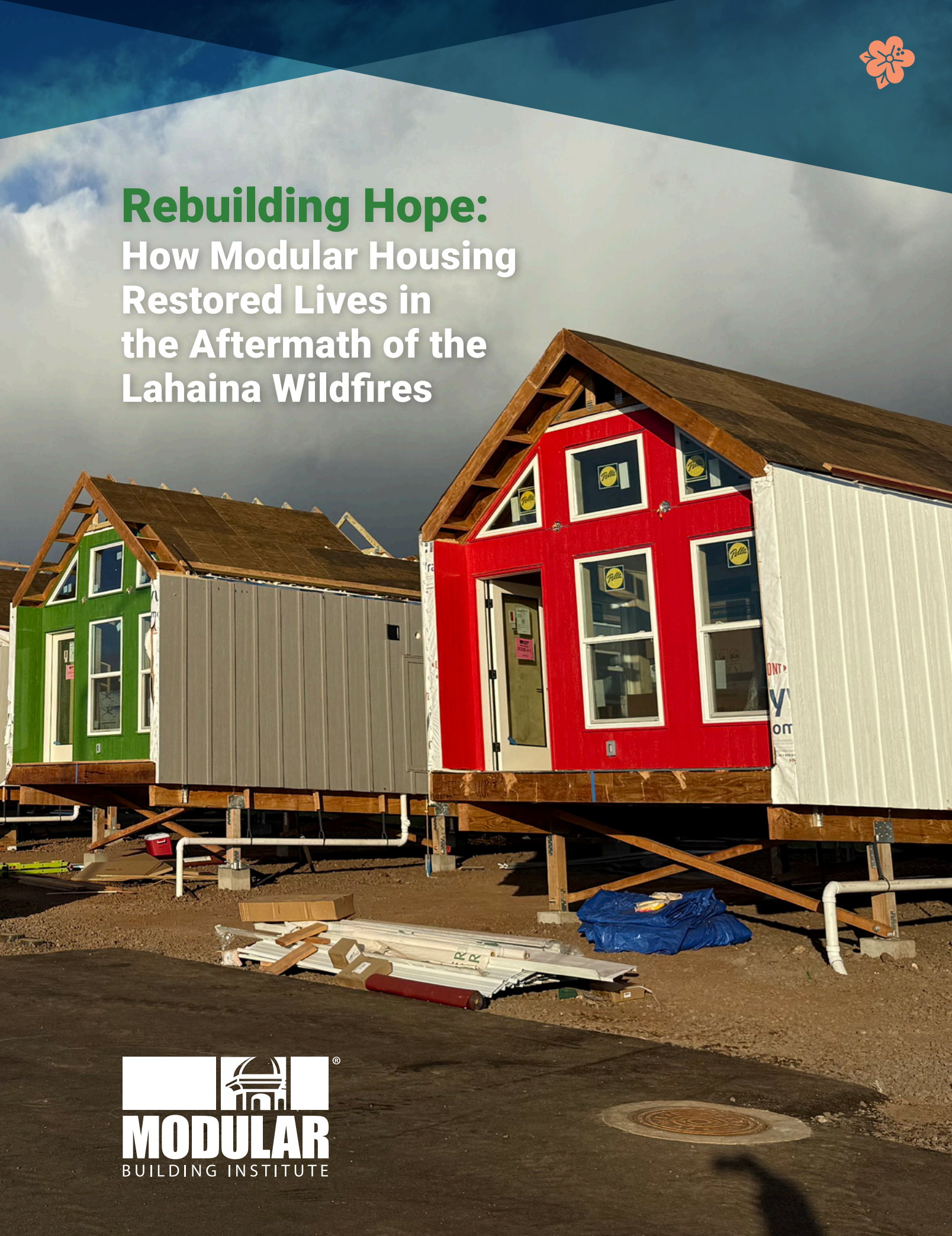
Rebuilding Hope:

How Modular Housing Restored Lives in the Aftermath of the Lahaina Wildfires



MODULAR®
BUILDING INSTITUTE

Modular Construction:
A History of Results and an Unlimited Future

The modular construction industry has long contributed to disaster relief projects by providing emergency shelters, healthcare facilities, administrative structures, temporary schools, and more. But regardless of the type of disaster, the collective need for housing—both in the immediate aftermath and during an area's long-term recovery—is constant.

Historically, state and federal agencies bring in relocatable shelters to house displaced residents, but these shelters, and their availability, are designed to be temporary. Unfortunately, the need for safe housing doesn't change following the removal of these structures.

While relocatable buildings can meet short-term living needs, permanent modular housing has always been an ideal long-term solution to rebuilding after a natural disaster. Such homes—built and finished in a fraction of the time of traditional alternatives—are completed offsite, transported in pieces to affected areas, and built to the same local codes and regulations as pre-existing structures.

Disasters affect people, and the loss of permanent housing due to these disasters creates a ripple effect of negative outcomes, including illness, abuse, poverty, unemployment, and prolonged homelessness. Beyond the individual, a widespread lack of permanent housing among working adults can also affect the greater economy, resulting in greater absenteeism, presenteeism, and overall productivity loss.

In this case study, we explore how the State of Hawaii worked with MBI members and other organizations to quickly respond to the long-term housing needs of those impacted by the wildfires in the town of Lahaina on Hawaii's island of Maui.

The modular building industry has always been in a strong position to contribute to disaster relief, and the capability of the industry to continue this support into the future has no boundaries. From design to construction to delivery, our industry's efforts to permanently house the residents of Lahaina proves this potential. The next challenge, however, will always be coming.

I urge you to contact our team at the Modular Building Institute today to learn more about how to be prepared before that challenge arrives. Our industry is ready now.

Tom Hardiman, CAE
Executive Director
Modular Building Institute
modular.org

Rebuilding Hope:
How Modular Housing Restored Lives in the Aftermath of the Lahaina Wildfires

A case study from the Modular Building Institute.

About the Modular Building Institute (MBI)

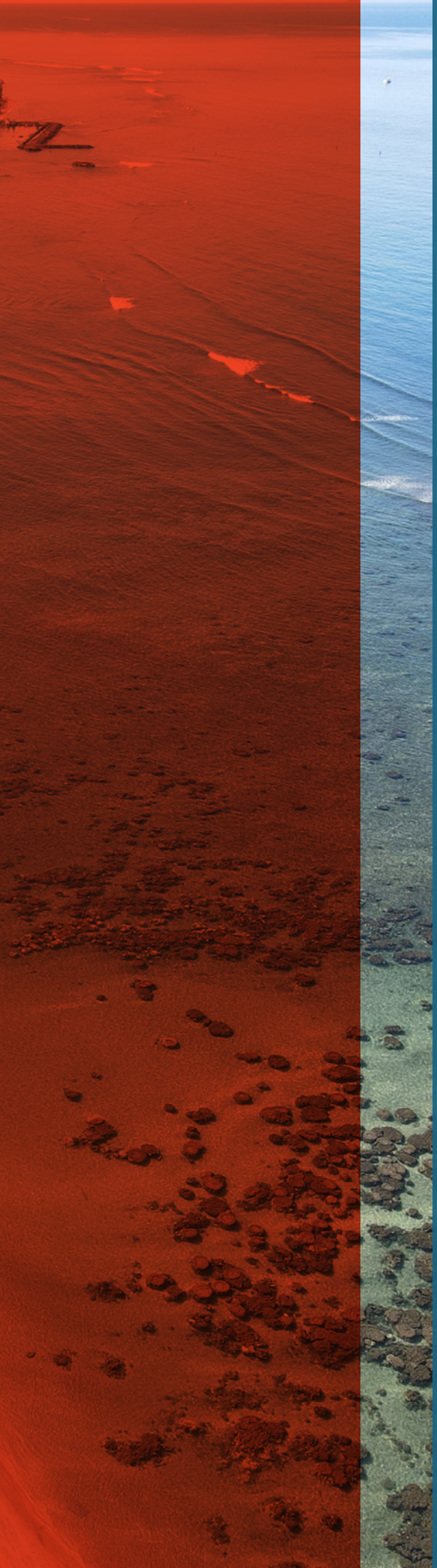
Founded in 1983, the Modular Building Institute (MBI) is the international non-profit trade association serving the commercial modular construction industry. Members are manufacturers, design professionals, contractors, and dealers in two distinct segments of the industry: permanent modular construction and relocatable buildings.

As The Voice of Commercial Modular ConstructionTM, it is the mission of MBI to expand the use of offsite and modular construction through innovative construction practices, outreach and education to the construction community and customers, and recognition of high-quality modular designs and facilities.

To learn more about the benefits of modular construction, visit modular.org.

Image courtesy of Marex Road Services.

Cover image courtesy of Fading West.



In the early hours of August 8, 2023, a brush fire near Lahaina, Hawaii, sparked under the dry, volatile conditions of Hawaii's peak fire season. Fueled by severe drought and high winds from Hurricane Dora's distant passage, the fire rapidly spread across Maui, catching residents off guard. Within hours, Lahaina—a historic coastal town home to over 12,000 people—was overwhelmed. Downed power lines severed communications, road closures blocked escape routes, and depleted water systems left firefighters with insufficient resources to battle the blaze.

By the next day, much of Lahaina had been reduced to ashes. Nearly 12,000 residents were displaced, 102 lives were lost, and more than 2,200 homes were destroyed, compounding the island's existing housing challenges. Amidst the devastation stood the charred but resilient 150-year-old Banyan Tree, a poignant symbol of hope for the community.

In response to this unprecedented disaster—one of the deadliest fires in modern U.S. history—state and federal governments launched a coordinated recovery effort. Additional support included temporary housing assistance, infrastructure repair funding, and long-term recovery programs designed to rebuild affected communities. Federal aid was directed to help residents and businesses recover and restore a sense of normalcy.

Early Collaboration with the Modular Building Institute

Less than a month after the devastating Maui wildfires, Cheryl O'Connor contacted the Modular Building Institute (MBI) in early September 2023. O'Connor had been tasked to identify housing solutions for the displaced residents of Lahaina.

"After talking with her and understanding the depth of what they were dealing with, we began to help her and the State of Hawaii understand their options for disaster relief Housing via the Stafford Act," explained MBI Government Affairs Director, Jon Hannah-Spacagna.

Understanding the Stafford Act

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, which was enacted in 1988 to provide federal assistance for disasters. The act enables financial and physical assistance, coordinates government-wide relief efforts, and allows federal agencies to provide disaster aid. However, the Stafford Act also includes a clause that enables states like Hawaii to decline traditional HUD trailers in favor of alternative housing solutions.

"That was really the first key point of my working with Cheryl—helping her understand their options outside of HUD trailers," said Hannah-Spacagna. "The Hawaiian people not only wanted housing that was long-lasting, but they also wanted housing that looks like it belongs on the island and fits the environment. These homes will be fixtures on the island for years to come, unlike in the continental U.S., where temporary housing can be easily removed after serving its purpose."

"They didn't understand modular construction, so I began working with them to provide the basics—explaining that modular construction is built to the same building codes as site-built structures, its capabilities, and how to write a modular-specific Request for Proposal (RFP)."

Educating Stakeholders on Modular Construction

State and federal officials needed assistance preparing a modular friendly proposal to utilize modular construction. The initial Request for Proposal (RFP), drafted with guidance from Hannah-Spacagna, proposed 169 new homes funded by the federal government for the areas most affected by the wildfires. This was in addition to 450 homes funded by the State of Hawaii and provided by HomeAid Hawaii on adjacent property.

There was a commitment from all government agencies to using modular construction, and Hannah-Spacagna worked closely with them to draft modular-friendly RFPs, ensuring the industry could respond effectively and efficiently.

Building Momentum: Workshopping and RFP Development

In January 2024, Hannah-Spacagna was invited to attend a project development workshop in Washington, D.C., during which he provided copies of ICC/MBI standards 1200 and 1205, along with a prototype structure developed by an MBI member a 2019 study.

These modular-specific RFPs were made available to manufacturers on March 30, 2024, marking a significant step forward in deploying modular solutions for disaster recovery.

A History of Advocacy

Hannah-Spacagna's collaboration with US federal agencies and their leadership teams was built on years of advocacy for modular construction in post-disaster scenarios. His work began with a 2019 study by MIT, which explored modular buildings' potential

“Our factory is 110,000 square feet, set up like a Toyota lean car factory with two workstations,” explained Eric Schaefer, Chief Business Development Officer of Fading West. **“Twenty houses are in the factory at any given time at different levels of completion, moving to a new station every four hours. It takes about seven or eight days to finish a house.”**

for disaster relief. This foundation allowed MBI to play a critical role in shaping the housing recovery efforts for Lahaina and the broader Maui community.

Building a Team for Recovery: Forming the Dynamics Team

When the Kilohana Group Housing Site project for Lahaina wildfire survivors began taking shape to deliver temporary housing to the wildfire survivors, it was a New York-based architecture firm, Liv Connected, that first reached out to Colorado-based modular home manufacturer, Fading West. They had heard about their work through Van Meter. Van Meter, in turn, was working with a New Orleans group called Dynamic. Dynamic brought Liv Connected and Fading West together to form the “Dynamics Team.” This three-way collaboration was crafted to meet the rigorous requirements and be considered for the project.

Preparation for a Rigorous Selection Process

To secure a disaster relief project of this nature, companies undergo a competitive process of interviews and evaluations. Fading West worked closely with Liv Connected to design housing that could be efficiently manufactured in their state-of-the-art facility.

“Our factory is 110,000 square feet, set up like a Toyota lean car factory with two workstations,” explained Eric Schaefer, Chief Business Development Officer of Fading West. “Twenty houses are in the factory at any given time at different levels of completion, moving to a new station every four hours. It takes about seven or eight days to finish a house.”

A Focus on Quality and Dignity in Disaster Recovery

Following the lessons learned from previous disaster housing efforts after Hurricane Katrina, where homes fell short in quality and durability, government agencies prioritized creating high-quality, long-lasting housing for Maui wildfire survivors.

“Our entire presentation revolved around modular homes that are built to international building code and built to last 40-50 years,” said Schaefer. “We also wanted to preserve as much dignity as possible for the people who would be moving into these homes. When people lose everything, like the residents of Lahaina did, they face post-traumatic stress and immense emotional challenges. We wanted to design homes that provided comfort and met the cultural and environmental needs of Hawaii.”

To achieve this, the homes were designed by someone who grew up in Maui, ensuring they reflected Hawaiian aesthetics and addressed the unique challenges of the local climate.

From Factory to Maui: A Modular Housing Solution

Fading West was one of three contractors to build homes for Lahaina's recovery, assigning them the largest portion of the project: 109 units in the first phase. These included one-bedroom, two-bedroom, and three-bedroom homes, ranging from 490 to 980 square feet, all built on temporary foundations for future relocation.

"We built homes that could be relocated and repurposed because of the island's constraints," shared Schaefer. "It sometimes takes years for people to recover from disasters like this, so the homes needed to be both comfortable and adaptable for longer-term use."

Design Optimization Through Collaboration

A project of this magnitude, especially on an island, required precision and efficiency. Fading West worked closely with Liv Connected to refine the designs for factory production while meeting the logistical challenges of transporting and installing homes in Maui.

"We had to educate Liv Connected on the 'do's and don'ts' of modular construction," said Schaefer. "This included detailed considerations like the clearance of tunnels on the way to Lahaina. We were literally measuring with the Hawaiian Department of Transportation to ensure no errors."

The Critical Role of Logistics in Design

Logistics partner, ProSet Modular, played a pivotal role early in the process, bridging the gap between design and practicality. Dynamic reached out to ProSet to discuss logistics, but those conversations quickly shifted to design optimization.

"Design and logistics are very much interconnected," explained Scott Bridger, Principal at ProSet Modular. "The initial design required significant onsite work after delivery, but we worked to maximize the benefits of offsite construction."

Image courtesy of Fading West.

Image courtesy of Fading West.

For example, the original vaulted ceiling design was modified to include a partially flat top. "This adjustment allowed us to install the roof as a single component by crane, saving hours of onsite labor," Bridger shared. "It's these small, thoughtful changes that make a huge difference when deploying over 100 units on an island."

Balancing Innovation and Stakeholder Needs

Bridger acknowledged that design optimization often requires careful consideration of competing priorities. "There are half a dozen stakeholders engaged in the design process. Everybody is working toward the betterment of the project through their own knowledge and expertise," he explained. "With every suggested design modification, you must also ask whether it is a compromise to the design and if that compromise is worth it."

In the case of the roof design, the adjustment was deemed worthwhile. However, Bridger emphasized the complexity of decision-making in collaborative projects. "Anyone can come to the table and say, 'Here's the best way to do this,' but ultimately, it might just be the best for one stakeholder and their efficiency in their part of the overall project."

"Materials arrived at the factory, and within 14 calendar days, we had units on a barge headed to Maui," said Tommy Rakes, CEO of Guerdon. **"It was an incredible pace."**

ProSet's ability to balance logistical considerations with design intent underscored its role as a critical partner in ensuring the project's success. Their collaborative approach helped refine the design in ways that enhanced efficiency without compromising the overall vision.

Overcoming Supply Chain and Production Challenges

Building 109 homes in two months came with significant challenges. Procuring treated lumber to prevent termites was a major hurdle. "I think we bought every piece of treated lumber in the 48 states to get this project done," said Schaefer. Long lead times on doors, windows, and furniture added to the complexity.

Despite these obstacles, Fading West ramped up production with 125 workers operating seven days a week, 12 hours a day, producing seven to 10 homes weekly. They completed 84 units before contracting Guerdon Modular Buildings, a Boise-based factory, to build the remaining 25 homes.

Collaboration Across Teams and Industries

Guerdon Modular Buildings brought their specialized expertise and innovative approaches to the project, further strengthening the collaborative effort. While they were not initially selected as one of the three contractors, Guerdon's early discussions with Maui officials and federal officials laid the groundwork for their eventual partnership with Fading West.

"Materials arrived at the factory, and within 14 calendar days, we had units on a barge headed to Maui," said Tommy Rakes, CEO of Guerdon. "It was an incredible pace."

Image courtesy of Fading West.

Streamlining Production Through Pre-Planning and Sub-Assemblies

Achieving such an accelerated timeline required a strategic reimagining of Guerdon's manufacturing process. By implementing a combined approach of sub-assemblies, pre-planning, and reallocating factory workstations, they were able to optimize efficiency and adapt to the unique demands of this project.

"We decided to build it on paper before we did anything," Rakes explained. "We evaluated every sub-assembly we could pre-build, including interior doors, casework for trimming out windows, drop ceilings, and any other components that could be prefabricated ahead of receiving the major structural components that had to be termite-treated."

This meticulous planning allowed Guerdon to reduce bottlenecks and focus on maximizing productivity at every stage.

Adapting the Production Line for Speed

Guerdon's typical manufacturing process involves 20 modular units in production at any given time. To meet the tight deadlines, they made strategic adjustments to their production line, reducing the number of workstations by five.

"For example, we removed the sheetrock station because these units had pre-finished birch materials on the inside instead," Rakes shared. By reallocating resources and eliminating unnecessary steps, Guerdon shaved two critical days off their production timeline, ensuring that the units were completed and shipped without compromising quality.

Addressing Accessibility with Proactive Design

One of Guerdon's key contributions was addressing potential gaps in compliance with Uniform Federal Accessibility Standards (UFAS). "We were concerned that government agencies may have missed this in their designs, and we were right," Rakes explained. To mitigate this, Guerdon incorporated flexible design elements to accommodate future accessibility adjustments.

"For example, we built some means and methods into the design so that if a standard tub had to come out and an ADA shower had to be installed, it was not a major rebuild," Rakes shared. "We included removable fur-out walls so an adjustment like that could easily be made." This proactive approach ensured that the homes could meet accessibility needs without requiring extensive modifications, a critical consideration for emergency housing projects.

Preparing Homes for Immediate Use

The completed homes were delivered fully furnished and equipped with essential items—beds, couches, tables, chairs, and kitchen appliances—ensuring they were ready for immediate occupancy. This full-turnkey approach was particularly critical in the wake of disaster, as many occupants of these homes had lost everything. Providing fully functional, move-in-ready housing allowed individuals and families to begin rebuilding their lives without the added stress of sourcing furniture or basic household necessities.

While this turnkey approach was vital, the rapid timeline presented unique logistical challenges. Furniture lead times occasionally necessitated separate shipments, requiring meticulous coordination to ensure that all components arrived at their final destination without delay. This commitment to a full-turnkey solution underscores the importance of providing not just housing, but a true foundation for recovery and resilience for those affected by disaster.

"Typically, when the modular units arrive at the yard, they're removed from their carriers—which are essentially modular trailers used for transport—and set up on cribs off the ground before going to the crane," Bridger explains. **"But for this project, the modular units were loaded onto carriers at the factories and remained on those carriers until they were placed on their foundations."**

Reverse-Engineering Logistics for Seamless Installation

When ProSet tackles logistics for any project, its approach begins with the end in mind: the installation process. From there, they work backward, mapping out every step to ensure efficiency and cost-effectiveness.

"All of our projects involve large quantities of modular units that need to be transported and installed. We don't do single-family homes here and there, which is important to point out in terms of what is involved with the efficiency of organizing these logistics so the installation can be as quick and cost-effective as possible," explains Scott Bridger, Principal at ProSet Modular.

Setting the Sequence: A Foundation for Success

ProSet starts by assessing the site and determining the specific order in which modular units will be installed. "There's always a specific location where each unit goes. They're rarely interchangeable, so we have to identify what order we're going to set the project," says Bridger.

In the case of the Kilohana project, determining the first home to install was critical. This decision informed the installation sequence and guided logistics upstream, all the way back to the factory floor. Factors like the readiness

of foundations and initial crane access on-site played a significant role in establishing this sequence.

Navigating Unique Challenges: Ocean Freight Logistics

The logistics of transporting units to Maui added another layer of complexity. "If you think about the journey of these modular units for this project, there's one extra step compared to most of our other projects––ocean freight," Bridger explains. This was ProSet's first project that involved ocean freight.

On the mainland, modular units typically travel directly from the factory to a city's storage yard by truck. For the Kilohana project, however, the units required careful sequencing to ensure smooth transportation via ship and subsequent delivery to the site.

Precision in Storage: Sequencing for Efficiency

One of the most critical aspects of modular logistics lies in storage yard organization. "The whole logistics process for this project was about understanding how close 109 modular homes will be stored next to one another in a yard," says Bridger.

Storing the units in the proper order ensures efficiency when it's time to transport them to the site. "You can't just drive a truck and grab the one you want halfway back into that storage yard. The first one you need

Image courtesy of Marex Road Services.

has to sit at the exit of that storage yard, and the last one you need is buried all the way in the back. So, that's a lot of the coordination and sequencing work that we do," Bridger explains.

Factory Coordination: Building in Reverse

The logistics don't just start in the storage yard—they extend all the way back to the factory. ProSet's precise sequencing informs the factory about the order in which to build the units. "The last modular unit to come off the factory floor is going to be the first one we install," Bridger notes.

This level of synchronization ensures that every modular unit is efficiently transported from the factory gate to its final foundation.

A Unique Approach to the Kilohana Project

The Kilohana project introduced a distinctive logistical challenge: unlike typical projects where units are unloaded from their transport carriers at the storage yard, these units remained on their carriers until they reached the crane for installation.

"Typically, when the modular units arrive at the yard, they're removed from their carriers—which are essentially modular trailers used for transport—and set up on cribs off the ground before going to the crane," Bridger explains. "But for this project, the modular units were loaded onto carriers at the factories and remained on those carriers until they were placed on their foundations."

This unique approach minimized handling and expedited the installation process, showcasing ProSet's adaptability and attention to detail in delivering efficient modular solutions for complex projects.

The Benefits of Modular Construction for Disaster Relief

Few scenarios highlight the advantages of modular construction more than disaster relief. Rapid deployment, durability, scalability, cost-effectiveness, minimal on-site work, portability, sustainability, and flexibility make this approach uniquely suited to address the urgent needs of communities in crisis.

Speed, Quality, and Repeatability

For Schaefer, speed, quality, and repeatability are the most critical benefits of modular construction in disaster scenarios. "On a high level, it's speed and higher quality. The walls of these homes are perfectly built, which then allows for energy efficiencies," he said.

Speed is especially vital when responding to displaced communities. Schaefer emphasized the importance of standardized designs for disaster recovery efforts. "When you think of disaster relief, you want one standard: a one-bedroom, two-bedroom, and three-bedroom design. There's no reason to vary from that," he explained. Repetition, he said, is key. "All the positives of modular construction really come to life in a disaster relief scenario because repetition is what we want, and that speeds up the process. Then, the faster we go, the less expensive it is."

Factory-Built Precision and Durability

Beyond speed and cost, the ability to complete as much of the build as possible in a factory setting is another game-changer. "The more you can do in the factory—right down to including the lamps in the living room—makes this an ideal approach for government agencies to provide housing for those who are displaced and have lost everything," Schaefer added.

Rakes echoed the importance of building in a controlled environment. "We're not worried about the framing or sheathing getting rained on and then that moisture being entrapped," he said, highlighting how modular processes eliminate some of the common risks associated with traditional construction.

Rakes also pointed out that modular construction is inherently stronger and more eco-friendly. "The fact that we build from the inside out results in a much stronger process that is always going to make the project more eco-friendly and performance-driven. The worst modular manufacturer will outperform a conventional builder in that way."

Adaptability for Seamless Disaster Recovery

Modular construction is not only efficient but also highly adaptable. Rakes suggested that by pre-designing structural elements like platform framing, floor systems, and wall systems, the process could be made even more seamless. "Pre-design all those things, ready to go," he said. "That type of mindset is how we can make this process even better."

Addressing Pre-Existing Housing Challenges

For Bridger, the pre-existing conditions in Lahaina made modular construction the logical solution for this specific project. The town, already grappling with housing challenges before the wildfires, was a prime example of why modular approaches are so effective.

"In a lot of ways, this project is a great example of the extreme benefits of modular construction because of the pre-existing conditions before the fires," Bridger explained. Lahaina faced multiple challenges, including isolation, high living costs, limited housing inventory, and a workforce strained by housing shortages.

"When you take those challenging conditions and then the community is decimated with a fire like this, the situation becomes even more challenging," Bridger continued. Modular construction's ability to quickly provide high-quality, repeatable housing solutions is why it is an invaluable tool in disaster recovery efforts like these.

A Blueprint is Born from the Ashes of Lahaina

Lahaina's pre-wildfire need for affordable housing mirrors one of the most pressing issues across the United States and, increasingly, the world. As Bridger put it, "The nature of that acute condition in Lahaina is just begging for modular in a lot of ways."

A Community in Crisis Finds Hope

At the time of installation, Bridger spoke with some of the displaced residents who would soon be moving into the modular homes. These individuals described the day after the fires as a moment of deep uncertainty—an endless stream of questions about how to navigate the destruction and what the future might hold.

Image courtesy of Marex Road Services.

"There was a population of folks there that were likely very discouraged, and maybe even frustrated about how long and how much time had passed before seeing any real forward progress in the rebuild," Bridger explained. "When modular became the solution, it quickly brought a new hope and enthusiasm, with homes onsite that seemed as though they sprouted up overnight."

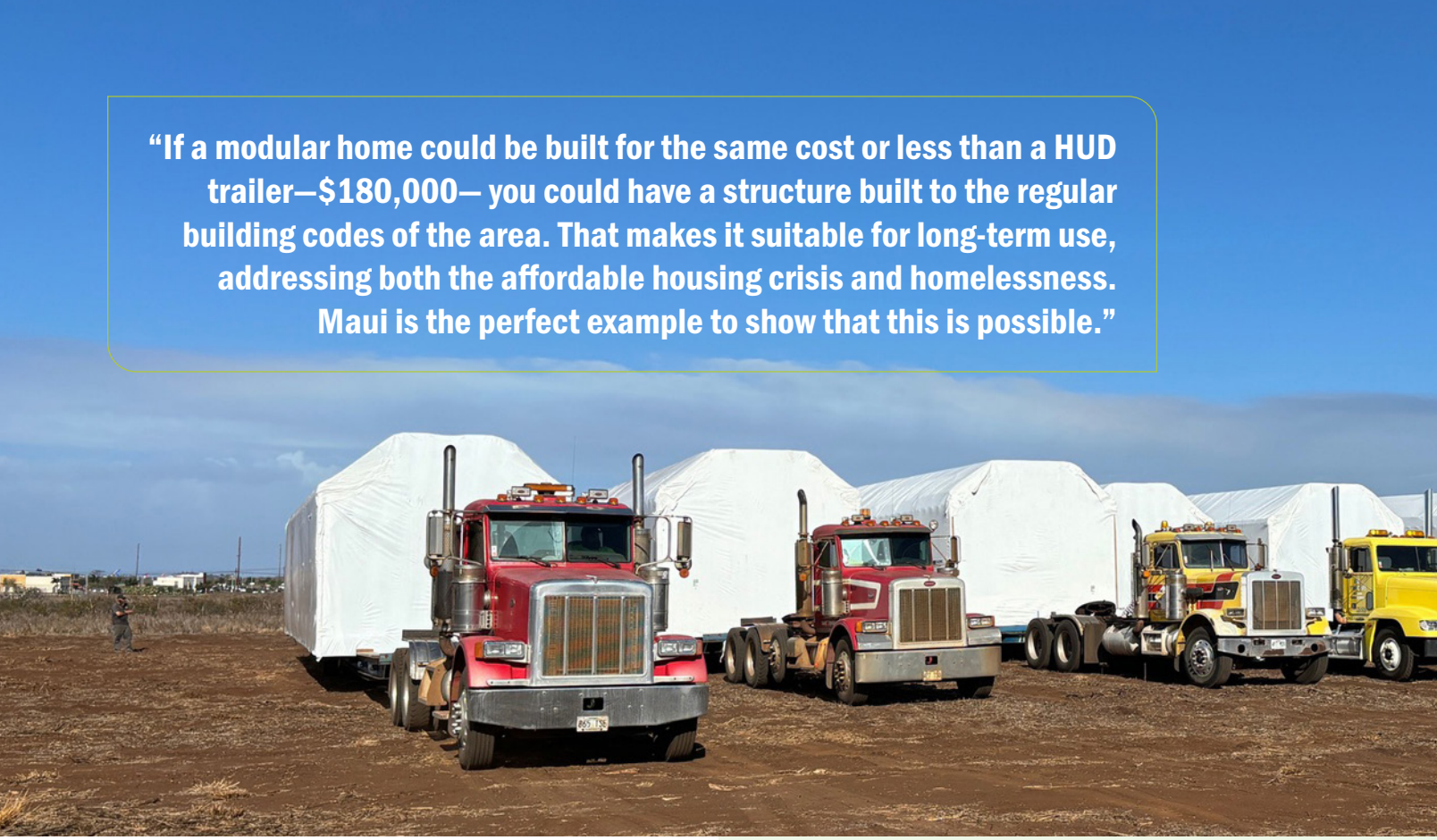
A Dual-Purpose Solution for Immediate and Long-Term Needs

The benefits of modular construction extend far beyond immediate disaster relief. Once Lahaina is rebuilt, the homes will be repurposed as affordable housing on the island, creating a powerful precedent for other states navigating similar disasters. This dual-purpose approach exemplifies how modular construction can address both the immediate needs of displaced communities and the long-term challenges of housing affordability.

Addressing the Limitations of Traditional Disaster Relief

While temporary HUD trailers have traditionally played a role in disaster response, their utility and cost-effectiveness often fall short. Hannah-Spacagna points out a fundamental issue tied to current legislation: "The Stafford Act only allows temporary housing up to 18 months—which is rarely enough time for a family who has lost everything to get back on their feet. That's a very key component that needs to be changed to provide structures that can not only serve

“If a modular home could be built for the same cost or less than a HUD trailer—$180,000— you could have a structure built to the regular building codes of the area. That makes it suitable for long-term use, addressing both the affordable housing crisis and homelessness. Maui is the perfect example to show that this is possible.”



as disaster relief housing but continue to be utilized long after as affordable housing. Since Hawaii is outside of the continental United States, it allowed them to request more permanent housing solutions.”

The Case for Modular as a Long-Term Housing Solution

Hawaii’s unique geographic challenges as an island underscore the need for innovative solutions, but the larger question remains: Why not apply this approach everywhere? Hannah-Spacagna elaborates, “If a modular home could be built for the same cost or less than a HUD trailer—$180,000—you could have a structure built to the regular building codes of the area. That makes it suitable for long-term use, addressing both the affordable housing crisis and homelessness. Maui is the perfect example to show that this is possible.”

Schaefer echoed this, urging decision-makers to consider the financial and functional advantages of modular housing over traditional disaster relief options. “If a project like this costs $200 million, but the purchased housing is only going to last for three years before they’re thrown out—you do the math, right?” he said. “But, if the housing is well-built and to an international code with the same level of quality as a stick-built home, it could be repurposed and even sold after it has filled a community’s need post-disaster, allowing [the government] to make its money back.”

By embracing modular construction as both a short-term and long-term solution, Lahaina’s recovery provides a transformative blueprint for disaster relief and housing innovation. It’s a model that not only responds to crises but also proactively addresses the larger issue of housing affordability—a challenge that communities across the country and around the world continue to face.

The Human Impact: Gratitude, Hope, and Community

When the modular homes were installed and ready for families to move in, the most common reaction Bridger witnessed was one of deep gratitude. “It was very rewarding,” he shared. “I think it goes back to trying to put yourself in their position, what they’ve gone through, and their experience over the last couple of years. To be able to actually walk into the home that they’re going to live in—not only is it a complete home, but every family was very excited about the quality, size, and features.”

Image courtesy of Marex Road Services.

A Full-Circle Moment

For Rakes and his team, the moment their hard work came full circle was made even more meaningful by the personal connection. The CEO of Dynamic shared videos from the ground in Maui, capturing the reactions of families moving into their new homes. "They shared some videos that we shared with everyone in our organization. We created some Maui-specific t-shirts and awarded everybody, and they were able to wear them while hearing some of the comments from the families. It was a really neat time for the Guerdon team," Rakes reflected.

The First Home-Cooked Meal in 16 Months

Perhaps the most powerful account comes from Schaefer, who spent time on the ground as the families moved into their homes.

"The site of these homes is up on the hill that overlooks the area that burned. It's probably the most beautiful view in all of Lahaina, but it's overlooking all this pain and sadness. In Lahaina, there are Hawaiians, Samoans, and Tongans—all of them sharing a friendly connection with one another, but all of them are extremely proud of their backgrounds," he explained.

Schaefer recounted a poignant moment with a Tongan family moving into a three-bedroom Fading West home. "The mother of the family said that that night was going to be the first time she cooked a home-cooked meal for her family in over 16 months. It would be her first time going to a grocery store in over 16 months to buy food to fill a refrigerator of her own. Her three children were taking pictures on the front porch, and I was overcome by the fact that their lives had been on hold for all this time, but now this was their home, and this will now be their community."

Housing Policy is Education Policy is Community Policy

The significance of these homes went beyond providing shelter. Schaefer emphasized that the families were moving into a place where they shared a bond with their neighbors—whether they were Tongan, Hawaiian, or Samoan—because they had all experienced the same devastating loss. "If you look on the psychological spectrum, community is just as important as shelter, right?" Schaefer asked.

He went on to connect this philosophy to the broader impact of housing policy. "One of the things I always say, and what our Governor here in Colorado says, is, 'Housing policy is education policy—it's community policy.' It affects everything. You don't just want to house people; you want to house them in a dignified community that allows them to move forward with their lives. One of our taglines at Fading West is, 'We build community,'" said Schaefer, encapsulating the heart of the effort in Lahaina: creating not just homes, but a foundation for families to rebuild their lives in a community where hope and dignity are restored.

Recommendations to Streamline the Process

There's a lot the federal government can take away from its experience working with the Modular Building Institute to provide disaster relief housing for the Lahaina community. The speed that the modular building industry can provide in response to a disaster is unparalleled. For this project, the first 15 homes or so were built in two weeks, and the first 169 in 60 days.

"No other industry can do that," Hannah-Spacagna points out. "If the government already had these contracts in place with a modular manufacturer when future disasters occur,

Image courtesy of Fading West.

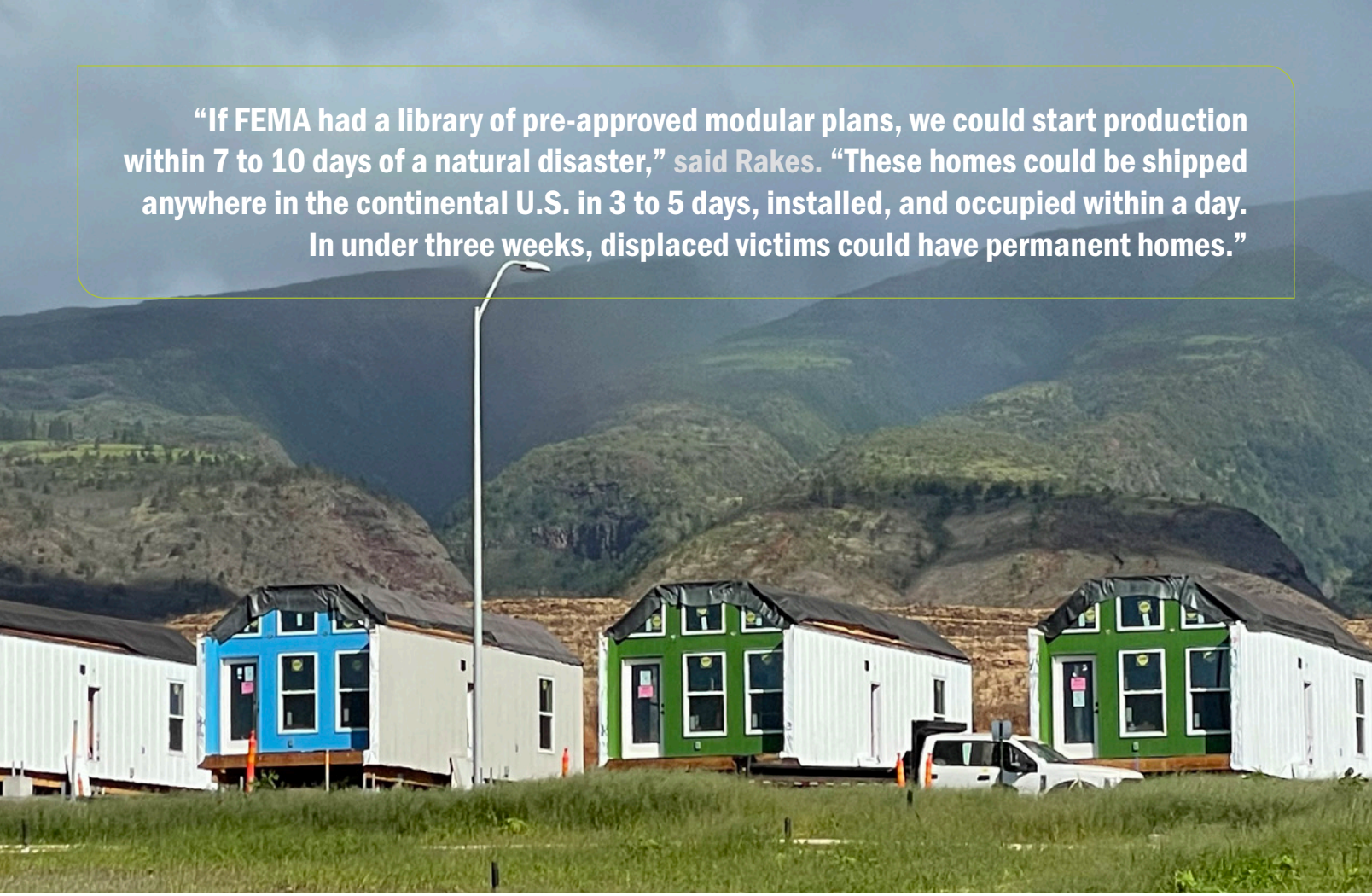
Image courtesy of Fading West.

it would be as simple as saying, 'We need 200 homes in this state, go.' They would already have the design in hand and know what they're going to build. The only thing left to do would be to begin production and the homes could be placed on site even faster."

Schaefer and Rakes reiterated this sentiment from a factory perspective, stating that having the final design in hand sooner than they did would have allowed them to respond that much quicker.

"If we work with government agencies for disaster relief housing in the future, we hope they could give us a longer runway. It would allow us to prepare and scale up our work staff, supplies, and procurement," said Schaefer.

"If government agencies could get a standard approved model, taxpayers in the United States wouldn't have to pay as much if this process was already approved and we could find means



“If FEMA had a library of pre-approved modular plans, we could start production within 7 to 10 days of a natural disaster,” said Rakes. “These homes could be shipped anywhere in the continental U.S. in 3 to 5 days, installed, and occupied within a day. In under three weeks, displaced victims could have permanent homes.”

Image courtesy of Fading West.

and methods that could make it easier to build and easier to plan for,” said Rakes.

Preparing for the Next Disaster

The most effective way for FEMA to prepare for future disasters is to develop a catalog of pre-approved modular designs tailored to different geographic regions.

“If FEMA had a library of pre-approved modular plans, we could start production within 7 to 10 days of a natural disaster,” said Rakes. “These homes could be shipped anywhere in the continental U.S. in 3 to 5 days, installed, and occupied within a day. In under three weeks, displaced victims could have permanent homes.”

The key challenges—design approvals, site preparation, and material procurement—can be mitigated with pre-planning. Modular designs with plug-and-play utility connections for water, sewer, and power could rival the speed of FEMA trailers while delivering superior quality and permanence.

IRC-compliant modular units not only match the speed of HUD-compliant products but surpass them in durability, with higher wind load standards and a longer lifespan. Modular construction’s speed, cost-efficiency, and lasting value make it the clear choice—provided FEMA invests in planning now, before the next disaster.

The Power of Innovation, Efficiency, and Empathy

Overall, this project proved that when innovation, efficiency, and empathy come together, the impossible becomes achievable. Lahaina’s recovery serves as a beacon for how modular housing can redefine what it means to rebuild—not just with speed, but with purpose.

From the ashes of devastation, a framework has emerged that offers more than just shelter—it provides hope, dignity, and a future. Today, the success of modular housing in response to the Lahaina wildfires is more than a case study; it’s a call to action for policymakers, community leaders, and builders nationwide to rethink how we address both disasters and the ongoing housing crisis.


ALPHA
Liv·Connected

Because at the heart of every crisis is an opportunity—to not just rebuild what was lost, but to chart a better, stronger, and more sustainable path forward. Like the 150-year-old Banyan Tree, Lahaina's story reminds us that true resilience is found not just in the structures we create, but in the hope they inspire within the community. Structures rooted in quality translate to longevity and empowerment, allowing any community not just to survive the unimaginable, but to thrive in its wake.

That should be the true measure of success in disaster relief and recovery.

Image courtesy of ProSet.

Image courtesy of ProSet.

The Next Disaster Could Be Tomorrow. Get Ready Now.

Every state should be familiar with the Pre-Disaster Preparedness Checklist in the Stafford Act. The section regarding Alternative Temporary Housing Units (ATHUs) provides an opportunity for the state to proactively create a housing plan. The checklist is available at FEMA.gov.

The checklist should be used alongside the full Pre-Disaster Housing Guide, which is also on the FEMA website. Once the housing plan is finalized, the state can submit it to FEMA for approval. This approval will save time when a disaster strikes and will provide clear and concise steps to address housing afterward.

The full guide contains three focus areas- planning and preparedness, partner identification, organization and coordination and disaster housing transition strategy. The focus areas align with a continuum from state preparedness through long-term recovery.

States can also present a plan to utilize modular construction for their post-disaster housing needs. This will allow them to secure partnerships with modular manufacturers and general contractors to rapidly deploy housing to those in need. There are potential opportunities to utilize HUD Community Development Block Grants for disaster recovery modular housing.

State leaders should also be familiar with the Disaster Recovery Reform Act (DRRA) that was signed into law in 2018. The law was passed to improve the nation's ability to prepare for, respond to, and recover from disasters.

Key elements of the DRRA include: reducing the complexity of FEMA assistance, build more resilient communities and infrastructure, incentivizing communities to invest in preventative measures like building codes and infrastructure upgrades before disasters occur and empowering local communities to lead the recovery process with greater input and decision making power.

Here's How to Prepare:

- ✓ **Review the Disaster Recovery Reform Act** (Pre-Disaster Preparedness Activities)
- ✓ **Review Section on Alternative Temporary Housing Units** (ATHUs)
- ✓ **Submit State Administered Pre-Disaster Housing Plan to FEMA for approval**
- ✓ **Once FEMA approval is received, complete pre-disaster housing checklist**

With special thanks to

FADING WEST

GUERDON

MAREX
ROAD SERVICES

PROSET