

The Transforming Manufacturing Sector

by Julia Hurst

Industry experts addressing the National Lieutenant Governors Association Winter Meeting had optimistic forecasts for the nation's manufacturing sector. They cautioned, however, that manufacturing's future is vulnerable to non-market "interventions."

Experts in the auto, coal and steel industries concurred the manufacturing sector is undergoing significant transformation. Fred Webber, president of the Alliance of Automobile Manufacturers, Stephen Miller, president of the Center for Energy and Economic Development, and Dr. Timothy Considine of Pennsylvania State University described transformations in various stages.

Considine said in 2004 the steel industry emerged from years of losses and is situated for increases in capacity for the next 20 years. He described companies that increased efficiency and productivity while decreasing costs. "The current productivity growth in steel is about 6 to 7 percent, compared with about 3 to 4 percent in the rest of the manufacturing industry," said Considine.

Considine said steel industry employment is 3 to 4 times lower following the changes, which he called a "re-industrialization," doing as much or more with fewer employees.

Webber said automobile companies are restructuring to increase operational efficiency, but added: "We are not watching the demise of the American automobile industry, we are watching a transformation."

Michigan has lost some 100,000 auto manufacturing jobs in the past few years, said Webber, but noted that in the same period Indiana and the Sunbelt gained auto manufacturing jobs.

Webber noted other changes transforming the automobile industry. "When manufacturing cars, safety is now a competitive issue, vehicles are 99 percent cleaner today in emissions than 30 years ago and fuel consumption standards are an important issue," he said.

Energy and environmental issues are operational constants in the manufacturing sector, according to the three experts.

Considine said steel companies now use less energy because nearly 60 percent of all U.S. produced steel is recycled. He added that changes in U.S. energy policy—for example, if a pipeline is built from the Alaska National Wildlife Refuge—would affect the industry because the pipeline would be made of steel.

Webber said industry, government and consumers need to partner to change the energy infrastructure. Every public fuel station, for example, should offer hydrogen, ethanol, natural gas and petroleum. He said the demand for energy alternative cars



(left to right) Dr. Timothy Considine, Alaska Lt. Gov. Loren Leman, Alliance President Fred Webber, North Dakota Lt. Gov. Jack Dalrymple, CEED President Stephen Miller

will be hampered as long as drivers perceive that the fuel is not conveniently accessible. He added that the number of stations offering ethanol is greatest in areas like North Dakota, a state producing ethanol.

Clearly, affordable energy sources are integral to operating manufacturing plants and to the success of many other economic sectors in the states. Miller said coal plant technology, like medical technology, is evolving at a rate of making great advancement about every one to three years. He said his organization's position is that states will need both clean coal technology plants and integrated gasification plants. He said Pennsylvania is offering a state subsidy for conversion of an old plant to the newer technology. The *Star-Telegram* in Fort Worth reported January 12, 2006, that Texas communities were competing to be the site of the first near-zero-emissions coal power plant, a \$1 billion project headed by the U.S. Department of Energy and a consortium of eight companies from the United States, China and Australia.

Even with innovation, efficiency and advancement projected in each of these manufacturing sectors, said Considine, the manufacturing sector and its jobs are vulnerable to non-market factors. He said these factors include health care and pension costs, the cost of capital, embedded costs and foreign currency manipulation. Likewise, state and federal public policy decisions impact the sector.

—Julia Hurst is executive director of the National Lieutenant Governors Association.

Resources:

The Alliance of Automobile Manufacturers: www.autoalliance.org
Center for Energy and Economic Development: www.ceednet.org
American Iron and Steel Institute: www.steel.org