



Center for Paper Business and Industry Studies

Newsletter of the Center for Paper Business and Industry Studies
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A New Source of Mill Data

In the course of their work on the CPBIS project, "External Benefits of Black Liquor Gasification," Dr. Michael Farmer and Dr. Scott Sinquefield have created a valuable new resource for those interested in the physical plant structure of the U.S. pulp and paper industry. Dr. Farmer has contributed the following article.

"A frustration that nearly every researcher at CPBIS has faced is the difficulty of locating high-quality data on individual mills. Some data are proprietary and unusable; other data from public sources are outdated or have enough inaccuracies to warrant caution; and data from private vendors are of high quality but can be very expensive and limited to a very few characteristics.

As a by-product of the CPBIS project on the External Benefits of Black Liquor Gasification (Farmer and Sinquefield, PIs), data are now publicly available to any visitor who wishes to determine which pulp mills are in operation today and where they are located, together with mill-specific information. This includes mill owner, status (operating or not), product type, tonnage, recovery boiler characteristics, whether an operation makes both pulp and paper at the site, and mill location. Finally, for transportation, labor or cross-industry studies, plant information is linked directly to US Census 2000 information to record data about the community where a pulp or paper mill now operates, its people, and its economy.

We have worked very hard to ensure that the information reported is complete and of very high quality. The tireless contribution of Emmanuel

Lafond, our Webmaster, has been essential in achieving this. An especially attractive feature reported to us by members and other visitors is the site's user-friendly and quickly informative navigation features.

We invite anyone interested to visit the site at:

<http://www.cpbis.gatech.edu/millsonline>

Just click on the map and the locations of mills in that state will appear, with quick links to information about the mill and the community in which the mill operates. The data cover a total of 654 mills in the U.S. For more details, see

<http://www.cpbis.gatech.edu/research/projects/gasification/webtool/MillsOnlineWriteup.pdf>

In constructing the site we assembled, cross-checked, validated and merged data from a variety of sources. Even with the considerable effort that had gone into compiling these primary sources, we were surprised at the level of additional effort required to incorporate the information into a coherent, up-to-date and readily accessible database. Approximately a full time equivalent year of work has already gone into its construction, and its continued currency will require on-going maintenance.

Future prospects for this user-friendly and readily accessible source of data turn on many concerns, but it is our hope to update and expand the information available via this now well-established platform. Many of our researchers collect publicly available data of various kinds that could be included to further enhance the value of the site. Our vision is that it will become not only a good

starting point for researchers coming into the field but also a complete data source that can be used to achieve specific research objectives.

In the meantime, we hope you will make use of the site and let us know what you think!”

Research Update: Analysis of Box Plant Trucking Logistics

(This is the sixth in a series of “Research Updates.” Previous installments appeared in the recent September, January, February, March, and May issues of the Newsletter.)

Back in April 2002, we reported on the relocation of the Trucking Industry Program (TIP), a Sloan Foundation Industry Center, from the University of Michigan to Georgia Tech. We also reported on our desire for collaboration with the TIP, in the form of joint research, and ongoing discussions with Professor Chip White, TIP Director, with that in mind.

The rest of the story is that those discussions resulted in an accord between CPBIS and TIP, by which a joint research project was established, with the approval of the industrial constituencies of both Centers. The project, entitled, “Profiling Best Practices: A Cross-Center and Cross-Industry Exploratory Analysis of Box Plant Trucking Logistics in the Paper Industry” got underway in the summer of 2003.

The background is that, despite the fact that trucking logistics operations in the pulp and paper industry can be complicated and costly, the literature contains very little information on the relative costs and benefits of alternative logistics operations, including outsourcing, long term contracts, and private carriage. The industry’s logistics planning, primarily involving the scheduling of trucks and labor, appears to be largely accomplished locally and seems to lack the efficient coordination necessary to achieve supply-chain management excellence. This research seeks to identify practices in trucking logistics that box plants might utilize to obtain materials and disburse products more economically. The project is being conducted through a collaboration of co-principal investigators belonging to three different academic units: Professor Patrick McCarthy, School of Economics, Georgia Tech (also CPBIS Director), Professor Jye-Chyi (JC) Lu, School of Industrial and Systems Engineering, Georgia Tech, and Professor Jeff Liker, Industrial and Operations Engineering Department, University of Michigan.

The investigators are addressing several key questions:

- What are the business models that corrugated box plants currently employ to meet their trucking logistics needs?
- How can one best evaluate existing trucking logistics practices in the corrugated box-plants?
- What are the criteria that reflect best practices in truck transportation logistics operations for materials going to corrugated box plants and finished goods transported via truck to end users?

To date, the researchers have studied and achieved an understanding of the characteristics of several commonly used business models. They have also examined “game theory” based contracting procedures between logistics service providers and their users, the box plants and box users. These efforts have resulted in a list of criteria for evaluating a box-plant’s trucking logistics practices and a list of survey questions aimed at understanding box-plant logistics operation details. Ultimately, the research will help companies identify improvement pathways by comparing their performance to benchmarks established by the researchers.

For details, contact JC Lu at 404-894-2318, or by e-mail at JCLU@isye.gatech.edu; Pat McCarthy at mccarthy@econ.gatech.edu; or Jeff Liker at liker@umich.edu.

Upcoming Events

Six Sigma. The PIMA/CPBIS Webcast Course on Six Sigma will begin on Wednesday September 8 at 11:00 a.m. The course will consist of six sessions at two-week intervals, all on Wednesdays, 11:00 a.m.–12:30 p.m. For details and registration, see <http://www.pimaweb.org/training/fall04seminar2.html>

CPBIS Industry Advisory Board (IAB) Meeting, Thursday September 23, 9:00 a.m. – 3:00 p.m., Room 114, Institute of Paper Science and Technology at Georgia Tech, 500 10th ST. N.W., Atlanta. This meeting will focus on research. IAB members, please mark your calendars.

CPBIS at the TAPPI Fall Technical Conference. CPBIS will sponsor two sessions at this conference in Atlanta, Nov. 1-3. Watch for details in the next issue of the Newsletter.

Management Development Course. Late October or early November at IPST. Watch for details.■