

# Travel Trailers as a Housing Option

Housing Innovation Series Report

April 2024



**LOTUS**  
CAMPAIGN 

 **Terwilliger Center**  
for Housing

COVER: Trinity Hollow Community, North Carolina

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# Travel Trailers as a Housing Option

## Housing Innovation Series Report

April 2024



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This paper, the first paper in the Lotus Campaign Housing Innovation Series was produced by the Lotus Campaign with financial support from Bruce Etkin and The Etkin Foundation, our sponsors. It is being published in partnership with the Urban Land Institute's Homeless to Housed Initiative.

# About the Lotus Campaign [lotuscampaign.org](http://lotuscampaign.org)

**Lotus Campaign** is a 501(3)(c) that unites real estate leaders, landlords, service providers and philanthropists to dramatically reduce homelessness.

Our goal is to engage the private sector in opening access to market-rate, mixed-income housing to those experiencing homelessness without government funding or support. This is very different than most current affordable housing options and one of the biggest distinctions in the Lotus model.

Lotus Campaign has facilitated the placement of nearly 500 people, with a 97% success rate of its sponsored residents going on to support themselves. Recognizing that the transition out of homelessness takes time participation in the Lotus Campaign program provides support to participants for a minimum of one year and for longer if needed.

Lotus Campaign currently operates in Charlotte and Raleigh, North Carolina, and its Landlord Participation Program is designed to be replicable and scalable everywhere.

## **About the Author: Philip Payne**

Philip Payne is the Co-founder and Chairman of the Board of Directors Chairman of the Lotus Campaign. For nearly 30 years, Philip has worked to produce and maintain multifamily rental housing that is affordable to the workforce. During this time, he has served in various roles at a number of real estate companies including being Chairman of a publicly traded multi-family real estate investment trust, CFO of both a private and public company, and a Board Member and Audit Committee Chairman for two public companies. He has extensive experience and expertise in the areas of development, acquisition, rehabilitation, management, operation, financing, tax, and legal issues of multifamily housing and has written for a number of publications on issues related to tax, finance, and the structure of real estate transactions. He is currently the chairman of Ginkgo REIT, which provides workforce housing in North Carolina and South Carolina. He is a former Trustee of the Urban Land Institute, the founding chairman of its Responsible

Property Investment Council, and a former Chair of ULI Charlotte. He also serves on the Board of Trustees of the Penland School of Craft. Philip holds both a BS in Psychology and a JD from the College of William & Mary.

## **About Our Sponsors: Bruce Etkin and The Etkin Foundation**

Bruce Etkin, a distinguished real estate veteran, has left an indelible mark on Colorado's landscape. With a remarkable career spanning over three decades, Bruce served as the chairman of Etkin Johnson Real Estate Partners, overseeing the acquisition and development of more than 15 million square feet of real estate. His commitment extends beyond business, as he actively engages in community endeavors and charitable causes, serving on boards such as the Aspen Community Foundation and the Urban Land Institute.

Most recently he has turned his attention to the issue of homelessness and has become a strong advocate for greater involvement of the private sector, particularly real estate developers, alongside government and nonprofits to address this crisis. The exorbitant costs of traditional housing solutions for the homeless has led him to seek innovative alternatives.

Initially inspired by the sharing economy, Bruce explored a model where unhoused individuals are matched with hosts for housing in exchange for services. However, public apprehension about hosting homeless individuals prompted him to consider other options. He then proposed the use of travel trailers as affordable, portable housing solutions for homeless individuals and families. These trailers offer essential amenities and can be placed in various locations, including underutilized lots or city-owned spaces. Bruce advocates for regulatory changes to recognize travel trailers as suitable shelter, akin to FEMA guidelines for emergency situations. Research conducted by the Lotus Campaign underscores the benefits of this model, including its potential as a steppingstone to independent living and provision of private facilities. Bruce calls for regulatory flexibility to test innovative solutions to address homelessness effectively.

# About the Terwilliger Center for Housing

The goal of the Terwilliger Center for Housing is to advance best practices in residential development and public policy, and to support ULI members and local communities in creating and sustaining a full spectrum of housing opportunities, particularly for low- and moderate-income households.

Established in 2007 with a gift from longtime member and former ULI chairman, J. Ronald Terwilliger, the Center integrates ULI's wide-ranging housing activities into a program of work with three objectives: to catalyze the production of housing; provide thought leadership on the housing industry; and inspire a broader commitment to housing.

## About the Homeless to Housed Initiative [uli.org/homelessness](https://uli.org/homelessness)

The ULI Homeless to Housed Initiative aims to spark conversations and promote real estate-driven solutions to end the housing and homelessness crisis in North America. The program is part of the ULI Terwilliger Center for Housing which works to advance best practices in residential development and public policy that creates and sustains a full spectrum of housing opportunities, particularly for low- and moderate-income households. ULI is a global network of professionals in every sector of real estate development and land use, from private enterprise to public service professionals dedicated to advancing the Institute's mission to shape the future of the built environment for transformative impact in communities worldwide.

Established in 1936, the Urban Land Institute (ULI) is a global network of professionals representing all sectors of real estate development and land use, spanning private enterprises and public service. ULI's mission is to shape the future of the built environment for transformative impact in communities worldwide.

# About the Lotus Campaign Housing Innovation Series

[housinginnovationseries.com](http://housinginnovationseries.com)

The United States is in the midst of a housing affordability crisis that is having a profound impact on homelessness. Addressing this situation will require a reevaluation of existing practices and policies as to the production of affordable housing, as well as an exploration of innovative approaches to addressing homelessness.

**The Lotus Campaign's Housing Innovation Series** is being created to stimulate discussion of these issues. Each paper in the series will focus on a single concept related to the production of affordable housing and on how best to address homelessness and will evaluate its viability in terms of economics and mission. Issues of cost, benefit, expected impact, suitability, desirability, and obstacles to implementation will be key. A prime consideration for the series will be how and to what extent the private sector can be involved in addressing homelessness.

## **We would love to hear your thoughts on innovative ways to address homelessness.**

Those interested in contributing to the discussion or in submitting an article to the series should contact: **Philip Payne**, *Chairman, Lotus Campaign* at [editor.housinginnovationseries.com](mailto:editor.housinginnovationseries.com)

Those interested in learning more about the Lotus Campaign should visit [www.lotuscampaign.org](http://www.lotuscampaign.org) or contact: **Beth Silverman**, *Executive Director, Lotus Campaign*, at [info@lotuscampaign.org](mailto:info@lotuscampaign.org)

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## **Core Guidelines and Definitions for Articles Submitted for Publication:**

### **Topics open for review include:**

- types of housing,
- building materials,
- building techniques,
- use of applicable technology, and
- the impact of public policy, public programs, and legal and regulatory requirements on the ability to provide low-cost housing.

**Homeless:** There is no universally accepted definition of who is considered to be homeless. This series of papers will use an expansive definition of homeless to include:

- those who are unsheltered ("live on the streets")
- those who live in places not intended or are unfit for human habitation
- those who live in shelters or other temporary housing
- those who live in situations where they have no control over the term of their occupancy (e.g., "doubled-up")

Housing status will be the sole determinant for who is considered to be homeless with no minimum time, disability, or health requirements.

Those who live in non-traditional housing, such as recreational vehicles, tiny homes, or single-room occupancy (SRO) units, will not be considered to be homeless, nor will the extremely small number of people who have knowingly made a lifestyle choice to live without a traditional home.

Because the most effective and cost-efficient way to address homelessness is to prevent it from happening in the first, this series will also consider approaches to assisting those who are in imminent danger of losing their housing (e.g., eviction, foreclosure, etc).

**Home:** This series will require that to be considered a home, a unit must provide living and sleeping space, a kitchen, a bathroom, heating, and air conditioning (as needed), and must be suitable for occupancy on a semi-permanent (six months to one year) or permanent (longer than one year) basis. Except for units in a permanent supportive housing facility, housing units that do not contain a kitchen and a bathroom or that are only suitable for occupancies of six months or less will be considered temporary shelters.

## Available Housing Options:

**Table A** (Possible Housing Options) lists housing options that are open for review. In evaluating housing options, suitability and essential need will be threshold issues with the goal of providing basic, no-frills, cost-efficient housing units.

While there are no minimum size requirements for inclusion in the series, it is expected that cost considerations will constrain the size of the units. Housing options suitable for single individuals, two or more unrelated individuals, couples, and families will all be addressed in this series. Units under consideration may be new construction, rehabilitation, or conversion projects. They may be detached or attached and may include single-room occupancy (SRO) units, studio units, and single and multi-bedroom units. In short, all types of housing are open for consideration in this series, with an emphasis on cost-effectiveness and innovation.

**Public Policy:** Current public housing policy and existing housing programs, including issues related to zoning, density, building codes, fees, tax policy, government subsidies, and the permitting, approval, and inspection processes, are all open for review with an emphasis on lowering costs and expediting the production of an abundant supply of low and moderate priced housing.

**Economic Viability:** A cost-benefit analysis will be a required element for every article.

**Role of Private Sector:** Whenever possible, articles should include an analysis of the role the private sector can take in addressing the housing crisis and homelessness.

**Table A**  
**Possible Housing Options for Addressing Homelessness**

- |  |  |  |   |
|--|--|--|---|
| • Modular Homes - apartments, townhomes, houses, micro-houses      | • Container Homes  | • Semi-Permanent Tents (Yurts and Hexi Huts) | • Duplexes to Quads - single level or stacked           |
| • Panelized Construction - walls, floors, top plates, roof trusses | • Concrete Printed Homes                                   | • Campgrounds with commons facilities        | • Cottage Courts  |
| • Manufactured Homes   | • Auxiliary Dwelling Units (ADU's) - attached and detached | • Micro-Homes                                | • "Big house" designs                                   |
| • Park Model Homes   | • Dormitories  | • Micro-Apartments                           | • "Tree" houses   |
| • Travel Trailers  | • Co-living Facilities                                     | • Hotel/Motel Conversions                    | • Log cabins  |
| • Tiny Homes - on and off wheels                                   | • Empty Bedrooms in private residences                     | • Container Homes                            | • Shed Conversions                                      |
|  |  | • In-Ground Earth Homes                      | • Conversions - office, medical, retail, old industrial |



MPG  
ULTRA-LITE

SUNDANCE

FURBISH



## **Travel Trailers as a Housing Option**

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# Homelessness in America

**Homelessness continues to beset and confound the United States.** The United States Department of Housing and Urban Development’s (HUD) 2023 Assessment Report estimates that 653,100 people are homeless on any given night in the United States.<sup>1</sup> This is an increase of 70,650 people or 12% over the number reported in 2022.<sup>1</sup> While there may be some questions about the exact size and cause of the reported increase, the 2023 report clearly indicates a significant increase in those experiencing homelessness in the United States. This conclusion is supported by reports from multiple municipalities showing sharp increases in homelessness in early 2023.<sup>2</sup> In addition, HUD’s count does not include an estimated 3.7 million individuals who are effectively homeless because they are living in “doubled-up” situations where they have no control over or certainty as to how long they will remain housed.<sup>3</sup>

Simply stated, the full extent of homelessness in America is not known. The consensus among housing experts is that the number of Americans who experience homelessness for some period during the course of a year is many multiples of the number reflected by HUD’s reported count. The National Conference of State Legislatures estimates that 4.2 million youth and young adults alone experience homelessness for some period of time each year.<sup>4</sup>

## Causes of Homelessness

The primary cause of homelessness in the US is not, as popularly believed, mental illness, drug addiction, or a lack of personal discipline, but an extraordinary shortage of housing that is affordable to lower-income individuals and families.

In their book “Homelessness is a Housing Problem,” Gregg Colburn and Clayton Page Aldern illustrate the impact of the housing shortage on homelessness by comparing the situation to a game of musical chairs.<sup>5</sup> Assume that at the beginning of the game, there are ten chairs and ten participants, three of whom have some form of disadvantage, e.g., a physical, mental, or financial impairment. If the music stops without any chairs having been removed, everyone finds a seat. But if one chair has been removed, one person will be without a seat, and that person most likely will be one of the individuals with a disadvantage. While one’s first reaction might be that it was the disadvantage that caused the person not to get a seat, the real reason was there were not enough seats. Even if the disadvantaged person was lucky enough to get a seat at the end of the first round, somebody went without. So, it is not the disadvantage that causes the person to go without a seat but the lack of a sufficient number of seats.

The full impact of the interrelationship between the shortage of affordable housing and economic, mental, or physical disadvantage is reflected in the fact that disproportionate numbers of those with some form of



**The primary cause of homelessness in the US is not, as popularly believed, mental illness, drug addiction, or a lack of personal discipline, but an extraordinary shortage of housing that is affordable to lower-income individuals and families.**

1. The Department of Housing and Urban Development 2022 Annual Homelessness Assessment Report, [www.HUD.gov](http://www.HUD.gov)
2. Homeless Numbers Rise in U.S. Cities, Wall Street Journal, June 19, 2023
3. [Quantifying Doubled-Up Homeless: Presenting a New Measure Using U.S. Census Microdata](#), Housing Policy Debate, 2022
4. Youth Homelessness Overview, National Conference of State Legislatures, March 29, 2023. <https://www.ncsl.org/human-services/youth-homelessness-overview>
5. Homelessness is a Housing Problem: How Structural Factors Explain U.S. Patterns, Gregg Colburn and Clayton Page Aldern, University of California Press, March 2022

disadvantage are represented in the homeless population. Poverty, race, age, ethnicity, gender, gender identification, mental illness, addiction, and physical and mental disability are all factors that can place people at a disadvantage when seeking housing.

## Affordable Housing Crisis

The United States is in the midst of an affordable housing crisis. The National Low-Income Housing Coalition estimates there is a shortfall of 7.3 million units of housing that are affordable and available to extremely low-income households, which means there are only 33 affordable units available for every 100 extremely low-income households.<sup>6</sup> As staggering as this number is, it does not take into account the approximately 500,000 additional units that would be required to house the 653,100 people identified by HUD as currently being homeless, nor does it include the number of units that would be required to house the estimated 3.7 million individuals living in “doubled-up” situations.

It is impossible to overcome this shortage using existing strategies. Despite numerous government programs intended to encourage the production of low-income housing, there are not enough new housing units being built to fulfill current demand, much less to make ground on overcoming the backlog.<sup>7</sup> From its inception in 1987 through 2021, HUD’s Low-Income Housing Tax Credit program (LIHTC), the U.S. government’s most successful low-income housing program, produced only 3.55 million units.<sup>8</sup> This represents less than half of the 7.3 million units currently needed. While current data is not yet available, it does not appear that the pace of development of these units has increased meaningfully above the 120,000 unit average of recent years.

Cost and lack of available funding are the principal reasons for the lack of production. Current reports indicate that the cost to produce a new LIHTC low-income housing unit can range from approximately \$250,000 to over \$1,000,000.<sup>9</sup> At an average of \$300,000 per unit, it would cost \$150 billion to produce the estimated 500,000 units needed to house the 653,100 individuals identified in HUD’s 2023 count. However, the true scope of this crisis only comes into focus when one understands that a conservative estimate of the cost of filling the 7.3 million affordable unit shortfall at \$300,000 per unit is approximately \$2.2 trillion.

## Solutions

As a first step in addressing homelessness, we must find the means and methods to produce significant numbers of low- and ultra-low-income housing quickly at a much lower cost. The attitude of “it costs what it costs” is not acceptable. Every aspect of the process of producing housing suitable for use by those experiencing homelessness must be scrutinized with the goal of reducing cost and expediting delivery. This will require a re-examination of what is expected in terms of size, finishes, amenities, and design for a housing unit to be deemed acceptable and suitable housing. The use of alternate construction methods, new materials and technology must be considered and evaluated. In addition, there must be an extensive review and unflinching re-evaluation of current public housing policy and existing housing programs, including issues related to zoning, density, building codes, fees, tax policy, government subsidies, and the permitting, approval, and inspection processes, all with the goal of lowering costs and expediting the production of an abundant supply of low and moderate priced housing.

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6. GAP – A Shortage of Affordable Homes, National Low-Income Housing Coalition, March 2023, [www.nlihc.org](http://www.nlihc.org)

7. LIHTC Provides Much-Needed Affordable Housing, But Not Enough to Address Today’s Market Demands, Yonah Freemark and Coriuanne Payton Scally, Urban Wire, [www.urban.org](http://www.urban.org), July 11, 2023

8. Low-Income Housing Tax Credit (LIHTC): Property Level Data, May 4, 2023, [www.huduser.gov/portal/datasets/lihtc/proerty/html](http://www.huduser.gov/portal/datasets/lihtc/proerty/html)

9 Affordable Housing, Los Angeles Times, June 20, 2023, <https://www.latimes.com/homeless-housing/story/2022-06-20/california-affordable-housing-cost-1-million-apartment>

## Role of Private Sector

Homelessness has generally been viewed as a social issue that falls solely within the province of government to resolve with little or no role for the private sector. Over the past fifty years, government entities at all levels, federal, state, and local, together with charitable and faith-based organizations, have spent billions of dollars and incalculable hours seeking solutions. Yet, the crisis continues.

It is clear that the scope of the housing crisis is beyond the government's capacity to address without the full engagement of the private real estate and financial communities. The government simply does not have the vast sums required to produce the needed housing, nor does it have the capability to build those units. Given the private sector real estate and investment communities' vast expertise, experience, and resources, it is imperative that we explore and develop ways to fully engage them in the development of the required housing while using private capital to minimize the need for government funding. This may entail the development of new form of public-private partnerships as well as new investment vehicles and financing structures.

The call for increasing the involvement of the private sector in addressing homelessness is not intended to underplay the role of government or to disparage its efforts but is a recognition of the overwhelming scope of the problem. By enlisting the private sector to do what it does best – build and finance housing, the government will be able to focus its resources on services and assistance to those in need.

## Role of Social Services

Acknowledging that the principal cause of homelessness is the lack of affordable housing does not discount the critical role of social services in addressing homelessness. Housing alone is not enough. Being homeless, even being in imminent danger of becoming homeless, is traumatic. Fear, anxiety, shame, a sense of failure, loneliness, abandonment, hopelessness, despair, hunger, malnutrition, and untreated medical conditions are pervasive among those experiencing homelessness. Successful, long-lasting emergence from homelessness requires that these emotional and physical issues are addressed. Providing housing alone is not sufficient. While establishing a stable home is an essential first step, the key to addressing homelessness is the combination of housing with appropriate social services support. Such support may include psychological counseling, addiction treatment, financial education, job and life skills training, as well as medical services and financial support. While the types and levels of support may be dictated by the needs and circumstances of the individual, it is essential that the appropriate services are readily available.

**Housing Shortfall: 7.3 Million Units**

**Cost to produce a Low-Income Housing Unit: \$250,000-\$1,000,000**

**Total Cost (using \$300,000 Average Unit Cost): \$2.2 Trillion**



# A Low-Cost Housing Solution

## The Use of Conventional Travel Trailers as a Low-Cost Housing Solution

“The paper arose from a conversation with our sponsor, **Bruce Etkin** (see *About Our Sponsor*) concerning the viability of using small (under 500 square feet), mobile, low cost, single-story units to create a community to house those experiencing homelessness on both a temporary and longer-term basis. Beginning with the property types shown in Table A, a short list of potential options was identified. These included conventional travel trailers, small manufactured (“mobile”) homes, park model homes, tiny homes, modular pods, and motorized recreation vehicles. While reviewing this list, it became clear that conventional travel trailers offered significant potential as suitable, ultra-low cost, mobile housing.

## Conventional Travel Trailers

**There are four distinct types of travel trailers:** conventional, pop-up, fifth wheel, and truck mount. Conventional travel trailers, which are the only type of travel trailer discussed in this paper, are trailers designed to be towed by a car, van, or pick-up truck using a bumper or frame hitch. Only trailers that offer living and sleeping areas, a kitchen, a bathroom with a shower, and HVAC systems will be considered.

While conventional travel trailers can be up to 40 feet in length, this paper will focus on those between 20 and 36 feet in length and that provide between 200 and 340 square feet of living space. This size unit can be configured as a studio, one-bedroom, or two-bedroom home and can provide sleeping accommodations for one to six individuals.



Travel Trailers averaging 20 and 36 feet in length can provide between 200 and 340 square feet of living space.

## Benefits and Advantages

**Conventional travel trailers offer a number of benefits and advantages for use in housing those experiencing homelessness:**

**Cost:** Many factors have a direct impact on the cost of housing. Size, materials, applicable zoning and building codes, means of production, time to produce, required infrastructure, as well as architecture and engineering expenses all play a role. While all of the options reviewed for this article offer significant cost savings over traditional stickbuilt construction, conventional travel trailers are the least costly.

The cost of a ready-to-deploy conventional travel trailer offering 200 to 340 square feet ranges from \$25,000 to \$60,000, depending on the manufacturer, options, and configuration. This cost includes built-in furnishings, appliances (a cooktop, a small oven, a microwave oven, a refrigerator), a heating system, and generally an air-conditioning system. The prices indicated are for individually purchased units before any discount for bulk purchasing.

**Infrastructure:** Conventional travel trailers are designed to be self-contained. Each trailer has internal freshwater and wastewater (gray and black) storage tanks and externally mounted propane tanks. Water and sewage can be dealt with using fresh-water supply and sewage removal services. Gas requirements can be met by routinely refilling the gas storage tanks. Electricity needs can be satisfied by plugging into a 30-50 amp dedicated outlet. Optional solar panel systems are available. As a result, it is possible to use the trailers without the time or cost of building out a supply infrastructure. This being said, the trailers can be attached to standard electric, water, and sewer services if available.

**Foundation:** Travel trailers do not require a permanent foundation. The units are supported by a one or two-axle chassis, which can be supplemented with stabilization braces. Installation can be as simple as rolling the trailer into position, installing the stabilization braces, and plugging into an appropriately sized electrical outlet. Connecting to available water and sewer services is optional. Removal of the trailers at a later date is just a matter of reversing the simple installation process.

**Flexibility:** The unique benefit of using conventional travel trailers is the flexibility they offer.

First, because conventional travel trailers can be operated without being connected to an external water or sewer system, they can be set up and used in areas where such services are not readily available and without the need to develop this type of infrastructure.

Second, because there is no requirement for a permanent foundation, conventional travel trailers can be located on a site typically not suited for conventional housing, such as a parking lot.

Third, because the trailers come fully outfitted with electrical, plumbing, and HVAC systems as well as furniture and appliances, they are ready for immediate occupancy upon delivery.

Fourth, because travel trailers are easy to install and move, they can be placed in a particular location on a short-term basis and moved at a later date. This allows landowners to help the community deal with a critical issue without having to relinquish long-term control over their property. "Landowners, including government entities, faith-based institutions, non-profits, or private entities, can use short-term land leases or use agreements to put their land to good use, possibly earn some income, and offset some expenses without a long-term commitment."

**Economic Viability:** The low initial cost of the units, low cost of installation, the lack of the requirement of significant investment in infrastructure for water, electrical, gas, and sewer services, the lack of a permanent foundation, the low cost of relocating the units to an alternate site, and the ability to use a short-term land lease or use agreement, all make it economically viable to use conventional travel trailers for temporary or longer-term use.

## Objects and Obstacles

**Permanent Use:** The biggest obstacle to using travel trailers in addressing homelessness is the issue of temporary versus permanent occupancy. HUD deems travel trailers to be temporary living quarters intended for recreational, camping, travel, or seasonal use, but not for use as permanent dwellings. While this designation exempts travel trailers from local building codes, HUD's Manufactured Home Construction and Safety Standards (24 CFR part 3280) and its Manufactured Home Procedural and Enforcement regulations (24 CFR part 3282), it results in most jurisdictions placing severe restrictions on the use of travel trailers for anything other than temporary occupancy by limiting use, in many cases, to no more than 28 days of continuous occupancy. In addition, most jurisdictions severely limit where travel trailers can be placed.

Importantly, the Federal Emergency Management Administration (FEMA) has a very different policy on the use of travel trailers. FEMA owns and uses thousands of travel trailers to provide housing to those in need as a result of a disaster and allows for occupancies of a year or more. The trailers used do not comply with either local building codes or HUD manufactured housing requirements.

This raises the issue of the nature of the housing crisis and government's response to it. Homelessness is a national crisis that is not dissimilar to the disasters addressed by FEMA. While the underlying causes are different, in both cases large numbers of people are without housing. What is different is the response. FEMA uses travel trailers to address the issue, while the use of travel trailers to house those who are homeless is prohibited by the enforcement of a series of zoning and building codes. Given the size and scope of the current housing crisis, how can we afford not to set aside some existing regulatory restrictions, even if only on a limited basis, to provide some immediate relief? Building codes are intended to ensure the safety of residential structures and no one denies that there is a need for such standards, but building codes increase the time and cost of construction and not all provisions of local building codes are directly related to building safety. Minimum unit size and minimum energy efficiency standards are just two examples of building code provisions that are not directly related to building safety, but can seriously impair the ability to provide small, low-cost housing to those experiencing homelessness.

**Location:** Zoning codes in most jurisdictions severely limit where travel trailers can be used. As with building codes, zoning provisions such as minimum lot size and density limitations have a negative impact on the production of low-income housing by not only increasing the cost of the housing, but by relegating small, low-cost housing to the fringes of the community where there are few, if any, of the services needed to make the housing viable. An ample supply of low-cost housing is essential for addressing homelessness. However, mandating that this housing be placed in areas with little or no access to public transportation, grocery stores, pharmacies, schools, medical facilities, social services, or jobs is not conducive to helping people maneuver from homelessness to independent living.

**Housing Vouchers:** At present, HUD Section 8 Housing Vouchers cannot be used to cover rent for a travel trailer. This raises the issue of what is the purpose of housing vouchers. If the goal is to get people off of the streets and out of places neither designed for nor fit for human occupation, then well-maintained travel trailers situated in a community with appropriate services should be considered an acceptable housing option. Again, HUD's policy on the use of government funding and vouchers to support the use of travel trailers to house those who have been homeless is in direct conflict with FEMA's use of government funding to purchase and provide the trailers to persons in need during a crisis.



Trinity Hollow, Phase I  
Site Plan, Raleigh,  
North Carolina

## Case Study-Trinity Hollow

Trinity Hollow, located in Raleigh, North Carolina, is being developed by APG Companies to test the concept of using conventional travel trailers to create a small community to house those who experiencing homelessness. Once completed, Trinity Hollow will consist of thirty travel trailers and four single family homes. Phase 1, consisting of five trailers, parking, an outdoor recreation area, a private well water system, connection to public electric supply, and a private septic tank sewer system, has been completed and is ready for occupancy. Unfortunately, the units are not occupied pending resolution of governmental restrictions on the use of the trailers for any purpose other than temporary occupancy and certain zoning code issues. While it is unfortunate that the property is not currently being used for its intended purpose, it has provided actual cost numbers to help illustrate the economic viability of the model.

Tables B and C provide details of development cost and pro forma operations for Trinity Hollow. The all-in per unit cost for a travel trailer unit at Trinity Hollow is \$66,980, including the trailer, land, installation, infrastructure, and soft costs. Pro forma per unit annual operating expenses including utilities are estimated to be \$5,940. When combined with a \$1,320 per year replacement reserve, the estimated expense outlay is expected to be \$7,260 (\$605 per month). The total per unit development cost and estimated operating expenses indicate that conventional travel trailers may be among the most cost-efficient ways to address homelessness.

The other important finding from Trinity Hollow is the potential role of the private sector. Trinity Hollow, while mission driven, is a private sector investment project intended to cover the expenses of holding the land and to produce a small profit. It is being developed using private capital, with no government funding, subsidies, or concessions. First year cash on cash return is predicted to be 6.9%. Using actual development costs, a residual value for the trailers of only 15%, and a 3% inflation factor for revenue, expenses, and the future value of the land, a pro forma internal rate of return (IRR) of 3.6% is achievable over a 10-year holding period (Table D). Any increase in net income during the holding period or in terminal land value will increase the total return significantly. This illustrates that it is possible to achieve a return on investment in a project such as Trinity Hollow.



Trinity Hollow community area.

# Trinity Hollow by the Numbers

Table B

## Trinity Hollow Development Costs

| <b>LAND *</b>                                      | <b>Per Unit</b> |
|--|-----------------|
| Acquisition Price                                  | 20,000          |
| Legal  | 250             |
| <b>Total Land</b>                                  | <b>\$20,250</b> |
| <b>RV UNITS **</b>                                 |                 |
| List Price   | 43,333          |
| Discount (25%)                                     | 10,833          |
| <b>Net Price</b>                                   | <b>\$32,500</b> |
| <b>HARD COSTS *</b>                                |                 |
| Amenity - Common Space Structure                   | 500             |
| Clear, Grade, Storm, Erosion Control, Travel       | 1,750           |
| Dumpster Facilities - Master Site                  | 150             |
| Electrical - RV Home Pad Infrastructure            | 2,250           |
| Landscaping / Hardscaping                          | 1,325           |
| Wastewater - Septic Infrastructure                 | 1,750           |
| Water - Potable Infrastructure                     | 700             |
| Media - WiFi Infrastructure                        | 125             |
| Misc. - Hard Cost                                  | 375             |
| Contingency - Hard Cost                            | 600             |
| Special Inspections / Testing                      | 63              |
| Furniture, Fixtures & Equipment                    | 1,000           |
| <b>Total Hard Costs</b>                            | <b>\$10,588</b> |
| <b>SITE SOFT COSTS *</b>                           |                 |
| Insurance - Hazard & Liability                     | 350             |
| Survey - ALTA, Wetlands & As-Built                 | 350             |
| Phase I - Environmental                            | 175             |
| GEOTECH - Subsurface Soils                         | 75              |
| POA - Site Maintenance                             | 210             |
| Design - Landplanning & Landscape Arch             | 175             |
| Legal - Land Use / Entitlements                    | 175             |
| Design - Civil Infrastructure                      | 250             |
| Design - Signs & Directions                        | 50              |
| Design - Interiors                                 | 150             |
| Property Taxes - Construction Period               | 350             |
| Jurisdiction - Municipal, Permit, Development Fees | 250             |
| Development Management                             | 900             |
| Misc. - Soft Cost                                  | 88              |
| Contingency - Soft Cost                            | 88              |
| <b>Total Site Soft Costs</b>                       | <b>\$3,635</b>  |
| <b>TOTAL COST PER UNIT</b>                         | <b>\$66,973</b> |

\* allocated per unit cost    \*\* actual per unit cost

Table C

## Trinity Hollow Pro Forma Operating Statement

|                                    | <b>Monthly Per Unit<br/>Pro Forma</b> | <b>Annual Per Unit<br/>Pro Forma</b> |
|------------------------------------|---------------------------------------|--------------------------------------|
| <b>INCOME</b>                      |                                       |                                      |
| Rental Income                      | \$1,100 *                             | \$13,200                             |
| Allocated Vacancy & Bad Debt 10.0% | (110)                                 | (1,320)                              |
| <b>Net Rental Income</b>           | <b>\$990</b>                          | <b>\$11,880</b>                      |
| <b>EXPENSES</b>                    |                                       |                                      |
| Management Fee (8.0%)              | \$79                                  | \$950                                |
| Repairs & Maintenance              | 42                                    | 500                                  |
| <b>Utilities</b>                   |                                       |                                      |
| Electricity                        | 100                                   | 1,200                                |
| Water & Sewer                      | **                                    | **                                   |
| Cable & Internet - Basic           | 35                                    | 420                                  |
| Gas                                | 50                                    | 600                                  |
| Landscaping / Lawn                 | 25                                    | 300                                  |
| Trash                              | 25                                    | 300                                  |
| Misc                               | 21                                    | 250                                  |
| Insurance                          | 69                                    | 833                                  |
| Property Tax                       | 49                                    | 590                                  |
| <b>Total Expenses</b>              | <b>\$495</b>                          | <b>\$5,943</b>                       |
| <b>CAP EX RESERVES 10.0%</b>       | <b>\$110</b>                          | <b>\$1,320</b>                       |
| <b>TOTAL EXPENSES AND CAP EX</b>   | <b>\$605</b>                          | <b>\$7,263</b>                       |
| <b>Net Operating Income</b>        | <b>\$385</b>                          | <b>\$4,617</b>                       |

\* HUD maximum rent for efficiency / 1 bedroom apartment

\*\* Well water and septic tank systems owned by community

Table D

**Trinity Hollow Pro Forma Return on Investment Analysis**

**Assumptions**

|                            |                  |                         |                |
|----------------------------|------------------|-------------------------|----------------|
| Units                      | 30               |                         |                |
| Unit Market Price per      | 43,333           | <b>Revenue</b>          |                |
| Unit Acquisition Discount  | 25.00%           | Rent per Unit per Month | 1,100          |
| Unit Acquisition Price per | 32,500           | Vacancy & Rent Loss     | 10.00%         |
|                            |                  | Revenue (Year 1)        | 356,400        |
| Development Cost           |                  |                         |                |
| Land                       | 600,000          | Expenses (Year 1)       | 178,303        |
| Trailers                   | 975,000          |                         |                |
| Other                      | 434,174          | Replacement Reserves    | 10.00%         |
| <b>Total</b>               | <b>2,009,174</b> | 10% of Gross Potential) | <b>39,600</b>  |
|                            |                  | <b>NOI (Year 1)</b>     | <b>138,497</b> |

|  |         |
|--|---------|
| <b>NOI Appreciation</b> . . . . .          | 3.00%   |
| <b>Land Appreciation</b> . . . . .         | 3.00%   |
| <b>Unit Acquisition Discount</b> . . . . . | 25.00%  |
| <b>% Residual Value</b> . . . . .          | 15.00%  |
| <b>Unit Terminal Residual Value</b>        | 195,000 |
| <b>Unit Avg Useful Life - years</b>        | 10      |
| <b>Annual Depreciation</b> . . . . .       | 78,000  |

|   |  |          |              |                  |             |                  |             |                  |          |             |                  |
|---|--|----------|--------------|------------------|-------------|------------------|-------------|------------------|----------|-------------|------------------|
| <b>IRR</b>                              |  |          | <b>-3.4%</b> |                  | <b>0.1%</b> |                  | <b>1.9%</b> |                  |          | <b>3.6%</b> |                  |
| <b>Year</b>                             |  | <b>1</b> | <b>2</b>     | <b>3</b>         | <b>4</b>    | <b>5</b>         | <b>6</b>    | <b>7</b>         | <b>8</b> | <b>9</b>    | <b>10</b>        |
| <b>(Investment)/Income</b> (2,009,174)  |  | 138,497  | 142,652      | 146,931          | 151,339     | 155,879          | 160,556     | 165,372          | 170,334  | 175,444     | 180,707          |
| <b>Unit Residual</b> . . . . .          |  |          |              | 741,000          |             | 585,000          |             | 429,000          |          |             | 195,000          |
| <b>Land Sale Value</b> . . . . .        |  |          |              | 655,636          |             | 695,564          |             | 737,924          |          |             | 806,350          |
| <b>Three Year</b> . . . . . (2,009,174) |  | 138,497  | 142,652      | <b>1,543,567</b> |             |                  |             |                  |          |             |                  |
| <b>Five Year</b> . . . . . (2,009,174)  |  | 138,497  | 142,652      | 146,931          | 151,339     | <b>1,436,444</b> |             |                  |          |             |                  |
| <b>Seven Year</b> . . . . . (2,009,174) |  | 138,497  | 142,652      | 146,931          | 151,339     | 155,879          | 160,556     | <b>1,332,297</b> |          |             |                  |
| <b>Ten Year</b> . . . . . (2,009,174)   |  | 138,497  | 142,652      | 146,931          | 151,339     | 155,879          | 160,556     | 165,372          | 170,334  | 175,444     | <b>1,182,057</b> |

Table E

### Hypothetical 30 Unit Travel Trailer Community - Development Costs

|  | Per Unit<br>Pro Forma | 30 Units<br>Pro Forma |
|--|-----------------------|-----------------------|
| <b>LAND</b>  |                       |                       |
| Acquisition Price                                  | \$- *                 | \$-                   |
| Legal  | 250                   | 7,500                 |
| <b>Total Land</b>                                  | <b>\$250</b>          | <b>\$7,500</b>        |
| <b>RV UNITS</b>                                    |                       |                       |
| List Price   | \$43,333              | \$1,300,000           |
| Discount   | 10,833                | 325,000               |
| <b>Net Price</b>                                   | <b>\$32,500</b>       | <b>\$975,000</b>      |
| <b>HARD COSTS</b>                                  |                       |                       |
| Amenity - Common Space Structure                   | \$500                 | \$15,000              |
| Clear, Grade, Storm, Erosion Control, Travel       | 1,750                 | 52,500                |
| Dumpster Facilities - Master Site                  | 150                   | 4,500                 |
| Electrical - RV Home Pad Infrastructure            | 2,250                 | 67,500                |
| Landscaping / Hardscaping                          | 1,325                 | 39,750                |
| Water - Internal Water Tanks                       | -                     | -                     |
| Sewer - Internal Storage Tanks                     | -                     | -                     |
| Media - WiFi Infrastructure                        | 125                   | 3,750                 |
| Misc. - Hard Cost                                  | 375                   | 11,250                |
| Contingency - Hard Cost                            | 600                   | 18,000                |
| Special Inspections / Testing                      | 63                    | 1,875                 |
| Furniture, Fixtures & Equipment                    | 1,000                 | 30,000                |
| <b>Total Hard Costs</b>                            | <b>\$8,138</b>        | <b>\$244,125</b>      |
| <b>SITE SOFT COSTS</b>                             |                       |                       |
| Insurance - Hazard & Liability                     | \$350                 | \$10,500              |
| Survey - ALTA, Wetlands & As-Built                 | 350                   | 10,500                |
| Phase I - Environmental                            | 175                   | 5,250                 |
| GEOTECH - Subsurface Soils                         | 75                    | 2,250                 |
| POA - Site Maintenance                             | 210                   | 6,300                 |
| Design - Land planning & Landscape Arch            | 175                   | 5,250                 |
| Legal - Land Use / Entitlements                    | 175                   | 5,250                 |
| Design - Civil Infrastructure                      | 250                   | 7,500                 |
| Design - Signs & Directions                        | 50                    | 1,500                 |
| Design - Interiors                                 | 150                   | 4,500                 |
| Property Taxes - Construction Period               | - **                  | - **                  |
| Jurisdiction - Municipal, Permit, Development Fees | 250                   | 7,500                 |
| Development Management                             | 900                   | 27,000                |
| Misc. - Soft Cost                                  | 88                    | 2,625                 |
| Contingency - Soft Cost                            | 88                    | 2,625                 |
| <b>Total Site Soft Costs</b>                       | <b>\$3,285</b>        | <b>\$98,550</b>       |

|   | Per Unit<br>Pro Forma         | 30 Units<br>Pro Forma         |
|---|-------------------------------|-------------------------------|
| <b>TOTAL COST -</b>                           |                               |                               |
| <b>Using Internal Water &amp; Sewer Tanks</b> | <b>\$44,173</b>               | <b>\$1,325,175</b>            |
| Water Connection - Public Water (1 meter)     | ,500                          | 45,000                        |
| Sewer Connection - Public                     | 2,250                         | 67,500                        |
| <b>TOTAL COST -</b>                           |                               |                               |
| <b>With Water and Sewer Connections</b>       | <b>\$47,923</b>               | <b>\$1,437,675</b>            |
|   | <b>Per Unit<br/>Pro Forma</b> | <b>30 Units<br/>Pro Forma</b> |
| <b>ADD-ON OPTIONS</b>                         |                               |                               |
| On-site Manager Housing Unit                  | \$2,500                       | \$75,000                      |
| Social Service / Medical Center               | 5,000                         | 150,000                       |
| Security Fencing                              | 1,400                         | 42,000                        |
| Enhance Security Surveillance System          | 833                           | 25,000                        |
| Small Laundry Facility                        | 2,500                         | 75,000                        |
| <b>Total Options</b>                          | <b>\$12,233</b>               | <b>\$367,000</b>              |
| <b>TOTAL COST WITH ALL ADD-ON OPTIONS</b>     |                               |                               |
| Using Internal Water and Sewage Tanks         | <b>\$56,406</b>               | <b>\$1,692,175</b>            |
| With Water and Sewer Connections              | <b>\$60,156</b>               | <b>\$1,804,675</b>            |

\* Assumes use of government land at no cost

\*\*Assumes exemption for local property taxes

Table F

**Hypothetical 30 Unit Travel Trailer Community -  
Operating Statement**

|  | Monthly Per Unit<br>Pro Forma | Annual Per Unit<br>Pro Forma |
|--|-------------------------------|------------------------------|
| <b>INCOME</b>  |                               |                              |
| Rental Income . . . . .  | \$1,100 *                     | \$13,200 *                   |
| Allocated Vacancy & Bad Debt 10.0% . . . . .                       | (110.00)                      | (1,320)                      |
| Net Rental Income . . . . .  | \$990                         | \$11,880                     |
| <b>EXPENSES</b>  |                               |                              |
| Management Fee n/a . . . . .                                       | n/a                           | n/a                          |
| Repairs & Maintenance . . . . .                                    | 42                            | 500                          |
| <b>Utilities</b>   |                               |                              |
| Electricity . . . . .  | 125                           | 1,500                        |
| Water & Sewer - Using Supply and Removal Services . . . . .        | 500                           | 6,000                        |
| or   |                               |                              |
| Water and Sewer - Public Connections . . . . .                     | 125                           | 1,500                        |
| Cable & Internet - Basic . . . . .                                 | 35                            | 420                          |
| Gas . . . . .  | 75                            | 900                          |
| Landscaping / Lawn . . . . .                                       | 25                            | 300                          |
| Trash . . . . .  | 25                            | 300                          |
| Misc. . . . .  | 21                            | 250                          |
| Insurance . . . . .  | 69                            | 833                          |
| Property Tax . . . . .   | - **                          | - **                         |
| <b>Total Expenses with Water &amp; Sewage Services</b>             | <b>\$1,042</b>                | <b>\$12,003</b>              |
| <b>Total Expenses with Public Water &amp; Sewer</b> . . . . .      | <b>667</b>                    | <b>7,503</b>                 |
| <b>CAP EX RESERVES 10.0%</b> . . . . .                             | <b>\$110</b>                  | <b>\$1,320</b>               |
| <b>TOTAL EXPENSES AND CAP EX - Water &amp; Sewer Services</b>      | <b>\$1,152</b>                | <b>\$13,323</b>              |
| <b>TOTAL EXPENSES AND CAP EX - Public Water &amp; Sewer</b>        | <b>\$777</b>                  | <b>\$9,323</b>               |
| <b>Net Operating Income - Water &amp; Sewer Services</b> . . . . . | <b>\$- ***</b>                | <b>\$- ***</b>               |
| <b>Net Operating Income - Public Water &amp; Sewer</b> . . . . .   | <b>\$213</b>                  | <b>\$2,557</b>               |

\* HUD maximum rent for efficiency / 1 bedroom apartment  
 \*\* Assumes exemption from local property taxes  
 \*\*\* Assumes a \$190 water & sewer service surcharge

## Alternative Low-Cost Housing Options

As mentioned earlier, a number of other options for providing low- or ultra low-cost housing for those experiencing homelessness were reviewed in preparing this paper.

**Manufactured (Mobile) Homes:** Small manufactured (formerly referred to as “mobile”) homes are a viable, albeit much more expensive, alternative to conventional travel trailers. Like travel trailers, manufactured homes are built upon a chassis with one or more axles, can be positioned in place with minimum effort, and can be moved with little difficulty at a future date. Unlike travel trailers, manufactured homes do not have self-contained water or waste storage and must therefore be attached to standard water and sewer services. The big positive for manufactured homes is that they must be built to HUD’s Manufactured Home Construction and Safety Standards and HUD’s Manufactured Home Procedural and Enforcement regulations. Compliance with these standards exempts manufactured homes from local building codes thereby allowing for permanent occupancy. Unfortunately, they are not exempt from restrictive zoning codes limiting where manufactured homes can be placed.



**Park Model Homes:** Park model homes, while similar to conventional travel trailers in size and interior layout, differ considerably in exterior appearance in that they are designed to look more like manufactured housing. Again, they are built on a chassis with one or two axles but are not as mobile as travel trailers. They generally do not have water or waste storage and must therefore be connected to standard water and waste services. Like travel trailers, they are considered to be temporary housing and are therefore subject to the same use limitations as travel trailers and to same restrictive zoning regulations that apply to travel trailers and manufactured homes. Generally, park model homes are more expensive to buy and install than travel trailers.

**Tiny Homes:** Tiny homes are a more nebulous category of alternative housing. Some tiny homes are built on a trailer chassis without compliance with local building codes and are therefore restricted to temporary occupancy restrictions and subject to the same severe zoning limitations as travel trailers. Trailer-style tiny homes do not usually have water and waste storage so they must be connected to standard services. They do have the ability to be moved from place to place but are not as mobile as travel trailers. Tiny homes are generally more expensive than travel trailers.



Other tiny homes are built to local building codes on permanent foundations using standard water, sewer, gas, and electric services. Given their compliance with local building codes they can be used for permanent occupancy. While they are frequently subject to certain restrictive zoning provisions, there is a growing trend among municipalities to allow tiny homes that are built on permanent foundations to be used as auxiliary dwelling units (ADUs). Tiny homes built on permanent foundations are obviously not mobile and are much more expensive than travel trailers.

**Modular Pods:** Modular homes are built off-site, delivered to the site in whole or in sections, and are placed on a permanent foundation. As they are constructed in compliance with local building codes, they are eligible for permanent occupancy. Most jurisdictions have moved or are moving toward allowing modular homes to be used in any location zoned for similar sized homes. While cheaper than site-built homes, they are generally much larger and far more expensive than a travel trailer.

There is, however, a new concept under consideration for a very small modular home (less than 500 sq ft) that is designed to be movable. Like full-sized modular homes, modular pods are constructed off site in compliance with local build code and then delivered to the site as a completed unit, but, unlike full-size modular, modular pods are designed to be positioned on either a permanent or a temporary foundation, such as a helical pier foundation. In theory, the modular pod would allow for permanent occupancy, while placement on the temporary foundation would allow the pod to be moved to a new location at a later date without the expense of having to abandon a permanent foundation. At the moment the cost of such a product is not known but would be expected to be higher than the cost of a travel trailer. An additional concern is the viability of using the temporary foundation format given current building codes.



**Motorized Recreational Vehicles:** Motorized recreational vehicles, commonly referred to as RVs, have all of the features of a conventional travel trailer but are more mobile in that they are self propelled. They are not built in compliance with local building codes or intended for permanent occupancy and are, therefore, subject to the same use and placement restrictions as conventional travel trailers. Being motorized vehicles, they are vastly more expensive than travel trailers.

## Recommendations

Initial indications are that conventional travel trailers can be a very low-cost means of providing housing for those who are experiencing homelessness. The trailers are built in compliance with RV Industry Association standards by major manufacturers, including Airstream, Winnebago, Jayco, and Forrest River (a Berkshire Hathaway company). They are readily available and can be quickly acquired and installed to create a small community that, unlike the co-living situation so frequently used in addressing homelessness, provides residents with a private home that includes a kitchen, bathroom, and living and sleeping space.

There are, however, several issues that need to be addressed for conventional travel trailers to be used in this way. At a local level, this includes changing or waiving restrictions to allow for occupancies of a year or more and to allow small communities serving those who have experienced homelessness to be located in more urban areas that offer access to essential services. At a national level, HUD needs to amend its policies to allow travel trailers to be used for longer-term occupancy when being used to address homelessness. HUD also needs to allow its housing vouchers to be used in such situations to help fund homelessness initiatives.

Other questions tend to focus on concerns about the useful life of a trailer when used to house those experiencing homelessness, the cost of maintaining a travel trailer, and the economic viability of creating and operating a community comprised of travel trailers.

## Recommended Action

To fully evaluate the pragmatic and economic viability of using conventional travel trailers as housing requires the establishment and operation of one or more test communities. Table E provides a list of estimated per-unit pricing for the trailers assuming the development of a thirty-unit community. Table F provides the estimated cost of operating the trailers but does not include the cost of managing the property or providing social services to residents. Please note, as pricing of these items varies widely by location, all costs listed are estimates.

A threshold decision for the establishment of a travel trailer community is whether to rely on the trailers' internal water and sewage storage tanks and use a water supply and sewage pump-out service or to connect the trailers to public water and sewer. Using a water supply and sewage removal service eliminates the time and cost of building the infrastructure required for connecting to public services. As a result, communities that use a water supply and sewage removal services can be put into service very quickly, can be placed in areas without access to public utilities, and can be moved at a later date without having to sacrifice the cost spent to build out the infrastructure required for access to public utilities. In short, communities that rely on water supply and sewage removal services cost less to develop, can be put into service far more rapidly, and are more flexible than those connected to public utilities. However, the use of a water supply and sewage removal service significantly increases operating expenses above those for a community connected to the public water and sewer.

Using the cost numbers established by Trinity Hollow as a guide, Table E shows that a basic project consisting of one to thirty trailers placed on a municipal parking lot, using a water supply and sewage removal service, and without any add-on options, can cost as little as \$44,173 per unit or approximately \$1,325,000 for a thirty-unit community. This bare-bones approach is both the cheapest and fastest way to create a travel trailer community. A more elaborate set-up with public water and sewer services, a common area, a unit for a resident manager, a meeting facility, a laundry facility, and security fences raises the cost significantly, with the pro forma model indicating a price of approximately \$60,000 per unit or \$1,800,000 for a thirty-unit community (Table E).

Operating expenses for a travel trailer community are relatively straightforward (Table F), with the most significant difference in operating expenses being related to water and sewage. Excluding is \$1,042, nearly half of which is related to supplying water and removing sewage. Adding a cap ex reserve contribution of \$110 per month increases the total monthly outlay to operate this type of property to \$1,152. If the trailers in the community are connected to public water and sewer, the estimated monthly operating expense drops to \$667 per trailer or \$777 after a cap ex reserve contribution of \$110 per month. It is important to note that the cost of water supply and sewage removal services vary widely by area of the country and the exact size and location of the community.

## Essential steps for developing a travel trailer community are:

- Issue a declaration that homelessness represents a state of emergency under which the appropriate government agencies will have the authority to waive or amend any and all rules or regulations preventing or hindering the use of conventional travel trailers as temporary or semi-permanent housing to address homelessness. The declaration of a state of emergency can have a limited initial effective period of not less than one year, provided it can be extended as needed.
- Identify a suitably situated parcel of land that has adequate transportation available and is near essential services. Generally, urban sites are better suited for this use than suburban ones. City-owned parking lots, other government-owned land that is not currently being used, land owned by a non-profit entity, or privately held land are all viable options. The land must be available for use for a minimum of one year, with five years being preferable.

- Determine the size and scope of the project. Urgency of need and the size and scope of the community have a profound impact not only on the speed with which the community can be developed, but on the cost and efficiency of operations. Small bare-bones communities in which the trailers are placed on a parking lot, use a water supply and sewage removal service, and do not include any of the add-on options listed in Table E are the cheapest and fastest to create but cost more to operate due to the need for potable water supply and sewage removal services. This type of community is especially well suited for emergency situations, where placement on the site is anticipated to be for a short term or when public utilities are not available. Larger communities that include all of the add-on options identified in Table E or that are going to be connected to public water and sewer services will take more time and be more expensive to develop but will offer some efficiencies in operations. This type of community is better suited for longer-term occupancy and for when the community is expected to be in place for a longer period of time.
- Identify a service provider or a collection of service providers with the capacity to oversee the operation of the property and to provide essential social services to the community's residents throughout the term of their tenancy. For example, Lotus Campaign ([www.lotuscampaign.org](http://www.lotuscampaign.org)) enters into contractual agreements with existing local service providers who have been selected based on the strength of their social service program and their ability to provide comprehensive social services throughout the full term of residency. These providers, referred to as Sponsoring Organizations, are responsible for identifying potential residents who are ready to live in a community such as the one being proposed, for providing comprehensive social services throughout the full term of the residency, and for conducting an in-unit visit with the resident a minimum of once per month.

The importance of the social service organizations to the success of the proposed communities and their residents cannot be overstated. The background, experience, physical and mental conditions, and needs of those experiencing homelessness vary widely. Not all housing situations options or every social service program is suitable for every person. The success of the individual resident and the community depends on careful consideration of whether a particular housing situation is appropriate for that individual and the necessary level of support. The communities proposed in this paper are not a one-size-fits-all solution but are intended to be one of a wide range of housing options available for use in addressing homelessness. It is up to the social service organizations to match residents with appropriate housing and to provide the necessary support.

- Establish a schedule of requirements for residency that are contractually agreed to by the resident. Essential terms for this contract include the resident agreeing to participate in the social service programs specified by the social service organization overseeing the property, agreeing to a minimum of a once-per-month visit within the unit, and acknowledging that failure to comply with the terms of the agreement or the rules of the community can result in their removal from the community.



The questions as to the useful life of a travel trailer and the cost of maintaining that trailer when it is used to house those experiencing homelessness are directly tied to the matching of residents to the housing option, continuing social services, and the enforcement of a schedule of requirements for residency. A frequently heard comment is that people who have experienced homelessness cause excessive damage to properties. This belief is in direct conflict with the experience of Lotus Campaign ([www.lotuscampaign.org](http://www.lotuscampaign.org)). In its first five years of operation, Lotus Campaign facilitated the placement of over 425 people in market-rate apartments. During this period, only six people failed to complete their residency successfully, there was only one eviction, and total damages were less than \$30,000. In short, the performance of Lotus Campaign sponsored residents far exceeded that of non-sponsored market-rate tenants in the percentage of successful full-term leases, lower eviction rates, and far lower average damages. There is no reason to believe a carefully designed program for placing those who have experienced homelessness into trailer homes will be any less successful than Lotus Campaign's program of placing residents in market-rate apartments.

- Apply for HUD's approval to allow the conventional travel trailers to be used, even if only on a test basis, to provide housing on both a temporary and semi-permanent basis in the proposed community.
- Apply for HUD's approval to allow HUD funding and HUD housing vouchers to be used, even if only on a test basis, to support the use of conventional trailer trailers to address homelessness.

## Conclusion

Homelessness is a crisis that has a profound impact on every segment of a community. No sector is immune – police, emergency services, social services, medical services, public health, businesses, business development, parks and recreation, and the general public are all negatively affected. While it is virtually impossible to accurately quantify the total economic impact of homelessness on a community, a common estimate is that it costs a community approximately \$40,000 per homeless person per year just for tangible items like police, emergency housing, and social and medical services. Our current reactive response to homelessness is neither economically nor morally sustainable. The situation demands a proactive approach that addresses both housing and social services and that actively encourages new approaches and innovation. To do this will require political will and courage on the part of elected officials and regulators. It has become standard for there to be strong, vocal opposition to every proposed low-income housing project. When undertaking a project like the one proposed in this paper, which involves homelessness and travel trailers, it is reasonable to expect that public opposition will be stronger and more vocal than the unfortunate norm.

The current situation requires that all options and ideas be explored and, where appropriate, tested. The use of conventional travel trailers is just one such idea. In the end, it may turn out that it is not a viable idea, but any rejection of the concept should be an informed rejection and not a knee-jerk reaction.

Lotus Campaign would like to hear your comments or thoughts on this paper, as well as any ideas you might have on innovative approaches or solutions to providing housing to those who have experienced homelessness. Please feel free to contact Philip Payne, our Chairman at [editor.housinginnovationseries.com](mailto:editor.housinginnovationseries.com) or Beth Silverman, our Executive Director, at [info.lotuscampaign.org](http://info.lotuscampaign.org) should you want to share your thoughts or learn more about Lotus Campaign.