Logging & Trucking In Maine

2021 Economic Contribution

A Study of the Impact of Professional Logging & Trucking in Maine
The Economic Contribution of Logging and Trucking in Maine study was prepared by Megan Bailey and Andrew Crawley of the University of Maine, with assistance from Vanessa Tillson of the PLC.

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The Professional Logging Contractors of Maine (PLC) is Maine’s only trade association which exists to give independent logging contractors and sole proprietors a voice in Maine’s forest products industry.

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Maine’s forest products industry has long been hailed as the backbone of the state’s economy – and an important component of the industry is logging. The strength and competitiveness of the logging sector is increasingly important as Maine’s forest products industry competes in a global market.

The Professional Logging Contractors (PLC) of Maine has been working with researchers since 2014 to specifically highlight the logging industry’s economic role in Maine. In March of 2020, the results from the third comprehensive economic study were released. In the years since that study was completed, much has changed. So last year the PLC commissioned an update, aiming to examine the industry in the wake of the COVID-19 pandemic and the eruption of the Pixelle Specialty Solutions paper digester.

The logging and trucking industries contribute directly to the Maine economy through both day-to-day operations (e.g. direct sales, wages, employment of workers) and indirect effects. In addition to day-to-day operations (direct impacts), every dollar that is spent on local purchases by any business or individual involved in the logging and trucking industries circulates throughout Maine’s economy and is used by other businesses and organizations to pay their employees, taxes, and purchase more goods and services (indirect impacts). This “multiplier effect” is a crucial component to consider when studying the total economic contribution of the logging and trucking industries to the state of Maine. The estimated 2021 economic contribution of Maine’s logging industry, including multiplier effects, was $582 million in output.

The study, “The Economic Contributions of Logging and Trucking in Maine”, included an analysis of these direct and indirect impacts as well as the results from a survey of industry members. The study revealed that in 2021, including multiplier effects, logging supported over 5,500 full-and part-time jobs in Maine, generated $312 million in labor income, and contributed an estimated $27 million in state and local taxes. Maine’s logging industry affects businesses across the entire state through the activities of logging companies (businesses and individuals) and the purchases that they (and their employees) make. It is clear logging remains critical to a range of industries and companies across Maine, as well as serving as the foundation of the state’s $8.1 billion forest products economy.

The industry is heavily dominated by small family businesses, with the vast majority employing fewer than five people. Survey responses indicate, as they did in previous studies, that logging companies in Maine are processing their harvest using highly mechanized equipment requiring skilled workers and significant financial investments. Respondents also reported that inflation and business costs, mill closures, access to qualified labor, and market prices are factors that significantly affect their ability to attain maximum production.
Never in my 40+ years of logging have I seen such wide variations in markets and pricing as I have in the last few years. After a dismal few years of shuttered paper mills and the bankruptcy filing of the Verso paper mill in Jay, when things were looking pretty bleak, Verso finally got their feet under them. They started consuming “IP level” volumes of wood, raising pricing, and actively seeking logger expansion to meet the need. We’d survived the hardest time we’d ever experienced. It’s behind us now, or so I thought back in 2019.

Shortly thereafter we purchased a new CTL system and added a processing head to our tree length side to meet the new demand.

A little over a year later Pixelle (formerly the Verso mill) exploded. One of the only major softwood pulp markets left vanished overnight. Now pine and oak were literally worthless and the remaining mills immediately cut prices and limited deliveries. All the while Pixelle was peddling off the 100,000+ tons of inventory they had scattered around of roundwood further plugging up the remaining markets. Pixelle informed us it would be one year before they could tell us “if” they would rebuild. Most of us hung on anticipating they would. One year later the answer was no.

While this was going on COVID-19 had just put the country in a lockdown. Fortunately, logging was deemed essential, and we were allowed to work (at a loss. I guess that’s essential?) But we were still standing. We’d definitely survived the hardest times we’d ever experienced.

The remaining mills enjoyed the below cost wood for a couple years then a funny thing happened. Supply and demand met a new imbalance. This time there was too much market and not enough wood. Prices started climbing. We were still standing. We’d weathered the storm and survived the hardest times we’d ever experienced. Then inflation took root, (a byproduct of printing money instead of generating it). All the increase in wood prices was gobbled up by the cost of fuel, equipment, taxes, labor, and insurance.

So here we are today, still standing. Wondering if it is over or is the roller coaster ride heading for its next unexpected turn?

Here’s a look at where we were and where we are today. Comparing 2017 data to today, we’ve got fewer people employed in the industry, lower economic impact (but paid more taxes), and contractors cutting fewer acres on average.

In 2021 logging employed 3,054 and created an additional 2,548 indirect jobs. State and local taxes paid were $27 million and loggers supported the $8.1 billion forest products economy. Labor income generated exceeded $312 million. Logging and trucking contributed $582 million to the state’s economy.

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So the question remains. Is it over? Has the ride stopped? Many of us are ready to get off this roller coaster, onto our feet, and start walking again. The wobbly legs are to be expected but just a bit of time on good footing will cure that.

The remaining markets are now right where we’ve been for the last 5 years - living with uncertainty. The good news is they seem to be reasonably healthy and are ready to listen to our needs.

Crisis always brings opportunity for those with courage enough to look for it. It is my firm belief that there are more courageous people in this industry than crisis can stomp out.
Maine is the most forested state in the U.S., and timber harvesting and hauling is the foundation of the state’s entire $8.1 billion forest products economy as well as the primary means of managing forest health and sustainability. This makes loggers and forest truckers vital to Maine’s economy and future.

All aspects of the timber industry supply chain are vital. None can exist without the other, but the weakest link is the logging and trucking sector.

Logging and trucking have become very capital-intensive elements of the forest products industry, with the most labor challenges and tightest returns on investment. Trucking is getting more and more difficult with regulations, driver shortages, inflationary expenses, insurance, and maintenance becoming cost prohibitive.

Nationally, a review of publicly traded forest products manufacturers and landowners reveals strong, if not record, returns on investment over the past few years. Although forest product prices have fallen dramatically compared to the record prices, large forest products companies have posted strong stock value increases over the past couple of years. Two of the largest companies have reported stock price increases of 2 to 5 times 2022 prices. These companies have also reported annual net earnings of over $1 billion.

Landowners, including Real Estate Investment Trusts (REITs) and industrial landowners (mills), have initial investment costs, but minimal annual costs. The return on investment for landowners, particularly REITs and industrial landowners has been consistently positive, with an annual percentage increase in value of 25% over the past three years. Large industrial landowners have experienced similar increases in value of their timberlands.

In contrast, it is obvious at times that the large manufacturer or landowner is unconcerned about paying a service contractor (logger) to harvest at rates that keep the contractor sustainable and their crews making a sustainable family wage. Too often, the large company succeeds in leveraging the smaller logging service contractor to harvest at unsustainably low margins. Why have the smaller service contractor loggers and truckers not experienced the same gains, as have the larger companies in the forest industry?

There is nothing wrong with segments in the supply chain being profitable. In fact, they all should be profitable. It is the only way that the timber and forest products industry will be sustainable.

However, there is a major discrepancy between the return on investment of the landowner and mill compared to the logging and trucking sector. The logging sector invests millions of dollars in equipment that does not increase in value but instead continually depreciates in value. It is similar for the timber trucking industry.

Nationally, employment within the logging industry has steadily declined on average 2% per year. A prior survey found that half of the logging companies in the U.S. operated at a breakeven or loss, while the greatest percentage of profitable logging companies operated at a 1%-3% profit margin. In most instances the price paid for delivered wood has not kept pace with inflation over the past 10 years, while all costs (fuel, labor, equipment, insurance) have increased more rapidly than the Consumer Price Index (CPI) inflation rate.

These are national trends but in Maine the challenges are the same, and in some cases exceed the national averages, for instance it is notable that the average number of wood-based employees in Maine per firm in 2021, as calculated from survey responses for this report, was half of what it was in 2014.

Without the logger and trucker, the landowners cannot harvest their timber and realize the return on their investment. Without wood, the forest products industry cannot produce the products that generate income and profit. The logging and trucking industry values its key role in the timber and forest products supply chain. But, as has been demonstrated, the chain - both in Maine and elsewhere - must be strengthened to ensure this link does not continue to weaken and eventually break.
Trucking and logging in Maine go hand in hand, but as this study shows, a shortage of drivers and mechanics; inflation on everything from diesel to parts to trucks; deteriorating road conditions; slowdowns in the supply chain and changing weather conditions are all challenges to the wood trucking industry.

Most wood moving in Maine moves on trucks, and many logging firms maintain and operate their own while others subcontract the trucking out. This study showed that in 2021 thirty-seven percent trucked all their own wood while 14 percent trucked most of it. Eight percent rarely trucked their own material and 41% contracted with an outside source for all their trucking needs. It also showed 20-25 percent of the employees of responding logging firms may be truckers by occupation. On average, companies reported owning two trucks with log trailers and one truck with a chip trailer.

There is no doubt inflation is hurting the trucking industry. I've been driving trucks for 27 years, and in addition to a woods trucking business we all end up working together in this area. Mechanics are also very important in trucking and we normally have five, but we are two short lately all the time.

Roads seem a lot rougher than they’ve ever been but that might be because I’m getting a little bit older now. Something I’d like to see with our posted roads is if they’d just pick a date every spring so everyone would know how much time they had left to operate, but it’s tough because boy has our weather changed. It’s hard to have a prime winter season that’s only eight weeks long and that’s why we’ve had to diversify into other things.

Trucks are quickly becoming more expensive. We are paying more for used trucks right now than we were paying for brand new trucks two years ago. They are also getting costlier to maintain because of the electronics and computers requiring expensive software and different tech skills than the old trucks needed. It is also sometimes true that we can diagnose computer problems at our own garage, but only dealerships are allowed to have the software to fix them.

Our workforce is aging. My current drivers are 65, 75, 75, and I am 50. I have one other guy who is 53 and drives part time. That is scary. I’m someone who has a lot of respect for old school drivers and find you can’t get the knowledge from the young people that these drivers have. For so many it’s just a job nowadays. The old school mentality is it was a career.

There is a lot of competition for drivers. We pay all that we can, I think everyone does, and we’re all finding that we’ve got to pay more for our drivers and offer benefits and it’s hard because the rates we get haven’t gone up to match that. The best people already have jobs and they’re good jobs. And you hate to take someone from someone that that you work with regularly because in the woods business we all end up working together in this area.

There is plenty of work out there in woods trucking, but the cost of doing it is very tough with inflation and all the other factors working against you. We need to find a way to make it work for everyone, because logging depends on it.
The forest products industry has long been a cornerstone of Maine’s economy. While the products made from Maine wood have changed over time, Maine families, businesses, and our rural communities continue to prosper from the harvest of Maine timber. Today, a working forest also plays a vital role in the State’s ability to meet our climate goals. But workforce shortages and worldwide inflation pose challenges that prevent the industry from reaching its full potential.

The logging workforce in Maine shrunk from employing more than 3,900 individuals directly to just over 3,000 between 2017 and 2021. While the number of individuals employed in logging has declined in Maine at a faster rate than the national average (15% decline between 2014 and 2021 in Maine, 9% decline nationally), average annual earnings have increased from $47,289 in 2017 to $65,000 in 2021. This wage growth is likely attributable in part to the need to retain and attract skilled employees including heavy equipment operators and truck drivers, as well as to simply provide a fair wage to valued employees.

The positive news of increased earnings for loggers comes at the same time logging firms are facing other spiking costs. Many firms surveyed cited inflation and business costs, mill closures, access to qualified labor, market price, timely access to repair parts and weather as being important factors affecting their ability to attain maximum production, but inflation was the top concern. Surveyed firms reported an average inflation of costs of 35.74 percent from Sept. 2020 to Sept. 2022.

Inflation is also having an impact on most facets of the industry, particularly logging equipment. There is widespread concern that businesses will not be able to withstand the cost pressure if the prices firms are paid for cutting and trucking wood do not keep pace with current inflation.

Maine’s strategic plan focused on strengthening the forest products supply chain and finding innovative uses for wood products that will help the industry thrive in the long term. Recognizing the importance of the forest products sector, Governor Mills has directly invested nearly $30 million in the industry through her Maine Jobs & Recovery Plan, including through the $20 million Forest Recovery Initiative, which offered direct support to 243 Maine forestry companies across 10 counties. In addition to helping support existing businesses that have been impacted by COVID, these dollars are helping to stimulate innovative products and develop new markets for Maine’s timber assets.

The Governor’s Jobs Plan has also invested directly in the future of the future of the industry workforce, covering the cost of tuition at Northern Maine Community College for two cohorts of students enrolled in the Mechanized Logging Operations program, and five more working to earn a CDL.

While these investments are significant, more needs to be done to ensure this critical Maine heritage industry experiences continued sustainability, diversification, and growth. That includes developing robust markets for each part of the tree, and leaning into the supply chain in innovative ways. Loggers and truckers cannot solve these challenges alone, and we look forward to partnering with and investing in the industry to ensure that generations to come can find success working in the forests of Maine.
Dating back to the first time the bit of an ax met the butt of a tree, the successful logger has been one that has managed to have a thorough understanding of their business costs and a seemingly psychic ability to prognosticate what lies around the next corner. As time passes, and the industry morphs, we are left with a logger that has evolved to have nerves of steel and a knack for business far surpassing many of those names gracing the glossy pages of the Fortune lists. Every day new challenges arise through various price increases and unfortunately, market decreases. The price of fuel, parts, personnel, and insurance weigh heavily on the mind of loggers and mandate that, in order to survive, they must refuse to fall into the trap of resting on one’s laurels but instead be nimble, lean, and able to change their approach on a dime. Controlling risk has emerged as one of the most effective ways to reduce costs and remains a project that Maine loggers are focused on.

Competitive advantage is hugely important in business but Maine loggers have continued to demonstrate that not all processes need to remain a secret, and that the sharing of risk management information can have a significant and positive impact on the well being of the industry as a whole and the employees who rely on it to make a living.

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To be successful in the dynamic world of commercial logging, a logger needs to be technologically smart, a rapid thinker, and a quality wood fiber producer. At the same time, they need to keep the three pillars of logging in mind: safety for everyone in the company, environmental protection, and production. Without production, there is no job.

Entry-level positions in logging and trucking are hard to fill. For one thing, training new hires is expensive, and usually means lost production and reduced revenue for contractors. With the added cost of equipment and fuel for the time it takes to train the new hire, this makes the expense of bringing on a new recruit very high for most contractors.

Unfortunately, in today’s world, even a child of a logging contractor entering the business cannot get the much-needed experience until they turn 18. Add in that a large number of loggers are now at or past retirement age, and you quickly see why the need for new loggers is growing.

In Maine, we have two education tracks that are trying to fill the need for more loggers. The first is the high school Centers for Technical Education (CTE). We now have five programs, and one is struggling to find instructors to provide this instruction. The other four programs have added heavy equipment to the curriculum to help attract students. The high school programs focus on the following: tree species, wood product marketing specifications, equipment operation and maintenance, chainsaw safety & maintenance, and harvest layout.

In Maine we also have the Mechanized Logging Operations Program (MLOP) for post-high school students that is operated by the Maine Community College System. This unique certificate program focuses on developing a mechanized logging operator’s fundamental skills. In 2023, students in MLOP will also be able to complete the requirements for a Commercial Driver’s License (CDL). After completing MLOP, a student can take the CDL State test and have that license to go with their equipment operation experience.

The Mechanized Logging Operations Program is a partnership between the Professional Logging Contractors of Maine (PLC), equipment dealers, and the community college system – particularly Northern Maine Community College. This course takes students from CTE schools as well as students with no experience or base skills and conducts a logging operation for the summer season just as a commercial logging contractor would. There is no age cap on who is eligible, and over six seasons, MLOP has trained 80 students fresh out of high school and students who have been in the workforce for decades.

The first week of an MLOP course is focused on safety, communication, wood merchandising, and tree identification and characteristics in a classroom, then students move into the woods. Every student gets one week in each piece of equipment until they work through six types of mechanized logging equipment plus three commercial tractor trailer and a center-mount loader truck & trailer. After they gain basic skills with each type, they specialize in the equipment that interests them the most or that they have already been hired to run once the course is completed.

Today’s logging industry is fast-paced and fast-changing, and pre-employment education is essential to address the downward spiral of the number of new entrants to the logging industry that is taxing the industry’s future.
The logging industry of today demands increasing levels of professionalism and forest stewardship to meet the rising expectations of landowners and consumers. While training programs play a role, only a true third-party certification program can verify performance where it matters – in the woods.

Field verifiers visit actual harvest sites to determine whether candidates for Master Logger Certification are meeting or exceeding the standards required for certification. Their findings are submitted to an independent, regional board that makes the final decision on whether a company will be certified.

Once certified, Master Loggers are subject to regular recertification audits to ensure performance continues to meet the standard. The Master Logger program is audited yearly by the global certifying body Preferred by Nature, which randomly selects companies for field audits and reviews group documents. These audits identify strengths and areas for improvement and are used to continuously improve the program.

TCNEF also administers a Forest Stewardship Council (FSC)-certified group Chain of Custody that provides an information trail, established and audited according to rules set by FSC, for Master Loggers and wood products companies to ensure that wood comes from certified forests. Master Loggers can carry FSC Chain of Custody for their wood sales and in 2023, FSC recognition of Master Logger will expand even further when Master Loggers can provide FSC Forest Management certification as a benefit to small landowners in the region.

Master Logger has also been recognized by the Sustainable Forestry Initiative (SFI). Mills and landowners can recognize any Master Logger certified company as a “Certified Logging Company,” which meets the SFI fiber sourcing and forest management standard requirements.

As demand for wood harvested professionally, sustainably, and safely grows, the merits of Master Logger Certified companies in meeting that demand are clear. There has never been a better time to become a Master Logger, or to seek one for a harvest.
This study on the state of the Maine logging industry in 2021 is focused on what has happened in the recent past, but it is also about the future, because the challenges of 2020 and 2021 continue today and must be overcome if logging and forest trucking is to have a future.

I cannot imagine any successful future for Maine without a successful logging industry. This heritage industry is the foundation of the entire $8.1 billion forest products economy in this state, and the key to the survival of much of our rural landscape and the communities within it.

Yet as this study revealed, logging and forest trucking is being hammered by a list of challenges that just keeps growing. Inflation across the board, loss of mills and lack of consistent market prices, worker shortages, wood prices not keeping pace with expenses, supply chain issues, warmer wetter weather that limits the ability to cut timber and move it, and the list goes on. If loggers can’t rely upon those they work for to provide sustainability that they can plan on, logging capacity will continue to be at risk.

Maine loggers and truckers are the hardest working, most optimistic and resilient group of people I have ever had the pleasure of working with. If they were not, it is doubtful the industry would have survived the past few years. But, there are limits to what this group can and should endure. At some point if we do not find ways to make the business sustainable and attractive to the next generation, we will lose it.

To me, one of the most telling findings of this study is one many may overlook, and it concerns succession planning in the logging industry.

Our logging workforce is aging, and many contractors approaching retirement age are deciding what to do with the businesses they have devoted their lives to when they retire. Their businesses, which they have built for decades have little value beyond the equipment they own. If mills are not willing to commit to consistent prices, it makes the ability to transition a business from one generation to the next almost impossible.

We surveyed our members and found only 22 percent have a succession plan in place to continue the business. Think about that for a minute and consider that the cost of starting a logging business from scratch is so prohibitive that keeping our current firms going is the best and perhaps the only strategy for maintaining wood supply to the mills and other consumers that depend on it. Lose loggers and you lose it all.

I believe we can save the industry, but belief is not enough. We need action. On wood prices, common-sense regulations, legislation, taxes, workforce education and more. The next generation is out there, but it is up to us today to put in place what it will take for them to be successful tomorrow.

The challenges facing Maine loggers and forest truckers can be overcome, but failure to do so will be disastrous for Maine’s economy, forests, and way of life.
Logging & Trucking in Maine

2021 Economic Contribution

CONTRIBUTED TO THE STATE'S ECONOMY IN 2021

$582 MILLION

EMPLOYED
3,054 WORKERS

Created An Additional
2,548 INDIRECT JOBS

Generated Over
$312 MILLION IN LABOR INCOME

Supported Maine's
$8.1 BILLION FOREST ECONOMY

STATE & LOCAL TAXES PAID
$27 MILLION

Workers Earned An Average Of
$65,000 PER YEAR