lack of procedures for preservation and storage.

This Note analyzes the electronic wills legislation proposed in 2016 through 2019, discusses the concerns raised by the legislation, and identifies technological advances that can alleviate many of those concerns. By utilizing technologies such as electronic notarization, biometrics, blockchain, and public key infrastructure, states can pass electronic wills legislation that provides both convenience and security.

As states determine how best to utilize these emerging technologies, they can begin to recognize electronic wills without passing new electronic wills legislation. The harmless error rule, already accepted within the Uniform Probate Code and recognized by 11 states, allows a court to disregard harmless errors in the execution of a will and should be adopted in Iowa and other states to honor a testator's intended will—paper or electronic. Even without the adoption of the harmless error rule, Iowa can begin recognizing electronic wills by relying on the broad definitions of writing *and* signature *already present within Iowa's code.*

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I. INTRODUCTION

As Americans become increasingly dependent upon the Internet and electronic devices,[1] a person can now do anything from filing insurance claims to obtaining a mortgage solely on an electronic device.[2] So why should writing a will be any different? Some critics argue the protective nature of current will formalities, discussed further in Part II of this Note, are inconsistent with the acceptance of electronic wills.[3] However, these formalities have suffered criticisms for their strict and archaic requirements, and probate law has seen a push for lenient interpretation of formalities in favor of honoring wills that do not strictly comply.[4] At least one state, Nevada, has long embraced this change and gone as far as recognizing electronic wills since 2001.[5] The requirements for a valid electronic will in Nevada are outlined in Part III of this Note.

In 2016 and 2017, five additional states—Arizona, Indiana, Virginia, New Hampshire, and Florida—attempted to follow Nevada's lead by considering electronic wills legislation of their own.[6] Part IV of this Note reviews the text of each of these bills, and Part V discusses the concerns

1. A 2016 study conducted by the PEW Research Center indicates 96 percent of American adults own cellphones, 74 percent own desktop or laptop computers, and 52 percent own tablets. *Mobile Fact Sheet*, PEW RES. CTR. (Jan. 12, 2017), http://www.pewinternet.org/fact-sheet/mobile/ [https://perma.cc/8N4G-YU2Z].

2. *See, e.g.*, *Quicken Loans Launches Revolutionary End-to-End Online Product "Rocket Mortgage" Transforming How Consumers Experience the Home Loan Process*, QUICKEN LOANS, https://www.quickenloans.com/press-room/2015/11/24/launches-rocket-mortgage/ [https://perma.cc/2DFV-L3ZM] (boasting its process for allowing customers to share financial information and obtain mortgage approval in minutes "with the click of a button"); *The History of Insurance*, ESURANCE, https://www.esurance.com/info/car/the-history-of-car-insurance [https://perma.cc/6EP8-Y9TP] (providing online "insurance for the modern world").

3. *See* Scott S. Boddery, *Electronic Wills: Drawing a Line in the Sand Against Their Validity*, 47 REAL PROP. TR. & EST. L.J. 197, 198–99 (2012) (arguing the evidentiary and protective functions of current will formalities would be undermined by fraudulent activity associated with electronic mediums).

4. *See infra* Part II.B.

5. NEV. REV. STAT. ANN. § 133.085 (West 2019).

6. *See* S.B. 1298, 53d Leg., 1st Reg. Sess. (Ariz. 2017); H.B. 277, 119th Leg., Reg. Sess. (Fla. 2017); H.B. 1107, 120th Gen. Assemb., 1st Reg. Sess. (Ind. 2017); S.B. 40, 165th Gen. Court, Reg. Sess. (N.H. 2017); H.B. 1643, 2017 Gen. Assemb., Reg. Sess. (Va. 2017).

raised within the legal community that caused the death of these bills.[7] After each of these bills were killed in 2017, three states—Arizona, Indiana, and Virginia—revived the electronic wills discussion and began considering new legislation in 2018.[8] Part VI of this Note discusses the changes made between the 2017 and 2018 bills and the large change that ultimately led to the successful passing of electronic wills legislation in Arizona and Indiana.[9]

In addition to state legislative measures, the Uniform Law Commission (ULC) established an electronic wills committee, which met for the first time in October 2017, to draft a uniform electronic wills act.[10] In its initial meeting, the committee found the public wants the ability to form electronic wills because people believe electronic wills are easier to execute, cheaper,[11] and better aligned with will substitutes, such as trusts.[12] The use of electronic wills

7. Although a bill that would recognize electronic wills passed unanimously through Florida's legislature, Florida's Governor ultimately vetoed the bill. Dan DeNicuolo, *The Future of Electronic Wills*, 38 BIFOCAL 75, 76 (2017). The 2016 and 2017 bills in Arizona, Indiana, Virginia, and New Hampshire never passed through their legislatures. *Id.*

8. *See* H.B. 2471, 53d Leg., 2d Reg. Sess. (Ariz. 2018); H.B. 1303, 120th Gen. Assemb., 2d Reg. Sess. (Ind. 2018); H.B. 1403, 2018 Gen. Assemb., Reg. Sess. (Va. 2018).

9. Indiana's governor signed Indiana House Bill 1303 into law on March 8, 2018. *Actions for House Bill 1303*, IND. GEN. ASSEMBLY, https://iga.in.gov/legislative/2018/bills/house/1303 [https://perma.cc/KHF7-QMEW] (follow "Bill Actions" hyperlink). The law became effective July 1, 2018. H.B. 1303 § 1 (Ind.); Robert Fleming, *Arizona Adopts Electronic Will Law Effective Next Year*, FLEMING & CURTI PLC (May 20, 2018), https://elder-law.com/arizona-adopts-electronic-will-law/ [https://perma.cc/K35B-THQQ].

10. *Electronic Wills Act*, UNIFORM L. COMMISSION, https://www.uniformlaws.org/committees/community-home?CommunityKey=a0a16f19-97a8-4f86-afc1-b1c0e051fc71 [https://perma.cc/A2QZ-VQM4].

11. The cost of will execution includes all transactional costs—fees paid to the attorney as well as "the time and effort necessary to locate and consult an attorney and execute a will . . . and the psychic costs of focusing on one's own death." Daniel B. Kelly, *Toward Economic Analysis of the Uniform Probate Code*, 45 U. MICH. J.L. REFORM 855, 865 (2012).

12. Memorandum from Suzy Walsh, Turney Berry & Susan Gary, Members of the Elec. Wills Drafting Comm., to the Elec. Wills Drafting Comm. 1 (Oct. 2, 2017), https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=ab76c652-5ef5-68b6-b468-7dbe1b8d5c78&forceDialog=0 [https://perma.cc/H2T8-AFAP] [hereinafter ULC 2017 Memorandum] (outlining notes from the first committee meeting) (on file with Author).

may also allow for the creation of a searchable will database that would make it easier to find wills when a person dies.[13]

Additionally, the public is more comfortable with electronic wills because everything else in their lives has become electronic.[14] In fact, advances in other areas of electronic technology, such as electronic notarization, blockchain, and public key infrastructure, can be relied upon to address some of the concerns raised by electronic wills.[15] The use of these technologies for electronic wills is discussed in Part VII of this Note. In particular, the use of electronic notarization made it possible for Florida to revive and pass its electronic wills legislation in 2019.[16] The new Florida law is discussed, along with the recently approved Uniform Electronic Wills Act (UEWA),[17] in Part VIII of this Note.

Due to the proliferation of electronics in Americans' everyday lives, it is likely people will try to execute electronic wills even if statutes do not expressly permit them to do so.[18] Passing electronic wills legislation will ensure those wills have a clear statutory basis for recognition; however, the electronic wills committee of the ULC found certain state statutes may be interpreted today to allow electronic wills without requiring new legislation.[19] Additionally, the harmless error rule can be applied to validate otherwise-invalid wills in states that apply the rule.[20] Part IX of this Note argues these options should be utilized by state legislatures until new

13. *Id.* Indiana considered a bill that would create such a database in 2018, but it never moved out of committee. H.B. 1416, 120th Gen. Assemb., 2d Reg. Sess. (Ind. 2018); *see also Actions for House Bill 1416*, IND. GEN. ASSEMBLY, http://iga.in.gov/legislative/2018/bills/house/1416 [https://perma.cc/A4LF-VDQP] (follow "Bill Actions" hyperlink).

14. *See* ULC 2017 Memorandum, *supra* note 12, at 1.

15. *See infra* Part VII.

16. *See generally* H.B. 409, 121st Leg., Reg. Sess. § 3 (Fla. 2019).

17. *See generally* UNIF. ELEC. WILLS ACT (UNIF. LAW COMM'N 2019).

18. ULC 2017 Memorandum, *supra* note 12, at 1; *see also* James T. Walther, *Opinion of the Ohio Court of Common Pleas:* In re: Estate of Javier Castro*, Deceased, Probate Division, Lorain County, Ohio, June 19, 2013*, 27 QUINNIPIAC PROB. L.J. 412, 417 (2014) (discussing the use of a Samsung Galaxy tablet to write a will in spite of the lack of an electronic wills statute in Ohio).

19. ULC 2017 Memorandum, *supra* note 12, at 2.

20. *Id.*

technologies can be fully developed to properly address concerns raised with the establishment of electronic wills legislation.

II. TRADITIONAL WILL FORMALITIES

In order to give property through a will, known as devising the property,[21] a person, known as a testator,[22] must meet the specific will formalities outlined within the probate code of the state where the testator resides at the time of death.[23] Probate codes generally require a will to be in writing, signed by the testator, and attested to by at least two witnesses.[24] A testator's failure to meet these requirements makes a will invalid and causes property to pass through the state's intestacy laws rather than under the terms of the will.[25]

A. *Why Are These Formalities Needed?*

Will formalities originally developed as a means to help courts authenticate wills.[26] Courts reviewing a contested will are forced to apply what has been called the "worst evidence" rule.[27] The best evidence regarding the validity of a will and the testator's intent would be testimony from the testator.[28] Because the testator has died and is unable to testify to the circumstances surrounding the creation of the will or the intent surrounding its terms, the court can only rely on the testator's compliance with statutory formalities to authenticate the will.[29]

The writing requirement of the statutory formalities ensures the accuracy of evidence presented in court.[30] Rather than relying on a witness

21. *Devise*, BLACK'S LAW DICTIONARY (10th ed. 2014).

22. *Testator*, BLACK'S LAW DICTIONARY (10th ed. 2014).

23. JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS AND ESTATES 148 (9th ed. 2013); *see, e.g.*, IOWA CODE § 633.279 (2019) (indicating a will must meet the requirements of this statute "to be valid").

24. *See, e.g.*, IOWA CODE § 633.279; RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.1 cmt. f (AM. LAW INST. 1999).

25. *See In re* Estate of Phillips, No. 01-0879, 2002 WL 1447482, at *2 (Iowa Ct. App. July 3, 2002); DUKEMINIER & SITKOFF, *supra* note 23, at 153.

26. DUKEMINIER & SITKOFF, *supra* note 23, at 150.

27. Burkhalter v. Burkhalter, 841 N.W.2d 93, 105 (Iowa 2013) (quoting John H. Langbein, *Will Contests*, 103 YALE L.J. 2039, 2044 (1994) (book review)).

28. DUKEMINIER & SITKOFF, *supra* note 23, at 147.

29. *See Burkhalter*, 841 N.W.2d at 105.

30. *See* WILLIAM M. MCGOVERN, SHELDON F. KURTZ & DAVID M. ENGLISH,

who may misremember or lie about the testator's intended dispositions, the court simply looks to the writing.[31] The statutory formalities also establish a sense of ceremony or ritual thought to impress upon the testator the seriousness of the act of writing a will.[32] Rather than using the same, careless language people often use in daily conversation and informal writings, the testator is more likely to carefully outline a clear testamentary intent within the formal will.[33] This ritual function becomes increasingly important when considering the establishment of electronic wills legislation because people tend to treat electronic writing and communication less formally.[34]

The signature requirement of the statutory formalities—in addition to linking the will to the testator—provides evidence of finality.[35] The court can be assured the document is not merely a draft but rather the testator's final, intended will.[36] To later change or revoke a will, specific actions must be taken by the testator, such as destroying the document or revoking the will within the text of a new will.[37]

B. *Criticism of Formalities*

Notwithstanding the justifications for traditional will formalities outlined above, some argue these formalities are too strict and "emanate from a time when most wills were made on the testator's deathbed" rather than the more common practice today of estate planning with an attorney during the course of a person's life.[38] Yet, a 2017 survey indicated that 58 percent of American adults do not have a will or some other form of estate

PRINCIPLES OF WILLS, TRUSTS & ESTATES 216 (2d ed. 2012).

31. *Id.*

32. *Id.* at 217.

33. *See* Ashbel G. Gulliver & Catherine J. Tilson, *Classification of Gratuitous Transfers*, 51 YALE L.J. 1, 3 (1941).

34. *See* Brian Engard, *The 5 Most Critical Business Communication Skills for Getting Ahead*, JEFFERSON ONLINE (Jan. 10, 2017), https://online.jefferson.edu/business/5-critical-business-communication-skills/ [https://perma.cc/X8TK-FBDS].

35. MCGOVERN, KURTZ & ENGLISH, *supra* note 30, at 221.

36. RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.1 cmt. j (AM. LAW INST. 1999).

37. *See, e.g.*, IOWA CODE § 633.284 (2019).

38. MCGOVERN, KURTZ & ENGLISH, *supra* note 30, at 217 (citing John H. Langbein, *Substantial Compliance with the Wills Act*, 88 HARV. L. REV. 489, 497 (1975)).

planning.[39] The top reason given for not having some form of planning was that people simply had not "gotten around to it," indicating advance estate planning practices may not be as commonplace as argued.[40] For those who do eventually get around to planning, an earlier study indicated wills were executed, on average, five to seven years prior to death.[41]

In addition to a general change in the handling of estate planning, some argue against strict will formalities, specifically those related to witness attestation, because "remedies are employed more frequently against innocent parties who have accidentally transgressed the requirement than against deliberate wrongdoers."[42]

For example, in *Stevens v. Casdorph*, Homer Miller executed his will at his local bank in the presence of a bank employee, Debra Pauley.[43] Pauley then took the will to two other bank employees who signed the will as witnesses.[44] Because Mr. Miller was wheelchair bound,[45] he did not accompany Pauley to the other employees' work areas.[46] The court applied West Virginia Code § 41-1-3, which required a testator to sign or acknowledge the will in the presence of the witnesses and the witnesses to

39. *See* Nick DiUlio, *More than Half of American Adults Don't Have a Will*, FOX BUS. (Feb. 6, 2017), http://www.foxbusiness.com/features/2017/02/06/more-than-half-american-adults-dont-have-will.html [https://perma.cc/7WQF-Z46R]. Gallup surveys conducted in 1990, 2005, and 2016 found similarly high percentages of American adults living without a will—52 percent in 1990, 49 percent in 2005, and 56 percent in 2016. Jeffrey M. Jones, *Majority in U.S. Do Not Have a Will*, GALLUP (May 18, 2016), http://news.gallup.com/poll/191651/majority-not.aspx [https://perma.cc/3FPX-TZ4L].

40. DiUlio, *supra* note 39. An early survey of 600 Iowan adults from 1978 found 51 percent did not have a will. Contemporary Studies Project, *A Comparison of Iowans' Dispositive Preferences with Selected Provisions of the Iowa and Uniform Probate Codes*, 63 IOWA L. REV. 1041, 1070 (1978). The top three reasons given for not having a will were (1) they had not "gotten around to making a will"; (2) they had little or no property to devise; and (3) their family would automatically receive through intestacy. *Id.* at 1077. Put simply, when a person weighs the perceived benefits of will formation against the current transactional costs—time, effort, attorney fees, and mental and emotional cost of focusing on one's death—many choose not to exert the necessary cost. Kelly, *supra* note 11, at 865.

41. Robert A. Stein & Ian G. Fierstein, *The Demography of Probate Administration*, 15 U. BALT. L. REV. 54, 86 (1985).

42. Gulliver & Tilson, *supra* note 33, at 12.

43. Stevens v. Casdorph, 508 S.E.2d 610, 611 (W. Va. 1998).

44. *Id.*

45. *Id.* at 611 n.1.

46. *Id.* at 612.

sign in the presence of the testator and each other.[47] Although everyone involved knew Miller was at the bank to execute his will and no evidence of any fraud, coercion, or undue influence existed, the court held the will invalid because it did not strictly comply with West Virginia's requirements for executing a valid will.[48]

The outcome of this strict compliance in cases of innocent error establishes a strong argument against strict compliance with will formalities.[49] The dissenting opinion in *Stevens* agreed with the critics of strict compliance, indicating the result was "harsh and inequitable," "wholly contrary to [Miller's] indisputable intent," and "patently absurd."[50] In her dissent, Justice Margaret Workman argued:

> [W]here a statute is enacted to protect and sanctify the execution of a will to prevent substitution or fraud, this Court's application of that statute should further such underlying policy, not impede it. When, in our efforts to strictly apply legislative language, we abandon common sense and reason in favor of technicalities, we are the ones committing the injustice.[51]

C. *Trend Away from Formalism Opens Door for Electronic Wills*

In the same spirit as Justice Workman's call for furthering the underlying policy of wills legislation, modern legal authority moves away from the absolutes of strict compliance with will formalities.[52] Many consider statutory formalities to be a means of accomplishing the evidentiary, protective, and ceremonial purposes discussed in Part II.A of this Note rather than a necessary end.[53] For example, the Uniform Probate Code (UPC) has eliminated the requirement for witnesses to sign in the presence of the testator and allows for notarization as an alternative to the traditional two-witness requirement.[54]

47. *Id.*
48. *Id.* at 613.
49. *See* Gulliver & Tilson, *supra* note 33, at 12–13.
50. *Stevens*, 508 S.E.2d at 613, 615 (Workman, J., dissenting).
51. *Id.* at 615.
52. RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.3 cmt. b (AM. LAW INST. 1999).
53. *See id.*
54. UNIF. PROBATE CODE § 2-502 (UNIF. LAW COMM'N 2010).

The UPC also applies the harmless error rule to validate wills that fail to strictly comply with will formalities.[55] When a court applies the harmless error rule, the court can excuse an error in the execution of a will and treat the will as though it meets all statutory formalities so long as clear and convincing evidence establishes that the testator intended the document to be treated as the testator's will.[56] Application of the harmless error rule to validate electronic wills is discussed further in Part IX.A of this Note.

While the UPC has made large strides in addressing the criticisms of strict compliance with will formalities, not all states have adopted the uniform rules.[57] As of September 2015, eighteen states had enacted at least a substantial portion of the UPC, and several other states adopted specific articles or sections of the UPC.[58] Eight states had enacted the full UPC, eight states had enacted an amended version, and two states had enacted a substantially similar version.[59] The remaining 32 states had not adopted the full UPC or even a substantially similar version.[60]

However, many states that have not adopted some version of the UPC have liberalized the formal will requirements in their statutes and judicial opinions.[61] In the 1970s and 1980s, courts began overruling earlier decisions that invalidated wills due to failure to strictly comply with will formalities.[62] The Georgia Supreme Court expressed this sentiment best in *Waldrep v. Goodwin*, stating, "[T]he law . . . seeks to afford the full realization of the testamentary desires of individuals, and to the extent that decision-established rules frustrate these desires without clearly providing safeguards against fraud, they are not entitled to continued recognition."[63]

55. *Id.* § 2-503.

56. *Id.*; RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.3.

57. UNIF. LAW COMM'N, GUIDE TO UNIFORM AND MODEL ACTS 27 n.1 (2019), https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=f7289877-3018-0c5f-a6e1-fb5ad8b3c686&forceDialog=0 [https://perma.cc/JM2B-FEC4].

58. *Id.* at 27.

59. *Id.* at 43.

60. *Id.*

61. MCGOVERN, KURTZ & ENGLISH, *supra* note 30, at 218.

62. *Id.* (citing Estate of Black v. Rombotis, 641 P.2d 754 (Cal. 1982); Waldrep v. Goodwin, 195 S.E.2d 432 (Ga. 1973)).

63. *Goodwin*, 195 S.E.2d at 435.

III. LONG-TIME RECOGNITION OF ELECTRONIC WILLS IN NEVADA

Although strict will formalities have been liberalized, states have hesitated to go so far as to pass electronic wills legislation.[64] The reasons for that hesitation are examined in Part V of this Note. Prior to 2018, Nevada was the only state with enacted legislation expressly allowing for the validity of electronic wills.[65]

Under the Nevada statute, an electronic will "[i]s created and maintained in an electronic record" and includes the date and electronic signature of the testator.[66] Additionally, the will must include either an authentication characteristic of the testator, an electronic signature and seal from a notary public, or electronic signatures from two or more attesting witnesses.[67] An *authentication characteristic* is defined as a characteristic unique to a certain person and "capable of measurement and recognition in an electronic record as a biological aspect of or physical act performed by that person."[68] Authentication characteristics recognized under the Nevada statute include the following: "a fingerprint, a retinal scan, voice recognition, facial recognition, video recording, a digitized signature or other commercially reasonable authentication using a unique characteristic of the person."[69] This definition of an authentication characteristic was amended from its original text in 2017 to add video recording as an accepted form of authentication characteristic and to require that any other authentication be "commercially reasonable."[70]

Prior to the 2017 amendment, the Nevada statute required an electronic will to include an authentication characteristic and did not provide the alternative options for an electronic signature of a notary public or

64. DeNicuolo, *supra* note 7, at 75.

65. *See id.*; NEV. REV. STAT. ANN. § 133.085 (West 2019).

66. NEV. REV. STAT. ANN. § 133.085(1).

67. *Id.* § 133.085(1)(b)(1)–(3).

68. *Id.* § 133.085(5)(a).

69. *Id.*

70. *See* NEV. REV. STAT. § 133.085(5)(a) (2015), *amended by* Electronic Wills–Custodians–Qualifications, 2017 Nev. Stat. 3442.

attesting witnesses.[71] This change aligns with witnessing options for a nonelectronic will.[72]

Prior to the 2017 amendment, the Nevada statute also required that only one authoritative copy of the electronic will could exist and that copy had to be maintained and controlled by the testator or a designated custodian.[73] The 2017 amendment removed these requirements but added a section requiring the testator to designate a qualified custodian in order to make the will self-proving,[74] meaning witnesses would not need to appear in court to testify to the validity of the will.[75] The 2017 amendment also added a clearer definition of the rights and responsibilities of a qualified custodian.[76]

These legislative changes are likely a reaction to the fact that Nevada's original electronic wills legislation was rarely used.[77] Because the original statute required an authentication characteristic, such as a retinal scan, voice recognition, or other biological record, to be attached to the will, most people did not have access to the type of technology necessary to create a valid electronic will.[78]

71. *See* NEV. REV. STAT. § 133.085(1)(b) (2015), *amended by* 2017 Nev. Stat. 3441–42.

72. *See* NEV. REV. STAT. ANN. § 133.040 (West 2019).

73. *See* NEV. REV. STAT. § 133.085(1)(c) (2015), *amended by* 2017 Nev. Stat. 3441–42.

74. *See* 2017 Nev. Stat. 3436.

75. *See* 1 PUBL'N COMM. OF THE STATE BAR OF NEV., NEVADA CIVIL PRACTICE MANUAL § 39.03(2)(e) (6th ed. 2017).

76. *See* 2017 Nev. Stat. 3436–39. Under the amended law, a custodian must "store electronic records of electronic wills in a system that protects electronic records from destruction, alteration or unauthorized access and detects any change to an electronic record." *Id.* at 3436. The custodian must also document the identities of the testator and witnesses and maintain an audio and video recording of the signing of the will by the testator and witnesses. *Id.* The amendment further outlines when the custodian must provide access to the electronic will, when the record may be destroyed, and how the custodian may go about ending the custodial relationship. *Id.* at 3437–38.

77. DeNicuolo, *supra* note 7, at 78.

78. *See* NEV. REV. STAT. § 133.085(1)(b) (2015), *amended by* 2017 Nev. Stat. 3442; Boddery, *supra* note 3, at 199–200. However, the availability of this technology is becoming more commonplace in today's society. *See, e.g.*, *About Touch ID Advanced Security Technology*, APPLE, https://support.apple.com/en-us/ht204587 [https://perma.cc/GGD8-A5LR].

Additionally, because Nevada recognizes holographic, handwritten wills as valid without any requirement for witness attestation,[79] it has simply been easier for Nevada residents to handwrite and sign a holographic will rather than attempt to meet the various requirements for forming a valid electronic will.[80] Although the 2017 amendment made forming an electronic will easier than it was prior to the amendment,[81] the requirements for executing a valid holographic will remain simpler for residents to satisfy, and the state will likely continue to see people opting for holographic wills over electronic wills.[82] Presumably, states that do not allow holographic, unattested wills are more likely to see residents utilize legislation for electronic wills.

IV. 2016 & 2017 PROPOSED LEGISLATION

In 2016 and 2017, Arizona, Indiana, Virginia, New Hampshire, and Florida each considered electronic wills legislation of their own.[83] New Hampshire's bill outlined the purpose for enacting electronic wills legislation, including expanding individual freedom of disposition, facilitating affordable and accessible end-of-life planning for vulnerable and marginalized groups, giving effect to a decedent's intended distribution of property, and harmonizing wills law with other laws that recognize electronic signatures and transactions.[84]

Despite a growing acceptance of electronically created, stored, and signed documents within the legal community, states have shown reluctance

79. NEV. REV. STAT. ANN. § 133.090 (West 2019).

80. *See* Boddery, *supra* note 3, at 200–01.

81. *See* 2017 Nev. Stat. 3441 (adding the option for the testator to have the will electronically witnessed or notarized as an alternative to the authentication characteristic previously required).

82. *See* NEV. REV. STAT. ANN. § 133.090 (allowing the testator to simply handwrite, date, and sign a will without requirements for attesting witnesses or notarization to form a valid holographic will).

83. *See* S.B. 1298, 53d Leg., 1st Reg. Sess. (Ariz. 2017); H.B. 277, 119th Leg., Reg. Sess. (Fla. 2017); H.B. 1107, 120th Gen. Assemb., 1st Reg. Sess. (Ind. 2017); S.B. 40, 165th Gen. Court, Reg. Sess. (N.H. 2017); H.B. 1643, 2017 Gen. Assemb., Reg. Sess. (Va. 2017).

84. S.B. 40 § 1 (N.H.).

in passing bills allowing electronic wills.[85] Of the five bills considered in 2016 and 2017, Arizona, Indiana, and Virginia's bills never survived the committee stage.[86] New Hampshire's bill passed through the senate but was killed by the house.[87] Only Florida's bill lived long enough to pass through the state legislature; however, it was later vetoed by Florida's Governor.[88] This Part discusses the language of each of these bills, and Part V of this Note discusses the concerns surrounding electronic wills that ultimately led to the bills' deaths.

85. *See* DeNicuolo, *supra* note 7, at 75.

86. *See Actions for House Bill 1107*, IND. GEN. ASSEMBLY, https://iga.in.gov/legislative/2017/bills/house/1107 [https://perma.cc/W868-YZTG] (follow "Bill Actions" hyperlink); *Bill History for SB1298*, ARIZ. ST. LEGISLATURE, https://apps.azleg.gov/BillStatus/BillOverview/69097 [https://perma.cc/J98R-7NEH]; *HB 1643 Electronic Wills; Process for Execution of Will*, VA.'S LEGIS. INFO. SYS., http://lis.virginia.gov/cgi-bin/legp604.exe?171+sum+HB1643 [https://perma.cc/7T59-RL3X].

87. *Docket of SB40*, GEN. CT. N.H., http://www.gencourt.state.nh.us/bill_status/bill_docket.aspx?lsr=788&sy=2017&sortoption=&txtsessionyear=2017&txtbillnumber=sb40&q=1 [https://perma.cc/DQX8-YYUW].

88. DeNicuolo, *supra* note 7, at 76. Florida Governor Rick Scott indicated he is not generally opposed to electronic wills legislation, but he believed the bill "fail[ed] to strike the proper balance between competing concerns." Letter from Rick Scott, Governor, to Ken Detzner, Sec'y of State 1 (June 26, 2017), http://www.flgov.com/wp-content/uploads/2017/06/HB-277-Veto-Letter.pdf [https://perma.cc/DHG3-HY8Q].

TABLE 1: 2017 BILL HISTORIES[89]

	Date Introduced	**Committees Assigned**	**Action & Resolution**
Arizona Senate Bill 1298	Jan. 26, 2017	Senate: Judiciary and Rules	Held in committees; no further action after a second reading on January 30, 2017
Indiana House Bill 1107	Jan. 5, 2017	House: Judiciary	Coauthors added in February 2017; no further action taken
Virginia House Bill 1643	Jan. 11, 2017	House: Courts of Justice; Civil Law subcommittee	Subcommittee recommended striking from the docket on January 25, 2017; left in committee; however, no further action taken
New Hampshire Senate Bill 40	Jan. 5, 2017	Senate: Commerce; House: Judiciary	Amended by committee and passed senate vote on March 29, 2017; killed in house on May 4, 2017
Florida House Bill 277	Jan. 18, 2017	House: Judiciary; Civil Justice & Claims Subcommittee Senate: Rules	Passed in house with vote of 111–8 on April 28, 2017; subsequently amended by both the senate and house; passed unanimous senate vote on May 5, 2017; vetoed by Governor on June 26, 2017

89. *See Actions for House Bill 1107*, *supra* note 86; *Bill History for SB1298*, *supra* note 86; *CS/CS/HB 277- Wills and Trust*, FLA. HOUSE OF REPRESENTATIVES, http://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=56942&SessionId=83 [https://perma.cc/669E-2NTG]; *Docket of SB40*, *supra* note 87; *HB 1643 Electronic Wills; Process for Execution of Will*, *supra* note 86.

A. *Arizona Senate Bill 1298 (2017) Text*

Arizona Senate Bill 1298 sought to update the definition of *will* to include both written statements and electronic records of written statements.[90] Senate Bill 1298 would have required electronic wills to be created and maintained in a manner that allowed for the detection of alterations.[91] The will would also need to include a date-and-time stamp, signatures from two witnesses completed in person or through an audiovisual conference, an electronic signature from the testator, and identification of the testator through an accepted authentication method.[92] Accepted authentication methods listed in the bill included a copy of the testator's valid, government-issued ID and one of the following: (1) "a knowledge-based authentication"; (2) "a digital certificate using a public key infrastructure" (PKI);[93] (3) "a smart card, a universal serial bus [(USB)], or . . . token"; (4) "a biometric identification, including a fingerprint, a retinal scan, voice or facial recognition"; (5) "electronic notarization;" or (6) "some other commercially reasonable method."[94]

B. *Indiana House Bill 1107 (2017) Text*

Indiana House Bill 1107 sought to allow electronic wills containing the testator's date-and-time-stamped electronic signature and identifying the testator using an attached or logically associated authentication method.[95] The approved authentication methods listed within House Bill 1107 were the same as those listed above for Arizona Senate Bill 1298 with one exception—House Bill 1107 would have allowed electronic notarization to stand on its own as an authentication method without including a copy of the testator's

90. S.B. 1298, 53d Leg., 1st Reg. Sess. § 6 (Ariz. 2017).

91. *Id.* § 7.

92. *See id.* §§ 2, 7.

93. A PKI is used to encrypt and authenticate data. Brien Posey, *A Beginner's Guide to Public Key Infrastructure*, TECHREPUBLIC (Sept. 15, 2005), https://www.techrepublic.com/article/a-beginners-guide-to-public-key-infrastructure/ [https://perma.cc/8YCL-NLG8]. It works by assigning pairs of alpha-numeric keys—one encrypted private key known only by the owner and one public key that can be used to decrypt the private key, confirming the identity of the document creator. *Id.* A digital certificate issued through a PKI acts as an electronic identification card. *Id.* ("[I]f a public key is used to decrypt a file, it absolutely guarantees that the person who encrypted it was the owner of the corresponding private key . . . .").

94. S.B. 1298 § 7 (Ariz).

95. H.B. 1107, 120th Gen. Assemb., 1st Reg. Sess. § 7(13) (Ind. 2017).

government-issued ID.[96] Also, like the Arizona Senate Bill 1298, House Bill 1107 would have required electronic wills to be created and maintained in a manner that allowed for detection of alterations.[97]

C. *Virginia House Bill 1643 (2016) Text*

Virginia House Bill 1643 sought to add a new section to the Virginia Code outlining the requirements for forming a valid electronic will.[98] To be valid, an electronic will would need to be "written, created, and stored in an authoritative electronic record under the control of the qualified custodian designated therein" and electronically signed by the testator.[99] The will would also need to be attested to in the presence of the testator with the electronic signature of either two witnesses or a notary public.[100] House Bill 1643 defined *presence* to include both physical presence in the same location and remote physical presence through a live audiovisual conference.[101]

House Bill 1643 also outlined the responsibilities to be carried out by the qualified custodian designated within the electronic will.[102] The custodian would be required to "prepare an affidavit to be stored with the certified paper original" indicating the custodian's identity and eligibility to serve as a qualified custodian.[103] The affidavit would also need to certify that a true and complete electronic record was created at the time the testator made the electronic will, remained in the custodian's control, and had not been altered at any time.[104] The custodian would also be required to create and store documents with the electronic record of the will, including a photograph or other visual record of the testator taken at the time of execution, documents providing evidence of the testator's identity and any attesting witnesses' identities, and an audiovisual recording of the signing and attestation of the will.[105]

96. *See id.* § 7(1).
97. *Id.* § 7(13).
98. H.B. 1643, 2017 Gen. Assemb., Reg. Sess. § 1 (Va. 2017).
99. *Id.*
100. *Id.*
101. *Id.*
102. *Id.*
103. *Id.*
104. *Id.*
105. *Id.*

D. *New Hampshire Senate Bill 40 (2017) Text*

New Hampshire Senate Bill 40 sought to introduce a new Electronic Wills Act to the New Hampshire Revised Statutes Annotated.[106] To be valid under Senate Bill 40, an electronic will would need to be made and electronically signed by the testator, include an electronic record, and be attested to and electronically signed by two witnesses in the presence of the testator.[107] Like Virginia House Bill 1643, the bill defined *presence* to include both physical presence in the same location and remote physical presence through a live audiovisual conference.[108] This permission to use the remote presence of witnesses was one of the leading concerns raised regarding the bill, with opponents arguing remote presence would increase the possibility of undue influence and prevent witnesses from sufficiently observing the testator's mental capacity at the time of signing.[109]

Senate Bill 40 also allowed for an electronic will to be self-proving, meaning witnesses would not need to appear in court to testify to the validity of the will,[110] so long as the will included a declaration made by the attesting witnesses under penalty of perjury.[111] The self-proving will would also need

106. S.B. 40, 165th Gen. Court, Reg. Sess. § 2 (N.H. 2017).

107. *Id.*

108. *Id.*; *see* H.B. 1643 § 1 (Va.).

109. *See* N.H. H.R. Judiciary Comm., COMMITTEE REPORT S.B. 40, 165th Sess. Gen. Court (2017); Letter from Michael P. Panebianco, N.H. attorney, to N.H. House of Representatives Judiciary Comm. 1 (Apr. 18, 2017) [hereinafter Letter from Michael P. Panebianco] (on file with New Hampshire House Clerk).

110. *See* S.B. 40 § 2 (N.H.); 7 CHARLES A. DEGRANDPRE, NEW HAMPSHIRE PRACTICE SERIES: WILLS, TRUSTS AND GIFTS § 6.03 (4th ed. 2017).

111. The required declaration would state:

> As a witness to the foregoing instrument, I hereby under oath do swear as follows:
>
> 1. The testator placed his or her electronic signature on the record as the testator's electronic will.
>
> 2. This was the testator's free and voluntary act for the purposes expressed in the electronic will.
>
> 3. Each witness (if applicable) placed his electronic signature on the electronic will at the request of the testator, in the testator's presence, and in the presence of the other witness(es).

to designate a custodian to keep possession and control of the electronic record and remain under the custodian's control until the time of probate.[112]

E. *Florida House Bill 277 (2017) Text*

Florida House Bill 277 sought to validate electronic wills so long as they existed in a unique and identifiable electronic record and were electronically signed by the testator and two witnesses in each other's presence.[113] The bill would have permitted a video conference to constitute presence if the video was live, secure, clear, and time stamped; the parties were identified within the video; and they answered a specific list of questions.[114] Additionally, if using a video conference, one of the people communicating through the video would need to be an attorney licensed to practice in Florida or a Florida notary public and would be required to sign the electronic will.[115]

House Bill 277 would have also allowed for an electronic will to be self-proving if it designated a qualified custodian who had custody of the electronic record at all times prior to probate.[116] The custodian would be required to certify under oath that the will and any audio or video recording related to the will were not altered in any way after execution.[117]

V. CAUSES OF DEATH: CONCERNS RAISED BY ELECTRONIC WILLS LEGISLATION

The causes of death for the bills in Arizona, Indiana, and Virginia are unknown due to a lack of legislative history.[118] However, due to the similarities among the five bills introduced in 2016 and 2017, it is likely each of the bills ultimately failed for similar reasons. The bills in Florida and New

> 4. To the best of my knowledge, at the time of the signing the testator was at least 18 years of age, or if under 18 years was a married person, and was of sane mind and under no constraint or undue influence.

S.B. 40 § 2 (N.H.).

112. *Id.*

113. H.B. 277, 119th Leg., Reg. Sess. § 5 (Fla. 2017).

114. *Id.* § 7.

115. *Id.*

116. *Id.* § 6.

117. *Id.*

118. *See Actions for House Bill 1107*, *supra* note 86; *Bill History for SB1298*, *supra* note 86; *HB 1643 Electronic Wills; Process for Execution of Will*, *supra* note 86.

Hampshire were met with outcry from members of each state's legal community.[119] As outlined in this Part, critics argued the bills created more problems than they solved and should not pass until further security measures and procedures could be clearly identified.

A. *Lack of Adequate Safeguards to Protect Testators from Fraud and Exploitation*

Traditional wills law requires a testator to sign a will in the physical presence of two witnesses.[120] Both New Hampshire Senate Bill 40 and Florida House Bill 277 would have allowed for the remote presence of witnesses through the use of an audiovisual conference.[121] This transition from physical presence to remote presence raised concerns regarding an increased risk of undue influence over the testator.[122]

While supporters of the bills argued audiovisual conferencing would provide additional evidence to document the testator's act of signing the will,[123] opponents argued the remote presence of witnesses would allow for others to be in the room, influencing the testator outside the view of the video feed.[124] Additionally, one New Hampshire attorney pointed to the difficulty of assessing testator capacity through video conference as a reason to continue to require witnesses to be physically present.[125]

119. *See* Letter from Michael P. Panebianco, *supra* note 109; *see generally* REAL PROP., PROB. & TR. LAW SECTION OF THE FLA. BAR, WHITE PAPER ON PROPOSED ENACTMENT OF THE FLORIDA ELECTRONIC WILLS ACT 2 (2017), https://www.flprobatelitigation.com/wp-content/uploads/sites/206/2017/05/RPPTL-Electronic-Wills-Act-White-Paper-Final.pdf [https://perma.cc/5C5U-PGYF] [hereinafter FLA. BAR, WHITE PAPER].

120. *See, e.g.*, IOWA CODE § 633.279 (2019); RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.1 cmt. f (AM. LAW INST. 1999).

121. H.B. 277 § 10 (Fla.); S.B. 40, 165th Gen. Court, Reg. Sess. § 2 (N.H. 2017).

122. *See* N.H. H.R. Judiciary Comm., COMMITTEE REPORT S.B. 40, 165th Sess. Gen. Court (2017); FLA. BAR, WHITE PAPER, *supra* note 119, at 2; Letter from Michael P. Panebianco, *supra* note 109, at 1.

123. *Hearing on S.B. 40 Before the S. Commerce Comm.*, 165th Gen. Court, Reg. Sess. (N.H. 2017) [hereinafter *Hearing on S.B. 40*] (statement of Michael Delgado, General Counsel, Bequest, Inc.).

124. Letter from N.H. Chapter of the Nat'l Acad. of Elder Law Attorneys, Inc. to Senate Commerce Comm. (Jan. 31, 2017) [hereinafter Letter from NAELA to Senate] (on file with N.H. Senate Clerk); Letter from Michael P. Panebianco, *supra* note 109, at 1.

125. Letter from John Brandte, N.H attorney, to N.H. House of Representatives Judiciary Comm. 2 (Apr. 18, 2017) [hereinafter Letter from John Brandte] (on file with

If remote presence is allowed in the future, the Florida Bar's Real Property, Probate, and Trust Law Section argues additional safeguards are needed to prevent fraud and undue influence:[126]

> Those safeguards should include, at a minimum, requirements that the testator be asked a list of fundamental questions confirming that their act in signing the will is voluntary and free of undue influence, to identify all other persons present with the testator, and provide a 360-degree view of the room as part of the execution ceremony.[127]

B. *Lack of Adequate Methods of Authenticating Testator Identity*

Critics of electronic wills legislation also argued that the proposed legislation did not have sufficient safeguards in place to ensure the person who created a will online was actually the testator.[128] When originally enacted, Nevada's electronic wills statute required the will to include an authentication characteristic such as a fingerprint, retinal scan, or voice recognition.[129] Rather than requiring some form of biometric authentication, New Hampshire's bill and Florida's bill simply required the signatures of the testator and two witnesses.[130] Critics of New Hampshire's bill pointed to this lack of required biometric authentication as a major shortcoming in the bill.[131] This concern regarding lack of biometric authentication seems to once again stem from the proposed use of audiovisual conferencing for execution, since the execution of a paper will, which always occurs in the physical presence of witnesses, does not require this biometric authentication.[132]

N.H. House Clerk).

126. *See* FLA. BAR, WHITE PAPER, *supra* note 119, at 3.

127. *Id.*

128. *See id.*

129. *See* NEV. REV. STAT. § 133.085(1)(b), (5)(a) (2015), *amended by* 2017 Nev. Stat. 3441–42. Under the amended Nevada law, a will may include either an authentication characteristic of the testator, an electronic signature and seal from a notary public, or electronic signatures from two or more attesting witnesses. NEV. REV. STAT. ANN. § 133.085(1)(b) (West 2019).

130. *See* H.B. 277, 119th Leg., Reg. Sess. § 5 (Fla. 2017); S.B. 40, 165th Gen. Court, Reg. Sess. § 2 (N.H. 2017).

131. *See* Letter from John Brandte, *supra* note 125, at 3; Letter from N.H. Chapter of the Nat'l Acad. of Elder Law Attorneys, Inc. to House Judiciary Comm. (Apr. 18, 2017) [hereinafter Letter from NAELA to House] (on file with N.H. House Clerk).

132. *See, e.g.*, FLA. STAT. ANN. § 732.502 (West 2019).

Florida's bill did account for an additional safeguard when using video conferencing, requiring one of the people communicating through the video to be either an attorney licensed to practice in Florida or a Florida notary public.[133] However, this intended safeguard has been criticized for significantly changing Florida's notarization laws.[134] Although Florida's notarization laws at the time allowed a notary to complete an electronic notarization by attaching an electronic signature,[135] the laws also required the notary to complete a certificate that confirmed "the signer personally appeared before the notary public at the time of the notarization."[136]

The Florida Bar's Real Property, Probate, and Trust Law Section argued that additional regulation and identification safeguards were needed before video-conference notarization could be recognized.[137] As outlined in Part VIII.A.1, Florida has since updated its notarization laws to permit remote, electronic notarization and provide the necessary safeguards. Future, proposed electronic wills bills simply need to ensure this issue is addressed within the text of the bill or within the state's existing statutes.

C. *Lack of Adequate Storage, Preservation, and Security Protocols*

Electronic wills legislation also raises concerns regarding the storage, preservation, and security protocols needed to protect electronic wills.[138] As one critic pointed out, wills often need to be stored for decades before use, and digital storage changes over time—from floppy disk to CD-ROM to the cloud.[139] Proposed electronic wills legislation has not considered the protocols for transferring storage as mediums change.[140]

While both New Hampshire's bill and Florida's bill provided for storage of electronic wills with a qualified custodian, the bills failed to establish any security standards the custodian would need to meet or any liability the custodian would face should the custodian fail to properly store and preserve the will.[141] Additionally, the bills did not account for the reality

133. H.B. 277 § 7 (Fla.).
134. FLA. BAR, WHITE PAPER, *supra* note 119, at 3.
135. FLA. STAT. ANN. § 117.021.
136. *Id.* § 117.05.
137. FLA. BAR, WHITE PAPER, *supra* note 119, at 3–4.
138. *Id.* at 4.
139. Letter from NAELA to House, *supra* note 131.
140. *Id.*
141. *See* H.B. 277, 119th Leg., Reg. Sess. §§ 6, 9 (Fla. 2017); S.B. 40, 165th Gen. Court, Reg. Sess. § 2 (N.H. 2017); *see also* Letter from Michael P. Panebianco, *supra* note

that corporations would establish themselves as qualified custodians.[142] Some of those corporate–qualified custodians would eventually go out of business and require protocols to ensure all wills are properly transferred to a new custodian.[143]

Aside from the long-term storage issues, electronic wills create a new risk of fraud through hacking electronic databases and altering electronic wills.[144] Supporters of the proposed electronic wills legislation argued paper wills are also subject to fraud by simply changing out a page of the will.[145] However, with the recent increased frequency of hacking events, which have targeted everything from retail stores to government databases, the possibility of hacking an electronically stored will seems more likely than physically exchanging a page of a paper will.[146]

In our world of electronic commerce, technology exists to reduce the chances of hacking or undetected document alteration.[147] State legislatures simply need to account for this technology when writing electronic wills legislation.[148] The possibility of the use of modern blockchain technology and PKI is discussed further in Part VII.B of this Note. Additionally, critics suggest state licensing and regulation of qualified custodians will be needed to ensure that minimum security standards are in place and those who fail to use those standards are held accountable.[149]

VI. TAKE TWO: 2018 PROPOSED LEGISLATION

Although concerns regarding electronic wills may have killed legislation in Arizona, Indiana, and Virginia in 2017,[150] each state proposed

109, at 2.

142. *See* Letter from NAELA to House, *supra* note 131.

143. *See id.* Protocols needed to address the transfer from one corporate custodian to a new corporate custodian are currently missing from the bill's language. *See id.*; *see also* S.B. 40 § 8 (N.H.) (allowing a qualified custodian to unilaterally decide to stop serving as the custodian and making the designation of a successor custodian optional).

144. FLA. BAR, WHITE PAPER, *supra* note 119, at 4.

145. *Hearing on S.B. 40*, *supra* note 123.

146. *See* Letter from NAELA to House, *supra* note 131.

147. *See* FLA. BAR, WHITE PAPER, *supra* note 119, at 4.

148. *Id.*

149. *See id.* at 4–5.

150. *See supra* Table 1.

a new bill in 2018.[151] This Part considers whether each state learned from the issues raised in 2017 and changed the bills to adequately address these concerns.

TABLE 2: 2018 BILL HISTORIES[152]

	Date Introduced	**Committees Assigned**	**Action & Resolution**
Virginia House Bill 1403	Jan. 15, 2018	House: Courts of Justice	Subcommittee failed to recommend the bill for reporting with a vote of 3–5; left in committee with no further action taken since February 15, 2018
Arizona House Bill 2471	Jan. 24, 2018	House: Judiciary and Rules; Senate: Judiciary and Rules	Passed unanimously in the house on February 21, 2018; amended and passed in the senate on April 9, 2018; passed in the house with a vote of 58–1 on April 17, 2018; vetoed by the Governor on April 20, 2018
Arizona House Bill 2656	April 30, 2018	None	Passed in the house with a vote of 49–11 on May 3, 2018;[153] passed in the

151. *See* H.B. 2471, 53d Leg., 2d Reg. Sess. (Ariz. 2018); H.B. 1303, 120th Gen. Assemb., 2d Reg. Sess. (Ind. 2018); H.B. 1403, 2018 Gen. Assemb., Reg. Sess. (Va. 2018).

152. *Actions for House Bill 1303*, *supra* note 9; *Bill History for HB2471*, ARIZ. ST. LEGISLATURE, https://apps.azleg.gov/BillStatus/BillOverview/70520 [https://perma.cc/TCU7-RRQX]; *Bill History for HB2656*, ARIZ. ST. LEGISLATURE, https://apps.azleg.gov/BillStatus/BillOverview/70954? [https://perma.cc/FQ4K-B8HU]; *HB 1403 Electronic Wills; Requirements*, VA.'S LEGIS. INFO. SYS., http://lis.virginia.gov/cgi-bin/legp604.exe?181+sum+HB1403 [https://perma.cc/PH9T-BA9L].

153. Interestingly, nine members of the house who originally voted in favor of House Bill 2471 subsequently voted against House Bill 2656 less than one month later, even though the text of the two bills were identical. *Compare House Final Reading – HB2471*, ARIZ. ST. LEGISLATURE, https://apps.azleg.gov/BillStatus/BillOverview/70520? [https://perma.cc/TCU7-RRQX] (follow "Show House FINAL" hyperlink), *with House Third Reading – HB2656*, https://apps.azleg.gov/BillStatus/BillOverview/70954? [https://

			senate with a vote of 25–4 with one abstention on May 3, 2018; signed by the Governor on May 16, 2018
Indiana House Bill 1303	Jan. 11, 2018	House: Judiciary; Senate: Judiciary	Passed unanimously in the house on January 29, 2018; passed in the senate with vote of 49–1 on February 27, 2018; signed by the Governor on March 8, 2018

A. *Virginia House Bill 1403 (2018)*

Virginia House Bill 1403 sought to add a new section to the Virginia Code outlining the requirements for forming a valid electronic will.[154] Much like the Virginia bill introduced in 2016 and considered in 2017, House Bill 1403 would have required attestation in the presence of the testator through the electronic signature of either two witnesses or a notary public.[155] Also like the earlier bill, House Bill 1403 defined *presence* to include both physical presence in the same location and remote physical presence through a live audiovisual conference.[156]

As discussed in Part V, this use of remote physical presence has raised the most concerns from those opposing electronic wills legislation. However, House Bill 1403 did attempt to correct some of the shortcomings of Virginia's 2016 bill by explicitly requiring any notary attestation to be provided by an electronic notary and include an electronic seal, a safeguard that was lacking in the 2016 bill and would flag any unauthorized attempt to alter the will.[157]

perma.cc/FQ4K-B8HU] (follow "Show House THIRD" hyperlink). Perhaps, after a second chance to reflect on the changes in the senate's amendments, these house members became uncomfortable with the broader scope of the bill. For a discussion of the text of these bills, see *infra* Part VI.B.

154. H.B. 1403 § 1 (Va.).

155. *Id.*; H.B. 1643, 2017 Gen. Assemb., Reg. Sess. § 1 (Va. 2017).

156. H.B. 1403 § 1 (Va. 2018); H.B. 1643 § 1 (Va. 2017).

157. *Compare* H.B. 1403 § 1 (Va.), *with Frequently Asked Questions About Becoming a Virginia Electronic Notary*, SEC'Y COMMONWEALTH, https://commonwealth.virginia.gov/official-documents/notary-commissions/enotary-faq/ [https:

While this change would have helped to protect wills with notary attestation, it would not have provided any safeguard for wills utilizing witness attestation and would not have alleviated any of the remote-presence concerns previously discussed.[158] Furthermore, House Bill 1403 removed one additional safeguard previously seen in the 2016 bill—rather than requiring a qualified custodian to make the will valid, House Bill 1403 would have simply permitted the use of a qualified custodian to make the will self-proving.[159] Although this change is consistent with the language of the other proposed electronic wills bills, it removed a safeguard that otherwise existed in the prior bill without adding any additional safeguards.[160] Interestingly, it seems the drafters of House Bill 1403 considered adding a biometric safeguard to the bill but failed to do so. The bill provided a definition of *authentication characteristic* that included biometrics, such as fingerprints, retinal scans, and voice and face recognition, yet the term failed to appear anywhere else in the bill.[161] With all of these issues, it is not surprising that the subcommittee failed to recommend the bill for reporting.[162]

B. *Arizona House Bill 2471 (2018) and Arizona House Bill 2656 (2018)*

Arizona House Bill 2471, as originally introduced, made significant strides in addressing many of the concerns raised in Part V of this Note.[163] As originally introduced and passed by the house, the bill would have completely cut out the possibility of attestation by two witnesses.[164] Instead, House Bill 2471 would have required an electronic will to include either "the electronic signature and electronic seal of an electronic notary public" or "an authentication characteristic of the testator."[165] The original bill defined *authentication characteristic* as a characteristic unique to a certain person and

//perma.cc/6A7H-J45K].

158. *See supra* Part V.

159. *Compare* H.B. 1643 § 1 (Va. 2017) ("No electronic will is valid unless it: 1. [i]s written, created, and stored in an authoritative electronic record under the control of the qualified custodian designated therein . . . ."), *with* H.B. 1403 § 1 (Va. 2018) ("An electronic will is made self-proving . . . if . . . [t]he electronic will designates a qualified custodian to maintain custody of the electronic document of the electronic will . . . .").

160. *See, e.g.*, H.B. 277, 119th Leg., Reg. Sess. § 6 (Fla. 2017).

161. H.B. 1403 § 1 (Va.).

162. *See HB 1403 Electronic Wills; Requirements*, *supra* note 152.

163. *See* H.B. 2471, 53d Leg., 2d Reg. Sess. § 3 (Ariz. 2018).

164. *See id.*

165. *Id.*

"capable of measurement and recognition in an electronic record as a biological aspect of or physical act performed by that person."[166] It included biometric indicators such as fingerprint and retinal scans, as well as voice and facial recognition.[167] Replacing the two-witness-attestation option for an authentication characteristic would have provided the biometric safeguard that opponents of the 2017 electronic wills bills claimed was lacking and would have done away with the fraud concerns raised by remote witness attestation.[168]

However, these safeguards were adjusted when the bill was amended by the senate.[169] Rather than requiring electronic notarization or biometric safeguards to make an electronic will valid, the senate's amendments reverted the requirements back to allowing for the electronic signature of two witnesses.[170] The bill did, however, require the witnesses to be "physically present with the testator when the testator electronically signed the will."[171] Additionally, the bill outlined the following requirements for a valid electronic signature:

> "Electronic signature" means an electronic method or process that through the application of a security procedure allows a determination that the electronic signature at the time it was executed was all of the following:
>
> (a) Unique to the person using it.
>
> (b) Capable of verification.
>
> (c) Under the sole control of the person using it.

166. *Id.*

167. *Id.*

168. *See supra* Parts V.A–B.

169. *See* H.B. 2471 § 5 (Ariz.) (Senate engrossed version).

170. *Id.*

171. *Id.* One must assume *physically present* means that the witness must be in the same room as the testator at the time of witnessing, rather than witnessing through any remote, electronic means; however, the bill did not take the step to define the term as seen in Indiana's House Bill 1303. *See* H.B. 1303, 120th Gen. Assemb., 2d Reg. Sess. § 4 (Ind. 2018) (codified at IND. CODE ANN. § 29-1-21-4 (West 2019)); *infra* text accompanying note 186.

> (d) Linked to the electronic document to which it relates in a manner so that if the document is changed the electronic signature is invalidated.[172]

Rather than biometric indicators, the amended bill simply required the electronic will to include a copy of the testator's government-issued identification card.[173] The additional protections of an electronic signature and seal of a notary—which would have been required for all electronic wills under the original bill—was only required under the amended bill in order to make the will self-proving.[174] Additionally, to be self-proving, the bill required the electronic will to designate a qualified custodian.[175] The qualified custodian would be required to "consistently employ and store electronic records of electronic wills in a system that protects electronic records from destruction, alteration or unauthorized access and detects any change to an electronic record."[176]

Although this amended bill passed through the state's legislature, it was ultimately vetoed by Governor Douglas Ducey on April 20, 2018.[177] Unlike the 2017 letter from Florida Governor Rick Scott, Governor Ducey's letter simply states, "Today I vetoed HB 2471," without any further explanation of the matter.[178] However, this veto did not discourage the legislature, as evidenced by the fact that a second 2018 electronic wills bill was introduced just 10 days later.[179] The text of the "new" House Bill 2656 was identical to that of the senate-amended House Bill 2471.[180] House Bill 2656 was first read in the House on April 30, 2018, passed in both the House and Senate just three days later, and signed by the Governor on May 16,

172. H.B. 2471 § 5 (Ariz.) (Senate engrossed version). In a 2019 amendment to the legislation enacted in 2018, an additional requirement was added to the electronic signature definition, requiring the electronic signature to be "attached to or logically associated with an electronic record and . . . executed or adopted by a person with the intent to sign the electronic record." H.B. 2054, 54th Leg., 1st Reg. Sess. § 1 (Ariz. 2019).

173. H.B. 2471 § 5 (Ariz.) (Senate engrossed version).

174. *Id.*

175. *Id.*

176. *Id.*

177. *Bill History for HB2471*, *supra* note 152.

178. Letter from Douglas A. Ducey, Governor, to J.D. Mesnard, Speaker of the House (April 20, 2018), https://www.azleg.gov/govlettr/53leg/2r/hb2471.pdf [https://perma.cc/FJ5W-M4VE].

179. *Bill History for HB2656*, *supra* note 152.

180. *Compare* H.B. 2471, 53d Leg., 2d Reg. Sess. (Ariz. 2018) (Senate engrossed version), *with* H.B. 2656, 53d Leg., 2d Reg. Sess. (Ariz. 2018).

2018.[181] Effective June 30, 2019, electronic wills that comply with the requirements discussed above are valid in Arizona.[182]

C. *Indiana House Bill 1303 (2018)*

Much like Arizona's bills, Indiana House Bill 1303 addressed the concerns raised regarding two-witness attestation by requiring physical presence.[183] To be valid under the 2018 Indiana law, an electronic will must be electronically signed by the testator and two attesting witnesses, with each electronic signature placed in the actual presence of all signing parties.[184] The testator must also "state, in the actual presence of the attesting witnesses, that the instrument to be electronically signed is the testator's will."[185] House Bill 1303 took the additional step of defining *actual presence* to mean "physically present in the same physical location" and explicitly excludes "any form of observation or interaction that is conducted by means of audio, visual, or audiovisual telecommunication or similar technological means."[186] While this exclusion alleviated the concerns raised regarding remote attestation by simply not allowing it, Indiana—and Arizona—might look to expand the scope of recognized electronic wills in the future through the use of the technological advances discussed in Part VII. For the time being, electronic wills that comply with the requirements discussed above became effective in Indiana on July 1, 2018.[187]

VII. ADVANCES IN TECHNOLOGY ADDRESS MANY CONCERNS

As discussed in Part V of this Note, modern technological advances may be used to address many of the concerns raised regarding electronic wills legislation so long as the use of these technologies are accounted for within the text of the legislation. Biometric authentication methods such as fingerprint scanning and facial recognition are already available within the security systems of many electronic devices and are only becoming more

181. *Bill History for HB2656*, *supra* note 152.

182. H.B. 2656 § 8 (Ariz.).

183. *See* H.B. 1303, 120th Gen. Assemb., 2d Reg. Sess. § 4 (Ind. 2018) (codified at IND. CODE ANN. § 29-1-21-4 (West 2019)).

184. H.B. 1303 § 4 (Ind.) (codified at IND. CODE ANN. § 29-1-21-4).

185. *Id.*

186. *Id.* § 3 (codified at IND. CODE ANN. § 29-1-21-3).

187. H.B. 1303 § 1 (Ind.).

popular.[188] Hacking concerns can be addressed through information security protocols and the use of blockchain and PKI.[189] Laws permitting the use of electronic notarization already exist in many states and can serve to guide others in establishing the necessary security protocols.[190]

Critics of the electronic wills legislation proposed in 2017 suggested that legislators wait for the ULC to research these issues further and create uniform laws that fully address the concerns raised by electronic wills.[191] When drafting its uniform rules, the ULC did account for the use of electronic notarization technology, stating, "[A]n electronic notarization may provide more protection for a will than a paper notarization."[192] As discussed in Part VIII.B of this Note, the ULC did not make use of any other technologies, such as blockchain and PKI, in the UEWA, and states might consider adding these options in future legislation.

A. *Blockchain and Public Key Infrastructure May Be Used to Address Hacking and Fraud Concerns*

It has been suggested that blockchain can be used as a means of protecting electronic wills against hacking and unauthorized alterations.[193] A blockchain is an encrypted database shared among the members of a participating network.[194] The database includes a record of every transaction entered within the database, and each transaction must be authenticated by half of the members of the network.[195] As explained by one author, "This implies that no participant or user as an individual can modify any data within a Blockchain without the consent of other users (participants)."[196]

While blockchain has primarily been used in connection with the cryptocurrency Bitcoin, many believe it can be expanded over time to be used for everything from contracts to voting systems to medical records.[197]

188. *See, e.g.*, *About Touch ID Advanced Security Technology*, *supra* note 78.

189. *See infra* Part VII.A; *see also* FLA. BAR, WHITE PAPER, *supra* note 119, at 4.

190. *See infra* Part VII.B.

191. FLA. BAR, WHITE PAPER, *supra* note 119, at 1; Letter from Michael P. Panebianco, *supra* note 109, at 2.

192. UNIF. ELEC. WILLS ACT § 5 note (UNIF. LAW COMM'N 2019).

193. DeNicuolo, *supra* note 7, at 78.

194. *See* VINCENZO MORABITO, BUSINESS INNOVATION THROUGH BLOCKCHAIN: THE B^3 PERSPECTIVE 4 (2017).

195. *Id.*

196. *Id.*

197. *See Blockchain Explained*, INVESTOPEDIA, https://www.investopedia.com/

Arizona passed legislation in 2017 recognizing blockchain signatures and contracts for electronic commerce transactions.[198] A Vermont statute also allows entry of blockchain records into evidence to determine issues such as contracting parties and terms, ownership and transfer of title, a person's identity, record authenticity, and integrity of communication records.[199]

Expanding the law to allow for the use of blockchain as proof that a will has not been altered would address one concern related to the use of electronic wills.[200] As one author said, "After all, Blockchain's purpose is to provide an unchangeable, irrefutable, distributed record of transactions."[201] However, this would only protect a will against fraudulent changes and would not address the larger concern regarding authentication of testator identity.[202] Blockchain cannot be used—on its own—to prove that a certain person created a document.[203] Instead, PKI can prove the creator's identity.[204] PKI certificates have been compared to using a passport: they are an identity-authentication tool, issued by a controlled source, that can validate the ownership and origin of the certificate.[205]

A PKI certificate is tied to a pair of alpha-numeric keys—one private key and one public—through the use of a mathematical process.[206] The private key can be used to encrypt a file, and only the associated public key can be used to decrypt the file.[207] Unless the private key has been stolen or given to someone else, the fact that the public key successfully decrypts the

terms/b/blockchain.asp [https://perma.cc/4DFP-F5K7].

198. ARIZ. REV. STAT. ANN. § 44-7061 (2019).

199. *See* VT. STAT. ANN. tit. 12, § 1913 (West 2019).

200. *See Blockchain Explained*, *supra* note 197.

201. Ron Ih, *Blockchain vs PKI: What Is the Right Security Solution?*, KYRIO (Aug. 13, 2018), https://www.kyrio.com/blog/blockchain-vs-pki-what-is-the-right-security-solution [https://perma.cc/N7LP-UUGX]. Ron Ih is the director of business development for Kyrio, a company that designs and governs PKI systems. *See id.*

202. *See* FLA. BAR, WHITE PAPER, *supra* note 119, at 2–3.

203. Ih, *supra* note 201 ("[A]lthough a Blockchain can prove that a particular transaction occurred and wasn't altered, it can't prove that a particular person or entity conducted that transaction. . . . In fact, Bitcoin's implementation of Blockchain was intended to allow for transactor anonymity in case you want to pay for something and not reveal who you are. To this day, Bitcoin's creator is unknown.").

204. *See id.*

205. *Id.*

206. Posey, *supra* note 93.

207. *Id.*

file confirms the identity of the person who created the file as the owner of the private key.[208] As a result, the PKI process works as a secured, digital signature and could be used in electronic wills as a means of authenticating the testator's identity. When used together, blockchain and PKI would combat fraud concerns by authenticating both the testator's identity and the original contents of the electronic will.[209]

When drafting future electronic wills legislation, states should consider whether blockchain and PKI technology should be referenced as a means of ensuring document security protocols. Admittedly, many states may not wish to exert the cost of establishing the necessary systems to regulate and maintain these technologies.[210] However, as with any technology, as the use of blockchain and PKI become more commonplace, it is likely these costs will reduce over time.

B. *Electronic Notarization Becoming More Widely Accepted*

An alternative technology that has seen tremendous growth in recent years and can be used to alleviate the concerns surrounding the security of electronic wills is electronic notarization.[211] When a document is electronically notarized, a notary affixes an electronic signature and seal to the electronic document.[212] Once this occurs, any "unauthorized attempts to alter the document will be evident to relying parties."[213] In addition to the ability to detect an alteration in the electronic document, a key point of concern regarding proposed electronic wills legislation is the use of video conferencing for witness attestation.[214] One method for combatting this

208. *Id.*

209. *See* Ih, *supra* note 201 ("The bottom line is that both Blockchain and PKI use cryptography, but they're different beasts for different purposes. You use a Blockchain to verify a transaction record. You use PKI to verify the identity of an entity bearing a certificate. That said, there is nothing preventing the use of Blockchain and PKI in combination so that you can not only verify a transaction but also verify the identity of the transactor.").

210. *See* Boddery, *supra* note 3, at 211.

211. *See* Pem Guerry, *2017 Poised to Be Landmark Year for E-Notarization Adoption*, HOUSINGWIRE (May 5, 2017), https://www.housingwire.com/articles/40060-poised-to-be-landmark-year-for-e-notarization-adoption/ [https://perma.cc/DWP4-Q2PF].

212. *Frequently Asked Questions About Becoming a Virginia Electronic Notary*, *supra* note 157.

213. *Id.*

214. *See* Letter from NAELA to Senate, *supra* note 124; Letter from Michael P.

concern, as seen in Florida's bill, would be to require a registered online notary to take part in the video conference.[215] In order to utilize the benefits of remote electronic notarization, states must ensure that their existing statutes or the proposed electronic wills bill provides for the procedural safeguards needed for remote notarization.[216]

1. *Virginia Set the Original Standard for Electronic Notarization*

In 2011, Virginia became the first state to adopt legislation authorizing electronic notarization.[217] The Florida Bar's Real Property, Probate, and Trust Law Section suggested that the same statutory safeguards used in Virginia would assist in correcting the deficiencies seen in Florida House Bill 277.[218] As discussed in Part VIII.A, the Florida legislature took this advice when it introduced its next piece of electronic wills legislation in 2019.[219]

In Virginia, the Secretary of the Commonwealth, in partnership with the Virginia Information Technologies Agency, publishes an Electronic Notarization Assurance Standard outlining the necessary procedures and standards electronic notaries must follow.[220] To become an electronic notary, a notary must complete an additional application process certifying compliance with these standards, provide a description of the technology the notary will use to apply electronic signatures, and then use that technology to apply the application signature.[221] The signature used by an electronic notary must be:

Panebianco, *supra* note 109, at 1.

215. H.B. 409, 121st Leg., Reg. Sess. § 13 (Fla. 2019) (codified at FLA. STAT. ANN. § 732.522 (West 2019)).

216. FLA. BAR, WHITE PAPER, *supra* note 119, at 3.

217. *See Remote Electronic Notarization*, NAT'L ASS'N SECRETARIES ST., https://www.nass.org/initiatives/remote-electronic-notarization [https://perma.cc/P4EW-WQWY].

218. FLA. BAR, WHITE PAPER, *supra* note 119, at 3.

219. *See* H.B. 409 § 13 (Fla.).

220. VA. CODE ANN. § 47.1-6.1 (West 2019); SEC'Y OF THE COMMONWEALTH OF RICHMOND, VA., THE VIRGINIA ELECTRONIC NOTARIZATION ASSURANCE STANDARD 1 (2013), https://www.commonwealth.virginia.gov/media/governorvirginiagov/secretary-of-the-commonwealth/pdf/VAe-NotarizationStandard2013Version10.pdf [https://perma.cc/JV6X-4ZV7].

221. VA. CODE ANN. § 47.1-7; *see also Electronic Notary Application Instructions*, SECRETARY COMMONWEALTH., https://commonwealth.virginia.gov/official-documents/notary-commissions/enotary/ [https://perma.cc/J9JC-GJTC].

> (i) attributed or uniquely linked to the electronic notary;
>
> (ii) capable of independent verification;
>
> (iii) created using means that the notary can maintain under the electronic notary's exclusive control; and
>
> (iv) linked to the electronic document to which it relates in such a manner that any subsequent change of the electronic document is detectable.[222]

Any time an existing electronic notary changes the technology used to apply electronic signatures, the notary must provide notice to the secretary within 90 days.[223]

In addition to the signature requirements, all electronically notarized documents must include a digital certificate affixed to the electronic document in a way that allows for detection of any future unauthorized modifications.[224] When creating the electronic signature and seal, the technology used must be "protected by use of at least one factor of authentication such as a password, token, biometric, or other form of authentication."[225]

In Virginia, when a notary completes an electronic notarization through video conference, the notary must take additional measures to confirm the identity of the person in the video.[226] Identity can be confirmed through personal knowledge, prior, in-person identity proofing "in accordance with the specifications of the Federal Bridge Certification Authority," or a digital certificate that uses biometric data or a personal identity verification card "designed, issued, and managed in accordance with the specifications published by the National Institute of Standards and Technology."[227]

222. SEC'Y OF THE COMMONWEALTH OF RICHMOND, VA., *supra* note 220, § 2.1(a).
223. VA. CODE ANN. § 47.1-7.
224. SEC'Y OF THE COMMONWEALTH OF RICHMOND, VA., *supra* note 220, § 2.1(b).
225. *Id.* § 2.2.
226. VA. CODE ANN. § 47.1-2.
227. *Id.*

2. *Expansion of Electronic Notarization in 2017 Through 2019*

In 2017 through 2019, nineteen additional states enacted legislation authorizing remote, electronic notarization,[228] and two additional states enacted legislation authorizing the development of remote, electronic-notarization platforms and rules.[229] Much of this expansion in electronic notarization legislation occurred as a result of the ULC's approval of its Revised Uniform Law on Notarial Acts (RULONA) in July 2018.[230] The ULC summarized the remote, electronic-notarization portion of the RULONA as follows:

> This amendment authorizes notaries public to perform notarial acts for remotely located individuals. The requirements set out in the amendment enable the notary public to verify the identity of the remote individual. Through synchronous audio and visual communication, the notary also will be able to assess the competency of the individual and whether the individual's acts are knowingly and voluntarily made.[231]

Of the nineteen states that recently enacted electronic notarization legislation, nine enacted the RULONA.[232]

The RULONA permits a notary public to perform remote notarization services using electronic "communication technology," defined as "an electronic device or process that . . . allows a notary public and a remotely located individual to communicate with each other simultaneously by sight and sound," including capabilities for those who have vision, hearing, or speech impairment.[233] The notary public must have "satisfactory evidence of the identity of the remotely located individual" either through personal knowledge, an oath or affirmation from a credible witness who appears physically before the notary public, or the use of at least two forms of identity

228. *Remote Electronic Notarization*, *supra* note 217. These states include Arizona, Florida, Idaho, Indiana, Iowa, Kentucky, Maryland, Minnesota, Montana, Nebraska, North Dakota, Nevada, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, and Washington. *Id.*

229. *Id.* These states include Michigan and Vermont. *Id.*

230. *See* REVISED UNIF. LAW ON NOTARIAL ACTS (UNIF. LAW COMM'N 2018).

231. *Id.* at prefatory note to 2018 amendment, § 14(a).

232. *2018 Law on Notarial Acts, Revised*, UNIFORM L. COMMISSION, https://www.uniformlaws.org/committees/community-home?communitykey=8acec8a5-123b-4724-b131-e5ca8cc6323e&tab=groupdetails.

233. REVISED UNIF. LAW ON NOTARIAL ACTS § 14A(a)(1).

proofing.[234] The notary is also required to create an audiovisual recording of any remote, electronic-notarization services.[235] Additionally, the notary must follow any rules adopted by the commissioning officer or agency responsible for adopting notary rules in the enacting state.[236] This would be something similar to the Electronic Notarization Assurance Standards adopted in Virginia.[237] When adopting or changing these rules, the RULONA further obligates the commissioning officer or agency to consider the most recent standards promulgated by national standard-setting organizations, the National Association of Secretaries of State, and other jurisdictions that have enacted rules similar to those in the RULONA.[238] This will help to ensure continued uniformity of remote notarization laws moving forward.

At the time of the writing of this Note, twelve additional states have pending electronic notarization legislation.[239] As states adopt electronic notarization legislation, they can utilize the safeguards put in place through this legislation to help advance electronic wills legislation. This is particularly true when the electronic wills legislation includes provisions that permit remote witnessing, as seen in Florida's 2019 legislation discussed in the next Part.

VIII. REVIVAL OF ELECTRONIC WILLS LEGISLATION IN 2019

The future of electronic wills legislation took two major steps forward in 2019. First, Florida resolved the controversy surrounding its prior electronic wills legislation by passing an electronic legal documents bill that provides for remote online notarization to make electronic wills and other

234. *Id.* § 14A(c)(1). For purposes of the RULONA and state statutes enacting the RULONA, "'Identity proofing' means a process or service by which a third person provides a notary public with a means to verify the identity of a remotely located individual by a review of personal information from public or private data sources." *Id.* § 14A(a)(3).

235. *Id.* § 14A(c)(3).

236. *See id.* § 14A(h).

237. *See* VA. CODE ANN. § 47.1-6.1 (West 2019).

238. REVISED UNIF. LAW ON NOTARIAL ACTS § 14A(i). The enacting body must also consider "the views of governmental officials and entities and other interested persons." *Id.* § 14A(i)(3).

239. *See Remote Electronic Notarization*, *supra* note 217. These states include Alabama, Alaska, California, Colorado, Connecticut, Hawaii, Louisiana, Missouri, New Jersey, New Mexico, New York, and South Carolina. *Id.*

electronic legal documents valid.[240] The Florida Judiciary Committee said the following regarding the impact of this bill:

> [T]he bill puts Florida at the forefront of recognizing the validity of electronic legal documents, such as wills and powers of attorney, by authorizing their electronic creation as well as authorizing remote signing, remote notarization, and remote witnessing, even by a witness in separate location from both the notary and the principle signer.[241]

In addition to Florida's electronic legal documents bill, the ULC approved the first UEWA,[242] which will provide a foundation for additional states to pass their own electronic wills legislation in the future.

TABLE 3: 2019 BILL HISTORIES[243]

	Date Introduced	**Committees Assigned**	**Action & Resolution**
Florida House Bill 409	Jan. 22, 2019	House: Judiciary; Senate: Judiciary	Passed in the house with a vote of 87–28 on April 24, 2019; passed unanimously in the senate on May 2, 2019; signed by the Governor on June 7, 2019

A. *Florida House Bill 409*

1. *Remote Electronic Notarization Permitted*

House Bill 409 started by amending Florida's electronic notary laws and adding new requirements for remote, online notarizations. First, House Bill 409 added a new requirement for a notary's electronic signature. In addition to the previous requirements for electronic notary signatures—

240. H.B. 409, 121st Leg., Reg. Sess. § 3 (Fla. 2019).

241. SENATE JUDICIARY COMM. ET AL., CS/CS/HB 409 — ELECTRONIC LEGAL DOCUMENTS 1 (2019), https://www.flsenate.gov/PublishedContent/Session/2019/BillSummary/Judiciary_JU0409ju_0409.pdf [https://perma.cc/3BDC-DD97].

242. UNIF. ELEC. WILLS ACT (UNIF. LAW COMM'N 2019).

243. *CS/CS/HB 409: Electronic Legal Documents*, FLA. SENATE, https://www.flsenate.gov/Session/Bill/2019/00409 [https://perma.cc/779E-GHNB].

"unique to the notary public," "capable of independent verification," and "retained under the notary public's sole control"—electronic notary signatures under the new law must "include[] access protection through the use of passwords or codes under control of the notary public."[244] The new law further provides that the Department of State must collaborate with the Agency for State Technology to "adopt rules establishing standards for tamper-evident technologies that will indicate any alteration or change to an electronic record after completion of an electronic notarial act" by January 1, 2020.[245]

In addition to tamper-evident technologies, the Department of State must establish rules for online notarization standards, which must address issues such as "[i]dentity proofing,[246] credential analysis,[247] unauthorized interception, remote presentation,[248] audio-video communication technology, and retention of electronic journals and copies of audio-video communications recordings in a secure repository."[249] These standards are necessary because House Bill 409 added a new set of laws for online notarizations, allowing electronic notarization to occur both when the notary is "(a) [i]n the physical presence of another person; or (b) [o]utside of the physical presence of another person, but able to see, hear, and communicate with the person by means of audio-video communication technology."[250] The new laws also allow online notary publics to supervise the witnessing of

244. H.B. 409 § 3 (Fla.) (codified at FLA. STAT. ANN. § 117.021(2) (West 2019)).

245. *Id.* (codified at FLA. STAT. ANN. § 117.295).

246. "'Identity proofing' means a process or service in compliance with applicable law in which a third party affirms the identity of an individual through use of public or proprietary data sources, which may include by means of knowledge-based authentication or biometric verification." *Id.* § 6 (codified at FLA. STAT. ANN. § 117.201(7)).

247. "'Credential analysis' means a process or service, in compliance with applicable law, in which a third party aids a public notary in affirming the validity of a government-issued identification credential and data thereon through review of public or proprietary data sources." *Id.* (codified at FLA. STAT. ANN. § 117.201(3)).

248. "'Remote presentation' means transmission of an image of a government-issued identification credential that is of sufficient quality to enable the online notary public to identify the individual seeking the notary's services and to perform credential analysis through audio-video communication technology." *Id.* (codified at FLA. STAT. ANN. § 117.201(15)).

249. *Id.* § 16 (codified at FLA. STAT. ANN. § 117.295(1)(c)). Until the Department of State adopts the required rules, section 117.295(3) sets forth the minimum standards that must be followed when an electronic notarization is performed.

250. *Id.* § 6 (codified at FLA. STAT. ANN. § 117.201(1)).

electronic records, such as electronic wills, even if the witness is in a remote location from both the notary and the principal whose document is being notarized. This situation is discussed in more detail in Part VIII.A.2. Any time online notarization is used, the notary is required to "confirm the identity of a principal and any witness appearing online, at the time that the signature is taken . . . and record the two-way audio-video conference session between the notary public and the principal and any witnesses."[251]

Anyone wishing to complete online notarization services must complete a separate registration with the Department of State, which identifies the Remote Online Notarization (RON) service provider the notary will use.[252] A RON service provider "provides audio–video communication technology and related processes, services, software, data storage, or other services to online notaries public for the purpose of directly facilitating their performance of online notarizations"[253] and must comply with the rules adopted by the Department of State in order for the online notarization registration to be approved.[254] Additionally, an online notary must complete a "course covering the duties, obligations, and technology requirements for serving as an online notary public"[255] and obtain a $25,000 bond "payable to any individual harmed as a result of a breach of duty by the registrant acting in his or her official capacity as an online notary public."[256] Once an online notary begins completing online notarization services, the online notary must keep an electronic journal of all online notarizations performed and "retain an uninterrupted and unedited copy of the recording of the audio–video communication in which an online notarization is performed."[257]

2. *Electronic Wills Permitted*

Under Florida's Probate Code, a will must be signed or acknowledged by the testator in the presence of two witnesses who must sign in the presence of the testator and each other.[258] House Bill 409 added section

251. *Id.* § 13 (codified at FLA. STAT. ANN. § 117.265).
252. *Id.* § 9 (codified at FLA. STAT. ANN. § 117.225).
253. *Id.* § 6 (codified at FLA. STAT. ANN. § 117.201(14)).
254. *Id.* § 9 (codified at FLA. STAT. ANN. § 117.225(5)).
255. *Id.* (codified at FLA. STAT. ANN. § 117.225(2)).
256. *Id.* (codified at FLA. STAT. ANN. § 117.225(6)).
257. *Id.* § 11 (codified at FLA. STAT. ANN. § 117.245).
258. FLA. STAT. ANN. § 732.502(1)(c).

732.522 to the Florida Statutes, which permits the creation of electronic wills by allowing for electronic signatures.[259] Additionally, House Bill 409 permits remote witnessing through the use of audiovisual communication technology if the remote witnessing is supervised by a notary public—following the rules for online notarization—and "the witness hears the principal make a statement acknowledging that the principal has signed the electronic record."[260] The online notarization rules require the notary to confirm the identity of the remote witness and require the remote witness to "verbally confirm that he or she is a resident of and physically located within the United States or a territory of the United States at the time of witnessing."[261]

As discussed in Part V.A, remote witnessing is an issue that raised significant fraud concerns when electronic wills legislation was killed in 2017 and 2018.[262] Likely in recognition of these concerns, additional safeguards have been built into House Bill 409.[263] When the document that is being notarized is a will, testamentary trust, health care directive, or power of attorney, the RON service provider must require the principal to answer a specific series of questions related to the principal's competence, any influence placed on the principal while creating the documents, and any individuals in the room with the principal at the time of signing.[264]

The Florida Judiciary Committee made further assurances regarding the prevention of elder abuse, stating, "[T]he bill contains safeguards for vulnerable adults and provides that witnesses must be physically present with a vulnerable adult in order for a legal document, such as a will or power of attorney, to be given any effect."[265] In fact, the RON service provider must provide the following notice for all remote witnessing:

> If you are a vulnerable adult as defined in s. 415.102, Florida Statutes, the documents you are about to sign are not valid if witnessed by means

259. H.B. 409 § 33 (Fla. 2019) (codified at FLA. STAT. ANN. § 732.522(1)). The electronic will becomes self-proving if a qualified custodian is designated in the will and the qualified custodian holding the will at the time of the testator's death certifies that the electronic will has remained in the custody of a qualified custodian since its execution and has not been altered. *Id.* § 34 (codified at FLA. STAT. ANN. § 732.523).

260. *Id.* § 33 (codified at FLA. STAT. ANN. § 732.522(2)).

261. *Id.* § 15 (codified at FLA. STAT. ANN. § 117.285(4)).

262. *See supra* Part V.A.

263. *See* H.B. 409 § 15 (Fla.) (codified at FLA. STAT. ANN. § 117.285).

264. *See id.*

265. SENATE JUDICIARY COMM. ET AL., *supra* note 241, at 1.

> of audio-video communication technology. If you suspect you may be a vulnerable adult, you should have witnesses physically present with you before signing.[266]

Under Florida Statutes § 415.102,

> "Vulnerable adult" means a person 18 years of age or older whose ability to perform the normal activities of daily living or to provide for his or her own care or protection is impaired due to a mental, emotional, sensory, long-term physical, or developmental disability or dysfunction, or brain damage, or the infirmities of aging.[267]

The vulnerable-adult exclusion for electronic notarization was proposed by the Florida Bar's Elder Law Section, which the legislature consulted when drafting the 2019 bill.[268] Although the bill received the support of the Elder Law Section, some attorneys from the Probate and Trust Law Section of the Florida Bar and members of the Florida legislature continue to question whether these safeguards are sufficient to protect against fraud.[269] Ultimately, elder abuse and fraud are concerns in any probate transaction, and the law builds in safeguards that allow wills to be set aside for issues of competency, undue influence, and fraud. The vulnerable-adult exclusion and the online notarization rules promulgated by the Florida Department of State should act as sufficient safeguards to account for special fraud concerns associated with electronic wills.

B. *Uniform Electronic Wills Act*

Similar to Florida's electronic wills legislation, the UEWA has been in the works since 2017.[270] After almost two years of working to create simple, uniform laws that can be adopted by all states, the UEWA was finalized and approved by the ULC in July 2019.[271] The electronic wills committee

266. H.B. 409 § 15 (Fla.) (codified at FLA. STAT. ANN. § 117.285(5)).

267. FLA. STAT. ANN. § 415.102(28).

268. Meryl Kornfield, *Florida May Allow Legal Papers to Be Notarized Online*, AP NEWS (Mar. 27, 2019), https://www.apnews.com/27dad18c04d04eb4ad92bfb67230d61f [https://perma.cc/XET2-LK4G].

269. *Id.*; Jim Ash, *House Passes Online Notary, Will Signing Bill*, FLA. BAR (Apr. 25, 2019), https://www.floridabar.org/the-florida-bar-news/house-passes-online-notary-will-signing-bill/ [https://perma.cc/C5W7-XUUX].

270. ULC 2017 Memorandum, *supra* note 12.

271. UNIF. ELEC. WILLS ACT (UNIF. LAW COMM'N 2019).

summarizes the UEWA as follows: "The Uniform Electronic Wills Act supplies sensible rules and policies for the execution and validity of wills signed electronically on a computer, instead of on paper. . . . The Uniform Electronic Wills Act retains core wills act formalities of writing, signature and attestation, but adapts them."[272]

Under the UEWA, an electronic will must be "a record that is readable as text at the time of signing," signed by the testator, and either signed by two witnesses or acknowledged before a notary.[273] As defined by the UEWA, "'Sign' means, with present intent to authenticate or adopt a record: (A) to execute or adopt a tangible symbol; or (B) to affix to or logically associate with the record an electronic symbol or process."[274]

The UEWA also allows for the possibility of remote, electronic witnessing and notarization, providing optional language depending upon the state's preference.[275] When drafting the UEWA, the ULC was mindful of the fact that remote witnessing is a continued concern, stating, "We know that many states oppose attestation by remote (virtually present) witnesses, so the act is designed to make that form of attestation optional and can be easily enacted without that."[276] Of course, any state that utilizes the remote notarization option would need to have its own remote notarization laws or adopt the 2018 version of the RULONA.

Notably absent from the provisions of the UEWA are any provisions related to qualified custodians.[277] Under the electronic wills laws in Nevada, Arizona, and Florida, a qualified custodian is required to make the will self-

272. Memorandum from Suzanne Brown Walsh, Turney P. Berry & Susan N. Gary, Members of the Elec. Wills Drafting Comm., to Unif. L. Comm'n 1 (May 30, 2019), https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=134c0ae2-a0ae-2752-1497-f47d8c1d9d75&forceDialog=0 [https://perma.cc/3QFU-YM8B] [hereinafter ULC 2019 Memorandum].

273. UNIF. ELEC. WILLS ACT § 5. Even for traditional wills, the UPC allows the testator to acknowledge a will before a notary public rather than requiring the use of two witnesses. UNIF. PROBATE CODE § 2-502 (UNIF. LAW COMM'N 2010). However, only two states have adopted this portion of the uniform code. DUKEMINIER & SITKOFF, *supra* note 23, at 196. The ULC suggests that even states that have not adopted section 2-502 should consider the notarization alternative for electronic wills: "Because remote online notarization includes protection against tampering, other states may want to include the option for the benefit of additional security." UNIF. ELEC. WILLS ACT § 5 cmt.

274. UNIF. ELEC. WILLS ACT § 2(5).

275. *Id.* § 5.

276. ULC 2019 Memorandum, *supra* note 272, at 2.

277. *See generally* UNIF. ELEC. WILLS ACT.

proving.[278] However, under the UEWA, a will becomes self-proving simply through the use of notarized witness affidavits.[279] This is the same requirement that is utilized for traditional wills under the UPC.[280] Although the committee ultimately decided not to include provisions related to qualified custodians, it was an option the committee considered earlier in the drafting process.[281] An early committee meeting memorandum stated, "One option is to require a Qualified Custodian to store the will, for the will to be valid. If we use the concept of a Qualified Custodian, we need to think about requirements. What if a Qualified Custodian goes out of business?"[282] It is likely the ULC chose not to utilize qualified custodians due to the complexity related to establishing security standards and regulations for their use. These are the exact concerns that were raised by the electronic wills legislation in Florida and New Hampshire in 2017.[283]

Additionally, the UEWA does not include any references to the use of biometrics or PKI technology.[284] This is something states may wish to consider adding if they are concerned that the simplified terms of the UEWA do not do enough to prevent against issues of fraud.

IX. TEMPORARY SOLUTIONS ALREADY EXIST

The progress made in 2018 and 2019 suggests there is truth to the claim: "[T]he question now is no longer if all states will allow for wills and trusts to be created and passed on electronically, but when."[285] However, if we learned anything from the 2016 and 2017 legislation, it is clear that some states may resist passing separate electronic wills legislation for the time being.[286] Additionally, some states may need additional time to establish new technologies and electronic notary standards. In the meantime, many states can use a broad interpretation of their existing probate code or the harmless

278. NEV. REV. STAT. ANN. § 133.085 (West 2019); ARIZ. REV. STAT. ANN. § 14-2519 (2019); H.B. 409, 121st Leg., Reg. Sess. § 11 (Fla. 2019) (codified at FLA. STAT. ANN. § 117.245 (West 2019)).

279. UNIF. ELEC. WILLS ACT § 8.

280. UNIF. PROBATE CODE § 2-504 (UNIF. LAW COMM'N 2010).

281. *See* ULC 2017 Memorandum, *supra* note 12, at 3.

282. *Id.*

283. *See supra* text accompanying notes 141–43.

284. *See generally* UNIF. ELEC. WILLS ACT.

285. DeNicuolo, *supra* note 7, at 78.

286. *See supra* Table 1.

error rule to honor electronic wills without the need to enact specific electronic wills legislation.[287]

A. *Application of the Harmless Error Rule*

The harmless error rule is a statutory provision that allows a court to excuse an error in the execution of a will so long as clear and convincing evidence establishes the testator intended the document to be treated as the testator's will.[288] In most reported cases, disputes related to execution formalities involve "technical defects or obvious mistakes, with little or no risk of fraud."[289] Application of the harmless error rule allows a court to disregard the technical error or mistake and honor the testator's obvious intent.[290] As noted in the Restatement (Third) of Property, "The question in each case is whether a defect in execution was harmless in relation to the purpose of the statutory formalities . . . ."[291]

The UPC's harmless error rule has been adopted in some form by 11 states. Hawaii, Michigan, Montana, New Jersey, South Dakota, and Utah adopted the rule verbatim as it appears in the UPC, requiring only clear and convincing evidence of the testator's intent for a document to serve as the testator's will.[292] Other states have adopted modified, more restrictive, versions of the harmless error rule—California and Virginia apply a minimum requirement for the document to be signed by the testator;[293] Colorado allows the document to either be signed or acknowledged by the

287. *See* Boddery, *supra* note 3, at 211.

288. RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.3 (AM. LAW INST. 1999).

289. Kelly, *supra* note 11, at 880 (citing Erickson v. Erickson, 716 A.2d 92 (Conn. 1998); Arnheiter v. Arnheiter, 125 A.2d 914 (N.J. Super. Ct. Ch. Div. 1956); *In re* Estate of Pavlinko, 148 A.2d 528 (Pa. 1959); Stevens v. Casdorph, 508 S.E.2d 610 (W. Va. 1998); *In re* Groffman, [1969] 1 WLR 733 (Q.B.)).

290. *See* RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.3 cmt. b.

291. *Id.*

292. HAW. REV. STAT. ANN. § 560:2-503 (West 2019); MICH. COMP. LAWS ANN. § 700.2503 (West 2019); MONT. CODE ANN. § 72-2-523 (West 2019); N.J. STAT. ANN. § 3B:3-3 (West 2019); S.D. CODIFIED LAWS § 29A-2-503 (2019); UTAH CODE ANN. § 75-2-503 (West 2019).

293. CAL. PROB. CODE § 6110(c)(2) (West 2019); VA. CODE ANN. § 64.2-404 (West 2019). Virginia also limits application of the harmless error rule to petitions filed within one year of the testator's death and requires plaintiffs to include all interested persons as parties. VA. CODE ANN. § 64.2-404(B).

testator;[294] Oregon imposes specific notice requirements upon a person requesting application of the rule, including the requirement to provide notice to any devisees listed within the will and anyone who would collect as an heir should the will be invalidated;[295] and Ohio applies a full list of elements that must be shown by clear and convincing evidence.[296]

Hesitation in adoption of the harmless error rule in the other 39 states likely stems from a concern regarding the potential for an increase in litigation of contested wills.[297] However, the extent to which application of the harmless error rule would increase the number of litigated cases and overall cost of litigation is in dispute.[298] Some argue application of the rule actually decreases litigation because a will with a minor technical error is less

294. COLO. REV. STAT. ANN. § 15-11-503 (West 2019).

295. OR. REV. STAT. ANN. §§ 112.238(1), 112.238(3), 113.035(5) (West 2019).

296. OHIO REV. CODE ANN. § 2107.24 (West 2019). Ohio's code expands upon the general harmless error rule and requires the proponent of a will to establish the following by clear and convincing evidence before the rule is applied:

> (1) The decedent prepared the document or caused the document to be prepared.
>
> (2) The decedent signed the document and intended the document to constitute the decedent's will.
>
> (3) The decedent signed the document . . . in the conscious presence of two or more witnesses. . . . "[C]onscious presence" means within the range of any of the witnesses' senses, excluding the sense of sight or sound that is sensed by telephonic, electronic, or other distant communication.

Id.

297. *See* David Horton, *Partial Harmless Error for Wills: Evidence from California*, 103 IOWA L. REV. 2027, 2033 (2018) [hereinafter Horton, *Partial Harmless Error*] (quoting Mark Glover, *In Defense of the Harmless Error Rule's Clear and Convincing Evidence Standard: A Response to Professor Baron*, 73 WASH. & LEE L. REV. ONLINE 289, 296–97 (2016)); John H. Langbein, *Excusing Harmless Errors in the Execution of Wills: A Report on Australia's Tranquil Revolution in Probate Law*, 87 COLUM. L. REV. 1, 37 (1987). When the harmless error rule was originally adopted in Australia, the courts heard 41 lawsuits applying the rule in just 6 years, raising concerns regarding its adoption in the U.S. system. *Id.* However, a large percentage of these cases occurred as a result of specific procedures within the Australian probate system, which do not exist in the U.S. system. *Id.* at 37–38 ("Of the forty-one cases, only three have been genuinely contested. Virtually none of the others would have resulted in adjudication, or even in litigation, had they arisen in a typical American jurisdiction that had adopted a comparable harmless error rule.").

298. *See* Kelly, *supra* note 11, at 881–82.

likely to be disputed.[299] A recent study of 1,543 estates in Alameda County, California conducted over the course of four years found only one case where the harmless error rule was used to generate additional litigation.[300] It is likely California's modification of the rule, explicitly imposing a minimum requirement for the document to be signed by the testator before the harmless error rule can apply, reduces any influx of litigation that might occur from application of the broader UPC rule.[301]

States considering adoption of the harmless error rule but concerned about the possibility of an influx of litigation should adopt the rule with restrictions, as seen in California, Colorado, Ohio, Oregon, and Virginia.[302] Iowa has not adopted the rule, and Iowa courts will not apply the rule unless the legislature takes measures to write it into the probate code.[303]

Iowa's legislature should take action to implement some form of the harmless error rule as the current strict adherence to will formalities prevents wills from being recognized even when no evidence of fraud or undue influence exists.[304] The ULC has noted that we are in an "era of self-help will drafting," increasing the importance of the recognition of the harmless error doctrine in the 39 states that have yet to recognize the rule.[305] When the Iowa Court of Appeals most recently considered the issue of utilizing harmless error to recognize a will, the testator attempted to modify an existing, valid will but failed to comply with the signature and witness requirements of Iowa's Probate Code.[306] Although both parties stipulated the changes were made by the testator with no allegations of fraud or undue influence, the court was unable to recognize the testator's changes to his will simply because it failed to meet the formal statutory requirements.[307]

299. *Id.* at 882.

300. Horton, *Partial Harmless Error*, *supra* note 297, at 2059–60. The study does acknowledge this number could grow over time as the law was relatively new to California at the time of the study, and some lawyers may not have been accustomed to its utilization at the time. *See id.* at 2060.

301. *See id.* at 2063.

302. *See supra* notes 293–96 and accompanying text.

303. *In re* Estate of Phillips, No. 01-0879, 2002 WL 1447482, at *1 (Iowa Ct. App. July 3, 2002) (indicating wills are "purely a creature of statute" and the Iowa Code does not currently provide for recognition of noncompliance with formal statutory requirements).

304. *See id.*

305. *See* ULC 2019 Memorandum, *supra* note 272, at 2.

306. *Phillips*, 2002 WL 1447482, at *1.

307. *See id.*

Instead, the original, unmodified will was honored without the testator's intended changes.[308] Adoption of the harmless error rule would maintain the statutory requirements for will formation but allow Iowa courts to honor a testator's wishes in those cases of innocent, harmless error in both electronic and paper wills.[309]

1. *Application of Harmless Error Rule:* In re Estate of Castro

U.S. courts have considered at least two cases in which the harmless error rule was used to recognize an electronic will.[310] In the first documented case, *In re Estate of Castro*, Javier Castro wrote his will while in the hospital using a Samsung Galaxy tablet and stylus pen.[311] Javier later signed the will on the tablet in the presence of his brothers Miguel and Albie, who acted as witnesses.[312] The court held this was sufficient to meet the writing requirement of the wills statute, which "does not require that the writing be on any particular medium."[313] Similarly, the court held the signature made on the tablet was sufficient to meet the signature requirement of the wills statute, describing the signature as a "graphical image of Javier's handwritten signature."[314]

308. *Id.* at *1–2.

309. *See* RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.3 cmt. b (AM. LAW INST. 1999). Admittedly, a modified form of the harmless error rule requiring the testator's signature as a threshold element would not have validated the will in the specific facts provided in the *In re Estate of Phillips* case. *See Phillips*, 2002 WL 1447482, at *1; *see also* CAL. PROB. CODE § 6110(c)(2) (West 2019). The broader rule applied in states that have adopted the standard UPC rule would be required. *See, e.g.*, MONT. CODE ANN. § 72-2-523 (West 2019). The extent to which that broader rule would increase litigation is a debated subject requiring further empirical research. *See* Kelly, *supra* note 11, at 881–82.

310. *See In re* Estate of Horton, 925 N.W.2d 207 (Mich. Ct. App. 2018); Walther, *supra* note 18, at 417.

311. Walther, *supra* note 18, at 414.

312. *Id.*

313. *Id.* at 416. The court stated:

> The writing in this case includes the stylus marks made on the tablet and saved by the application software. I believe that the document prepared on December 30, 2012, on Albie's Samsung Galaxy tablet constitutes a "writing" under section 2107.03. To rule otherwise would put restrictions on the meaning of "writing" that the General Assembly never stated.

Id.

314. *Id.* at 417.

The court found "by clear and convincing evidence that Javier signed the will, that he intended the document to be his last will and testament, and that the will was signed in the presence of two or more witnesses."[315] This meets the three requirements outlined within Ohio's harmless error rule, and as a result, the court held the will valid.[316] *In re Estate of Castro* is a fairly straightforward application of the harmless error rule to electronic wills. In fact, it is possible that the court could have recognized the will without applying the harmless error rule simply by applying the broad definitions of *writing* and *signature* provided in the Ohio Code, a solution discussed in more detail in Part IX.B.

2. *Application of Harmless Error Rule:* In re Estate of Horton

In the more recent and complex case of *In re Estate of Horton*, the Michigan Court of Appeals upheld the validity of an electronic will that truly required the application of the harmless error rule to establish its validity.[317] Michigan law recognizes both traditional wills, which are in writing and signed by the testator and two witnesses, and holographic wills, which are in the testator's handwriting and signed and dated by the testator.[318] Additionally, Michigan has adopted the UPC version of the harmless error rule, validating a will that does not strictly comply with the traditional will or holographic will requirements so long as there is clear and convincing evidence of the testator's intent for the document to serve as the testator's will.[319]

The 2018 case of *In re Estate of Horton* put Michigan's harmless error rule and the breadth of its reach to the test when Duane Francis Horton II committed suicide and left behind a will that did not comply with either the traditional will formalities or the requirements for a holographic will.[320] Prior to committing suicide, Horton left behind an undated, handwritten journal entry indicating his "final note" could be found in Evernote, an application

315. *Id.* at 417–18.

316. *Id.*; *see also* OHIO REV. CODE ANN. § 2107.24 (West 2019).

317. *See In re* Estate of Horton, 925 N.W.2d 207, 215 (Mich. Ct. App. 2018).

318. MICH. COMP. LAWS ANN. § 700.2502 (West 2019).

319. *Id.* § 700.2503.

320. *Horton*, 925 N.W.2d at 209, 212 ("In this case, it is undisputed that decedent's typed, electronic note, which was unwitnessed and undated, does not meet either the formal requirements for a will under MCL 700.2502(1) or the requirements for a holographic will under MCL 700.2502(2). Instead, the validity of the will in this case turns on the applicability of MCL 700.2503.").

on his cellular phone.[321] This final note was typed and in electronic form only with Horton's full name typed at the end of the note.[322] It was not signed by any witnesses, and no portion of the final note was in Horton's own handwriting.[323] However, this electronic document did contain apologies to his friends and family, religious comments about the afterlife, requests for funeral arrangements, and "one full paragraph regarding the distribution of decedent's property after his death."[324]

Horton's mother, Lanora Jones, contested the validity of this document as Horton's will and claimed his estate should be distributed to her as Horton's sole intestate heir.[325] However, the Berrien County Probate Court found the will was valid through the application of the harmless error rule, and the Michigan Court of Appeals affirmed this ruling.[326]

The Michigan Court of Appeals explained the state's harmless error statute as follows:

> [U]nder MCL 700.2503, while the proposed will must be a document or writing, there are no specific formalities required for execution of the document, and any document or writing can constitute a will, provided that the proponent of the will presents clear and convincing evidence to establish that the decedent intended the document to constitute his or her will.[327]

The court further explained that the ultimate question for determining whether a decedent intended a document to constitute a will is "whether the person intended the document to govern the posthumous distribution of his or her property."[328] When determining the testator's intent, the court does consider the adherence to or departure from will formalities,[329] but the court also considers the text of the document itself and any extrinsic evidence related to the creation of the document.[330] Upon reviewing all the evidence,

321. *Id.* at 209.
322. *Id.*
323. *Id.* at 209, 212.
324. *Id.* at 209.
325. *Id.* at 210.
326. *Id.* at 209.
327. *Id.* at 212.
328. *Id.* at 213.
329. *See id.* at 211 n.2.
330. *See id.* at 213.

the probate court found that Horton clearly intended the electronic final note to serve as his will.[331] The Michigan Court of Appeals agreed, describing the final note as follows:

> On the face of the document, it is apparent that the document was written with decedent's death in mind; indeed, the document is clearly intended to be read after decedent's death. The note contains apologies and explanations for his suicide, comments relating to decedent's views on God and the afterlife, final farewells and advice to loved ones and friends, and it contains requests regarding his funeral. In what is clearly a final note to be read upon decedent's death, the document then clearly dictates the distribution of his property after his death. . . . In short, the note is "distinctly testamentary in character," and the document itself provides support for the conclusion that decedent intended for the note to constitute his will.[332]

Ultimately, both courts agreed the electronic will was valid under Michigan's harmless error rule.[333]

B. *Compliance with Broad Definitions of Writing and Signature*

Even if Iowa and other states do not adopt the harmless error rule, courts may recognize an electronic will as valid so long as their statutes define *writing* and *signature* broadly.[334]

1. *What Qualifies as a Writing?*

The good news for electronic wills is that the writing requirement does not mean a will must be written with pen and paper.[335] Instead, a will is "in writing" if it is written on a medium allowing the will to be reasonably permanent and detectable.[336]

Although an electronic format can be reasonably permanent and detectable, courts have been reluctant to expand the definition of the writing requirement for wills to include electronic formats without legislation

331. *Id.*

332. *Id.* at 213–14 (quoting *In re* Fowle's Estate, 290 N.W. 883, 885 (Mich. 1940)).

333. *Id.* at 215.

334. David Horton, *Tomorrow's Inheritance: The Frontiers of Estate Planning Formalism*, 58 B.C. L. REV. 539, 568 (2017) [hereinafter Horton, *Tomorrow's Inheritance*] (quoting VA. CODE ANN. § 1-257 (2016)).

335. RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.1 cmt. i (AM. LAW INST. 1999).

336. *See id.*

explicitly providing some basis for this expansion.[337] However, when a state's legislature chooses to define *writing* broadly within its statutes, as is the case in Iowa, the definition likely permits writing wills on electronic devices without the need for separate electronic wills legislation.[338] Although Iowa's Probate Code does not specifically define the term *writing*,[339] Iowa's rules of statutory construction indicate a writing includes electronic records "created, generated, sent, communicated, received, or stored by electronic means."[340] Under this definition, an electronically created and stored will should be upheld as a valid writing.

2. *What Qualifies as a Signature?*

In *Taylor v. Holt*, the testator, Steve Godfrey, prepared a will on his computer and added a computer-generated signature at the end of the document while two witnesses were present.[341] The document was then printed, and both witnesses signed.[342] At the time this case was decided, the Tennessee Code defined *signature* to include "a mark, the name being written near the mark and witnessed, or any other symbol or methodology executed or adopted by a party with intention to authenticate a writing or record."[343]

The court held Godfrey's computer-generated signature was a valid signature because he intended the computer-generated signature to act as his mark made in the presence of his witnesses.[344] The court indicated this signature falls into the category of "any other symbol or methodology" recognized under Tennessee Code.[345]

337. *See In re* Estate of Reed, 672 P.2d 829, 833 (Wyo. 1983) (indicating the expansion of the definition of *writing* to include a video recording or other recorded voice prints is a decision the state legislature must make).

338. Horton, *Tomorrow's Inheritance*, *supra* note 334, at 568 (quoting VA. CODE ANN. § 1-257).

339. *See* IOWA CODE §§ 633.3, 633.279 (2019).

340. *Id.* §§ 4.1(39), 554D.103(7).

341. Taylor v. Holt, 134 S.W.3d 830, 830–31 (Tenn. Ct. App. 2003).

342. *See id.*

343. *Id.* at 833.

344. *Id.*

345. *Id.*

Some suggest the outcome of this case resulted from the court's application of the harmless error rule discussed above.[346] However, Tennessee is not among the states that have adopted the harmless error rule.[347] Instead, it is likely, as evidenced by the language of the court's opinion, the court simply found this form of *signature* meets the definition of a signature within the state's existing code.[348]

While the court in *Taylor* was required to interpret the definition of *signature* to include an electronic signature, Iowa's definition explicitly states it includes electronic signatures.[349] Electronic signatures in Iowa are further defined to include "an electronic sound, symbol, or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record."[350]

X. CONCLUSION

It has been suggested that the implementation of electronic wills legislation is not a question of if but when.[351] The recent consideration of electronic wills legislation in 2016 through 2019 as well as the approval of the UEWA seem to support that suggestion. Although analysis of recent bills brought many concerns to light regarding the use of electronic wills, advancing technology in today's society can easily overcome these issues. When drafting future legislation, states must be careful to consider the implementation of security procedures and methods of sufficient identification through the use of developing technologies, such as biometric authentication and electronic notarization—and possibly even blockchain and PKI technology. States can rely upon the UEWA to establish simple, straightforward rules for recognition of electronic wills; however, more conservative states may not believe these rules go far enough to establish

346. Boddery, *supra* note 3, at 203.

347. *See* TENN. CODE ANN. §§ 32-1-101 to -113 (West 2019) (outlining the statutory requirements for execution of a will in Tennessee).

348. *Taylor*, 134 S.W.3d at 833 ("Further, we note that Deceased simply used a computer rather than an ink pen as the tool to make his signature, and, therefore, complied with Tenn. Code Ann. § 32-1-104 by signing the will himself.").

349. IOWA CODE § 4.1(39) (2019). Similar to the definition of *writing* in Iowa, the definition of *signature* is found within the rules of statutory construction rather than being separately defined within the Probate Code. *See id.* §§ 4.1(39), 633.279.

350. *Id.* § 554D.103(8).

351. DeNicuolo, *supra* note 7, at 78; Jill Lebowitz, *Electronic Wills: No Longer in a Galaxy Far, Far Away*, LAW.COM: N.J. L.J. (Sept. 11, 2017), https://www.law.com/njlawjournal/sites/njlawjournal/2017/09/11/electronic-wills-no-longer-in-a-galaxy-far-far-away/?back=law [https://perma.cc/P8Z9-LACZ].

protections against fraud and hacking or procedures for long-term storage. These states should consider adding terms related to qualified custodians—provided they establish regulations for those custodians to follow—and additional authentication characteristics.

In the meantime, states such as Iowa can begin to recognize electronic wills without the need to create new legislation. Additionally, Iowa's legislature should consider enacting the harmless error rule. This would allow the recognition of both electronic and paper wills when testators have made a simple error in execution of the will. Even if Iowa does not enact this doctrine, Iowa courts can recognize electronic wills using a broad interpretation of the writing and signature requirements of the current probate code.

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