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New Beginnings Homeless Transition Village

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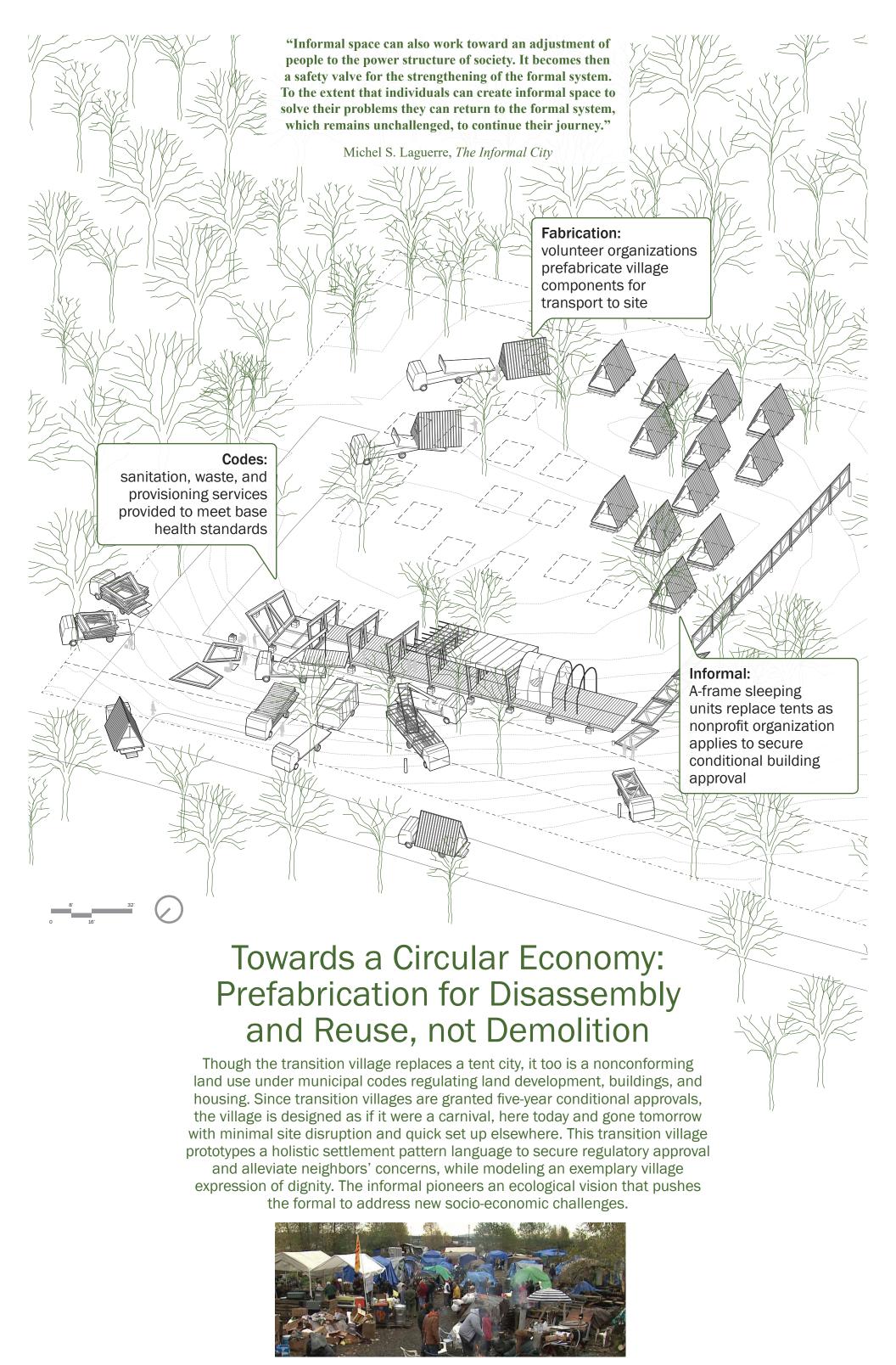
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Problem: Reconciling the Informal and the Formal

An estimated three million Americans experience homelessness annually, and more than 850,000 are sheltered nightly. Emergency shelter capacity is limited, while local governments are unable to provide permanent housing. Informal housing involving interim selfhelp solutions is the best adaptational action for obtaining shelter, despite its nonconformance to city codes. New Beginnings proposes a low-cost prototype for a homeless transition village incorporating a kit-of-parts that can be replicated in other communities. Moving a step beyond tent cities and squatter campgrounds, project design reconciles gaps between informal building practices and formal sector regulations, making interim solutions ecologically sustainable and more permittable under most city codes. Informal solutions traditionally associated with structural poverty in emerging economies have become logical means for maintaining economic viability in advanced economies marked by growing inequality. The project shows the viability of the informal as a source of ecologically sustainable shelter and community in restoring resiliency and wholeness among homeless populations.





Planning Principles: Prototyping a Settlement Pattern

The village model facilitates self-stabilization through greater security, community, and autonomy among unsheltered populations. Three planning principles guide its development.

Housing-first Solution

Homeless shelters only provide overnight emergency stays. The transition village provides 24/7 housing through individual sleeping units available for six-month stays. Sleeping units are supported by a Community Porch offering shared sanitation, waste, provisioning, and social services.

Upcycling of Temporary Construction

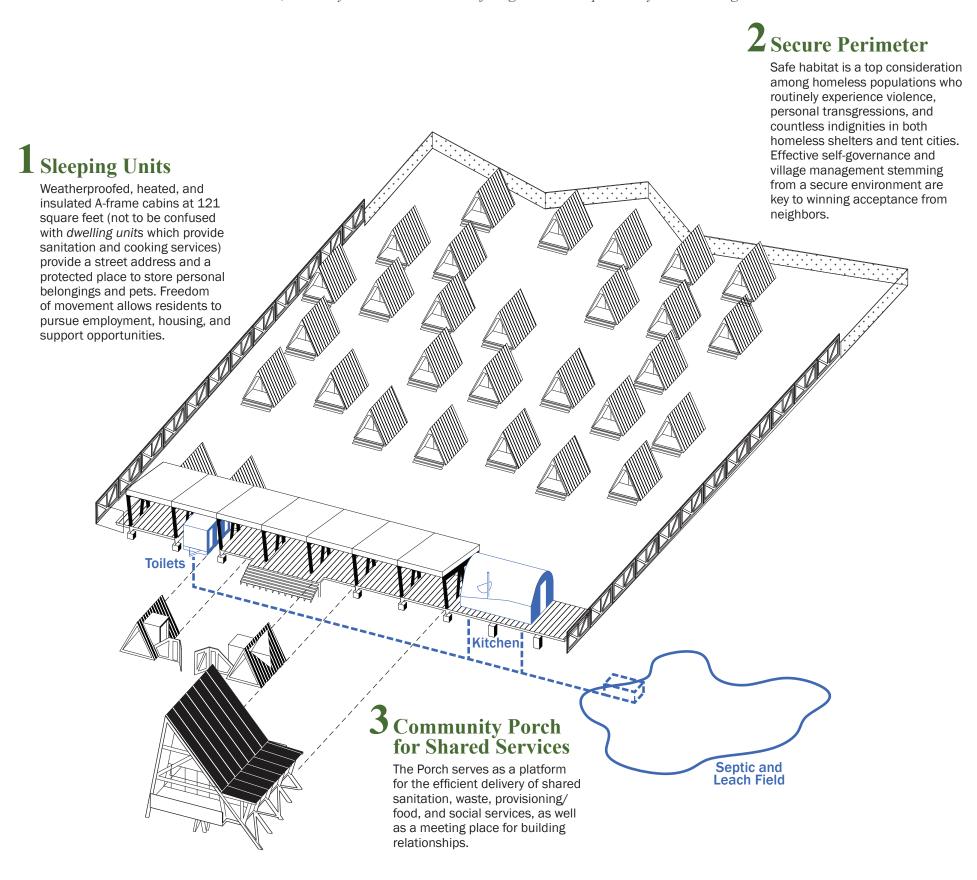
To eliminate local homelessness, the transition village was granted five-year approval for eventual dismantling. Village design minimizes disruption to the site and eliminates the concept of waste through a flexible kit-of-parts made for disassembly and adaptive reuse, or upcycling elsewhere.

Village Prototype for Universal Application

Amidst a national housing crisis, the emergence of tent cities and other informal settlements indicates the need for permittable transition solutions. The village's settlement pattern language transfers information and methods for overcoming common regulatory obstacles.

"The question of where one will sleep consumes significant mental resources and limits the capacity to focus on other tasks."

Andrew Heben, Tent City Urbanism: From Self-Organized Camps to Tiny Home Villages



Components of a Transition Village Prototype

Components are prefabricated off-site and flat-packed for transport and assembly minimizing on-site construction. On-site construction is limited to wet assembly and site preparation for water supply, waste disposal, foundations, and stormwater management. Three components in a system of subassemblies are essential to the development of a homeless transition village.



Regulatory Barrier 1 Zoning or How Formal Land-use Classification Prevents Transition Villages.

Street improvements

Local codes require installation of sidewalks and connections to water/sewer utilities.

Recommendation: Conditional use permits should trigger waivers from making permanent street infrastructure upgrades to local streets that do not compromise public health and safety.

Who is the applicant for approval?

The conditional use permit is based on having a sponsoring agency responsible for compliance. Recommendation: Transition villages should be sponsored by a host government or nonprofit organization that ensures code compliance. The federal 2000 Religious Land Use and Institutionalized Persons Act grants churches automatic right to sponsor transitional housing on their properties pursuant to their ministries, overriding local zoning codes.

Is campground classification helpful?

use.

limited to 90-day stays while mobile homes are subject to provisional use permits and are usually excluded from residential areas. Most cities have anti-camping ordinances, including vehicle camping.

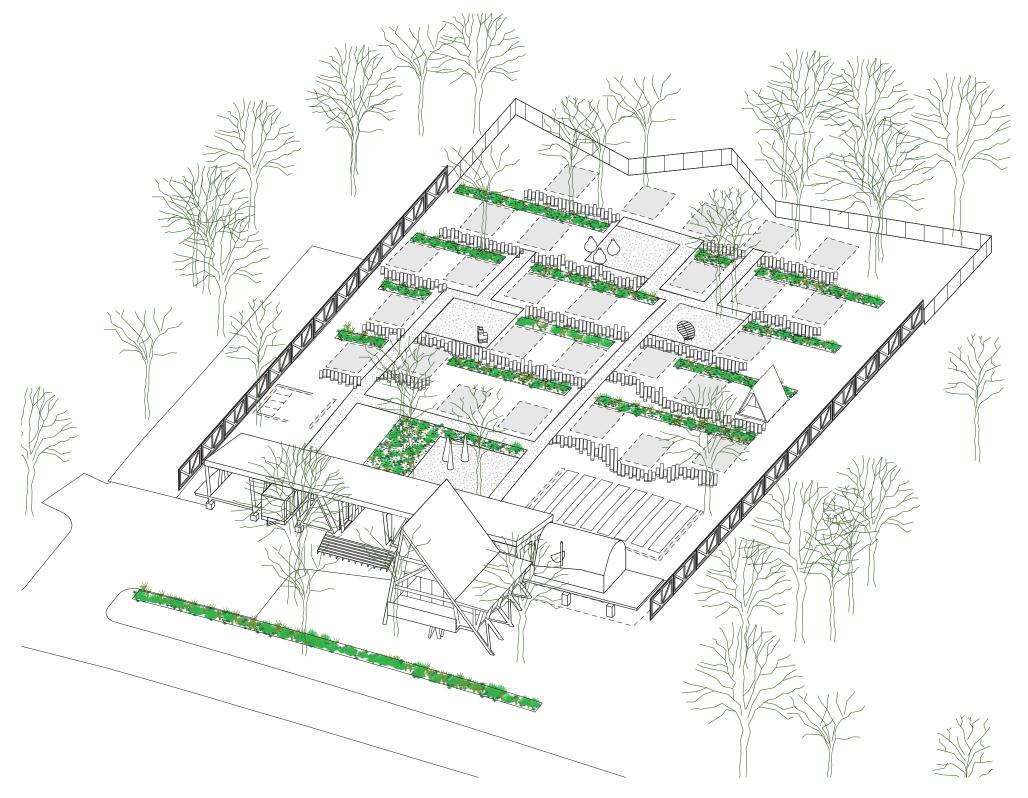
Recommendation: Land-use classifications serving campgrounds, tiny houses, and RV Parks do not work for homeless transition village needs. Conditional use approvals, consent decrees, or even planned unit developments can be acquired while long-term solutions involve creation of a new zoning land-use category to make "homeless transition villages" an accepted land

Vehicles in designated campgrounds are commonly

Environmental Review

Development beyond single-family duplexes triggers an environmental review governing stormwater management, tree canopy (20% coverage) and hillside preservation, and Americans with Disabilities Act (ADA) accessibility.

Recommendation: Minimize impervious surfaces and employ Low Impact Development water management techniques or "soft engineering". These ecological-based treatment strategies substitute bioswales and infiltration basins for hard engineered pipes and ponds. Preserve trees as they provide the discrete environments homeless populations seek. Design ten percent of sleeping units to satisfy ADA requirements.



Fire access

The International Fire Code requires structures to be within 150 feet of a 20-foot wide drive for fire truck access. Maximum length of lane from street is 150 feet before requiring a 100-foot turnaround. Numbers identifying each unit are to be displayed on their exteriors to guide emergency responders.

Fire Separation

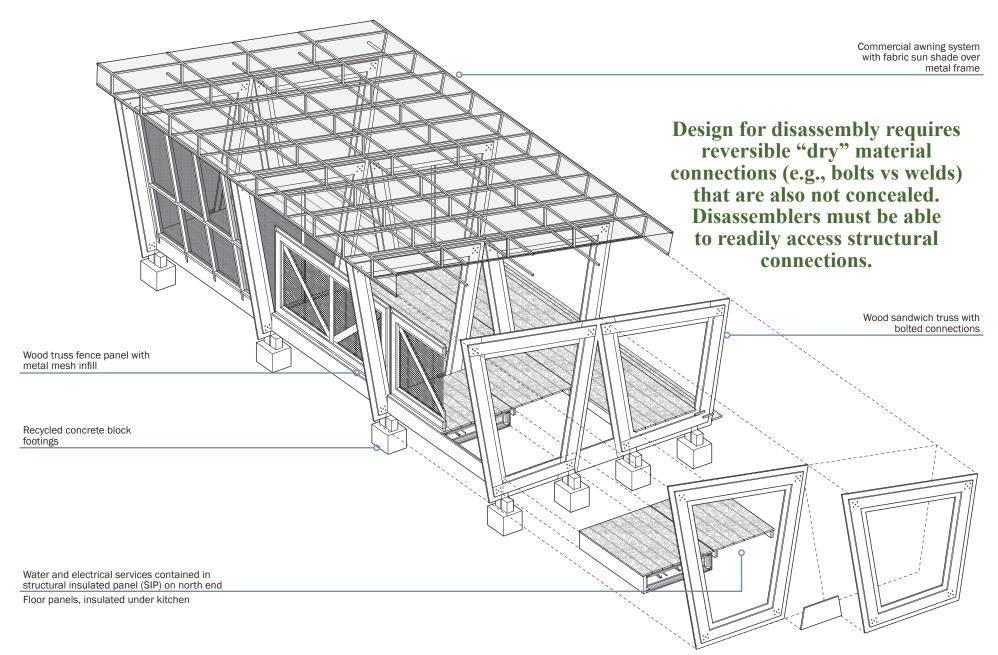
Existing codes require a ten-foot distance between structures to achieve a two-hour fire separation.

Minimum density

Zoning needs to be at least R24 allowing the village's proposed twenty units and eventual expansion to 30.

Regulatory Barrier 2 Building Codes or How Building Services Requirements Discourage Transition Villages.





Sanitation a top issue—no porta-potties

Existing codes require connection to water supply and sewer while state law disallows composting toilets and greywater recycling systems. Codes disallow portable toilets that cannot be connected to a sewer or septic system.

Recommendation: Since sanitation is the primary concern in maintaining a conditional use permit, ensure that bathrooms are always clean, in top working order, and pose no health risks. This favors sewer over septic, the latter more challenging to maintain.

Dwelling unit vs sleeping unit

The IBC requires that dwelling units have toilets, bathtub or shower, kitchen with a sink, hot and cold water connections, and a sewer connection.

Recommendation: Transition villages are congregate living facilities where micro-housing is supported by shared facilities. Classify cabins as sleeping units without utility connections (except for electricity for heating units), and congregate plumbing, waste, and sanitation utilities in the Community Porch, which efficiently functions as a common utility bar.

Kitchens

Health department codes prohibit common noncommercial kitchens while commercial kitchens require three sinks, a grease trap, and commercial-grade ventilation hood.

Regulatory Barrier 3 Housing Codes or How Residential Regulations Renders Transition Villages Unfeasible.

Trailer or building?

If it's built on a foundation, building codes apply. If it's on a trailer and axle then it's a "move-on" structure inspected only for connection to utilities—water, sewer, and electricity. Though, many localities do not allow utility hookups except in designated land uses, including on one's own property. Trailers must be NHTSA-approved (National Highway Traffic and Safety Administration). Recommendation: Cabins can be fabricated for as low as \$3,000 while tiny home trailers alone are \$5,000, and trailers must be moved every 90 days.

Sprinklers and sleeping units

Cabins as commercial sleeping units along with motels, dormitories, and other bedrooms for hire require an automatic sprinkler system, entailing costly plumbing with supply lines protected from winter weather.

Automatic smoke detectors and an alarm system networked to the local fire department are also required. Recommendation: Since sleeping units with minimal services pose negligible fire hazard, substitute installation of a fire extinguisher for sprinklers in each unit. Provide battery operated smoke detectors in units and a hose bibb in every commons (every 4-5 units) for fire suppression.

Sleeping unit

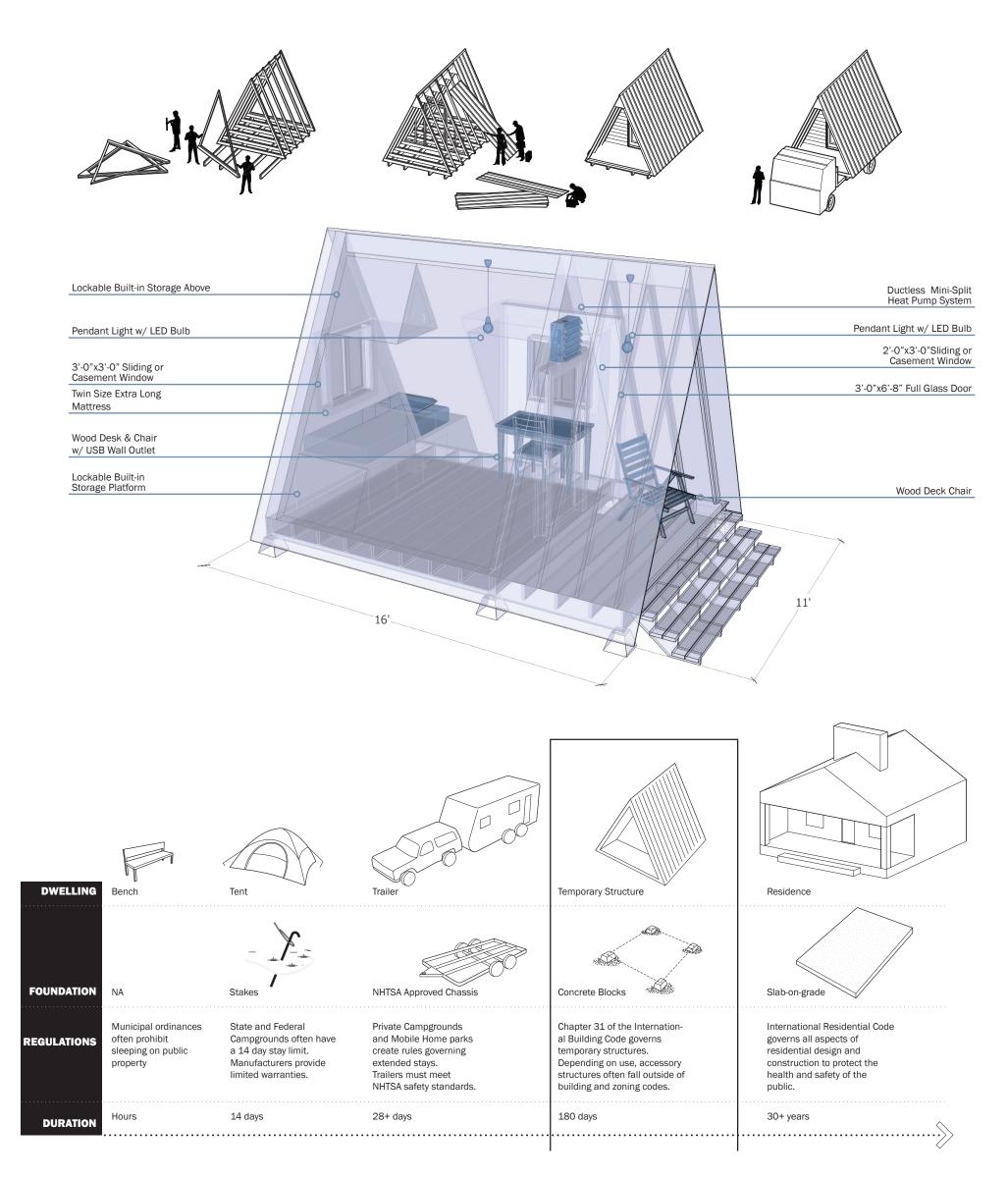
Codes classify cabins as sleeping units which are governed by the International Building Code (IBC) instead of the International Residential Code (IRC), requiring a minimum room size of 70 square feet with a minimum ceiling height of seven feet.

Building inspections

Many local codes require on-site inspection of wall sections before they are cladded with finished surfaces, precluding total prefabrication of unit.

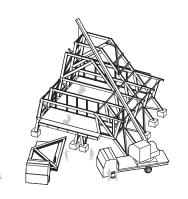
Energy rating

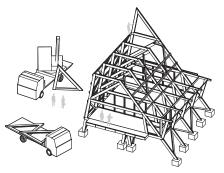
Existing codes require an R20-rated envelope.













Community Hall: Prefabrication for Transport and Adaptive ReuseThree sets of trusses are transported, stacked, and clipped together.







