

EVALUATING TINY HOUSES AS A SOLUTION TO THE HOUSING AFFORDABILITY AND ENVIRONMENTAL CRISES

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Tiny houses have captured the attention of North American media, with HGTV, the major cable television channel, alone showing three tiny-house related shows: *Tiny House Hunters*, *Tiny House Builders*, and *Tiny House, Big Living* (“HGTV Canada”). Additionally, an internet search will yield a number of results for tiny house building companies in Canada (Zero Squared, Mint Tiny House Company, Minimaliste Houses, Canadian Tiny Homes, Nelson Tiny Houses, Rewild Homes, Summit Tiny Homes, Teacup Tiny Homes, Fritz Tiny Homes, and more), suggesting that there is a market for and interest in tiny house living in Canada. One of the first results to appear is the official “Tiny Homes in Canada” website, which claims that tiny homes sit at “the intersection of the housing crisis and the climate crisis” (Tiny Homes in Canada). Notably, this website also proclaims that the tiny home community is a “culturally idealistic response to financial desperation” (Tiny Homes in Canada) and sustainability. Scholarly research also supports the notion that the two primary drivers for tiny house living are affordability and sustainability (Evans; Shearer and Burton). Therefore, I am interested in evaluating the potential for tiny houses to serve as a solution to the housing affordability and environmental crises, particularly in Ontario, Canada. Much of the scholarship on tiny houses comes out of the United States, Australia, and New Zealand. This essay will apply the insight of this scholarship to the specific Canadian context surrounding tiny houses. I will ultimately argue that tiny houses have the potential to be a solution for the housing affordability and environmental crises, but that they are not a current solution because Ontario legislation renders them costly and somewhat inaccessible. This study will also explore the lifestyle choices and social

conditions associated with tiny house living as a housing option that is both idealistic (presented as a solution to the overwhelming housing affordability and environmental crises) and pragmatic (financially feasible).

The Ontario provincial government officially defines a tiny house as a “small, private and self-contained dwelling unit” (“Build or Buy a Tiny Home”) with living and dining areas, kitchen and bathroom facilities, a sleeping area, and that is intended for year-round use (“Build or Buy a Tiny Home”). The maximum size requirement for a tiny house varies between municipalities, with some municipal by-laws requiring a tiny house to be 37m² (400 ft²) or less (“Build or Buy a Tiny Home”). In all of Ontario, a tiny house cannot legally be smaller than the minimum required size set out in Ontario’s Building Code, which is 17.5m² (188 ft²) (“Build or Buy a Tiny Home”). Tiny house scholarship also typically defines a tiny home as a dwelling that is less than 37m² or 40m² in area (Crawford and Stephan; Shearer and Burton; Evans). They can either be mobile, usually referred to as a “tiny house on wheels”, or in a fixed location. However, in most Ontario municipalities, a building permit will not be issued for a tiny house on wheels. Instead, they are usually relegated to the “mobile park” or “campground” zones (“Build or Buy a Tiny Home”). Tiny house scholars also often include in their definition the additional characteristics of design ethos, affordability, and environmental sustainability (Shearer and Burton). Further, tiny houses are commonly presented as a counter-cultural alternative to the typical suburban sprawl of Canada, the United States, Australia, and New Zealand, and an opportunity to “live more simply” (Shearer and Burton). These definitions are a useful starting point for a deeper investigation of tiny houses as a potential solution to the housing affordability and environmental crises.

There is evidence to suggest that our cultural climate might be a fertile backdrop for tiny houses to become a widespread housing option in Canada. For instance, a 2021 article, out of Quebec, argues that we are at a current milestone where tiny houses are becoming a mature industry driven by entrepreneurs and housing industry stakeholders, rather than just a grassroots and marginal housing phenomenon driven by enthusiasts (Lessard). He argues that events such as the 2008 mortgage subprime crisis and growing interest in sustainability has pressured the housing regime to change in recent decades, as seen through recently adopted codes, regulations, and public policies at various levels of government in Canada (Lessard). Brokenshire, from Australia, also points toward the Global Financial Crisis of 2007-2008 as an event that sparked a trend towards smaller homes and the tiny house movement, as it caused homeowners to become conscious of unsustainable lending for mortgages. The 2006 Ontario Places to Grow Plan, an ambitious attempt to address urban sprawl in the province, is one example of legislation that indicates some focus on sustainability in housing planning (Eidelman). Tiny houses can reduce urban sprawl, as in 2012 an experimental tiny house village in Washington D.C. was built to explore the potential for tiny houses on wheels to provide a solution for urban infill (Ford and Gomez-Lanier). Therefore, our current climate has created space for alternative, affordable, and sustainable housing options, such as tiny houses.

Housing is currently incredibly unaffordable in Canada, as the Canadian National Housing Affordability Index rose to 1.34 in the first quarter of 2021, signifying that the median house was 34% more expensive than the median-income could afford (Klachkin et al.). Tiny houses offer a promising solution to the housing affordability crisis, with a Canadian tiny house costing between \$80,000 and \$200,000 CAD (The Tiny Life), compared to an average price of \$720,850 CAD for a traditional house in Canada in 2021 (The Canadian Real Estate Association). In fact, economic factors were the dominant reason given for considering tiny house living in a qualitative research study done by Shearer and Burton. Additionally, owners of tiny houses also often contribute their labour and use recycled materials, further driving down costs (Shearer and Burton). This makes

tiny housing a favourable option for affordable housing.

Notably, however, tiny houses are not simply the most affordable housing option (Shearer and Burton). Tiny house owners often express that tiny houses were rather the most affordable option that they could own, rather than rent, and that was detached, and not a part of an apartment complex. (Shearer and Burton). Additionally, the cost per square metre of a tiny house is usually higher than that of a typical house (Brokenshire). Tiny house dwellers often comment on how a lower overall cost enables them to afford higher quality fixtures (Shearer and Burton). Individuals also reportedly choose to reduce the size and cost of their dwelling to reduce financial stress, increase their housing stability, and to work fewer hours (Brokenshire). Many tiny house dwellers instead choose to spend more quality time with family and friends and contribute meaningfully to the community (Brokenshire). Therefore, it seems as though tiny houses are an affordable option for those who are looking to have a specific lifestyle, and perhaps achieve the great Canadian (or American or Australian) dream and own a detached house. Tiny houses are therefore an idealistic yet pragmatic housing option – they are homes that enable a specific lifestyle that might not be affordable otherwise. However, if one is looking to simply reduce housing costs outright, tiny houses might not be the solution, given their associated luxuries.

Tiny houses appear cheaper than traditional housing overall because in many countries, they do not necessarily require the purchase of land and associated infrastructure (Shearer and Burton). However, in Ontario, legislation only permits the building of a tiny house as long as one has a building permit, owns the land, and the house conforms to the Ontario Building Code (“Build or Buy a Tiny Home”). The owning of land is, of course, a major financial barrier. Those who cannot afford to purchase land would still have their housing options limited to renting. The Ontario website also recommends that those who are looking to build a tiny home hire at least one of the following: Building Code designer registered with the Ontario government, a professional planner, an architect, or an engineer (“Build or Buy a Tiny Home”), implying additional costs in the tiny house building process. Therefore, Ontario legislation specifically prohibits

tiny housing to be a largely accessible housing option.

Homelessness, however, is a major related issue to housing affordability, which tiny houses can potentially provide a robust solution for. There is an estimate that over 235,000 people in Canada will experience homelessness in any given year (Statistics Canada).

Evans argues that tiny house villages are a more permanent, cost-effective, solution to address homelessness than traditional approaches of soup kitchens and overnight shelters (Evans). A research study done by Evans yielded results on 115 tiny house villages for the homeless in the United States as of July 2019 that were either currently operational, planned to open in the future, abandoned, or of unknown status. Additionally, this research indicated that the average cost of a tiny house unit for the homeless is only \$21,160 USD (Evans). In Canada, the Homes for Heroes Foundation partners with ATCO structures to create similar tiny house villages, specifically for veterans who are homeless. Each of these homes is under 300 square feet in size. These villages are designed to foster a sense of community among its residents, with shared outdoor spaces, mental health services, and access to public transportation (Homes for Heroes). In 2016, Australia, too, began their first tiny home project for the homeless in Gosford, NSW (Brokenshire). Other homeless villages exist in Austin, Texas; Olympia, Washington; and Eugene, Oregon, and have all been funded by local non-profits or churches (Ford and Gomez-Lanier). In this context, the affordability of tiny houses creates a promising option for housing the homeless.

However, Evans' database reveals that several tiny house villages in the United States do not offer essential amenities including heating, electricity, and plumbing (Evans). For instance, 18% of tiny house villages that were operational in 2019 had no heating or air conditioning, and 59% had no plumbing (Evans). Though this might mean that these homes are more cost-effective, this is not an acceptable means of housing the poor (Evans). However, Homes for Heroes in Canada appears to provide essential amenities. Evans also questions whether tiny house villages for the homeless increase exclusion and residential segregation, as 72% of those in the United States are gated (Evans). These are crucial points that must be considered upon constructing

tiny house villages for the homeless. Overall, Homes for Heroes in Canada appears to provide a promising permanent solution to housing for the homeless. In sum, tiny houses do offer a potential solution to housing affordability, especially for those who are interested in owning a detached home, as well as for homeless groups. They are not, however, the most affordable housing option that exists, especially with Ontario legislation requiring the owning of land and forbidding tiny houses on wheels.

In turning now to tiny housing as a potential solution for the environmental crisis, it is important to note that residential buildings were responsible for over 70% of total building energy demand in the world in 2017 (Crawford and Stephan). Tiny houses offer a promising solution to this intense energy consumption, as a tiny house leads to at least a 70% reduction in life cycle greenhouse gas emissions per capita compared to a traditional house (Crawford and Stephan). Of course, the small volume of the tiny house means that there is very little energy demanded for heating and cooling. In fact, the average volume of space per capita is seven times greater in an average traditional house than in a tiny house (Crawford and Stephan). Although the traditional average house can house many more people than a tiny house, it would require at least 10 occupants for the per capita life cycle greenhouse gas emissions to be lower than those of the tiny house (Crawford and Stephan). This would be very rare in Canada, where the size of an average household is 2.5 (OECD). Therefore, for those interested in owning a detached home, living in a tiny house would likely greatly reduce one's greenhouse gas emissions.

The small scale of the tiny house not only results in fewer greenhouse gas emissions, but also in proportionally fewer materials used in construction. Additionally, tiny houses are often built using recycled materials and green technology such as solar panels, water filtration systems, and compost toilets (Lessard). This small scale also means that the ability for a tiny house dweller to accumulate material possessions is limited by the size of their home, and they must therefore make more conscious consumption choices (Lessard). Notably, this ethos of minimalism and anti-consumerism is often an important association with

tiny house dwellers. Overall, Homes for Heroes in Canada appears to provide a promising permanent solution to housing for the homeless. In sum, tiny houses do offer a potential solution to housing affordability, especially for those who are interested in owning a detached home, as well as for homeless groups. They are not, however, the most affordable housing option that exists, especially with Ontario legislation requiring the owning of land and forbidding tiny houses on wheels. In turning now to tiny housing as a potential solution for the environmental crisis, it is important to note that residential buildings were responsible for over 70% of total building energy demand in the world in 2017 (Crawford and Stephan). Tiny houses offer a promising solution to this intense energy consumption, as a tiny house leads to at least a 70% reduction in life cycle greenhouse gas emissions per capita compared to a traditional house (Crawford and Stephan). Of course, the small volume of the tiny house means that there is very little energy demanded for heating and cooling. In fact, the average volume of space per capita is seven times greater in an average traditional house than in a tiny house (Crawford and Stephan). Although the traditional average house can house many more people than a tiny house, it would require at least 10 occupants for the per capita life cycle greenhouse gas emissions to be lower than those of the tiny house (Crawford and Stephan). This would be very rare in Canada, where the size of an average household is 2.5 (OECD). Therefore, for those interested in owning a detached home, living in a tiny house would likely greatly reduce one's greenhouse gas emissions.

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tiny house living (Shearer and Burton). However, it is important to question whether this practice of “anti-consumerism” is unique to tiny house dwellers. For instance, apartment dwellers likely also have similar limits on space that might cause conscious and careful consumerism (Lessard). Lastly, many tiny houses and tiny house owners seek to live off the grid, which tiny houses enable them to do (Shearer and Burton). Living off the grid encompasses generating their own power, collecting their own rainwater, and use composting toilets. These practices might obligate tiny house owners to confront their use and potential misuse of their resources, which might cause them to be more aware of their consumption. Therefore, the smaller space of tiny houses might also contribute to more sustainable, less wasteful living through a reduced consumption of resources. Although the ethos surrounding tiny house living encourages the use of recycled materials and green technologies, the sustainability induced by physical limitations of space are not unique to tiny house dwellers. Tiny houses on wheels provide unique sustainability and environmental opportunities through their mobility. For instance, in a bushfire or flood, tiny houses on wheels can be hitched to a truck and moved to safety (Brokenshire). This can save resources from being destroyed the way traditional, permanent houses would have been. Additionally, tiny houses on wheels can be placed on a property for years without impact on the environment, as they can be entirely off-grid, and do not require the same digging and construction of a foundation as traditional housing does, which results in the removal of trees and the installation of a concrete slab (Brokenshire). However, we must also be careful to consider the environmental impact of tiny houses on wheels when they are used to travel from place to place (Penfold et al.). In Ontario, of course, tiny houses on wheels are not legal (“Build or Buy a Tiny Home”). However, Brokenshire argues that tiny houses on wheels are being built regardless of whether they are regulated or not. In Australia, this has caused conflict with local state and municipal governments (Brokenshire). Planning controls and legislation for tiny houses on wheels are thus necessary for a regulated and consistent approach. Lastly, it is important to note that the tiny house, as a way to financial freedom, is also often presented as a

pathway towards increasing consumption activities that are unrelated to one’s household, such as travel, leisure, and social life (Lessard; Shearer and Burton). These consumption activities, especially travel, might actually cause a higher environmental footprint. Therefore, though tiny houses are sustainable in themselves, and can help to foster a more sustainable lifestyle through the ethos associated with tiny houses, they do not inherently create a more sustainable lifestyle (Lessard).

Tiny houses thus have potential to be a housing option for those who are seeking an affordable detached home and to limit their impact on the environment. However, tiny houses in Ontario currently require the purchasing of land and planning of construction, and are therefore only an option for those with the resources to undertake such a project. Tiny houses have great potential as either government or non-profit funded housing for the homeless because of their small size, potential to be built around a community, and relative affordability to construct. The small size of tiny houses also implies a smaller use of resources, and are therefore a relatively harmless housing option for our environment. In Ontario, legislation that regulates tiny houses on wheels has the potential to make tiny house living more accessible, as it would enable tiny house on wheels dwellers to stay temporarily in certain locations, implying that they would no longer have to purchase land, and greatly reducing the associated costs with tiny house living. It would also enable unique environmental advantages such as transporting tiny houses away from natural disasters. Though tiny houses are a fascinating option for affordable housing without compromising on a detached home, and for sustainable living, they are not the single solution to affordable housing and climate change. One does not need to live in a tiny house to consume consciously nor utilize sustainable technologies.

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