



LOGGING CAPACITY SURVEY SUMMARY REPORT

Surveys/Studies: logging

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INTRODUCTION: The forest products industry has long desired empirical data on the match between logging capacity and manufacturing capacity on a state-by-state basis. In October 2005, PricewaterhouseCoopers (PwC) was awarded a grant from the Wood Supply Research Institute (WSRI) to conduct a two-pronged research effort: primary research on logging capacity using a survey distributed to wood suppliers in selected states; and secondary research on wood consumption using published information to summarize the number and size of primary forest products manufacturing facilities in selected states, for the years 2004 and 2005.

DATA AND ANALYSIS: For purposes of this study, logging capacity is defined as one-shift production such that full harvesting and transportation of roundwood can be obtained with *unrestricted quotas* and *unrestricted timber supply* under *normal* weather conditions. The following regions and states participated in the study:

- Mid-Atlantic Region (North Carolina, Virginia, West Virginia)
- North-East Region (Maine, New Hampshire, Pennsylvania)
- Lake States Region (Michigan, Minnesota, Wisconsin)
- South-East Region (Georgia, South Carolina, Florida, Alabama)
- South-Central Region (Mississippi, Arkansas, Texas, Louisiana, Oklahoma)
- Western Region (Oregon, Montana, Washington, California)

For the 22 states surveyed, the calculated logging production/manufacturing consumption for 2004 was 422 million tons, compared to 429 million tons in 2005, representing a modest increase of 1.8%. However, industrial wood consumption had declined during the previous five-year period (1999-2003), resulting in a significant decrease in logging capacity, which showed an additional 8% decline during the survey period. The data also suggest that the Western states are experiencing a much more dramatic decline in logging capacity than other regions are.

For 2004, the data indicate that the utilization of total logging capacity was nearly 70%, whereas the 2005 data show that total logging capacity utilization rose to 74%. **Table 1** compares the six regions:

Table 1: Logging Capacity for 2004 and 2005

Region	2004 Utilization	2005 Utilization
Mid-Atlantic	74.4%	80.4%
Northeast	73.2%	67.8%
Lake States	75.6%	73.9%
Southeast	73.8%	79.0%
South-Central	69.3%	77.1%
Western	63.9%	68.9%
United States	69.7%	74.0%

Using information from logger surveys and interviews with industry leaders, it was determined that logging capacity utilization rates of 75% are close to the maximum possible, due to a variety of factors, including mill procurement practices related to wood orders, wide variation in timberland stand conditions and terrain, and the impacts of weather. In general, it was assumed that logging capacity levels over 85% are not consistently obtainable.

For purposes of this study, primary forest products manufacturing operating levels were estimated to be at 85% in 2004 and 87% in 2005. It was assumed that primary forest products manufacturing could reach 100% rated capacity in favorable market conditions. Since the data indicate that logging capacity is continuing to decline and that logging capacity utilization is operating at close to maximum, modest increases in manufacturing demand will likely cause restrictions and possible disruptions in primary raw wood supply, affecting manufacturers' ability to respond to market conditions.

RECOMMENDATIONS: Based on comments in the logger survey, PwC researchers developed a list of possible industry actions that to address the decline in logging capacity, including:

- **Quotas** – Re-think the mill wood order system with an objective of stabilizing production for core loggers/suppliers and to minimize downtime. Production commitments must be respected by both wood-consuming companies and wood suppliers.
- **Turn Time** – Ensure that log truck loading and unloading times are known and minimized. A moderate reduction in turn times can have a major impact on logging capacity utilization.
- **Timber Supply** – Address the real or perceived insecurity of suppliers regarding timber availability, with better joint long-range planning and timber purchase support.
- **Labor Shortages** – With advances in logging mechanization, more highly skilled labor is needed for logging operations. On-the-ground supervisors and truck drivers are also in short supply.
- **Communications & Planning** – Address the lack of timely and clear communications and business planning between consumers and suppliers that causes relationship break-downs and loss of trust. Improved communications could result in a more stable contractor force and higher wood supply security for wood-consuming companies.
- **Capital** – Improving the contractor's business environment and profitability opportunities, through the successful resolution of the foregoing issues, will address the problem of many contractors' lack of capital.

Logging contractors' survey response indicates that these factors are the primary ones needed for a healthy wood supply system that encourages expansion. All factors are strongly intertwined and require a timely and comprehensive approach seeking resolution to the wood fiber supply imbalances facing some manufacturers. PwC researchers feel that these survey results offer opportunities for individual mills to compare their own supply systems with those in their respective region or state.

COMMENT: Copies of the entire *Logging Capacity Survey Summary Report* are available to WSRI members by contacting FRA's national office at 301/838-9385. For questions about the PwC Survey, please contact PwC Project Leader Don Taylor at 864/675-9146 or don.r.taylor@us.pwc.com. For questions about WSRI, please visit www.wsri.org or contact WSRI Executive Director Jim Fendig at 912/598-8023 or Fendig@bellsouth.net.

Steve Jarvis
FRA Director of Forestry Programs
sjarvis@forestresources.org