

The average new house built in the U.S. has more than doubled in size since 1950, even as fewer people are living in each household. According to the U.S. Census, in 1950 new houses averaged 983 square feet with 3.38 persons per household. But by 2015, they averaged 2,687 square feet with just 2.52 persons per household.

Our Village Model returns to a more sustainable standard without compromise to quality or durability. Known as a tiny house village, this physical form clusters compact residential dwellings around shared community spaces and resources—providing significant economic, environmental, and social benefits compared to conventional housing options. It combines the privacy and autonomy of a single-family house with the greater density and economy associated with a multi-family building. However, it replaces hallways and elevators with meandering pathways and common areas. The space between houses creates a medium for casual social interactions, fostering a strong sense of community and belonging among neighbors.

Each house is 400 square feet or less, built on a permanent foundation, and includes a living area, kitchen, full bathroom, and a loft that can be utilized for sleeping or storage. We have developed a variety of house plans, available on our website, to support a variety of different household types and sizes including singles, couples, and small families.



## **ECONOMIC Advantages...**

- Tiny house construction is far less complex and specialized when compared to a multistory apartment building, which allows for the inclusion of volunteers and sweat equity.
- Monprofits can act as their own general contractor, which can reduce hard construction costs by 1/3 or more.
- A smaller building footprint means smaller ongoing maintenance and utility bills.



## **SOCIAL Advantages...**

- Tiny homes are connected by pathways and common spaces, creating a physical environment that makes it easy and natural for neighbors to meet and communicate.
- Our residents report a strong sense of community and belonging within our villages.
- Strong relationships amongst neighbors creates social capital and shared resources that can help to prevent someone from falling in to homelessness.



#### **ENVIRONMENTAL Advantages...**

- Oregon's Department of Environmental Quality found that reducing the size of a home is the single most effective measure for reducing its impact on the environment.<sup>8</sup>
- Reducing the size of the home is the only building practice that reduces both energy usage and material demand.
- Studies have shown tiny homes can reduce one's impact on the environment by 45%.9

Building small reduces material and energy demand during construction, and offers lower maintenance and utility bills over the life of the home. Consequently, Oregon's Department of Environmental Quality found that reducing the size of a home is the single most effective measure for reducing its impact on the environment. For example, a smaller home (1,623sf) was found to have a lighter footprint than an average size home (2,274sf) built to Energy Star standards.

While building codes had become a barrier to building small, over the last several years our work in this sector along with several others, has helped to influence new standards. The 2018 International Residential Code adopted a Tiny House Appendix, which Oregon and other states have recently adopted in their state building codes. These recent changes have allowed us to safely design and build more compact and cost-effective homes.

A common house is also a central feature of the tiny house village, which acts as an extension of each individual home, by providing a variety of shared amenities. While the individual homes may be small, a common house provides residents with access to a flexible use space for gatherings and everyday use, a community kitchen and pantry for group meals, laundry facilities, and storage of common resources (i.e. lawn mower, tools, etc.). This type of generous common space puts the "village" in tiny house village.

# **Tiny House Village — Site Design Patterns**

- ❖ Perimeter Parking: Leave the vehicular parking at the edge of the site to promote a built environment focused on people, not cars.
- Clustered Dwellings: Orient homes in clusters facing onto the shared common space, which encourages community cohesion and improves security with more eyes on the space.
- Degrees of Publicness: Provide each resident a healthy balance of privacy and community by layering access to private, public, and semi-public spaces throughout the site.
- ❖ Active Common Spaces: Arrange common buildings, parking areas, and gardens so that residents walking through the commons to get to their front doors.

## **Tiny House Village — House Design Patterns**

- ❖ Even Modules: Design on even modules that utilize the standard dimensions of building materials to reduce waste and streamline construction.
- Accessible Materials: Utilize standard materials available at your local lumber yard and hardware store to avoid added construction timeline and complexity.
- \* Flexible Use: Provide for a variety of flexible, multi-functional floor plans that accommodate diverse household composition and accessibility needs.
- \* High Light: Place large windows high in the building to allow for natural light while preserving valuable wall space in a small home, and privacy when homes are clustered close together.



Emerald Village tiny home community in Eugene, OR, developed by SquareOne Villages

### Tiny House Village Site Design Program:

- Tiny Houses (200 400sf)
- Common House (1,000 1,500sf)
- Consolidated Vehicle Parking

- Trash/Recycle Enclosure
- Bicycle Parking Enclosure
- Community Gardens

Density: 20 - 30 tiny houses per acre (can be increased with duplex/triplex/fourplex units)

**Scale:** Successful housing co-ops have included anywhere from 4 to more than 100 households. There are tradeoffs to developing small vs. large scale co-ops, which should be considered during the planning process.

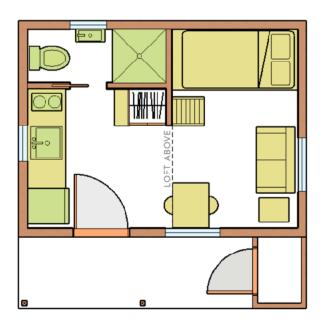






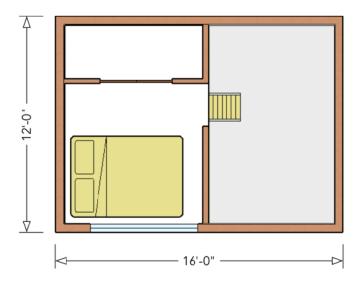
building footprint: 192sf

sleeping loft: 88sf



**GROUND FLOOR** 



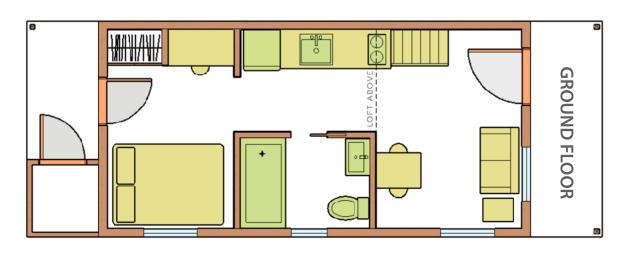


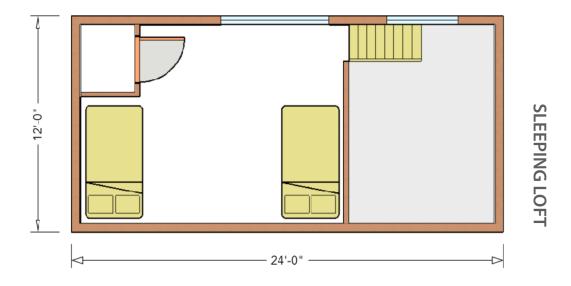




building footprint: 288sf

sleeping loft: 165sf







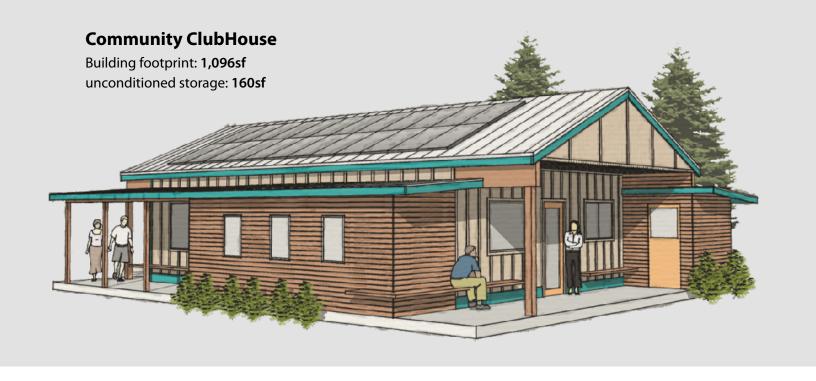


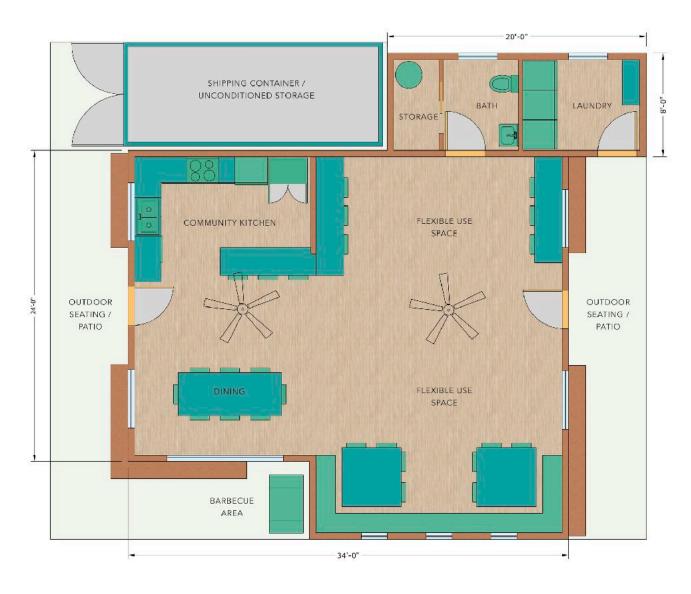
building footprint: 256sf

sleeping loft: 112sf



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## **Physical Form References:**

- **(8)** "Small Homes: Benefits, Trends, and Policies,"Oregon Department of Environmental Quality, https://www.slideshare.net/ORDEQ/deq-building-lca-forwebsite-16minfinal1
- (9) Saxton, "The Ecological Footprints of Tiny Home Downsizers," Virginia Polytechnic Institute and State University, 2019 (link)

In a study of the relationship between downsizing to a tiny home and environmental impact, ecological footprints were reduced by about 45% after living in a tiny home for a year or more (infographic below).

