

Logging and Hauling Cost Drivers

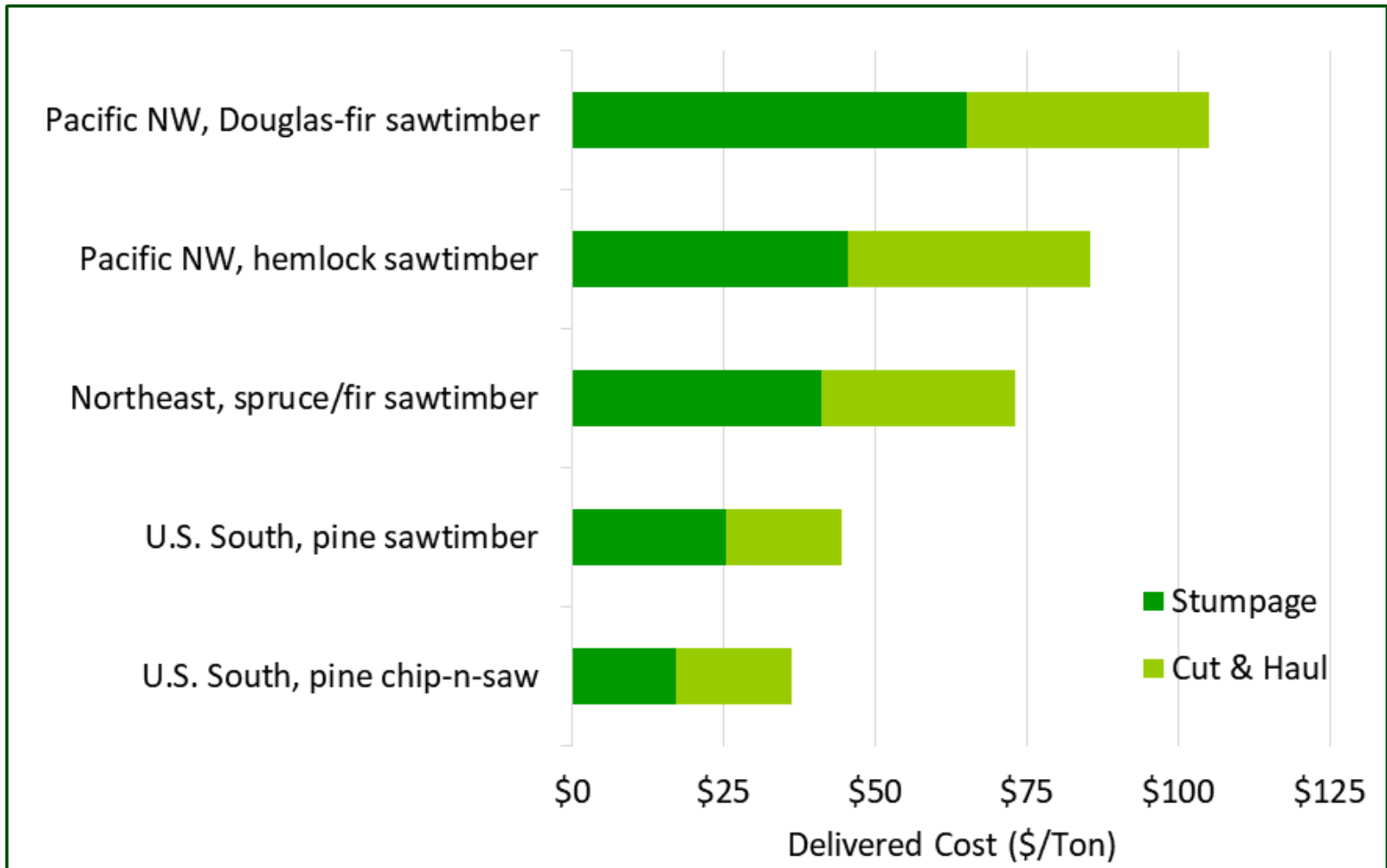
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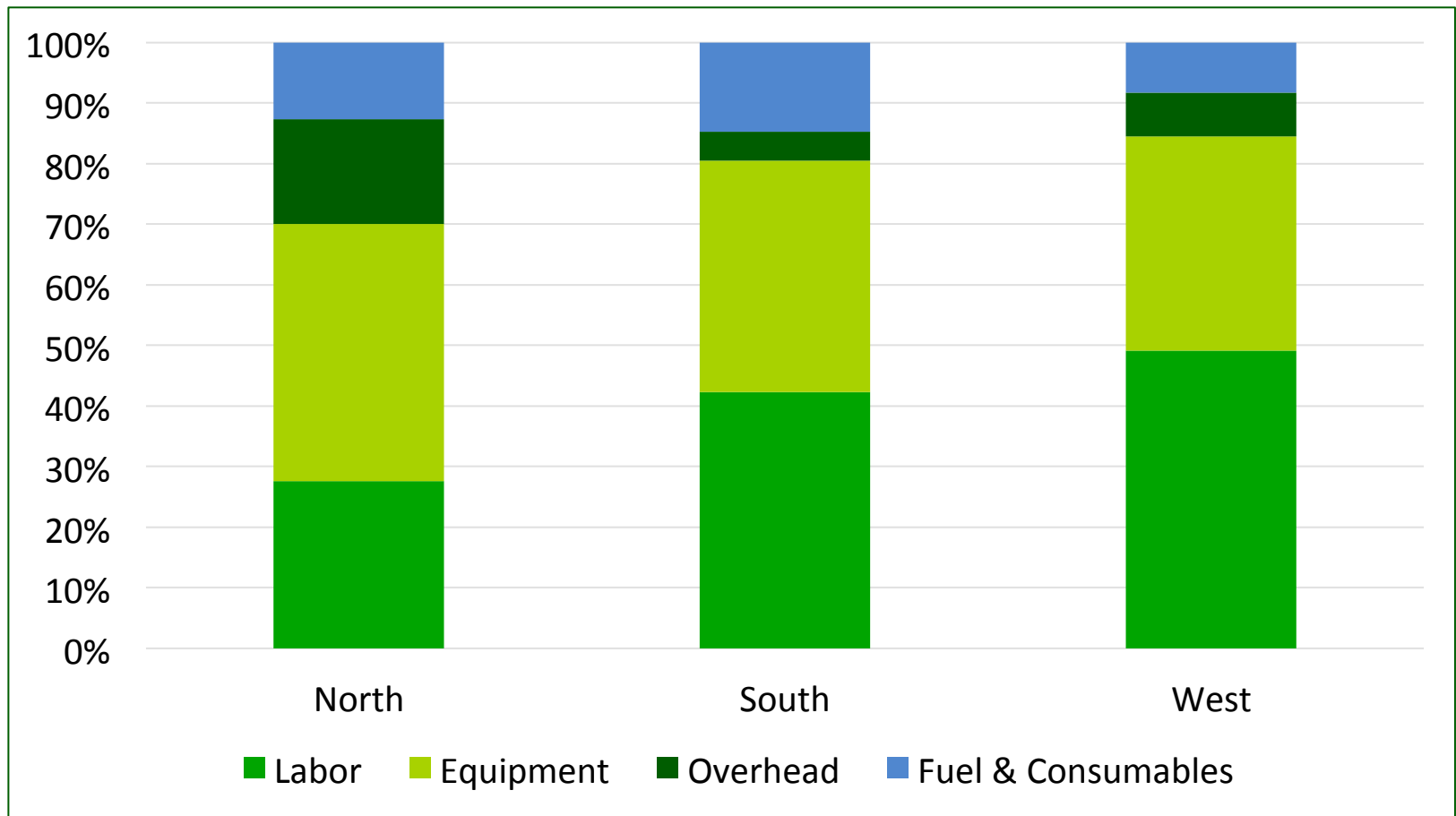
Introduction

- ▶ U.S. forest operations are among the best in the world.
- ▶ We are not without challenges:
 - ▶ Labor availability
 - ▶ Hauling infrastructure
 - ▶ Cost of diesel and other inputs
- ▶ All challenges have potential to increase cost.

Delivered Costs by Region

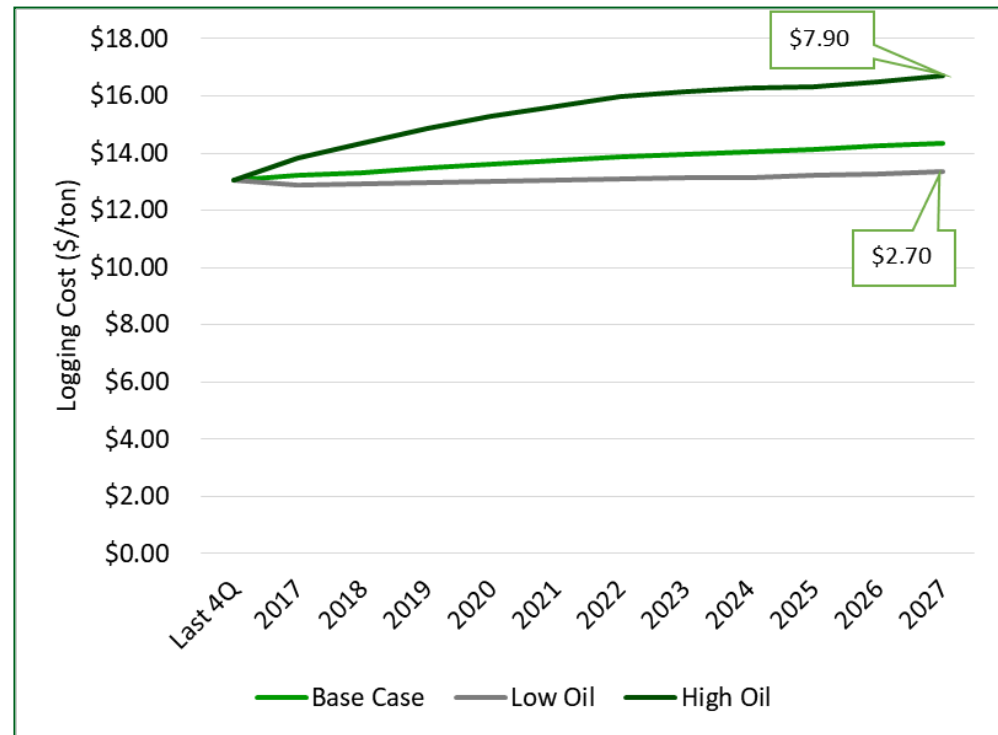


Logging Cost Centers

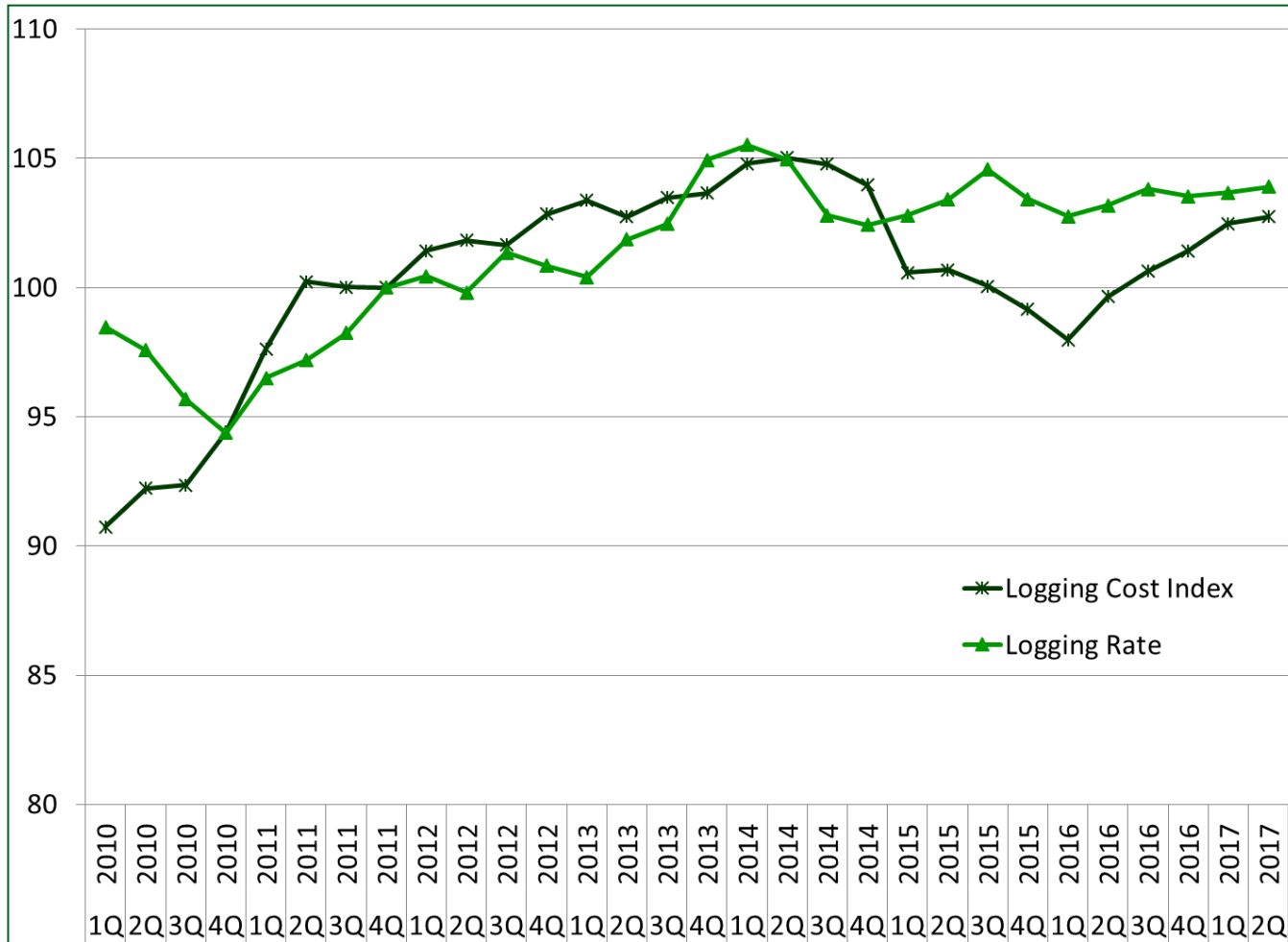


Diesel is a source of variation but cost impacts are knowable

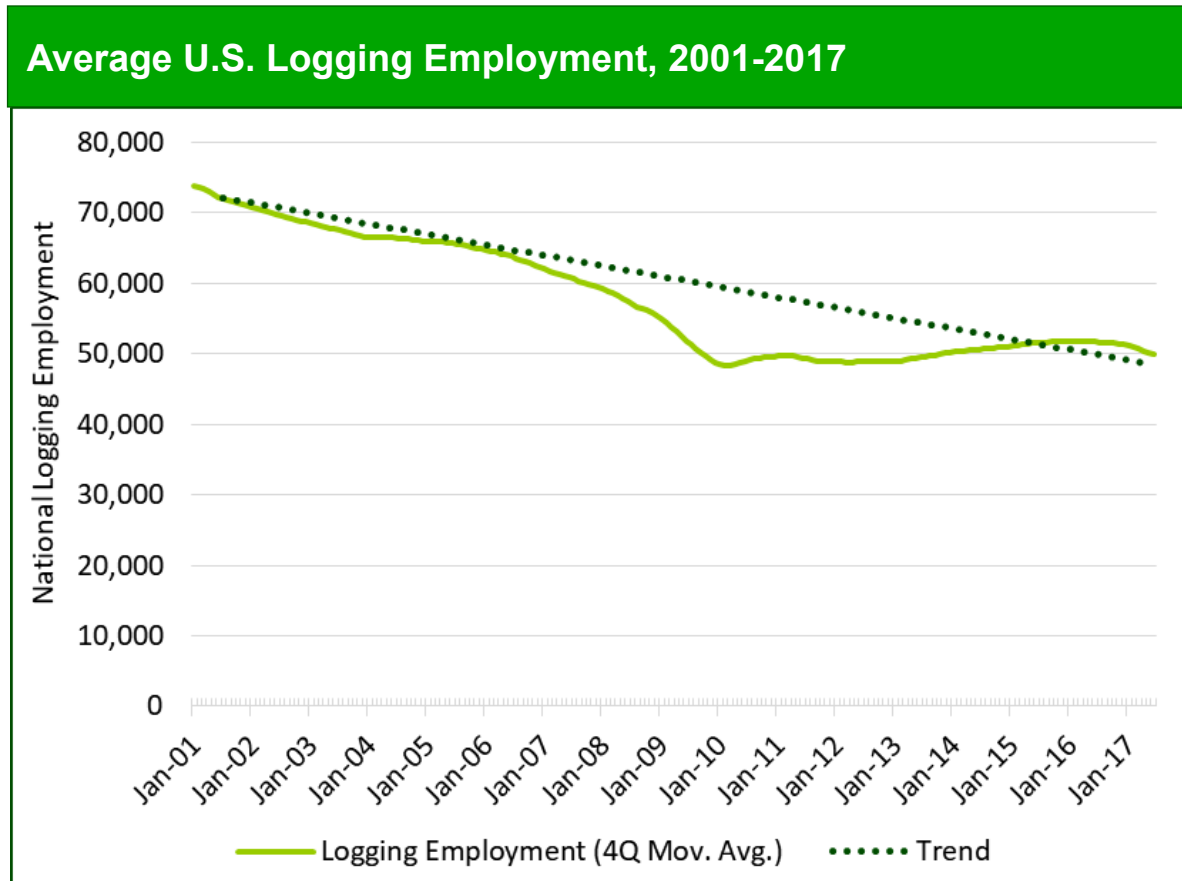
- ▶ A \$5 per gallon swing in diesel prices alters logging costs by \$3 per ton.



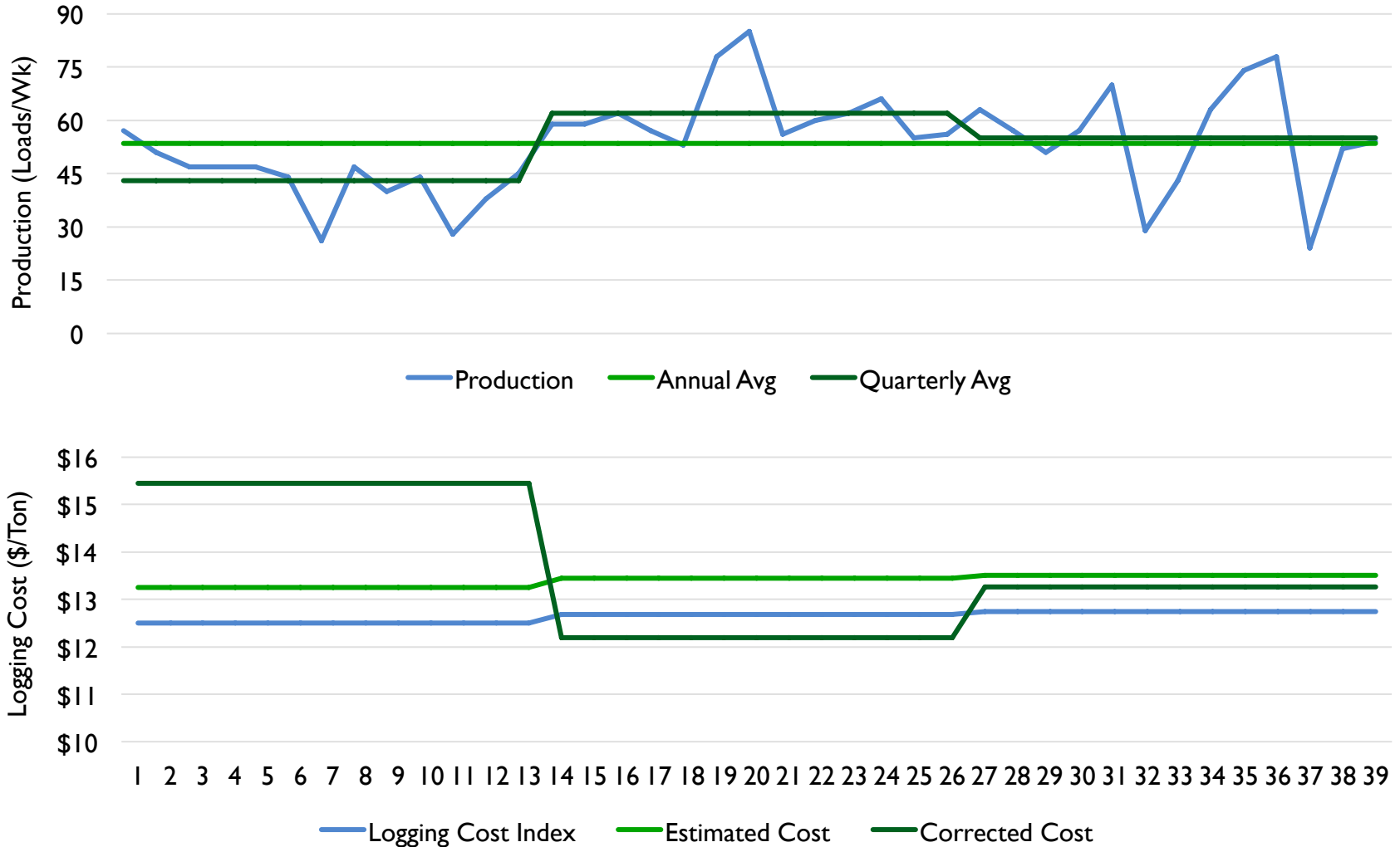
Logging costs track market rates over time.



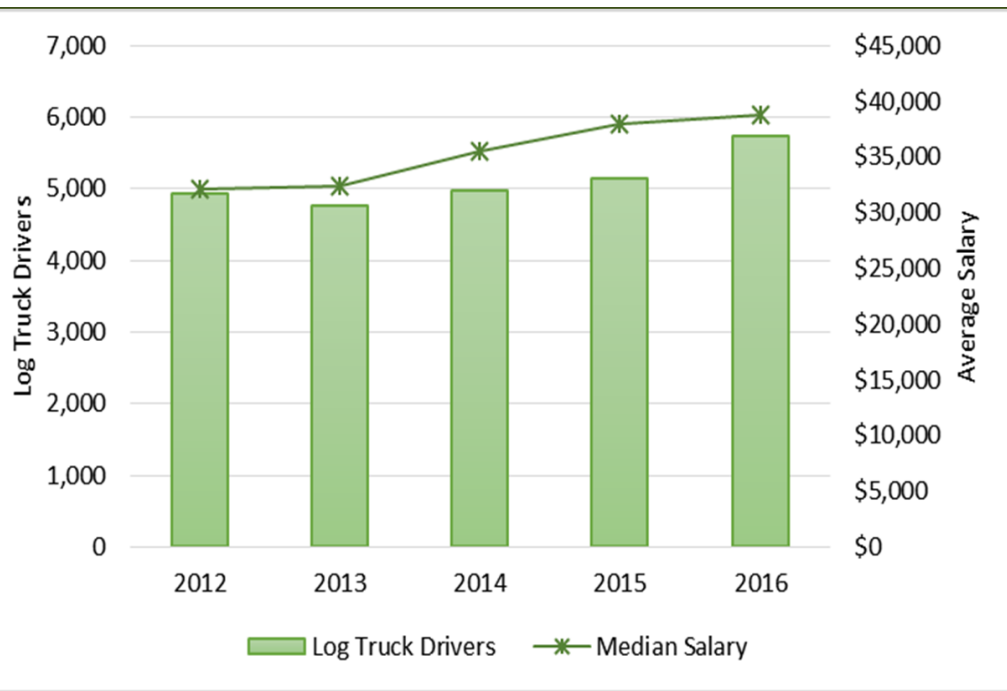
Logging employment has declined for years from increased productivity.



Costs are driven by production, not diesel.



Hauling is the weakest link in the wood supply chain today.



- ▶ Salaries increased 21% between 2012 and 2016.
- ▶ Number of drivers increased 16%.
- ▶ Insuring new drivers remains a challenge.

Conclusion

- ▶ Logging and hauling are significant costs for the wood supply chain.
- ▶ Labor, machinery, and diesel are the major costs loggers face.
- ▶ Despite future pressure on these costs, *production* will continue to be the most important consideration in logging costs.