

**PRIMARY ORGANIZATION**

Ecobaun is a construction design and management company.

**EXECUTIVE SUMMARY**

LMH is a patented portable multi-unit housing. As construction experts, we decided to provide proven, transitional housing built for cost and durability. The LMH unit provides a portable “hardened” shelter with uniquely prefabricated living modules offering safety, privacy, bed, toilet, shower, sink and internet communications. LMH can be connected to utilities or operate as standalone. It is expandable, and modules are interchangeable.

LMH offers the same specified amenities as ground up housing at a fraction of current per unit cost. Durable and watertight, it can be setup anywhere without complication. LMH is simple, reliable, upgradable, and reduces the cost impact to Cities for unprotected homeless.

**GAME-CHANGING APPROACH**

Seemingly every policy group has ideas how to solve this crisis. There is no sales pitch when providing solutions to a crisis affecting communities globally. Do whatever it takes to increase safety and wellbeing.

Our idea is radical. Supply a cost-effective solution that provides the simple dignity of shelter, security and hygiene, individually or with families. Engage government and corporate sponsors to create LMH villages, where people can find refuge and plan their futures away from living on the street, in tents or dormitories.

Our solution will deliver transitional housing at over 20 to 1 cost savings, based on our patented design for prefabricated living module inserts. Once the LHM unit is setup, living modules can be simply maintained, replaced or upgraded in place without replacing unit, and at a fraction of the cost.

No more prolonged city planning, funding shortfalls, negotiating tax breaks with developers, local opposition to permanent residence, and ridiculous construction cost. These villages will be embraced and branded by corporate sponsors who will partner to underwrite LMH units individually or whole neighborhoods, while the construction, assembly, and maintenance will be undertaken as local work program.

**EFFECTIVENESS**

In Los Angeles, the homeless population has grown to 58,000 with a 26% increase in the past year, with supportive housing projects in Los Angeles County cost an average of \$420,000 per unit. In Santa Clara, the homelessness direct per person cost to the taxpayer is a stunning \$62,473 in combined medical, judicial, etc. costs, notwithstanding cost of cleanup, disease, and tourism. The increasing problem with the current delivery model for the cost and availability of affordable housing Los Angeles isn't working. We plan on a sweeping program to provide homeless people access to this transitional housing.

We are not addressing the cause of homelessness but concentrating on providing a home that provides basic care. Besides their health and welfare, this increases chances for an individual's lasting success, landing and keeping a job, and helping others struggling with reintegration into society.

### **PROJECTED IMPACT**

The most immediate measurable outcome of our service solution is the cost savings and flexibility the City and County is afforded when planning the housing placement in the affected areas. These housing solutions can now be measured in months vs. years.

Persistently homeless not eligible for affordable housing, can be housed in the LMH shelter. The LMH design and durability lends itself to providing a viable option to normal housing. Supplying housing in local neighborhoods for persistently homeless, increase savings over the base cost model for government. Open living, tents and dormitories are currently the only available option for this demographic.

The LMH shelter imparts itself to corporate sponsorship. Shelters organized in areas or "villages" will be customized graphically to show companies branding. Companies will develop internal employee participation programs and public interest through advertising showing community commitment, reducing the burden on government.

When we provide consistent and reliable access to housing, the ultimate long-term impact is saving lives and bringing families back together.

### **TEAM**

John Wong, Tom Fee and Mike Gonzales, have worked together for over 20 years in a multitude of projects throughout California and Western U.S. With very strong individual backgrounds and a lifetime of project collaboration together, their current focus is to find a solution to the homeless problem that is plaguing many major cities in California. They understand that the source of homelessness is due to several causes, and very complicated to solve. Instead of focusing on the source, the group decided to dedicate its energy in finding ways to provide a low-cost housing solution that is quick and easy to deploy. We care deeply about the ongoing impact that homelessness has on both the victims and on the urban city centers they inhabit. We hope our solution will greatly enhance the hygienic condition of the victims and city streets, help preserve the dignity of the homeless, and help stop the decay of our urban centers.

### **EXPERIENCE**

For over 30 years, John Wong has been a corporate executive with organizations such as Tishman Construction, Hilton Hotel, LAUSD, AECOM, and OTO Development. Having charge of over \$4B of capital projects, Mr. Wong understands all aspects of development, planning, design, construction, governmental approval, and operations. He understands the interests of multiple stakeholders and manages in a way that leads everyone to a common vision.

For over 30 years, Tom Fee has successfully led teams managing development, design, and construction for private developers and government entities. He is an expert in design development, construction management, planning, scheduling, estimating, contracts, bidding, and buyout.

For over 35 years, Mike Gonzales has been supervising commercial and industrial construction delivery for public and private sector. Mike's background is diverse in large commercial and industrial delivery and will be managing unit transportation, module assembly, physical setup and coordination of process with all agencies.

### **FRONT LINE REPRESENTATIVE**

Tom Fee solves large scale problems. He organizes people and material with effective results. Traveling to the Philippines annually to work at home that adopts and raises abused children changed the way he sees people in need. Working in downtown LA for the last three years gave him a keen sense of the growing homeless population and their specific needs. After studying the problem and solutions for over a year Tom and his partners began working on pragmatic solutions.

We found if hardened housing can be deployed quickly and inexpensively in specific locations, it reduces government support cost while supplying the critical amenities required for re-integration. The money savings supports funding for additional units, and the critical support programs helping people out of the situation. The key is flexibility and cost while providing reliable living space, to give people the simple dignity of shelter, security, and hygiene.

### **ALIGNMENT WITH COUNTY APPROVED STRATEGIES TO COMBAT HOMELESSNESS**

#### **SYSTEMS INTEGRATION**

Coordinated Entry System (CES). CES provides a common database with data sharing, a real-time list of individuals experiencing homelessness in our communities.

LMH will aid in CES planning and add flexibility and options when coordinating the real-time list of individuals matching people to available housing by increasing the unit inventory count and distribution. Ecobaun will be working with placement agencies when planning unit study and deployment where and as needed.

Depending on the immediate or long-term needs for housing, the LMH unit scalability will be key for deployment throughout the region. The LMH shell and prefabricated living modules can be assembled within 90 days. There is no limitation for production due to the simple prefabricated construction and unlimited availability of shells.

The LMH specified design amenities allow the planned use of this transitional housing to be considered in lieu of permanent housing types, allowing agencies unlimited flexibility and placement at a fraction of the cost.

LMH supports local agencies by adding incredible value to the normal per unit delivery costs cities are currently experiencing. These savings can be redirected to support our housing programs or the critical individual support programs for affected individuals.

In addition to working directly with placement agencies, LMH will also coordinate with local work program agencies. The prefabricated living modules are manufactured in a central plant and assembled into the units locally. LMH intends to establish a work program for assembly and maintenance in conjunction with local agency work program/s. Our Corporate sponsorship program for LMH villages will create a synergy with all local agencies and NGO's.

### **PROBLEM**

We studied various aspects of the homeless problem as we do with any development challenge. First researching common homeless demographic and general conditions for homelessness. We reviewed different bond, design and development programs for various types of affordable housing. We reviewed typical challenges to the public-private partnerships for this type of development.

Reported government costs are as high as \$83,000 annually per persistently homeless individual. Direct per person cost to the taxpayer is a stunning \$62,473 in combined medical, judicial and other costs. Current housing programs have proven too costly and litigious. An analysis of state tax credit projects for supportive housing projects in Los Angeles County cost an average of \$420,000 per affordable unit.

By providing simple and transitional "hardened" housing that supplies safety, privacy, proper hygiene, communications and storage is a key element to allowing an individual what they need to function socially to transition back, juxtaposed to verses open, tented or dorm style conditions.

As a program, it is critical for the housing supply to be scalable and readily deployable. When housing is provided locally and close to the onset of homelessness, will reduce risk and increase the overall success for these individuals.

### **TARGET BENEFICIARIES**

Our target populations are every person that can benefit from safety, privacy, proper hygiene, communications and storage but can't afford it. When studying homelessness, there are several categories for individuals circumstantially in transition to habitually homeless.

Populations that benefit from the LMH shelter are diverse. Our shelters can be deployed directly in urban sections adjacent populations or in surrounding region where larger LMH villages can be set up.

Persistently homeless are typically difficult to qualify for ground up affordable housing yet pose the most risk to the state and local government for support and cost. By providing simple transitional housing to this group, reduces overall cost and impact.

LMH is a portable hardened shelter, with prefabricated “living modules”, offering safety, privacy, bed, toilet, shower, sink and communications. LMH can be connected to local utilities or operate as standalone.

### **LOCAL CONDITIONS**

In our design development, we targeted challenges unique to cities/counties regarding homeless housing. These areas are experiencing large homeless populations spread out over larger areas. Our design supplies a hardened shelter meeting specification, while staying transitional and portable.

Our approach is treating the homeless condition as transitional. Like a doctor prescribing medication so the body can heal itself. After the body heals, there is no longer a need for the medicine, with the understanding sometimes the patient requires lifetime treatment.

LMH will be deployed over a large landscape quickly, efficiently and inexpensively. The living modules are prefabricated and can be swapped out in place during maintenance upgrades or with new floor plans depending on shifting demographic I.E. family vs individuals. LMH unit is scalable and can fit into any neighborhood with temp utility connection to sewer, water and power. We also include a standalone model that can be maintained without utility connections if not available.

LMH provides mission critical amenities found in normal housing at a fractional cost compared to current (per unit) housing program costs.

### **TRACKING & METRICS**

We intend to track the impact of our service solutions in 3 specific areas.

- **Cost Savings** – Comparatively measured against other current housing programs, we will track cost savings for providing unit housing and account for value added. This value can translate either into additional units produced or reallocating the cost savings toward applicable support programs. We will also track the marketable corporate sponsorship underwriting to offset the City and County cost for the LMH units.
- **Individuals Housed** – Specifically, we will be tracking the impact of the service solution via deployed LMH units. Calculating performance will be measured mathematically by total individuals housed.
- **Growth Value** – Using the LA Homeless Challenge as a vehicle for measuring the success of cost savings and individuals housed, we intend on duplicating the efforts and successes to other cities and states.

**PROJECT PLANNING**

All final LMH unit design is complete. The startup distribution will used as follows:

Conduct final design and housing specification constructability review.

Setup, construct and assemble 20' prototype (4 unit) LHM. This process includes validating all production and assembly costs, production schedule and setting up locations for module production and shell retrofit.

**Proof of Concept**

- LMH shell retrofitted from locally obtained shipping containers, using a unique universal design template cutout of doors and windows.
- The living module is a standalone prefabricated living unit that includes toilet, sink, shower, bed and storage.
- Each module is built to specifications and based on the several floor plans.
- The prototype will be using a 20 shell with 4 living units installed.
- Living modules come in a variety of unique floor plans, depending on design requirement. Module floor plans will match shell exterior door and window cutouts for universal fit. We currently have 8 available floor plans.
- LMH modules are easily maintained with sturdy PVC interior surfaces.
- Modules can be replaced individually without affecting the shell. Interiors can be replaced periodically at fractional cost to whole housing replacement.
- Locate and validate unit assembly and distribution location/s.
- Confirm scalability, production assembly and delivery schedules.
- Commission finished prototype while finalizing all production and delivery costs.
- Work with agency and private owners to locate LMH village locations with utility assignments.
- Produce 5-year production cash flow and unit area mapping showing the LMH rollout and proven scalability.
- Develop presentation plan for corporation underwriting and village sponsorship.

**SCALABILITY**

We specialize in organizing large commercial and industrial project delivery. We are experts in organizing resources required to scale up this type of unit delivery while adjusting for actual conditions. Our design program is tailored specifically for scalability of the unit production.

Production for the LMH units is bifurcated. Shells are delivered to our production yard, then retrofitted to receive module inserts. Another production prefabricates module panels in a central plant. Once complete prefabricated panels are shipped to the shell yard where they are assembled and inserted into the finished unit.

Areas for unit distribution are pre-determined. The units are delivered via simple roll-off delivery, organized and hooked to utilities or turned on if stand alone.

Depending on need, production expansion in the region can be accommodated as necessary.

To pace with expansion in the region and US, the shell retrofit/assemble will be expanded into other cities. All prefabricated living module panels are built in a central plant location. These panels are then shipped to the various locations for assembly and insertion into the shell prior to delivery and setup.

**Work Program Opportunities**

We intend to work with local agencies to create work opportunities for local communities.

- LMH unit assembly.
- Module assembly for those who qualify.
- Village maintenance.
- Employee ownership programs.

**RESOURCE REQUIREMENTS****BUDGET**

See Cost and Cashflow

**OTHER REQUIREMENTS**

We intend to actively pursue corporate sponsorship and branding of the villages and work with them to setup and activate employee participation programs, etc. Winning the LA Homeless Challenge will gain credibility and advance our goal to have these villages privately funded.

**NEXT STEPS**

Once we begin constructability review and prototype construction, we will meet with city officials to review current demographic and propose relevant locations for the LHM placement. After several locations are selected, we determine unit type by area utility connections or unit standalones.

At the same time, we begin engagement for corporate sponsorship for the material underwriting at these locations. Here is an example of the corporate branding for an LHM village: <https://youtu.be/RR2lzoelqSY> We also begin discussions with City and County officials to begin the planning phase for populating these locations.

We intend to build on this strategy outlined for providing a wide net of LMH unit distribution.

No Gimmicks – The LMH unit is a sturdy portable building. LMH living modules are prefabricated then inserted and secured into the building unit end to end. The unit offers a secure sleeping space with sink, toilet, and shower to individuals or family depending on the floor plan. It can even be configured into a bank of toilets and Showers. There are no limitations to interior configuration or how these LMH units are organized, stacked, placed, etc.

The LMH unit fits into a typical parking space. 10 parking spaces can house 40 people. Stack those units and it doubles to 80. The unit is portable, easily relocated or reconfigured. It connects directly to utilities or operates as a standalone. The interior surfaces are easily cleaned and sterilized. floorplans are universally compatible and easily replaceable inside the shell.