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## Wood Chipper Feasibility Analysis

June 7, 2019

### Introduction

This analysis addresses the question, “Is the purchase of a wood chipper through a USDA grant by the Haines Borough a viable investment for contributing to the community’s economic development goals?”

### Recommendation

The following analysis examines that question in depth and provides a basis for this recommendation:

**The Haines Economic Development Corp. recommends the Haines Borough proceed with purchasing the chipper through the USDA grant to support the development of small and emerging private business enterprise in our community.**

While the market for local wood chips as a fuel source is not yet well defined, the risk to the borough in acquiring the chipper is low. There is evidence to show that purchasing the chipper and leasing it to a local business under the model described in this report aligns with the grant’s regulation 80 FR 15665 Rural Business Development Grant and in the grant agreement, specifically, “to support the development of small and emerging private business enterprises in rural areas.” Additionally, under the model suggested in this report the grant’s effect could be multiplied across several local businesses:

- A local, small and emerging industrial mechanic and equipment rental business will have an opportunity to add a piece of equipment not currently in its fleet;
- Other small businesses (i.e., timber harvesters, mills, landscapers, construction companies) will have access to equipment not normally available or affordable. This could spur other types of business or job development across several business, not just one;
- The community will have an incentive to move forward with the biomass boiler project, knowing there is equipment available in the community that can produce wood chips as an affordable fuel source for the boilers;
- Local entrepreneurs may develop business plans to become chip producers for the local and regional market knowing there is equipment available that can facilitate their business venture with low risk investment;

Taking advantage of this grant could also encourage more use of Haines State Forest resources on a local level and propel the biomass boiler project, resulting in a local energy source with reduced dependence on fossil fuels.

## Background

The Haines Borough in 2016 was awarded a Rural Business Development Grant from USDA “to purchase an industrial wood chipper and log splitter.” At the time of the grant, the goal was to “lease the equipment to a tribally owned business to produce chips for use in the biomass boilers in the community.”

The borough at first intended to work with Chilkoot Indian Association on a chip production operation. CIA later decided to focus on wood pellet heat in its facilities. The borough was able to amend the grant requirements to allow for leasing the chipper to a “small and/or emerging business” and not specifically tribal-owned.

The borough extended the deadline for using the grant as work continued on the design of a biomass boiler system.

The Haines Borough Assembly in 2018 approved a Request for Proposals for a “Mobile Chipper/Horizontal Drum Grinder.” Two responses were received. The proposal by Vermeer was selected at the time but the purchase was delayed as the borough assessed the timeline of the biomass boiler project.

With the biomass boiler design now finalized, the borough is deciding whether to issue another RFP to purchase a chipper. The borough would also issue an RFP for the lease at the same time or right after the purchase. Ideally, there would be a business interested in leasing the chipper when the borough seeks authorization to buy it.

### **How are the chipper grant and biomass boiler project connected?**

Haines Borough contracted with Wisewood Energy to design the biomass boiler project, and final design was completed in April 2019. While the boiler project is likely 1-3 years from being ready to go online and use chips as fuel, the grant for the chipper is on a shorter timeline. The borough needs to decide in the next 2-3 months whether to use the grant and purchase the chipper, ask for another extension (which is unlikely to get approved) or let the grant expire. Because the timeline of the boiler and chipper is not concurrent, this report examines if the chipper grant would fulfill the goals of the grant and benefit the economic goals of the community before a boiler was completed, and even if the boiler was not completed at all.

### **Assumptions**

This analysis uses the Vermeer proposal submitted and chosen at the time of the 2018 RFP. HEDC confirmed the same proposal from Vermeer is still valid but it is not a foregone conclusion that Vermeer’s proposal would be chosen by the borough again, depending on what other proposals are submitted during the next RFP.

This report at points refers to Haines Industrial Supply, assuming Haines Industrial Supply would initially lease the chipper from the borough. This is because Haines Industrial Supply expressed interest in the partnership and seems to be the most viable option at this time. There could be other interested parties in leasing the chipper once the borough releases the RFP; however, no other party was been identified at the time of this report.

## Chipper Specifications

The chipper would be owned by the borough and bought with grant funding. Insurance costs and maintenance responsibilities would be decided in lease negotiations with a local business. The borough holds general liability coverage, but the lessee would also likely hold insurance for chipper operations.

### **Specs**

Vermeer Northwest quoted the borough for two different chippers of the same kind; one new and one slightly used with a price difference of about \$7,000. Both machines have full factory warranties.

The machine is an AX19 Brush Chipper with a 173 hp John Deere diesel engine. The infeed opening is 28.9" wide by 24" tall. It operates using four knives. *(Complete specifications are in Attachment 1.)* The machine meets the borough's RFP requirements to "accept at least 19" diameter logs and produce 2" minus particle size chips."

According to the Vermeer quote to the borough, there are other uses for the machine beside producing chips; "For a small emerging business in Southeast Alaska, the AX19 allows the owner/operator the versatility to use this machine for other uses as well, including some minor land clearing work, residential tree removal, line clearing for overhead power distribution, forestry management, etc."

The chipper comes on a trailer and can be towed with a 2-ton pickup.

### **Maintenance and operational details**

Vermeer submitted the Maintenance Manual and Planned Maintenance Intervals and Fluid Capacity that gives a breakdown of what maintenance is recommended at certain hours of service. *(Attachment 1)*

Seasonality is an important factor in the operation and maintenance of the chipper:

- The chipper doesn't have a debarker; this has raised some questions among a few people in the community familiar with industrial chippers. The concerns center on their experience that bark can easily dull knives in chippers. Years ago, apparently the industrial chippers in Haines used debarkers to preserve the knives for longer periods of time.
- The chipper under consideration uses four knives. They can be flipped when dull and also sent to Vermeer in Tacoma or Anchorage for sharpening with about a 48-hour turnover. Additional knives are \$68.73 each, so it is affordable to keep more than one set of knives on hand.
- Local timber harvesters say it is not so much the bark that can dull knives but mud and dirt. Harvesting and chipping in the winter makes for "cleaner" wood. Harvesting and chipping in the summer may take more education to chipper renters, or they will have to be forewarned that they may have additional cost of new knives if they chip "dirty" wood and dull the knives beyond normal wear and tear.

## Market Environment

### **Market for leasing the chipper**

There are several potential uses and markets for individuals or businesses who may lease the chipper either directly from the borough or through a local business. (Some of these scenarios are discussed in more detail under other sections.)

- To produce and sell chips to the borough or a wider market
- To become zero-waste small mill operation and utilize industry by-products
- To chip by-product that may be used to manufacture briquettes
- To chip material to sell as compost, landscaping and agricultural use
- To sub-lease as a service to customers
- To reduce burning emissions from organic waste disposal and land clearing

### **What industries are the target market for leasing the chipper from the borough?**

#### **Local lumber harvesters**

Local timber businesses have expressed conditional interest in leasing a Borough-owned chipper if the Borough's biomass boiler project is installed and a lease agreement is economically viable. They may also be interested in purchasing their own chipper to integrate into their business plan. At this time, local timber harvesters have not expressed interest in a long-term lease with the borough until the borough decides whether to move ahead with building the biomass boilers.

#### **Industrial Supply/ Equipment Leasers**

Haines Industrial Supply is interested in leasing the chipper from the borough to work into its own business plan and rental equipment fleet. Haynes Tormey, manager of Haines Industrial Supply, suggests there is a local and regional market for renting out the chipper, primarily for land clearing projects. Having a chipper in the community may also encourage a local mill to test chip making options for small-scale sales for gardening, composting or other residential use and in preparation for providing chips to the borough as a fuel source.

#### **Individuals in the community**

One of the immediate markets for the chipper through Haines Industrial Supply would be individuals or small businesses involved in land clearing or building site development. Haines Industrial Supply's experience renting heavy machinery to private individuals and businesses mitigates inherent risks. Adding equipment to Haines Industrial Supply's existing rental fleet is far more efficient for consumer and owner, and the community, than for the borough to rent or lease directly to the public.

Tormey said he has had inquiries from beyond Haines for potential chipper use. Because the chipper comes on a trailer, it is possible to transport it via the ferry system.

### **Market Size**

The exact market size is unknown and difficult to estimate except anecdotally through Haines Industrial Supply's estimates. Others interviewed in the community suggested a modest or small market for a

chipper rental (these comments are discussed more under “Demand for Product” section.) The market may grow once the chipper is available and it is advertised in the community.

### **Market Environment for Wood Chips**

The current demand for wood chips in the community appears low. Haines Home Building disclosed it sells about a pallet worth of wood chips yearly for gardening needs. It orders chips for the playground at Haines School, but those are a special product for playgrounds and raw wood chips would not likely be used for that purpose. Haines Composting said it and other composting operations may use chips but probably would not be willing to pay much for them since they can currently get free sawdust from Mud Bay Lumber Co.

Some local gardeners said chips may become more popular if they were available locally, but they are not currently in high demand.

Chips may also find a market in use for livestock but they are not currently in high demand.

There may be demand for chips in the development of local trails set to begin construction this fall or next spring.

### **Would the chipper benefit a “small and/or emerging business” per the grant requirements?**

Tormey suggests his business could benefit from having a chipper in its fleet to rent out. As mentioned above, Tormey says he believes there is a local and regional market for sub-leasing the chipper. Additionally, if the biomass boiler project moves forward, he predicts he could rent out or sub-lease the chipper to a local timber harvester or small mill to produce chips. In this model at least two, and possibly more, locally owned businesses would benefit and spur job creation as opposed to the model of the borough leasing directly to one timber harvester or small mill as originally planned. This also places the maintenance and knowledge of the chipper with a qualified mechanic and equipment operator rather than the borough or local mill. While a local mill operator would likely have the knowledge to maintain a chipper, it may be more efficient for an industrial mechanic to house and maintain the chipper. However, Tormey suggests a short-term lease with the borough to start until the future of the biomass boiler project is determined. In that case, either Tormey or the borough could determine it would be better to have the borough lease directly to a chip producer once chips are in more demand.

### **Existing Competition and Challenges**

- **Competition**

There is no chipper for rent or community use in Haines currently.

Tyler Rental in Juneau often rents industrial equipment in Haines. Tyler Rental has one used chipper (2015 Vermeer BC700XL), a smaller version than is being considered by Haines Borough. It is currently for sale (\$13,900) but also available for rent.

- **Operating costs and fuel costs**

Maintenance and operational costs would be determined in lease negotiations with the borough and leasee. Most of the operating costs and minor maintenance responsibilities will be borne by the leasee who may set rental rates to recoup expenses.

- **Operational skill needed**

Vermeer provides a full day of on-site training in its quote on the chipper. The training could include several people. If the chipper is rented out, the leasee would be responsible to make sure the user has skills and knowledge (or training) to operate, like they do with their other equipment rentals.

- **Mobility/transportation**

At least a 2-ton truck is needed to tow the chipper.

- **Zoning in the borough for chipper use**

There may be certain restrictions on where the chipper could be used in the borough. According to Haines Borough Planner Holly Smith, whether a land use permit would be needed for operation of the chipper depends on several factors including duration of use; if the chipper is being rented by a land owner for a few days and possibly up to a week, and the chipper is operated during normal business hours to take into account the noise factor, a borough land use permit outside the industrial zoning area would not be necessary.

If the chipper was sub-leased or rented for an extended period of time, the borough may require a land use permit or conditional use permit for use in the non-industrial zoning areas. Noise has been mentioned as a concern for operating a chipper. The borough normally allows operation of loud equipment within reasonable hours, but if the chipper was located and operated in one area for a long period of time, it would have to be located in the proper zone and a land use or conditional use permit may be required.

- **Granting agency uncertainty**

The USDA on May 30, 2019, sent the borough an email, expressing concern that the idea of the borough purchasing the chipper to lease to an industrial equipment rental business may not “meet the intent of the Rural Business Development Grant regulation.” HEDC believes this analysis provides evidence that the chipper will be used as intended and allowed under the grant regulation 80 FR 15665 Rural Business Development Grant and in the grant agreement, specifically, “to support the development of small and emerging private business enterprises in rural areas.” This will happen in several ways:

- A local, small and emerging industrial mechanic and equipment rental business will have an opportunity to add a piece of equipment not currently in its fleet;
- Other small businesses (i.e., timber harvesters, mills, landscapers, construction companies) will have access to equipment not normally available or affordable. This could spur other types of business or job development across several business, not just one;
- The community will have an incentive to move forward with the biomass boiler project, knowing there is equipment available in the community that can produce wood chips as an affordable fuel source for the boilers;
- Local entrepreneurs may develop business plans to become chip producers for the local and regional market knowing there is equipment available that can facilitate their business venture with low risk investment;

Despite these goals conforming to the grant requirements, it is possible the granting agency could still disagree.

- **Expense and risk to borough**

Borough staff says the reporting requirements for the chipper grant is not unusual or overly burdensome.

- **Equipment disposal**

One of the risks in acquiring the chipper is what to do if the demand is low or the biomass project doesn't go forward. There is a clause in the grant agreement that allows the borough to dispose of the chipper, if necessary, by selling it and paying a portion of the grant back to the agency. It appears low-risk. The exact language reads:

(e) Disposition. When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a Federal awarding agency, except as otherwise provided in Federal statutes, regulations, or Federal awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the Federal awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with Federal awarding agency disposition instructions:

(2) Except as provided in § 200.312 Federally-owned and exempt property, paragraph (b), or if the Federal awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair market value in excess of \$5,000 may be retained by the non-Federal entity or sold. The Federal awarding agency is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the Federal awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the Federal awarding agency may permit the non-Federal entity to deduct and retain from the Federal share \$500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.

## The Haines biomass project and chipper grant relationship

The grant for the chipper and the biomass project are linked, but not exclusively. To compliment this research on the chipper, a recap of the biomass project is below and the final design report from Wisewood Energy is included as *Attachment 2*.

The borough contracted with Wisewood Energy of Portland, OR., to provide a detailed design and engineering of a biomass district energy system that can utilize locally available wood chip fuel from the Haines State Forest. It completed a final design for the biomass boiler system in April 2019. The proposed biomass district energy system is designed to provide heat to the Haines School and Pool, Administration Building, Library, Vocational Education building and possible future greenhouse; however, these individual connections may be completed at different times with minimal impact to the operations of the system. In consultation with the Borough, the Pool and School have been identified as the baseline development scenario, the Library and Administration building as Add Alternative One, and the Voc-ed building and Garage as Add Alternative Two. Costs to connect to the future greenhouse are not included in capital costs opinions because no site has been identified; however, the future greenhouse is included in the operating cost opinion for the full system buildout. (Companion greenhouses are often considered in biomass programs as a way to utilize "extra" heat. Greenhouses have been popular with some Alaska biomass projects, including in Prince of Wales and Tok where the

greenhouse is used as an educational tool and provides locally grown food to the school and community.)

Questions often arise about the moisture content of wood in the Haines State Forest. Wisewood’s design includes a boiler that “is capable of cleanly and efficiently utilizing wood chips with up to 45 percent moisture content, sufficient to handle material produced from the local Haines State Forest that has been passively dried.”

Local timber harvesters have pointed out that if the project moves forward, a local chip producer would likely have to invest in infrastructure to store chips.

The financial analysis of the biomass boiler project is detailed in the Wisewood report (*Attachment 2*.)

The chart below is a synopsis of the cost savings assuming the following:

- Heating oil cost of \$3.17/gallon – (based on the average taken from data collected from the borough and school district for 2014-2016.)
- Propane cost of \$2.00/gallon
- Electricity cost \$0.21/kWh
- Biomass fuel cost of \$90/ton

**TABLE 1** Estimated displaced fuel oil, annual savings, capital costs, and payback periods for each development scenario. The capital cost opinion range reflects a total project cost and a risk-adjusted total project cost.

DEVELOPMENT SCENARIO	BASELINE	BASELINE + ADD ALTERNATE 1	FULL BUILDOUT*
Displaced Oil (gal/yr)	32,800	35,200	40,500
Annual Savings	\$46,000	\$45,000	\$47,000
Capital Cost Opinion	\$1.88 – 2.14 M	\$2.3 – 2.61 M	\$2.56 – 2.91 M
Simple Payback** (yrs)	25	36	40
Accelerated Payback** (yrs)	15	19	20

\*Estimated fuel oil displacement and savings for the Full Buildout scenario include the future greenhouse; however, capital costs for connecting the greenhouse are not included in the capital cost opinion.

\*\*Simple and accelerated paybacks assume \$1 million in grant funding is used for construction.

**Utilizes local natural resources**

The goal – and basis – of the biomass boiler project is to utilize local resources from the Haines State Forest. The financial analysis is based on local harvesting and chipping to produce fuel. There may be chips available elsewhere, including near Haines Junction (see Regional Chip Producers section below) but the financial analysis does not include examining the costs of shipping chips in from outside Haines.

**Juneau Market**

There is a study currently underway from Juneau state forester Joel Nudelman. Joel is assessing the availability of biomass in the Juneau area for possible supply to proposed facility use at Lemon Creek prison and Bartlett Hospital. The report is expected to be published in 2-4 weeks. Joel said the assessment depends on two supply chains; one from within Juneau utilizing wood fuel from lot clearing



and the waste stream and a second supply from outside Juneau, including Haines or Hoonah. This assessment could prove helpful in defining an additional market for wood chips produced in Haines.

### **Regional chip producers**

Currently the only chip producer in Southeast is Viking Lumber in Klawock. Viking owns a chipper and the City of Craig owns a dryer it purchased through grant and matching funds. The dryer is installed at Viking lumberyard, but remains owned by the City. Viking produces chips primarily to sell as pulp for paper mills; it takes a small portion of the chips, dries them and then sells them to the City of Craig for biomass fuel and trucks them to the biomass boiler. Viking doesn't currently sell chips as biomass fuel to any other community and company representatives estimate shipping chips outside of POW would be cost prohibitive.

Viking also produces pressed briquettes from sawdust, chips and wood waste and sells to the local residential market.

Bear Creek Logging in Haines Junction began making chips in 2018 and sells to two businesses in Whitehorse that recently installed biomass chip boilers. Bear Creek Logging bought a \$150,000 chipping machine with financial help from the Yukon government. The company uses low-grade wood waste from its firewood operation, harvested from beetle-killed trees in the Haines Junction area, to create chips. According to the Yukon Wood Products Association, "chip production provides a burgeoning opportunity to the area's small logging industry to utilize local resources." It's unclear if Bear Creek Logging could be a financially viable chip supplier to Haines if necessary. [Information request still pending.]

### **The Haines State Forest Management Plan**

The following is taken from the Final Five-Year Forest Management Schedule for the Haines State Forest:

#### **Local Timber Resource Supply and Demand**

There are several small mobile dimensional lumber sawmills and at least two commercial log home building companies in the Haines area. These mills produce rough-cut green lumber for local consumption, round log and two and three side log homes for both local use and as an export product, and firewood products for sale throughout the communities of the upper Lynn Canal. They typically acquire approximately half of their timber needs from state timber sales.

This document lists possible available timber resources that could support the development of increased supply demands associated with a biomass market while maintaining supply for local markets. Planning for possible market demand changes remains conservative and is simply designed to represent practical limitations of supplying available resources without exceeding sustainable harvest levels set in the HSFMP (Rev. 2002).

Because current local markets do not have the capacity to utilize the entire annual allowable cut volume, and due to market conditions here in Alaska and on world markets, there is the potential for round log export of timber purchased on the Haines State Forest. It is the policy of DOF to encourage local processing of raw resource materials.

## Conclusion

Through this analysis, HEDC is assisting to inform the decision before the borough of whether to proceed with purchasing a wood chipper with grant funds or let the grant expire. The analysis shows that the most viable scenario for the chipper grant is the following:

The borough proceeds with the grant to purchase the chipper, ideally the Vermeer option if still available and if chosen through the RFP process.

The borough leases the chipper to a local business, likely Haines Industrial Supply, for 1-3 years. It is up to the borough and Haines Industrial Supply to negotiate a favorable lease that considers maintenance, operation and insurance costs.

Haines Industrial Supply, as a private company, will determine the best way to market and integrate the chipper into its rental fleet.

The borough determines within 1-3 years whether to proceed with the biomass boiler system.

1.) If the biomass boiler project proceeds:

- The borough (possibly along with HEDC) brings local timber harvesters and mills into the discussion, letting them know the borough will need to purchase chips to fuel the boilers.
- After the biomass boiler project progresses, and once the initial lease between the borough and Haines Industrial Supply is expired, the borough reissues an RFP to lease the chipper for the purpose of manufacturing chips for the Haines biomass boiler and wider market.

2.) If the biomass boiler project does not proceed:

- The borough and Haines Industrial Supply renegotiate a lease for the chipper and the chipper remains in the community for sub-leasing or rent, or;
- A regional wood chip market emerges in that time and a local timber harvester or mill negotiates a lease with the borough for wood chip production, or;
- The borough decides the chipper is not an asset to the community without the biomass boiler project and the borough divests itself of the chipper through the process outlined in the grant agreement.

Below are highlights of important considerations for this scenario:

### **What are the key opportunities for economic development?**

- A local business expands its rental fleet with minimal investment, aligning with the grant's intention to "support a new and/or emerging small business."
- Other local businesses have access to a chipper for landscaping, brush clearing and chip production with the potential for job creation, multiplying the effects of the grant to "support a new and/or emerging small business."
- The local timber harvesting and small mill operators have access to a chipper to test the market for chip production and sales with potential for job creation.
- Having a chipper available in the community may increase use of Haines State Forest resources
- The chipper is on a trailer, allowing access to a regional market.

- The community has access to a chipper that provides an alternative to “slash and burn” clearing for land and site development

**What are other positive points of the borough purchasing the chipper?**

- The grant opportunity means minimal investment from the borough.
- The chipper comes with a warranty, training and affordable knife replacement.
- The disposal option included in the grant agreement means minimal risk for the borough if the biomass project does not proceed.
- Purchasing the chipper completes a key piece of the puzzle going forward with the biomass boiler project and may help spur the project, including additional funding opportunities.

**What are the risks and concerns of the borough purchasing the chipper?**

- The market for renting the chipper is not well defined and mostly anecdotal.
- The market for wood chips is not well defined and currently minimal.
- The biomass project might not come to fruition, possibly eliminating the need for the chipper.
- The granting agency is skeptical whether leasing to an industrial rental company fulfills the intent of the grant.

**Recommendation**

The Haines Economic Development Corp. recommends the Haines Borough proceed with purchasing the chipper to support the development of small and emerging private business enterprise in our community. While the market is not well defined, the risk is low and could encourage more use of Haines State Forest resources on a local level. It could also propel the biomass boiler project and result in a local energy source with reduced dependence on fossil fuels.

The chipper and biomass project, while separate, go hand in hand. Considered together, the projects align with objectives in the Haines Borough Comprehensive Plan and Haines Five-Year Economic Plan:

**Haines Borough Comprehensive Plan:**

- Objective 3M: Continue sustained yield timber harvest from Haines State Forest, increase value-added wood and forest product use, support use of local wood for biomass heating.
- Objective 15L - 5: Support feasibility studies and development of small-scale renewable power or heating projects in Haines that power or heat individual buildings, or a series of connected buildings or an area through district heat; such as local wind, biomass, smaller hydro, ground or air sources heat pumps, and other.

**Haines Five-Year Economic Development Plan:**

- Objective 2 – Strengthen Economic Foundations
- Objective 1 – Increase Community Economic Development Awareness and Engagement

**Resources:**

“Haines State Forest Five Year Forest Management Schedule”

[http://forestry.alaska.gov/Assets/pdfs/timber/haines/20180604\\_fyfms18-22.pdf](http://forestry.alaska.gov/Assets/pdfs/timber/haines/20180604_fyfms18-22.pdf)

Wisewood Energy “Haines Borough Final Biomass District Energy Design Package” (Attachment 2)

Haines Borough Request for Proposals “Mobile Chipper/Horizontal Drum Grinder” (Attachment 1)

Alaska Energy Authority case studies and biomass community projects

<http://www.akenergyauthority.org/>

CBC, “Yukon Logger Bets on Biomass To Cut Costs and Wastes,” April 4, 2018

<https://www.cbc.ca/news/canada/north/yukon-biomass-logging-company-bear-creek-1.4604981>

**People interviewed:**

Brad Ryan, Haines Borough

Krista Kielsmeier, Haines Borough

Haynes Tormey, manager Haines Industrial Supply

Sylvia Heinz, Haines Timber Alliance

Roger Schnabel, Southeast Roadbuilders

Chip Lende, Lutak Lumber

Glenda Gilbert, Haines True Valley Home

Viking Lumber Co.

Karen Peterson, Alaska Energy Authority