



Monthly UpDate

Industries of the Future-West Virginia

Industrial Technology Partnerships

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Excerpts from a report by Dr. Richard K. Lester* entitled “Preparing for Innovation-Led Growth in West Virginia: Options and Choices”

There are two broad directions of innovation-driven growth. One involves building on the existing industrial base. The other involves the creation of new industries. Both are necessary. A dynamic economy cannot be sustained solely by improving on existing industrial practices and processes. The capacity to introduce new products and develop new markets is also essential.

In West Virginia, as in all economic communities, the industries of the present will to a large extent also be the industries of the future. **Today’s industries will still be accounting for a large fraction of employment in the state a decade or more from now.** These industries are also where much of the potential for innovation and most of the high-growth companies in the state are to be found, and they also define many of the local strengths on which future economic development strategies can be built. West Virginia cannot afford to turn its back on its existing industrial base.

Manufacturing employment in the state has declined by about 20% since the early 1990s, with much of the loss – about 9,000 jobs – occurring in the last three years. This is consistent with the national employment picture. Indeed, West Virginia has tracked the national manufacturing trend very closely since the early 1990s, and actually experienced slightly less job loss in percentage terms than the nation as a whole during the past three years.

From the perspective of the American consumer, however, it has been a different story. Since 1990, sales of durable manufacturers have more than doubled in real terms. Indeed, America’s appetite for manufactured goods has been increasing at a faster rate than the demand for services, and during the 1990s the share of durable goods in total final purchases actually increased slightly.

Most of the traditional factory jobs that have been lost from the U.S. economy will not return. **But the huge and growing appetite of the American market for manufactured products – and the increasingly fragmented supply chains which produce them – are creating new opportunities for the American workforce in situations where proximity to the market is more important than low labor costs.** Most of these new manufacturing-related jobs are not found in factories, or even in manufacturing firms. They are, however, integral to the development, production

and delivery of manufactured goods. Examples include:

Systems integration work

- Incorporating new technologies into products and production processes
- Integrating skills, knowledge, and components across value chains
- Designing and implementing product lifecycle support strategies and other product service enhancements

Logistics centers

- Spare parts tracking, product analysis and testing services, etc.
- Repair centers
- Final assembly (where quick turnaround is necessary to cut inventory, reduce delivery times, and react faster to market changes.)

West Virginia should aggressively explore these opportunities in at least some of the manufacturing areas in which it is currently active.

West Virginia should establish a process to identify the needs, both general and targeted, for developing an internationally competitive innovation capability in specific fields of industry. The first round of this process should focus on three or four clusters that reflect the regional diversity of the state.

Possible candidates include: energy; biometrics; chemicals, plastics and polymers; and forestry, wood and paper products.

Working groups should be convened for each cluster. Each group should be charged with developing a **roadmap and action agenda for creating a competitive cluster** in the state within a 10-year time frame. Each group should seek to assess strengths and weaknesses and identify promising innovation and market opportunities and directions of development within the cluster, and should benchmark West Virginia’s current capabilities against those of the world’s leading regions for clusters of that type.

**Director, MIT Industrial Performance Center, 292 Main Street, Suite E38-102, Cambridge, MA 02139. The complete report may be accessed at www.wvcouncil.org/*

EVENTS

Society for Glass Science and Practices Annual Symposium will be held May 4-6, 2005 at Ogleby Park, Wheeling, WV. For further information contact Larry Banta at (304) 293-3111 ext. 2334 or Lebanta@mail.wvu.edu.

The West Virginia Forestry Association will present a “Timber and Wood Products Show” to be held May 14-15, 2005 at Holly Gray Park, Flatwoods, WV. For more information, visit www.wvfa.org.

West Virginia VC Expo 2005 sponsored by the WV Small Business Development Center will be held **April 27, 2005 at the Allan B. Mollohan Innovation Center** in Fairmont. For more information, contact Connie Runion at (304) 368-4522.

Teaming to Win Conference will be held June 1-2, 2005 at Stonewall Resort, Roanoke, WV. For further information visit www.teamingtowin.org.

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Co-Funding Opportunities for IOF–WV Research Teams

Announcement	Due Dates	Funding
DOE/Industrial Technologies Program Chemical Industry of the Future http://e-center.doe.gov	April 1, 2005 (Request for Proposals) TBD (Proposals due)	\$3,000,000 total funding
FY 2005 U.S.D.A National Research Initiative Competitive Grants Program csrees.usda.gov	Now Open (Request for Proposals) Due Dates vary - See Solicitation	\$150,000,000 total funding
DOE/Industrial Technologies Program Ultra-High Efficiency Industrial Steam Generation http://e-center.doe.gov	Now open (Request for Proposals) April 14, 2005 (Proposals due)	\$2,400,000 total funding \$ 600,000 per award Phase I \$1,200,000 per award Phase II
DOE/State Energy Program Special Projects http://e-center.doe.gov	Now open (Request for Proposals) May 2005 (Proposals due) (due dates vary see solicitation)	\$14,700,000 total funding
DOE/Industrial Technologies Program Plant-Wide Assessments http://e-center.doe.gov	Now Open (Request for Proposals) May 3, 2005 (Proposals due)	\$1,000,000 total funding \$ 100,000 per award
DOE/Biomass Research and Development Initiative http://e-center.doe.gov	Now Open (Request for Proposals) May 2, 2005 (Proposals due)	\$15,000,000 total funding
U.S DOE - Energy Efficiency and Renewable Energy - Industrial Tech- nologies Program - Forest Products fedbizopps.gov	May 1, 2005 (Request for Proposals) TBD (Proposals Due)	TBD
U.S. Department of Transportation SBIR/STTR volpe.dot.gov/sbir/current.html	Now Open (Request for Proposals) May 16, 2005 (Proposals Due)	TBD
U.S. Environmental Protection Agency SBIR/STTR http://es.epa.gov/ncer/sbir/	Now Open (Request for Proposals) May 25, 2005 (Proposals Due)	\$100,000 Phase I \$100,000 - \$750,000 Phase II TBD
U.S. DOE - Energy Efficiency and Renewable Energy - Industrial Tech- nologies Program - Materials for Energy Efficient Industrial Processing fedbizopps.gov	June 27, 2005 (Request for Proposals) TBD (Proposals Due)	

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