

A man wearing a brown cap, safety glasses, and a black t-shirt is operating a large orange portable sawmill. The sawmill is processing a large log into a wide board. The background shows a wooded area with green trees and a dirt ground. The text "The Alaska Lumber Grading Program" is overlaid in large white letters.

The Alaska Lumber Grading Program

Update for the State of Alaska Board of Forestry Meeting

August 19th, 2025

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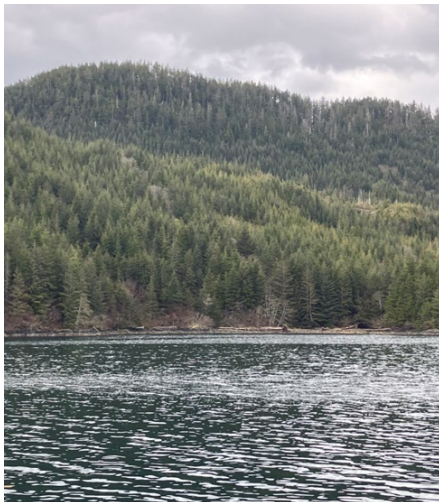


Objectives:

- What is the Alaska Lumber Grading Program?
- Why is the program needed in Alaska and how does it integrate with the existing national lumber grading standards?
- How does the training program work? Where has it been offered?
- What are the impacts of the program so far?
- Other CES/partner efforts to respond to the needs of Alaska's current and aspiring wood product manufacturers.

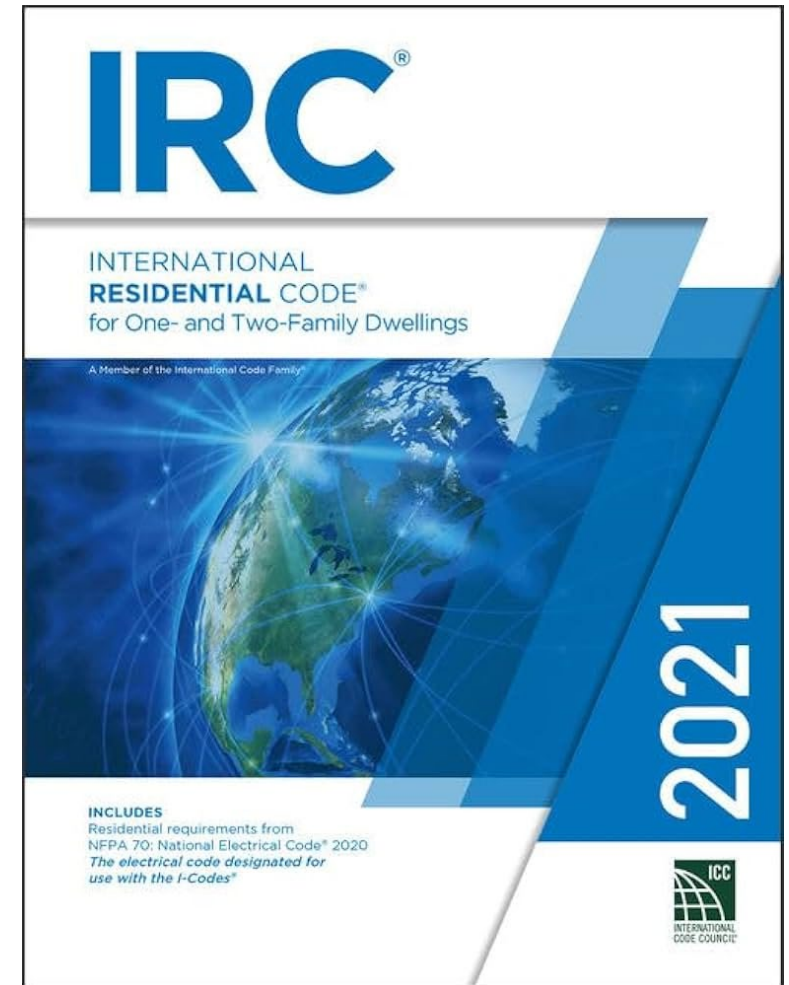
The Alaska Lumber Grading Program

- A state alternative structural lumber grading program that offers small- to medium sized sawmill businesses a training to allow them to grade and self-certify dimension lumber, which under limited circumstances can be used to meet residential building code requirements.



Why is this program needed?

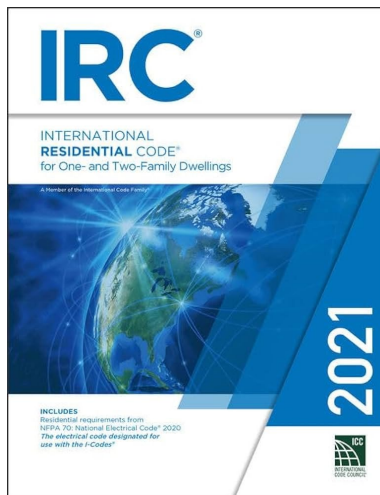
- Residential building codes in Alaska require the use of grademark lumber for structural applications
- **State structural lumber grading programs create an alternative to meet this requirement**



Does Alaska have a residential building code?

Lenders:

- Alaska Housing Finance Authority (AHFC)
- Mortgage lending institutions



Municipalities:

- | | |
|--|----------------|
| 1. Anchorage (within its service area) | 9. Palmer |
| 2. Fairbanks (within its city limit) | 10. Petersburg |
| 3. Juneau | 11. Seward |
| 4. Kenai | 12. Sitka |
| 5. Ketchikan | 13. Skagway |
| 6. Kodiak city and borough | 14. Soldotna |
| 7. Nome | 15. Valdez |
| 8. North Pole | 16. Wrangell |

Fun fact: this may be the authoritative list of Alaska Municipalities that enforce residential building codes

What is Dimension Lumber Grading?

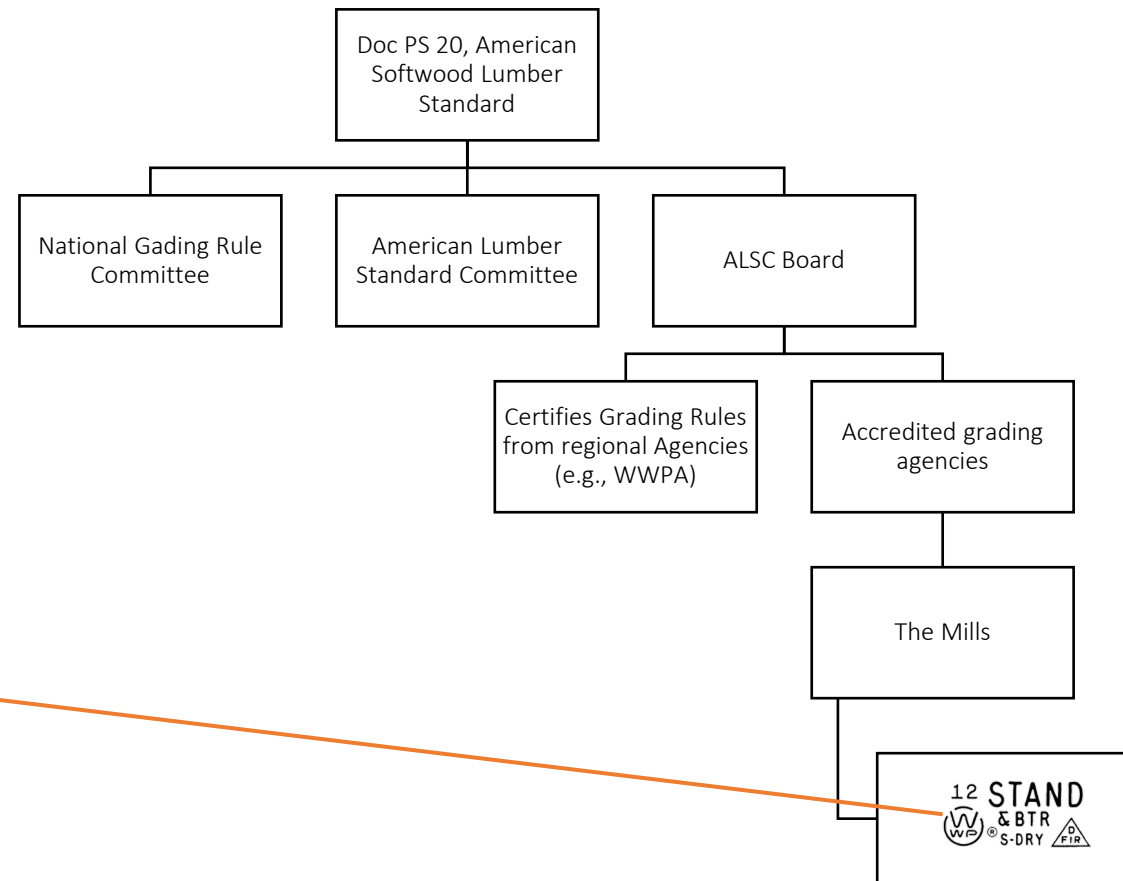
- “Dimension lumber”
 - Size: 2 – 4 inch thickness; 2 inch width and greater
 - Light-frame wood structures
- “Grading”
 - Sorting into categories based on amount of grain displacement
 - Visual inspection of defects
 - Framing spans / spacing, etc. are calculated based on species and grade





A Brief Overview of the Existing Structural Lumber Grading System in North America

What is “grade mark” or grade-stamped lumber?





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(W) & BTR
WF[®] S-DRY 

A grademark on dimension lumber communicates the key factors that affect structural performance:

- Species
- Grade
- Rules-Writing Agency
- Moisture Condition
- Sawmill (traceability)



Advantages of the Grademark System

- Standardization
- A basis for consistency
- Expertise
- 3rd Party Auditing
- Ongoing review, updates and evolution



Challenges with the grade stamp lumber requirement in Alaska:

- **Cost and Access**

- Most AK sawmill businesses can't justify the costs associated with the grade mark system (trained graders, membership fees, third-party verification, etc.)
- Alaskans living off the road system face logistical challenges and expense in order to obtain grade stamped lumber



- **As a result...**

- Most framing lumber used in Alaska is imported from Canada and the Pacific Northwest
- We are subject to price volatility of global lumber markets
- Our domestic resource is under-utilized





The Alaska Lumber Grading Program

Key similarities and differences of ALG / WWPA

Similarities Between ALG Program and WWPA Practices	Key Differences in ALG
<ul style="list-style-type: none">• Visual grading system• Grading rules are linked to species with design values approved by ALSC• Many of the ALG grading rules are the same as the corresponding WWPA grading rules (e.g., slope of grain, checks, splits, warp)• Standards for certifying grade, species, MC, origin.	<ul style="list-style-type: none">• ALG Limited to set of 3 species combinations for “Alaskan Species Lumber”• Key differences in rules. E.g., how knots are assessed (simpler and more strict)• Program certification goes to individual, not mill• No third party verification in ALG• Accommodations for lumber that is not surfaced

In conclusion:

- The ALG program is a state alternative structural lumber grading program that offers small- to medium sized sawmill businesses a training to allow them to grade and self-certify dimension lumber, which under limited circumstances can be used to meet residential building code requirements.
- Limited scope of 3 substitute grades for residential framing
- Underpinned by already existing strength property data for Alaska species and grading rules developed for them.
- To compensate for the fact that participants receive less training than their industry counterparts, the rules restricting grain displaced by knots are simplified and more restrictive.



ALG Program Development Timeline

**WWPA
Establishes
Design Values
for Alaskan
Species
Lumber**
•2005

**Program
Instructor
Participates
in WI and TN
LUDL
Programs**
•February 2024

**First Alaska
Lumber
Grading
Training is
Held in
Palmer**
•June 2024

**3 Air / Kiln
Drying
Workshops
Held**
•May 2025

**SB 87 Signed
into Law**
•August 2023

**Mock
Training
Event Held in
Fairbanks**
•May 2024

**Final Training
of 2024 Held
in Haines, a
total of 8
Workshops**
•October 2024

**5 more
Lumber
grading
trainings in
2025**

About the Lumber Grading Training

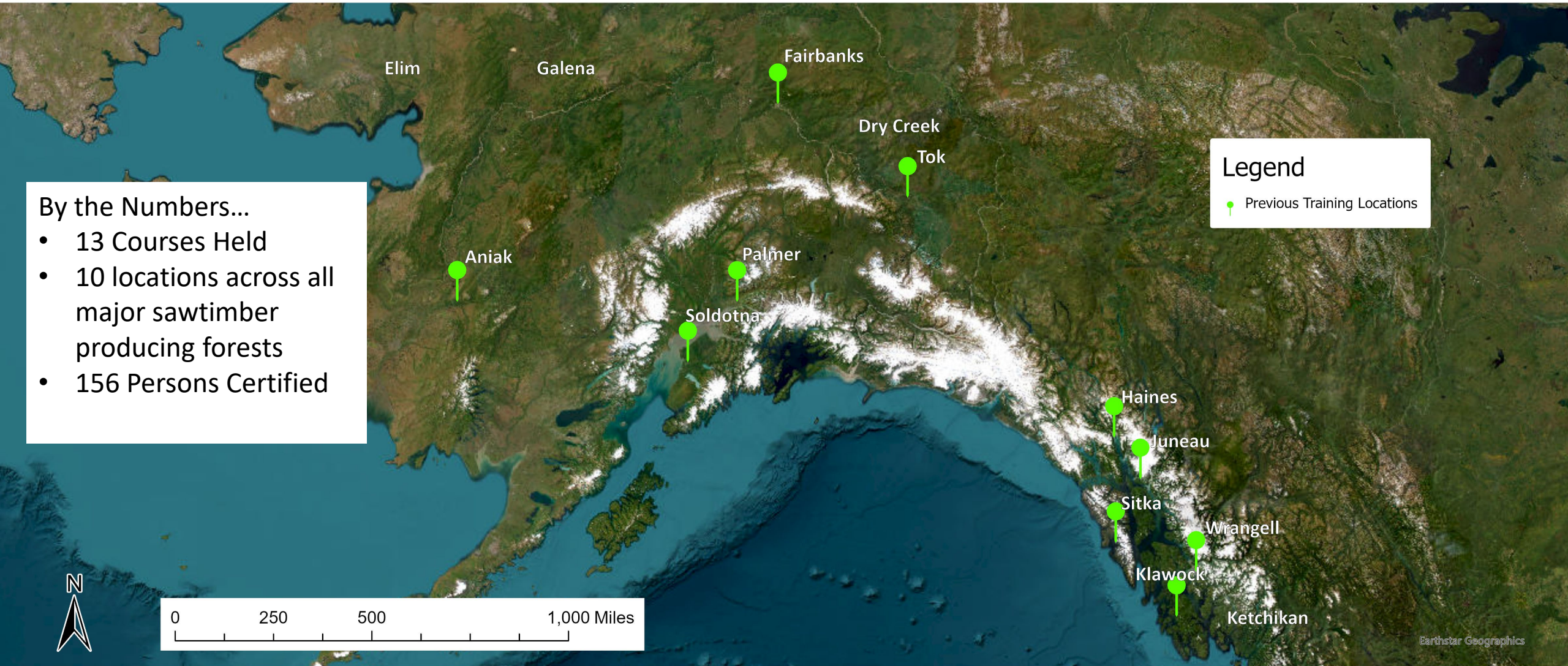
- At a minimum will be held annually in:
 - Interior
 - Southcentral
 - Southeast
- Completed in one 8-hour day
- Includes lectures, hands-on lumber grading practice, and an assessment test to earn the certificate
- No registration cost; it is free
- Partner agencies, networking events, course interest form on website helps show demand



The Alaska Lumber Grading Program

By the Numbers...

- 13 Courses Held
- 10 locations across all major sawtimber producing forests
- 156 Persons Certified



**Workshop Locations
-Lumber Grading Certificate**

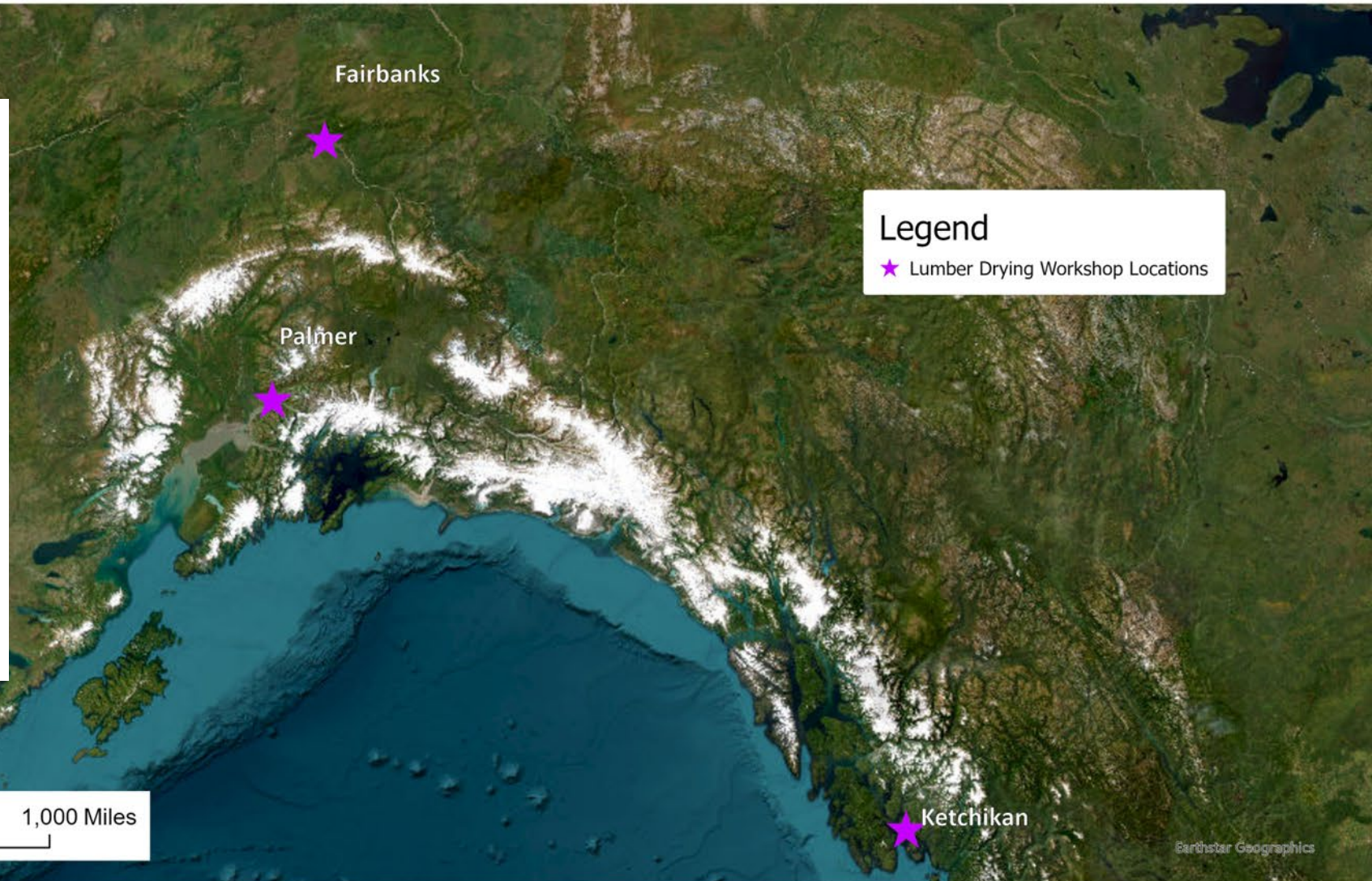
2024 - 2025, to date

Takeaways from the first year of trainings...

- LOTS of demand and interest in this field
- Participants break down (roughly) as follows:
 - 50% small to medium sized sawmill businesses
 - 25% Hobbyist (one person, or one person and a somewhat reluctant significant other)
 - 20% - Aspiring (do not have a mill)
 - 5% - Agency (code official, architect, engineer, program coordinator, etc.)
- Significant demand for basic sawmill operation training
- Huge demand for knowledge in lumber drying and kiln operation

The Alaska Lumber Grading Program

- Visiting instructor: Dr. Frederik Laleicke, NC State Extension Wood Products Specialist
- Held in 3 Locations
 - **Fairbanks** – Fairbanks Pipeline Training Center
 - **Palmer** – Matanuska Experiment Farm and Extension Center
 - **Ketchikan** – US Forest Service Discovery Center
- 30 Participants overall



May 2025 2-Day Wood Science and Lumber Drying Workshops

2-Day Lumber Drying / Wood Science Workshop



2-Day Lumber Drying / Wood Science Workshop



2-Day Lumber Drying / Wood Science Workshop

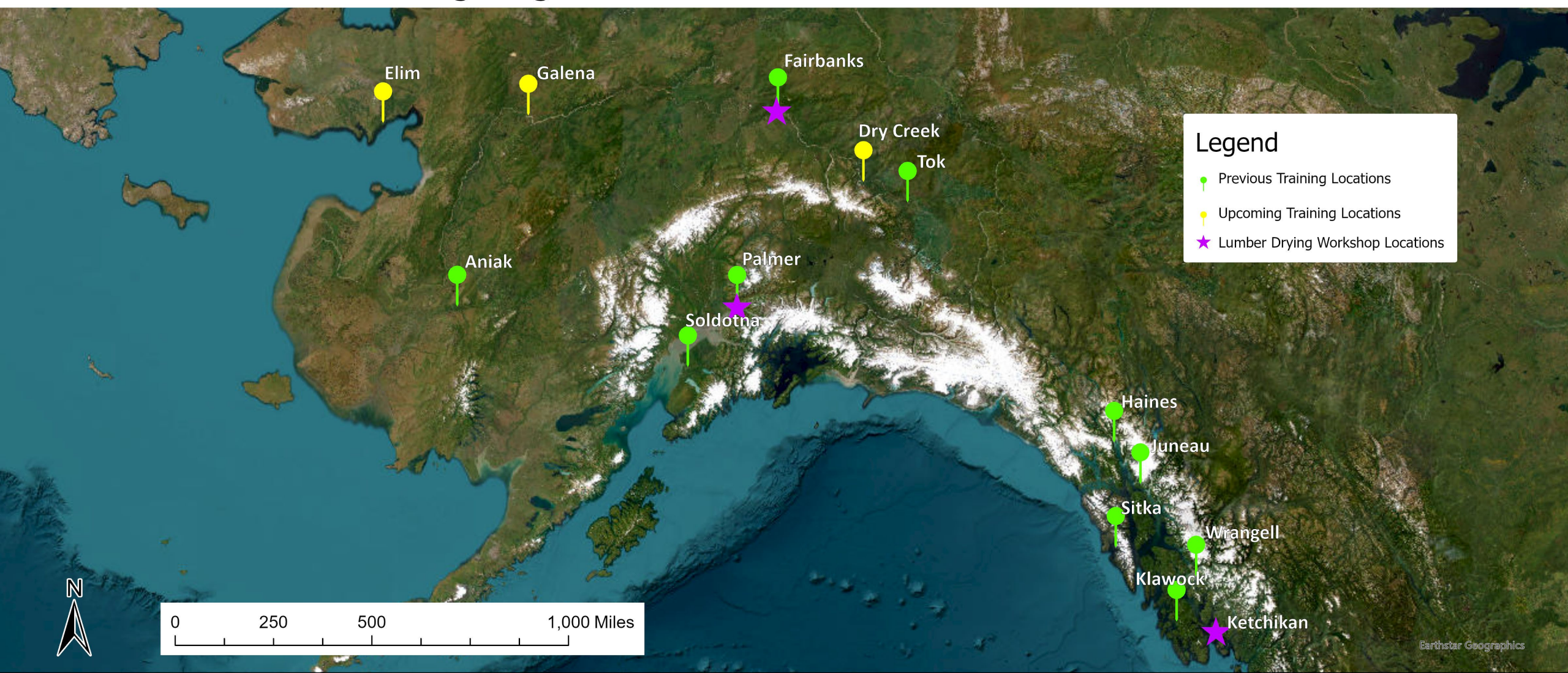


Upcoming Trainings include:

- Palmer, August 21st
- Elim, August 27th
- Klawock, September 17th
- Dry Creek, October 8th
- Galena, October 15th



The Alaska Lumber Grading Program



Workshop Locations
-Lumber Grading Certificate
-Lumber Drying

2024 - 2025

Where ALG is being used so far:

- **The Kuskokwim Corporation** – Harvest to Home
- **Typhoon Merbok impacted area** housing initiative
 - 15 ALG participants signed up to be on the producer list
- Forest Service employee housing project in **Sitka**
- **YDFDA** is designing a major sawmill and drying facility in Emmonnak
 - Reps have attended lumber grading and lumber drying programs
- **Port Graham, Dot Lake, Louden tribe** all gearing up their sawmill equipment and personel
- Numerous “informal uses”
 - E.g., non-structural or non-mandatory lumber producers using the ALG certificate of completion as value-added credential in their marketing (still a positive outcome in my book).





Status of Municipal Building Department Integration – an ongoing effort...

- Resolved approval
 - Alaska Housing Finance Corporation
- Have stated *intent* to adopt the program into their code:
 - Sitka
 - Wrangell
 - Valdez
- In-roads made with engineers, architects, and inspectors:
 - Fairbanks
 - Juneau

We will be at the Municipal League's annual conference
December 8th – 11th

Looking ahead: Current projects and future goals:

- Alaska Lumber Grading Program Specific:
 - Continued support of integration into local building codes
 - New strength property testing of Alaska species
 - Sawmill operation and lumber drying workshops
- Supported by USFS Wood Innovations Grant:
 - Developing an online wood products directory
 - Establishment of an “Alaska Forest Product” branding campaign
 - A comprehensive guide for drying lumber in Alaska
 - Regionally / species specific information for kiln and air drying wood products
 - “If I’m in Petersburg, what MC should I dry my hemlock trim product to prior to shipping to my customer in Fairbanks?”



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<https://www.uaf.edu/ces/lumber>