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SHIFTING TINY: THE ENVIRONMENTAL AND ECONOMIC BENEFITS OF ZONING REFORM FOR TINY DWELLINGS

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As we continue to evolve as a society we are confronted with the pitfalls of humanity. Time goes on and the greed of our human nature is reflected in our need for space, our careless use of resources, and our disregard for future generations. Humans have a hard time contemplating life beyond their very own, which is why as a race we have failed to take necessary environmental precautions. Because we are human, we are often gluttonous and in western culture specifically we have the habit of taking up far more space than we need to live a full life. Tiny homes offer an alternative form of living that is not only economically feasible for a greater number of Americans but is also more environmentally conscious when compared to traditional American living situations. This note will explore the environmental impact of today's single-family homes compared to tiny homes. To do so one must first discuss the history of zoning and building laws in the United States. Once there is an understanding of how these laws may have impacted the construction of tiny dwellings, this paper will go on to discuss a hypothetical example expressing the advantages of shifting to a tiny lifestyle. Environmental impact will be measured in the form of an ecological footprint calculated in hectares. Then, using data from the US Census Bureau, we will be able to find the potential decrease in carbon waste if new developments were primarily tiny style dwellings. It is the purpose of this analysis to challenge traditional forms of housing and look to more environmentally friendly alternatives. In the end, this note will work to show the positive impact tiny homes can have on our environment.

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I. Introduction

Property is personal. It not only represents a person's socioeconomic status, but people are often rooted in the property that they own as the identity they create for themselves. Author of *Every Life a Delight*, James Henry Potts noted, "Property is dear to man, not only because it assures him of a sustenance while he lives, but also because it is a safeguard to those he must leave behind him when he quits the earth."¹ Because our homes are so ego-driven we are often incentivized to embellish their walls with ornate details that will tell the stories of our lives. But the stories of our lives do not have to depend on the size of our homes; rather, the stories of our lives should be tempered by our impact on the world around us. If innovation provides people with a way of living a more environmentally friendly lifestyle, then our egos should be retired so that we can seize the opportunity to choose a more need-based, rather than want-based lifestyle.

¹ JAMES HENRY POTTS, *EVERY LIFE A DELIGHT* (1914).

Living tiny provides an alternative way of living that is not only economically feasible but also works to soften the carbon impact homeowners often have on the world. Although smaller homes have always been used for economical homeownership, the tiny home movement began to trend in the early 2000s.² Today, people aren't turning to the tiny lifestyle out of pure economic necessity; rather, they understand that this lifestyle offers the opportunity to live sustainably.

This Note will explore the environmental impact of tiny living and how our historical and modern zoning and building laws have worked to incentivize—or de-incentivize—their construction. The analysis will start by looking to historical zoning and building laws that may be hindering the expansion of tiny home communities. The analysis will discuss foundational property cases that have shaped local governments' powers over their zoning regulations while also looking at the socio-economic impact of those regulations. Once the foundation for zoning and building laws has been discussed, this note will specifically look at what Arizona has done in terms of its building and zoning laws and its efforts to cater to people looking to pursue the tiny, less impactful, lifestyle.

This note will then explore the potential environmental benefits of downsizing. To do so one must understand housing trends throughout the United States and specifically look to housing trends in the state of Arizona. Understanding the growth in homeownership will allow us to understand the environmental impact the growth in home construction is having on the planet. Housing developments continue to eat at our earth's resources. This note will demonstrate that if all-new tiny eligible homes were built to adhere to tiny home standards in Arizona carbon emissions would decrease by more than 583 million pounds a year.³

In the end, one can conclude that the tiny lifestyle is not only a solution to environmental inefficiencies but also economic inefficiencies present in our communities today.

II. The History of Zoning and Building Laws in the United States

Over the years, the United States government—and state governments within—have developed an extensive anthology of zoning opinions. These decisions have helped shape the lives of homeowners in America while forcing them into trends such as the single-family home or the suburban community. The following sections will discuss the history of zoning laws in the United States and how such history continues to inform homebuilding decisions throughout the country.

A. The Apex of Zoning Laws

Local governments divide their communities into districts or zones and then regulate the use of land within those zones.⁴ Zoning districts can be made through

² Emily Nonko, *A Tiny House Movement Timeline*, CURBED (July 19, 2017), <https://archive.curbed.com/2017/7/19/15974554/tiny-house-timeline>.

³ See *infra* note 106.

⁴ Eric Damian Kelly, *Fair Housing, Good Housing or Expensive Housing? Are Building Codes Part of the Problem or Part of the Solution?* 29 J. MARSHALL L. REV. 349, 352 (1996).

either administrative or legislative processes. Depending on the laws of the local government, either judicial or government officials can vote on and advocate for particular zoning restrictions. Regulation of the land includes the use of each parcel of land, the intensity of that use, as well as all aspects of the buildings allowed within a certain area.⁵ Common land use classifications used to organize these zones include residential, commercial, industrial, and agricultural.⁶ “Communities regulate intensity through minimum lot sizes, limits on residential density and limits on the total floor area of commercial or industrial space permitted for each square foot of land.”⁷ These categories were originally established to protect residential neighborhoods, provide predictability of neighbors’ use, and preserve property values.⁸

Unfortunately, zoning restrictions end up limiting the range of housing opportunities within specified areas. Zoning laws had and continue to have a major impact on the ways that properties are developed. In many cases, the laws themselves shape the social and economic status of those that reside in the homes. Single-family housing was promoted as the “American Dream” and therefore single-family zones were the most protected zones under the zoning laws in the United States. Single-family districts were, and are, the pinnacle of zoning laws and any changes made to impact them likely impacted the socio-economic balance of their communities.⁹ For instance, zoning an area for single-family living has its perks, as this form of zoning works to preserve the value of the land.¹⁰

The typical single-family zone is based on the American dream of the post-World War II era. The impact of this anachronistic concept of housing creates significant preference for single-family housing. For instance, single-family zoned housing can be up-zoned but cannot be down-zoned. To be up-zoned is to “be used for less intensive uses.”¹¹ For example, one may be able to build a single-family home in a zone built for multi-family homes. On the contrary, to be down-zoned would be to build a multi-family living space in an area zoned for single-family living.¹² This makes it difficult for multi-family housing to be built in areas zoned for a single-family residence. The result here is that the zone limitations pose problems for people looking to build tiny home communities that may be considered multi-family communities through the lens of the law. Tiny homes are often built as part of multi-family communities. This is done so that they don’t have to conform to any square foot minimums sometimes placed on single-family zoned areas. This also allows builders to fit more homes in a smaller area achieving the

⁵ *Id.*

⁶ *Id.* at 349.

⁷ *Id.*

⁸ *Id.*

⁹ Katherine M. Vail, *Saving the American Dream: The Legalization of the Tiny House Movement*, 54 LOUISVILLE L. REV. 357, 361 (2016) (discussing modern zoning laws and the impact on those who wish to live the tiny lifestyle).

¹⁰ *Id.*

¹¹ Georgette Chapman Phillips, *An Urban Slice of Apple Pie: Rethinking Homeownership in U.S. Cities*, 24 NOTRE DAME J. L. ETHICS & PUB. POL'Y 187, 191 (2010).

¹² *Id.* at 192.

same benefits as an apartment complex. This is just one barrier to entry for those seeking to build tiny communities.

B. The Socio-economic Ramifications of Zoning Laws

Zoning policies like the one described above not only had economic ramifications but shaped socio-economic segregation amongst large communities in the 1940s. Through the passing of legislation like that described above and the upholding of their constitutionality, white suburban neighborhoods grew in wealth while urban minority communities continued to struggle economically.¹³ Many have made the argument that these laws were not the only root of racial segregation in America, rather these laws worked alongside other legislation to create more barriers for those working to move into higher social classes¹⁴.

The rationale of pertinent zoning laws like the ones described above have been affirmed in foundational case law. *Village of Euclid v. Ambler Realty Company* has been the foundation for many zoning laws in the United States.¹⁵ This case specifically granted municipalities' policing power over all zoning decisions. The Court held that the village had policing power over the acreage subject to zoning restrictions.¹⁶ Ambler Realty made the argument that the zoning restriction violated Fourteenth Amendment rights. However, the Court held that the Village of Euclid had the ability to make decisions as long as they were making the decision in a fashion that made a positive impact on overall public welfare.¹⁷ The Court stated that zoning provisions must be "clearly arbitrary and unreasonable, having no substantial relation to the public health, safety, morals, or general welfare" before being ruled unconstitutional.¹⁸ In this case, the Court ultimately decided that the provisions were not unreasonable, and therefore Fourteenth Amendment rights were not violated.

One of the reasons Ambler Realty originally filed suit against the Village of Euclid was because the real estate company was looking to erect an apartment complex in the acquired land. The village zoning provisions prevented the erection of the complex. The Court in its analysis made the argument that "very often the apartment house is a mere parasite, constructed in order to take advantage of the open spaces and attractive surroundings created by the residential character of the district."¹⁹ The Court ultimately concluded that apartment complexes "come very near to being a nuisance."²⁰ The notions adopted in this opinion helped shape what is known as the Euclidean Era of zoning laws. The Euclidean Era of zoning law is where one can observe clear examples of property law being used to inadvertently make socio-economic waves.

¹³ *Id.* at 193.

¹⁴ *Id.*

¹⁵ *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 367 (1926).

¹⁶ *Id.* at 384.

¹⁷ *Id.*

¹⁸ *Id.* at 395.

¹⁹ *Id.* at 394.

²⁰ *Id.*

Modern courts have continued to rely on the rationale used in *Euclid* and the other historical zoning cases. In 2002, an Arizona appellate court heard a zoning dispute in *Emmett McLoughlin Realty, Inc. v. Pima County*.²¹ The controversy in question dealt with Arizona Revised Statute Title 11 §829(F), which has since been repealed. The statute originally prohibited counties from passing zoning regulations that would restrict a zone without permission from the landowner.²² The court, in this case, agreed with the trial court and ultimately found the “anti-downzoning” statute to be unconstitutional.²³ The court was able to make their argument based on the legislative powers supported in *Village of Euclid*.

Although the original Arizona statute was found to be unconstitutional, the findings of the court have severe policy implications. Property is personal and when a city or county can exercise its legislative power over a community without consent from the people who may have lived there for generations, tensions arise between people and the government. Specifically, the power given to the legislator, in this case, would further allow the county to freely rezone without the consent of the people.

The ideals presented in *Ambler Realty* directly impact the building of tiny home communities. Specifically, multi-family living as described in the case was said to be a nuisance by the court. If opinions such as this remain good law, they work as a direct barrier for those seeking to develop tiny home communities.

C. Zoning Laws and Restriction

The power given to municipalities in cases like *Village of Euclid* allows local governments to set restrictions on various home building standards including minimum floor space and lot size—restrictions that directly impact the construction of tiny homes.²⁴ These restrictions continue to be upheld because courts will typically look to maintaining property values when making determinations on zoning. Specifically, when it comes to minimum floor space standards, these standards “were designed to prevent the unhealthy overcrowding of dwellings.”²⁵ In the early 1950s, the Supreme Court of New Jersey stated that “the size of the dwellings in any community inevitably affects the character of the community and does much to determine whether or not it is a desirable place in which to live.”²⁶ Although these determinations were meant to be rooted in the general welfare, modern studies have found that people do not need as much living space as many believe;²⁷ a single person only needs between 200 and 400 square feet of

²¹ *Emmett McLoughlin Realty, Inc. v. Pima Cnty.*, 58 P.3d 39 (Ariz. Ct. App. 2002).

²² *Id.* at 40.

²³ *Id.*

²⁴ Vail, *supra* note 8, at 362.

²⁵ Harvard Law Review Association, *Developments in the Law: Zoning*, 91 HARVARD L. REV. 1429, 1445–46 (1978).

²⁶ *Lionshead Lake, Inc. v. Wayne Twp.*, 89 A.2d 693, 697 (N.J. 1952).

²⁷ Steve Adhock, *This study suggests that you're wasting a ton of home space*, THINK SAVE RETIRE (Nov. 5, 2019) <https://thinksaveretire.com/think-you-need-a-2000-sqft-house-to-be-comfortable-think-again/>.

living space to survive comfortably.²⁸ What people need, however, was not at the center of the minimum square footage determination. Rather legislators were working to drive what they believed to be efficient economic forces. Forcing a square footage requirement increases the desirability of certain neighborhoods, further playing into the classist notions enforced by the landmark cases.²⁹

Another example took place in 1952 when the Supreme Court of New Jersey upheld minimum square foot requirements. In *Lionshead Lake, Inc. v. Wayne Tp.*, the court found that setting minimum square foot requirements was perfectly reasonable.³⁰ Specifically, the court reasoned that “[i]f some such requirements were not imposed there would be grave danger in certain parts of the township, particularly around the lakes which attract summer visitors, of the erection of shanties which would deteriorate land values generally to the great detriment of the increasing number of people who live in Wayne Township the year-round.”³¹ The court believed that the size of the homes would impact the economic value of the community, and not setting such requirements would negatively affect the desirability of the town as a whole.

Other courts have distinguished themselves from the reasoning presented in *Lionshead*. For instance, the Supreme Court of Connecticut declined to follow the reasoning presented in *Lionshead* and found in *Builders Service Corp., Inc. v. Planning & Zoning Com'n of Town of East Hampton* that a minimum square footage requirement in their state was unreasonable.³² Also, in this case, the court held that zoning regulations enforcing minimum square foot requirements were not valid.³³ The court ultimately found that the square footage restrictions had no rational relationships “to the legitimate objectives of zoning,”³⁴ meaning that the square footage minimum did not work to promote general welfare and was unnecessary in their communities.

Another New Jersey court also rejected the findings in *Lionshead*. In *Home Builders League of South Jersey, Inc. v. Township of Berlin* a non-profit, the Homebuilders League of South Jersey, brought suit against four separate municipalities that were requiring minimum square footages within their zoning ordinances.³⁵ The court found that although the municipalities had a sound reason for imposing a square footage minimum, the negative impact that the ordinance would have on the communities as a whole far outweighed any positive results.³⁶ The court concluded that the ordinances “[did] not relate to public health or safety

²⁸ Southdown Homes, How Much Space Does A Family Need? <https://southdownhomes.com/how-much-square-footage-fits-your-family/#:~:text=The%20average%20living%20space%20required,range%20between%20%24147%2C000%20to%20%24436%2C000.>

²⁹ Vail, *supra* note 8, at 363.

³⁰ *Lionshead Lake, Inc.*, 89 A.2d at 693.

³¹ *Id.* at 698.

³² *Builders Serv. Corp. v. Plan. & Zoning Comm'n of Town of E. Hampton*, 545 A.2d 530 (Conn. 1988).

³³ *Id.*

³⁴ *Id.*

³⁵ *Home Builders League of S. Jersey, Inc. v. Berlin Twp.*, 385 A.2d 295 (N. J. Law. Div. 1978), *aff'd* 405 A.2d 381 (1979).

³⁶ *Id.*

or the preservation of the neighborhood but, instead, serve[d] the purpose of creating economic segregation.”³⁷

As discussed in this subsection, what was once thought to be the promotion of general welfare and the health of communities turned out to be a mechanism used to create economic segregation. In reality, smaller spaces would not have a negative impact on communities if the stigma developed by courts did not attach to their creation.

D. Exclusionary Zoning

Zoning laws such as the ones described above pose a threat to the construction of tiny homes and tiny home communities. Square footage requirements alone have worked to discourage tiny construction, but they are not the only force hindering the growth of this type of living. Rather socio-economic stigmas developed through case law have given rise to what is referred to as exclusionary zoning.

Village of Euclid v. Ambler Realty was not solely about giving cities policing power over their land. Rather, this allowed cities thereafter to restrict the amount of low-income housing in any area, revealing tensions between not only classes but also races. This type of zoning is referred to as exclusionary zoning.³⁸ These particular zoning regulations can have a disproportionate impact on low-income families especially, “when the regulation requires a standard beyond necessary for the protection of the health, safety, and welfare.”³⁹ The policy arguments made in this case have been used to develop a stigma against certain types of housing including multi-family living arrangements and manufactured housing. Unfortunately, many tiny homes are developed in areas zoned for multi-family living and factory-built homes. These classifications pose a threat to the development of tiny home communities as these zones are limited and don’t offer independent builders as much flexibility as those building traditional single-family homes.

E. The History of Building Codes

Zoning Codes are not the only sources working to hinder the development of zoning codes changes in the United States. Building codes are also used to regulate the physical dimensions of a dwelling. Such codes have been developed through history and evolved over time.⁴⁰ The basic goal of building codes “is to ensure that buildings used for housing (and other purposes) in the United States are safe, sanitary, and increasingly, convenient and efficient.”⁴¹ Although there is a legitimate reason building codes are put in place, Professor Kelly argues that the current building codes reflect a society that cares more about standards of living

³⁷ Vail, *supra* note 8, at 365.

³⁸ *Id.* at 363.

³⁹ Emily Keable, *Building on the Tiny House Movement: A Viable Solution to Meet Affordable Housing Needs*, UNIV. ST. THOMAS J. L. & PUB. POL'Y 112, 122 (2017).

⁴⁰ Kelly, *supra* note 4, at 349.

⁴¹ *Id.*

than the presence of affordable housing.⁴² She continues that affordable housing should be a larger priority than creating codes that restrict how housing is developed.⁴³ This is particularly important here as tiny living is typically one of the most economically and environmentally efficient alternatives to traditional single-family living.

Building codes became increasingly popular as populations in urban centers began to increase.⁴⁴ Four national model building codes have been created:⁴⁵ the Uniform Building Code, the Basic Building Code, the Southern Standard Building Code, and the National Building Code.⁴⁶ Other standard codes have also been established to regulate electrical, heating, air conditioning, and plumbing.⁴⁷ Due to the complexity of building codes, most states opt to adopt the national regulations rather than developing specific codes of their own.⁴⁸ And even where jurisdictions have attempted to develop their building codes, they tend to model their organization after the national standard codes.⁴⁹

The rigid nature of national building codes discourages flexibility in the construction of homes. Building codes are often enforced by local administrators who work to make sure each new build aligns with national and local standards. Because the standards are national, they are often difficult to amend, and when laws are difficult to amend they do not evolve at the appropriate speed. Although building codes were designed to keep family homes safe and sanitary, the standards implemented in the past may have the unintended result of severely limiting innovation in building technology and use. Today we live in a day and age when affordable housing is becoming more and more scarce. Increasing barriers to entry through codes will only make it more and more difficult for Americans to find housing that is not only economically but environmentally conscious.

F. Tiny Home Regulations in Arizona

Over time, most states have worked to adopt zoning and building codes that shape building trends within their communities. The following section will explore the policies and codes adopted by the State of Arizona and its two largest counties that support tiny living.

a. Appendix Q and the National Rise of the Tiny Home Regulation

Although zoning and building codes have traditionally created barriers to property innovation in the United States, the growth of tiny home popularity has led numerous states to adopt their own tiny home provisions. In 2018 the

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.* at 350.

⁴⁵ *Id.*

⁴⁶ *Id.* at 350–51.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

International Residential Code (IRC) added Appendix Q. The IRC was adopted to address the design and construction of one and two-family homes.⁵⁰ The IRC intends to establish standards for building and construction that support the health and safety of the public in all communities.⁵¹ Appendix Q works to define what a tiny house is and relax various code requirements for single-family homes.⁵² The code defines a tiny house as a home that is 400 square feet or less.⁵³ It specifically states that habitable areas of the home are not to have ceilings less than six feet and eight inches.⁵⁴ The ceiling height requirement does not apply to loft spaces, as many tiny homes use lofts as sleeping quarters.⁵⁵ The code addresses particular dimensions required for loft spaces as well as special exceptions made for staircases and ladders. Special exceptions are also made for emergency exits in Section AQ105.⁵⁶

In Arizona specifically, some counties have adopted Appendix Q.⁵⁷ Adoption of the code was the most efficient option for the counties as it gives clear instruction for regulating tiny builds. Adoption of the standards set Arizona up to become one of the most tiny home-friendly states in America. The Tiny House Society blog graded each state on their tiny house “friendliness” in 2018.⁵⁸ Arizona was given a grade of seven out of ten.⁵⁹ This makes sense because in places like Pima County specifically, tiny dwellings built on foundations are legal in any zone that allows detached single-family dwellings.⁶⁰ However, some tiny homes will be considered factory-built buildings and will not be allowed in every zone, posing problems for some looking to place a prefabricated tiny home on their property.

Pima County is one of the counties in Arizona that has adopted Appendix Q. There, a tiny home is defined as a single-family dwelling that is 400 square feet or less. However, a tiny home built on a chassis⁶¹ has specific provisions. If the home has had the axle and suspension components of the original base removed and has now been placed on a permanent foundation, it is considered a factory-built home.⁶² In Pima County, factory-built homes are allowed in the following zones: CR-3, CR-

⁵⁰ International Residential Code, Int'l Code Council, <https://www.iccsafe.org/products-and-services/i-codes/2018-i-codes/irc/>. (last visited Oct. 1, 2021) [hereinafter International Residential Code].

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Appendix Q Tiny Houses*, 2018 International Residential Code, (last visited Oct. 1, 2021) <https://codes.iccsafe.org/content/IRC2018/appendix-q-tiny-houses>. [hereinafter *Appendix Q*].

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Permitting Regulations for Tiny Houses*, Pima County, (last visited Oct. 1, 2021). <https://webcms.pima.gov/cms/One.aspx?pageId=259596>. [hereinafter *Pima County Tiny House Regulations*].

⁵⁸ Molli McGee, *Tiny House Laws in the United States; States That Allow Tiny Houses*, Tiny House Soc'y (Dec. 13, 2018), <https://www.tinysociety.co/articles/tiny-house-laws-united-states/>.

⁵⁹ *Id.*

⁶⁰ *Pima County Tiny House Regulations*, *supra* note 55.

⁶¹ A chassis is a frame or base of a wheeled conveyance. Vehicles or trailers are built on chassis. Many tiny homes are built on chassis as this makes mobility easier.

⁶² *Id.*

4, CR-5, TR, ML, SP, CB-1, and CB-2.⁶³ CR-3 is a single-family zone while CR-4 is a mixed dwelling type zone. CR-5 is a multiple-resident zone. Tiny homes are also allowed in TR or transitional zones as well as any Mount Lemmon Zone.⁶⁴ The important part of this structure is that these homes would be allowed in single-family zones, allowing people to place prefabricated tiny homes within these zones. At the end of the day, although there are options for those considering building tiny, the law is still not as flexible as for those seeking to build a traditional single family home in Arizona.

b. Strict Regulations for Tiny Homes on Wheels

Tiny homes built on a chassis are more heavily regulated in Pima County than tiny homes built on a permanent foundation. This is likely due to socioeconomic-based policy decisions in Euclidean Era zoning case law.⁶⁵ Pima county only allows tiny homes built on chassis' in the following zones: RH, GR-1, SH, MU, CMH1, CMH2, and IR. These zoning areas include rural residential zones as well as multi-family living zones such as duplexes.⁶⁶

The building codes in Pima County are adopted from Appendix Q in the IRC. If built off-site, the County requires that the home be approved by a recognized agency or approved by an accredited tiny house fabricator. Certain building code adjustments are allowed such as reducing electrical circuits required to efficiently support a home. Exceptions are made to promote efficiency in tiny living. Relaxing certain standards such as these is a step in the right direction, as this eliminates many obstacles that are often coupled with building a tiny dwelling.

c. Other Barriers to Tiny Entry

Many tiny homes are considered to be manufactured homes given the way that they are constructed. A study published by the United States Department of Housing and Urban Development (HUD) in 2011 looked to the zoning laws and the legislation that governs manufactured housing across the United States.⁶⁷ The study found a wide range of strategies across states when it came to how local governments deal with the regulation of manufactured housing. Some states are more open to the idea of manufactured housing and have realized that this type of living is an economic solution for many families. Therefore, states like Utah equally classify manufactured homes and site-built homes.⁶⁸ In Utah, this keeps

⁶³ https://codelibrary.amlegal.com/codes/pimacounty/latest/pimacounty_az/0-0-0-15237.

⁶⁴ *Id.*

⁶⁵ Decisions like the one discussed in *Ambler v. Euclid Realty* helped shape socio-economic stigma when it came to housing alternatives to the traditional single-family home.

⁶⁶ *Pima County Tiny House Regulations*, *supra* note 55.

⁶⁷ Casey J. Dawkins et al., *Regulatory Barriers to Manufactured Housing Placement in Urban Communities* U.S. Dep't of Housing & Urban Dev., Off. Policy Dev. & Rsch (2011).

⁶⁸ *Id.*

manufactured homes from being excluded from zones limited to single-family housing, essentially allowing them to be placed wherever a site-built home would be allowed.⁶⁹ Other states have followed a similar approach but have in some cases placed further restrictions on the homes when it comes to architectural design requirements as well as size requirements. For instance, in Colorado, the state has applied minimum unit size requirements.⁷⁰ Regulations such as these pose direct concerns for those looking to build tiny homes in Colorado.

The study also conducted empirical analysis on each US state along with the District of Columbia to find what percentage of the country was “graceful” to the idea of manufactured housing. While over 78 percent of the states had a manufactured housing statute that governed their construction, only about 62 percent of the states considered manufactured homes to be real property rather than personal property.⁷¹ Real property is considered to be more permanent than personal property, therefore it can pose problems when people are living in a dwelling not considered to be permanent or long term. Using statistics like the ones presented here, the study was able to rate the strength of each states’ manufactured housing regulations. The study found that Arizona had moderate statutes when it came to the regulation of manufactured housing.⁷²

Not only are people deterred from developing tiny homes because of zoning and building code ordinances, but cities have been historically averse to developing affordable housing.⁷³ This is understandable as people are often motivated to live “bigger and better.” This is why many states have legislation that deters the development of affordable housing.⁷⁴ In states like California, the construction of affordable housing must be approved per the state constitution.⁷⁵ And although many voters believe that economically friendly housing is necessary, they do not necessarily want it in their neighborhood.⁷⁶ To combat this reaction, the government has worked create federal housing policy and developed programs to subsidize the construction of these homes.⁷⁷ This is a critical issue as tiny homes and affordable housing often go hand in hand, as not all looking to downsize are doing it purely for the environmental benefits. Rather many people who adjust to the tiny lifestyle also do so because of the financial benefits of downsizing.

III. Tiny Living and Opportunity

As our world continues to evolve, the need for an alternative form of living that meets our environmental needs will no longer be a luxury but a necessity. Although met with zoning and building laws that do not necessarily incentivize their

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.*

⁷³ Laura M. Padilla, *Reflections on Inclusionary Housing and a Renewed Look at its Viability*, 23 HOFSTRA L. REV. 545 (1995).

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.* at 547.

construction, tiny living offers opportunities for communities to not only make economically efficient strides but also environmental progress. The following section will examine the environmental impact living tiny can have on our planet. It will also look specifically at the state of Arizona. This analysis will show the impact that tiny conversion can have on the carbon footprint of the state. Such conversion will not only be more environmentally efficient but also economically efficient.

A. The Need for Housing Alternatives

While the United States population continues to grow, so does the need for housing. The growth of the population, as well as the decreasing amount of affordable housing, has made life difficult for a majority of Americans. Today millennials are the largest generational population in America. In 2019 millennials outnumbered Baby Boomers 72.1 to 71.6 million.⁷⁸ Although being the largest generational population in the United States, the homeownership rate was only 53.8 percent among the group in 2020. This percentage lags that of Generation X by six percent and Baby Boomers by eight percent when these populations were the same ages as current millennials.⁷⁹ Many believe the lack of homeownership to be a product of basic social characteristics among the generational group, but the reality of the matter is that the country is lacking accessible housing for this population. The lack of accessible housing presents the opportunity for alternative forms of living in the U.S.

Although the largest generational population is not actively buying homes, the number of homes in the U.S. has continued to rise throughout the past decade.⁸⁰ According to the United States Census Bureau, the number of housing units grew at a rate of 6.7 percent between 2010 and 2020.⁸¹ Arizona had a growth rate that reflected the growth of the entire country. Specifically, from 2010 to 2020, the number of housing units in Arizona grew approximately 8.3 percent.⁸² Two counties in Arizona are growing rapidly and as a result, have been experiencing housing shortages.⁸³ The two largest counties in Arizona that are experiencing these

⁷⁸ Richard Fry, Millennials overtake baby boomers as America's largest generation, PEW RSCH. CTR. (Apr. 28, 2020), <https://www.pewresearch.org/fact-tank/2020/04/28/millennials-overtake-baby-boomers-as-americas-largest-generation/>.

⁷⁹ Megan Leonhardt, *Meet the middle-aged millennial: Homeowner, debt-burdened and turning 40*, CNBC: MAKE IT (Mar. 29, 2021) <https://www.cnbc.com/2021/03/29/middle-aged-millennials-are-homeowners-but-burdened-by-debt.html>.

⁸⁰ Evan Brassell, *Despite Slower Overall National Growth, Housing Stock Rapidly Expanded in the South and West from 2010 to 2020*, U.S. Census Bureau (Aug. 12, 2021) <https://www.census.gov/library/stories/2021/08/growth-in-housing-units-slowed-in-last-decade.html>.

⁸¹ *Id.*

⁸² 2020 Population and Housing State Data, U.S. Census Bureau (Aug. 12, 2021), <https://www.census.gov/library/visualizations/interactive/2020-population-and-housing-state-data.html>.

⁸³ Michael Lieb, *If cities don't solve metro Phoenix's housing crisis, everyone will pay*, AZ CENTRAL (Feb. 20, 2022), <https://www.azcentral.com/story/opinion/op-ed/2022/02/20/phoenix-has-housing-supply-crisis-ignore-cost-all/6805418001/>.

shortages are Maricopa County and Pima County. Maricopa County has grown approximately 21.6 percent since 2010, while Pima County has grown approximately 8.87 percent.⁸⁴ Not only are these communities growing rapidly but they are doing so while running out of space. Maricopa County has a population density of approximately 480 people per square mile, while Pima County has a population density of about 113 people per square mile.⁸⁵

B. More Housing, More Waste

The expansive use of resources by our growing population will inevitably result in environmental repercussions. Every home that is built across America contributes to the global carbon impact. Researchers have used multiple variables to measure environmental impact in a way that can be easily communicated to those hoping to learn about environmental change. For instance, the ecological footprint is typically measured in global hectares (gha). Although global hectares is a scientific term that can be difficult to understand, it is the unit of measurements most commonly used to measure environmental impact. Global hectares are units specifically used to represent biological capacity. Biological capacity works to measure the production of biological materials and the absorption/filtering of other materials such as carbon dioxide.⁸⁶ Therefore, to simplify the unit of measurement, a global hectare is used to measure biological productivity and efficiency.⁸⁷ In laymen's terms, biological capacity measures how big the earth's trash can is. The more global hectares, the more room that's being taken up in the trash can. It becomes critical to understand these units of measurement because the building and use of each home will produce some amount of waste. According to the Global Footprint Network, the ecological footprint of an average American is 8.04 gha.⁸⁸

a. Impact as a Measure of Pounds of Carbon Dioxide.

Global hectares are units of measurement that are difficult to understand. For ease of understanding, environmental impact will also be illustrated here using pounds of carbon dioxide (CO₂). The American Institute of Architects, in an article about tiny living, found that the average amount of CO₂ emissions for an average size American home was approximately 28 thousand pounds produced a year.⁸⁹ That is equivalent to the carbon sequestered by 15 acres of U.S. forests in one

⁸⁴ Population of Counties in Arizona, World Population Rev., <https://worldpopulationreview.com/us-counties/states/az> (last visited Sept. 30, 2021).

⁸⁵ *Id.*

⁸⁶ *Biocapacity*, Wikipedia, <https://en.wikipedia.org/wiki/Biocapacity> (last visited Sep. 30, 2021).

⁸⁷ *Id.*

⁸⁸ *Ecological Footprint by Country*, World Population Rev., <https://worldpopulationreview.com/country-rankings/ecological-footprint-by-country> (last visited Nov. 4, 2022).

⁸⁹ James Hardie Building Products, *Sustainable and small: The tiny house movement* <https://www.aia.org/articles/141631-sustainable-and-small-the-tiny-house-moveme:36> (last visited Mar. 3, 2022).

year.⁹⁰ On the other hand, the American Institute of Architects article expressed that the average tiny home only produced approximately two thousand pounds of CO₂ emissions each year.⁹¹ For comparison, that is equivalent to the carbon emissions sequestered by only 1.1 acres of U.S. forests in one year: a difference of approximately 13.9 acres of forest.^{92:93}

As environmental restrictions become necessary for our survival, the human race will be forced to adapt and innovate. People across the globe have looked to tiny living as not only a more affordable option but also a more environmentally friendly option. Tiny living poses an alternative to traditional forms of home building but unfortunately, building and zoning ordinances do not always incentivize their construction. The following analysis will work to show the environmental impact of incentivizing tiny home dwellings through building and zoning ordinances.

C. The Environmental Impact of Tiny Living as an Alternative to Meet Affordable Housing Needs

Living tiny eliminates much of the waste typically coupled with traditional forms of living. A 2019 study entitled *The Ecological Footprint of Tiny Home Dwellers* found that an average of 37 percent of energy used in a tiny home was from renewable energy.⁹⁴ In comparison, the average traditional home only uses an average of two percent renewable energy.⁹⁵ Although homeowners may be forced to use renewable energy sources when living tiny, the difference is still noteworthy. The use of renewable sources is simply because many renewable sources are designed to be compact and not reliant on large power systems. The lives of tiny home dwellers were completely transformed. Not only did behavior in energy efficiency change, but people living in tiny dwellings exhibited environmentally friendly behavior in other areas of their life including food habits, transportation efficiency, and transportation behavior.⁹⁶ In the end, this study found that the participants in the study decreased their ecological footprint by 3.1 gha, or approximately 37 percent.⁹⁷

⁹⁰ *Green House Gas Equivalency Calculator*, U.S. Env'tl Prot. Agency, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> (last visited Oct. 1, 2021). The calculator allows one to enter any amount of CO₂ in pounds, and then it returns various equivalencies such as carbon sequestered by US forests. [hereinafter *Green House Gas Equivalency Calculator*].

⁹¹ *Sustainable and small: The tiny house movement*, Am. Inst. Architects, <https://www.aia.org/articles/141631-sustainable-and-small-the-tiny-house-moveme:36> (last visited Sept. 30, 2021),

⁹² *Green House Gas Equivalency Calculator*, *supra* note 86.

⁹³ (15 – 1.1 = 13.9) <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>.

⁹⁴ Maria W. Saxton, *The Ecological Footprint of Tiny Home Downsizers: An Exploratory Study*, 87 (Mar. 25, 2019) (PhD Dissertation, Virginia Polytechnic and State University), https://vtechworks.lib.vt.edu/bitstream/handle/10919/89224/Saxton_MW_D_2019.pdf?isAllowed=y&sequence=1.

⁹⁵ *Id.* at 88.

⁹⁶ *Id.* at 88-99.

⁹⁷ *Id.* at 101.

D. A Hypothetical: If Arizona Actively Converted All Eligible Homes to Tiny Homes.

To understand the impact tiny living can have on the state of Arizona, an empirical hypothetical will be presented here. One must first find the number of homes in Arizona and the rate at which housing units are being built in the state. It would be unrealistic to assume that every homeowner would be able to downsize completely, taking large families and people with physical disabilities into consideration. In order to reflect this reality, this hypothetical will only use data that expresses the number of two-bedroom homes being built in Arizona. This number will then be used to represent “tiny eligible” living situations. Once the number of “tiny eligible” homes is derived, one can use the data to determine the environmental impact a shift to tiny living can have.

According to the U.S. census bureau, there are approximately 2.67 million households in Arizona with an average 2.68 people per household. It is more convenient for homes with less than three individuals to make the transition to tiny living.⁹⁸ As of 2019, 65.3 percent of Arizona households were owned rather than rented. That leaves approximately 1.74 million homes in Arizona that would be candidates for tiny living.^{99:100} Homes with less than three occupants are ideal for tiny living, as are those homes with two bedrooms or less. Data representing the selected housing characteristics in Arizona reveal that 40.5 percent of the homes in the state have two bedrooms or less.¹⁰¹ Two-bedroom homes with less than three occupants represent the pool of “tiny eligible” households in Arizona for the purpose of this analysis.

Considering the data above, 40.5 percent of the 1.74 million homes lived in by homeowners in Arizona comes out to approximately 704,000 households¹⁰² that are candidates for tiny living. If the average US household has an ecological footprint of 8.04 gha, the 704,000 households that are candidates for a tiny living would have an ecological footprint amounting to approximately 5.6 million gha.¹⁰³ Hypothetically, if each of these households were able to downsize to tiny living based on the data found in *The Ecological Footprint of Tiny Home Dwellers*, the total ecological footprint for the households would decrease by 39 percent. This percentage accounts for approximately 2.2 million gha.¹⁰⁴

For clarity, the same analysis can be done using pounds of CO2 emissions. Therefore, if each of the 704 thousand homes eligible for tiny living were able to

⁹⁸ Data USA: Arizona, <https://datausa.io/profile/geo/arizona#housing> (last visited Sept. 30, 2021).

⁹⁹ *QuickFacts: Arizona*, U.S. Census Bureau, <https://www.census.gov/quickfacts/AZ> (last visited Sep. 30, 2021).

¹⁰⁰ The product of 2.67 million and 65.3 percent (2.67 million * 0.653=1.74 million).

¹⁰¹ *Selected Housing Characteristics*, U.S. Census Bureau, <https://data.census.gov/cedsci/table?g=0400000US04&tid=ACSDP5Y2019.DP04&hidePreview=true> (last visited Sep 30, 2021)..

¹⁰² The product of 40.5 percent and 1.74 million is approximately 704 thousand (0.405*1.74m = 704.7 thousand).

¹⁰³ 8.04 gha * ~704,700 = 5,665,788.

¹⁰⁴ The product of 5,665,788 and 39 percent is ~2.2 million (0.39 * 5,665,788 = 2,209,657.32)

downsize, carbon emissions would go from approximately 19.7 billion pounds to 12.02 billion pounds.¹⁰⁵ This is equivalent to taking the amount of carbon sequestered by 10.9 million acres of U.S. forests and decreasing that acreage to only 6.7 million.¹⁰⁶ That is over 4.2 million acres of US forests conserved.¹⁰⁷

E. A More Realistic Hypothetical

The hypothetical presented above is not the most realistic example as it would create more waste to downsize already existing single-family homes. Therefore, it is critical to create a model that forecasts the impact if a large percentage of new housing that was tiny eligible was built to meet tiny standards.

According to the U.S. Census Bureau, the housing market in Arizona grew approximately 8.3 percent from 2010 to 2020.¹⁰⁸ If this trend continues and housing continues to increase by eight percent through the next decade, the number of tiny eligible homesteads will go from 704,000 to approximately 760,000 homes. If these extra 56,000 homes were to be constructed as traditional American family homes, they would create approximately 1.57 billion pounds of CO₂ emissions a year.¹⁰⁹ On the other hand, if these homes were to be designed to adhere to tiny dwelling standards, their existence would only create approximately 987 million pounds of CO₂ emissions per year.¹¹⁰ That is a decrease in carbon emissions greater than 583 million pounds. An amount that is equivalent to the carbon sequestered by more than 312 thousand acres of U.S. forests in one year.¹¹¹

The model above poses a solution to both the housing shortage and the need for environmental innovation.

IV. The Solution in Practice

Not only will tiny homes and tiny communities have an environmental impact in theory but non-profits across the country have been implementing their use for the past several years. The following sections will explore companies that have been successful in their pursuit of the benefits of tiny living. They will also discuss the overarching benefits of making the move from the traditional to the tiny way of living.

¹⁰⁵ The product of 19.7 billion and 39 percent is 7.68 billion. 7.68 billion subtracted from 19.7 billion equals 12.02 billion.

¹⁰⁶ *Green House Gas Equivalency Calculator*, *supra* note 86.

¹⁰⁷ 10.9 million minus 6.7 million equals 4.2 million.

¹⁰⁸ 2020 Population and Housing State Data, U.S. Census Bureau (Aug. 12, 2021), <https://www.census.gov/library/visualizations/interactive/2020-population-and-housing-state-data.html>.

¹⁰⁹ 56 thousand times 28 thousand equals 1.57 billion.

¹¹⁰ Decreasing 28 thousand, the amount of pounds of CO₂ an average single family home creates every year, by 39 percent equals approximately 17 thousand. This figure is used to represent the amount of CO₂ emitted by a tiny home. 17 thousand multiplied by 56 thousand will equal approximately 987 million. 987 million subtracted from 1.57 billion equals a decrease in carbon emissions of approximately 583 million pounds of CO₂.

¹¹¹ *Green House Gas Equivalency Calculator*, *supra* note 86.

A. Shifting Perspectives: Making use of the tiny home model today

Although Arizona tiny home builders face plenty of barriers to entry, some developers have found success in developing tiny home communities within the state. Groups in need of housing solutions throughout the state have realized that tiny living offers opportunity to groups facing housing disparities as well as economic difficulty. They have found that tiny homes offer an alternative to traditional forms of living that can help uplift the community as a whole.

I Am You 360 is a non-profit organization located in Tucson, Arizona. After partnering with a real estate developer, the company began developing tiny homes for homeless youth in the community.¹¹² I Am You is currently in the process of raising money for their initiative. The initiative includes the building of ten 450 square-foot energy-efficient tiny homes.¹¹³ The program also offers educational resources to those living with the community.

Although this particular tiny home community was not developed for environmental efficiencies, the case reflects the possibilities in the tiny home market. The development of the community in this case is working to make efficient use of the limited land available to them. It is an example of tiny infrastructure that is now made available by Pima County's Tiny House adoption of Appendix Q.

Tiny home communities are not only being used in Pima County, but other cities throughout the state have seen the opportunity in this affordable housing structure. In May 2019, the first veteran-focused tiny house community was established in Phoenix through Arizona non-profit Build Us Hope.¹¹⁴ The town of Tempe is also using the tiny model through Habitat for Humanity to combat the affordable housing problem in the growing town.¹¹⁵

More and more people are becoming accustomed to the idea of tiny home communities but that does not mean that everyone is ready for the shift in lifestyle. Many homeowners remain concerned with what the erection of tiny homes will do to their property values over time. For example, in 2019 in the small mountain town of Eagar, Arizona, homeowners fought to re-zone their subdivision and prohibit the tiny homes in the area.¹¹⁶ The planning and zoning administrator of the town argued that the land should not be re-zoned as homes such as these play a vital role in the development of the town's community.¹¹⁷

¹¹² *Tucson group providing 'tiny homes' to homeless youth to prepare them for success*, KOLD News 13 (July 29, 2021), <https://www.kold.com/2021/07/30/tucson-group-providing-tiny-homes-homeless-youth-prepare-them-success/>.

¹¹³ *Small Home Experience LLC*, I Am You 360, <https://iamyou360.org/small-home-experience-llc/>.

¹¹⁴ *Arizona Tiny Home News*, TINY HOME INDUSTRY ASS'N, <https://tinyhomeindustryassociation.org/arizona-tiny-home-news/>

¹¹⁵ *Id.*

¹¹⁶ Amber Shepard, *Eagar neighborhood zoning request denied*, WHITE MOUNTAIN INDEP. (Dec. 6, 2019) https://www.wmicentral.com/news/latest_news/eagar-neighborhood-rezoning-request-denied/article_c69576d7-58e6-5bfe-b4ea-1f3aae090c5e.html.

¹¹⁷ *Id.*

Today we are living in a time when tiny home communities are becoming a need rather than a simple want. As cities grow and the wage gap increases in this country the need for affordable living will undoubtedly continue to skyrocket. However, tiny living should not be the last resort in a person's life. This way of life offers both environmental and economic incentives that would benefit any person, in any tax bracket.

B. The Best of Both Worlds: Environmental and Economic Opportunity

As Keable noted, "Having clear, well-defined property rights is essential to promote sustainable economic development."¹¹⁸ Property rights are considered to be the core of a successful society. A system of well-defined property rights would foster a system of perfect competition, leading to ultimate efficiency.¹¹⁹ "The theory of the success of an income-integrated community that includes tiny homes rests on the theory of strong property rights to incentivize the creation of wealth."¹²⁰ Specifically, ownership and the opportunity to obtain more property rights are beneficial to communities. Just like the theory of sweat-equity,¹²¹ when someone owns something for themselves they are often more likely to invest further into the property. Lockean Property Theory tells us that people will be more likely to invest in their property if he or she is likely to benefit from the investment.¹²² With an increase in investment in one's property comes an increase in economic value.

When municipalities take the steps to include creative home types like tiny homes, homebuilders are given confidence in their investments. Builders will be able to rely on the fact that the government is supporting their clients' decision to live tiny. Just because the homeowners in this scenario would be building smaller homes, does not mean that they would be any less likely to invest in quality resources for their build.

"Tiny homes are unique in the affordable housing scheme as providing a distinct opportunity to increase homeownership for low to moderate-income levels that in return have a positive impact on the community."¹²³ This is what makes zoning and building codes that de-incentivize their build so problematic. Building

¹¹⁸ Keable, *supra* note 37, at 126.

¹¹⁹ R. H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1, 6 (1960). The Coase theorem was developed as a means of illustrating the workings of perfect competition. And even when standards and regulations are introduced into the system, the parties may reach perfectly efficient outcomes through negotiations.

¹²⁰ Keable, *supra* note 37, at 127.

¹²¹ "The term sweat equity refers to a person or company's contribution toward a business venture or other project. Sweat equity is generally monetary and, in most cases, comes in the form of physical labor, mental effort, and time. Sweat equity is commonly found in real estate and the construction industry, as well as in the corporate world—especially for startups." Will Kenton, *Sweat Equity: What It Is, How It Works, and Example*, INVESTOPEDIA (June 27, 2022), <https://www.investopedia.com/terms/s/sweatequity.asp>. Studies have found that those who invest sweat equity into a project are more likely to hold whatever the project is at a higher value. Christopher Marquis & Joshua D. Margolis, *How Much is Sweat Equity Worth?* HARV. BUS. REV. (Dec. 2012) <https://hbr.org/2012/12/how-much-is-sweat-equity-worth..>

¹²² Keable, *supra* note 37, at 127.

¹²³ *Id.* at 128.

tiny homes offers the same amount of economic support as building a traditionally sized home. In fact, building tiny homes offers more intrinsic value than building a traditional home because of the environmental impact discussed at the beginning of this analysis.

Building tiny homes in Arizona alone has the power to decrease carbon emissions by more than 583 million pounds of CO₂.¹²⁴ This decrease in carbon emissions comes from the building of homes on their own and doesn't even account for the changes people often make when they start to live a tiny lifestyle. These changes include the elimination of unnecessary waste, making more conservative purchases when it comes to clothing and other household items, as well as limited uses of energy to conserve power sources within a home.

a. Implementing the Solution: Three Options.

Unfortunately, zoning and building codes cannot be changed overnight. This leaves home builders thinking of creative ways to make their tiny build work in the community. The first option when looking to build tiny in a zone that does not allow it is to apply for an area variance. A successful variance request will have to show a non-applicant created hardship. This is a high barrier but with escalating costs of land, material and labor this might be the only way for first time homebuyers and builders to enter the American dream of home ownership. Since some local governments will even look to practical difficulties when making such a determination, this could be a viable argument.¹²⁵ Once an area variance is granted, it will continue to run with the land, granting all future owners the opportunity to remain legally nonconforming.¹²⁶ In order to be successful, the applicant seeking a tiny living variance could make the argument that zoning laws hindering tiny development create an economic hardship not of the applicant's creation. The argument would go on to state that the hardship created by the economic barriers to entry defeat the purpose of zoning by-laws attempting to create opportunities for home ownership.

Applying for an area variance is not the only way to overcome zoning and building codes that restrict tiny home developments. The second way of building a tiny home in an area not zoned for tiny living is to apply for an accessory dwelling unit or ADU. ADUs are typically on the property of an existing single-family home, as they are accessory to the main home on the property. However, this eliminates some of the intrinsic value that comes with homeownership (the value that was discussed above). ADUs are typically built on another person's property so they do not give the same effect when it comes to property ownership.¹²⁷

The last option is serious zoning changes at the community level. This requires grassroots efforts to educate the local community as to the value of tiny living alternatives. However, it is up to our local governments to not only tolerate the transition with passive legislation but also actively incentivize tiny living. The

¹²⁴ See *supra* note 106 and accompanying text..

¹²⁵ Keable, *supra* note 37, at 129.

¹²⁶ *Id.* at 127.

¹²⁷ *Id.* at 130.

federal and local government often subsidizes affordable housing because it is understood that such investments are good for the welfare of our communities. The economic impacts of rising home prices and the consequent barriers to entry for all first-time homebuyers are obvious to all of us. The climate crisis is more difficult to physically see but it is happening all around us. Just as Americans face problems posed by not enough affordable housing, Americans are also facing an environmental future that is slowly deteriorating. Just like any social problem, it is the job of our local government to look out for the best interests of our future generations. Whether through community outreach or a few dedicated supporters, it is critical to the future of all of us that we incentivize people to downsize and live a more environmentally friendly lifestyle.

V. Conclusion

As discussed above, pursuing the tiny lifestyle is not an easy feat as historical zoning and building codes have worked to de-incentivize their growth with the help of socio-economic stigma developed by Euclidean Era Common Law. Although the history of zoning and building laws has made it difficult to develop tiny homes and tiny home communities, their construction offers both environmental and economic growth. Many people seeking to retain economically viable housing can do so and remain environmentally efficient if they decide to downsize. As presented in the hypotheticals above, if more individuals were incentivized to live tiny, the amount of carbon emissions could decrease by more than 583 million pounds a year in Arizona alone.¹²⁸ This feat is possible as small communities across the U.S. have started to pop up with the help of non-profit companies. Living tiny offers a solution to more than one issue here in the United States and it is the responsibility of our communities and our local and national governments to incentivize their efficiencies.

¹²⁸ See *supra* note 106 and accompanying text.