#### **TACTICS TO TINY**

Finding Your Way Home

by Sheng Wu

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presented to the
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the thesis requirement
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#### **AUTHOR'S DECLARATION**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

#### **ABSTRACT**

This is a study of tiny homes and how they fit within the practical and theoretical framework of our regulatory housing system. It starts with a (much) smaller home but has social, political, financial and legal implications far greater than its physical size. Concluding with a guidebook of tactics in a choose-your-own-adventure format, readers navigate the current system and experience the choices and challenges it takes to obtain a tiny home. It offers conscious readers the opportunity to critique their own presumptions on traditional home-ownership. The format is congruent with the belief that there is more than one way to reach a destination and there is more than one destination when it comes to choosing our homes. We should nurture the small, agile, and convivial efforts of autonomous individuals making a home for themselves. The dweller gains back control of the home, allowing it to become one's specific adaptation of the world.

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They will build houses and dwell in them; they will plant vineyards and eat their fruit.

No longer will they build houses and others live in them, or plant and others eat.

For as the days of a tree, so will be the days of my people; my chosen ones will long enjoy the work of their hands.

Isaiah 65:21-22 New International Version

# Tiny Answer(s) to the Great Housing Problem

The traditional conception of homeownership is eroding.

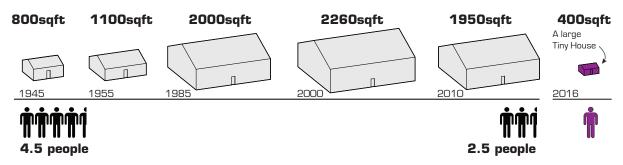
To minimize our personal living space goes against our North American culture and values, one that has been built upon our abundance of space and excess of material goods. In our "bigger is better" culture, homes have continued to grow larger in the past decades despite shrinking household sizes. But we have passed a tipping point. As a society, we are paying well above our means for shelter and as a result, we have little left to care for our wellbeing, or allow our homes to reflect our minds. We are living in an age of such unaffordable housing, that moving back in with our parents has become the most common living arrangement among young adults.1 With the rise of single-person households and increasing personal mobility, traditional home-ownership no meets the needs of a shifting demographic, especially when the trade-off is being tied down to long term mortgages, in addition to our exorbitant student and credit debts.

Mobile tiny homes are a solution that meet the needs of this new demographic. This solution -or tiny solutions- have been created from the bottom up as many selfbuilders have risen up to meet their own needs for a home. As individuals, we are all faced with our own unique set of choices, constraints, preferences and abilities. Rather than join the long waiting line for a solution from the top-down (which is usually in the form of government subsidized housing in low supply), aspiring home-owners can use their nuanced circumstances as tactics to fill the gaps left by a fragmented market. Tiny homes operate in a profit margin that is too low for speculative builders. It is a disruption to a system that normally tends to favour large developers and corporations.

<sup>1</sup> Richard Fry, For First Time in Modern Era, Living With Parents Edges Out Other Living Arrangements for 18- to 34-Year-Olds. Washington, (D.C.: Pew Research Center, May 2016.)

#### "Bigger is Better" Culture

Growing house size = Growing House Burden



The American dream -and the Canadian version of it- was the promise of cheap abundant land and the opportunity it enabled to own your own home. But the once affordable price tag to homeownership has escalated immensely in metropolitan areas where demand for homes is the greatest and incidences of core housing needs the highest.<sup>2</sup> The post-war generation's answer to this problem was to move to the suburbs. In the time of cheap fuel, there was an illusion of affordability but the sprawling urban landscape created out of the illusion is now no longer tenable. People are seeing the benefits of nesting in the city, integrating their work and leisure spaces by cutting down the commute time in between. We are seeing the rise of a new demographic that is unsuited to nuclear-family suburban life. Average houses have more than doubled in size

since the mid 1940's while households have been getting smaller.3 More and more people are choosing to live by themselves, marry later, have smaller families, have less stuff and be more mobile. People are also waking up to the real cost of "owning space" and being tied to 30 years of mortgage debt. New social conditions have created a market that is not being served by our current housing supply. While there are many people who have broaden their dreams to accommodate apartments, condominiums, and other alternates living arrangements, one group of individuals have together formed a social movement called the "tiny house movement." It starts with living in a smaller home but involves much larger implications, one of which is the power of individual efforts over waiting for top-down solutions.

<sup>2</sup> Canadian Housing Observer 2014. "Housing Affordability and Need." Canada: Canadian Mortgage and Housing Corporation, 2014. 1-5

<sup>3</sup> Avi Friedman, Room for Thought: rethinking home and community design (Toronto: Penguin group 2005), p8.

Livable and affordable home and housing is not merely a simple problem of architectural design and economic forces, but must also take into consideration technological advances, evolving legal policies, cultural appropriations, and deep psychological needs. The solution is not simply replacing the suburban family home with another type of housing. A home, beyond its basic function of providing shelter, constitute the physical and symbolic relationship between our inner-identity and our outer-reality. While we can no longer take for granted that every person is able to afford a home. homes satisfy a sense of belonging and this need cannot be simply foreclosed.

We all operate on a spectrum of choices and constraints but these are not the same for each individual. The relevance of either will also vary as well since some are more constrained than others. There may be differing opinions but "it is no coincidence that accounts of middle-class suburbs have emphasized choice, while explanations of working-class settlement begin by discussing constraints."4 While the dream and collective behavior of home-ownership has been nourished in North America by public policy and the way banks have set up mortgages and leverage, the 2008 U.S. financial crisis demonstrated that the typical house is not the trustworthy, correction-proof investment most would like to believe. Nevertheless, home-ownership will still prevail as a cultural mindset since owning

The home operates in a realm between providing comfort and security as well as meaning and identity; this longing to be able to appropriate a space to differentiate yourself from others cannot be overlooked. However, "as dwellers lose control over their living environments, shelter becomes a commodity reduced value to the individual and often an inordinate expense to society."5 Our generation is facing a roadblock in that historically our system is biased to benefit home-ownership but our lifestyles are increasingly mobile and our careers increasingly less stable in our "gig economy." Ownership of a large suburban house retains the status of the golden standard for some but maintaining this standard proves to be our heaviest burden. It would be too naïve to assume that this generation seeks freedom more than stability because having a home to always return to satisfies our deep need for belonging. Currently, the typical way of home-ownership is to own a structure along with the static piece of land that it sits on. Given that it is mainly the cost of land that is driving up the cost of homes, if we can detach the construction of the home from speculative land costs, people would able to own and operate their homes at a much lower cost while still enjoying the benefits of homeownership.

your home provides a certain degree of freedom and control more so than any rental unit.

<sup>4</sup> Richard Harris, *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950* (Baltimore: Johns Hopkins University Press, 1996), p16.

<sup>5</sup> John F. C. Turner, and Robert Fichter, Freedom to Build; Dweller Control of the Housing Process. (New York: Macmillan, 1972), vii

I am not arguing for everyone to live in a mobile trailer. Under the current policies, most cities only allow mobile homes to be parked long-term in trailer parks that exist in the peripheries of civilization or temporarily parked in designated parks that are operational only during certain times of the year -efficiently rendering them inaccessible or inconvenient let alone issues of social stratification. Mobile homes and nomadic living has cycled into our collective unconscious time and time again with the most recent manifestation being the "tiny house movement". This grassroots movement of people choosing to live in (much) smaller homes are often -although not a rigid requirement- built on a towable trailer bed. It is one example of a type of living that corresponds to our psychological need for both permanence/transience and freedom/stability that we seem to seek. It satisfies an instinctual desire for "freedom linked to a degree of comfort."6 People who choose to live in tiny homes for financial reasons or otherwise had to decidedly fight opposition on multiple fronts including building code regulations, zoning bylaws, municipal services, and finding furniture or materials that confine to tiny spaces. It speaks to the difficulty of affording a "normal" home being so great that people are instead willing to jump through multiple obstacles just to stay relevant in a housing establishment that actively resists anything too "different." It is their determination for their own home (albeit tiny) that subverts a system which normally favors large corporations—through setting rules for certification or requirements for capital investments that overwhelms most single individuals.

Although tiny homes are frequently featured in news articles and video documentaries, tiny homes in our housing market are still few and far in-between. It can be tempting to assume that people who live in tiny homes are exceptionally eccentric, composed mostly of quirky one-off enthusiasts and marginal misfits. However, after researching their seemingly unique stories something universal emerges: these are everyday people that simply wanted their own house and -with all things consideredfound this to be the most desirable option. Literally everything from the design, specs, sourcing the smallest bolt and screw had to be considered and decided upon by the earliest tiny home owners since these houses did not exist

<sup>6</sup> Liesbeth Melis, *Parasite Paradise: A Manifesto for Temporary Architecture and Flexible Urbanism* (Rotterdam: NAi Publishers/SKOR, 2003), p12

on the market as a pre-existing product and therefore had to be *improvised from the ground up*. These homes exist in a profit-margin threshold that is so low that it is simply not profitable for real estate developers to invest in. But they are perfectly satisfactory for individuals interested in having the comforts of home-ownership that are willing to be a little creative and daring. In any case, making any decision (including correct ones) for what we deem most desirable also comes with its own set of sacrifices.

We do not always get what we want in terms of the changing opportunities and constraints that we face, each of us can only respond with a unique set of abilities, weaknesses, and desires. In weighing choices and constraints, we must consider individual agents and actions outside our control, the influences of social institutions, and the rules of capitalism.7 Generally though, "we are all much more unique in our preferences than planners [are willing to] acknowledge."8 To depend on just one solution or one technology would be to deny our nature as intrinsically creative beings. City planning has traditionally been painted with very broad strokes as

evidenced from the simple color-blocked zoning plans that strictly separates land use and specifies what one can and cannot do on their property. Largescale retailers and residential property developers might actually find it easier to regurgitate the same repeated design on large new lots but even if they had ambitions to build something different, the extra effort (which translates to extra capital) it takes to apply for a variance is a major deterrent. Without the backing of a major corporation, it is even harder for single individuals who want to create something on their own to go through the same process. Anyone who tries to deviate from the established set of rules will find out the immense amount of energy, resource and time it takes to be just a little different. Yet, as your grade school teacher has probably told you at one point in time: we are all different and special. We need to take a more nuanced view and sensitive approach to the ways in which we inhabit our cities together.

Charles Montgomery in Happy City brings up the notion of **Heteroscedasticity**. This is the idea that the bigger the group, the harder it is to predict variations in its characteristics or to find some one-

<sup>7</sup> Harris, Unplanned Suburbs, p15

<sup>8</sup> Charles Montgomery, *Happy City: Transforming Our Lives through Urban Design.* (Doubleday Canada, 2013), p197

size-fits-all solution to problems that involve huge numbers of independent variables and actors. Heteroscedasticity means that the city is complicated and a bit chaotic, so the solution cannot be singular nor one-dimensional. The solution comes when we embrace complexity and arrive at a multiplicity of multi-dimensional answers. Luckily, this aligns with our human nature of having unique preferences and strengths. Major shifts in the fields of technology, typology, finance, legal standings, and social relationships are all part of this story. The future of housing is not going to be solved by a single new invention. It can only be solved by embracing diversity, making small incremental improvements and innovations to the tools we already have to work with. As citizens, we should not just wait and hope that the top reforms and installs the next ideology for a better place to live. Through empowering individuals with the knowledge and tools to make their own decisions, alongside social-structural changes, every person can start living at their most optimal and participate in the design of the future. People are choosing to live differently from the last generation (vertical differentiation) but we must now also encourage and enable alternative ways of living from peers of our own generational (horizontal differentiation).

Everyone must find the point where they are most comfortable on these spectrums of choice and constraint and that is where their home will be.

For this thesis, I will explore in detail tiny homes (and related tiny living arrangements) as one alternative that currently faces many obstacles in the North American housing system. Tiny homes are able to satisfy those with an intrinsic need for home-ownership, especially for those that are unwilling to buy a "standard" suburban house nor interested in living in a shoebox-style condo unit in the sky. Tiny homes are a good solution for this group of people. But a paradigm shift is required in order to make these homes more accessible. approachable, and acceptable. We need to focus on encouraging and enabling avant-garde alternative home solutions (tiny homes and everything else) that sustainable at the theoretical. legal, social, and practical levels so that traditional homes and traditional alternatives are not the only options, but just one of many, many more. We are at a tipping point where the housing system must nurture the small, efficient convivial space-sharing solutions for the sake of both environmental sustainability and economic stability. Irresponsible space-hogging and pollution-inducing urban planning should be exposed as such and given penalties rather than stay clouded in a delusion and glamorized.

In this case study of tiny homes, I will start by unpacking the underlying social implications of the movement as well as the more technical logistical issues in the form of mini essays. Each essay will explore in-depth one distinct theme or idea. Included is an illustrated guidebook in the format of a choose-your-ownadventure comic for readers to simulate the experience of navigating the current housing system towards a tiny home. It is my hope that through the case study, a reader will become conscious of -and maybe even challenge- certain built-in presumptions and prejudices (such as the origin of our current idea of a traditional home) in order to better assess the alternative options before rejecting them prematurely. A reader who is already committed in pursuing tiny homes will find practical routes and tactics on what needs to be done and what steps to take. Most of the ideas are already being tested and used by some brave and creative souls. I want to illustrate the "known knowns", bring to the forefront "unknown knowns" and "known unknowns", and to expose some "unknown unknowns" that systematically underlie all our decisions when it comes to choosing our homes. The guidebook is a way to consolidate separate and distinct individual experiences into practical knowledge that can then be easily utilized by individuals to take a stand (which in turn promotes and normalizes such alternatives).

I can wax poetic non-stop about the positive aspects of alternative living arrangements but history "suggests that transformation happens less by arguing cogently for something new than by generating active, ongoing practices that shift a culture's experience of the basis for reality." Your home can be your castle or it can be your cage -it is not a matter of size, it is a matter of choice.

<sup>9</sup> Rosamund Stone Zander and Benjamin Zander, *The Art of Possibility: Transforming Professional and Personal Life* (New York: Penguin, 2000), p4. italics mine

# 12 POINTS ON TINY HOMES

- 1. Tiny Home, Home Enough?
- 2. The Problem With Tiny Building Scale
- 3. Tiny Building Scale is Not the Problem
- 4. Difference between Tiny House&Tiny Condo
- 5. Costs of Ownership
- 6. When Housing Needs Are Not Met
- 7. Are Tiny Homes Affordable?
- 8. Owner-built Homes are Not Radical
- 9. The Bottom-up Social Movement
- 10. Isolated but not alone
- 11. Minimized Space, Expanded Living
- 12. Be Intentional

#### 1. TINY HOME, HOME ENOUGH?

#### What exactly is a tiny home?

It is an independent house structure that falls somewhere between 50 Sq. Ft. and 400 Sq. Ft. (anything larger would be considered a small home).

It is also a home, which is a primary full-time dwelling. The other attributes usually associated with tiny homes are variable.

It can be built on a trailer to be mobile (allowing it to move from place to place) or it can have permanent foundations and sit tight in its spot.

It can be owner-built from owner sourced materials or built-to-order, fully assembled and move-in ready. It can also be somewhere inbetween which includes: assembled from a DIY kit of pre-cut materials, prefabricated, or shelled-in.

It can be on-grid, connected to city water, hydro, and sewage or it could be off-grid, fully autonomous, carbon-neutral, generates energy, and recycles it or fall somewhere in between.

It can be fully-owned, financed, leased, borrowed, inherited, or shared.

It can exist on its own plot of land in the country or it can be an accessory unit sharing the yard of a suburban house.

The name 'Tiny Home' is quite telling, the only thing that defines these houses is their full-time occupancy and size.

They are, by North American standards, tiny but this range of size is considered quite normal in many countries. Shrinking our personal living space is only a radical idea to us in North America because land is plentiful (and used to be cheap). Space is most appreciated by people living in a small country with a relatively dense population hence the ubiquity of spatially interesting small homes in a place like Japan.<sup>1</sup>

Time is naturally more valuable to people living in a large country with relatively fewer people.<sup>2</sup> The interest in saving time translates to a higher value placed on convenience and efficiency; these exploited terms are used to sell us more "tools" to achieve an undisturbed life. Often we buy cumbersome appliances on the promise that it will do our work for us to save us time but end up taking more time to set-up, clean, and maintain. If we go back to the beginning to ask what exactly would we ideally be doing with all this "saved time", we may find that the lack of these items is not the reason why we cannot be doing what we want to be doing. In some cases, having to maintain all our stuff is the distraction that prevents us from spending more leisure time with our families and friends. Instead of freeing us, owning non-essential items tie us down. We work to "make a living" but forget to make time for living.

In addition to the price tag, we are also paying for the space it takes to store the things we purchase. We are led to believe we need a big house because we need space -not necessarily for us to live in- but for our things to live in. We enter into a vicious cycle of working to pay for our housing but give up our time to enjoy it because we must work more to keep paying for it. We have come full circle: our lack of precious time may be caused by us having too much space.

Owning too much stuff is not a problem for everyone. Some cannot further cut down on their expenses without losing the roof over their heads. About 3.3 million households (25.2%) spent 30% or more of their household total income on shelter costs.<sup>3</sup> While even just a basic shelter provides safety and security (the first two levels of Maslow's hierarchy of needs), at these crippling costs, there it will just remain literally a shelter from the elements and nothing more.

A tiny home costs a fraction of a regular home and have a monthly utility bill averaging in the \$10-\$70 range (based on the calculations of various tiny home owners online). Choosing a tiny home significantly cuts down shelter cost so that it frees up resources for the path towards self-actualization. In this case, living with less is better: it enables a house to become a home.

Depending on what metaphor you choose, a home is your anchor, your castle, your base, your nest, a place to safely dream, a point of view, a window out to the world, or simply where your heart is i.e., where your family and relationships are. The emphasis may be slightly different but none of them necessarily have to do with the size of your home. The issue with home has never been about size. Despite what real estate specs list, it is rarely the square footage or the number of rooms that will make a place feel "homey." It is whether it allows you to be at complete ease with yourself and empower you to begin transforming a house into your specific adaptation of the world. When a person is instructed to "make yourself at home", there are many implicit meanings: it is a question of comfort, of security, of intimacy, of belonging, of ownership, and of meaning. A true home fulfils both the personal and cultural needs that we may initially not be fully conscious of.

#### 2. THE PROBLEM WITH TINY BUILDING SCALE

How do you fit In a standard-sized refrigerator? Do you include a washer and dryer in your house or just opt to go to the laundromat every other week? How does water get fed into your tiny house, and more importantly, where does it go afterwards? One of the first steps towards going off-grid is to opt for a composting toilet to get rid of blackwater production entirely. Using biodegradable soaps helps make the remaining greywater disposable in a garden. Then use solar panels for electricity. How many solar panels does it take to generate enough electricity to power your house and your laptop? What if it's a cloudy day? These may seem like insurmountable questions but they have all already been answered in some form or another by existing tiny homes, RVs, and Trailer homes. Since there are many functioning models of tiny scale homes in existence already, answering technical casespecific questions (e.g., plumbing) will not be the main focus of our project.

One cannot expect to live exactly the same way as a "normal-sized" house that is connected to the grid with electricity and water. You would have to be more conscientious of your water usage if your water comes from a tank which you must refill with rainwater. Or you have to be considerate of your energy usage because it has been too cloudy recently for your solar panels to recharge. Although it requires more active participation on our part to be mindful of our limited resources, this is

not necessarily a bad trade-off. We have been spoiled by convenience to the point of being disjointed from our impact on the resources of this earth. Mindfulness brings back this connection. Thoreau went to the woods because he wished to "live deliberately."

# 3. TINY BUILDING SCALE IS NOT THE PROBLEM

The tiny home is not just about the size or the technological capability. It is about allowing individuals to take back control of their home. The creativity, desire, and energy of individual home-dwellers are a large untapped resource in solving the housing crisis in Canada. It is in the logistical implementation of these tiny homes that proves to be the problem. There are many legal and financial agents that create and affect the current housing system (contractors, developers, realtors, insurance companies, public policy and lending institutions) but these major players focus on effective demand and have largely overlooked the differing needs of individuals in the process of home-making that allows houses to become homes. "Effective demand is a market concept, legal *minimum standards* is a concept developed by public officials, whereas user needs exist independently of the market and the government...The supply side of the market is of course interested in user needs, but only insofar as they can be turned into effective demand."5

A home becomes a commodity and people become mere consumers of houses.

"Society can be destroyed when further growth of mass production renders the milieu hostile, when it extinguishes the free use of the natural abilities of society's members, when it isolates people from each other and locks them into a man-made shell,

when it undermines the texture of community by promoting extreme social polarization and splintering specialization, or when cancerous acceleration enforces social change at a rate that rules out legal, cultural, and political precedents as formal guidelines to present behavior."<sup>6</sup>

Minimum size standards and other regulations are made by those who presume to know what is best. Even out of good intention to raise standards of living for all, the ramifications of having these rules is that they often prohibit small homes that could be perfectly adequate and safe in relation to the dweller within.

Many tiny house builders may be tempted to leverage the Building Act's classification of building as "a structure occupying an area greater than ten square metres" and build under the defined minimum to escape the need for a building permit but such under-the-radar strategies will be met with legal amendments further down the line. While it may functionally, spatially, and emotionally be your home and primary residence, it can never be acknowledged as such on legal documents. This formal acknowledgement will not affect your daily "home" experience until you try to fill out a bureaucratic paper that prompts for your address.

# 4. DIFFERENCE BETWEEN TINY HOUSE & TINY CONDO

In a mobile tiny home, if you didn't like your noisy neighbours, you can just drive away until there is a comfortable amount of distance between you and them (see page 129). In a condo, if you don't like your noisy neighbours, you can complain to the building manager or secretly sabotage their balcony plants but they will probably still stay put in their condo unit for as long as it makes sense for them. Even if that means until their crying baby is not a baby anymore. The condo being their home, everyone expects a degree of freedom and privacy, but are instead sharing walls with strangers whom you have no control over. This is why "the shimmering vertical city has become a breeding ground for lawsuits, bullies and brawlers."7

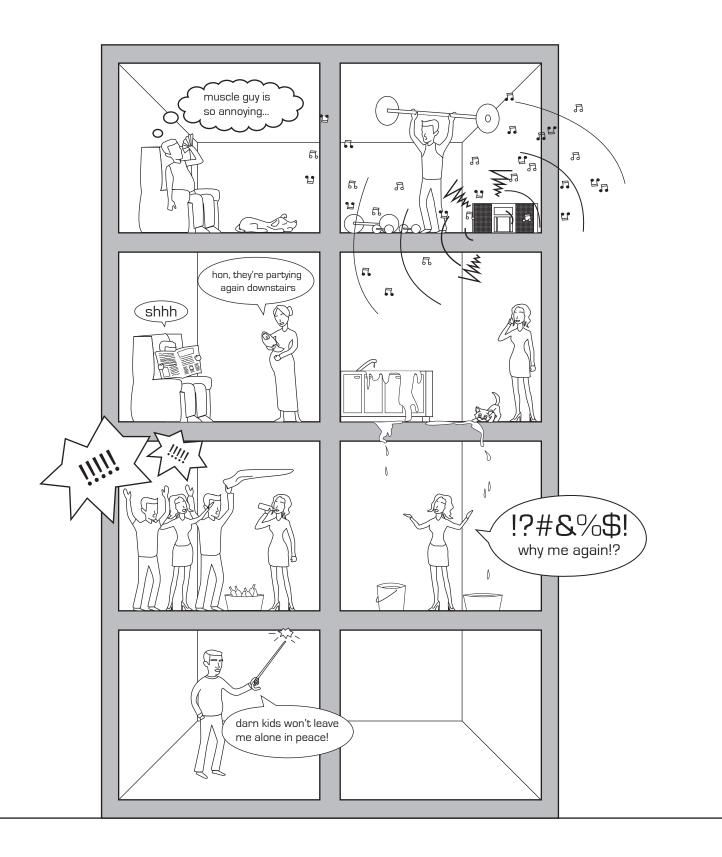
Being of similar size to a small condo unit, more autonomy and freedom is what tiny homes offers. The amount of individual control of the dwelling by the dweller and the mobility of the ground-oriented home far exceed the stacked towers of shoeboxes in the sky. In a tiny home, you are responsible for every aspect of your own house. During the construction process, it is the quality of materials that go into building the house. During occupation, it is the water and energy you use on a daily basis. This responsibility is reflected in your daily rituals and monthly costs, potentially making you more selfaware, which in turn will result in less waste. No tragedy of the commons here. When something physically breaks, like the heater,

the tiny home owner would fix it themselves rather than wait helplessly for the central building manager to come.

If you wanted to pick up some building materials to change the exterior appearance of your home, a condo board would likely prevent you from doing so even though you "own" your unit. Having a tiny home offers the autonomy to do so. "Autonomy means the power to bargain, the ability to get what one needs, the capacity to pay, in one way or another, for what one gets. In sum, it is synonymous with substantial freedom of action." It is possible to self-build your tiny home from scratch, you cannot self-build a condo unit.

The tiny house also has the capabilities to be highly efficient to the point of being self-sustaining and off-gird. Being off-grid is another form of autonomy that makes one unconstrained by large infrastructure and thus be free in mobility. A house could be free to exist anywhere.

Our current condo towers are still built with shocking amounts of thermal bridges on exterior walls with low-to-no insulation value, which make them entirely dependent on the energy from mechanical units to turn them into habitable spaces. Our developer condos are still a far ways away from being energy efficient.



# 5. COSTS OF OWNERSHIP

There are a lot of perks to owning your own home. At best, owner-occupied homes offer a greater degree of control and self-expression. Compared to renting, you can plan for the next 10 years without worrying that a landlord might suddenly decide to stop renting to you the upcoming year. When you own your home, you could one day decide to change all your doors and windows, again without worrying what a landlord has to say.

Ownership of a place to call your own also offers a sense of belonging and security because you know you will always have that place to return to at the end of a chaotic day. You have decidedly differentiated it from all the other foreign places to identify it as yours. One could acquire property by purchasing it with money, trade it for other property, win it in a bet, receive it as a gift, inherit it, find it, receive it as damages, earn it by doing work or performing services, make it, or homestead it. A deeper sense of ownership happens when one is personally invested and committed, not just one of a consumer purchasing a product but a creator enjoying her creation. Ownership means financially owning it as your property but also ownership over its existence, its creation, and its maintenance. Over every aspect of its details. The difference that a sense of ownership makes is illustrated by the old parable of the sheep and its sheppard. A hired help will flee and not protect the sheep when a wolf comes but a shepherd will stay because of his sense of ownership over the sheep.9 This commitment can either indicate the personal value of something (which may or may not be separate from its monetary value) or induce it to grow.

We are in the danger of viewing our homes as mere commodities and financial investment opportunities. Before we even buy the house, we are already concerned about its resale value and base our decisions on how it will affect it as a future product.

Economics dating back to Aristotle make a distinction between "use value" and "market value." If you maximize use value, your home will steadily become more idiosyncratic and highly adapted over the years. Maximizing market value means becoming episodically more standard, stylish, and inspectable in order to meet the imagined desires of a potential buyer. Seeking to be anybody's house it becomes nobody's. 10

Although we take for granted that homes are intimate private spaces reflecting individual tastes, collective influence can be witnessed in the changing standard styles of furnishings throughout the centuries. The particular fashion of the time is often seeping into our homes. Just as in Medieval and Renaissance times, furniture was not for comfort but to show status, in our age of consumerism, we are still urged to arrange the innermost spaces of our home in terms of one upping the neighbour.<sup>11</sup>

There are trade-offs to homeownership as well. You may have to sacrifice some traveling to keep up with mortgage payments. You cannot quit a job you dislike to pursue a passion that could very well be your budding career because again you need to keep up with mortgage payments. The land transfer fees, adjustment costs, insurance, brokerage, legals cost, transportation, hiring professional movers, and other associated costs to moving makes it harder to relocate to a new home or a new city. There are also worries that accompany ownership. If something breaks, there is no landlord that will magically appear to come fix it. For a generation that puts a high value on the freedom to pursue personal interests, the cost of "owning space" becomes much higher when measured against the experiences it displaces.

Where does this leave us? We still want a home.

It is not surprising that according to the 2016 Bank of Montreal Millennial Home Buyer Report, 89% of millennials agree that there is value in home-ownership, but are willing to defer the decision to own until the time is right.<sup>12</sup>

When home-ownership is removed as a capital investment opportunity for financial gain, what is left is your personal needs for a home.

Live for your today and your future, not someone else's hypothetical market-driven future. The choice of home-ownership has been skewed by the (American) dream of owning your own home. With the recent financial crisis, people are losing trust in the credit system that nourished delusions of securely possessing a home beyond your means. The benefits and constraints of ownership vs renting created by the regulations and bank policies need to adjust

to be more evenly distributed. Other countries (such as Germany) have proven that renting tenants can feel rooted enough in their homes to invest in home-renovations even if they do not own it. When legal and bank policies protect renters in their homes and do not overly skew the benefits solely towards homeowners, the sense of security that comes from belonging is possible for renters as well.

In the meantime, individuals have to figure out how to work within our current system. A tiny home is small enough that you can truly make the choice of living for investment (market-driven renovations) or live in a highly tailored dwelling (specific to you).

One of the biggest critiques of tiny homes is that it depreciates in value similar to a car rather than retain or increase like a "normal" house. This can also be its biggest asset; there is freedom from concern of a future sell. The cost to own a tiny home is relatively low (comparable to 2-3 years rent) but if built well with quality materials, it can last as long as any old house. If the tiny house lasts as long as its value in rent would have lasted, then there is no lost and only the added benefits (as well as constraints) of ownership and many more years of living rent-free (or at least as low as the rent for the land it parks on).

### 6. WHEN HOUSING NEEDS ARE NOT MET

"In Canada, most households are able to satisfy their housing requirements through the housing market. However, there are some households whose housing needs are not being met in the market place."13 Our resources and influence may be small but we can still use them to help ourselves and others. Relieving people from the bondage resulted from oppressive laws and social barriers, many of which have been created over decades and centuries (to keep suburb neighbourhood's uniform aesthetic and feel, pushing out townhomes and apartments also effectively pushes out lower income families). It speaks of the systematic injustice in society that has institutionalized profiting from people's basic need for shelter and safety. It refers to cultural mindsets that prevail from a combination of capitalism, credit-mortgages, and the romantic American dream for everyone.

As we work to make a difference in the future and change oppressive laws and unjust social barriers, we also need to meet the practical and immediate needs of those suffering from injustice today. We may not be able to know all the complexities that developed over the decades nor be able to understand each individual's life situation, but we can respect and acknowledge the dignity of individuals who are worth just as much as someone with a lot of capital and a big estate. Every citizen should be allowed to establish a sense of belonging; to feel that they are wanted, that their lives are valuable. It starts with having the safety of a sturdy enclosure. Owning your home should not be a choice only available to the wealthy. It should be a right to all humans.

Is a home for shelter or is it an investment? Can it be both without compromising the integrity of either? If both, Is one more important than the other? Your answer will affect whether you think a home is a human right or if it is a luxury. Whether it is a responsibility of society that everyone should get a home or if it is determined by individual action with no interference from external factors. It also matters who you are. Whether you are aware of it or not, your social position has already affected whether you are driven more by desire or by necessary constraints. Usually it is some combination of both desire and constraints differing only in their relevant weights. The truth is, there are already so many visible and invisible hands that have determined your home and living situation.

If we cannot meet the needs of all the people in our country, at least we can make an impact on some of them. Over time, impacting the lives of a few will impact the lives of many. No matter how small each individual act is, together we can make a difference.

Although our standards and laws come with their inherent prejudices, we are fortunate to be living in a civil society where violent corruption is not accepted as an necessary condition.

# 7. ARE TINY HOMES AFFORDABLE?

In 1970 and earlier, structure costs represented about 90% of the value of a home in most areas. But since 1980, the cost of land and obtaining regulatory approval has shrunk the importance of physical building costs as a factor in house prices.<sup>14</sup>

Banks and mortgage loaners gave out loans for larger and larger homes with little consequence of their own since the government foots the bill when foreclosures happen. Developers would favor larger houses because it would translate to more profit per structure. Right now is a time when the housing market crash is still fresh enough in our minds but the shortage of affordable housing still prevalent requires us to fight for change. It has been quietly accepted that homes are beyond what most can afford. Houses are seen as a major capital investment.

At roughly \$30 000 for a tiny house with all the same core amenities, it is a fraction of the cost of a regular house but it is not "dirt cheap" at roughly \$200/sqft. We are still dealing in the realm of those who have some choice in their dwelling. Although "square footage is really the cheapest thing that can be added onto a house. The electrical system, plumbing, heating, appliances and structural components of most any dwelling are similar in at least one key way. They are all expensive. This costly core is housed by relatively cheap volume that surrounds it."15 Its affordability is in terms of per unit price, not just due to mass production and corporate bulk ordering of materials. Each unit(house) in and of itself is affordable: thus, individual home-builders

stand a chance amongst developers.

The total cost of a tiny house can be less than the down payment for a regular house but still requires you to save a large amount to purchase it all at once. Financing options for tiny homes through private lenders are increasingly becoming more common as more people demand the need and corporations start to wrap their heads around the idea of tiny houses. Tumbleweed (a popular tiny house manufacturer in the US) offers their own financing program, resulting in roughly \$450/month payments over 15 years to own a Tumbleweed tiny home.

Another way that makes tiny houses affordable is in leveraging sweat equity and time for capital. Adjust priority according to needs. Building it yourself and making the effort to source your own materials can add to the value of the house as well as construction time but without adding extra cost. If you are in a position of having time but only incremental amounts of capital, the trade-off could be worth it. It is also possible to start living with the bare necessities of the house and slowly build outwards as finances allow.

The XS Size makes it inherently more "sustainable" and cheaper to operate than a larger home. Less energy used to heat and cool the place, less area that need to be lit with lights translates to less monthly operations costs.

# 8. OWNER-BUILT HOMES ARE NOT RADICAL

Before they became popular, if you wanted a tiny home, you had to build it yourself. Owner-built homes is not such a radical new idea.

Owner-builders were responsible for 20 percent of new single-family dwellings constructed annually in the US in the 60's.16 Similarly, Toronto suburbs had its share of owner-builders too. Blue collar workers with little capital were able acquire cheap land and thus slowly build up their houses overtime. Workers would quickly dig a hole, line it, and put a covering to temporarily live in the future basement and start construction every night after work. They may have been considered "shantytowns" but people were working towards a place where they were finally their own bosses. Homes built this way were for practical use, not necessarily for profit, although workers were able to increase their equity through this method.<sup>17</sup>

It is not so much that everyone must literally build their own house but to have the option to deliberately choose to create for yourself something that best suits your needs, rather than wait for "the market" to catch-up and create it for you. Market should be responding to our needs, not completely dictating them. Same with laws and political parties, they should represent the people's needs, not tell us what our needs are, even if it means forcing us to change our needs against our will. Tiny homes were not offered as a choice in the market.

The ability of the free market system to serve shelter needs is questionable when

there is a large wealth gap and many fall through the cracks. Speculative builders will not operate in the threshold that is affordable because the profit margins are too small. "The formal market was simply not in the business of building such cheap homes." <sup>18</sup>

# 9. THE BOTTOM-UP SOCIAL MOVEMENT

It is inadequate to talk about tiny homes without bringing in the movement that goes with it. The tiny home movement is a bottomup grassroots movement of individuals who have chosen either by desire or by constraint to live smaller, simpler, and usually as a result, cheaper and more sustainable lifestyles. They are self-titled the "tiny house people." While there are communities and neighbourhoods specifically made for tiny homes slowly popping up in the United States, the movement and "community" gathered momentum largely online. Their digital presence was much larger than their individual physical tiny homes. It was a trend that many were highly skeptical of, who thought they were nothing more than a short fad.

The pioneers of the movement were living this way long before the shows came to feature them. Some were living this way semi-illegally under the radar. Living this way was not to become famous, that would be too inefficient in terms of investment returns because for the 5 minutes of Youtube fame, living in a tiny home literally affects how you live daily or even by the minute. More people are taking notice of the movement and are turning the production of tiny homes into a business venture, before, the only way to attain a tiny house was to custom build it yourself. For this reason, latecomers have been questioned of their authenticity since it has become a marketing trend with developers or opportunists looking for a profit grab. However, the community is usually supportive enough to say that there are varying degrees

of living tiny -all equally authentic. Despite the plethora of media attention surrounding tiny homeowners, they are still far from becoming the mainstream. In most cases, individuals were not looking to join a mass activist movement out to change how everyone lived, but were rather embarking on a deeply personal and solitary journey.

In terms of city planning and policy making, by favouring small individual actions over large-scale megaprojects, responses can be made quicker to meet immediate needs and fill in deficiencies left by current industry. Decentralized, bottom-up, low-cost, networked tactics can then inspire long-term change, revise outdated policies, impact public policy and neighbourhood life. A city must plan for the long term but also must move quickly on protecting and supporting the many smaller initiatives to meet the many of the immediate individual needs of housing.

When the current housing supply system is too slow, not flexible enough or otherwise is not meeting housing needs, there is opportunity for decentralized, bottom-up individuals to be an active part of the solution. The prejudice that people cannot house themselves is being broken as "tiny house people" continue to use their economy of effort to address their personal needs of a home. These more agile, flexible responses make the entire housing system more resilient.

# 10. ISOLATED BUT NOT ALONE

It is no longer taboo to live alone and to enjoy the bachelor lifestyle. Single households are becoming more prevalent as more people are choosing to live by themselves. Eric Klinenberg from the book "Going Solo" states why single households are on the rise: delayed marriages, longer lifespans, the connectivity brought about by technology, and increased women in the work force. The same study on "singletons" suggests that far from being anti-social individuals, singletons have a greater need for community and more reasons to be outwardly social.<sup>19</sup>

In a similar misconception, at initial glance, tiny home lovers may seem like misfits of society that build their houses as an retreat from normal civilization when the opposite is true. People that live in tiny homes, especially mobile trailer tiny homes, strive on conviviality and social dependence. From the land they pay or otherwise negotiate to park on to the tools they must burrow on occasion because there is no extra space to store stuff they don't use on a daily basis, there is always a degree of reciprocity. Thoreau had to burrow the ax to start building his cabin but he returned it sharper than how he received it.20 A tiny home parked in the yard can also be an additional source of income for a landowner. Maintaining a mutual and reciprocal relationship with "normative society" is crucial for tiny homes to become a sustainable, long-term housing solution especially in cities.

Alonetiny house sitting in a picture sque landscape may be toted as the ideal image but tiny homes are not to be mistaken as nostalgia for a pastoral life. Finding a place for tiny homes in the city where demand is the greatest will prove them most beneficial as people are already paying thousands to rent a room. Small, awkward plots of otherwise "unusable" land can be used to park a tiny home. We can find spaces that have fallen through the cracks of the planning process (see page 93). Secondary suites and laneway homes are being embraced in cities like Vancouver and Ottawa as a way to increase density and supply more affordable housing.

Businesses based on conviviality are also popping up in many cities. Paintlounge, zipcars, bike share, boardgame cafés, community kitchen are all examples of a new type of sharing economy. You no longer have to own something to enjoy or use it. Pay for the use of something instead of the acquisition of it. In this sharing, post-consumer society, there is freedom from owning things. These businesses need a densely packed, lively community to support it which tiny homes can contribute to and tiny home owners would greatly benefit from such sharing economies. It is only when you first have community can you then be alone.

# 11. MINIMIZED SPACE, EXPANDED LIVING

Minimize your house but expand your living. When your home is tiny, you live in the city more, use public space more, travel more, visit more friends and love more. As the Google employee known for sleeping in his truck states in his latest blog post, he doesn't live in his truck, he lives in the mountain where he rock climbs, on the trails that he bikes on, the park that he plays in, the gym that he works out at and the coffee shops where he reads. He only sleeps in the truck. Living is what happens when you wake up.<sup>21</sup>

By shrinking the footprint of your private home, you can afford to spend more money and time elsewhere. Although home is comfortable, it is a central starting point to view out and safely explore the world. When the amount you save does not have to go into maintaining your shelter, you have excess to save or spend on experiences that turn into memories, which in the end is all we have. In the case of a mobile tiny home, rather than tie you down, it allows your haven to literally venture with you.

"A reduction in building volume also reduces man's intrusion in the natural environment and should, therefore, enhance our experience of nature." - Richard Horden, designer of Micro Compact House

Minimalist design reduces the extraneous to reach an essential quality. An experience with all inessentials removed makes space for true desires to come forth.

"Have nothing in your house that you do not know to be useful or believe to be beautiful" - William Morris

Overlapping programme in the same space also works to enhance our sensory experience by forcing dwellers to be present and engaged in the current moment; the same room takes on different functions depending on your human activity within i.e. becomes a dining room when you are eating in it. Transforming, multi-use furniture work in a similar way in that it has the capacity for multiple functions but at any point can only be in one state. And that might be better for us.

Research by psychologists Matthew A. Killingsworth and Daniel T. Gilbert of Harvard University, finds "a human mind is a wandering mind, and a wandering mind is an unhappy mind," and "the ability to think about what is not happening is a cognitive achievement that comes at an emotional cost."<sup>22</sup>

Growing older does not mean your house has also has to grow in size or that you should own more things. Scaling up your life does not entail scaling up your home.

Live BIG in a tiny space.

## 12. BEING INTENTIONAL

What can an individual do to find (or create) your home within the current housing and planning regulatory system that is constrained by social-political-economic forces? One answer is to live tactically and realize your own economy of effort to address your needs and concerns as well as push the boundary of what is possible. Build small enough to let your home be yours with no concern or fear of what others around you are doing. We don't have to accept what the media or advertising companies tell us we need in our lives to live happier and live fuller. We do not need to be limited by the current options.

Instead of being frustrated with the system, be the one that makes a difference. Even if it means only making a difference for the way you are living. You are a part of "society." This guidebook is to help you to see the implications of your choices, letting you experience the paths you would have to take and decisions you would have to make before you make them. Then go back and make a different decision and experience that one too. Our life path is not always linear. Sometimes we try our hand at something different and love it. Sometimes we find ourselves going back on the same track we were on years ago. Sometimes we find ourselves in a position with many great options; other times there is only a mediocre one. This book is not made to be read linearly. Jumping around the guidebook emulates the freedom of a mobile dweller.

This thesis is written in second person and in a choose-you-own-adventure format because there is not one right answer for everyone but rather many answers for every person. You have a combination of values, abilities, concerns, and constraints which will generate a different desirable outcome than the next person. Having this knowledge of yourself as well as the external forces will empower you to be intentional on your journey towards finding home.

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#### BEFORE YOU START YOUR TINY HOME ADVENTURE

On the following pages are some examples of how one would use the guidebook. The left column depicts a character (in your case, you) and the route/choices this character makes. In the corresponding rows are the "cards in your hand" which I have put into 4 categories. The 4 categories are: Financial, Psychological, Technological, and Legal. The categories may be distinct from each other but are usually interrelated and together make up your status. The combination of cards that you hold in your hand dictate and explain the reasoning behind your choices.

FINANCIAL

- This can be your financial abilities or constraints. Ex. How much savings or debt do you have? Do you expect a stable income? Are you broke? Are you able to get a loan?

- This can be your values, your wants, your needs, your health. Ex. Do I need a kitchen to cook or can I eat out everyday? Am I able to take care of myself physically and mentally? Am I capable of living alone or I prefer to live with others?

LEGAL - This can be your legal standing as well as your tolerance for bending the rules. Ex. Are you a legal resident that is able to obtain the necessary documentations? Are you willing to risk getting caught without the documents?

TECHNOLOGICAL - This can be your ability to get materials, use tools, and the infrastructures you need to support your preferred lifestyle. Ex. Am I able to use power tools to frame my own house? Do I insist on a traditional toilet and therefore need to figure out plumbing?

The cards and their combinations differ from person to person and will change for the same person depending on the different stages of life. You may also find that they change as you learn more about the system and want to widen your scope of options. Your cards will not be explicitly depicted in the guidebook because they are your personal circumstances but you should have your set in mind to guide you when navigating through your adventure towards a tiny home.

# Sample Route I

### reasons behind the decisions



The Recent Grad

#### **FINANCIAL**

Student Debt

After 4 years of school, savings are virtually non-existent but debt abundant. Looking for a starting salary job and is willing to move to a different city to find a suitable job.

#### **PSYCHOLOGICAL**

Independent

Has been living on their own since university. Would like to own a place eventually, although not in the near future. Would like to stay connected to city centres for work & social life.

#### **TECHNOLOGICAL**

On the Cloud
Possessions have been reduced to the scale of personal devices. All that is needed to work and play is laptop, tablet and cell phone.

Don't own a home or land but would like to live in the city [ page 35 ]

Less than \$10,000 in bank account [ page 41 ]

Move back in with parents

(page 99)

#### **FINANCIAL**

Would rather move back in with parents and save on some rent than buy an RV and be forced to live in RV parks that are getting few and far between.

#### **PSYCHOLOGICAL**

Many recent grads are living with their parents. Almost 1/3 of young people choose to live back at home. It is becoming common to do so for the first time in 130 years.

#### **TECHNOLOGICAL**

Moving back home is easy when parents expect and are willing for their adult child to return.

Decide to build their way to independence [ page 99 ]

Grow their home as they grow

( page 145 )

Consult and join league of homebuilders

(page 123)

#### **FINANCIAL**

Use the money saved on rent to buy materials to build a tiny home in the yard. Living at parent's house also allows more time to build.

#### **PSYCHOLOGICAL**

Although still living with parents and using them as resources, this option allows more independence and privacy for all parties.

#### **LEGAL**

Start building a mobile tiny home in the yard and begin living in it Still use their address to "legally reside" in parent's house.

Find a community of tiny enthusiasts online [ page 101 ]

Form a group and start an intentional community together

(page 143)

#### **PSYCHOLOGICAL**

Finding a group of like-minded people to share life with is thrilling. Find that there is more to life than working to pay for stuff.

#### LEGAL

Use your experience dealing with building permits to help the group buy and organize a plot of land together, Will come up against some resistance for this new type of Eco-community.

#### **TECHNOLOGICAL**

Install a system to provide water, sewage and electricity to many small units. Can use similar method as RV plug ins. Community can be off-grid, sustainable and autonomous if desired.

# Sample Route II

### reasons behind the decisions



The Downsizing Senior

#### **FINANCIAL**

Retired

Retired or getting close to retiring. Have money saved up and the time to invest in some personal projects.

#### **PSYCHOLOGICAL**

Stable

Feel less of a need to keep buying material goods. Want to spend more time with family and friends.

#### **TECHNOLOGICAL**

Scaling Down

Have so much stuff accumulated over the years. Want to downsize and cut back.

Own the home that they currently live in page 33 )

Home is in the suburbs [ page 35 ]

Wants to stay in the suburbs but also have a tiny home

(page 47)

#### FINANCIAL

Mortgage is paid off and have gained home equity but would be nice to find a way to generate a second cash income.

#### **PSYCHOLOGICAL**

Happy staying in the suburbs with their friends all living nearby but want to find a way to downsize and help their children with a place to live.

#### LEGAL

Are owners of their home and lot. Can burrow from a home equity loan to build a tiny home.

Build a secondary unit [page 55]

Oblige by ADU requirements for children to live nearby [ page 57 ]

Learn to adjust to multi-generational living

( page 147 )

#### **PSYCHOLOGICAL**

The main home and tiny home can be used interchangeably by seniors and children generation as needed.

#### **TECHNOLOGICAL**

As seniors, no longer have ability to operate the tools necessary to build own tiny home.

#### **LEGAL**

Zoning permits a additional Dwelling Unit (ADU). In order to obtain a building permit, must adhere to setbacks and building code.

Find a suitable reciprocal living relation

(page 149)

Research about home-building [page 123]

Start building tiny home

(page 153)

#### FINANCIAL

Adult children pay rent to live in tiny home alongside senior parents. Senior parents earn some cash to supplement savings.

#### **PSYCHOLOGICAL**

Having the younger generation live in a tiny home on the same lot allows them to share the yard-work, chores around the house, and later on take care of the aging seniors.

#### LEGAL

The main house may eventually be passed on to the children.

# Sample Route III

## my reasons behind my decisions



Waterloo grad student building a Nap Shack

#### **FINANCIAL**

Student Wallet
Not a lot of money to
spare. Applied for
Waterloo Grad Student
Initiative Fund. Received
\$286 in funding for
purchasing materials.

#### **PSYCHOLOGICAL**

Need Nap Space

An architecture student having a hard time finding the perfect semi-private spot for a short nap between studio work sessions.

#### **TECHNOLOGICAL**

Wood Workshop
Have the entire school
wood workshop full of
tools that can be used.
As well as expert staff
as helpful resources.

Don't own home but would not like to [ page 33 ]

Would not like to rent land nor live in car [ page 39 ]

Rent-free sidewalk living case study [ page 109 ]

#### **PSYCHOLOGICAL**

Not intended to be a long-term residence but still better than living in a car.

#### **LEGAL**

Not intended to be a long-term residence. Temporarily built and parked structure near parking lot. Did not pay the school to rent a space. Only possible for a student or staff of the institution.

#### **TECHNOLOGICAL**

Would need insulation if it was to be a long term residence. Bathroom, shower, fridge and electrical outlets can be burrowed from the school. Can only function as a residence for a student of the institution

Tiny-Scale Experiment [page 179]

**1-person construction** [ page 181 ]

Use knowledge to help others [ page 183 ]

( page 100 )

#### **FINANCIAL**

Had to pay out of pocket for the remaining material costs.

#### **PSYCHOLOGICAL**

Had the support of many friends and passersby from the school community to carry heavy loads of material during construction.

#### **TECHNOLOGICAL**

Found building materials left over from other projects around the school. Burrowed friend's cars to go purchase materials.

See finished result [page 179]

#### **PSYCHOLOGICAL**

Faced the fear of construction and gained experience on how to build a h u m a n - s c a l e d structure. A priceless value.

#### **LEGAL**

Eventually had to move the tiny nap shack off of school property.

#### **TECHNOLOGICAL**

Partially disassembled the nap shack and rented a cargo van to transport it back to parent's backyard.

#### TO START YOUR ADVENTURE

#### STEP 1.

BEGIN ON NEXT PAGE

Try out your options toward tiny homes here before taking the plunge in real life.

#### STEP 2.

BE TACTICAL

Be honest, make decisions as you would in real life and find out the implications of your choices. Move to where the underlined <u>paged numbers</u> take you.

#### STEP 3.

TRY MORE TACTICS

Feel free to go back, re-try and make different decisions to see all your options. There is no ideal end to this adventure, the story here ends whenever you are satisfied with your choices. Jump to <a href="https://doi.org/10.1081/jhen.2007/jhen.

# 



Continue to page 33

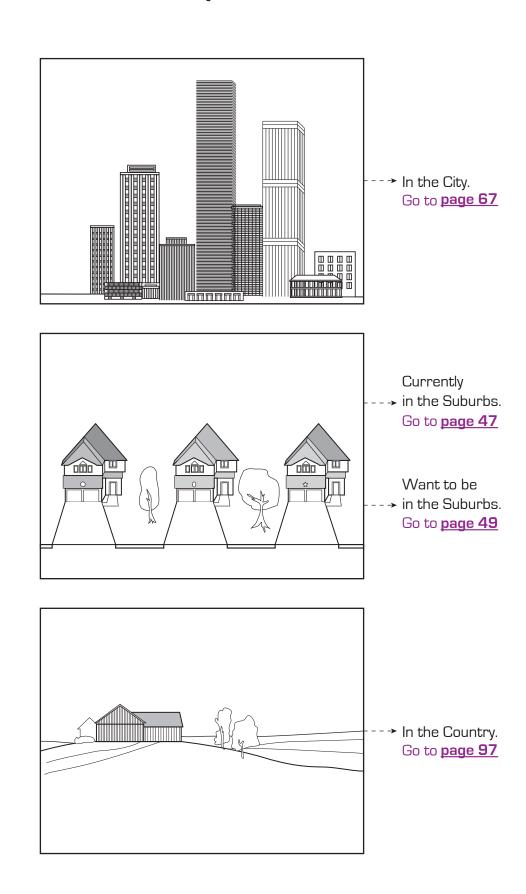
# The Tiny House Journey

Do you own the home you are currently living in? Go to page 35 Do you own a plot of land? MM MINE Yes. Go to page 37 Would you like to own a home? No. Yes.

Go to page 35

Go to page 39

# Where is HOME? or where would you like it to be?



# Land Ownership



Is your land in an unorganized territory?



## You need a building permit!

Go to City Hall

Ministry of Municipal Affairs and Housing

Preliminary Project Review \*CAD\$194.24

Minimum Permit Fee --- An hourly fee \*\$82.08 \*CAD\$194.24

examination and inspection activities. frame 🖟 inspection foundation plumbing work inspection inspection

Occupancy Permit

sanitary

shall be charged for

inspection

drainage

inspection

Fee Calculation Formula: Permit fee =  $SI \times A$ SI = Service Index for classification of proposed work

A = Floor area in m2 of work involved of work involved

> Min. \*\$419.55/permit Mechanical work \*\$194.24 flat fee Septic system \*\$699.25 flat fee Water Services \*\$194.24 flat fee

\*City of Toronto fees. Effective Jan 1, 2016.

Ready to build. Go to page 60

## You don't need a building permit!

http://www.mah.gov.on.ca/Page2103.aspx

BUT (if they exist) check with: Ministry of Municipal Affairs & Housing Municipal Service Office Ministry of Natural Resources Ministry of Transportation

## still subject to Zoning by-laws

May need: Letters of Conformity Zoning Conformity Permits

## and Building Code compliance

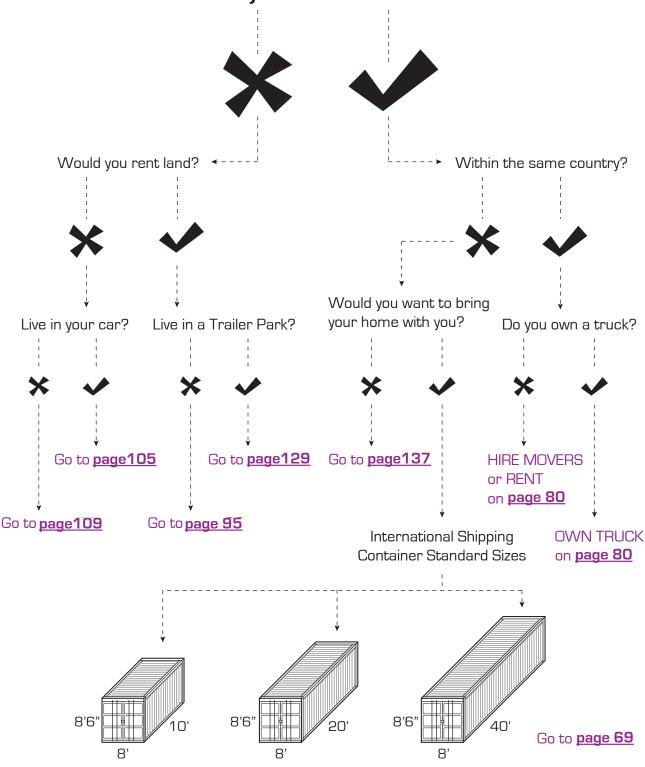
applicable to all lands, all buildings whether or not a permit is required

## and Provincial **Land Taxes**

sometimes: Board of Education taxes, Local Service Board taxes. Local Roads Board taxes Ready to build. Go to **page 97** 

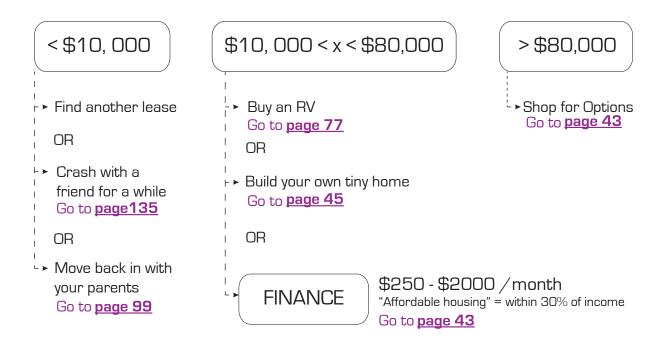
# Convivial land non-ownership

You don't want to own land because you move around a lot?

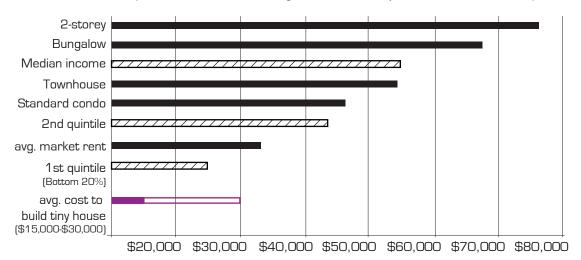


# Savings Account: How much is in it?

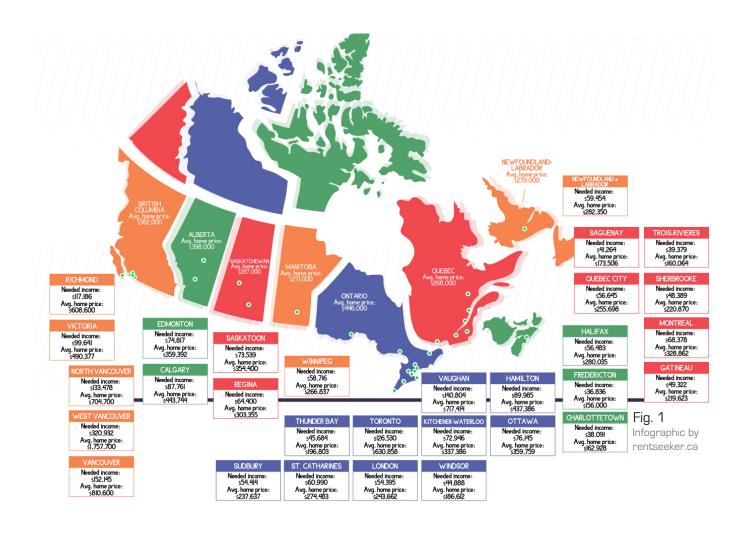
\* You may choose a category that is below your savings amount to protect against anomalies i.e. job loss, change career, recession) but you may NOT move up a category (unless you want to be in debt)



## Income required for housing in Canada 2009 (adapted from "Precarious Housing in Canada" Wellesly Institute Summer 2010 report)



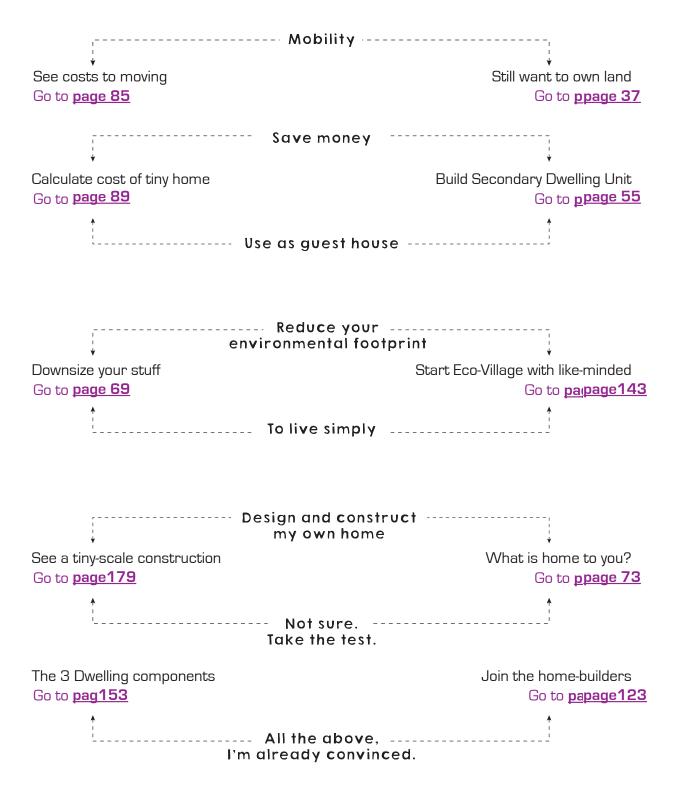
# The Salary you need to buy an average Home in Cities across Canada



Find a place that is desirable to you and fits within your income? Great! Go to **THE END** 

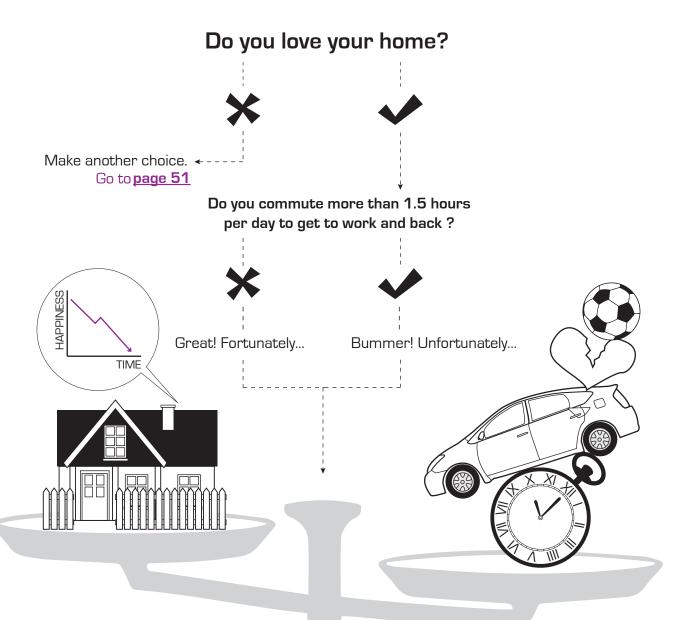
Need or Want an alternative to what the current housing market offers? Go to page 45

# Why do you want a tiny home?



# Staying Suburban

Commuting to Live



Your dream home brings you great joy in the beginning but over time the felt joy decreases as the brain adapts and gets used to it because the house stays exactly the same size everyday.1 lt is more difficult to adapt to commuting because everyday is "a slightly new form of misery." 2

The time spent commuting also translates to less time spent with family and loved ones which may lead to further frustration that only continues to build over time.

Do you still love your suburban home?

1. Gilbert, Daniel Todd. Stumbling on Happiness. New York: A.A. Knopf, 2006. 2. Ibid.

No. But I will still do it... Go to **page117** 

Yes.

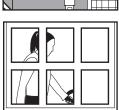
I want a tiny house also. Go to page 55

## Suburban Routines

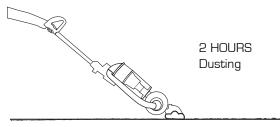
Keeping up with the Joneses

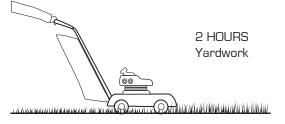


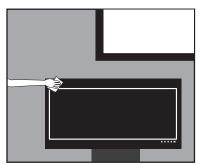






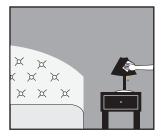






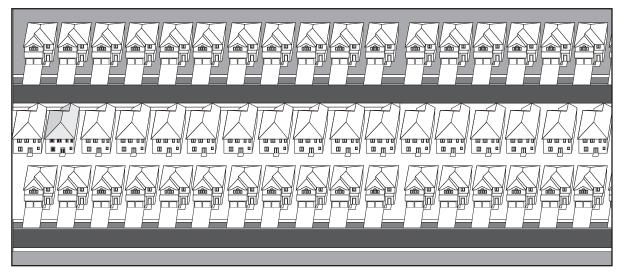
## HOURS... CLEANING MANY ROOMS



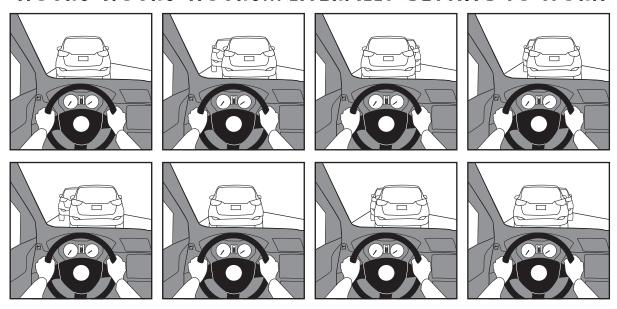




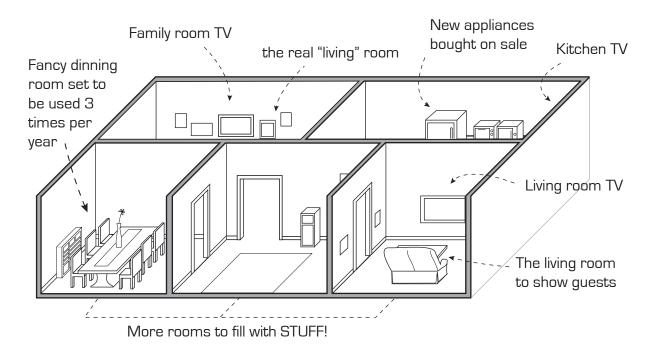
### JOIN THE CLUB! KEEP UP APPEARANCES! GET TO WORK!



### HOURS HOURS... LITERALLY GETTING TO WORK



## Then you will have all this...



Go to Next Page

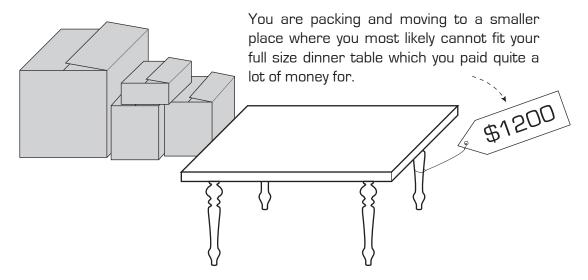
# Suburban Decision

## To Continue or Not to Continue

M	ove	Stay	Alt. Stay
You don' empty sp wasting l everyday to work. mcMans and mov	hours commuting	You are okay with this situation. You are thinking about having kids in a few years and would like the space and nice neighbourhood school. Continue this lifestyle for 30 more years until you can pay off your mortgage and finally be free. Be careful not to lose your job and your car inbetween.	You would like to stay in the suburbs because downtown is too busy, noisy and crowded for you but think this lifestyle is unsustainable environmentally, financially and psychologically. Would like another way to live in the suburbs.
Go	to <u>page 53</u>	Go to page117	Go to <b>page 55</b>

# Self-Storage Dilemma

### to hold or to toss



You could sell it. -

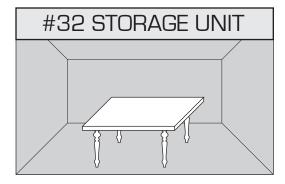


Sell for 20% of what you originally paid

- =\$240 cash gained
- = "lose" \$960 value

or

= keep it in storage in hopes that it will gain more value over time or that you will save the money of having to buy another dinning table when (or if) you need it. Or keep it. ---



Average \$160 per month for 50 sf for a location near downtown T.O. not including tax or insurance

= \$1920 per year

or

=\$5.26 per day

or

=\$3.2 per square feet per month

It worth keeping and paying storage for it?

No. Sell it and move on.

Continue your move to the city.

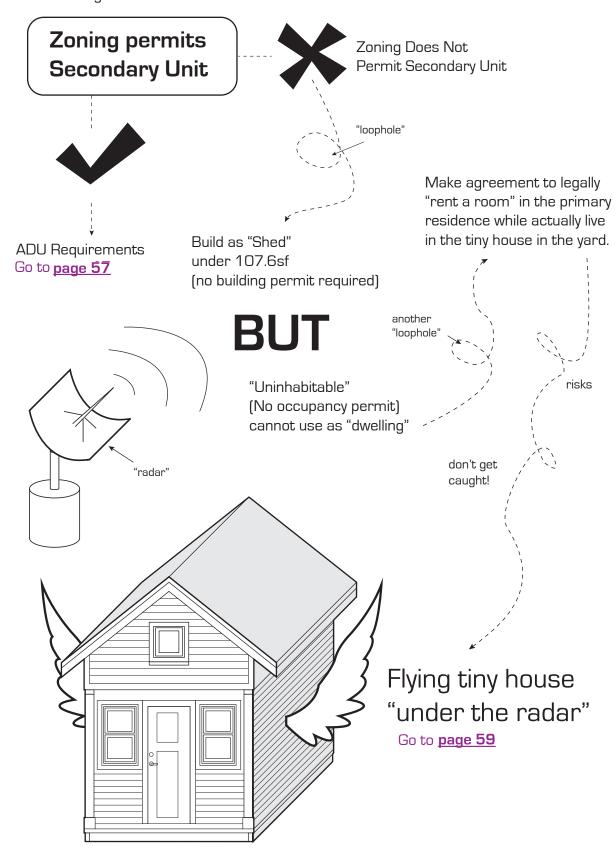
Go to page 67

Yes. I paid full price for it so I can pay a little more to keep it. Must I downsize?

Go to page 69

# Build Secondary Unit

Build a small residence beside or behind an existing main house



# ADU Requirements

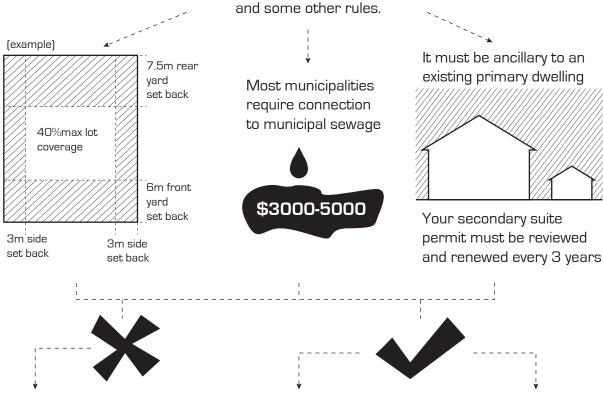
# aka. ACCESSORY DWELLING UNITS, or GARDEN SUITES, GRANNY FLATS, SENIOR SUITES, GUEST HOUSE

Usually for single family residential zones ex. RR1 zone it's one household per lot with a minimum lot size

But you got lucky,

### your zone permits 1 additional unit!

You will need to get a permit for the additional unit and you still have to abide by lot set-backs, coverage, building code



Forget this, go under the radar!

Go to page 59

## Why not?

Densifying existing downtown neighbourhoods can prevent more urban sprawl and provide a form of affordable housing to many who wish to stay a reasonable distance to city centres. Some cities are starting to embraced such tactics!

Secondary suites and ADU's can usually be rented out to a non-related tenant for profit but the owner must occupy one of the units. This rule is to prevent over-densification and over-straining existing infrastructure.

Ready for a new neighbour!

Go to p:page149

Guest House, Granny, Senior and Garden Suites (when specified) cannot be rented or used as an independent residence. They were intended for family, employee or a 90-day non-paying guest

For family? That's me!
Go to page147

### Live "Under the Radar"

So you decided that you are living in your tiny house regardless of zoning by-laws... Since the system works on a complaint bases, if your neighbours don't tattle tale, you might be able to live in peace

#### so be nice to your neighbours!



#### **CONSEQUENCES**

No protection, could be evicted from your own property! Be ready to move at a moment's notice.

Build on permanent - → Go to **page 83** Decide to build your concrete foundations, tiny house on wheels you are not planning on and be mobile in order going anywhere and it protect your hard work seems more and home in case you straightforward to have to move. construct on than on a Go to page 103 ← movable trailer bed.

### Building Code Requirements

### That make tiny houses illegal

#### Min Room Size

9.5.4. Living Rooms or Spaces within Dwelling Units Combined [Taking the minimum, most conservative number]

Living Areas > 11m<sup>2</sup> Dining Space > 3.24m<sup>2</sup> Kitchen Area > 3.7m<sup>2</sup> Bedroom Space > 4.2m<sup>2</sup>

Or total combined living, dining, bedroom and kitchen spaces > 13.5m<sup>2</sup>

9.5.1.5. Lesser Areas and Dimensions --

Using the definition of a tiny home as a structure between 50sf-400sf or  $4.6m^2 - 37m^2$ 

The homes in the lower range would be prohibited by the 13.5m<sup>2</sup> minimum

(1) Areas of rooms and spaces are permitted to be less than required in this Section provided it can be shown that the rooms and spaces are adequate for their intended use, such as by the provision of built-in furniture to compensate for reduced sizes.

### **Ceiling Heights**

See Table 9.5.3.1 for minimum ceiling heights

ltem	Room or Space	Minimum Heights
1.	Living room or space, Dining room or space, Kitchen or kitchen space	2300 mm over at least 75% of the required floor area with a clear height of 2100 mm at any point over the required area
2.	Bedroom or bedroom space	2300 mm over at least 50% of the required floor or 2100 mm over all of the required floor area. Any part of the floor having a clear height of less than 1400mm shall not be considered in computing the required floor area

Min. ceiling height requirements disqualifies some areas inside tiny homes from the area calculation, making it harder to reach the min. room size.

#### Flush Toilet

9.5.9. Bathrooms and Water Closet Rooms 9.5.9.1. Space to Accommodate Fixtures

Space requirements for water fixtures become interpreted as requirements for water fixtures that prohibits compositing toilets.

(1) In every dwelling unit an enclosed space of sufficient size shall be provided to accommodate a water closet, lavatory and bathtub or shower stall.

#### (No Stairs) Ladder access loft

9.8.2.1. Stair Width

(1) Except as provided in Sentence (2), required exit stairs and public stairs serving buildings of residential occupancy shall have a width, measured between wall faces or guards, of not less than 900 mm.

(2) At least one stair between each floor level within a dwelling unit, and exterior stairs and required exit stairs serving a single dwelling unit, shall have a width of not less than 860 mm.

9.8.2.2. Height over Stairs

(1) The clear height over stairs shall be no less than 1 950 mm for stairs serving a single dwelling unit

Space requirements for stairs are interpreted as requirements for stairs, making the use of a ladder as the sole access to the bedroom loft illegal.

### Egress from bedrooms

9.9.10. Egress from Bedrooms

9.9.10.1. Egress Windows or Doors for Bedrooms

(1) Except where a door on the same floor level as the bedroom provides direct access to the exterior, every floor level containing a bedroom in a suite shall be provided with at least one outside window that.

(a) is openable from the inside without the use of tools,

(b) provides an individual, unobstructed open portion having a minimum area of 0.35 m<sup>2</sup> with no dimension less than 380mm,

(c) maintains the required opening described in Clause (b) without the need for additional support.

Bedrooms in the upstairs loft require an operable window that is big enough for a person to go through and can stay open by itself.

### Mobile home not under building scope

Section 3.1. Qualifications for Chief Building Officials and Inspectors

3.1.1. Scope and Definition

(2) The qualification requirements for chief building officials and inspectors in Sentence (1) do not apply to plans review and inspection of,

(b) construction of a factory-built house certified to CSA A277, "Procedure for Factory Certification of Buildings",

(c) construction of a mobile home conforming to CSA Z240 MH Series, "Manufactured Homes", 659 see page 85

MH Series, "Manufactured Homes", 659 see **p** (d) construction of a park model trailer conforming to

CAN/CSA-Z241 Series, "Park Model Trailers",

What about zoning by-laws that make tiny homes illegal? go to **Next Page** 

Without a clear definition and classification of tiny homes, they are sometimes grouped with mobile homes or park model trailers which mean building plan reviews do not apply and will not be fit for a building permit even if all code requirements are satisfied

Unless your land is in an unorganized territory... go to page 37

# Zoning By-Laws That make tiny houses illegal

#### Land use

Cannot be parked or built on land not zoned for residential use. The set density of the zone is also taken into consideration when applying for tiny home to be an additional dwelling unit. Can apply for variance or zone change. Go to page 65

### Minimum Dwelling Unit Area

Some local by-laws may dictate a minimum dwelling unit area in square footage or square meters.

### Property Line and Lane/Road Setbacks

Cannot build too close to your neighbours even if you own the land. Usually for privacy reasons, fire safety, and promotion of open yard space. Can apply for a variance.

### **Building Height**

Again for neighbour's privacy and access to sunlight. Also to maintain the historical and/or consistent character of the neighbourhood.

### **Parking**

Often trailers cannot be parked and lived in on driveways even if you own the driveway as well as the house it leads to. In order to preserve the character of the neighbourhood.

#### Materials and Context

Another rule to preserve the character of the neighbourhood.

#### Services

Some regions require dwelling units to be connected to municipal gas, water, sewage and electricity from the main house to prohibit the additional units from being severed from the main property. Effectively making off-grid dreams illegal even if the technology is possible.

### Pay for an RV permit

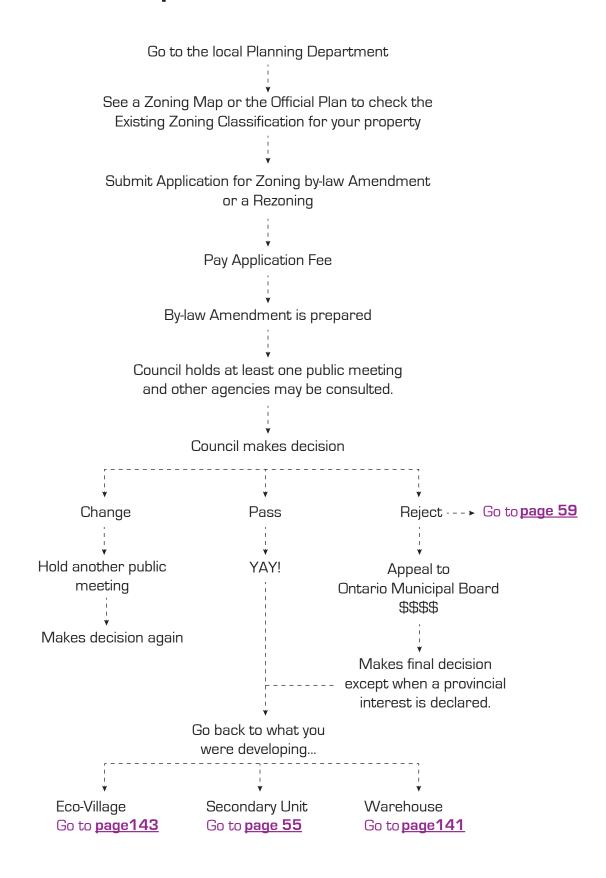
Often cheaper and with less stringent requirements than the building code. But being classified as a RV can have drawbacks. See point below.

#### RV or mobile-home designated area

RV's can often only be legally parked and operated in designated parks even though these parks are often pushed to the fringes of cities and away from city centres.

my zone allows for tiny homes as an additional dwelling unit. Go to page 55

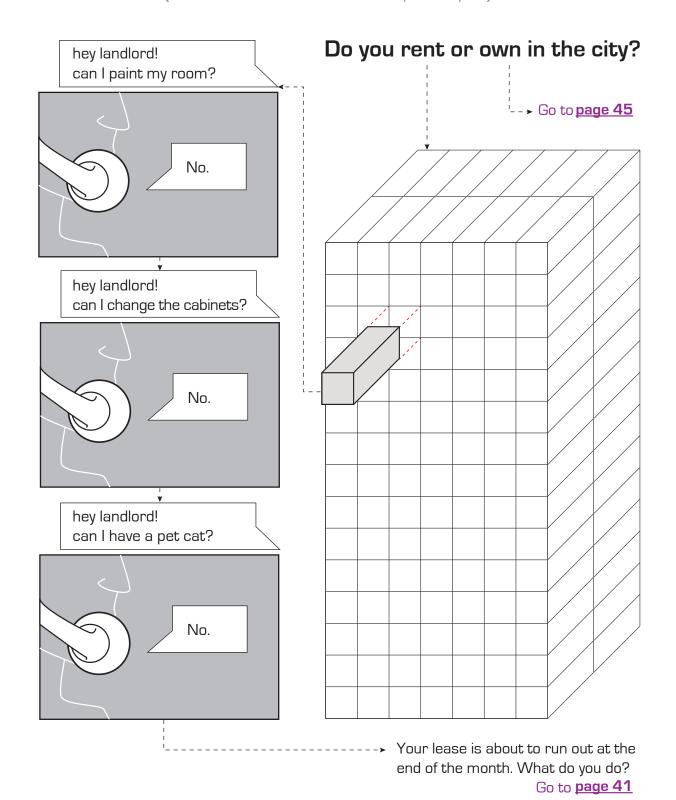
# Changing Zone Use the process in Ontario



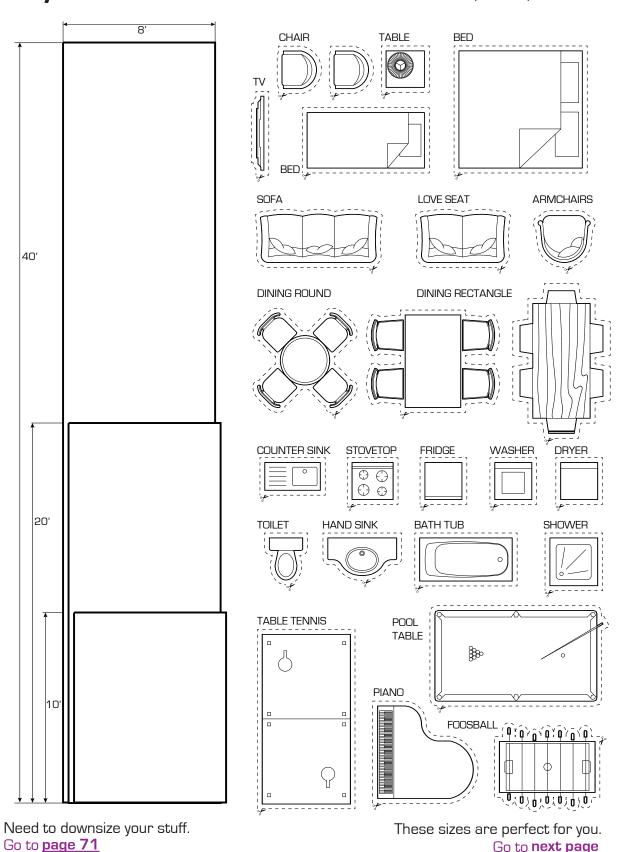
### Urban Living

### Welcome to the 82% of the North American population that is living in an urban area.

(UN 2014 World Urbanization Prospects report)



# Container Home try out the 3 standard sizes (10',20',40')

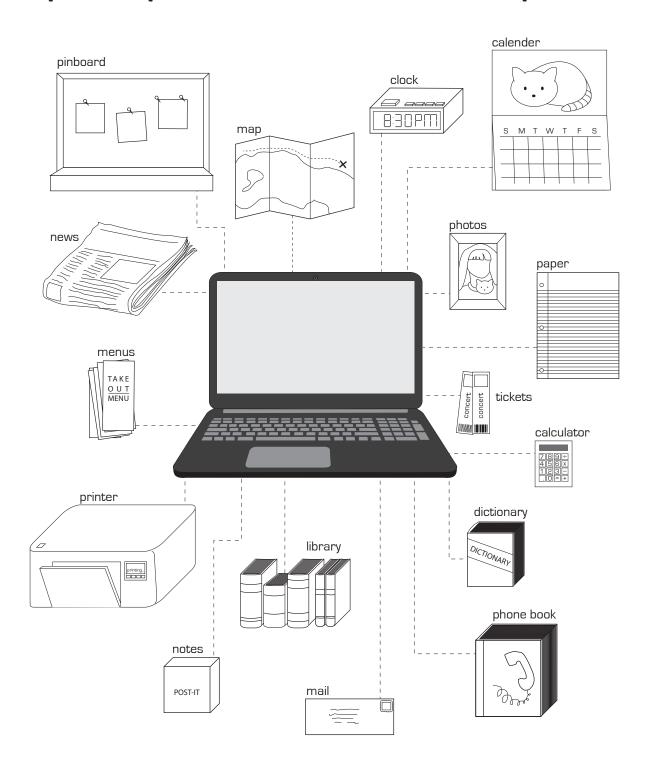


69

Go to next page

### Stuff replaced by Apps

\*you may not need as much stuff as you think



Want to try again?
Go back to page 53

Agreed. Go to <u>next page</u>

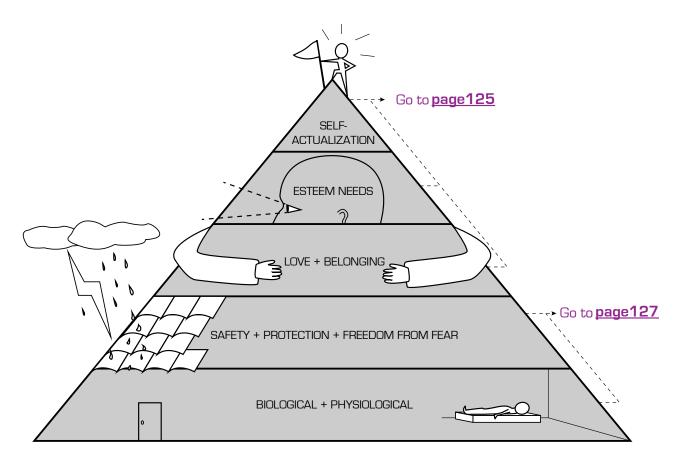
### First (House) Impressions

\*you are more than the house you bought/buy



### Meeting Human Needs

### based on Maslow's Hierarchy of Needs



#### START FROM BOTTOM OF TRIANGLE

- \*answer according to your current home
- 1. Do you feel safe in your home? Yes [move up] / No [move down]
- 2. You are comfortable inviting friends and family over to your home? Yes [move up] / No [move down]
- 3. Your home makes you feel good about your achievements? Yes (move up) / No (move down)
- 4. Your home facilitates your dreams and lets you pursue your true passions? Yes [move up] / No [move down]
- 5. You rely on being better than your neighbours for your self-esteem? Yes (move down) / No (move up)
- 6. Your home takes most of your free time to maintain? Yes [move down] / No [move up]
- 7. Your living expense (i.e. mortgage, rent...etc) prevents you from traveling? Yes (move down) / No (move up)
- 8. Your home manifests your beliefs about the chief end of life (i.e. to be stewards of earth, hedonistic enjoyment...etc)? Yes [move up] / No [move down]

# Recreational Vehicles vs. Tiny Home

### the differences

	Tiny Home	Recreational Vehicles	
Aesthetics	Looks like a traditional home but smaller, unique, and adorable	Looks unmistakably like a camping/recreational equipment	
Traveling	heavier, harder to tow, need more preparation and cost considerations before travel	Lightweight, easily towable, made for traveling	
Materials	regular wood framed construction with insulation or Structural Insulated Panels (SIP) on a trailer bed	Metal, Plastics, wood composites, less insulation	
Year-round	year round comfort. Built similar to traditional home with high levels of insulation, reap benefits of small space needing less energy to heat/cool	mainly for seasonal use of camping or traveling. Metal shell and low insulation levels require more energy to control temperature	
Immediacy	Custom Built or Ordered takes time and sweat equity	Ready made, Move-in ready fully functional from the store	
DIY	Various levels of construction involvement	Factory manufactured	
Insurance	Tiny homes are not well known and therefore hard to finance and insure. If you build it yourself, you are your own warranty.	RV and travel trailers are well known, easy to finance, insure, and get warranty when buying new.	

RV's are great! Just pick your model and start traveling in it! Go to <u>next page</u> Tiny homes are better! They look like homes but just smaller!

Go to page 75



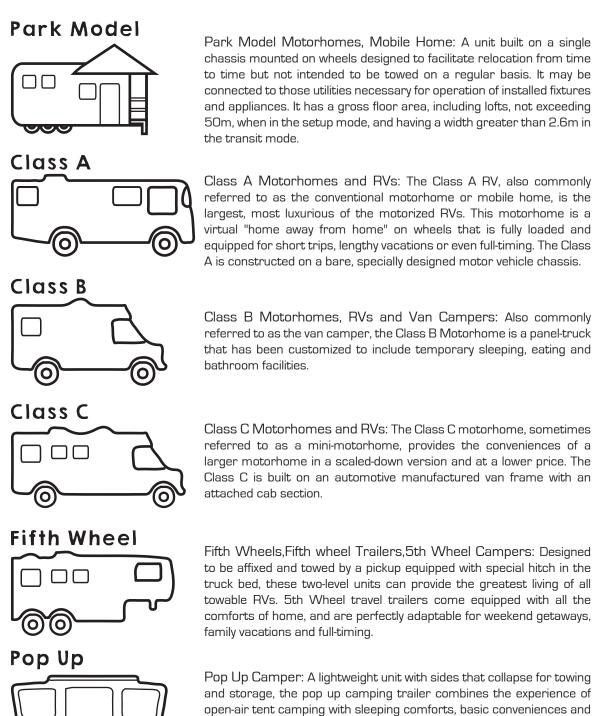


Fig. 2 - classifications and illustrations adapted from

http://www.rvtrader.com/rv-types/search-results?vrsn=links&format=type

opened].

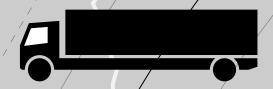
Go to page 129

weather protection found in other RVs. Size 15 to 23 feet (when

### Travel Distance to Cost

do your calculations for different conditions

HIRE MOVERS



\$2.10/km for 40ft container

\$USD 2.60 per mile = \$USD 1.62 per km from containerhomeplans.org \$USD 1.62 = \$CAD 2.10 (March 2016) go to page 69 HIRE MOVERS



\$1.08/km for 20ft container

\$USD 1.33 per mile = \$USD 0.83 per km/ from container nomeplans.org \$USD 0.83 \$\neq 1.08 \$CAD (March 2016)

go to page 69

EDMONTON



SASKATOÓN

CALGARY

**VANCOUVER** 



3000km

2000km

80

### RENT TRUCK



# \$0.85/km for U-Haul Rental Bate

rental rate 0.80\$/km x 8hr driving at 80km/hr = 512\$\forall day

512\$ + \$30 rental fee per day = \$542/day \$542/day/640km/day = \$0.85/km

go to page 83

### OWN TRUCK



# 0.20\$/km for Truck Gas

Standard Pickup truck 23 MPG = 9.78kmpl from 2015 Fuel Economy Guide, Standard Size truck RAM Truck, 10,800lbs towing capacity Est, diesel gas price 1\$CAD per litre 1\$CAD per litre / 9.78kmpl = 0.10\$CAD/km 0.10\$CAD/km (x2) multiplier for heavy towing

go to page 83

WINNIPEG

1000km

500km

TORONTO

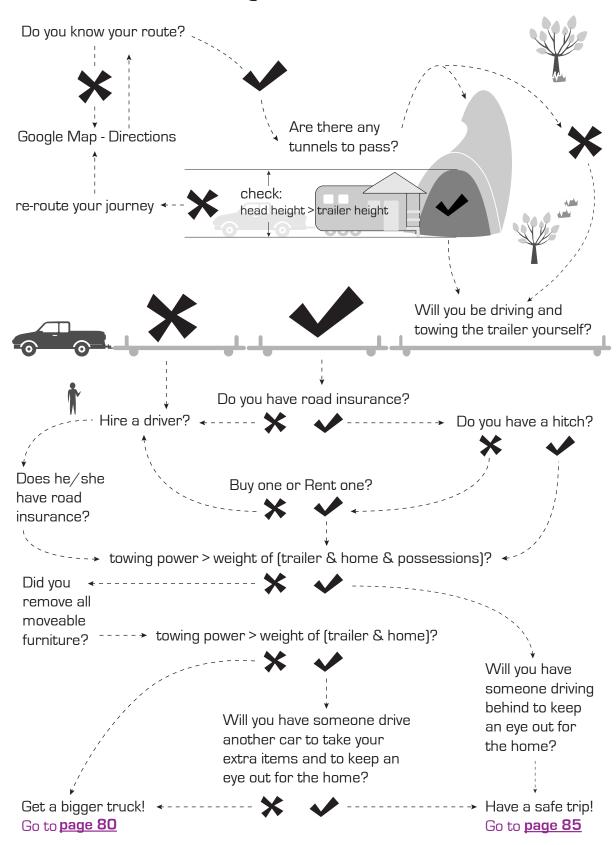
AWATTO

MONTREAL

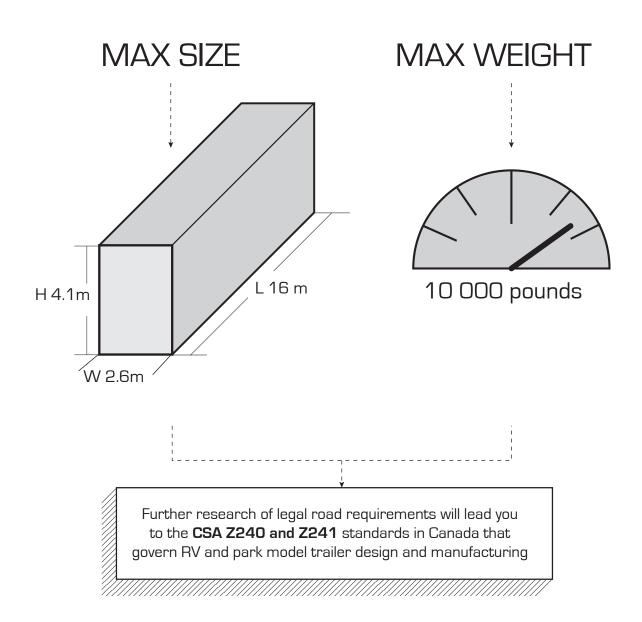
100km

### When Moving Trailer

### things to consider



### Towing - Road Requirements

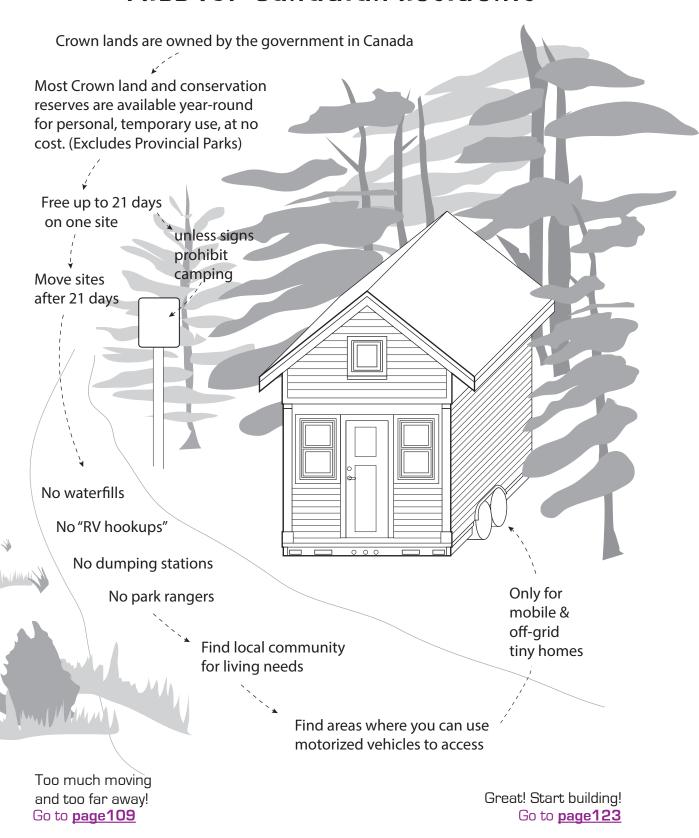


Just road requirements? Get your tiny home fully RV Certified! Go to page 115

Just build to road requirements. Your tiny home is not a RV! Go to page 123

### Camp on Crown Lands

#### FREE for Canadian Residents



# Calculating Cost Itemized breakdown

Not many people can tell you the exact cost of their homes but tiny house owner-builders often can. Below is the cost breakdown from Jenna of tinyhousegiantjourney.com in US dollars. Her comments are included to explain higher or lower than average range purchases.

- 1. Trailer (with registration fee) \$4,850 We purchased a Tumbleweed trailer. It's important to have a solid foundation. Of course, you could save money by refurbishing an old trailer. You'll need to be experienced with the engineering needed to support a tiny house. Also, time!
- 2. Kimberly wood stove & flue \$4,495 We splurged for the aesthetics, efficiency and off-grid capabilities.
- 3. Windows & skylights \$4,000 At the time Tumbleweed windows were custom (\$\$) sizes.
- 4. Structural lumber & sheathing \$3,000
- 5. Solar system \$2,800 We have four panels at 380 watts total, a solar generator and cables.
- 6. Siding \$2200
- 7. Insulation \$1200
- 8. Water heater \$1,125 We wanted a tankless, propane water heater that was compact, efficient and vented through the floor.
- 9. Composting toilet \$960 It's fancy. No one likes to clean poo.
- 10. Refrigerator \$870 We paid for the off-grid capability.
- 11. Roofing \$800 This is actually cheap for new roofing.
- 12. Build plans \$769 We purchased Tumbleweed Cypress plans.
- 13. Plumbing. \$700 Tanks, water pump, RV hose, filter, pressure regulator and piping.
- 14. Mattress \$450
- 15. Shower tub, fixtures and shower fan \$440
- 16. Light fixtures \$400
- 17. Front door \$385
- 18. Propane heat blanket \$380 For extreme cold climates.
- 19. Flooring \$330
- 20. Propane misc. \$310 Tanks, regulator and piping.
- 21. Wood slab countertops \$300
- 22. Kitchen sink & faucet-\$220
- 23. Ottomans & couch cushion \$200
- 24. Stovetop \$176
- 25. Hardware, Electrical components -
- 26. Contract Labour -

TOTAL TINY HOUSE COSTS: \$31,460

You may notice some items are missing from the above list, such as hardware, electrical, and miscellaneous build materials. These items, as well as our decor and furniture, are not included in the total. We also hired a finish carpenter, plumber and electrician intermittently during our build. The cost of labor is not included in this total.

The REAL total cost to build our tiny home is somewhere between \$35,000 - \$40,000.

Go to next page

# Calculating Cost pt.2 Now it is your turn

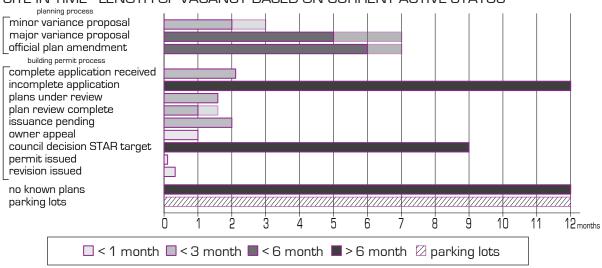
1. Trailer (with registration fee)	
TOTAL TINY HOUSE COSTS :	

Go to The End

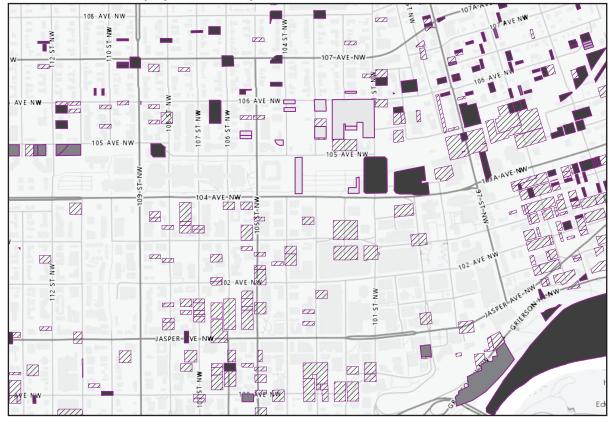
## Vacancy in the Permit Process Living/Renting in Temporal

### Space and Time

SITE IN TIME - LENGTH OF VACANCY BASED ON CURRENT ACTIVE STATUS



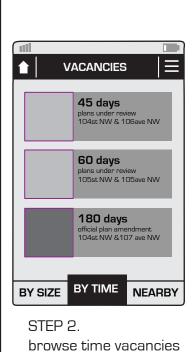
SITE IN SPACE - MAP OF VACANCIES WITH CORRESPONDING LENGTH OF VACANCY BASED ON GIS DATA (City of Edmonton)



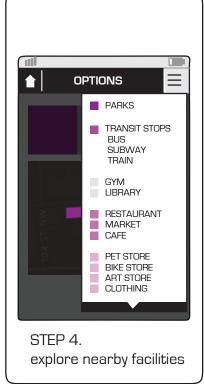
How to use and access this information? Go to next page

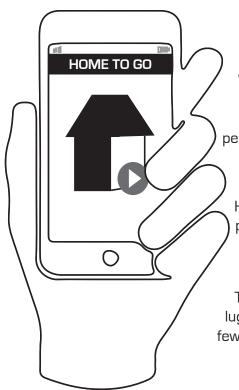
## Housing Network GIS HOME PARKING APP











Wow! This app supports
the ideals of individual
freedom realized in
personal interdependence!
Go to page111

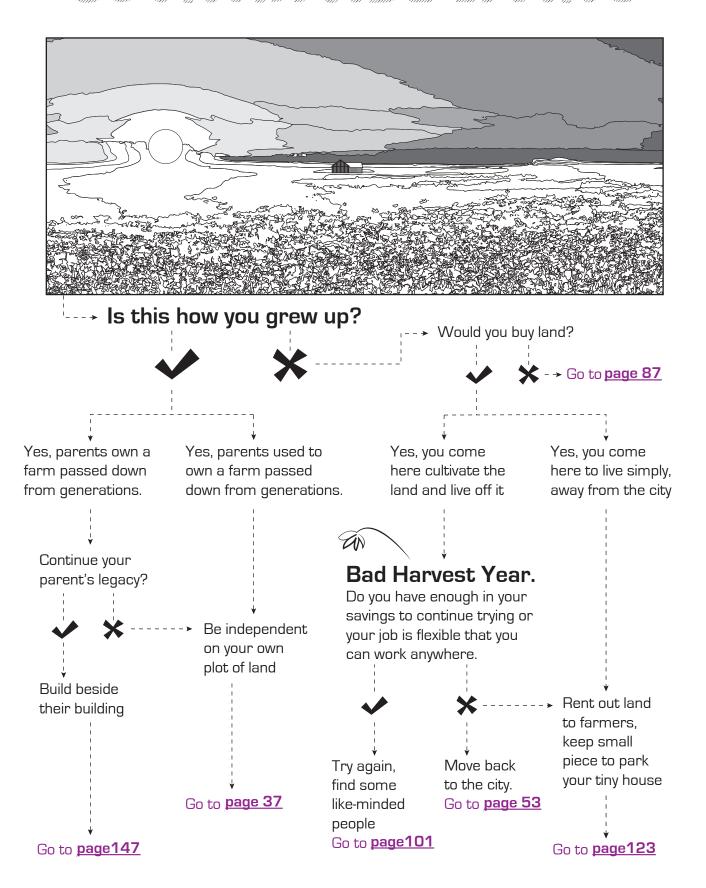
Have short-term places to park. Now need my home.

Go to page 123

Too much work! I have to lug around my home every few months? Maybe I don't even need a consistent "space" to call home.

Go to page 137

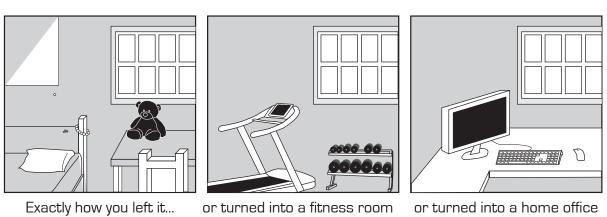
### COUNTRYSIDE LIVING



### Return home to Parents



#### THEN YOU GO BACK TO YOUR ROOM TO FIND IT:



Too weird to stay for long. Go immediately to a friend's house to crash on their couch. Anything is better than this.

Great! I can do this! My parents take care of me now but I can take care of them too.

Go to page 147

There is a tool workshop in the garage. To gain some independence, build something for yourself to live in.

### Consult Online Friends

#### discover fellow tiny house enthusiasts

# Google

tiny home movement

0

Living Big In A Tiny House
Tiny House Big Living
Tiny House Giant Journey





Hamilton Tiny Living Meetup

The Joy of Compact Living Meetup

Outside of the Boxers Meetup

tumbleweedhouses.com Dream Big, Go Tiny Workshop

relaxshacks.blogspot.ca Tiny House/Cabin Building Workshop





Tiny: A Story About Living Small Small is Beautiful Documentary

thetinylife.com tinyhouseontario.com thetinyhouse.net



tinyhouseblogs.com
tinyhousecommunity.com

Done your research and have gathered some ideas. Back to building your home.

Go to page 123

Interested in gathering this community and starting a tiny home neighbourhood together!

Go to page 143

# Unfriendly Neighbour + bad luck

You get a knock on the door in the morning. Inspectors are here.



You are being **EVICTED!** 

Try again. Look into your savings. Go to page 41

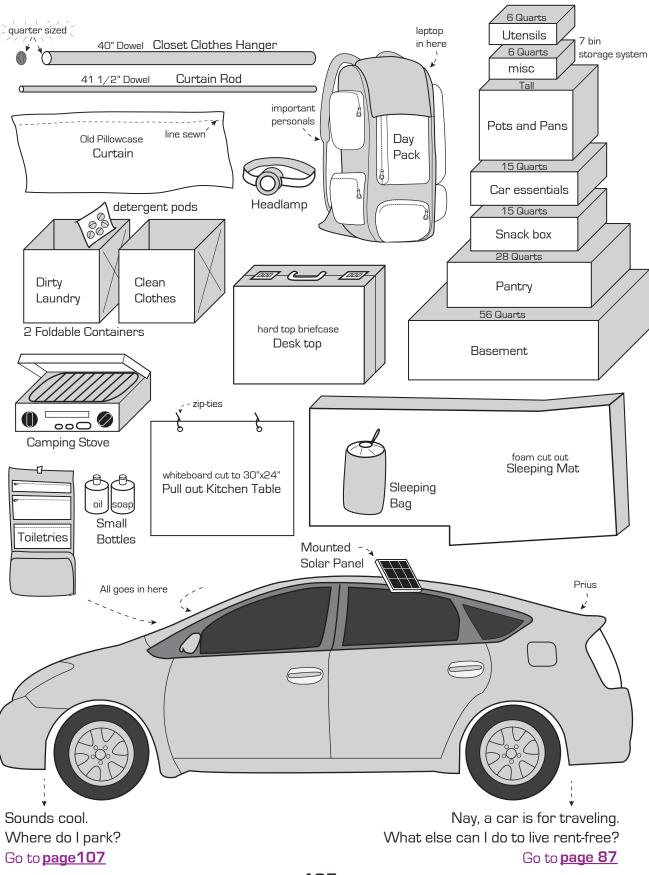
Return home to parents temporarily.

Go to page 99

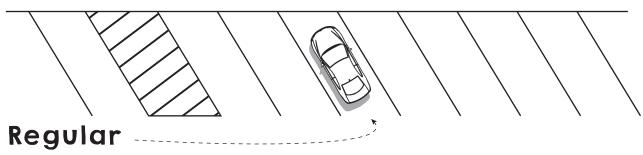
### Living in your Car

#### Case Study: Hotel Prius

Essentials for systematically living out of your car. YouTube: How To Live Out of your Prius Video 1: Materials



# Free overnight parking at Walmart\*



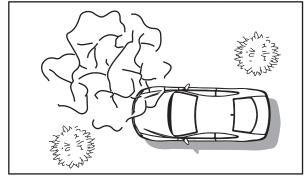
Check for 24h parking.

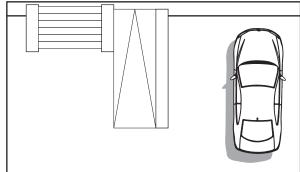
#### RV Parking

While we do not offer electrical service or accommodations typically necessary for RV customers, Walmart values RV travelers and considers them among our best customers. Consequently, we do permit RV parking on our store lots as we are able. Permission to park is extended by individual store managers, based on availability of parking space and local laws. Please contact management in each store to ensure accommodations before parking your RV. http://www.walmartlocator.com/rv-parking-at-walmart/

\*Being a good shopper in the morning helps to keep store managers in a good mood.

### or hidden in a park or church parking lot





### move around multiple spots rather than staying in one helps you to be discreet

How can I move around but also have a "real" bed? Go to page 137

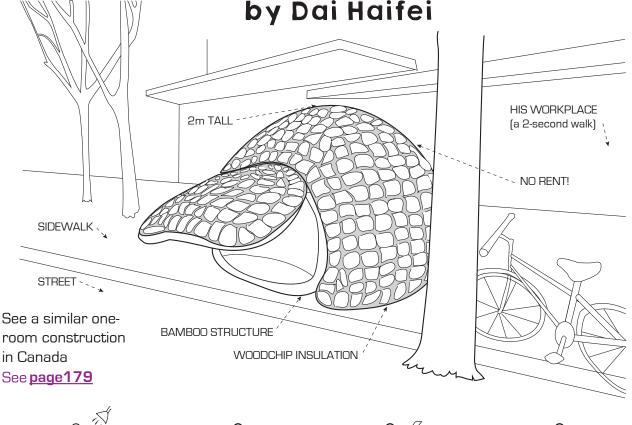
For no rent! I can keep doing this! Where else? Go to page 87

This would be better if I made a business out of driving around.

Go to page 133

### Rent-free sidewalk living

Case Study: Beijing Egg House by Dai Haifei





There's no bathroom. Q:How does he shower?



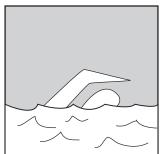
There's no kitchen. Q: How does he eat?



There's no power. Q: How does he charge?



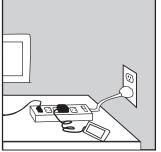
There's no living room. Q:How does he leisure?



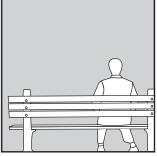
A: At a local gym where he has a membership and also goes to swim after work.



A: Eating out at local restaurants using the money he saves on rent.



A : His workplace lets him use their facilities and he has a little solar panel too.



A : Experiencing the local cafes and public spaces with his saved rent money.

Not enough privacy. Need more than one empty room. Go to page 139 Neat! Using these "inbetween" spaces in the city. Find more!
Go to page 93

## Living Social Living single but not alone



26% of all households are singles &numbers are rising

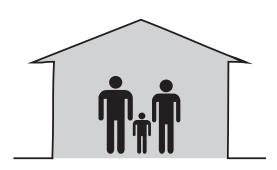


29.5% households without children

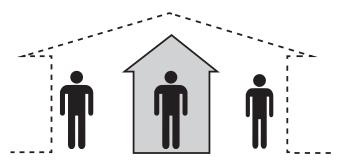


26.5% households with children

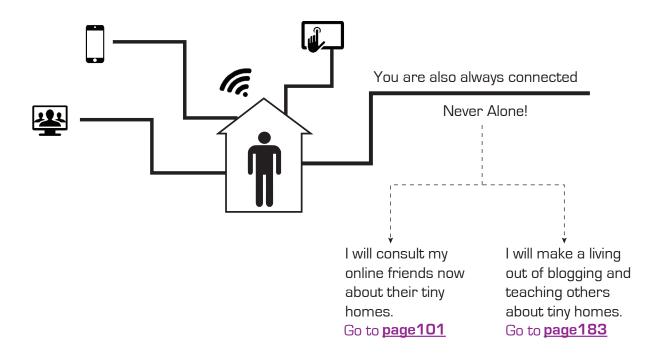
\* Statistics Canada 2011 census



Suburban houses meant for nuclear families privatized leisure and social activities to within the house

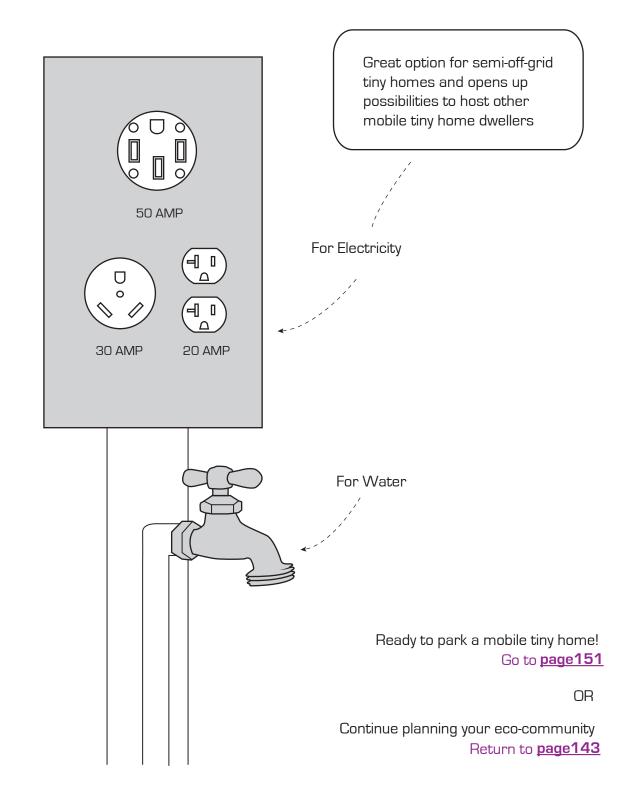


As a single household, the boundaries of home expand beyond the walls of the house to capture the places where you associate your relationships and social activities



### Install RV hookup

### maintaining connection to municipal services



### RV Certification

### Standards by CRVA Canadian Recreational Vehicle Association

Looking to get your Tiny Home RV Certified or become a Certified Manufacturer License?

\*Design and build to comply with:

CSA Z240 RV Series "Recreational Vehicles" or NFPA 1192 for Recreational Vehicles and CSA Z241 Series "Park Model Trailers" respectively.

Certification of RVs to CSA Z240 RV Series and Z241 can only be made by accredited certified agencies as the requirements deal with technical issues and the quality system of the manufacturer. As part of on-going compliance, these agencies independently audit each manufacturer to examine RVs at the various stages of the manufacturing process to ensure on-going compliance with original certification designs, specifications and approved components.

These types of certifications are often designed for/by large corporations who are able to pay for the licensing costs, official workspaces, and administrations to keep up with the process. The industry giants form together to make an association and write their own form of standards. These "standards" often become an industry standard because it is widely used by the same industry giants, which in turn, make it recognizable to authorities and the general public. Often times later on, industry standards are then adopted to become legal standards. At best, certifications check for safety and compliance (to rules set originally by the industry itself) but at an expensive cost that is compounded unto the end consumer. At worst, it acts as an exclusive club name that corporations buy membership into for the labels, seals, and metal plagues.

\*To ensure the utmost consumer safety and compliance of Canadian Laws, we strongly advise consumers to look for the proper certification labels visible on your RV before purchasing your new Recreational Vehicle

---- "Standards" such as these end up limiting or prohibiting self-builders who may be capable to build a safe home but do not have the leverage to pay the high fees for certification.

In any case, CRVA standards in Canada do not want to recognize tiny homes.

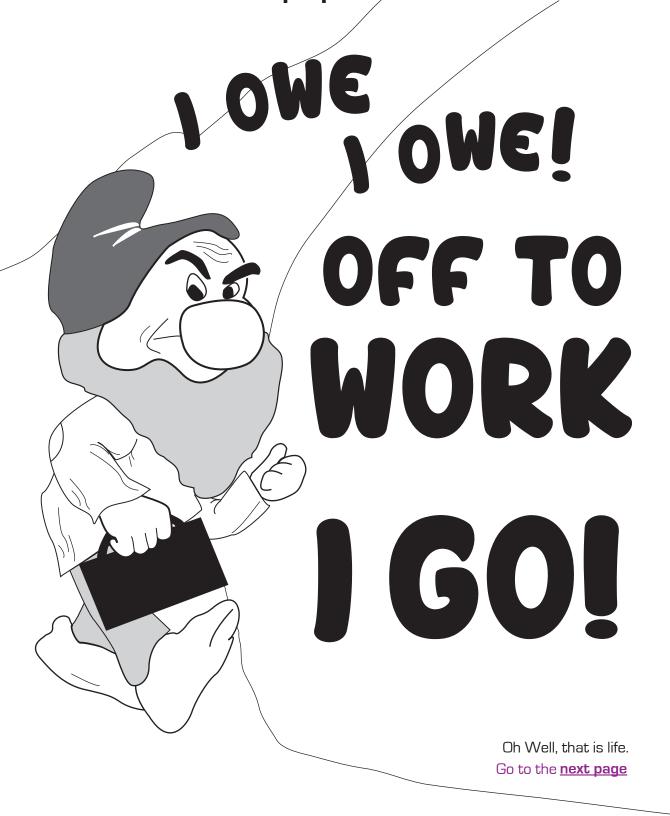
\*We want to provide consumers notice that CRVA Members "only" produce Recreational Vehicles described as follows- Motorhomes, Travel Trailers, Fifth Wheel Trailers, Tent Campers, Hybrids, Tow Haulers, Truck Campers, Park Trailers and Park Model Trailers.

CRVA members "do not" manufacturer, produce or distribute any unit described as a "Tiny Home", a "Tiny House", a "Tiny Park Model" or a "Tiny RV" and therefore we cannot provide any assurances or comments on their manufacturing process, components or consumer safety. Buyer Beware.

But what is the difference between RV's and tiny homes? Go to page 77

<sup>\*</sup>CRVA Certification and Standards from http://www.crva.ca/z/

# Paying your mortgage based on 90's pop culture reference



### Paying off mortgage pt2

etymology of the word from old french





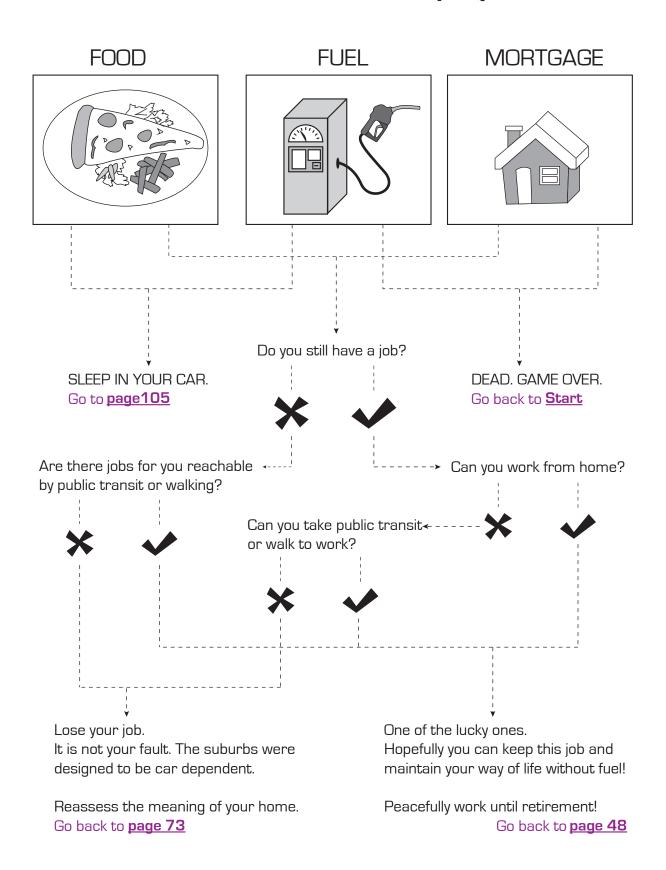
[GAGE]

## DEATH PLEDGE



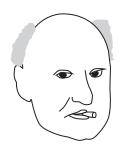
### In the case of Recession

choose 2 out of 3 to pay for



### Building your Home

You are joining a league of home makers who for thousands of years have self-created places of home to shelter themselves from all other places. It is a little intimidating but you have many resources at your hands.



Walter Segal was an architect that helped many ordinary people build their dream homes with his self-build method in the 80s. The houses were built very quickly and cheaply using readily available materials in standard sizes.

Go to page 125



Christopher Alexander believed we each had within us the ability to know when we encountered a special space that made us feel alive and therefore would be best able to create these types of spaces for ourselves.

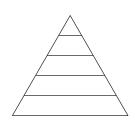
Go to page 127



Feel free to browse and see the community of real people who are currently doing this for themselves.

#TinyHomeMovement #TinyPeople #TinyHomeBigLiving #TinyHouse

Go to page 101



Take the test developed from Maslow's pyramid to find out what you think a home should be.

Go to page 73



Animals have been building their own homes for a long time...

Think you know enough and want to make decisions about your own tiny home now?

----- Go to **page153** 

# Learning from Segal Walter Segal

He had urged that studying and understanding human behaviour was the essential intellectual task of the architect

But beyond just practical and good looking, architecture must both welcome the body and provide a backdrop for gregariousness and contemplation, for stimulation and ease.

Where people assemble, the architecture must recede, become a back-cloth, disappear, but it must leave an illusion. Therefore the envelope made to house gregarious activity should be under-defined, so that it may be extended by suggestion rather than in reality, that the apparent space may generate that sensation of ease in which gregarious activities prosper.

(p198)

As I see it, buildings are there to be a background for people, against which they move, a background which envelopes them, protects them, gives them pleasure, and allows them to add a little bit of themselves.

(p200)

Go back to page 123

### Timeless Way to Build

### Christopher Alexander

Nothing to keep, nothing to lose.

No possessions, no security, no concern about possessions, and no concern about security:

in this mood it is possible to do exactly what makes sense, and nothing else;

there are no hidden fears,
no morals,
no rules,
no undercurrent of constraints,
no subtle sense of concern for the form of
what the people around you are doing,
and above all
no concern for what you are yourself,
no subtle fear of other people's ridicule,
no subtle train of fears
which can connect the smallest triviality
with bankruptcy
and loss of love
and loss of friends
and death.

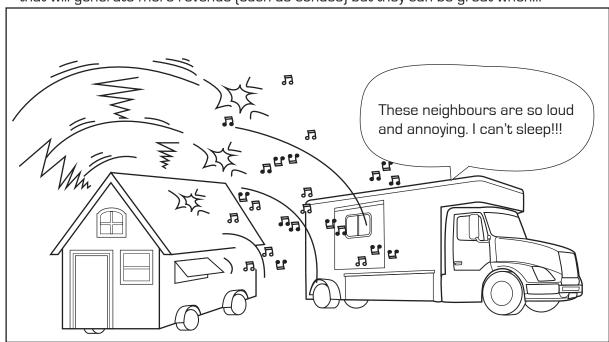
no ties, no suits, no outward elements of majesty at all.

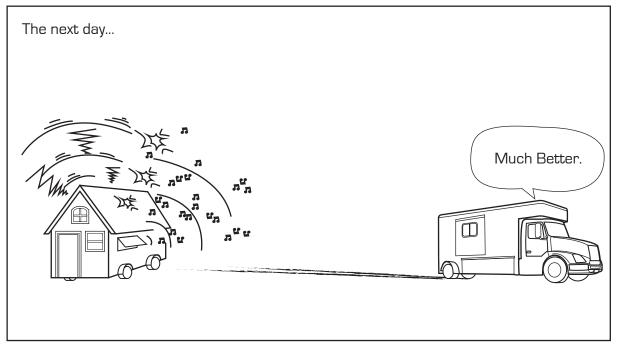
Only the laughter and the rain.

Go back to page 123

# RV Park Living \*you will be lucky to find one

Year round RV parks are often being zoned out of existence to build other enterprises that will generate more revenue (such as condos) but they can be great when...



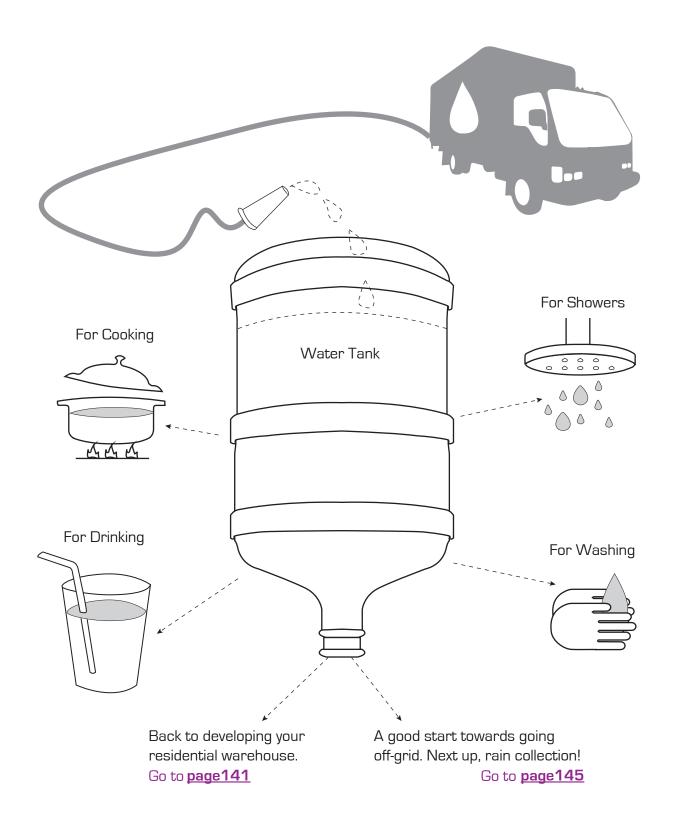


Great. Let me buy an RV. Go to page 77

There must be another way to form a similar community.

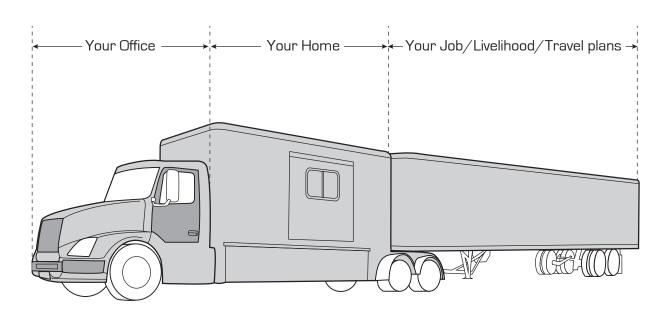
Go to page 143

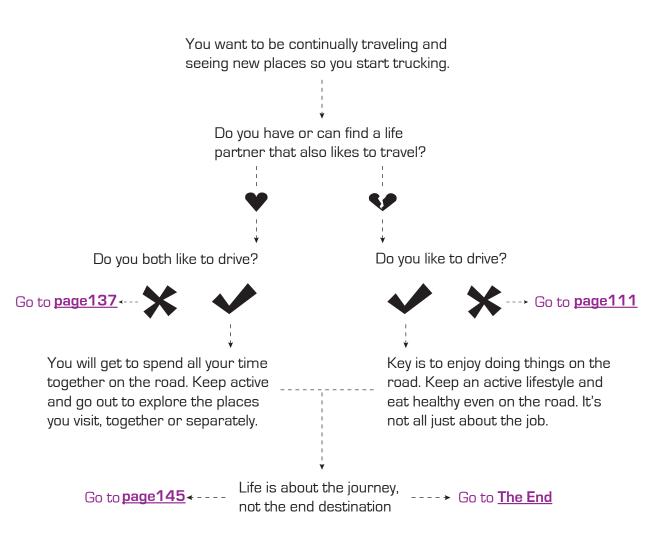
# Water Delivery to your home instead of plumbing



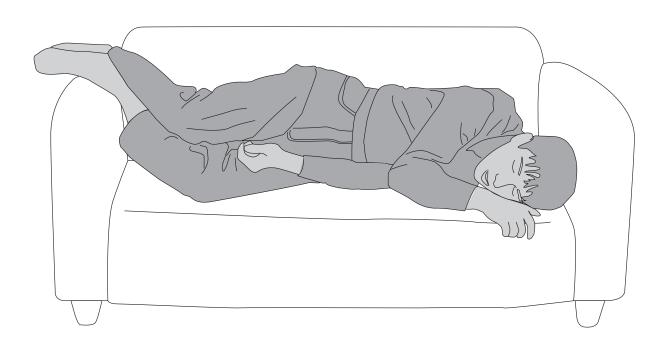
## Start Truck Service

### Case Study: Volvo Trucks "Welcome to my cab"





# Crashing on a friend's couch/sofa/futon



This might get tough on your friendship(s), can't do this forever either. Look online for some other options.

Sleep in your car some nights as to not overstay your welcome with your friends.

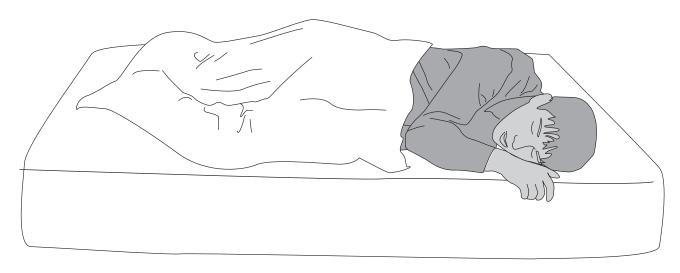
Go to page 105

Make it official. Ask to move in with your friend.

Go to page 139

# AirBNB + Couchsurfing

as your home



You want to be continually traveling and seeing new places but like to sleep in "real beds"

To you, home is more than a specific geographical location. It is anywhere you can carry out your daily habits and rituals with peace

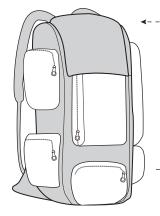


I need a specific location. Go to <u>page 139</u>

To keep doing this, you should minimize your possessions to fit a bag or luggage that can be easily moved with you See page 71



To you, home does not require a physical space. With just a few necessary belongings, you can belong anywhere.



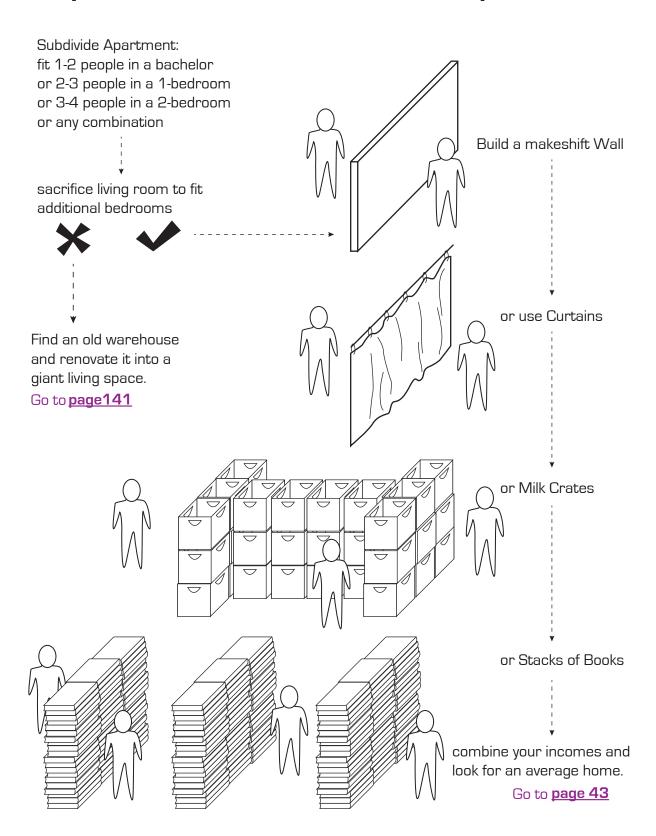
\*

I need a physical home. Go to <u>page109</u>

To keep doing this, you will have to live socially Go to page111

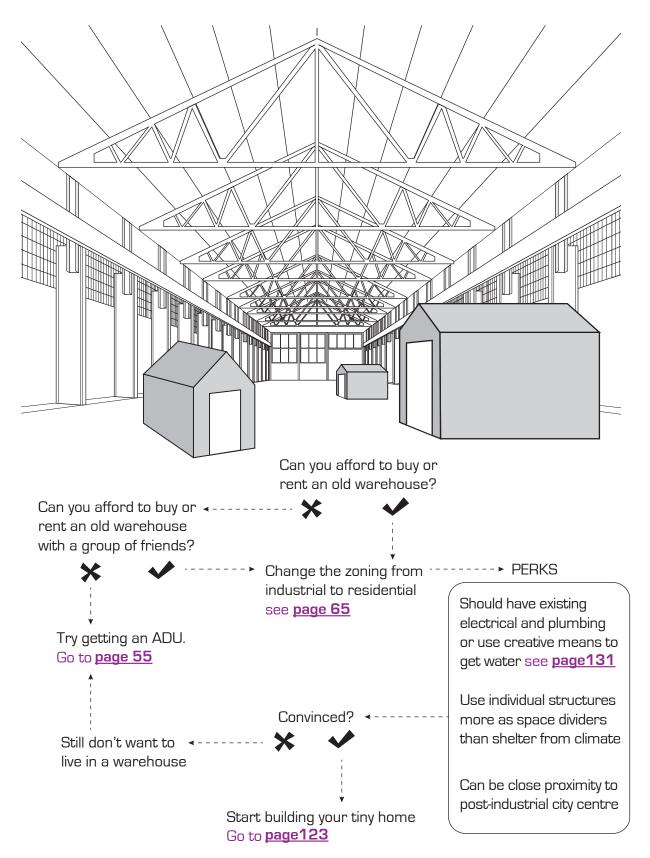
## Move in with a friend

### platonic adult roommates split rent

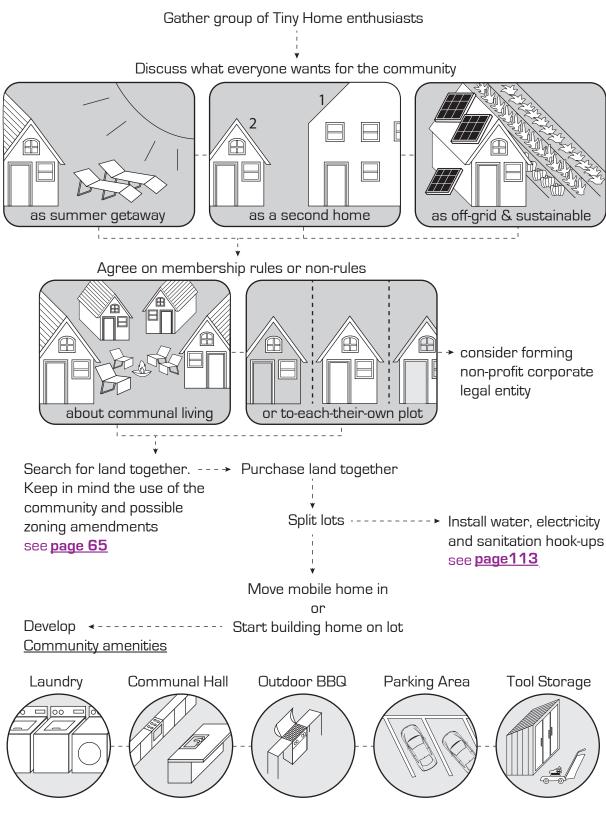


## Abandoned Warehouse

tiny boxes inside a bigger box



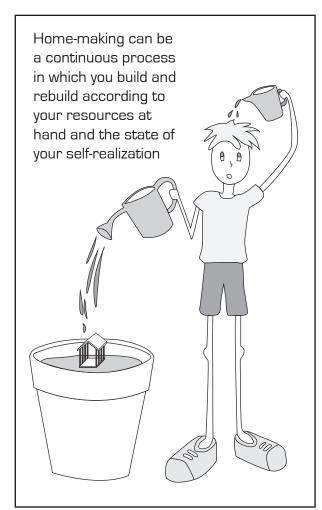
# Intentional Eco-Village Tiny Home Living with others and nature

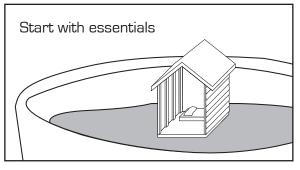


Live Happily Ever After with Friends
Go to The End

# Grow your home

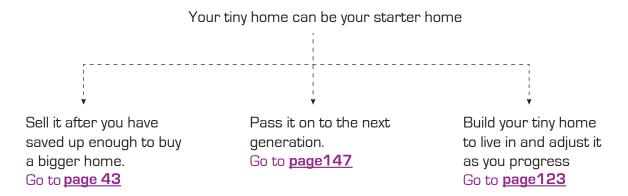
as you grow





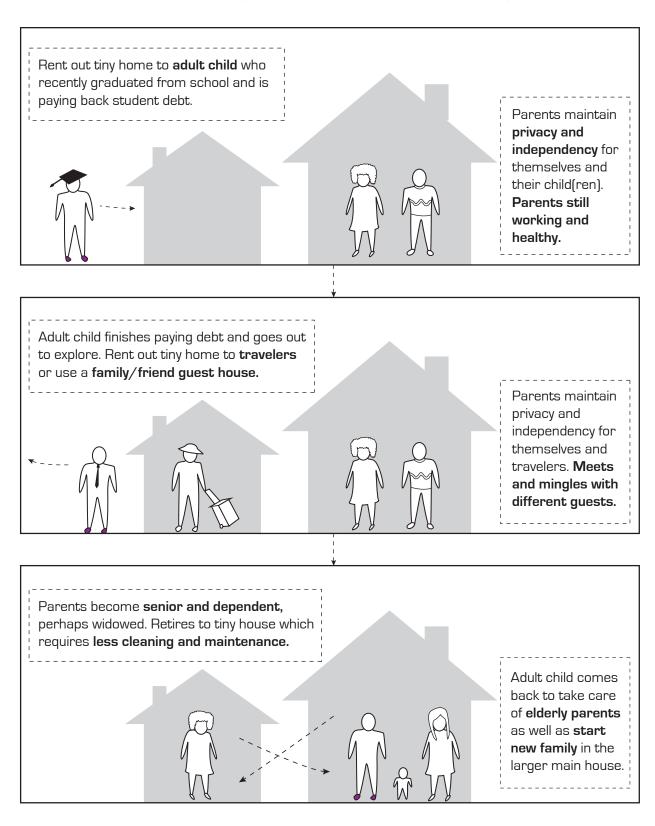






## Life Stage Adjustments

### multigenerational living



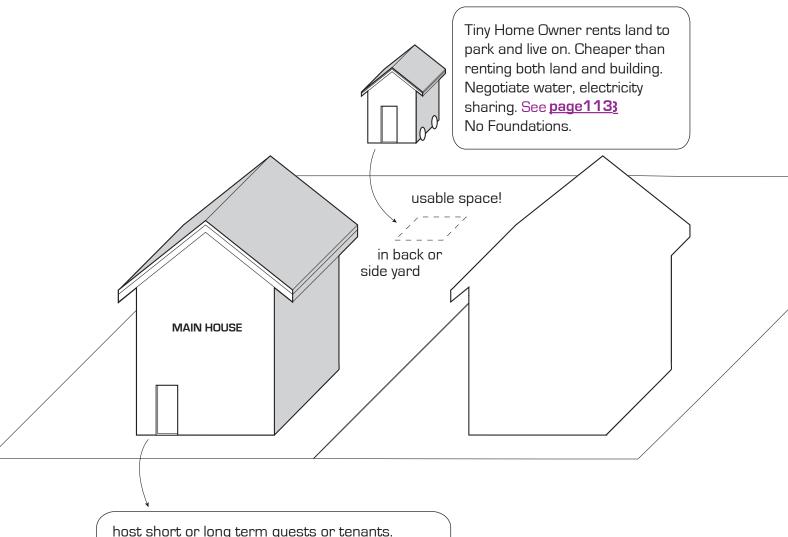
No.

Why would I want to live so close to my parents/children? Go back to page 45

Yes.
Sounds appealing.
Go to page149

# Reciprocal Living ver.l

### Tiny in a Large lot



host short or long term guests or tenants. Maintain privacy of house.

Negotiate maintenance of house and yard.\*

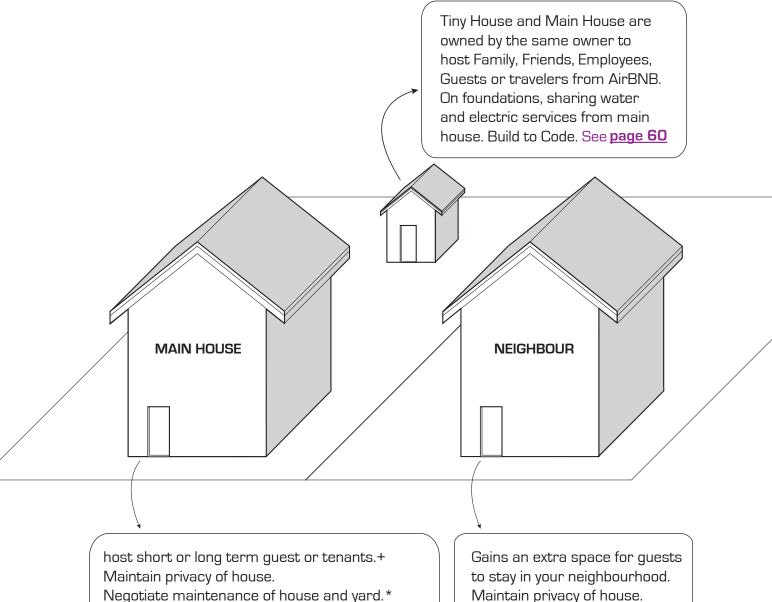
\*senior homeowners can especially benefit from getting extra help around the house or yard.

Perfect. Build Mobile Tiny House. Go to <u>page 83</u> See other Reciprocal Living option.

Go to page151

## Reciprocal Living ver.2

### Tiny in a Large neighbourhood



+widen potential tenants to include those that do not own a mobile tiny home. Maintain control over what is parked on your property.

\*senior homeowners can especially benefit from getting extra help around the house or yard.

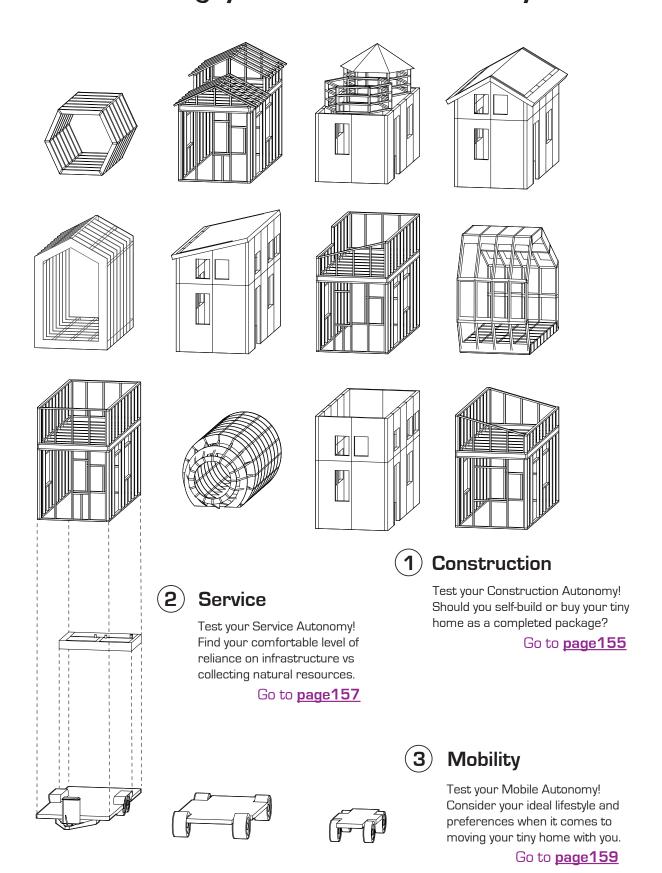
Maintain privacy of house.

Perfect. Build Tiny House. Go to page 123

What about a whole neighbourhood of tiny houses? Go to page 143

## 3 Dwelling Components

determining your home autonomy levels



# Construction Autonomy Self-build to Complete Package

### CHOOSE ONE STATEMENT FROM EACH GROUPING

- I don't know how to use power tools and I have no intention of starting now. (C)
  I don't know how to use power tools but I have always wanted to learn. (B)
  I am a pro at power tools, I've been building since I was a kid. (A)
- I dream of owning an IKEA modular kitchen. (B)

  IKEA is too mainstream for me. (A)

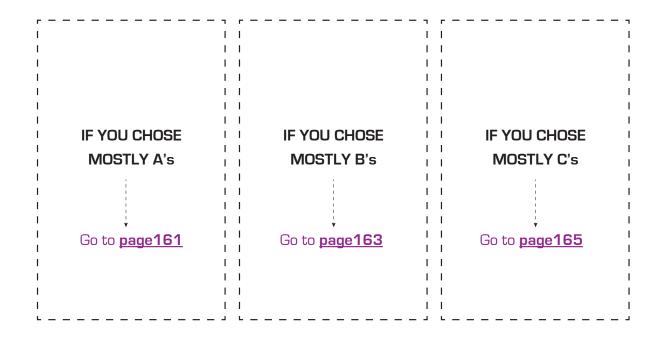
  IKEA is too hipster for me. (C)
- A house is not necessarily a home, you have to make it yours by changing it a little. (B)

  Every corner of my home represents my values and identity. (A)

  I prefer to let the experts design, I just want a nice place to live. (C)
- Only things that I have made or are sentimental can be in my home. (A)

  Kitchen, Bathroom, Bedroom, all houses are basically the same. (C)

  I can imagine what I want each of my rooms to look like. (B)



# Service Autonomy off-grid to fully connected

### CHOOSE ONE STATEMENT FROM EACH GROUPING

- I want a constant supply of electricity and water, they are life essentials! (C)

  Being off-grid means mean I will have to be conscious of my resource levels. (B)

  Rainwater collection, Wind and Solar power! I can rely on no one but mother nature! (A)
- I believe our stewardship of the earth is a human duty to be environmentally sustainable. (A)

  I can scale back my lifestyle but would like to be able to connect to services if it was suitable. (B)

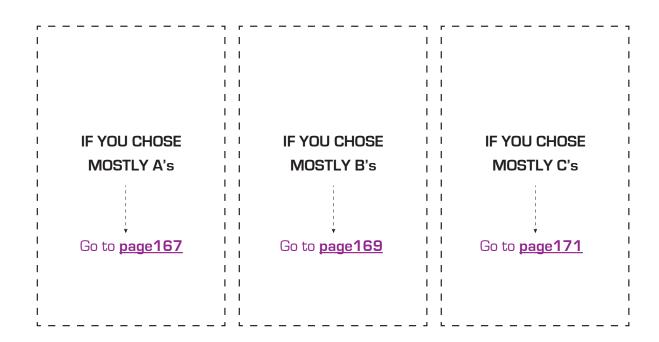
  I like the scale, the look, and the idea of living tiny but I don't want to lose the luxuries. (C)
- I dream of living in the mountains by myself. (A)

  I will alway want to live near civilization. (C)

  I want to easily be able to take short term trips to the wilderness. (B)
- I can deal with putting saw dust on my human waste after every time I use a compost toilet (B)

  People call me the Humanure guidebook. (A)

  I have to do what after I go to the bathroom?!? (C)



# Mobile Autonomy self-mobile to externally movable

### CHOOSE ONE STATEMENT FROM EACH GROUPING

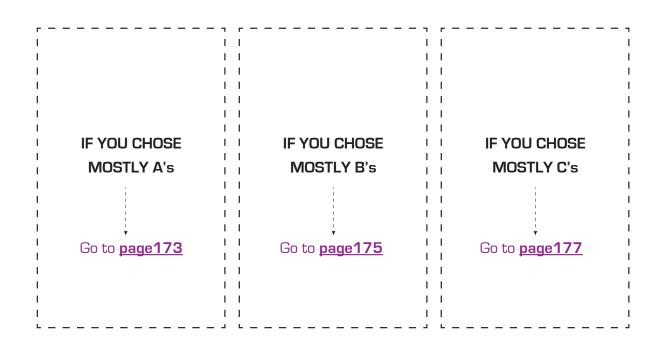
- I relocate very often, every few months. (A)

  I stay put for as long as possible. (C)

  I move around once in a while, every few years. (B)
- I need to be free as a bird, I may feel like moving to a new place tomorrow. (A)

  I like the ability to change but I won't insist on it for just for the sake of change. (B)

  Quite frankly, I don't like change that much. (C)
- I can rely on infrastructure and hiring help when I move. (C)
  It is best to be completely self-reliant when I move. (A)
  I can rent some equipment to help myself move. (B)
- Adaptability. (B)
  Freedom. (A)
  Security. (C)



## Construction Autonomy LEVEL: HIGH

DEPENDENT AUTONOMOUS

#### **Finished Shell**



You are a dreamer.
A shell of a home that lets you outfit the interior is best for you. Your home allows you to safely dream in peace

### Self-built

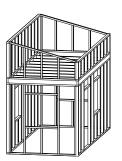


You are very particular.
A completely self made home would be most suitable for you.
Your home becomes the manifestation of your soul.

#### Readv-made



You are easy going.
A ready made house that suits
your style would make you glad.
Your home protects and
shelters you from the elements.
\*See Simple huts



Build it all yourself!

Take the next Autonomy Test Go back to <u>page153</u> See a self-build example.

Go to page179

## Construction Autonomy LEVEL: MEDIUM

DEPENDENT AUTONOMOUS

#### Salf-built



You are very particular.

A completely self made home would be most suitable for you Your home becomes the manifestation of your soul.

\*See Juna's Tower

### Finished Shell



You are a dreamer.

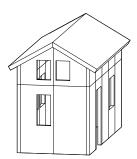
A shell of a home that lets you outfit the interior is best for you.

Your home allows you to safely dream in peace.

### Ready-made



You are easy going.
A ready made house that suits
your style would make you glad.
Your home protects and
shelters you from the elements.
\*See Simple huts



Let someone build the structure and you can focus on customizing the inside!

Take the next Autonomy Test Go back to <u>page153</u> See a self-build example.

Go to page179

## Construction Autonomy LEVEL: LOW

DEPENDENT AUTONOMOUS

#### Self-built



You are very particular.
A completely self made home would be most suitable for you. Your home becomes the manifestation of your soul.
\*see Jung's Tower

### Ready-made



You are easy going.
A ready-made house that suits your style would make you glad.
Your home protects and shelters you from the elements.

#### Finished Shell



You are a dreamer.

A shell of a home that lets you outfit the interior is best for you Your home allows you to safely dream in peace

\*See Poetics of Space



Buy a tiny house and fill it with the things you love!

Take the next Autonomy Test Go back to <u>page153</u> See a self-build example.

Go to page179

## Service Autonomy LEVEL: HIGH

DEPENDENT AUTONOMOUS

Half-Plug in

Your house can have plug-in connections to water and electricity similar to RV's but also have solar panels and water tanks for your short term adventures off-grid.

#### Off-Grid



Your house will be completely off-grid with solar panels, rainwater collection, water tanks, composting toilets that you can still live even if you were the last person on earth.

#### Connected



Your house needs to be connected to water, sewage and electric services at all times. Will be limited when looking for where to park your house that offers all these connections.

Take the next Autonomy Test Go back to <u>page153</u> See an off-grid idea.
Go to page131

## Service Autonomy LEVEL: MEDIUM

DEPENDENT AUTONOMOUS



Your house will be completely off-grid with solar panels, rainwater collection, water tanks, composting toilets that you can still live even if you were the last person on earth.



I Your house can have plug-in
connections to water and
electricity similar to RV's but
also have solar panels and
water tanks for your short
term adventures off-grid.



Your house needs to be connected to water, sewage and electric services at all times.
Will be limited when looking for where to park your house that offers all these connections.

Take the next Autonomy Test Go back to page 153

See a RV hookup.
Go to page113

## Service Autonomy LEVEL: LOW

DEPENDENT AUTONOMOUS



Your house can have plug-in connections to water and electricity similar to RV's but also have solar panels and water tanks for your short term adventures off-grid.

#### Connected



Your house needs to be connected to water, sewage and electric services at all times. Will be limited when looking for where to park your house that offers all these connections.

#### Off-Grid



Your house will be completely off-grid with solar panels, rainwater collection, water tanks, composting toilets that you can still live even if you were the last person on earth.

Take the next Autonomy Test Go back to <u>page153</u> Share services with an existing house

Go to page151

## Mobile Autonomy LEVEL: HIGH

DEPENDENT AUTONOMOUS

Self - Drivable

Crane-able

You move infrequently enough that you can afford to rely on cranes, lifts or other infrastructure to help you move which lets you be a bit more flexible with your use of space

You relocate often that you need to be able to move even when it is a one-person job. Something like a travel trailer or RV would give you the freedom to just pick up and go.

You move enough that it would be beneficial to have some control of your own move such as renting a truck to tow your home. Each move is not casual, requires planning but do-able.

Take the next Autonomy Test Go back to <u>page153</u> Confirm your mobility level

Go to page185

# Mobile Autonomy LEVEL: MEDIUM

DEPENDENT AUTONOMOUS

#### Towable

Crane-able

You move infrequently enough that you can afford to rely on cranes, lifts or other infrastructure to help you move which lets you be a bit more flexible with your use of space



You move enough that it would be beneficial to have some control of your own moves, such as renting a truck to tow your home. Each move is not casual, requires planning but do-able. Self - Drivable



You move much and often that you need to be able to go even as a one-person job. Something like a travel trailer or RV would give you the freedom to just pick up and go.

Take the next Autonomy Test Go back to <u>page153</u> Confirm your mobility level

Go to page185

# Mobile Autonomy LEVEL: LOW

DEPENDENT AUTONOMOUS

Self - Drivable



you move much and often that you need to be able to go even as a one-person job. Something like a travel trailer or RV would give you the freedom to just pick up and go.

Crane-able



You move infrequently enough that you can afford to rely on cranes, lifts or other infrastructure to help you move which lets you be a bit more flexible with your use of space Towable



You move enough that it would be beneficial to have some control of your own move such as renting a truck to tow your home. Each move is not casual, requires planning but do-able.

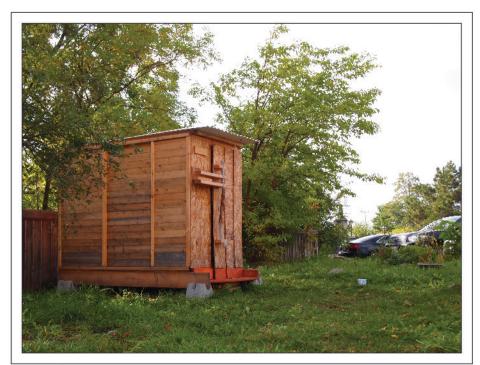
Take the next Autonomy Test Go back to page 153

Confirm your mobility level

Go to page185

## Tiny-scale Experiment

### building a one-bed room





construction PHOTOS See more next page

- ---- FINAL HOME - A MINI HAVEN - NEXT TO UNIVERSITY PARKING LOT - Functions as a Nap Shack for students

SLEEPING STUDIES - PLAN VIEW -



Try it yourself!
Go to page183

# I-person Construction with some help from friends&passersby



It started with a wall,



that was squared off,



and fitted together with no-glue.



More walls were added,



some windows,



along with a roof, and



a door and handles to open it.



Then it was done!

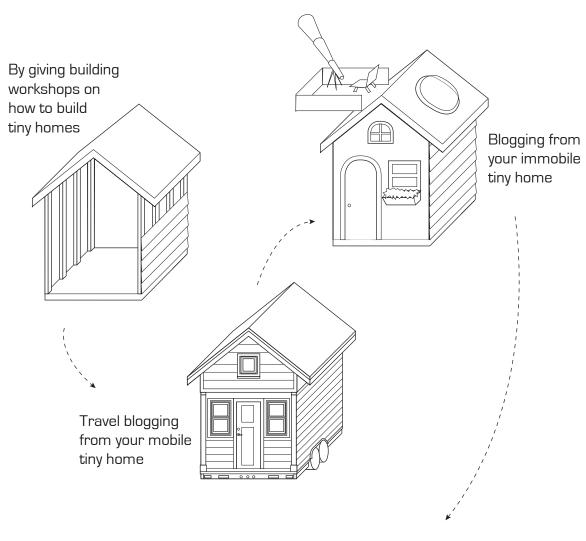


Try it yourself! Go to page 183

Go back to page 179

## Use Your Knowledge

### to teach others



Or just fill in the last page of this guidebook and give it to someone else to read!

Go to The End

# Finding Meanings confirm your personal mobility

What first comes to mind when you see this word? SETTLE To SETTLE in To SETTLE down To SETTLE is to be satisfied the world is to means the with less than the make chaos is finally best. progress. over. High Medium Low

Mobility

Mobility

Go to The End

Mobility

## END AS THE BEGINNING

### print and fill in

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## CONCLUSION

The place you choose to call home is one of the single most important decisions that will determine your life. As noted by urban studies theorist Richard Florida, where you live affects every other aspect of your life from who you meet to what careers will be accessible to you.1 The conception of "home" I refer to includes not just the physical structure, but also inherits the social, political, economic context in which it resides. Similarly, the location of our "home" is more than its geographic coordinates. Location relates you to the city, you to your neighbours, and determines the spaces in between. In other words, your choice of home is an extremely important one. Luckily, "the miracle of our modern age is that we do have a choice. For the first time ever, a huge number of us have the freedom and economic means to choose our place."2 The "us" referred to here, I hope, will soon be able to signify more citizens on Earth and not just the privileged few in the First World. The guidebook is to enable people to make their choices and trade-offs knowingly.

The conditions are ripe for this sort of "tiny house movement" and rethinking of how we choose to live. In Canada, the United States of America, and most developed countries are the best places for this structure of a subversive network to exist. As easy as it seems to blame "the system," this type

of subversion is only possible through the accepted societal and legal frameworks that we rely on to be consistent, stable (for the most part) and not outwardly corrupt. Most of us do not have to deal with corruption on a personal level even when we are found living "under-the-radar" let alone when we conduct our matters legally. The issues that we deal with here may be systemic, but at least we are not dealing with overt thugs and violence.

The proposed network of tactics works best in a reciprocal relationship with the main housing supply system but it takes effort to first remove oneself from within the system. Breaking free of the system requires one to operate on a different level of thinking. To paraphrase a popular quote attributed to Einstein, we cannot solve the problem using the same thinking that created the problem. To begin living tactically and think in this new strategic way about our homes and how we live requires a lot of research, planning as well as understanding of self. Taking a page from Jacob Lund Fisker, the author of "Early Retirement Extreme," a book about gaining financial independence, we "must first learn the general systemic rules that allow one to improvise and really live life the way it was intended - in your own way, rather than follow checklists devised by some random guy, like me."3

<sup>1</sup> Richard Florida, Who's Your City? How the Creative Economy is Making Where to Live the Most Important Decision of You Life (USA: Random House Canada, 2008), p1-13.

<sup>2</sup> Florida, Who's Your City? p7.

Jacob Lund Fisker, *Early Retirement Extreme* (USA: Jacob Lund Fisker, 2010), p6.

Everyone has different preferences and alternative housing solutions such as tiny homes will not appeal to all. There is however, enough room between the cracks of the housing supply system -that have let many individuals fall through- to allow these same individuals to pull themselves back up. It is possible and advantageous to all parties that "alternative homes" and what is considered "normal homes" co-exist in in varying degrees of reciprocity. This guidebook invites you to challenge the prejudice that we must depend on a housing supply system because people cannot or should not house themselves. Nonskilled or semi-skilled ordinary people can regain their autonomy to home-making by first knowing oneself and then learn to construct one's self. It is not about a specific way of building a home or a method of construction or even the type of housing structure but about a way of thinking about how to live. It is a way of thinking that emphasizes freedom, new possibilities, and human solidarity. And a way of thinking that promotes intentional decisions and living a life of meaning.

There are many rabbit holes that I have not gone down. There are many plausible living situations that I may have alluded to but have not explored in depth. To describe and illustrate every possible scenario would simply be impossible. That is not the point here. This is not a step-by-step guidebook (although certain routes do contain the relevant information for it to be treated as such). The intention is for each person to start thinking creatively and to start creating their own tactics. To see that there are other options available and to not be afraid of being different is the hardest step to take which also happens to be the first. Tiny homes were an interesting venue to discuss what it means to dwell and to belong.

After reading this work, some of you may have learned about what defines tiny homes architecturally and decided this is not for you. For some, the tiny house movement may be an inspiration for a pursuit of minimalist living and how to quit your job. Another might be drawn to the legal issues and seek the development of a separate set of standards for tiny homes, distinct from a conventional home and from a RV standard. Others might fight for them to exist as they are now in the spatial and political interstices. Perhaps, we would stop looking for a panacea and seek to optimize outlets for creative individual expression.

It would be nice to see more people live in tiny homes but a greater progress would be a paradigm shift regarding the possibility for ordinary folks to house themselves and to be free from the current housing supply system. In the new paradigm, architects can unleash the public's creative impulse by engaging in the means and processes of home-making rather than the production of objects. It is thinking more like an entrepreneur and a developer, concerning ourselves with the entire system. For architects, there also needs to be a greater willingness to engage in politics beyond passively reacting to the requirements of our particular projects. To take on more civic leadership roles in our communities with our wide-ranging skill-set. To speak with authority on matters relating to architecture, instead of fighting the local planning officers about meeting minimum standards. To engage in political activity to influence legislature, policies, and regulations that affects not just our profession but also our cities that we live in. To take matters beyond architectural circles and lead the discourse on how the build better environments that. ultimately, shape our future.

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