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THE INCREASING USE AND NEED FOR
REGULATION REGARDING DRONES IN REAL
ESTATE MARKETING

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SHOULD SELLER DISCLOSURES DRONE ON? THE INCREASING USE AND NEED FOR REGULATION REGARDING DRONES IN REAL ESTATE MARKETING

Margaret Vesper*

INTRODUCTION

When buying a house—investing in what is often considered one of the most valuable assets amassed during one’s lifetime¹—both buyers and sellers must meet certain requirements and disclose specific information in order to reach a final agreement.² What is required of buyers and sellers participating in the residential real estate market has changed over time³ and will continue to change as market conditions and expectations shift. In addition to changes in what must be revealed by a seller’s disclosure, buyers have new avenues for learning about properties they are interested in, with websites such as Realtor.com, Zillow, and Trulia being used

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¹ Editorial Board, *Homeownership and Wealth Creation*, N.Y. TIMES (Nov. 29, 2014), <https://www.nytimes.com/2014/11/30/opinion/sunday/homeownership-and-wealth-creation.html>.

² *Required Real Estate Disclosures When Selling Property*, FINDLAW, <https://realestate.findlaw.com/selling-your-home/required-real-estate-disclosures-when-selling-property.html> (last visited Feb. 14, 2019).

³ Kathleen McNamara Tomcho, Note, *Commercial Real Estate Buyer Beware: Sellers May Have Right to Remain Silent*, 70 S. CAL. L. REV. 1571, 1572 (1997); see Hilary M. Goldberg, *Disclosing the Inevitable: Reconciling the Varied Requirements for the Disclosure of Death on Real Property*, 32 NOTRE DAME J.L. ETHICS & PUB. POL’Y 183, 184 (2018).

to market homes.⁴ The information available to buyers has surged as both the technology and its accessibility have developed. The use of drones for real estate marketing is one avenue for increased consumer information, and this new technology has the potential to grow exponentially in the future.⁵ As the use of drones becomes more widespread, legislatures and courts will increasingly face issues surrounding drone regulation and will need to determine where or whether it appropriately fits into the existing legal framework.

I. SELLER'S DISCLOSURE

A. *Caveat Emptor*

To accommodate changes in expectations and access to information within the realm of seller's disclosure requirements, the law has begun to adapt by increasing the requirements for seller's disclosures for residential real property.⁶ The traditional common law approach to disclosures regarding the physical condition of real property was caveat emptor.⁷ The full Latin phrase, "[c]aveat emptor, qui ignorare non dubuit quod jus alienum emit," translates, "[l]et a purchaser, who ought not be ignorant of the amount and nature of the interest which he is about to buy, exercise proper caution."⁸ The shorter, caveat emptor, Latin for "let the buyer beware," articulates the principle that purchasers buy at their own risk.⁹

As applied to real estate transactions, under traditional caveat emptor, "the seller has no duty to disclose any information to the buyer, and it is the buyers of the realty who must conduct their own inspection and assume the risk of loss caused by the latent defects if they decide to purchase."¹⁰ This tradition of holding the buyer responsible for inspecting the property being purchased dates back to the seventeenth

⁴ *About Realtor.com*, REALTOR.COM, <https://www.realtor.com/about/> (last visited Feb. 16, 2019); *What Is Zillow?*, ZILLOW, <https://www.zillow.com/corp/About.htm> (last visited Feb. 16, 2019); *About Trulia*, TRULIA, <https://www.trulia.com/about/> (last visited Feb. 16, 2019).

⁵ John Speicher, *Drones for Real Estate: A Guide for Beginners*, DART DRONES (Mar. 16, 2017), <https://www.dartdrones.com/blog/drones-for-real-estate-guide-for-beginners/>.

⁶ See generally Robert M. Morgan, *The Expansion of the Common Law Duty of Disclosure in Real Estate Transactions: It's Not Just for Sellers Anymore*, 68 FLA. B.J. 28 (1994).

⁷ *Id.* at 28.

⁸ Goldberg, *supra* note 3.

⁹ *Caveat emptor*, BLACK'S LAW DICTIONARY (11th ed. 2019).

¹⁰ Alex M. Johnson, Jr., *An Economic Analysis of the Duty to Disclose Information: Lessons Learned from the Caveat Emptor Doctrine*, 45 SAN DIEGO L. REV. 79, 90 (2008).

and eighteenth centuries.¹¹ While caveat emptor insulated the seller from having to disclose information, it did not protect a seller who affirmatively misrepresented a defect or condition of the property.¹² Caveat emptor allowed, and was designed to, “finalize real estate transactions by preventing disappointed real estate buyers from litigating every imperfection existing in residential property.”¹³ While this protection to sellers was beneficial because it provided for stability and alienability following a real estate transaction, buyers are naturally at a distinct deficit when it comes to information regarding the seller’s property. This impediment to litigation in the real estate market regarding issues of seller disclosure has changed over time as market and consumer expectations have evolved.¹⁴

Courts in various jurisdictions have chipped away at the maxim of caveat emptor as it applies to residential real estate transactions.¹⁵ The common law trend in most jurisdictions has been that sellers must disclose facts that materially affect the value of the property.¹⁶ Sellers are required to disclose known defects which are not observable to prospective buyers and may impact the property value.¹⁷ This notion that sellers are required to disclose what affects property value also inherently suggests that there are limits to what a seller must disclose, and more minor defects, although likely of interest to potential buyers, are not required to be disclosed.¹⁸ Courts have conducted the inquiry of determining whether something “materially” affects the value of a property by using an objective standard and not a subjective standard, which would take into consideration if what was not disclosed would have impacted the buyer’s decision to purchase the property.¹⁹

¹¹ Leo Bearman, Jr., *Caveat Emptor in Sales of Realty—Recent Assaults upon the Rule*, 14 VAND. L. REV. 541, 542 (1961); see generally Walton H. Hamilton, *The Ancient Maxim Caveat Emptor*, 40 YALE L.J. 1133 (1931) (providing a detailed account of the historical development of caveat emptor).

¹² Florrie Young Roberts, *Disclosure Duties in Real Estate Sales and Attempts to Reallocate the Risk*, 34 CONN. L. REV. 1, 3 (2001).

¹³ *Goddard v. Stabile*, 924 N.E.2d 868, 873 (Ohio Ct. App. 2009).

¹⁴ *Id.*

¹⁵ Morgan, *supra* note 6, at 28.

¹⁶ *Id.*

¹⁷ Roberts, *supra* note 12, at 5.

¹⁸ *Id.* at 10.

¹⁹ *Id.*

If a seller breaches this disclosure duty, the buyer can bring a claim for rescission and damages.²⁰ In *Lingsch v. Savage*, the District Court of Appeals stated that in California, when a

seller knows of facts materially affecting the value or desirability of the property which are known or accessible only to him and also knows that such facts are not known to, or within reach of the diligent attention and observation of the buyer the seller is under a duty to disclose them to the buyer.²¹

The court also went on to explain that “sufficient materiality,” which makes this rule applicable, “depends on the facts of the particular case.”²²

B. Material Defects

What constitutes a “material defect” within the requirements of seller’s disclosures is an area of continuing evolution, and there is a distinct lack of uniformity among jurisdictions. Most litigated cases regarding the affirmative duty to disclose arise from physical defect(s) to the houses or buildings on the property, such as concerns about the foundation or roof.²³

Cases have also been brought concerning the nondisclosure of psychological stigmas of a specific property.²⁴ For example, the Pennsylvania Supreme Court in *Milliken v. Jacono* held that “purely psychological stigmas are not material defects of property that sellers must disclose to buyers.”²⁵ In *Milliken*, the sellers of a property did not disclose on their Seller’s Property Disclosure Statement that a murder-suicide had taken place in the home.²⁶ An out-of-town buyer eventually purchased the home and, upon later learning of the murder-suicide, filed a claim against the sellers and their real estate company, based in part on the sellers’ failure to disclose the murder-suicide.²⁷ Although in their decision the Pennsylvania

²⁰ *Id.* at 6.

²¹ *Lingsch v. Savage*, 29 Cal. Rptr. 201, 204 (Cal. Dist. Ct. App. 1963).

²² *Id.* at 205.

²³ Roberts, *supra* note 12, at 7–8.

²⁴ *Id.*

²⁵ *Milliken v. Jacono*, 103 A.3d 806, 811 (Pa. 2014).

²⁶ *Id.* at 807.

²⁷ *Id.* at 808.

Supreme Court acknowledged that there are many types of “traumatizing events that could occur on a property,” the court stated that while “a majority of the population would find [these types of events] disturbing . . . this does not make the events defects in the structure itself.”²⁸ The court reasoned that if it had created a requirement for disclosing psychological stigmas, there was a risk of creating a “slippery slope” and “opening the floodgates of litigation” given the factors relating to the stigma itself or the potential damages that would need to be addressed.²⁹ The court further explained that if a requirement like that were to be established, it should be left to the legislature.³⁰

A majority of states, like Pennsylvania, do not require that such a psychological stigma be disclosed. Twenty-eight states have enacted statutes that protect sellers who do not disclose death, murder, suicide, or other violent crimes so they cannot be held liable.³¹ In comparison, only three states—Alaska, California, and South Dakota—have statutes mandating the disclosure of some form of death on a property.³²

Courts have not only considered the seller’s duty to disclose psychological stigmas to potential buyers, but they have also considered the duty to disclose defects which are not located directly on one’s property.³³ “Off-site conditions” or defects “beyond the boundaries of the property being sold” have been held by some courts to be information that should be disclosed.³⁴ In *Strawn v. Canuso*, the Supreme Court of New Jersey held that because “professional sellers of residential housing and their brokers enjoy markedly superior access to information . . . it is reasonable to extend to such professionals a similar duty to disclose off-site conditions that materially affect the value or desirability of the property.”³⁵ *Strawn* concerned a claim that was brought by one hundred and fifty families who sought damages after they discovered

²⁸ *Id.* at 810.

²⁹ *Id.*

³⁰ *Id.*

³¹ Goldberg, *supra* note 3, at 197–98.

³² *Id.* at 197.

³³ Roberts, *supra* note 12, at 9.

³⁴ *Id.*

³⁵ *Strawn v. Canuso*, 657 A.2d 420, 428 (N.J. 1995).

that the new homes that they purchased were located near a hazardous-waste dump site, which had not been disclosed to the buyers.³⁶

However, in *Capano v. Borough of Stone Harbor*, the United States District Court for the District of New Jersey held that there was no liability for failure to disclose that there was a no swimming beach in front of the property because the seller made no verbal representations to the buyer regarding the existence of a swimming beach in front of the purchased property.³⁷ The court reasoned that the defendant “could not have known that the existence or non-existence of a swimming beach would render the property undesirable to plaintiff.”³⁸

What is deemed an off-site condition may vary from the presence of a loud neighbor, to the proximity of a beach, or a toxic waste dump, and courts across jurisdictions have not been consistent in holding whether these conditions must be disclosed. However, the age-old mantra that the value of property depends on “location, location, location” appears to be getting judicial recognition; and, it seems that some consideration is given to the severity and nature of the off-site condition in dispute.³⁹

II. TECHNOLOGICAL AND INTERNET DEVELOPMENTS

Disclosure requirements are not the only element of residential real property transactions that have changed and continued to change over time. Technology and access to information for sellers, and especially for buyers, has increased. These advances have allowed buyers the technical ability to compare the details of a house before leaving their couch or consulting with a real estate agent.

This trend will likely continue as investors throughout Silicon Valley put their money into real estate technology, which is now being termed “proptech.”⁴⁰ For example, one website, Opendoor, uses data, software, and a team of evaluators to determine a home’s value.⁴¹ If a seller accepts the value of their home, Opendoor

³⁶ *Id.* at 423.

³⁷ *Capano v. Borough of Stone Harbor*, 530 F. Supp. 1254, 1263 (D.N.J. 1982).

³⁸ *Id.*

³⁹ Roberts, *supra* note 12, at 9–10.

⁴⁰ Erin Griffith, *The Hot Property That’s Next on Tech’s Agenda: Real Estate*, N.Y. TIMES (Sept. 27, 2018), <https://www.nytimes.com/2018/09/27/technology/next-techs-agenda-real-estate-opendoor.html>.

⁴¹ *Id.*

will then buy their home, while charging an average of a 6.5% fee.⁴² This online company aims to avoid the uncertainty that comes with the traditional home selling transaction and eliminate the need for a real estate agent.⁴³ Opendoor seeks to make moving “as simple as the click of a button.”⁴⁴

Other tech companies have been established, developed, and expanded in order to make profit from real estate transactions, as opposed to merely providing information for consumers or internet browsers. In April 2018, Zillow, a popular website offering information on homes, announced that in the Phoenix and Las Vegas markets, it would begin testing the direct purchase and sale of homes.⁴⁵ Zillow offers to connect homeowners directly with real estate investors, which would allow homeowners to avoid having to list their home, use a real estate agent, and pay agency commissions or fees.⁴⁶ In Southern California, Redfin, a national brokerage firm, is looking into a model like Zillow’s, which allows for the direct purchase and sale of homes.⁴⁷ These new functions shift the role of websites from providing interested buyers or curious internet browsers with information, to also including companies, such as Zillow and Redfin, as part of the profit-making transaction.⁴⁸

Although websites like Zillow have become popular sources of information, there is also some concern about the accuracy of the information they provide.⁴⁹ Zillow, Realtor.com, Trulia, and other similar websites, especially those not regulated by realtors, pose a risk that the provided information is incorrect or misleading.⁵⁰ This inaccuracy is often harmless, but for those unaware that what they are viewing could be false or misleading, this data defect can cause serious problems. Some websites falsely advertise that they have houses for sale by owners or provide

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ Devon Thorsby, *Do You Want A Real Estate Website to Buy Your House?*, U.S. NEWS (May 2, 2018), <https://realestate.usnews.com/real-estate/articles/do-you-want-a-real-estate-website-to-buy-your-house/>.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Jon Colie, *How Reliable Are Those Online Real Estate Sites?*, WASH. POST (Aug. 5, 2015), https://www.washingtonpost.com/news/where-we-live/wp/2015/08/05/how-reliable-are-those-online-real-estate-sites/?noredirect=on&utm_term=.d32a1e4f66d8.

⁵⁰ *Id.*

a link to talk to an agent; however, this “on-call” real estate agent is often not the listing agent and may not know relevant and important information about the property in question.⁵¹ Additionally, Zillow offers a “Zestimate” tool, which provides “the value of all 130 million properties in America.”⁵² However, this touted Zestimate can be inaccurate, and does not consider all of the features of the property and all the factors of a market in the same ways a local real estate agent or a sophisticated buyer would.⁵³ Some sellers have raised concerns because these Zestimates, if incorrect, can “kill offers on their homes.”⁵⁴ In 2017, Zillow recognized this serious problem, and launched a contest with a \$1,000,000 prize for whoever could help improve their algorithm for Zestimates.⁵⁵

Despite this effort, not all of the 171 million people visiting Zillow and similar websites each month are aware that the information from these websites can be incorrect, especially regarding whether a property is still presently on the market.⁵⁶ The detail and quality of information provided also varies between the different websites.⁵⁷ For example, for whether a house is on the market, Realtor.com, which updates the properties actually on the market every fifteen minutes, is more accurate than Zillow.⁵⁸ Although they sometimes restrict access to members, local multiple listing service websites are among the most accurate sources for information, as they reflect real time knowledge and are updated by real estate professionals.⁵⁹ The listing agency’s website also offers a more detailed and reliable source than many of the other online websites for up-to-date and accurate information on a property.⁶⁰

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

⁵⁴ Nick Wingfield, *Angry Over Zillow’s Home Prices? You Can Win a Prize by Improving Them*, N.Y. TIMES (May 24, 2017), <https://www.nytimes.com/2017/05/24/upshot/angry-over-zillows-home-prices-a-prize-is-offered-for-improving-them.html>.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ Colie, *supra* note 49.

⁵⁹ *Id.*

⁶⁰ *Id.*

Online resources provide information not only regarding the specific property or house that one is looking to buy, but also about the details and demographics of the neighborhood where that property is located.⁶¹ Websites like AreaVibes.com, which advertises itself as designed to help you find a place to live, scores locations based on a “unique algorithm that takes into account dozens of characteristics in seven different categories, including nearby amenities, cost of living, crime rates, education, employment, housing, and weather.”⁶² These types of websites, and their access to varied information, have led buyers to expect and require more specific details about the homes they are interested in buying. The increased demand for accurate information on the buyer’s side means that those who market residential real property need to upgrade their services and cater to the developing demands of the market and potential buyers.

III. THE USE OF DRONES

A. *History and Background of Drones*

Drones have begun to provide a comparatively easy and affordable means of meeting the demands created by increasingly sophisticated real estate buyers. The drone industry itself is rapidly growing. Goldman Sachs has projected that there would be “a \$100 billion market opportunity emerging for drones from 2016 through 2020.”⁶³ The Association of Unmanned Vehicle Systems International also reports that “between 2015 and 2025, the [unmanned aircraft systems] industry will create 100,000 jobs and contribute \$82 billion to the U.S. economy.”⁶⁴

Drones developed out of the advancement of balloons used by the military for surveillance during the mid-nineteenth century.⁶⁵ These military surveillance balloons, which first appeared in the American Civil War, were eventually equipped

⁶¹ Alexia Chianis, *How Safe Is Your Neighborhood? Use These 5 Tools to Find Out*, SAFEWISE, <https://www.safewise.com/blog/crime-reporting-websites-to-help-you-stay-informed/> (last updated Nov. 28, 2018).

⁶² *The Livability Score*, AREAVIBES.COM, <https://www.areavibes.com> (last visited Jan. 29, 2019).

⁶³ Jeffrey Steele, *Drones Taking Off in Real Estate Industry Applications*, FORBES (Nov. 26, 2018), <https://www.forbes.com/sites/jeffsteele/2018/11/26/drones-taking-off-in-real-estate-industry-applications/#37b9d4067e36>.

⁶⁴ Bob Lambrechts, *The Drone Revolution*, 85 J. KAN. B. ASS’N 30, 31 (2016).

⁶⁵ Nolan Chandler, Note and Comment, *O Drone, Where Art Thou?*, 38 WHITTIER L. REV. 239, 241 (2017).

with cameras during the late nineteenth century and World War I.⁶⁶ Nikola Tesla helped to further the development of drones when he controlled a boat on a pond using radio communications, which is how today's drones are controlled in the air.⁶⁷ Drones, although initially developed and utilized by the armed services, have now regularly come to be used in other non-military government sectors and for civilian recreational uses.⁶⁸ These non-government and recreational uses have translated to increasing drone use for both personal and commercial purposes.⁶⁹

The applicable uses for drones are wide and varied. They have changed the way movies are made.⁷⁰ For example, they were used for both *Game of Thrones* and the recent *Star Wars* film to get footage that would previously have been much more time consuming or impossible to obtain.⁷¹ Drones have also been used to deliver supplies to medical clinics, as well as monitor crops in the agricultural industry.⁷² In the real estate industry, drones have primarily been used for marketing purposes, but they are also now beginning to be used in conjunction with more traditional surveying methods.⁷³ Radar and laser drones can be used to inspect whether roofs or windows leak, to check if there is flooding on the property or access roads, and to try to remedy other structural problems before they cause damage.⁷⁴

B. *Drones and the Real Estate Market*

The real estate industry is now the leading industry working with drones for marketing purposes.⁷⁵ The use of drone photography is one expanding field of drone use. The National Association of Realtors has set up a page on its website to help realtors who are interested in incorporating drone photography into the marketing of

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ Lambrechts, *supra* note 64.

⁷¹ *Id.*

⁷² *Id.*

⁷³ Steele, *supra* note 63.

⁷⁴ *Id.*

⁷⁵ *Drone-in-a-box for Real Estate? How Drones are Transforming Real Estate Marketing*, TECHHELPLINE (Feb. 27, 2018), <https://www.techhelpline.com/drones-real-estate-marketing/> [hereinafter *Drone-in-a-box for Real Estate?*].

their listings.⁷⁶ This site helps them to better understand government drone regulations.⁷⁷ Bill Brown, the 2017 president of the National Association of Realtors, described the trend of incorporating drones as a way to “streamlin[e] the buying and selling process by providing more visual information at a reasonable cost. Any opportunity you have to further educate the buyer to the property they’re purchasing is a win-win for everybody.”⁷⁸

Brown went on to explain that although drone photography and its usage are currently a novel marketing tool in the industry, it could eventually become an industry standard that sellers when marketing their property, or buyers when looking for a property, would come to expect.⁷⁹ The use of drones in real estate marketing is already substantial, as the National Association of Realtors reports that forty-four percent of its members “either use drones for marketing . . . , report that someone in their office uses drones for marketing . . . , or plan to use drones for marketing.”⁸⁰ As this technology becomes more pervasive, its legal implications will become more acute.

C. Regulation of Drones

One of the parties with a vested interest in the future of unmanned aircraft systems (“UAS”), commonly referred to as drones, is the Federal Aviation Administration (“FAA”).⁸¹ The Supremacy Clause of the Constitution grants the FAA, “exclusive and sovereign jurisdiction over the [national airspace system].”⁸² Therefore, the FAA has preemptive power over state and local authorities when it comes to national air space. This is in part due to the understanding that a single and uniform system of regulation is essential to air safety. Relating to drones, the FAA’s concerns are based on the civilian use of drones that could endanger manned aircraft, buildings, exposed pedestrians, and homeland security, as well as the need to keep

⁷⁶ Ilyce Glink, *9 Ways Drones Are Changing Real Estate*, CBS NEWS (Mar. 6, 2017), <https://www.cbsnews.com/media/9-ways-drones-are-changing-real-estate/>.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Drone-in-a-box for Real Estate?*, *supra* note 75.

⁸¹ See Lane Page, Note, *Drone Trespass and the Line Separating the National Airspace and Private Property*, 86 GEO. WASH. L. REV. 1152, 1156–57 (2018).

⁸² Timothy M. Ravich, *Grounding Innovation: How Ex-Ante Prohibitions and Ex-Post Allowances Impede Commercial Drone Use*, 2018 COLUM. BUS. L. REV. 495, 533–34.

UASs out of the airspace used by planes and away from airports and military facilities.⁸³

Recently, drone flights near airports have drawn media attention and raised security questions. In January 2019, flights at both Newark Liberty International Airport in New Jersey and Heathrow Airport outside of London were halted due to separate incidents of drone interference.⁸⁴ Twice within the same week in December 2018, drone activity forced flights to be stopped at Gatwick Airport outside of London.⁸⁵ In 2018 a drone was also reported to have hit a passenger plane near Quebec City; despite the impact, the plane was able to land safely and avoid what could have been a tragic outcome.⁸⁶ Further emphasizing the potential safety hazards posed by drones, drones are usually unable to be detected by air traffic control's radar and traffic avoidance systems in aircraft unless the drone has a transponder.⁸⁷ These drone incidents at and near airports, which have been occurring with increasing frequency, highlight the critical importance of effective regulations and enforcement for drones in the future.

In addition to the serious concerns raised about drone flights near airports, and in the airspace designated for larger aircraft, there are also serious legal concerns about drone safety raised by the public. However, the public is not left without recourse as drones, in addition to being governed by federal, state, and local laws and regulations, are in some respects governed by common law claims of trespass and nuisance.

1. Federal Regulation of Drones

The FAA has been the leading force and primary governmental agency responsible for promulgating drone regulations.⁸⁸ These regulations have evolved to

⁸³ Troy Rule, *Drone Zoning*, 95 N.C. L. REV. 133, 135–36 (2016).

⁸⁴ Lori Aratani, *Drone Activity Halts Air Traffic at Newark Liberty International Airport*, WASH. POST (Jan. 22, 2019), https://www.washingtonpost.com/transportation/2019/01/22/drone-activity-halts-air-traffic-newark-liberty-international-airport/?noredirect=on&utm_term=.1895646a6727.

⁸⁵ *Id.*

⁸⁶ *Id.*

⁸⁷ Chandler, *supra* note 65, at 239.

⁸⁸ Andrew Meola, *The FAA Rules and Regulations You Need to Know to Keep Your Drone Use Legal*, BUS. INSIDER (July 25, 2017), https://www.icex.es/icex/wcm/idc/groups/public/documents/documento_anexo/mde4/nzc3/~edisp/dax2018777817.

reflect market and user demands, while at the same time protecting against the misuse and potential dangers posed by drones.

On August 29, 2016, the FAA released a new rule regarding small-drone use.⁸⁹ Prior to the 2016 rule going into effect, in order to fly a drone commercially, the FAA required that the user get express authorization.⁹⁰ This authorization was granted under an exemption process, which was detailed by the 2012 FAA Modernization and Reform Act (“FRMA”).⁹¹ The FRMA gave the FAA control of drone regulation and, under FRMA Section 333, the Secretary of Transportation was empowered to grant exemptions for commercial drones that were determined to be capable of safely operating in the National Airspace System (“NAS”).⁹²

The FRMA also directed the Secretary of Transportation, after consulting with representatives from the aviation industry and federal agencies that utilize UASs, to develop a “comprehensive plan to safely accelerate the integration of civil unmanned aircraft systems into the national airspace system” within 270 days of the enactment of the FRMA.⁹³ Under Section 333 of the FRMA, the Secretary of Transportation was also required to make determinations about UASs’ operating safety in the NAS and, at a minimum, provide information on “which types of unmanned aircraft systems, if any, as a result of their size, weight, speed, operational capability, proximity to airports and populated areas, and operation within the visual line of sight do not create a hazard to users of the national airspace system or the public.”⁹⁴ In June 2016, the FAA published a notice of proposed rulemaking for small drones, and on August 29, 2016, this rule went into effect.⁹⁵

This new national regulation, Part 107 of title 14 of the Code of Federal Regulations (“C.F.R.”), applies to unmanned aircraft. 14 C.F.R. Section 107.3 defines small unmanned aircraft as “an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the

⁸⁹ Page, *supra* note 81, at 1156–57.

⁹⁰ *Id.*

⁹¹ *Id.* at 1157.

⁹² *Id.*

⁹³ FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95 § 332, 126 Stat. 11, 73.

⁹⁴ *Id.* § 333(b)(1).

⁹⁵ Page, *supra* note 81, at 1157.

aircraft.”⁹⁶ These new regulations allow for the operation of UASs that weigh less than fifty-five pounds, that are operated within the visual-line of sight (“VLOS”) of the operator, and that are used during the day.⁹⁷ Part 107 restricts the use of drones at night, over people, beyond the VLOS, from a moving vehicle, and above an altitude of 400 feet without a waiver being issued.⁹⁸ There are also areas where the FAA did not specifically restrict drone flight over or in close proximity to, such as: amusement parks, power plants, refineries, and prisons.⁹⁹ Instead the FAA left these issues open for state regulations.¹⁰⁰

When flying near airports the FAA requires that pilots flying over 400 feet above ground get prior authorization for their flights.¹⁰¹ Regardless of altitude, UASs must “yield the right of way to all aircraft, airborne vehicles, and launch reentry vehicles.”¹⁰² This means the small unmanned aircraft cannot pass over, under, or ahead of these other aircraft.¹⁰³ In many circumstances, these restrictions impact the availability and applicability of drone use in commercial contexts.¹⁰⁴

There is also a question of whether one needs a license in order to operate a drone. For either commercial or recreational purpose, if one is operating a drone exclusively indoors, one does not need to obtain a license, and Part 107 would not apply.¹⁰⁵ However, if a drone is being used for recreational purposes outside and is

⁹⁶ 14 C.F.R. § 107.3 (2016).

⁹⁷ Ravich, *supra* note 82, at 503; FED. AVIATION ADMIN., SUMMARY OF SMALL UNMANNED AIRCRAFT RULE (PART 107) (2016), https://www.faa.gov/uas/media/Part_107_Summary.pdf.

⁹⁸ Ravich, *supra* note 82, at 503.

⁹⁹ NAT’L LEAGUE OF CITIES, CITIES AND DRONES: WHAT CITIES NEED TO KNOW ABOUT UNMANNED AERIAL VEHICLES (UAVs) 8 (2016), <https://www.nlc.org/sites/default/files/2016-12/NLC%20Drone%20Report.pdf> [hereinafter CITIES AND DRONES].

¹⁰⁰ *Id.*

¹⁰¹ *Flying Near Airports*, FED. AVIATION ADMIN., https://www.faa.gov/uas/recreational_fliers/where_can_i_fly/airspace_restrictions/flying_near_airports/ (last updated July 22, 2020).

¹⁰² 14 C.F.R. § 107.37 (2016); Meola, *supra* note 88.

¹⁰³ 14 C.F.R. § 107.37.

¹⁰⁴ Ravich, *supra* note 82, at 503.

¹⁰⁵ *Do the FAA Rules and Regulations Apply to a Commercial UAS or Drone Operations Conducted Indoors ONLY?*, FED. AVIATION ADMIN. (Dec. 10, 2018), https://faa.custhelp.com/app/answers/detail/a_id/738/kw/General%20UAS%20or%20Drone%20Questions/session/L3RpbWUvMTU0ODM3NDA2MS9zaWQvTFBuY2hHNW8%3D.

operating in the NAS, there are two ways that one could lawfully fly the aircraft.¹⁰⁶ The first would be to fly under the Special Rule for Model Aircraft, which requires that: the drone is registered with the FAA, it is being flown for hobby or recreational purposes only, community-based safety guidelines are followed, the drone is flown within VLOS, the drone gives way to manned aircraft, prior notice is given to airports and air traffic control towers if they are within five miles, and the drone does not weigh more than fifty-five pounds.¹⁰⁷

The second option for flying drones recreationally is to follow 14 C.F.R. Part 107 of the FAA's Small UAS Rule, which requires that the drone is registered with the FAA as a "non-modeler," the pilot obtain an FAA Remote Pilot Certificate, and follow the operational requirements under 14 C.F.R. Part 107.¹⁰⁸ In order to obtain the FAA Remote Pilot Certificate, required under the FAA's Small UAS Rule, one must meet certain qualifications.¹⁰⁹ According to the FAA, this pilot certificate "demonstrates that you understand the regulations, operating requirements and procedures for safely flying drones."¹¹⁰ One must be at least sixteen years old, be able to read, speak, write, and understand English, be physically and mentally capable of safely flying a drone, and must pass an initial aeronautical knowledge exam.¹¹¹ This knowledge exam covers topics including: regulations relating to small UAS limitations and flight operation, airspace classification and operating requirements, flight restrictions that apply to UASs' operation, and airport operations.¹¹² In order to take the test, a valid United States identification showing a photo, date of birth, address, and signature is required and a fee of approximately \$150 must be paid.¹¹³ If one fails the test, they are able to retake the test in fourteen

¹⁰⁶ *Do I Need Permission from the FAA to Fly a UAS or Drone for Recreation or as a Hobby?*, FED. AVIATION ADMIN. (Dec. 21, 2018), https://faa.custhelp.com/app/answers/detail/a_id/803/kw/General%20UAS%20or%20Drone%20Questions/related/1.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ *Become a Drone Pilot*, FED. AVIATION ADMIN. (Oct. 29, 2018), https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ Stewart Lawson, *Do I Need a License to Fly a Drone? [Read Before You Fly]*, DRONEGURU, <http://www.droneguru.net/license-to-fly-a-drone/> (last updated Feb. 19, 2020).

days.¹¹⁴ Once issued, the certificate should be kept by the certificate holder and be easily accessible when conducting UAS operations.¹¹⁵ Remote Pilot Certificates are valid for two years, after which a recurrent knowledge test is required to renew the certificate.¹¹⁶

The framework the FAA has created with its Small UAS Rule allows for commercial users, including those who would take photographs for real estate marketing purposes, who are operating drones under fifty-five pounds to operate them as long as they conform with the requirements of 14 C.F.R. Part 107.¹¹⁷ However, if the drone being flown weighs over fifty-five pounds, the commercial user would then need to apply for an exemption under the Special Authority for Certain Unmanned Systems, 49 U.S.C. § 44807, which replaced Section 333 of the FAA Modernization and Reform Act of 2012.¹¹⁸ Under 49 U.S.C. § 44807, the Secretary of Transportation is provided with the authority through September 30, 2023 to decide whether UAS operation can safely operate within the NAS.¹¹⁹ This determination should be based on a risk-based approach.¹²⁰ One would need to apply for a Certificate of Waiver or Authorization (“COA”), and petition for exemption in order to operate a drone over fifty-five pounds.¹²¹ Operators with valid exemptions issued under the previous Section 333 exemption are allowed to operate under a blanket COA for two years after the date of their valid Section 333 grant of exemption as long as they fly below four hundred feet and conform with the requirements of the exemption.¹²²

The new regulatory scheme imposed by the FAA has faced legal challenges. In *Taylor v. Huerta*, a model aircraft owner claimed the FAA did not have the statutory

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Become a Drone Pilot*, *supra* note 109.

¹¹⁷ *Certified Remote Pilots Including Commercial Operators*, FED. AVIATION ADMIN., https://www.faa.gov/uas/commercial_operators/ (last updated Jan. 28, 2020).

¹¹⁸ *Special Authority for Certain Unmanned Aircraft Systems (Section 44807)*, FED. AVIATION ADMIN., https://www.faa.gov/uas/advanced_operations/section_333/ (last updated May 12, 2020) [hereinafter *Special Authority*].

¹¹⁹ 49 U.S.C. § 44807 (2018).

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Special Authority*, *supra* note 118.

authority to issue a rule requiring owners of small unmanned aircraft operated for recreational purposes to register them.¹²³ This opinion was written by then D.C. Circuit Judge Kavanaugh, now sitting on the Supreme Court of the United States, who reasoned that the 2012 FAA Modernization and Reform Act provided that “the FAA ‘may not promulgate any rule or regulation regarding a model aircraft.’”¹²⁴ The statutory interpretation for this challenge to the FAA’s authority to require the registration of model aircraft, in the words of the court, “does not get much simpler.”¹²⁵ The United States Court of Appeals for the District of Columbia held that the FAA’s registration rule violated the FAA Modernization and Reform Act and vacated the rule as applied to model aircraft.¹²⁶ Congress responded to this decision in 2017 with the National Defense Authorization Act, which included a provision allowing for registration of UASs by the FAA, and the FAA also reinstated its registration requirement.¹²⁷ By January 2018 the FAA had registered one million drones.¹²⁸

2. State and Local Regulation of Drones

The patchwork of drone regulations in place across various states has been referred to as “the proverbial wild-west.”¹²⁹ Some cities have also enacted specific drone regulations.¹³⁰ However, there is also hesitancy to act because other cities are waiting for more guidance from the FAA as to how they should be involved in the regulatory challenge presented by drones.¹³¹ The FAA itself acknowledges that challenges can be presented as various states and municipalities take individualized approaches to regulating drones stating, “[i]f one or two municipalities enacted

¹²³ Taylor v. Huerta, 856 F.3d 1089, 1090 (D.C. Cir. 2017).

¹²⁴ *Id.* at 1092.

¹²⁵ *Id.*

¹²⁶ *Id.* at 1094.

¹²⁷ 2017 Unmanned Aircraft Systems (UAS) State Legislature Update, NAT’L CONFERENCE OF STATE LEGISLATURES (Jan. 17, 2018), <http://www.ncsl.org/research/transportation/2017-unmanned-aircraft-systems-uas-state-legislation-update.aspx>.

¹²⁸ *Id.*

¹²⁹ Kevin C. Desouza et al., *Drones and the “Wild West” of Regulatory Experimentation*, BROOKINGS (Aug. 17, 2015), <https://www.brookings.edu/blog/techtank/2015/08/17/drones-and-the-wild-west-of-regulatory-experimentation/>.

¹³⁰ CITIES AND DRONES, *supra* note 99.

¹³¹ *Id.*

ordinances regulating UASs in the navigable airspace and a significant number of municipalities followed suit, fractionalized control of the navigable air space could result . . . [a] navigable airspace free from inconsistent state and local regulations is essential.”¹³²

Providing some clarity, the FAA in its *Fact Sheet on State and Local Regulation of Unmanned Aircraft Systems*, gave a list of state and local laws that it suggested state or local governments should consult with the FAA before enacting.¹³³ The *Fact Sheet* also helpfully provides local and state laws that are within the police power of the state and local authorities.¹³⁴ For example, states and municipalities should seek consultation before enacting laws that would require mandatory equipment or training for UASs that relate to safety.¹³⁵ Additionally the FAA would recommend prior consultation for laws or regulations that would regulate the navigable airspace, limit flight altitude or flight paths, or ban operations of UASs.¹³⁶ The laws and regulations which states and local municipalities have the authority to independently enact are those that relate to their police power such as laws regarding “land use, zoning, privacy, trespass, and law enforcement operations.”¹³⁷ Specific examples of potential zone restrictions include: requirements for a warrant to be obtained prior to police using a UAS for surveillance; excluding the use of drones for voyeurism, hunting or fishing, or to hinder or harass someone who is hunting or fishing; and prohibiting the attachments of firearms or weapons to UASs.¹³⁸

Although at first these delineations appear clear, the line between the federal, state, or municipal power(s) in the airspace cannot be clearly drawn. In *Skysign International Inc. v. City and County of Honolulu*, the United States Court of Appeals for the Ninth Circuit considered whether Skysign, a company that provided aerial advertising, was legally able to do so because, although they had received a waiver

¹³² FED. AVIATION ADMIN. OFFICE OF THE CHIEF COUNSEL, STATE AND LOCAL REGULATION OF UNMANNED AIRCRAFT SYSTEMS (UAS) FACT SHEET 2 (Dec. 17, 2015), https://www.faa.gov/uas/resources/policy_library/media/UAS_Fact_Sheet_Final.pdf.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ *Id.*

from the FAA, they still ran afoul of municipal ordinances.¹³⁹ Skysign had received a certificate of waiver from the FAA allowing its civil aircraft flights to take place over densely populated areas and in a congested airway near a busy airport.¹⁴⁰ Section 40103(a)(1) of title 49 to the United States Code provides that the “United States Government . . . [has] exclusive sovereignty of airspace of the United States.”¹⁴¹ However, Honolulu had local ordinances that bared various types of signage, such as flashing signs and using aircraft to display signage.¹⁴² The court stated: “[a]lthough Congress has acted to exclude the states altogether from regulating certain *aspects* of air travel, such as aircraft noise and airline pricing, . . . we agree with the United States that § 40103(a)(1) does not in and of itself exclude any state regulation of aerial advertising.”¹⁴³

In *Skysign*, the Court of Appeals was also asked to decide, whether because of conflict preemption, the certificates of waiver that had been granted by the FAA precluded the enforcement of the Honolulu ordinances.¹⁴⁴ The court held that the ordinance did not conflict with a federal purpose or policy that the FAA may have had in granting the waivers to Skysign.¹⁴⁵ The court reasoned, “state law cannot by its mere existence stand as . . . an obstacle when the federal government contemplates coexistence between federal and local regulatory schemes.”¹⁴⁶ As discussed above, drone regulation is one of the areas where federal, state, and local regulations have been contemplated, and are likely needed.

As of April 2020, forty-four states have passed laws that deal with UASs and three states—Alaska, North Dakota, and Utah—have adopted resolutions regarding UASs.¹⁴⁷ In addition to issues of federal preemption that have been discussed, there is also the potential for states to pass legislation that would preempt or restrict

¹³⁹ *Skysign Int’l, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1113–14 (9th Cir. 2002).

¹⁴⁰ *Id.* at 1113.

¹⁴¹ *Id.* at 1116.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.* at 1117–18.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 1117.

¹⁴⁷ *Current Unmanned Aircraft State Law Landscape*, NAT’L CONFERENCE OF STATE LEGISLATURES (Apr. 1, 2020), <http://www.ncsl.org/research/transportation/current-unmanned-aircraft-state-law-landscape.aspx>.

municipalities from passing their own local regulations for UASs.¹⁴⁸ Alaska addressed this concern when it passed a drone law with a section entitled “Conformity to Federal Law,” which excluded its state authorities from adopting regulations that would be inconsistent with an act of Congress or already existing regulations or standards.¹⁴⁹ The question of whether federal aviation law regarding drones would preempt state law has not yet been decided by courts.¹⁵⁰

Some states have specifically restricted the ability for public and private UAS operators to take photographs, videos, or other surveillance, while other states have decided that existing privacy laws provide enough protection against these types of activities.¹⁵¹ This means that in the commercial context, those who use drones to take photographs or videos, which includes those companies using drones for real estate marketing or inspections, will need to be continuously aware of federal, state, and also local drone regulations and restrictions.¹⁵² Although there are other states with similar laws, Florida and California provide examples of these property related laws. In Florida, if there is a reasonable expectation of privacy, one cannot use a UAS to capture photographs of privately-owned property or the owner or tenants of privately-owned property.¹⁵³ In California, knowingly entering the airspace above someone else’s land to take picture or video recording is deemed to be a physical invasion of privacy.¹⁵⁴

Cities have also begun to pass ordinances that restrict or relate to drone use. In 2015, Chicago, Illinois became the first major city to pass such an ordinance.¹⁵⁵ Edward M. Burke, co-sponsor of this ordinance and alderman of the 14th Ward of the City of Chicago, described the need for drone regulations, saying “[i]t’s clear that government regulations have simply not kept pace with drone technology. . . .

¹⁴⁸ 2017 *Unmanned Aircraft Systems (UAS) State Legislature Update*, *supra* note 127.

¹⁴⁹ Ravich, *supra* note 82, at 536–37.

¹⁵⁰ *Id.* at 537.

¹⁵¹ Kristen G. Juras, *The Game of Drones: Federal and State Rules of Play and Their Intersect with Property Law*, 34 PRAC. REAL EST. LAW. 23, 23, 30–31 (2017).

¹⁵² *Id.* at 30.

¹⁵³ *Id.* at 31.

¹⁵⁴ *Id.*

¹⁵⁵ CITIES AND DRONES, *supra* note 99, at 21; Ravich, *supra* note 82, at 538; Fran Spielman, *Drone Regulations Fly with City Council*, CHI. SUN TIMES (Nov. 18, 2015), <https://chicago.suntimes.com/news/drone-regulations-fly-with-city-council/>.

Chicago simply needs local laws in place to authorize the city to take action against those who operate drones recklessly and threaten public safety.”¹⁵⁶ The Chicago ordinance, along with restrictions similar to the later enacted new federal regulations, “banned [the use of drones] ‘directly over’ any nonconsenting person as well as over ‘property the operator does not own’ . . . and drones launched with the intention to cause ‘harm to persons or property’ or the ‘purpose of conducting surveillance unless expressly permitted by law.’”¹⁵⁷

In 2015, after Chicago passed its ordinance, Miami, Florida’s City Council passed an ordinance restricting the use of recreational UASs “within a half-mile of events in parks, stadiums, open spaces, plazas, and streets that attract large groups, or over sporting or large-venue special events.”¹⁵⁸ Miami’s ordinance also expressly provided that it “is not intended to preempt FAA rules, but to operate in conjunction with those rules to promote public safety while recognizing the limitations of the FAA’s enforcement capabilities.”¹⁵⁹ The goal of this local regulation, according to Commission Chair Wilfredo Gort, who was involved in the development of this Miami ordinance, was to stay ahead of problems that could arise with drones, stating that a drone is “no longer a toy . . . and could be very dangerous.”¹⁶⁰ Other cities like Santa Clara and San Jose in California passed laws limiting the use of drones near special events like the Super Bowl.¹⁶¹

3. Privacy and Trespass: How Drones fit in (or Do They?)

The FAA has left open for states and municipalities the control of drones through land use, zoning, privacy, and trespass, all of which are traditional areas of police power.¹⁶² In the United States, property law has traditionally been and continues to be a matter of state law.¹⁶³ States and municipalities are often best able

¹⁵⁶ Spielman, *supra* note 155.

¹⁵⁷ *Id.*

¹⁵⁸ CITIES AND DRONES, *supra* note 99, at 21.

¹⁵⁹ *Id.* (quoting John Charles Robbins, *Miami Moves to Regulate Drones*, MIAMI TODAY (Dec. 2, 2015), <https://www.miamitodaynews.com/2015/12/02/miami-moves-to-regulate-drones/>).

¹⁶⁰ John Charles Robbins, *Miami Moves to Regulate Drones*, MIAMI TODAY (Dec. 2, 2015), <https://www.miamitodaynews.com/2015/12/02/miami-moves-to-regulate-drones/>.

¹⁶¹ CITIES AND DRONES, *supra* note 99, at 20.

¹⁶² FED. AVIATION ADMIN. OFFICE OF THE CHIEF COUNSEL, *supra* note 132, at 3.

¹⁶³ Juras, *supra* note 151, at 26.

to control concerns about privacy and trespass because of specific expertise as well as enforcement abilities.

By providing for the ability of homeowners to exclude uninvited things and people from their airspace, and allowing for nuisance claims, the state courts and state legislatures have provided some individual rights and protections against unwanted drones.¹⁶⁴ In issuing its updated UAS regulations, the FAA acknowledged that states and municipalities will likely control these concerns, explaining that “[p]roperty rights are beyond the scope of this rule. However . . . depending on the specific nature of the small UAS operation, the remote pilot in command may need to comply with State and local trespass laws.”¹⁶⁵

In *United States v. Causby*, the United States Supreme Court helped to clarify the control that owners have over the airspace directly above their property.¹⁶⁶ Prior to that decision, the Latin maxim “*cujus est solum ejus usque ad coelom*,” meaning “for whoever owns the soil, it is theirs up to Heaven,” had been the controlling understanding of one’s air rights.¹⁶⁷ However, with the advent of airplanes and their continued use for commercial travel, the Supreme Court clarified that a person’s air rights certainly do not extend into the heavens.¹⁶⁸

In *Causby*, the Supreme Court was faced with a taking’s issue under the Fifth Amendment.¹⁶⁹ A husband and wife claimed that the regular and continued flights of loud Army and Navy aircraft that flew over their land at a low altitude amounted to a taking of their property that required compensation.¹⁷⁰ The Court held that there was a taking by the government of the couple’s land and their chicken farm because the primary question is the “character of the invasion” and there can be a taking as long as the damage is substantial.¹⁷¹ The Court reasoned that:

¹⁶⁴ *Id.*

¹⁶⁵ Operation and Certification of Small Unmanned Aircraft Systems, 81 Fed. Reg. 42063, 42131 (June 28, 2016) (to be codified at 14 C.F.R. pts. 21, 43, 61, 91, 101, 107, 119, 133, 183).

¹⁶⁶ *United States v. Causby*, 328 U.S. 256, 258–59 (1946).

¹⁶⁷ Ravich, *supra* note 82, at 533 n.134.

¹⁶⁸ *Id.* at 533; *see Causby*, 328 U.S. at 260–61.

¹⁶⁹ *Causby*, 328 U.S. at 258–59.

¹⁷⁰ *Id.* at 256, 258–59.

¹⁷¹ *Id.* at 265–66.

the airspace is a public highway. Yet it is obvious that if the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere. . . . [T]he landowner, as an incident to his ownership, has a claim to [suprajacent airspace] and that invasions of it are in the same category as invasions of the surface.¹⁷²

The Court declined to delineate what the exact limits are between the airspace that the public would have a claim over.¹⁷³ Instead the Court held that “[f]lights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land.”¹⁷⁴

Under the law of trespass, property owners are able to protect their right to exclude people or things from their property.¹⁷⁵ Trespass is “an intentional, unauthorized entry by a person or object onto another’s real property (including the surface, the air space above, and the earth below). It matters not whether the entrance is momentary or lengthy, nor does it matter whether the entrance resulted in harm or damages.”¹⁷⁶

In order to have a claim for private nuisance, one is required to show “the unreasonable interference with the use and enjoyment of one’s land.”¹⁷⁷ In contrast, to be a public nuisance the activity must be “harmful to public health or safety.”¹⁷⁸ Nuisance is usually claimed when light, noise, vibration, or odor “unreasonably interferes with the plaintiff’s use and enjoyment of [his/her] land.”¹⁷⁹

Because both public and private nuisance claims deal with one’s property rights, there can be overlap between nuisance and trespass claims; however, in order to bring a valid nuisance claim one does not have to own the property—they could

¹⁷² *Id.* at 264–65.

¹⁷³ *Id.* at 266.

¹⁷⁴ *Id.*

¹⁷⁵ Juras, *supra* note 151, at 28.

¹⁷⁶ *Id.*

¹⁷⁷ Hillary B. Farber, *Keep Out! The Efficacy of Trespass, Nuisance and Privacy Torts as Applied to Drones*, 33 GA. ST. U. L. REV. 359, 392–93 (2017).

¹⁷⁸ *Id.*

¹⁷⁹ *Id.* at 393.

be a lawful user or occupant of the property.¹⁸⁰ Also, as with an act of trespass, in order to make a successful nuisance claim, the plaintiff must show that the defendant's interference with the use and enjoyment was either intentional or due to negligence.¹⁸¹

In *Boggs v. Merideth*, the United States District Court for the Western District of Kentucky was presented with an interesting case, which could be a harbinger of future claims and their frequency.¹⁸² The plaintiff alleged that he was legally operating his UAS in navigable airspace when it was shot down and that federal law should preempt state law, which would mean that the defendant had no property rights and should not have shot down the plaintiff's drone.¹⁸³ The District Court made its decision on jurisdictional grounds, finding that they did not have subject matter jurisdiction over the claim because the claims brought were state trespass claims that did not present a "significant federal issue."¹⁸⁴ Although the court did not reach a decision on the merits of the case, the facts of this case are particularly interesting—the defendant, who now refers to himself as "The Drone Slayer," claimed he was defending his property against aerial assault when he shot down the UAS.¹⁸⁵

As *Boggs* illustrated, because there is still no clear line between the navigable airspace and the outer-bounds of an individual's property rights relating to airspace, the domain where drones can and should be legally operating is foggy. And while in some cases drones operate close enough to the ground to arguably constitute a trespass or create a nuisance, due to the constant advances in technology, drones may be able to increasingly escape the protections to privacy that are provided by trespass and nuisance law.¹⁸⁶ Drones are able to operate at high elevations, which may allow them to evade the airspace property rights that were provided in *Causby*.¹⁸⁷ There is

¹⁸⁰ *Id.* at 393–94.

¹⁸¹ *Id.* at 393.

¹⁸² See *Boggs v. Merideth*, No. 3:16-CV-00006-TBR, 2017 WL 1088093 (W.D. Ky. Mar. 21, 2017).

¹⁸³ Page, *supra* note 81, at 1153–54; see *Boggs*, 2017 WL 1088093, at *1.

¹⁸⁴ *Boggs*, 2017 WL 1088093, at *8.

¹⁸⁵ Page, *supra* note 81, at 1153.

¹⁸⁶ Hillary B. Farber & Marvin J. Nodiff, *Protecting Homeowners' Privacy Rights in the Age of Drones: The Role of Community Associations*, 44 *FORDHAM URB. L.J.* 623, 644–45 (2017).

¹⁸⁷ *Id.* at 644; *United States v. Causby*, 328 U.S. 256, 264–65 (1946).

a strong argument that “a cause of action that is dependent on proximity to real property is of little or no utility in the drone context.”¹⁸⁸

IV. HOW DRONES’ EMERGING AND CONTINUING COMMERCIAL USES SHOULD FIT WITHIN THE LEGAL FRAMEWORK

Where exactly drones fit into the existing network of federal, state, and local regulations, statutes, and case law remains much too unclear. Drone capabilities will continue to grow and UASs will become a part of everyday life; the potential uses for drones have not been fully realized. The varied application of drones will only become truly evident after technology has had the time and opportunity to both adapt and expand. Specifically, within the real estate context there are questions that should be more clearly asked and answered, such as the ability of real estate agents or potential buyers to use drones to take pictures of properties they are marketing or interested in purchasing.¹⁸⁹ This new form of marketing will also need to be considered by courts and legislatures in the context of seller’s disclosures.

The existing combination of state, municipal, and federal regulations indeed creates a “wild-west”¹⁹⁰ legal landscape for drones operating within the navigable airspace and close to an individual’s property. This high-tech wild west has been opened to the public. We have already seen the emergence of a “Drone Slayer” trying to protect what he believed was his property right.¹⁹¹ These legal questions should be confronted by our courts, legislative bodies, and regulatory agencies in order to give the public, as well as state and local law-makers, better clarity as to where the line in the sky should be drawn. Even if that line is drawn with minimal specificity, it would provide much needed lucidity and transparency for the muddled and dangerously unclear skies that many of today’s drone users knowingly or unknowingly occupy.

Courts are inherently reactionary and can only make decisions on the cases that are brought before them. Therefore, while courts will have a role in the future legal landscape for drones and drone regulations, courts should not and cannot be the leading body to make drone regulations and laws to comply with today’s growing

¹⁸⁸ Farber & Nodiff, *supra* note 186, at 645.

¹⁸⁹ Rule, *supra* note 83, at 136.

¹⁹⁰ Desouza et al., *supra* note 129.

¹⁹¹ Page, *supra* note 81, at 1153–54.

demands. State legislatures and municipal governments in conjunction with the Federal Aviation Administration should get ahead of some of the new and developing capabilities of and uses for drones. This opportunity is not being seized appropriately. Policymakers should be educating themselves and then continue to stay informed about the developing uses for UASs.

The remaining legal patchwork¹⁹² that exists given the many varied state regulations and local ordinances needs to be mended. While some cities like Chicago and Miami have continued to stay ahead of, or more accurately, on pace with, the expanding and increasing uses for drones, these cities do not represent that majority¹⁹³ and many municipalities have been limited in the actions that they can take to control drones because of restrictive state laws and regulations.¹⁹⁴ There are also holes in the updated FAA regulations that have been left to states, and while the majority of the states now have drone regulations,¹⁹⁵ this myriad of approaches can create confusion for users, which may undo the intended protections of such regulations.

One area of the law where there is an acute need for additional clarity on drone usage is within the real estate industry and its uses for drones. The real estate industry has emerged as the leading industry using drones for marketing purposes.¹⁹⁶ Sellers are increasingly using drone footage and photographs of their properties to market their homes, and this phenomenon is on its way to becoming an industry standard.¹⁹⁷ Drones can also be, and are now being used for, buyer inspections—as a buyer in the real estate market no longer has to beware, so long as the alleged defect is material.¹⁹⁸ This use of drones emerges as seller's disclosure requirements have been increasing to include certain material off-site conditions.¹⁹⁹ The use of drones for both sellers, buyers, and real estate agencies has the potential to create the perfect arena for future legal challenges to drone use. A buyer may have their own drone with a camera and fly it over a property they are interested in buying, or sellers may increasingly be required to use drone footage to determine potential disclosable defects. As UASs

¹⁹² Desouza et al., *supra* note 129.

¹⁹³ CITIES AND DRONES, *supra* note 99, at 20.

¹⁹⁴ *Current Unmanned Aircraft State Law Landscape*, *supra* note 147.

¹⁹⁵ *Id.*

¹⁹⁶ *Drone-in-a-box for Real Estate?*, *supra* note 75.

¹⁹⁷ *Id.*

¹⁹⁸ Morgan, *supra* note 6, at 28.

¹⁹⁹ Roberts, *supra* note 12, at 9–10.

become more affordable, their usage, especially in competitive commercial real estate, will skyrocket. These industry-specific potential problems call for more specialized and detailed regulations of drones to create clarity.

At this juncture, state legislatures and municipal governments have the opportunity to get ahead of many potential problems that could result as drones increasingly become a part of daily life. Courts will also play a role, although more of a reactionary, second-hand role, in shaping the future of drone law, as new legal challenges are brought. However, before the skies above our heads become a true wild west, action should be taken, not just for the people on the ground but also so that industries employing advances in this technology can have needed peace and clarity on their future in the sky.

