NEW LOGGING COST INDEX PROVIDES RAPID UPDATES

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INTRODUCTION: Over the past five years, diesel prices have increased rapidly, decreased almost as rapidly, and then increased again. Most other major logging costs have also increased, although in a slightly less volatile manner. For logging contractors who deal with the bills associated with running their businesses every day, it can be challenging to keep track of just how much their overall costs have been affected. For others in the forest industry, it is nearly impossible to determine the cumulative impact of these changes on logging costs. In an effort to provide better insight into the trends in logging costs over time, researchers at the University of Georgia developed a logging cost index that reports on a quarterly basis.

GENERAL FEATURES: Our project was funded by the Wood Supply Research Institute and entailed interviewing nearly 50 logging contractors from around the country to discuss the major costs involved in their operations. Of the loggers we interviewed, 28 graciously shared detailed cost data from their businesses. Using data from the 19 contractors in the South, we developed a solid understanding of the major costs in the Southern region. The remaining participants were scattered across the rest of the country without sufficient numbers in any region to enable an accurate determination of the cost breakdown. As a result, the UGA Logging Cost Index is currently indicative only of changes in logging costs in the South.

![Fig. 1: Distribution of major cut-and-load costs for Southern logging contractors.](image)

Based on the data provided by participants, we determined the breakdown of costs associated with cut-and-load operations (Fig. 1). Hauling costs were difficult to obtain from many participants, and most loggers still contract roughly 50% of their hauling. Using the major categories shown in Fig. 1, we also identified publicly available data which would indicate changes in each of these categories. We compiled data on logging wages, equipment, and repair costs from the Bureau of Labor Statistics, with diesel fuel price data from the Energy Information Administration and interest rates from the Federal Reserve. Using these sources, we were able to identify reliable estimators of over 90% of cut-and-load costs. By combining these public data with the information shared by the participants, we developed a logging cost index to track changes in the cut-and-load cost over time. We set the initial value of the index to $12.50, which was roughly the average cut-and-load our participants reported in 2011.
APPLICATION: The UGA Logging Cost Index is now reported each quarter in *Timber Mart-South*, a publication providing forest industry news and pricing for the U.S. South ([http://www.timbermart-south.com/](http://www.timbermart-south.com/)). Many in the industry are familiar with the logging cost index reported annually by Bill Stuart and Laurie Grace for many years from Mississippi State University. We worked backward through time to calculate the UGA Logging Cost Index with the public data inputs for previous years to compare it to the Stuart and Grace index. The UGA Logging Cost Index tracks their reported cost trends very well and covers most of the major shifts observed over the 11-year duration of the Stuart and Grace cost index (Fig. 2). The major advantage of the UGA Logging Cost Index, however, is that we can report it on a quarterly basis with very little time lag, whereas gathering accounting records requires at least a one-year delay in order for all records to be collected by contractors and tabulated by researchers.

OPERATION: We began reporting the UGA Logging Cost Index in the first quarter of 2013, and it will be reported quarterly going forward. We intend to validate the index in 2014 by again collecting accounting records from a group of logging contractors. The UGA Logging Cost Index provides an estimate of changes in per-ton cut-and-load logging costs for the Southern industry as a whole; it is not intended to serve as a specific guide for any individual contractor. The exact percentage of fuel, depreciation, and repair costs for a given logging contractor will be specific to that contractor, and therefore changes in costs of each of those components will have a different impact than the aggregate UGA Logging Cost Index. However, as with any reported index measuring economic conditions, it will serve as a useful guide to show the trend in cost changes over time.

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