Better Homes and Scattered Gardens: Why Iowa Should Legalize "Human Composting" as a Method of Final Disposition

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ABSTRACT: Washington State became the first state to legalize "human composting" (also known as "recomposition") as an available method of final disposition. Recomposition is a process that ultimately turns the body into soil. It is more environmentally sustainable than traditional methods of disposition (i.e., burial and cremation) and is a crucial alternative in the face of increasing land scarcity and climate change. Introducing recomposition into the death care market would bode well for consumers because it is cheaper than traditional burial and it expands people's power of choice. Recomposition is safer than other death care occupations (i.e., embalming and cremating). Iowa should legalize human composting because it can serve as an affordable mortuary practice while promoting efficient land use, environmental protection, consumer welfare, public health, and social equality.

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I. INTRODUCTION

When our loved ones die, we mourn. Mourning is a painful but natural process. The law of human remains traces the path of mourning. We must accept the finality of death, as defined by science and codified by law. We may remember loved ones by inheriting their cherished belongings. We may commemorate the departed by passing a law in their name. An inevitable part of the mourning process is the disposal of the body—the "final disposition"—primarily governed by state law.

^{1.} See Unif. Determination of Death Act § 1 (Unif. L. Comm'n 1980); Ray D. Madoff, Mourning in America: What's Law Got to Do with It's, in Law and Mourning 14, 15–17 (Austin Sarat, Lawrence Douglas & Martha Merrill Umphrey eds., 2017).

^{2.} See Madoff, supra note 1, at 23–28 (discussing the control of property at death by freedom of testation).

^{3.} See id. at 30–32 (discussing "Megan's Law, the Ryan White Care Act, [and] the Lindbergh Law").

^{4.} See id. at 19-22 (framing state law as the primary authority concerning disposition of human remains).

On May 21, 2019, Washington State Governor Jay Inslee signed Senate Bill 5001 ("SB 5001"), legalizing a new way to dispose of human remains—"natural organic reduction," also known as "aboveground decomposition," "recomposition," or "human composting" (hereinafter, this process is referenced as "recomposition" or "human composting"). As the first state to legalize human composting, Washington will illustrate how a state might successfully integrate the practice into its physical, cultural, and regulatory landscapes. California, Colorado, and New York may soon follow suit.

Iowa should legalize human composting as an option for final disposition because doing so would benefit Iowa's residents, environment, and economy. Death care industries⁸ must adapt their practices in the face of climate change and increasing land scarcity. Recomposition is more environmentally sustainable than traditional methods of final disposition (i.e., burial and cremation). It is also cheaper than traditional burial and is likely a safer occupation than its counterparts in the death care market (i.e., embalming and cremating). Part II of this Note first defines the methods of final disposition in practice today. Part II then surveys the law of human remains, including a comparison of how the laws of Washington and Iowa dictate the physical treatment of human remains (i.e., how the remains may be processed), where the treated remains may finally rest, and who may decide where and how the remains will be disposed. Part III evaluates the language and legislative history of Washington's new recomposition law and its policy justifications. Part IV advocates for Iowa's legalization of recomposition, given its anticipated environmental and economic benefits and the feasibility of amending Iowa law to permit recomposition. Part IV argues that education and public discourse can garner intrigue and reduce stigma surrounding human composting. Recomposition can serve as an affordable mortuary

^{5.} S.B. 5001, 66th Leg., Reg. Sess. (Wash. 2019). The legislative history is available at *SB* 5001—2019–20, WASH. ST. LEGISLATURE, https://app.leg.wa.gov/billsummary?BillNumber=5001&Year=2019&Initiative=false [https://perma.cc/LDU6-7KPK].

^{6.} See Ben Guarino, Washington Passes Bill to Become First State to Compost Human Bodies, WASH. POST (Apr. 26, 2019, 6:48 PM), https://www.washingtonpost.com/science/2019/04/26/washington-passes-bill-become-first-state-compost-human-bodies/?noredirect=on [https://perma.cc/KS6R-E5PM].

^{7.} Melody Gutierrez, Compost Your Departed Loved One and Save the Planet, L.A. Lawmaker Says, L.A. TIMES (Feb. 24, 2020, 3:55 PM), https://www.latimes.com/california/story/2020-02-24/california-human-compost-legislation [https://perma.cc/Y74M-G268]; Julia Donovan, CO Lawmakers Propose New Death Care Option: Human Composting, KRDO (Dec. 19, 2019, 6:46 PM), https://krdo.com/news/2019/12/19/co-lawmakers-propose-new-death-care-option-human-composting [https://perma.cc/2574-TMKG]; Joe Mahoney, NY Bill Would Let Corpses Be Used for Composting, OBSERVER-DISPATCH (Mar. 3, 2020, 5:45 PM), https://www.uticaod.com/news/20200303/ny-bill-would-let-corpses-be-used-for-composting [https://perma.cc/YUW6-4XX2].

^{8.} See United States Death Care Market Report 2018–2023: Market Is Estimated to Reach Revenues of Around \$68 Billion, PR Newswire (Nov. 27, 2018, 9:30 AM), https://www.prnewswire.com/news-releases/united-states-death-care-market-report-2018-2023-market-is-estimated-to-reach-revenues-of-around-68-billion-300755813.html [https://perma.cc/RV5N-MFLF].

practice while promoting efficient land use, environmental protection, consumer welfare, public health, and social equality.

II. AN OVERVIEW OF CONTEMPORARY BURIAL PRACTICES IN THE UNITED STATES

At a high level, this Note concerns the law of human remains, also known as cemetery law or funeral law. This body of law is primarily determined at the state and local level. However, there are common norms and practices shared across the United States. Section II.A discusses the mechanics of the most common disposition methods permitted by law in all states. Section II.B discusses alternative disposition methods that are currently available. Section II.C surveys the common law of human remains. Section II.D looks at statutes and regulations. This Note focuses on the contemporary law of human remains in the United States and does not cover the history of indigenous burial traditions—a topic which deserves more thorough discussion. Nor does this Note thoroughly examine death rituals practiced in other parts of the world.

A. PROCESSES OF CONTEMPORARY CONVENTIONAL BURIAL AND CREMATION

In the United States, conventional burial and cremation are the most common methods of final disposition.¹² A conventional burial is commonly understood as the placement of a corpse in a casket, six feet underground.¹³ Traditional burial practices are grounded in such sentiments as "[f]ear of vengeful spirits . . . ; [h]abits of respect and veneration; . . . attachment and

^{9.} TANYA D. MARSH, DISPOSITION OF HUMAN REMAINS: A LEGAL RESEARCH GUIDE 1 (2015).

^{10.} For an in-depth discussion of Native American burial traditions, see generally Margaret B. Bowman, The Reburial of Native American Skeletal Remains: Approaches to the Resolution of a Conflict, 13 HARV. ENV'T L. REV. 147 (1989); John E. Peterson II, Dance of the Dead: A Legal Tango for Control of Native American Skeletal Remains, 15 AM. INDIAN L. REV. 115 (1990); and John B. Winski, There Are Skeletons in the Closet: The Repatriation of Native American Human Remains and Burial Objects, 34 ARIZ. L. REV. 187 (1992).

^{11.} This is not to say that such practices are not worth considering, for they can be interesting and innovative. For example, the Buddhist practice of "sky burials" involves

tak[ing] bodies to charnel grounds where vultures come to eat the flesh, offering back to the world what was taken in life: meat. It's believed that the practice encourages the dead to move along to the next life without being held back by one's greatest attachment—their physical body. Ritual aside, it's a practical answer due to the scarcity of wood and usable burial grounds (the rocky earth makes it hard to dig).

 $[\]label{lem:condition} Kelly Maclean, 7 \textit{Eco-Friendly Options for Your Body After Death, MENTALFLOSS (Jan. 8, 2018), https://www.mentalfloss.com/article/513564/7-eco-friendly-options-your-body-after-death [https://perma.cc/3ZSP-9YKM].$

^{12.} See Statistics, NAT'L FUNERAL DIRS. ASS'N, https://www.nfda.org/news/statistics[https://perma.cc/8PEL-K6VG] (last updated July 18, 2019).

^{13.} See Suzanne Kelly, Greening Death: Reclaiming Burial Practices and Restoring Our Tie to the Earth 9 (2015). But see Tanya Marsh, The Law of Human Remains 63 (2016) (explaining that state statutes differ regarding location and depth of burials).

affection . . . ; [and] [f]ear of pollution." ¹⁴ While some states might allow you to "bury a loved one in your backyard," burials generally take place in cemeteries. ¹⁵ Cemeteries come in different forms, including churchyards, municipal cemeteries, rural cemeteries, and lawn cemeteries (also known as memorial parks). ¹⁶ The first American cemeteries, known then as graveyards, "were created solely out of need [when] a settlement experienced its first death or an old graveyard was filled." ¹⁷ With urban expansion, a need for space spurred the use of rural cemeteries. ¹⁸ Modern-day memorial parks have not developed out of need, but as a business model. For-profit corporations typically operate memorial parks, whereas other types of cemeteries are operated by families, municipalities, and nonprofit organizations. ¹⁹ Generally, local level zoning determines where bodies may be buried and is often "highly restricted in cities, and largely unrestricted in rural areas." ²⁰

Often, before its burial, a body is embalmed for purposes of preservation and presentation. Embalming is a cultural norm in the United States, but is not legally mandated.²¹ The practice of embalming first spread during the American Civil War, to stave off decomposition so that soldiers' bodies could return home to their families.²² Nowadays, embalming serves primarily to create a "memory picture" for display at a funeral, to help loved ones cope with the process of letting go.²³ It is commonly thought that embalming serves sanitary purposes, but according to Dr. Jesse Carr of San Francisco General Hospital and University of California Medical School, embalming does not

^{14.} PERCIVAL E. JACKSON, THE LAW OF CADAVERS AND OF BURIAL AND BURIAL PLACES 5 (2d ed. 1950).

^{15.} Dylan Baddour, Explained: What You Can (and Can't) Do with Dead Texans, HOUS. CHRON. (Sept. 7, 2016), https://www.houstonchronicle.com/local/explainer/article/Explained-what-to-do-with-dead-Texans-9208206.php [https://perma.cc/5QEN-E5ND]; see DAVID CHARLES SLOANE, THE LAST GREAT NECESSITY: CEMETERIES IN AMERICAN HISTORY 1–2 (1991).

^{16.} MARSH, *supra* note 13, at 60–62.

^{17.} SLOANE, *supra* note 15, at 129.

^{18.} Id.

^{19.} Distinct characteristics of the memorial park, such as flat plaques instead of tombstones, keep the land flat and allow for efficient grounds maintenance (e.g., lawnmowing). MARSH, *supra* note 13, at 62. "Vaults prevent the settling of the dirt around the body, thus making landscaping more uniform and cost effective." CAITLIN DOUGHTY, SMOKE GETS IN YOUR EYES & OTHER LESSONS FROM THE CREMATORY 159 (2014). One memorial park, Forest Lawn in Glendale, California, has prided itself with "selling immortality" and earning the title of the "Disneyland of Death." *Id.* at 105.

^{20.} MARSH, *supra* note 13, at 63. *See generally* Joseph D. Lehrer, *Cemetery Land Use and the Urban Planner*, 7 J. URB. & CONTEMP. L. 181 (1974) (noting the fragmented law of cemetery land use).

^{21.} See 16 C.F.R. § 453.3(a)(ii) (2019) ("[E]mbalming is not required by law except in certain special cases, if any."); JESSICA MITFORD, THE AMERICAN WAY OF DEATH REVISITED 43 (1998) ("[N]o law requires embalming, no religious doctrine commends it, nor is it dictated by considerations of health, sanitation, or even of personal daintiness. In no part of the world but in North America is it widely used.").

^{22.} DOUGHTY, *supra* note 19, at 77–80; MARY ROACH, STIFF: THE CURIOUS LIVES OF HUMAN CADAVERS 78–79 (2003).

^{23.} MITFORD, supra note 21, at 16; ROACH, supra note 22, at 76.

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kill disease, and "in cases of communicable disease, a dead body presents considerably less hazard than a live one." Although disease and bacteria could spread through water contaminated at grave sites, this is attributable to the location of the grave sites, a problem better suited for urban planners and engineers than embalmers. And, as discussed in Section III.C, the embalming fluid itself can contaminate water and cause other health problems. On the problems of the problems.

To embalm a body, the embalmer first drains the blood and replaces it with "three to six gallons of a dyed and perfumed solution of formaldehyde, glycerin, borax, phenol, alcohol, and water." The embalming fluid does not prevent decomposition, but merely slows it. The embalmer then sews, washes, powders, and positions the body into a "lifelike, relaxed appearance." The body is placed in a casket, which is then laid in a concrete or metal underground vault. Caskets and vaults are required at the cemetery's discretion, but not by law. The body is placed in a casket or required at the cemetery's discretion, but not by law.

Cremation is now the most common method of final disposition in the United States.³¹ According to the Cremation Association of North America, "[c]remation is the mechanical, thermal, or other dissolution process that reduces human remains to bone fragments."³² The cremation process is primarily "flame-based": the body is placed in a cremator and burned, reduced to an ash-like substance (known as cremated remains or "cremains").³³ Most states do not require cremains to be buried, though they can be.³⁴ Cremains are often stored permanently at a crematory, kept by the decedent's family in an urn, scattered in designated cemetery "scatter gardens," or on private property with the landowner's permission.³⁵

B. ALTERNATIVE METHODS OF DISPOSITION

Traditional burial and cremation are not the only available means of processing a dead body. "Alternative" methods of disposition have been in

^{24.} MITFORD, *supra* note 21, at 57; *see also* DOUGHTY, *supra* note 19, at 207 (discussing how embalming is deemed "sanitary" in mortuary school curriculum).

^{25.} MITFORD, supra note 21, at 57.

^{26.} See infra text accompanying notes 190, 214–17.

^{27.} MITFORD, *supra* note 21, at 45–46.

^{28.} ROACH, *supra* note 22, at 81–82.

^{29.} MITFORD, *supra* note 21, at 45-49.

^{30.} DOUGHTY, supra note 19, at 159.

^{31.} Statistics, supra note 12.

^{32.} Cremation Process, CREMATION ASS'N N. AM., https://www.cremationassociation.org/page/CremationProcess [https://perma.cc/6UEJ-AG86].

^{33.} Id.

^{34.} SLOANE, *supra* note 15, at 228.

^{35.} MARSH, supra note 13, at 64; see also, e.g., Nathan Hurst, A California Startup Is Using Ashes to Protect Forests, SMITHSONIAN MAG. (Dec. 5, 2016), https://www.smithsonianmag.com/innovation/california-startup-using-ashes-protect-forests-180961289 [https://perma.cc/LVA3-CZPQ] (permitting the scattering of cremated ashes in a redwood forest).

practice in the United States for some time. "Home funerals" or "backyard burials" were once more common than cemetery burials.³⁶ The terms "green burial" and "natural burial" refer to methods of final disposition that aim to minimize environmental impacts by minimizing the use of land, chemicals, and traditional caskets.37 Green Burial Council ("GBC") is a nonprofit organization that has established certification standards for providers of green burial services.³⁸ Under GBC's standards, the dedication of land for green burials ("green cemeteries") can take three forms: hybrid cemeteries, natural burial grounds, and conservation burial grounds.39 Hybrid cemeteries are "conventional" cemeteries that additionally "do not require vaults and must allow for any kind of eco-friendly, biodegradable burial containers, such as shrouds and soft wood caskets."40 Natural burial grounds prohibit the use of chemicals, vaults, non-native stone, and non-plant-based materials.41 Conservation burial grounds are "established in partnership with a conservation organization and include[] a conservation management plan that . . . provides perpetual protection of the land according to a conservation easement or deed restriction."42 According to GBC's nationwide registry of certified green cemeteries, 29 states plus D.C. have at least one green cemetery.48 Even though "no state laws explicitly prevent green burial[,] ... cemetery operators all over the country say outdated state and local laws have made it difficult for green burial to gain a foothold."44

^{36.} DOUGHTY, supra note 19, at 172.

^{37.} KELLY, *supra* note 13, at 3–4.

^{38.} *Our Standards*, GREEN BURIAL COUNCIL, https://www.greenburialcouncil.org/our_standards.html [https://perma.cc/YR3R-8YSH].

^{39.} Green Burial Characteristics, GREEN BURIAL COUNCIL, https://www.greenburialcouncil.org/burial_grounds_cemeteries.html [https://perma.cc/JgDN-XH2Y].

^{40.} Id.

^{41.} *Id*.

^{42.} Id.

^{43.} The following 29 states, plus D.C. and British Columbia, have at least one certified green cemetery: California, Colorado, Connecticut, Florida, Illinois, Indiana, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, and Wisconsin. *GBC Certified Cemeteries*, GREEN BURIAL COUNCIL, https://www.greenburialcouncil.org/gbc_certified_cemeteries.html [https://perma.cc/A6YT-BJZP].

^{44.} Alex Brown, More People Want a Green Burial, but Cemetery Law Hasn't Caught Up, PEW CHARITABLE TRS.: STATELINE (Nov. 20, 2019), https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/11/20/more-people-want-a-green-burial-but-cemetery-law-hasnt-caught-up [https://perma.cc/TXS7-[8BY] ("Some laws, for instance, require paved roads to burial plots. Others mandate fencing around cemeteries—both antithetical to the natural settings required for conservation cemeteries. Many states mandate that new cemeteries set up a large endowment fund for future maintenance, which green-burial advocates say is a burdensome requirement for places that are intended to be left in their natural state.").

Additionally, a person may choose to donate their body after death for purposes of scientific research or organ donation.⁴⁵ Cadavers are a valuable resource for medical students learning their way through dissection.⁴⁶ Cadavers are also used in a number of studies, such as car-crash testing to make cars safer.⁴⁷ On any given day, an estimated 80,000 people wait for organ donations and 16 people die in wait.⁴⁸ Ultimately, donated bodies are cremated once they have served their purpose.⁴⁹

C. COMMON LAW GOVERNING HUMAN REMAINS

The U.S. common law of human remains developed from the widespread adoption of early state-court opinions, and can be summarized by a series of principles.⁵⁰ The common law of human remains exists in the first place because courts have deemed themselves to have "jurisdiction over the dead."⁵¹ Disposal of human remains "is a common-law duty imposed to maintain public health and decency."⁵² A decedent is entitled to a "decent burial" in a place and manner of his or her choosing.⁵³ However, the meaning of "decency" varies depending on social custom, as well as the social and financial circumstances of the decedent and his or her family.⁵⁴ If the decedent's wishes regarding disposition are not "strongly and recently

^{45.} See KELLY, supra note 13, at 26 (discussing Gunther von Hagens' "Body Worlds" exhibit, and pointing out that the dissection, study, and display of cadavers has not always been a voluntary choice by decedents).

^{46.} ROACH, *supra* note 22, at 55–57.

^{47.} *Id.* at 91–93.

^{48.} *Id.* at 304.

^{49.} *Id.* at 74; Stephanie Thurrott, *Would You Donate Your Body to Science After You Die? Here's Exactly What Happens When You Do*, BUS. INSIDER (Apr. 4, 2019, 12:11 PM), https://www.businessinsider.com/donate-your-body-to-science-what-happens-2019-4 [https://perma.cc/9W34-4PJL].

^{50.} See MARSH, supra note 13, at 8 (outlining the principles of the common law of human remains).

^{51.} *Id.*; *see*, *e.g.*, *In re* Estate of Thomas, 66 A.3d 205, 214 (N.J. Super. Ct. App. Div. 2013) ("[O]nce a body is buried it is in the custody of the law, and removal or other disturbance of it is within the jurisdiction of our courts with equitable powers." (alteration in original) (quoting Petition of Sheffield Farms Co., 126 A.2d 886, 891 (N.J. 1956))); Pierce v. Proprietors of Swan Point Cemetery, 10 R.I. 227, 233 (1872) ("[E]stablish[ing] the jurisdiction of courts of equity to protect and preserve the repose of the dead....").

^{52. 25}A C.J.S. Dead Bodies \S 14 (2020). However, it is only a strict legal duty insofar as a state's statutes say so. Id. \S 15.

^{53.} MARSH, *supra* note 13, at 9; *see, e.g.*, O'Donnell v. Slack, 55 P. 906, 907 (Cal. 1899) ("[T]he individual has a sufficient proprietary interest in his own body after his death to be able to make valid and binding testamentary disposition of it.").

^{54. 25}A C.J.S. Dead Bodies § 14 (2020) ("The terms 'decent,' 'respectable,' and 'proper,' as applied to burial, are necessarily relative, varying according to the financial and social standing of the deceased . . . and are not infrequently affected by the community and the rules of religious, social, or political organizations"); see, e.g., Seaton v. Commonwealth, 149 S.W. 871, 872 (Ky. 1912); Ellen Stroud, Law and the Dead Body: Is a Corpse a Person or a Thing?, 14 ANN. REV. L. & SOC. SCI. 115, 121 (2018) ("Marsh (2016) cites Seaton's case to demonstrate how much of dead body law in the United States rests on custom, not legislation.").

expressed," someone else will decide where and how the body will rest.⁵⁵ The control of disposition, or "right of sepulture," first vests in the surviving spouse, followed by children, parents, siblings, or more distant relatives.⁵⁶ This hierarchy may be "modified ... by circumstances of special intimacy or association."⁵⁷ A corpse is considered "quasi-property" only for purposes of the right of sepulture—once buried, a corpse is not considered property, absent extenuating circumstances such as a contested disinterment or other disturbance.⁵⁸

Courts have held that "each decedent shall occupy a single grave, appropriately memorialized, in perpetuity," thereby protecting the dead from disinterment.⁵⁹ However, courts have permitted disinterment for "the most compelling reasons" including probable cause that an autopsy would reveal evidence important to a pending investigation, or abandonment and dilapidation of a cemetery.⁶⁰ The most compelling reasons in today's world could include "mak[ing] space for a new skyscraper, bigger airports, or hydroelectric dams," but even so, the common law keeps "legal disinterment . . . carefully controlled to ensure respect for human remains." David Charles Sloane, a professor of urban planning at the University of Southern California Price School of Public Policy, remarked:

^{55.} See, e.g., Pettigrew v. Pettigrew, 56 A. 878, 880 (Pa. 1904).

^{56.} See id.; MARSH, supra note 13, at 9.

^{57.} Pettigrew, 56 A. at 88o.

^{58. 25}A C.J.S. Dead Bodies §§ 2, 4 (2020); MARSH, supra note 13, at 15; see, e.g., Newman v. Sathyavaglswaran, 287 F.3d 786, 792–93, 797 (9th Cir. 2002); Guthrie v. Weaver, 1 Mo. App. 136, 143 (Mo. Ct. App. 1876) ("There is no property in a corpse; the relations have, in regard to it, only the right of interment . . . [and then] no right to the corpse remains except the right to protect it from insult."); see also Ryan M. Seidemann, How Do We Deal with All the Bodies? A Review of Recent Cemetery and Human Remains Legal Issues, 3 U. BALT. J. LAND & DEV. 1, 70 (2013) ("[T]he unique nature of the subject—i.e., the dead and the special treatment of the dead in Western culture—means that the judicial and legislative systems view the [relevant] traditional property concepts through the lens of grief and alter some of those traditional property law concepts to fit this special niche of the law." (footnote omitted)).

^{59.} MARSH, *supra* note 13, at 11; *see, e.g.*, State *ex rel*. Comm'r of Transp. v. Med. Bird Black Bear White Eagle, 63 S.W.3d 734, 746 (Tenn. Ct. App. 2001) (collecting early cases regarding "the sanctity of the grave" and the importance "of undisturbed repose"); King v. Frame, 216 N.W. 630, 633 (Iowa 1927); Yome v. Gorman, 152 N.E. 126, 129 (N.Y. 1926).

^{60. 25}A C.J.S. Dead Bodies § 21 (2020) (footnote omitted); see Fischer's Estate v. Fischer, 117 N.E.2d 855, 858 (Ill. App. Ct. 1954) (explaining how courts determine whether moving a body is justified—by balancing "the interests of the public, the wishes of the decedent, the rights and feelings of those entitled to be heard by reason of relationship or association, [and] the rights and principles of the religious body or other institution which granted the right to inter the body"); Stastny v. Tachovsky, 132 N.W.2d 317, 319 (Neb. 1964) (permitting exhumation for autopsy); Trs. of First Presbyterian Church in Newark v. Alling, 148 A.2d 510, 514 (N.J. Super. Ct. Ch. Div. 1959) (holding that relocation of bodies from an abandoned and dilapidated cemetery was justified because "[r]espect for the dead does not require that land once used as a burial ground shall forever be hallowed and set aside as a final resting place. If that were so the dead would in time crowd the living off the face of the earth.").

^{61.} Eleanor Cummins, *What Lies Beneath*, VOX (Oct. 30, 2019, 9:17 AM), https://www.vox.com/the-highlight/2019/10/23/20920800/exhuming-bodies-john-dillinger-lies-beneath [https://perma.cc/[8AY-BU2Z].

Today, disinterment on cemetery lands for the purpose of using the land for residential or commercial purposes requires complicated legal agreements, which are sometimes impossible to negotiate. The taboo against disturbing the dead is so powerful that the inviolate nature of the cemetery is now accepted as a stereotypical example of an impossible task. 62

A person who exhumes a body without authority, or violates any other common law provision, could face criminal or civil charges.⁶³ A decedent's relatives may seek damages for mental anguish when victim to such a violation.⁶⁴

D. CONTEMPORARY LAW GOVERNING HUMAN REMAINS

Over time, statutes and regulations have come to define the law of human remains. Statutes may codify the common law or depart from it, and also serve to regulate the cemetery and funeral industries. ⁶⁵ Statutes and regulations regarding the disposal of human remains primarily exist at the state level, with a few at the federal level. ⁶⁶ This Section examines the federal and state statutes and regulations that are relevant to this Note.

1. Federal Law of Human Remains

Federal statutes governing human remains are limited in scope, but nonetheless important. The Uniform Anatomical Gift Act codifies the practice of organ and body donation.⁶⁷ The Native American Graves Protection and Repatriation Act ("NAGPR") vests tribes with decision-making

^{62.} SLOANE, supra note 15, at 7.

^{63. 25}A C.J.S. *Dead Bodies* §§ 67–72 (2020); RESTATEMENT (SECOND) OF TORTS § 868 (AM. L. INST. 1979) ("One who intentionally, recklessly or negligently removes, withholds, mutilates or operates upon the body of a dead person or prevents its proper interment or cremation is subject to liability....").

^{64.} See, e.g., Spomer v. City of Grand Junction, 355 P.2d 960, 963 (Colo. 1960) (holding that a jury could hear the parents' claim for damages after a municipality removed and reburied a child's body); Sworski v. Simons, 293 N.W. 309, 311 (Minn. 1940) (holding that parents could seek damages after the unauthorized embalming of their son); Alderman v. Ford, 72 P.2d 981, 983–84 (Kan. 1937) (permitting a widow to sue for damages for the unauthorized autopsy of her husband).

^{65.} MARSH, *supra* note 13, at 19.

^{66.} See 14 C.J.S. Cemeteries § 2 (2020) (explaining that the establishment and regulation of cemeteries is within the police power of states and municipalities). For a survey of legal disputes in various states concerning human remains, see generally Mary Catherine Joiner & Ryan M. Seidemann, Rising from the Dead: A Jurisprudential Review of Recent Cemetery and Human Remains Cases, 45 OHIO N.U. L. REV. 1 (2019). For a survey of different states' approaches to the laws of inheritance and the right of sepulture—characterized as either a "decedent intent approach" or an "actual relationship approach," see Frances H. Foster, Individualized Justice in Disputes over Dead Bodies, 61 VAND. L. REV. 1351, 1385–1401 (2008). For a comparison of death care regulations across several states, see generally U.S. GEN. ACCT. OFF., DEATH CARE INDUSTRY: REGULATION VARIES ACROSS STATES AND BY INDUSTRY SEGMENT (2003), https://www.gao.gov/new.items/do3757.pdf [https://perma.cc/4YLH-J9TC].

^{67.} MARSH, *supra* note 13, at 64–65.

authority regarding Native American burial sites and remains found on federal lands, "grant[ing] priority rights of ownership or control to the lineal descendants of the deceased." Federal law also offers burial benefits for military servicemembers and veterans, including eligibility for burial in a national cemetery, in recognition of veterans' unique sacrifices for their service. Geometry of the service of

The Federal Trade Commission's ("FTC") Funeral Rule regulates the cemetery and funeral industries to protect consumers from unfair business practices.⁷⁰ The Funeral Rule defines "funeral services [as] any services which may be used to: (1) [c]are for and prepare deceased human bodies for burial, cremation or other final disposition; and (2) arrange, supervise, or conduct the funeral ceremony or the final disposition."⁷¹ The Funeral Rule forbids funeral service providers from advertising inaccurate pricing for goods and services or misrepresenting mortuary law to consumers.⁷²

Federal courts occasionally hear disputes concerning human remains. For example, the U.S. Supreme Court⁷³ and the Ninth Circuit⁷⁴ both held that city and county ordinances limiting burials in certain locations do not violate a cemetery association's due process rights. Recently, in *Knick v. Township of Scott*, the U.S. Supreme Court held that a property owner had a Fifth Amendment takings claim where a township passed an ordinance requiring all cemeteries to be open and accessible to the public, including the property owner's small, private family graveyard.⁷⁵ Absent such constitutional implications, mortuary issues are generally litigated at the state level, since each state has its own mortuary laws.

^{68.} Winski, supra note 10, at 198.

^{69.} See, e.g., 38 U.S.C. §§ 2400–2414 (2018) (governing national cemeteries and memorials); see also 36 C.F.R. § 65.4 (2019) (establishing National Historic Landmark criteria); 40 C.F.R. § 229.1 (codifying procedures for burial at sea); SLOANE, supra note 15, at 232–34 (discussing the history and intent behind laws providing privileges for veteran burials).

^{70.} See 16 C.F.R. §§ 453.1–453.9; see also MITFORD, supra note 21, at 26–28 (describing instances of mortuary service providers' dishonesty with consumers, which "moved the FTC to rule in 1984 that morticians may no longer lie to the public").

^{71. 16} C.F.R. § 453.1(j).

^{72.} *Id.* §§ 453.2(a), 453.3; *see also* MITFORD, *supra* note 21, at 26–28 (reflecting on conversations in which undertakers told Mitford that California law required a body to be cremated in a casket, when in fact "no law in California require[ed] that a coffin be used when a body is cremated," and in which a cemetery salesman claimed that the law required the placement of a casket in a vault "[t]o prevent the ground from caving in," when in fact no such law existed).

^{73.} Laurel Hill Cemetery v. City of San Francisco, 216 U.S. 358, 364 (1910).

^{74.} Masonic Cemetery Ass'n v. Gamage, 38 F.2d 950, 955 (9th Cir. 1930).

^{75.} Knick v. Township of Scott, 139 S. Ct. 2162, 2167–68 (2019).

2. Washington State Law of Human Remains

Washington state law is collected in the Revised Code of Washington ("RCW").⁷⁶ The law of human remains is primarily covered by title 68,⁷⁷ though other provisions of the RCW regulate the professions of embalming and funeral direction,⁷⁸ protect Native American graves,⁷⁹ and determine disposition procedures for indigent persons⁸⁰ and veterans.⁸¹ This Section discusses the RCW as it existed prior to May 1, 2020, while Part III discusses the revisions to the RCW, effective May 1, 2020, per SB 5001.

Washington law requires decent burial or cremation of human remains "within a reasonable time after death."⁸² As far as who can decide matters of disposition, Washington State recognizes the common law hierarchy of right of sepulture: The choice of the decedent is given first priority, followed by an agent designated by the decedent, a surviving spouse, children, parents, and so on down the line of kin.⁸³ Disinterment of remains from a cemetery plot is subject to the consent of the next of kin within this hierarchy, along with the cemetery authority's consent.⁸⁴ Authorized persons are permitted to possess cremains "without further intervention by the state."⁸⁵ An indigent decedent's body shall go to a physician or medical school "to be used for the advancement of anatomical science," or to schools for training in funeral and embalming services.⁸⁶ Like the common law, the RCW imposes civil or criminal penalties for violations such as the unauthorized removal or disturbance of human remains.⁸⁷

Washington funeral directors, embalmers, and cremators must become licensed to practice.⁸⁸ To acquire a license, the applicant must meet certain educational requirements and pass an examination.⁸⁹ Once licensed, an

^{76.} See Revised Code of Washington (RCW), WASH. ST. LEGISLATURE, https://apps.leg.wa.gov/rcw[https://perma.cc/7DCH-QW7C] (last updated Dec. 16, 2019).

^{77.} WASH. REV. CODE §§ 68.04.005–68.70.030 (2019).

^{78.} *Id*. §§ 18.39.010–18.39.810.

^{79.} Id. §§ 27.44.020-27.44.901.

^{80.} Id. § 36.39.030.

^{81.} *Id.* §§ 73.08.070, 73.24.020–73.24.030, 72.36.110.

^{82.} Id. § 68.50.110.

^{83.} *Id.* § 68.50.160; Braun v. Selig, 376 P.3d 447, 449–50 (Wash. Ct. App. 2016); Wood v. E.R. Butterworth & Sons, 118 P. 212, 214 (Wash. 1911); *see supra* text accompanying notes 56–57.

^{84.} WASH. REV. CODE § 68.50.200. However, "[i]f the required consent cannot be obtained, permission by the superior court of the county where the cemetery is situated is sufficient: PROVIDED, That the permission shall not violate the terms of a written contract or the rules and regulations of the cemetery authority." *Id.*; *see id.* § 68.50.220.

^{85.} *Id.* § 68.50.270.

^{86.} Id. § 68.50.070.

^{87.} See, e.g., id. §§ 68.50.050, 68.50.090, 68.50.130–68.50.140, 68.50.185.

^{88.} *Id.* §§ 18.39.020, 18.39.217. A "funeral director" "provid[es] for the care, shelter, transportation, and arrangements for the disposition of human remains that may include arranging and directing funeral, memorial, or other services." *Id.* § 18.39.010(4). Duties of funeral directors are further described in section 70.58.240.

^{89.} *Id.* §§ 18.39.035, 18.39.045, 18.39.070.

embalmer must have permission from an authorized individual to embalm a body.90 Before a burial or cremation, the local registrar must approve the death certificate and "issue a burial-transit permit to the funeral director or person acting as such."91 An inspector may inspect funeral establishments and crematories to ensure that they meet the licensing and permitting requirements.92

A county, city, town, or special cemetery district in Washington may develop, own, fund, and regulate a public cemetery.93 The Funeral and Cemetery Board oversees the licensing and financing of private cemeteries and crematories.94 Private cemeteries must be incorporated, either for-profit or nonprofit.95 Private cemetery authorities hold certain powers of rulemaking, enforcement, and property control, subject to city and county regulation.96 Cemetery authorities and crematories must keep final disposition records to help the state maintain accurate death records and statistics.97

Washington cemetery authorities can acquire property to use as a private cemetery "by purchase, donation, or devise." Dedication of land for cemetery purposes is virtually permanent, with limited removal procedures available, "and shall be deemed to be in respect for the dead . . . and a duty to, and for the benefit of, the general public." Dedicated cemetery land is exempt from taxation, judgment, and liens. Once the land is dedicated, the

^{90.} *Id.* § 18.39.215.

^{91.} *Id.* § 70.58.030.

^{92.} *Id.* §§ 18.39.170, 18.39.217.

^{93.} *Id.* §§ 68.52.030–68.52.040; *see* Rea v. Tacoma Mausoleum Ass'n, 174 P. 961, 962 (Wash. 1918) ("As public cemeteries, for the orderly and decent sepulture of the dead, are necessary requirements for all populous communities" (quoting 5 RULING CASE LAW: CEMETERES § 3 (William M. McKinney & Burdett A. Rich eds., 1914))); Hite v. Cashmere Cemetery Ass'n, 290 P. 1008, 1009 (Wash. 1930) (requiring evidence of injurious or offensive drainage or fumes for an injunction request by private landowners against a public cemetery extension). For a thorough list of examples of public cemetery documents and municipal codes, see *Cemeteries and Cemetery Administration*, MUN. RSCH. SERVS. CTR., https://mrsc.org/Home/Explore-Topics/Parks-and-Recreation/Park-Facilities/Cemeteries-and-Cemetery-Administration.aspx [https://perma.cc/GB8K-R9LA] (last updated Oct. 2, 2019).

^{94.} See WASH. REV. CODE §§ 68.05.010–68.05.900; Funeral Directors, Embalmers, Cemeteries, Crematories, and Funeral Establishments, WASH. ST. DEP'T OF LICENSING, https://www.dol.wa.gov/business/funeralcemetery [perma.cc/4TEV-PXGH]; see also WASH. REV. CODE §§ 68.40.010–68.40.900, 68.44.010–68.44.900, 68.46.010–68.46.900 (governing endowments and prearrangement contracts).

^{95.} See WASH. REV. CODE §§ 68.20.010-68.20.020.

^{96.} See id. §§ 68.04.190, 68.20.080; see, e.g., Clark v. Sunset Hills Mem'l Park, Inc., 273 P.2d 645, 650 (Wash. 1954); Laurel Park Cmty., LLC v. City of Tumwater, 698 F.3d 1180, 1193 (9th Cir. 2012); Whitney v. Cervantes, 328 P.3d 957, 960 (Wash. Ct. App. 2014).

^{97.} WASH. REV. CODE §§ 68.50.240, 70.58.160.

^{98.} *Id.* § 68.24.010.

^{99.} Id. §§ 68.24.070–68.24.090.

^{100.} *Id.* § 68.24.240; WASH. ADMIN. CODE § 458-16-180 (2019).

cemetery authority may convey plots of land or rights of interment.¹⁰¹ The "cemetery authority or . . . two-thirds of the owners of plots or rights of interment" must approve of infrastructure placement over cemetery land, such as roads and powerlines.¹⁰² When an unoccupied cemetery space is neglected for five years, it is deemed abandoned and may be reclaimed and sold by the cemetery authority.¹⁰³ Historic abandoned cemeteries may be preserved.¹⁰⁴

Each state has its own unique set of laws governing human remains, but similarities can be found when comparing the laws of each state. For purposes of this Note, it is important to consider how Washington's law of human remains compares to Iowa's. The next Section explores Iowa's law of human remains.

3. Iowa State Law of Human Remains

Iowa's Final Disposition Act governs the disposition of human remains.¹⁰⁵ The Act defines final disposition as "the burial, interment, cremation, removal from the state, or other disposition of remains."¹⁰⁶ It defines cremation as "the technical process, using heat and flame, that reduces human remains to bone fragments."¹⁰⁷ Embalming is required only if the body is not buried or cremated within a certain period of time after death.¹⁰⁸ Burials are governed by "local ordinances of the political subdivision in which the final disposition site is located and any and all regulations of the cemetery."¹⁰⁹ Iowa permits the donation of organs and bodies for medical or educational purposes.¹¹⁰ If human remains are unclaimed by next of kin and the decedent had expressed no preference for burial or cremation, such remains are donated to schools for educational purposes.¹¹¹ The Iowa Code mandates civil or criminal penalties for corpse abuse, illegal disinterment, and grave desecration.¹¹²

^{101.} WASH. REV. CODE §§ 68.24.110–68.24.140, 68.24.170; see also id. §§ 68.32.010 –68.32.170 (delineating the rights of title to cemetery plots).

^{102.} Id. § 68.24.180.

^{103.} Id. §§ 68.36.010-68.36.020. The cemetery authority can also post notice and, after three years, petition for an order of abandonment. See id. §§ 68.36.020-68.36.100.

^{104.} See id. § 68.60.030.

^{105.} See IOWA CODE §§ 144C.1–144C.11 (2019).

^{106.} *Id.* § 144C.2(11).

^{107.} *Id.* § 156.1(2).

^{108.} IOWA ADMIN. CODE r. 645-100.6(3) (2020).

^{109.} *Id.* r. 641-97.13(4).

^{110.} IOWA CODE §§ 142C.1–142C.18 (codifying the Revised Uniform Anatomical Gift Act); id. §§ 142.1–142.13 (Dead Bodies for Scientific Purposes); Alcor Life Extension Found. v. Richardson, 785 N.W.2d 717, 724 (Iowa Ct. App. 2010).

^{111.} IOWA CODE § 142.1.

^{112.} Id. §§ 708.14, 709.18, 716.1–716.2, 716.5(1)(d)–(e), 716.5(2).

As in the common law, burial grounds in Iowa are considered "consecrated ground."113 Disinterment is permissible "for the purpose of autopsy or reburial only" and is contingent on the consent of the person in control of the remains. 114 Disinterment for purposes of moving a burial site "may be allowed by court order only upon a showing of substantial benefit to the public."115 To illustrate a consequence of strict aversion to disinterment, we can look to Oak Grove Cemetery, outside of Des Moines, Iowa. There, bodies were unearthed by natural erosion, and the caretakers could not rebury the bodies because the headstones were worn down and illegible. 116 Finding the information required for relocation ("cause of death, date of death, and next of kin") would be "like catching a ghost."117 Perhaps in response to such an incident, or perhaps due to land scarcity, the Iowa Legislature (hereinafter, "General Assembly") recently passed a bill permitting the disinterment of cremated remains, or of a body in order to cremate the body, by court order, under a funeral director's supervision, and after interested persons are notified.118

Iowa's Final Disposition Act also provides for the right to control disposition. In an early Iowa Supreme Court case predating the Final Disposition Act, the court held that it was

the duty of courts to see to it that the expressed wish of one, as to his final resting place, shall . . . be carried out. . . . Call it sentiment, yet it is a sentiment and belief which the living should know will be respected after they are gone. 119

But this changed with the passage of the Final Disposition Act, which grants a right of sepulture beginning with "[a] designee . . . acting pursuant to the decedent's declaration," followed by a spouse, child, parents, and further down the line of kinship. These provisions do not necessarily put the decedent's wishes first, because "[a] [decedent's] declaration shall not include directives for final disposition of the declarant's remains and shall not

^{113.} Anderson v. Acheson, 110 N.W. 335, 337 (Iowa 1907) (quoting Dwenger v. Geary, 14 N.E. 903, 907 (Ind. 1888)).

^{114.} IOWA CODE § 144.34; *id.* § 523I.309; Stark v. Stark, 738 N.W.2d 625, 627 (Iowa 2007); *see also* IOWA ADMIN. CODE r. 645-100.9(144) (2020) (requiring funeral directors to receive a permit and follow Iowa Department of Public Health guidelines before a disinterment is performed).

^{115.} IOWA CODE § 144.34; *see also id.* § 523I.402 (requiring "good cause" for removal of remains, to be made "with due care and decency.... [A] court shall consider present or future access to the cemetery, the historical significance of the cemetery, and the wishes of the parties concerned").

^{116.} Oak Grove Cemetery: Bones and Caskets Popping Out at Iowa Graveyard (Video and Photos), HUFFPOST (Dec. 20, 2011), https://www.huffpost.com/entry/oak-grove-cemetery_n_1022017 [https://perma.cc/YEU2-HVBJ].

^{117.} Id.

^{118.} S.B. 2135, 88th Gen. Assemb., Reg. Sess. (Iowa 2020).

^{119.} Thompson v. Deeds, 61 N.W. 842, 843 (Iowa 1895).

^{120.} IOWA CODE § 144C.5.

include arrangements for ceremonies planned after the declarant's death."¹²¹ In the case *In re Estate of Whalen*, the Iowa Supreme Court found that the key legislative purpose of the Final Disposition Act was to decrease litigation, which "favor[s] clarity and certainty [of disposition procedures] over ability of persons to control the final disposition of their own bodies."¹²² Thus, it followed that the "Act displaced any common law right requiring a surviving spouse to follow the decedent's instructions on burial."¹²³ However, "[a] [decedent's] declaration may include the location of an agreement for prearranged funeral services . . . , cemetery lots owned by or reserved for the declarant, and special instructions regarding organ donation."¹²⁴ For example, in *Alcor Life Extension Foundation v. Richardson*, the Iowa Court of Appeals held that a man's donation of his head to a cryonics foundation superseded his relatives' wishes to bury his body intact.¹²⁵

The Iowa Board of Mortuary Science ("Iowa Mortuary Board"), within the Bureau of Professional Licensure of the Iowa Department of Public Health ("Iowa Health Department"), governs the licensing of funeral directors and mortuary establishments and investigates complaints about such establishments.¹²⁶ The Iowa Code broadly defines "mortuary science" to include: the preparation for, or direction and supervision of, the "burial or disposal of dead human bodies except supervising cremations;" arranging or providing funeral services; selling caskets, urns, or other receptacles; and embalming.¹²⁷ To practice mortuary science, a person must earn a funeral director's license, which entails studying for two years in a program approved by the Iowa Mortuary Board and then passing an examination.¹²⁸ A person need not be a certified funeral director to "bury their own dead" so long as they acquire a burial transit permit and are not compensated for performing the burial. ¹²⁹ Separate from the funeral director's license, funeral establishments and cremation establishments must obtain an establishment license. 130 Such establishments must maintain death records. 131

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^{121.} *Id.* § 144C.3(2).

^{122.} In reEstate of Whalen, 827 N.W.2d 184, 189, 192 (Iowa 2013).

^{123.} *Id.* at 193. *See generally* Timothy J. Farmer, Note, *Don't Die in Iowa: Restoring Iowans' Right to Direct Final Disposition of Their Bodily Remains*, 100 IOWA L. REV. 1813 (2015) (discussing the implications of *In re Estate of Whalen*).

^{124.} IOWA CODE § 144C.6(3).

^{125.} Alcor Life Extension Found. v. Richardson, 785 N.W.2d 717, 727 (Iowa Ct. App. 2010).

^{126.} See IOWA CODE §§ 147.12, 147.13(14), 147.14(1)(p), 147.16–147.28A; Board of Mortuary Science—Home, IOWA DEP'T PUB. HEALTH, https://idph.iowa.gov/Licensure/Iowa-Board-of-Mortuary-Science [https://perma.cc/9WLE-S2WJ].

^{127.} IOWA CODE § 156.1(7).

^{128.} *Id.* §§ 156.3, 156.4(4); *see* IOWA ADMIN. CODE r. 645-100.2(156) (2020). The examination covers "the subjects of funeral directing, burial or other disposition of dead human bodies, sanitary science, embalming, restorative art, anatomy, public health, transportation, business ethics, and such other subjects as the board may designate." IOWA CODE § 156.4(4).

^{129.} *Id.* § 156.2(4); *see also id.* § 144.32 (outlining the burial transit permit requirements).

^{130.} *Id.* §§ 156.1(3)–(5), 156.14.

^{131.} *Id.* §§ 144.26–144.31, 144.48–144.49.

Iowa municipalities have long had wide latitude to establish and regulate interment sites, "which will not ordinarily be interfered with by the courts." However, in one early case, when a cemetery polluted a town's water supply, the Iowa Supreme Court held that the Iowa Code "will never be construed to authorize the creation and maintenance of either a public or a private nuisance, unless it expressly so declares, or a nuisance is the natural and probable result of the act authorized." As of 2005, the Iowa Cemetery Act dictates the management of cemeteries. He Iowa Cemetery Act preserves government entities' authority to maintain cemeteries and requires such entities to "preserve and protect the cemetery or burial site as necessary to restore or maintain its physical integrity." Cemeteries may establish rules regarding "the use, care, control, management, restriction, and protection of the cemetery" and the property within the cemetery. Cemeteries may regulate the scattering of cremains on their grounds.

City codes establish the administrative requirements and processes for cemetery zoning.¹³⁸ When an Iowa cemetery association purchases land, it owns the land in equity.¹³⁹ The association can then convey interment rights to individuals—"license[s] to make interments . . . to the exclusion of all others."¹⁴⁰ If a burial space is unoccupied for 75 years, the cemetery may initiate an action to quiet title.¹⁴¹ Cemeteries cannot be acquired by "adverse possession, unless it is shown that all remains in the cemetery . . . have been disinterred and removed to another location."¹⁴² Additionally, "[a] mortgage,

^{132.} Payne v. Town of Wayland, 109 N.W. 203, 204 (Iowa 1906).

^{133.} *Id*.

^{134.} See generally IOWA CODE §§ 523I.801–523I.814 (governing cemetery management).

^{135.} *Id.* §§ 523I.316(3)(a), 523I.501.

^{136.} *Id.* § 523I.304(1).

^{137.} *Id.* § 523I.304(2)(c).

^{138.} See, e.g., DES MOINES, IOWA, MUN. CODE § 134-3.4.3 (2020), https://library.municode.com/ia/des_moines/codes/code_of_ordinances?nodeId=Chapter%20134%20-%20ZONING [https://perma.cc/JgV7-FPW5]; MARION, IOWA, CODE OF ORDINANCES ch. 176 (2020), https://www.cityofmarion.org/home/showdocument?id=19443 [https://perma.cc/E3A3-DE7Z]; IOWA CITY, IOWA, CITY CODE, tit. 14 (2019), https://codelibrary.amlegal.com/codes/iowacityia/latest/iowacity_ia/0-0-0-19281 [https://perma.cc/E8H6-BA9A]; Aaron Calvin, Roundabout Cemetery in West Des Moines to Become Another Regular Roadside Burial Ground, DES MOINES REG. (Aug. 16, 2019, 1:07 PM), https://www.desmoinesregister.com/story/news/local/west-des-moines/2019/08/15/west-des-moines-cemetary-in-the-middle-of-road-move-roadside-huston-iowa-history-graves-mills-civic/2021410001 [https://perma.cc/Z5MK-4ATZ]. See generally Johnson v. Bd. of Adjustment, 239 N.W.2d 873 (Iowa 1976) (holding that residents must participate in city zoning administrative procedures).

^{139.} Duntz v. Ames Cemetery Ass'n, 186 N.W. 443, 445 (Iowa 1922).

^{140.} Carter v. Town of Avoca, 197 N.W. 897, 898 (Iowa 1924); see Iowa Code §§ 523I.310, 523I.312, 523I.314A.

^{141.} IOWA CODE § 523I.315(2).

^{142.} *Id.* § 523I.316(7).

deed of trust, or other lien placed on dedicated cemetery property \dots is subject to the dedication." ¹⁴³

The foregoing survey of Iowa's current law of human remains and Washington's law before SB 5001 frames the inquiry of how each state's law can change to permit a new method of final disposition. Next, this Note considers the changes made to Washington law with SB 5001.

III. RECOMPOSITION AS AN ALTERNATIVE METHOD OF DISPOSITION

A. THE MECHANICS OF HUMAN COMPOSTING AND ALKALINE HYDROLYSIS

The idea of human composting grew from the concepts of natural and green burials. Katrina Spade, founder and CEO of the human composting company Recompose, developed the process and infrastructure of recomposition as it will be implemented in Washington State. ¹⁴⁴ This process is distinct from other kinds of green burials, ¹⁴⁵ and works as follows:

A carbon- and nitrogen-heavy mixture of wood chips, alfalfa and straw is put into a container called a vessel. The body is then laid on top of the vessel and covered with the same mixture. To make sure enough oxygen is getting to the body—allowing microbes to decompose it—a fan system is set up to provide air. The body breaks down within a month, and what's left are two wheelbarrows full of soil. ¹⁴⁶

The process is modeled after a similar process that is used to compost livestock carcasses on farms, which is regulated for safety and sanitation by the Washington State Department of Ecology.¹⁴⁷ The recomposition process has

^{143.} *Id.* § 523I.604(2).

^{144.} Henry Alford, Everything You're Afraid to Ask About Human Composting, NEW YORKER (Aug. 26, 2019), https://www.newyorker.com/magazine/2019/09/02/everything-youre-afraid-to-ask-about-human-composting [https://perma.cc/ $V_524-X99X$].

^{145.} FAQ. RECOMPOSE, https://www.recompose.life/faq [https://perma.cc/T4AF-KCA4] ("Our patent-pending process is modeled on green burial, but designed for our cities where land is scarce. Organic reduction happens inside of a vessel, which is modular and re-usable.").

^{146.} Robin Young & Jackson Cote, Soil Instead of Ashes: Human Composting is About to Become Legal in Washington State, WBUR (May 16, 2019), https://www.wbur.org/hereandnow/2019/05/16/human-composting-washington [https://perma.cc/YPZ8-4NSC]. To facilitate the microbial decomposition, the vessels are slowly rotated every few days. Sarah A. Spitz, Culture Watch—From Dust to...Compost?, SANTA MONICA DAILY PRESS (Dec. 19, 2019, 6:00 AM), https://www.smdp.com/culture-watch-from-dust-to-compost/184132 [https://perma.cc/7FK3-P8H5].

^{147.} Dr. Lynne Carpenter-Boggs, *Recomposition of Human Remains*, RECOMPOSE, https://www.recompose.life/pilot [https://perma.cc/C4DX-CM5E]. *See generally* WASH. ADMIN. CODE § 173-350-220 (2019) (establishing safety and sanitation standards for compost facilities); WASH. STATE DEP'T OF ECOLOGY, No. 05-07-034, ON-FARM COMPOSTING OF LIVESTOCK MORTALITIES (Aug. 1, 2005), https://fortress.wa.gov/ecy/publications/documents/0507034.pdf [https://perma.cc/KVT3-KQFX] (providing guidelines for composting of animal carcasses at animal feeding operations).

been tested to meet these regulations.¹⁴⁸ Recomposition is sanitary because the "[r]emains are ... heated to 131 [degrees] F[ahrenheit] ..., killing off contagions."¹⁴⁹ The resulting soil "is much like the topsoil you'd buy at your local nursery," and is safe to be used in the same way.¹⁵⁰ Families can either take the soil home or donate it to a conservation forest.¹⁵¹

Alkaline hydrolysis, also known as "liquid cremation" or "water reduction," 152 is a different process than human composting. Susanne Wiigh-Masak of Sweden developed the concept of alkaline hydrolysis in 2001. 153 Wiigh-Masak founded Promessa, a company "seek[ing] to replace cremation . . . with a technologically enhanced form of organic composting." 154

Alkaline hydrolysis is a chemical process that uses a combination of hot water, lye, pressure, and circulation to liquefy a corpse in a few short hours. The process dissolves flesh to its liquid elements Studies show the resulting liquid to be a sterile effluent, which can be safely discharged into a city sewer or possibly used as fertilizer. . . .

Proponents of alkaline hydrolysis claim the process is a dignified, respectful, and green alternative to cremation because the process merely accelerates the natural process of decomposition.¹⁵⁵

Thus, the end result of alkaline hydrolysis is not soil, but a liquid. "Mortuary digestors," the machinery used for alkaline hydrolysis, are "relatively inexpensive;" the process "does not pollute, as incinerators do. And because no natural gas is used, the process is approximately ten times cheaper than incineration." ¹⁵⁶ Alkaline hydrolysis is currently legal in 19 states. ¹⁵⁷ The Iowa

^{148.} Carpenter-Boggs, *supra* note 147 (explaining that the recomposition process, as tested, "met all safety thresholds of [Washington Administrative Code] 173-350-220... and Department of Ecology 05-07-034 for composting livestock mortalities").

^{149.} Ritu Prasad, *How Do You Compost a Human Body—And Why Would You?*, BBC NEWS (Jan. 30, 2019), https://www.bbc.com/news/world-us-canada-47031816 [https://perma.cc/BEgL-E[QZ].

^{150.} FAQ supra note 145; see Carpenter-Boggs, supra note 147 (providing an executive summary of a study by Washington State University's Soil Science Department demonstrating the safety and efficacy of the recomposition process).

^{151.} Spitz, supra note 146.

^{152.} See ROACH, supra note 22, at 252; Kent Hansen, Comment, Choosing to be Flushed Away: A National Background on Alkaline Hydrolysis and What Texas Should Know About Regulating "Liquid Cremation," 5 EST. PLAN. & CMTY. PROP. L.J. 145, 147 (2012).

^{153.} ROACH, supra note 22, at 261.

^{154.} Id.

^{155.} Hansen, *supra* note 152, at 150–51 (footnotes omitted).

^{156.} ROACH, supra note 22, at 253.

^{157.} Michael Waters, *The Future of Death Tech Has No Rules—Yet*, WIRED (Jan. 24, 2020, 8:00 AM), https://www.wired.com/story/the-future-of-death-tech-has-no-rulesyet [https://perma.cc/[BqH-CFPL].

General Assembly is currently considering legalizing the practice, which has support from the Iowa Funeral Directors Association.¹⁵⁸

B. WASHINGTON'S HUMAN COMPOSTING LAW

SB 5001, titled "Human Remains—Alkaline Hydrolysis and Natural Organic Reduction," amends Washington's existing code to permit the practices of alkaline hydrolysis and human composting. ¹⁵⁹ Generally, such revisions of the RCW entail nothing more than inserting the terms "alkaline hydrolysis" and "natural organic reduction" where necessary, ¹⁶⁰ removing the term "cremated" so that the term "human remains" can include those processed by a new method, ¹⁶¹ or replacing a specific term like "burial" or "cremation" with the broader, all-encompassing term "final disposition." ¹⁶² The most important implications of these changes are discussed below.

SB 5001 refers to "human remains' or 'remains' [as] the body of a deceased person, including remains following the process of cremation, alkaline hydrolysis, or natural organic reduction." "Natural organic reduction" is "the contained, accelerated conversion of human remains to soil," to be conducted in designated facilities. 164 Existing law which permitted the placement of cremated remains in "niches" of "columbariums" or in "scattering gardens" are revised to also permit placement of composted remains. 165 After processing by alkaline hydrolysis or recomposition, remains may be disposed "on private property, with the consent of the property owner; and on public or government lands or waters with the approval of the government agency" as is already permitted for cremated remains. 166 SB 5001 preserves the decedent's "right to control the disposition of his or her own remains" and the hierarchy of right of sepulture, as was already codified. 167 As

^{158.} See H.F. 578, 88th Gen. Assemb., Reg. Sess. (Iowa 2019), https://www.legis.iowa.gov/docs/publications/LGI/88/HF578.pdf [https://perma.cc/6H7W-RCXR] (requiring the Iowa Department of Public Health to "conduct a study on whether to authorize the use of alkaline hydrolysis as a method of disposing of a body of a deceased person" and "to submit a report to the general assembly about the study by January 1, 2020"); Lobbyist Declarations, IOWA LEGISLATURE, https://www.legis.iowa.gov/lobbyist/reports/declarations?ga=88&ba=HF578 [https://perma.cc/5QUZ-VFTM]. As of yet, there have been no updates on this bill. See Bill History for House File 578, IOWA LEGISLATURE, https://www.legis.iowa.gov/legislation/billTracking/billHistory?billName=HF%20578&ga=88 [https://perma.cc/W3XY-7VLQ].

^{159.} See 2019 Wash. Sess. Laws 3804.

^{160.} See, e.g., id. at 3804, 3808-09.

^{161.} See, e.g., id. at 3805.

^{162.} See id. at 3807-10, 3812-13, 3817.

^{163.} Id. at 3804.

^{164.} Id. at 3805.

^{165.} Id

^{166.} *Id.* at 3807. "The state regulations on what can be done with the remains are still being worked out...." Chia-Yi Hou, *You'll Soon Be Able to Compost Your Body After You Die*, HILL (Feb. 21, 2020), https://thehill.com/changing-america/well-being/medical-advances/484092-soon-you-can-compost-your-body-after-you-die [https://perma.cc/586Y-XVF8].

^{167.} See 2019 Wash. Sess. Laws 3807.

for cremated remains, people in lawful possession of human remains processed by alkaline hydrolysis or recomposition are "entitled to possession of the human remains without further intervention by the state." ¹⁶⁸

Recomposition and alkaline hydrolysis will be licensed professions.¹⁶⁹ Recomposition and alkaline hydrolysis must be performed "within a reasonable time after death," with a permit for each body to be processed.¹⁷⁰ Recomposition and alkaline hydrolysis facilities must keep record of the human remains processed on site.¹⁷¹ Pre-existing laws regarding inspection of funeral establishments and crematories will apply to recomposition facilities.¹⁷² SB 5001 also accounts for fees and land acquisition for facilities.¹⁷³ The Washington Department of Licensing adopted new administrative rules, effective May 7, 2020, specific to the licensing and operation of alkaline hydrolysis and recomposition facilities.¹⁷⁴ Washington State Board of Health is in the midst of establishing further regulations in coordination with the state departments of health, licensing, and ecology, and likely will need to focus on a protocol for cases of communicable diseases, including COVID-19.¹⁷⁵

The Washington company behind recomposition, Recompose, will "open its first facility in Seattle's SoDo neighborhood in 2021" and has thus far raised \$4.7 million from investors and donors to develop its operations, which will pave the way for expansion to other locations. The recomposition method is patent-pending, which will open opportunities for franchising if the patent is granted.

C. JUSTIFICATIONS FOR LEGALIZING RECOMPOSITION

For each of us individually, and at a global level, the impact of death is significant. Worldwide, two people die every second, and in the United States,

^{168.} Id. at 3809.

^{169.} *Id.* at 3805–06, 3817.

^{170.} *Id.* at 3806; *id.* at 3812–13.

^{171.} *Id.* at 3809.

^{172.} Id. at 3817.

^{173.} *Id.* at 3805–06.

^{174.} See WASH. ADMIN. CODE §§ 308-47-010 to 308-47-110 (2020); id. §§ 308-47A-010 to 308-47A-040; id. §§ 308-48-010 to 308-48-880; id. §§ 308-49-100 to 308-49-210; id. §§ 308-50A-005 to 308-50A-070; Wash. State Dep't Licensing, Washington Administrative Code Notice of Permanent Rules for Washington State Funeral and Cemetery Board (May 1, 2020), https://www.dol.wa.gov/business/funeralcemetery/docs/98-308-ces.pdf [https://perma.cc/6KD3-ECEW] (explaining the rulemaking and summarizing the public comments and responses).

^{175.} See Wash. Reg. 20-07-055 (Mar. 11, 2020).

^{176.} Kurt Schlosser, *Human Composting Company Recompose Raises* \$4.7*M* and *Hires GM Ahead of 2021 Seattle Opening*, GEEKWIRE (Mar. 11, 2020, 9:00 AM), https://www.geekwire.com/2020/human-composting-company-recompose-raises-4-7m-hires-gm-ahead-2021-seattle-opening [http://perma.cc/8TZS-X5M3].

^{177.} See World Intell. Prop. Org. [WIPO], System and Method for Recomposition of the Dead, WIPO 2019/023343 A1 (Jan. 31, 2019), https://patentimages.storage.googleapis.com/bf/d5/6b/e5ecdb5e5c9110/WO2019023343A1.pdf [https://perma.cc/9NVV-32EK]; FAQ, supranote 145.

2.5 million people die every year.¹⁷⁸ Recomposition is one way to mitigate the harms posed by the sheer volume of the dead. This Section discusses the arguments in support of recomposition as an available method of final disposition.

1. Recomposition Promotes Efficient and Sustainable Land Use

Recomposition offers a solution to the problem of finite land for burying our dead. Land scarcity is especially burdensome in urban settings. Cities already experience a dearth of space available for burial grounds, and "even finding space for an urn can be a challenge." 179 "In 1970, it was estimated that American cemeteries occupied two million acres of land." Although the United States lacks a "centralized census of available grave space," we can assume that the cemetery sprawl has grown significantly given the increased presence of expansive memorial parks and the laws against disinterment. Laws restricting disinterment are justified for reasons of decency and respect, but they underscore the eternal impact of traditional burials on the American landscape. As an illustration: to bury all 76 million Americans estimated to reach life expectancy "between 2024 and 2042... would require roughly 130 square miles of pure grave space, not counting roads, trees or pathways. That's an area about the size of Las Vegas." 182

The land use problem is aggravated by bureaucracy and socioeconomics. World War II "ushered in the modern era of land-use planning and zoning ... with the democratic trappings of zoning boards and public hearings for new development." ¹⁸³ Carlton Basmajian, an Iowa State University professor of urban planning, surmised that, "[w]hen you have to go before a zoning board and the neighbors show up and say we don't want to live next to dead people, you have a political problem." ¹⁸⁴ Space limitations also make burial plots more expensive: The average cost of a burial plot is \$1,000–\$4,000, but "[i]n land-constrained cities, those costs can be even higher. . . . [A]t Green-Wood [Cemetery in Brooklyn, NY], buying a burial plot alone can cost around

^{178.} DOUGHTY, supra note 19, at 37.

^{179.} John McManus, *The World is Running Out of Burial Space*, BBC NEWS (Mar. 13, 2015), https://www.bbc.com/news/uk-31837964 [https://perma.cc/S3H7-FRTJ] ("A 2013 survey indicated nearly half of England's cemeteries could run out of space within the next 20 years.").

¹⁸o. MARSH, *supra* note 13, at 59.

^{181.} Amy Biegelsen, America's Looming Burial Crisis, BLOOMBERG CITYLAB (Oct. 31, 2012, 7:45 AM), https://www.citylab.com/equity/2012/10/americas-looming-burial-crisis/3752 [https://perma.cc/AGU7-2934].

^{182.} Id.

^{183.} Id.

^{184.} Id.

\$18K."¹⁸⁵ Furthermore, cemetery grounds are exempt from liens, taxes, and adverse possession, which arguably constrains productive use of land.¹⁸⁶

Most existing green burial practices do not remedy the problems of land scarcity because they still involve dedicating land exclusively for the body's disposal. ¹⁸⁷ In contrast, recomposition does not require such dedication of land: It turns a person's remnants into soil, which can become an integral part of the land in its natural form. ¹⁸⁸ Legalizing recomposition can combat land scarcity and promote efficient land use because, where composted remains lay, there is room for other life to grow.

2. Recomposition Minimizes Harms to the Environment and the Atmosphere

Traditional mortuary practices not only diminish the quantity of space, but also damage the quality of that space. "[T]raditional cemeteries [maintain] a lawn of grass that must be mowed, watered, sprayed with pesticides, and used for nothing else, theoretically until the end of time." 189 Groundwater is regularly contaminated with toxic embalming wastes. 190 Natural resources are sapped to produce caskets: a year's supply—approximately two million caskets—requires hundreds and thousands of tons of bronze, copper, and steel, and millions of board-feet of wood. 191 Although existing green burial practices avoid these harms, green burials cannot curtail the release of environmental toxins from the human body itself. The human body can store up to 219 toxins in its lifetime, including

^{185.} Jarred Schenke, *Urban Cemeteries Running Out of Space as Baby Boomers Enter Twilight Years*, FORBES (Nov. 3, 2017, 11:13 AM), https://www.forbes.com/sites/bisnow/2017/11/03/urban-cemeteries-running-out-of-space-as-baby-boomers-enter-twilight-years/#21b8fdbb579c [https://perma.cc/47M6-HDXE]; *How Much Does a Funeral Cost?*, LINCOLN HERITAGE FUNERAL ADVANTAGE, https://www.lhlic.com/consumer-resources/average-funeral-cost [https://perma.cc/AE9B-WWWW].

^{186.} See supra text accompanying notes 100, 142–43.

^{187.} See supra Section II.B. Conservation burial grounds do serve the additional purpose of ecological restoration by partnering with land trusts and maintaining "minimal burial density." Frequently Asked Questions About Conservation Burial Grounds, GREEN BURIAL COUNCIL, https://www.greenburialcouncil.org/uploads/1/2/4/2/124231485/frequently_asked_questions_about _conservation_burial_grounds.pdf [https://perma.cc/2EVY-J2JX].

^{188.} See supra notes 144–46 and accompanying text.

^{189.} Shannon Palus, *How to Be Eco-Friendly When You're Dead*, ATLANTIC (Oct. 30, 2014), https://www.theatlantic.com/technology/archive/2014/10/how-to-be-eco-friendly-when-youre-dead/382120 [https://perma.cc/R6QD-H5AT].

^{190.} See Asmara M. Tekle, Have a Scoop of Grandpa: Composting as a Means of Final Disposition of Human Remains, 3 SAVANNAH L. REV. 137, 139 (2016); see also MARK HARRIS, GRAVE MATTERS: A JOURNEY THROUGH THE MODERN FUNERAL INDUSTRY TO A NATURAL WAY OF BURIAL 33–34 (2007) (surveying different instances of groundwater contamination from leaking embalming fluids).

^{191.} HARRIS, *supra* note 190, at 34–35; *see also* Brown, *supra* note 44 ("According to the California-based Green Burial Council, cemeteries in the United States put more than 4 million gallons of embalming fluid and 64,000 tons of steel into the ground each year, along with 1.6 million tons of concrete.").

BPA, preservatives, pesticides, and metals, and the body releases these toxins into the soil as it decays. 192

Cremation emits toxic air pollutants such as carbon dioxide and mercury, and such emissions are not currently regulated. Mercury emissions from dental fillings are particularly concerning because even very small amounts of mercury can be harmful to humans and animals, and its accumulation in the environment is permanent. Studies regarding mercury levels from cremation are conflicting, but some indicate that the amount is significant and is likely to increase as more people choose cremation. The operation of crematories also pollutes the air: "A single cremation requires about two SUV tanks worth of fuel. Scattering ashes is not so eco-friendly, either, because [c] remated remains consist of calcium phosphate and sodium and are heavy, apt to smother foliage on the surface. Underground cremated remains create . . . a nutrient-deficient salt lick that has no environmental benefits.

Recomposition diminishes the environmental harms of traditional mortuary practices. The recomposition process forgoes the use of pesticides, embalming fluids, and caskets. Tests of the recomposition process show that it reduces levels of metals and bodily toxins, including mercury, to "well under EPA limits," leaving the composted remains safe to use as regular soil.¹⁹⁸ Recomposition also requires about one-eighth the amount of energy that is needed for cremation.¹⁹⁹ The recomposition process sequesters air pollutants, saving an estimated metric ton of carbon dioxide "each time someone chooses

^{192.} Jae Rhim Lee, My Mushroom Burial Suit, TED (July 2011), https://www.ted.com/talks/jae_rhim_lee_my_mushroom_burial_suit#t-163585 [https://perma.cc/ZAR9-FW3Y].

^{193.} Philip Donald Batchelder, Comment, Dust in the Wind? The Bell Tolls for Crematory Mercury, 2 GOLDEN GATE U. ENV'T L.J. 118, 119 (2008); Heather Poole, Crematories and 'Safe' Chemicals, MEDIUM (Nov. 5, 2018), https://medium.com/s/story/are-crematory-emissions-safe-simply-because-theyre-unregulated-fed494ea9f9c [https://perma.cc/KF36-XV2A].

^{194.} Batchelder, *supra* note 193, at 120–24.

^{195.} *Id.* at 124–30.

^{196.} Palus, *sutpra* note 189. "[T]he [GBC] estimates that cremation—which involves heating a furnace to close to 2,000 degrees Fahrenheit for up to two hours—produces about the same emissions as driving 500 miles in a car." Brown, *sutpra* note 44.

^{197.} FAQs: Green Burial Defined, GREEN BURIAL COUNCIL, https://www.greenburialcouncil.org/green_burial_defined.html [https://perma.cc/F976-Z4NT]. Better options for cremated remains include using "Let Your Love Grow, a product that turns ashes into plantable soil for a memorial flower or tree. Another option is Eternal Reefs, which hold cremated remains in an underwater cement ball and create new marine habitats for fish and other sea life." Sonya Vatomsky, Thinking About Having a 'Green' Funeral? Here's What to Know, N.Y. TIMES (Mar. 22, 2018), https://www.nytimes.com/2018/03/22/smarter-living/green-funeral-burial-environment.html?login=smartlock&auth=login-smartlock [https://perma.cc/3GS4-REYB].

^{198.} Carpenter-Boggs, *supra* note 147 (explaining the studies of the recomposition process, and finding that "[t]est[] results for arsenic, cadmium, copper, zinc, lead, and mercury were all well under EPA limits"); *see also* WASH. ADMIN. CODE § 173-350-220 (2019) (establishing safety and sanitation standards for compost facilities, which the recomposition process complies with).

^{199.} Prasad, *supra* note 149 (referencing a statistic purported by Recompose, a company on the forefront of recomposition).

organic reduction over cremation or conventional burial."²⁰⁰ Although the impact of crematoria pollution pales in comparison to our world's major polluters,²⁰¹ promoting cleaner methods of final disposition is nonetheless a step forward in reducing air pollution and encouraging other industries to become more environmentally conscious.

3. Legalizing Recomposition Promotes Consumer Welfare

The inclusion of recomposition in the death care market can save people money. A traditional funeral service costs \$9,000 on average, not including the cost of a burial plot, flowers, or transportation.²⁰² In Iowa, if these costs go unpaid, the decedent's estate can be charged "[r]easonable funeral and burial expenses."²⁰³ At a total cost of about \$5,500, recomposition is cheaper than traditional burials, slightly cheaper than green burials (costing around \$6,000 in Washington, with burial plot prices ranging depending on "real estate in a specific location,")²⁰⁴ and potentially cheaper than cremation, which can cost anywhere between \$1,000–\$7,000.²⁰⁵

Legalizing recomposition also enriches consumers' power of choice. Final disposition is a significant choice in a person's (end of) life. As with other life choices, it is valuable to promote a variety of options in a given market—here, the death care market—to accommodate individuals' unique preferences. People's death care preferences are changing. A nationwide survey indicates that "[i]n 2015, 64 percent of adults 40+ said they would be interested in green funeral options, compared with 43 percent in 2010."206 Professor Sloane points out that "[i]ronically, as the grave has become legally inviolate, Americans have become increasingly indifferent to the cemetery as a sacred space or as a community and cultural institution."207 Recomposition is shaping up to become a new cultural institution, improving upon

^{200.} FAQ supra note 145 (providing a Life Cycle Assessment for further comparison data); see also id. ("We screen for non-organics like metal fillings, pacemakers, and prostheses and artificial joints during the process, and recycle them whenever possible.").

^{201.} ROACH, *supra* note 22, at 257.

^{202.} How Much Does a Funeral Cost?, supra note 185; Funeral Costs: How Much Does an Average Funeral Cost?, PARTING (Sept. 14, 2019), https://www.parting.com/blog/funeral-costs-how-much-does-an-average-funeral-cost [https://perma.cc/53PD-L7N5].

^{203.} IOWA CODE $\S 633.425(3)$ (2019).

^{204.} FAQs: Green Burial Defined, supra note 197; FAQ, supra note 145.

^{205.} See MARSH, supra note 13, at 64 ("A direct cremation, arranged by the family with the crematory without the involvement of a funeral director, can cost less than \$1,000. The cost of a direct cremation arranged through a funeral home, which is required in many states, can vary widely."); Joshua L. Slocum, The Funeral Rule: Where It Came from, Why It Matters, and How to Bring It to the 21st Century, 8 WAKE FOREST J.L. & POLY 89, 91 (2018) (discussing the purpose and efficacy of the FTC's Funeral Rule). See generally David Foos, Comment, State Ready-to-Embalm Laws and the Modern Funeral Market: The Need for Change and Suggested Alternatives, 2012 MICH. ST. L. REV. 1375 (describing the economic costs and detriments of traditional funeral practices).

^{206.} FAMIC Study, FUNERAL & MEM'L INFO. COUNCIL, https://www.famic.org/famic-study [https://perma.cc/C4AV-G7AW].

^{207.} SLOANE, supra note 15, at 7.

traditional mortuary practices while retaining the ceremonial and sentimental values of a traditional funeral. 208

Codification of recomposition not only accepts people's changing views on death care, but also provides clarity for those who might not otherwise know about the death care options available to them.²⁰⁹ The media coverage of SB 5001—much of it cited throughout this Note—was significant, and undoubtedly caught people's attention. Public knowledge about mortuary practices could encourage people to think more about death care in advance of death. Public awareness is crucial for consumer welfare because normally, "the funeral transaction is . . . influenced by . . . the disorientation caused by bereavement, the lack of standards by which to judge the value of the commodity offered by the seller, the need to make an on-the-spot decision, [and] general ignorance of the law."²¹⁰

4. Legalizing Recomposition Promotes Public Health and Social Equality

Mortuary practices naturally implicate issues of public health and, historically, issues of social equality. The common law right to a decent burial²¹¹ is deeply important because we wish to treat our dead with at least as much respect as we do our living. Death rituals are a delicate part of the mourning process and are spiritual for many people. But the availability of death care is tied to wealth,²¹² and the practice of death rituals can have disparate health impacts for certain vulnerable individuals. Author Caitlin Doughty illustrated the intersection of these issues, albeit in a different country under different regulatory and customary circumstances:

[N]ot being forced to see corpses is a privilege of the developed world. On an average day in Varanasi, on the banks of the Ganges in India, anywhere from eighty to a hundred cremation ghats burn. After a very public cremation (sometimes performed by young children from India's untouchable caste), the bones and ashes are released into the waters of the holy river. . . . Families that cannot afford a cremation but want their dead loved one to go into the Ganges will place the entire body into the river by night, leaving it there to decompose. Visitors to Varanasi see bloated corpses floating by or being eaten by dogs. There are so many of these corpses in the river that the Indian government releases thousands of flesh-eating turtles to chomp away at the "necrotic pollutants." ²¹³

^{208.} See Lilly Smith, The World's First Human Composting Facility Will Let Us Recycle Ourselves, FAST CO. (Nov. 25, 2019), https://www.fastcompany.com/go434525/the-worlds-first-human-composting-facility-could-help-us-recycle-ourselves [https://perma.cc/FFQ6-TQ62].

^{209.} See MITFORD, supra note 21, at 20–21.

^{210.} Id.

^{211.} See supra note 53 and accompanying text.

^{212.} See supra note 54 and accompanying text.

^{213.} DOUGHTY, supra note 19, at 49.

In the United States, the social and public health issues arising from death rituals are more insidious. In particular, embalmers face daily health hazards in the workplace. Embalmers work with toxic chemicals like formaldehyde, a carcinogen, and they develop a "decreased sensitivity to [formaldehyde, which] increases the likelihood that embalmers unknowingly overexpose themselves to the toxic gas, boosting their odds of contracting brain, colon, kidney, and other cancers for which the trade shows elevated rates."²¹⁴ Embalming fluids can also poison people's drinking water by seeping into the soil and the water table.²¹⁵ Before the twentieth century, arsenic was used in embalming fluid, and to this day, it is still detected in water sources near old cemeteries.²¹⁶ "Drinking arsenic-contaminated water has . . . been linked to cardiovascular disease, lung disease and cognitive deficits in children," as well as cancer.²¹⁷ Bacteria from corpses in crowded cemeteries also contaminate water.²¹⁸ Recomposition is a safer occupation and practice because it eliminates embalming, burials, and the resulting toxins.

Recomposition might also be a safer occupation than cremation. As of now, a primary concern for crematory workers is potential exposure to radiation from the bodies of cancer patients. Recently, an Arizona crematorium exhibited elevated levels of the same radioactive compound that a cancer patient had been treated with before his death and cremation.²¹⁹ Urinalysis revealed no traces of that compound in the crematory operator, but did reveal a small trace of a different cancer-treatment compound, signaling "a bigger problem if crematory workers are exposed to small doses of radioactive materials repeatedly."²²⁰ As discussed previously in Section III.C.2, cremation emits pollutants, like mercury, that are dangerous to crematory workers and the general public.²²¹ More information is needed to determine the dangers of radioactive materials released during cremation and recomposition, but studies show that recomposition safely reduces toxins like mercury.²²²

Symbolically, recomposition can promote social equality. American cemeteries reflect our history of social stratification. Some cemeteries were

^{214.} HARRIS, *supra* note 190, at 15.

^{215.} Mollie Bloudoff-Indelicato, Arsenic and Old Graves: Civil War-Era Cemeteries May Be Leaking Toxins, SMITHSONIAN MAG. (Oct. 30, 2015), https://www.smithsonianmag.com/science-nature/arsenic-and-old-graves-civil-war-era-cemeteries-may-be-leaking-toxins-180957115 [https://perma.cc/5S3E-7FUQ]; see supra note 190 and accompanying text.

^{216.} Bloudoff-Indelicato, supra note 215.

^{217.} Id.

^{218.} See supra text accompanying note 192.

^{219.} Rachel Becker, *Radiation in a Crematorium Traced Back to a Human Body*, VERGE (Feb. 26, 2019, 12:10 PM), https://www.theverge.com/2019/2/26/18241402/radiation-crematorium-arizona-radiopharmaceuticals-cancer-body-lutetium [https://perma.cc/MZS3-MKP5].

^{220.} Id.

^{221.} See supra notes 193–96 and accompanying text.

^{222.} See Carpenter-Boggs, supra note 147.

(and thus still remain) segregated, a "surprisingly robust ghost of Jim Crow."²²³ Both Washington and Iowa have codified prohibitions against racial discrimination by cemetery authorities, presumably in response to the refusal of burial rights on the basis of race.²²⁴ Cemeteries reveal flagrant "distinctions between the ostentatious mausoleums of the wealthy and the trench graves of the poor."²²⁵ Recomposition presents itself as a uniform process, universally available (or hopefully soon to be),²²⁶ empowering people to choose where and how their remains will rest. Ultimately, human composting achieves the common law goals of "maintain[ing] public health and decency"²²⁷ by reducing each decedent to the same organic matter that supports life on Earth.

IV. IOWA SHOULD LEGALIZE RECOMPOSITION AS AN OPTION FOR FINAL DISPOSITION

In light of the justifications for recomposition discussed in Section III.C, Iowa should follow Washington's example and legalize recomposition. Recomposition might not be so outlandish to Iowans: The idea developed from farmers' methods of composting dead livestock, which is an accepted practice in Iowa.²²⁸ Because there are no certified green burial sites located in Iowa, Iowans are left with limited options for alternative final disposition.²²⁹ Through legislative or regulatory means, Iowa should expand the disposition options available to Iowans.

A. LEGISLATIVE OPPORTUNITIES FOR LEGALIZATION OF RECOMPOSITION

The Iowa General Assembly could legalize recomposition by making minor revisions to the Iowa Code. In its current form, the Iowa Code might already be read to permit human composting: It allows for "other disposition"

^{223.} The Persistent Racism of America's Cemeteries, SLATE: ATLAS OBSCURA (Jan. 16, 2017, 2:30 PM), https://slate.com/human-interest/2017/01/america-s-segregated-cemeteries-are-important-troves-of-forgotten-black-history.html [https://perma.cc/3D69-N5YU].

^{224.} WASH. REV. CODE § 68.50.035 (2019) ("It shall be unlawful for any cemetery ... to refuse burial to any person because such person may not be of the Caucasian race."); IOWA CODE § 523I.304(3) (2020) ("A cemetery shall not adopt or enforce a rule that prohibits interment because of the race, color, or national origin of a decedent."); id. § 523I.307.

^{225.} SLOANE, *supra* note 15, at 151, 187–88.

^{226.} Granted, it will take time for recomposition to become available to people across the United States, and the current \$5,500 price tag may be out of reach for some people.

^{227. 25}A C.J.S. Dead Bodies § 14 (2020).

^{228.} See supra note 147 and accompanying text; see also IOWA ADMIN. CODE rr. 567-105.1(2) (b), 567-105.3, 567-105.6 (2020) (establishing requirements for animal mortality composting, as promulgated by the Iowa Department of Natural Resources).

^{229.} See supra note 43 (providing a list of states that have at least one certified green burial site, in which Iowa is not included). However, there is one non-certified hybrid cemetery, the Rose Hill Memorial Gardens Prairieview Preserve in Marshalltown, Iowa. Green Burial Cemeteries in the US and Canada, N.H. FUNERAL RES., EDUC. & ADVOC., https://www.nhfuneral.org/green-burial-cemeteries-in-the-us-and-canada.html [https://perma.cc/T5A3-RTTX] (last updated Apr. 2, 2020).

and does not contain any language limiting what that "other disposition" must be.²³⁰ Since recomposition is a thermal-based process, it might fall under the definition of "cremation" in some states,²³¹ but not in Iowa, which requires cremation to involve both "heat and flame."²³² Ultimately, to start a new practice like recomposition, death care professionals would rather obtain explicit legislative approval than assume the practice is already covered as "other disposition." An Ohio funeral director made such an assumption based on similarly vague statutory language; after starting an alkaline hydrolysis business without state approval, he suffered the costs of litigation, as well as disciplinary proceedings and a public reprimand from the Ohio Board of Embalmers and Funeral Directors.²³³ In the long run, codification encourages the development of best business practices and promotes public knowledge of the law.

The General Assembly is already considering alkaline hydrolysis as a method of final disposition,²³⁴ so it would make sense to consider recomposition as well-just as the Washington Legislature did when it codified both practices with SB 5001.235 To account for the new practice of recomposition, revisions to the Iowa Code might entail a simple "fiddl[ing] with some phrases in an outdated law."236 The General Assembly could model these revisions after those made by the Washington Legislature, which served to: incorporate new definitions pertaining to recomposition; make licensing requirements applicable to recomposition; establish recomposition facility infrastructure requirements; and establish how the composted remains can be used and where they can be placed—e.g., in scattering gardens, conservation forests, or on private land.²³⁷ The General Assembly could adopt definitions and infrastructure criteria similar to those adopted in Washington to comply with the patent-pending recomposition process. The General Assembly could have localities and cemeteries decide whether composted remains may be scattered in designated areas. The General Assembly might vest in the Iowa Mortuary Board the authority to implement licensing of recomposition practitioners and facilities, which could be subject to the existing safety and

^{230.} IOWA CODE § 144C.2(11) (2019); see also id. § 156.1(7)(a) (discussing the definition of "mortuary science" in the Iowa Code, which includes preparations related to the "burial or disposal of dead human bodies" (emphasis added)).

^{231.} See Tekle, supra note 190, at 150–54 (discussing the legalization of alkaline hydrolysis in some states under an expanded definition of cremation); Waters, supra note 157 (suggesting the term "cremation by carbon").

^{232.} IOWA CODE § 156.1(2).

^{233.} Tekle, *supra* note 190, at 152; Waters, *supra* note 157; T. Scott Gilligan, *Ohio Court Rules Against Alkaline Hydrolysis*, OHIO FUNERAL DIRS. ASS'N (Feb. 14, 2012), https://ofdaonline.org/aws/OFDA/pt/sd/news_article/56232/_PARENT/layout_details/true [https://perma.cc/BNP7-L8YS].

^{234.} See supra note 158 and accompanying text.

^{235.} See supra Section III.B.

^{236.} Waters, supra note 157.

^{237.} See supra Section III.B (discussing the components of Washington's SB 5001).

sanitation requirements for compost facilities implemented by the Iowa Department of Natural Resources.²³⁸ The Iowa Mortuary Board could also revise mortuary science curriculum to account for education and training in proper recomposition methods.²³⁹ Such licensing and educational requirements could be modeled after those in Washington, which are still in development.²⁴⁰ Indeed, as this Note explores next, the General Assembly might leave it entirely up to the Iowa Health Department, of which the Iowa Mortuary Board is a part, to legalize recomposition.

B. REGULATORY OPPORTUNITIES FOR LEGALIZATION OF RECOMPOSITION

Iowa might legalize recomposition through administrative rulemaking. A "rule" is an "agency statement of general applicability that implements, interprets, or prescribes law or policy."²⁴¹ The General Assembly can permit or require an Iowa agency to promulgate rules by statute "so long as 'intelligible principle' exists to guide its exercise."²⁴² Agency rulemaking is legislative in nature, but it must remain within the scope of an agency's enabling statute.²⁴³ When reviewing rulemaking, courts construe the rulemaking authority narrowly.²⁴⁴ Iowa's Administrative Procedure Act ("APA"), modeled after the federal APA and the Model State APA, outlines the rulemaking process.²⁴⁵

The Iowa Health Department is an agency with delegated rulemaking authority.²⁴⁶ The General Assembly granted the Iowa Health Department with "sole jurisdiction over the disposal and transportation of the dead bodies of human beings and . . . the methods to be used in preparing such bodies for

^{238.} See supra notes 126–31 and accompanying text; see also IOWA ADMIN. CODE rr. 567-105.1(2), 567-105.3, 567-105.6 (2020) (establishing requirements for animal mortality composting, as promulgated by the Iowa Department of Natural Resources).

^{239.} See supra notes 126-31 and accompanying text.

^{240.} See supra text accompanying notes 174–75.

^{241.} Iowa Administrative Procedure Act, IOWA CODE § 17A.2(11) (2019).

^{242.} Iowa Farm Bureau Fed'n v. Env't Prot. Comm'n, 850 N.W.2d 403, 420 (Iowa 2014) (quoting Whitman v. Am. Trucking Ass'ns, Inc., 531 U.S. 457, 474, 476 (2001)); Wallace v. Iowa State Bd. of Educ., 770 N.W.2d 344, 348–49 (Iowa 2009).

^{243.} Arthur Earl Bonfield, *The Iowa Administrative Procedure Act: Background, Construction, Applicability, Public Access to Agency Law, the Rulemaking Process,* 60 IOWA L. REV. 731, 826, 829, 896 (1975); *see* JOE ROYCE, LEGIS. SERVS. AGENCY, RULEMAKING GUIDE 7 (Jack Ewing ed., 2015), https://www.legis.iowa.gov/docs/publications/LG/14966.pdf [https://perma.cc/FQT4-KN9D] ("A general delegation of rulemaking authority does not grant to an administrative agency unlimited power to regulate matters within the agency's expertise." (citing Litterer v. Judge, 644 N.W.2d 357, 363–64 (Iowa 2002))).

^{244.} See, e.g., Iowa Power & Light Co. v. Iowa State Com. Comm'n, 410 N.W.2d 236, 240 (Iowa 1987).

^{245.} Bonfield, *supra* note 243, at 750–51.

^{246.} See IOWA CODE §§ 17A.2(1), 135.11 (delineating the duties of the Iowa Health Department as an agency); id. §§ 147.1(1), 147.13(14) (establishing the Iowa Mortuary Board); see also id. § 135.11(12) (granting the Iowa Health Department the duty to "[e]stablish, publish, and enforce rules not inconsistent with law . . . for the enforcement of the various laws, the administration and supervision of which are imposed upon the [D]epartment").

disposal and transportation."²⁴⁷ The question is whether, by giving the Iowa Health Department sole jurisdiction over final disposition, the General Assembly intended to enable the Department to promulgate a rule authorizing an entirely new method of final disposition. If the General Assembly did not intend to do so, then such a rule would be an invalid extension of the Iowa Health Department's delegated authority.²⁴⁸ To answer this question, this Note first lays out the basic rulemaking procedure of Iowa's APA, and then considers what the promulgation of a recomposition rule would look like.

An agency may instigate its own rulemaking, or the people of Iowa can petition the agency to do so.²⁴⁹ To initiate rulemaking proceedings, the agency must first notify the public by publishing a notice that provides "a statement of either the terms or substance of the intended action or a description of the subjects and issues involved."250 With its proposal, the agency must also provide a jobs impact statement to demonstrate its efforts "to minimize the [rule's] adverse impact on jobs." The agency may need to supplement the proposal with "a fiscal impact statement outlining the [necessary] expenditures" if the rule implicates an annual cost of over \$100,000, or \$500,000 over five years.²⁵² The agency might also need to provide a cost-benefit analysis with its proposal.²⁵³ After posting notice of the proposed rulemaking, the agency must give people at least 20 days to submit written comments on the proposal.²⁵⁴ If respondents meet certain criteria, the agency must allow them an opportunity to give an oral presentation.²⁵⁵ Once the comment period closes, the agency must consider the public's comments objectively and in good faith,256 and subsequently either adopt the rule or "terminate the proceeding by publishing notice of termination in the Iowa administrative bulletin."257 If the agency adopts a rule, the rule "shall include ... a brief explanation of the principal reasons for [the agency's] action"

^{247.} *Id.* § 135.11(7); *see also id.* § 135.11(8) (granting the authority to "[e]stablish, publish, and enforce rules which require companies, corporations, and other entities to obtain a permit from the department prior to scattering cremated human remains").

^{248.} See Iowa Dep't of Revenue v. Iowa Merit Emp. Comm'n, 243 N.W.2d 610, 615 (Iowa 1976) (laying out the requirements for an administrative regulation to have the force of law).

^{249. &}quot;An interested person may petition an agency requesting the adoption, amendment, or repeal of a rule." Iowa Administrative Procedure Act, IOWA CODE § 17A.7(1).

^{250.} *Id.* § 17A.4(1)(a).

^{251.} *Id.* § 17A.4B(2).

^{252.} Id. § 17A.4(4).

^{253.} *Id.* § 17A.4A(1).

^{254.} *Id.* § 17A.4(1)(b).

^{255.} Id.

^{256.} See Iowa Farm Bureau Fed'n v. Env't Prot. Comm'n, 850 N.W.2d 403, 420 (Iowa 2014) (holding that "[a]gencies are required to consider in good faith, and to objectively evaluate, arguments presented to them; agency officials, however, need not be subjectively impartial" (quoting Carolina Env't Study Grp. v. United States, 510 F.2d 796, 801 (D.C. Cir. 1975))).

^{257.} IOWA CODE § 17A.4(1)(b).

and, upon request, the agency shall explain its "reasons for overruling considerations urged against the rule." 258

In this instance, the Iowa Health Department could promulgate a rule defining recomposition and deeming it to fall under the "other disposition" catch-all term in Iowa Code section 144C.2.259 The Iowa Health Department's Professional Licensure Division could, in turn, promulgate a rule establishing the education and licensing requirements for recomposition practitioners and facilities.²⁶⁰ The proposed rules must comply with existing laws, such as the regulations concerning compost facilities.²⁶¹ With its proposed rule, the Iowa Health Department should provide the facts and data it relied upon in developing its proposal, including the scientific research behind the recomposition process, to enable the public to consider and comment on this data.262 In its jobs impact statement, the Iowa Health Department should contemplate the resulting "death-tech" business opportunities²⁶³ and assure that traditional mortuary industries will be maintained alongside the new recomposition industry. A fiscal impact statement may be necessary depending on administrative costs and the costs of building and maintaining a recomposition facility.

If, during the notice-and-comment period, the Iowa Health Department receives significant objections to the recomposition proposal, but the Department adopts the rule anyway, the Department must, upon request, explain why it did not rule in favor of the opposing comments. ²⁶4 If the Iowa Health Department revises its original proposal in response to comments received, and if the revised proposal is not a "logical outgrowth" of the original proposal, the Department must initiate a new notice-and-comment

^{258.} *Id.* § 17A.4(2). But, "[t]his explanatory requirement does not apply when the agency adopts a rule that only defines the meaning of a provision of law if the agency does not possess delegated authority to bind the courts to any extent with its definition." *Id.*

^{259.} *Id.* § 144C.2(11).

^{260.} *Id.* §§ 135.11A(1), 147.36; IOWA ADMIN. CODE r. 645-7.1 (2020).

^{261.} See IOWA ADMIN. CODE rr. 567-105.1(2), 567-105.3, 567-105.6; see also IOWA CODE § 17A.19(10) (providing that a court may reverse an agency rulemaking for a number of reasons, including if the rule violates a law or if the agency acts beyond its delegated authority).

^{262.} Iowa Exec. Order No. 9 (Sept. 14, 1999), https://publications.iowa.gov/2571/1/EO_09.pdf [https://perma.cc/9WGX-78DE]; see also United States v. N.S. Food Prods. Corp., 568 F.2d 240, 251 (2d Cir. 1977) ("If the failure to notify interested persons of the scientific research upon which the agency was relying actually prevented the presentation of relevant comment, the agency may be held not to have considered all 'the relevant factors.'").

^{263.} Waters, supra note 157.

^{264.} IOWA CODE § 17A.4(2); see also FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009) (holding that an agency's explanation for its final rule "must show that there are good reasons for the new policy. But it need not demonstrate to a court's satisfaction that the reasons for the new policy are better than the reasons for the old one; it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better, which the conscious change of course adequately indicates.").

period.²⁶⁵ After completion of rulemaking and finalization of the rule's language, the rule is adopted in the Iowa Administrative Code.²⁶⁶

Iowa law tests the longevity of administrative rules in a number of ways. Under the Iowa APA, Iowa's governor and attorney general may review agency rules.²⁶⁷ The Administrative Rules Review Committee ("ARRC"), a bipartisan entity composed of five state senators and five state representatives, may also review agency rules.²⁶⁸ So long as the rule is not "unreasonable, arbitrary, capricious, or otherwise beyond the authority delegated to the agency," the rule is likely safe from objection by Iowa's governor, attorney general, or the ARRC.²⁶⁹ However, Iowa's governor may also "rescind an adopted rule by executive order within seventy days of the rule becoming effective."270 The ARRC may also propose "that th[e] rule be overcome by statute" and refer the rule to the General Assembly for further action.²⁷¹ The ARRC may then delay or suspend the rule "until the adjournment of the next regular session of the general assembly."272 More significantly, in 1984, voters amended the Iowa Constitution to allow the General Assembly to nullify an administrative rule at any time by joint action.273 And in 1999, Governor Thomas Vilsack outlined a number of principles regarding rulemaking in Executive Order No. 9, including that "each agency shall only issue rules that are authorized by state law and that aid in interpreting the law or serve an important public need."274 Furthermore, after administrative review of a rule is completed, a person with standing may challenge the rule in court.²⁷⁵

Ultimately, legislative reform seems to be preferable to rulemaking for legalizing recomposition. Judging from legislative history, case law,²⁷⁶ and the Iowa Health Department's existing rules,²⁷⁷ it seems unlikely that the General Assembly intended to allow the Iowa Health Department to establish new methods of final disposition via rulemaking. Iowa Code section 135.11 seems to lack an intelligible principle to facilitate the Department's formation of a

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265. Iowa Citizen/Labor Energy Coal., Inc. v. Iowa State Com. Comm'n, 335 N.W.2d 178, 181 (Iowa 1983) (quoting BASF Wyandotte Corp. v. Costle, 598 F.2d 637, 642 (1st Cir. 1979)).
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^{266.} IOWA CODE § 17A.5.

^{267.} *Id.* § 17A.4(6)(a).

^{268.} Id. § 17A.8.

^{269.} Id. § 17A.4(6).

^{270.} Id. § 17A.4(8).

^{271.} Id. § 17A.8(8).

^{272.} *Id.* § 17A.8(9)(a).

^{273.} IOWA CONST. art. III, § 40; ROYCE, supra note 243, at 36.

^{274.} ROYCE, supra note 243, at 14 (quoting Iowa Exec. Order No. 9, supra note 262).

^{275.} See Iowa Med. Soc'y v. Iowa Bd. of Nursing, 831 N.W.2d 826, 839 (Iowa 2013); Iowa Dep't of Revenue v. Iowa Merit Emp. Comm'n, 243 N.W.2d 610, 615 (Iowa 1976); IOWA CODE § 17A.19(10).

^{276.} See Sanon v. City of Pella, 865 N.W.2d 506, 512 (Iowa 2015).

^{277.} For existing administrative rules regarding final disposition, see IOWA ADMIN. CODE rr. 641-97.1-641-97.18 (2020). For existing administrative rules regarding funeral director licensing and practices, see IOWA ADMIN. CODE rr. 645-100.1-645-104.8.

new disposition method.²⁷⁸ And a new disposition method might not qualify as an important public need under Executive Order No. 9. Even if the Iowa Health Department could promulgate a valid rule for recomposition, the General Assembly retains the power to eliminate that rule at any time under the Iowa Constitution. Thus, for purposes of legalizing recomposition, legislation possesses more authority and permanence than an administrative rule. The stability and foreseeability of legislation appeals to Iowans hoping to be composted after death, and to recomposition companies expanding to new states. Legislation leaves less to speculate than agency rules, and this certainty supports business investments and individuals' death planning.

C. ADDRESSING POTENTIAL BARRIERS TO A RECOMPOSITION LAW IN IOWA

Inevitably, there are obstacles to legalizing recomposition. People will reasonably ask: Is the effort and expense of codifying a new death care practice worth the outcome? Will this jeopardize existing death care industries? Will people actually choose recomposition over traditional methods?²⁷⁹ Without delving too deeply into the economics of this scenario, this Section considers these challenges.

Economic feasibility is a genuine concern. Recomposition is less expensive than burial, but it is likely more expensive than cremation.²⁸⁰ The recomposition process is currently patent-pending, and if the patent is granted, initial licensing of the process will be slower and more costly.²⁸¹ As of yet, the regulatory costs of legalizing recomposition are not fully known. The rollout of Washington's recomposition law will indicate whether existing regulatory procedures for traditional burials and cremations (e.g., licensing, inspection, financing) can easily apply to recomposition, or whether regulating recomposition will require substantial procedural deviation with added costs. However, these costs could eventually decrease once the practice becomes streamlined and as more people choose recomposition as their method of final disposition.²⁸² Furthermore, these costs can be shifted to the recomposition industry itself, rather than to the state and its citizens.

^{278.} See IOWA CODE § 135.11. But see Whitman v. Am. Trucking Ass'ns, Inc., 531 U.S. 457, 474–75 (2001) (noting the history of broad interpretation of the intelligible principle requirement).

^{279.} Asmara M. Tekle considers similar questions in her article, *Have a Scoop of Grandpa: Composting as a Means of Final Disposition of Human Remains.* Tekle, *supra* note 190, at 140 n.16.

280. *See supra* note 205 and accompanying text.

^{281.} Guarino, supra note 6; see Robert P. Merges & Richard R. Nelson, On the Complex Economics of Patent Scope, 90 COLUM. L. REV. 839, 868–84 (1990).

^{282.} See Sofia Quaglia, "I Want My Children to Remember Me When They Look at the Trees," INVERSE (Mar. 30, 2020, 8:58 AM), https://www.inverse.com/mind-body/human-composting-coming-to-another-town-near-you [https://perma.cc/B2HM-DURX] ("Carpenter-Boggs knows that the process itself can still be improved. Currently, she and her lab are working towards better understanding how to make the process efficient. That will help design more effective and, perhaps, more cost-effective methods to make this death rite a reality for more Americans.").

For existing funeral and cremation industries, a new industry like recomposition likely will not pose an existential threat. Recomposition would be an additional option, not a mandate, for consumers. Some people will ultimately find that traditional burial, cremation, or donation to science is right for them. Recomposition can establish itself as a new occupation and source of employment—a part of the rising "death-tech" industry.²⁸³ Including recomposition in the competitive market can encourage the traditional funeral and cremation industries to develop more affordable and eco-friendly practices. Recomposition can also support other industries in Iowa: Alfalfa (hay) is a staple crop in Iowa, and it is one of the primary materials used in the human composting process.²⁸⁴ Linking the agriculture and death care industries poses a unique and lucrative opportunity in Iowa.

If the Iowa General Assembly found Washington's recomposition method to be economically infeasible, discussion of the practice could nonetheless spur consideration of other opportunities to mitigate the environmental issues of burial and cremation. For example, Dr. John Troyer "stud[ies] crematoriums that capture the excess heat from the cremation process and put it to use elsewhere—heating other buildings . . . [,] saving taxpayers [\$18,600] a year."²⁸⁵ Iowa could consider the green burial methods discussed in Section II.B of this Note, such as conservation burial grounds "designed to preserve and expand existing wilderness areas while using the burials as a funding mechanism for the environmental work."²⁸⁶ Iowa could consider strategies championed by countries that have already acted in anticipation of land scarcity, such as building "multi-stor[y] underground burial tunnels."²⁸⁷ Or the General Assembly may decide to legalize alkaline hydrolysis.

Iowa's "right to control" rule under *In re Estate of Whalen*²⁸⁸ raises doubts about the utility of a law legalizing a new disposition method. If someone wished to be composted after death, a family member might decide differently and remain within the law's bounds. The move to legalize a new disposition method provides the General Assembly an opportunity to revisit this issue and to potentially limit or overrule the *Whalen* holding with new legislation respecting a person's choice regarding their own final disposition.²⁸⁹

^{283.} Waters, supra note 157.

^{284.} See 2019 State Agricultural Overview: Iowa, U.S. DEP'T AGRIC., https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=IOWA [https://perma.cc/8R5D-WX2J]; Young & Cote, supra note 146.

^{285.} DOUGHTY, *supra* note 19, at 217. *See generally* Adrianna K. Michalska, Note, *REC-overing Body Heat: How Awarding Renewable Energy Credits to Crematoria Can Encourage the Development of Renewable Electricity*, 50 CONN. L. REV. 987 (2018) (advocating for crematoria-generated electricity).

^{286.} Brown, supra note 44; see supra Section II.B.

^{287.} McManus, supra note 179.

^{288.} See supra text accompanying notes 122–24.

^{289.} *See supra* Section III.B (discussing Washington session law's language prioritizing decedent's choice of disposition); Farmer, *supra* note 123, at 1835–40.

Ultimately, proponents of a new method of disposition must capture people's interest and support. To pass a recomposition law with the governor's approval, the Iowa General Assembly needs the support of its constituents. To build this support, advocates must overcome the stigma surrounding recomposition. Human composting faces a "branding" problem because the idea of human composting may seem unsanitary or undignified.²⁹⁰ Cremation, however, faced and defeated a similar obstacle: "If cremation were known as 'human burning,' for example, it might not have grown nationally from just 3% of dispositions in 1960 to about 50% today."291 Additionally, death rituals are sensitive to change because they hold emotional and spiritual significance for many people. But cultural reluctance to change is not insurmountable. Fostering a change in ritual requires "good negotiation and mediation skills . . . underpinned by a deep understanding of local context, cultural norms[,] and values."292 From the first century AD, cremation faced a tumultuous history of cultural and religious opposition, but it has endured.²⁹³ So too can recomposition. The legalization of recomposition does not require universal endorsement, for it is not meant to replace all other methods of disposition. It would merely provide an additional option for interested individuals. Those who wish to be buried or cremated need not give recomposition a second thought.

A remaining challenge is getting people to care about sustainable methods of final disposition. Data shows that people's death care choices are motivated primarily by "cost and simplicity" rather than environmental concerns.²⁹⁴ But recomposition is on its way to becoming a simple and inexpensive process. Nationally, significant support for sustainable burial practices already exists and is growing.²⁹⁵ With alkaline hydrolysis now legal in 19 states and three more states considering human composting laws,²⁹⁶ there is a momentum of support for sustainable death care alternatives. Public education and discourse about the benefits of these alternatives can channel that momentum in Iowa.

^{290.} Richard Read, Washington State Braces for Eco-Friendly Human Composting, 'L.A. TIMES (May 13, 2019, 3:00 AM), https://www.latimes.com/nation/la-na-human-composting-washington-green-burial-inslee-20190513-story.html [https://perma.cc/PDM7-Z4FR].

^{291.} Id.

^{292.} Komla Tsey, The Search for Sustainable Disposal of Dead Bodies: The Case of Botoku, Rural Ghana, 11 OIDA INT'L J. SUSTAINABLE DEV. 23, 28 (2018).

^{293.} See Thomas Laqueur, The Burning Question—How Cremation Became Our Last Great Act of Self-Determination, GUARDIAN (Oct. 30, 2015, 10:00 AM), https://www.theguardian.com/books/2015/oct/30/burning-question-how-cremation-became-last-great-act-self-determination-thomas-laqueur [https://perma.cc/XME8-V8GG].

^{294.} KELLY, *supra* note 13, at 5.

^{295.} See supra text accompanying notes 206–08; Virginia R. Beard & William C. Burger, Change and Innovation in the Funeral Industry: A Typology of Motivations, 75 OMEGA: J. DEATH & DYING 47, 53–64 (2017).

^{296.} Waters, supra note 157; see supra text accompanying note 7.

Support for sustainable mortuary practices will continue to grow as climate change becomes a lived experience for more people. In 2019, Iowans experienced the brunt of climate change with historic flooding that devastated communities along the Mississippi and Missouri Rivers.²⁹⁷ In the future, Iowans can expect to experience more frequent heavy flooding, more severe summer droughts, and extreme heat.²⁹⁸ Dr. James Boulter of University of Wisconsin-Eau Claire predicts that "the Midwest region . . . [will] see the greatest increase in premature deaths [in the nation] due to increased temperatures brought on by climate change."299 Iowans have voiced their concerns about climate change: according to one poll, "[m]ore than twothirds of registered [Iowa] voters (69%) say they are worried about climate change, and say it is having an effect on Iowa's agriculture (74%), ... its economy (59%) and Iowans' health (58%)."300 Additionally, over 75 percent of respondents reported that water pollution and extreme weather are "serious problem[s] in their area." 301 Iowans want to mitigate the impacts of climate change, and recomposition is a significant and innovative way to do so. Iowans have shown they can appreciate having sustainable options in many facets of life, including at its end.

V. CONCLUSION

Evolving "the American way of death"³⁰² is integral to our growth as an environmentally conscious and pragmatic society. Human composting is a welcome solution to the environmental, economic, and social problems perpetuated by archaic mortuary laws. Washington's SB 5001 proves that legalizing recomposition need not be a difficult and tedious process, and one state's reform can inspire action in other states. Iowa can become one of those states by revising its code to allow recomposition. The availability of death care alternatives empowers people to meet the end of life with dignity. Recomposition reminds us of our impact on the planet and can "rectify[] our severance from the natural world in both symbolic and literal ways."³⁰³ The

^{297.} Kate Payne, *Report: Climate Change Impacts Clearer in Iowa than Much of US*, IOWA PUB. RADIO (Sept. 5, 2019, 5:49 PM), https://www.iowapublicradio.org/post/report-climate-change-impacts-clearer-iowa-much-us#stream/o [https://perma.cc/775M-M3L4].

^{298.} U.S. ENV'T PROT. AGENCY, EPA 430-F-16-017, WHAT CLIMATE CHANGE MEANS FOR IOWA (2016), https://lgjanuary2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ia.pdf [https://perma.cc/6 M_5 8-NYRR].

^{299.} Payne, *supra* note 297 (citing James Boulter, Iowa Pol'Y Project, An Uncertain Future: The Outlook for Iowa Communities and Flooding as Our Climate Changes 6 (2019), https://www.iowapolicyproject.org/2019docs/190905-Flood-Climate.pdf [https://perma.cc/6CZF-MFJ2]).

^{300.} Poll: Iowans on Board with Climate Action as Impacts Hit Home, YALE PROGRAM ON CLIMATE CHANGE COMMC'N (Aug. 12, 2019), https://climatecommunication.yale.edu/news-events/polliowans-on-board-with-climate-action-as-impacts-hit-home [https://perma.cc/WUE6-Q3RQ].

^{301.} Id.

^{302.} MITFORD, supra note 21, at 11.

^{303.} KELLY, supra note 13, at 6.

idea of turning into soil might help demystify death and ease our fear of it. There is comfort in knowing that death affects us all and that no one is alone, whether grieving a loss in life or existing as soil in death.