

7GEN COMPONENTS

Offsite Construction Manufacturer

JOSHUA C. SCHAAF



Craft Contracting and
Consulting

Specialty Contractor

JODI LARIO

OFFSITE CONSTRUCTION SYSTEM



Agenda

Introductions

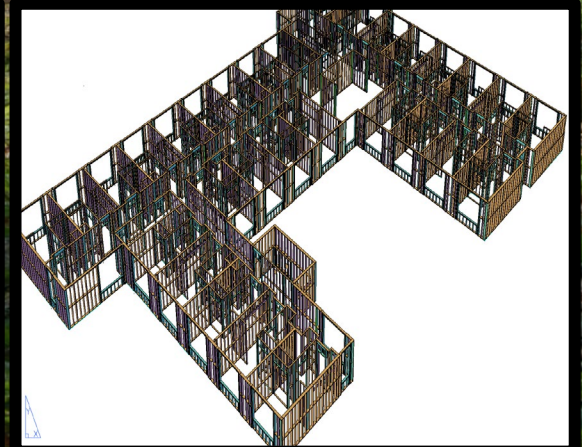
Offsite Built Systems: an Overview

Forest to Home

Mass Timber

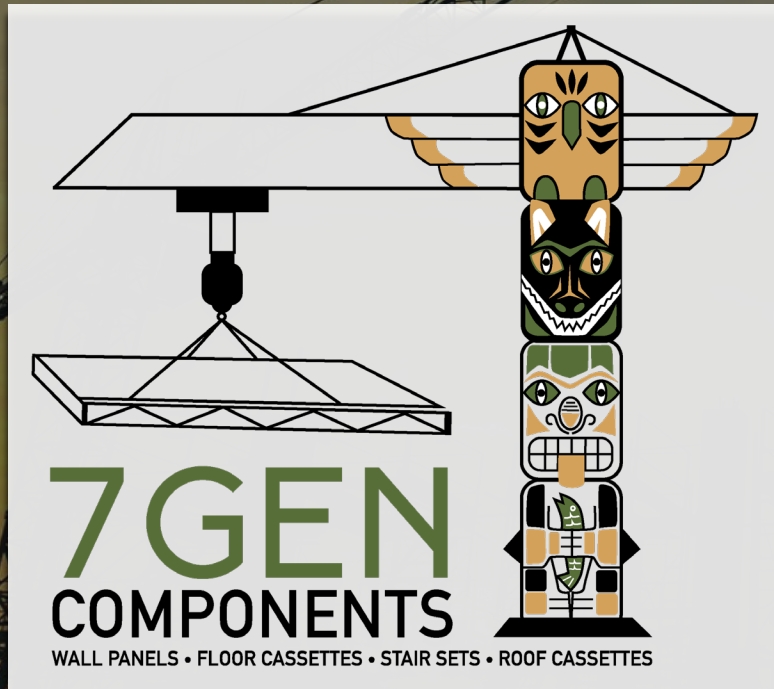
Workforce Development

QA



Mission Statement

7GEN Components and Craft Contracting and Consulting's shared mission is to support Tribal communities by utilizing Washington State's timber resources and innovative construction techniques to address the housing shortage, while providing workforce development training that fosters career opportunities and economic growth.

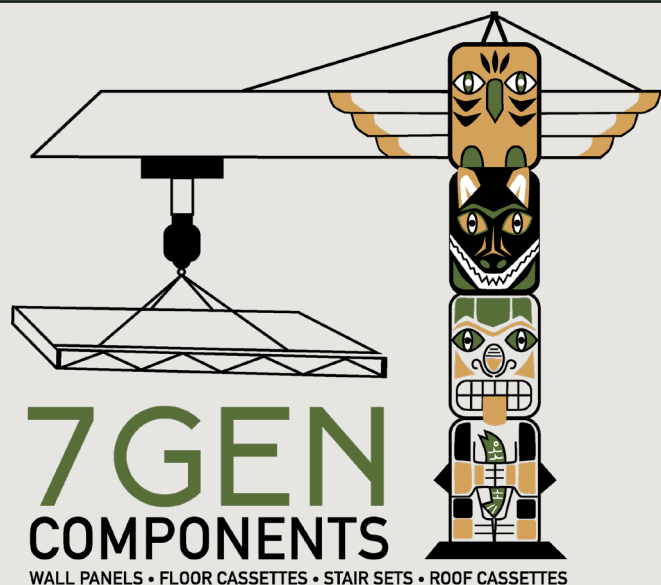


Services

- Design Build
- Preconstruction
- 3D Modeling
- Clash Detection
- Turnkey Rough Carpentry
- Component Assembly



Craft Contracting and Consulting is a woman owned specialty contractor, dedicated to providing exceptional turnkey rough carpentry services. With extensive experience in the construction industry, we excel in the installation of offsite built framing systems. Our expertise lies in delivering high-quality craftsmanship and efficient solutions for residential and commercial projects.



7GEN Components is a Native-owned manufacturer of Offsite Built Systems for commercial and residential construction. Our vision is to address the housing shortage and affordability while ensuring we leave the planet better for the next 7 generations..

Products:

- Wood wall panels
- Wood floor and roof cassettes
- Wood stair sets
- MEP integrated components
- Modulares

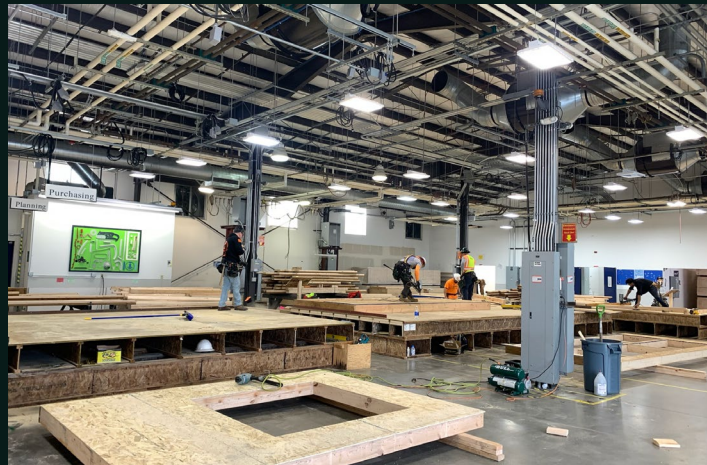
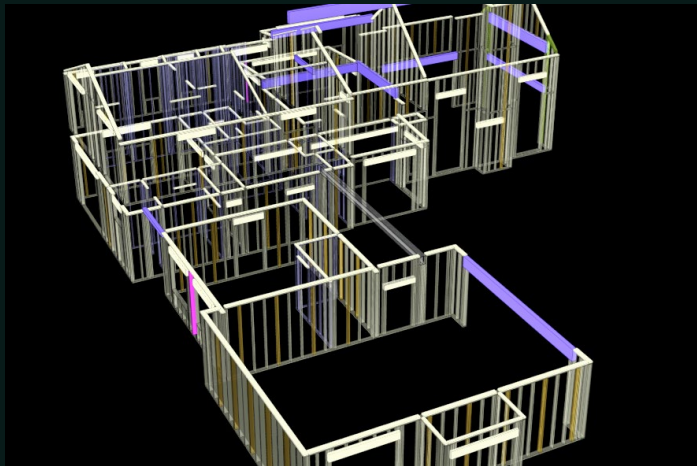
Services:

- Value Engineering
- Advanced Manufacturing
- Panelization
- Prefabrication
- MEP Integration
- Delivery

Offsite Built Systems: an Overview

Offsite Built systems involve manufacturing building components in a controlled factory environment and then transporting them to the construction site for assembly by Craft Contracting and Consulting

This innovative approach encompasses methods like panelization, modular construction, and mass timber structures, allowing for various levels of preassembly and integration of mechanical, electrical, and plumbing systems.



Examples Of Offsite Construction

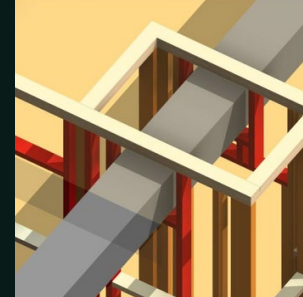


STAGE 1 PANELIZATION

Panelization creates flat panels, such as walls or floors, in a factory, which are then assembled onsite into the building structure.

STAGE 2 MEP INCLUSIONS

Integrating MEP components into prefabricated components streamlines construction by allowing efficient assembly and reducing project timelines.



STAGE 3 MODULAR

Modular construction builds whole sections or rooms of a building, including utilities and finishes, in a factory. These modules are then assembled onsite into a complete building.

BENEFITS OF USING OUR OFFSITE BUILT SYSTEM

Cost Savings

15-20% reduction in
construction costs

Lower labor costs and
reduced material waste

Time Savings

Projects completed 30-
50% faster

Simultaneous site
preparation and building
construction

Sustainability

Up to 90% reduction in
construction waste

Energy-efficient designs
and reduced CO2
emissions

Safety

80% fewer on-site
incidents

Controlled factory
environment reduces
exposure to hazards

Quality Control

Consistent quality with
factory precision

Reduced weather-related
delays and defects

Flexibility & Scalability

Customizable designs and
modular options

Easily scalable for future
expansions



Early September



Mid September

- **Lincoln Place:** 33,200 sq ft project featuring (20) 3-level duplexes of affordable housing in Tacoma, WA.
- **Structural Start:** September 2022
- **Structural Finish:** October 2022

CHIEF SEATTLE SACRED MEDICINE CLUB APTS, SEATTLE, WA



- Project Size: 51,508 sq ft, 120 units.
- Purpose: Permanent supportive housing for Native American individuals experiencing homelessness.
- Impact: Reflects dedication to community support and addressing homelessness.

STRUCTURAL
COMPLETED IN 2
MONTHS
VS. TRADITIONAL
FRAMING SCHEDULE
OF 4 MONTHS



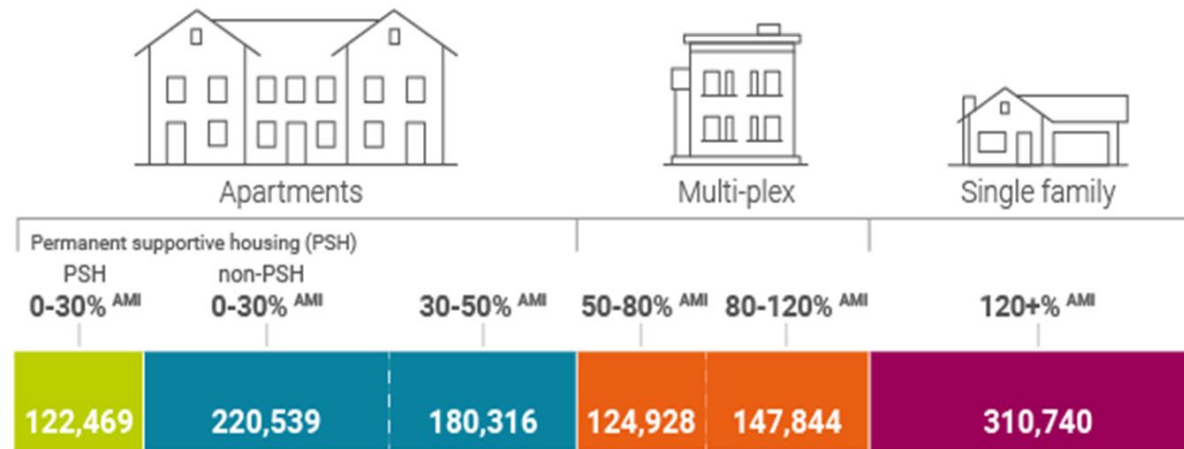
Housing Crisis

WA STATE NEEDS:

50,000

new homes annually

income (AMI) groups



1.1 Million new homes will be needed in the next 20 years

In addition, there will also need to be:

91,357 Emergency housing beds (temporary housing)





The Forest to Home movement focuses on utilizing local forests to create **sustainable building materials**, promoting a **circular economy** in the construction industry. This initiative emphasizes the use of **Washington State's abundant timber resources**, including underutilized species and lumber waste, to produce high-quality, **eco-friendly** housing components.

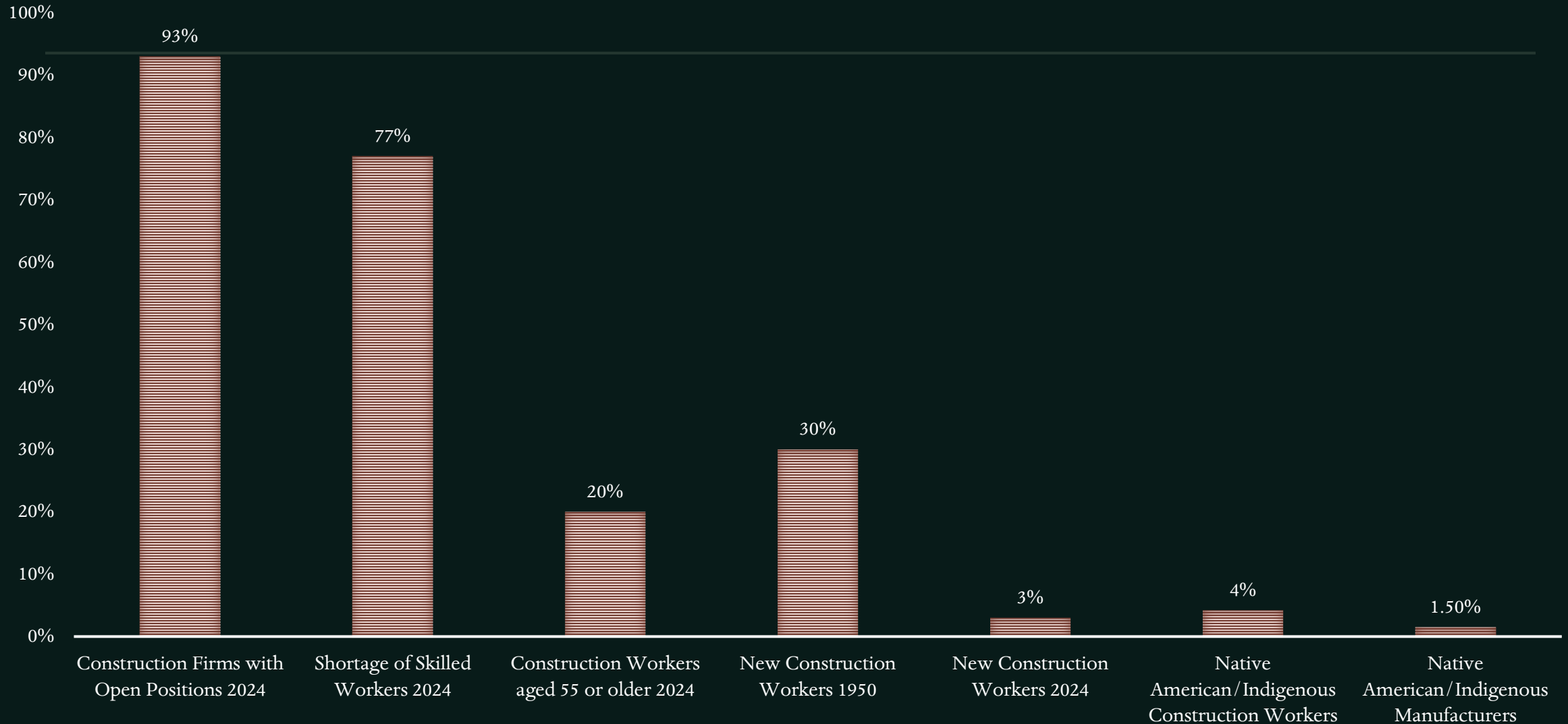
A photograph of a dense forest of tall evergreen trees, likely Douglas firs, shrouded in a thick mist or fog. The trees are dark green and stand against a lighter, hazy background, creating a serene and atmospheric scene.

In Washington State, where Douglas Fir is a common building material, mass timber provides an opportunity to diversify the use of local wood species. By incorporating other available trees and utilizing lumber waste, mass timber contributes to a more sustainable and efficient forestry industry, ensuring that more of the forest biomass is put to good use.

Mass timber is an innovative construction material composed of large, solid wood panels or beams. These engineered wood products include Cross-Laminated Timber (CLT), Dowel-Laminated Timber (DLT), and Adhesive-Laminated Timber (ALT).

MASS TIMBER

WA Workforce Development Needs



7GEN & Craft get involved:



Advisory Board Memberships

Washington State Apprenticeship Training
Council - Tribal Subcommittee

Washington Mass Timber Alliance

Auburn Public Schools Career and Technical
Education (CTE) programs

Federal Way Public Schools Career and Technical
Education (CTE) programs

Outreach Chair, Puget Sound Regional
PreApprenticeship Collaboration (RPAC)

Outreach Committee, Pierce County Community
Engagement Task Force

WORKFORCE DEVELOPMENT AND COMMUNITY IMPACTS



Construction industry faces a skilled labor shortage:

- The construction industry in Washington will need over 342,000 new workers by 2024 to meet rising demand.

We create new, accessible manufacturing jobs:

- Entry-level friendly; training to manufacture housing in <3 months.

Our Education & Community Impact:

- Aims to merge WA's funding for workforce development with affordable housing initiatives.
- Students help build their communities, addressing housing insecurity.

Beyond Construction:

- Committed to workforce development for underserved youth.
- Extends innovative practices' impact to community and economic development



We cannot always build the future for our youth, but we
can build our youth for the future.

Franklin D. Roosevelt



SUMMARY

Our goal is to stimulate local economies, provide affordable housing, and leave the planet better for the next seven generations.

By using local timber, including lumber waste, we can produce eco-friendly mass timber components.

15-20%
reduction in
construction
costs

Projects
completed 30-
50% faster

80% fewer
on-site
incidents

Up to 90%
reduction in
construction
waste

At 7GEN Components and Craft Contracting, we are dedicated to creating a circular economy that connects forestry, education, manufacturing, housing, and sustainability.

Our partnerships with schools and pre-apprenticeship programs aim to provide valuable skills and career opportunities for Tribal members and our community.

Contact Us

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