Leadership in Tough Times

The Role of Manufacturing in Today’s Economy
Manufacturing West Virginia's Latest Export: Information Technology
300 West Virginians Strong and Growing

Information Manufacturing Corporation is proud to be a forerunner in West Virginia's latest export: Information Technology. In 1998, IMC started in the Robert C. Byrd Hilltop Office Complex in Rocket Center, and today these facilities host a state-of-the-art conversion facility and data center that supports government and commercial customers around the world.

IMC's Webster Springs personnel provide conversion and indexing support to the Armed Forces Institute of Pathology. Celebrating its first year of operation, IMC now employs 45 personnel in Webster Springs and is expanding to 75 this summer.

In Clarksburg, Information Manufacturing Corporation started a conversion operation supporting the National Oceanic and Atmospheric Administration. The group has grown to 40 personnel in just two months. Plans are to expand to a second floor and 50 personnel by Fall 2003.

Information Manufacturing Corporation's success in West Virginia is attributable to a quality workforce and strong political leadership.

Information Manufacturing Corporation

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U.S. Senator Robert C. Byrd works to improve WV

OPPORTUNITY KNOCKS
Publisher Charlotte Weber welcomes you to the first issue of Capacity.

WV IS WORKING
West Virginia Economic Development Director David Satterfield examines the manufacturing trend and shows how even in tough manufacturing times, WV is growing and attracting new businesses.

THE STATE OF MFG.
The President of the WV Manufacturers Association, Karen Price, looks at the state of manufacturing in WV.

AD-VENTURES IN CAPITAL
Staff writer Brandon Lee Dingess reports on venture capital in WV and whether it might be right for your business.

IMPORTANT MATTERS
West Virginia Chamber of Commerce President, Steve Roberts takes note of the importance of manufacturing in WV.
MANUFACTURING

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FALL 2003 FEATURES

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VISION SHARED
Profiling West Virginia’s long-awaited and successful economic development plan with task force leaders Mike Basile and Kenny Perdue.

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REFORMING WORKERS’ COMP.
State Senator Brooks F. McCabe, Jr. looks at how the recent efforts to reform West Virginia’s wounded Workers’ Compensation system came together.

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NUTS & BOLTS

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A show and tell of manufacturing facts and figures!

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Capacity has a conversation with the president of Dow Chemical’s West Virginia Operations, Allan Fowler.
MANUFACTURING ACROSS THE UNITED STATES IS IN TROUBLE AND THE PUBLIC DOESN’T UNDERSTAND THIS IS HAPPENING OR THE CONSEQUENCES THIS SITUATION IS HAVING ON OUR ECONOMY AND, ULTIMATELY, OUR ENTIRE WAY OF LIFE.

Manufacturing, defined by Webster’s Dictionary, is “the process of making wares by hand or by machinery especially when carried on systematically with division of labor.” This dry definition doesn’t begin to take into account the fascinating sector that makes up manufacturing or the simple fact that today’s shop floor is far more exciting, involved and rewarding than ever before.

The reality is that manufacturing isn’t a boring, repetitious, dead-end job in a dirty, old warehouse. Today, it involves a combination of the latest computer software that runs computer-controlled production equipment operated from the shop floor by highly-skilled men and women who are well-compensated for contributing to their companies’ bottom lines while they produce regular products we use in our everyday lives. More simply, manufacturing today builds Capacity and creates both wealth and further potential for all West Virginians.

The connection between the manufacturing sector and economic growth is strong and well-documented. Manufacturing, and its related sectors of the economy, account for 40 percent of our country’s employment and the vast majority of our exports. Here in West Virginia, while it accounts for only 16 percent of employment, manufacturing is responsible for a full 26 percent of all sales and 22 percent of all payroll figures. With the exception of the mining industry, wages are higher in manufacturing than any other sector of our state’s economy. Thus, while manufacturing is compact in its overall size, it plays a significant role in contributing to statewide and regional prosperity.

Additional reasons to encourage our country and our state to reinvest in the long-term competitiveness of our manufacturing sector are simple: for every dollar invested, seven are returned to the state in tax revenue, and for every job in the manufacturing sector, there are three spin-off jobs needed in the service sectors to support and assist the manufacturing sector’s creation of goods. Manufacturing growth spaws more economic activity than any other economic sector.

West Virginia’s senior senator, Robert C. Byrd, recognizes the importance of manufacturing to our economy (both nationally and in West Virginia) and has shown leadership by supporting our industrial base in good times and in hard times. Because of his dedication, continuing commitment and unparalleled foresight, we are thrilled to have the opportunity to acknowledge our senator and his continuing commitment to invest in West Virginia’s future as well as the future of our country.

For the past decade, the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI), named to honor the man who recognized the need to provide real-time assistance to our front line manufacturing community, has provided hands-on access to state-of-the-industry equipment and technologies that continue to make our hometown industrial base stronger and more competitive. According to an October 2002 survey of RCBI clients, RCBI is “contributing measurably to the competitive abilities of the firms it serves” and “adds significantly to the vitality of the state’s economy.”

The independent survey notes that by providing access to high-tech production equipment, affordable workforce development initiatives and technical training, RCBI helps manufacturers increase their global competitiveness and win lucrative contracts. For example, through efforts of the RCBI 21ST Century Manufacturing Network, more than two dozen...
manufacturers have secured nearly 60 Department of Defense and other government contracts worth in excess of $74 million since January 2001.

Further, manufacturers in the survey indicate that they were able to add 638 new high-wage jobs and invest more than $7 million in cutting edge technologies in their own shops as a direct result of RCBI assistance. In this time of a declining manufacturing base, this is significant! And it’s happening right here in West Virginia!

Also, according to the client survey’s findings, increased economic activity attributable to RCBI directly provides more than $32 million in additional incomes – or roughly $50,000 per person, which is nearly double the West Virginia average. The increased activity contributes $142 million in new sales each year. When subsequent induced transactions are included in the tally, it is estimated that RCBI services are responsible for 1,379 additional jobs, $52 million in personal incomes and $209 million in annual sales.

The findings show that 75 percent of survey respondents indicate their operations are more profitable because of RCBI. Forty-two percent of the respondents indicate that RCBI has helped them in the development of new products. Sixty-four percent of responding firms indicate they are able to produce more output per worker because of their interactions with RCBI. This increased productivity makes client firms more competitive, which leads to more sales, leading to greater economic viability overall.

Manufacturing’s productivity gains are historically higher than those of any economic sector — and over the past two decades, manufacturing has averaged twice the annual productivity gains of other sectors.

In addition to these documented successes, RCBI has forged strong partnerships with industry by bringing the latest in technological advanced equipment to this region that, before now, did not exist in here. RCBI has helped them in the development of new products. Sixty-four percent of responding firms indicate they are able to produce more output per worker because of their interactions with RCBI. This increased productivity makes client firms more competitive, which leads to more sales, leading to greater economic viability overall.

RCBI works daily with machine tool vendors – who in the not-too-distant past did not consider West Virginia a welcome place to conduct business – and as a result has placed more than 76 pieces of new production equipment across our state. Ask any of these manufacturers and they will tell you it is because of the exposure and trial use available to them every day at RCBI!

RCBI, working closely with industry, has been involved in placing design assistance, new product development, quality implementation and certifications, lean production and management techniques and online networking resources at the fingertips of our manufacturers. By bringing this quality expertise and high-tech equipment to the region, we have helped ensure that our manufacturers have a leg up on the competition so they may be the first in new product and business development arenas in order to diversify, compete and grow with the world’s best.

Manufacturing touches all aspects of everyone’s daily life. Did you open the refrigerator this morning? Did you watch the news last night or sit at the table and read your daily newspaper? Did you drive to work or take mass transit? Manufacturers make all of these items. Without manufacturing, the world economy – as we know it – stops! Manufacturing is essential, creates wealth and grows our economy.

It is our great hope that you find Capacity interesting and enlightening. We intend to bring you up-to-date articles written by influential individuals who work every day to make our economy grow and prosper. We at RCBI enjoy the work we do, continue to stress the importance of manufacturing, and believe in serving as the support system that continues to assist our private industry do what it does best – create wealth and jobs!

Thank you for reading Capacity. We hope you enjoy its content and send comments about how we can make our product better with each issue. You may e-mail us at Capacity@rcbi.org.
After several years of a shrinking manufacturing base, a prominent industry group warned that a loss of “critical mass” by the U.S. manufacturing sector could reduce the nation’s economic growth by half and lead to widespread declines in living standards.

A new study prepared for the National Association of Manufacturers and released June 10 doesn’t say how close the country may be to dropping below critical mass in manufacturing. It said if enough companies shutter factories, resulting in the loss of related activities such as research and development, this would diminish the sector’s traditional contribution to overall economic growth.

The report paints a dire picture in which manufacturing is wilting by many measures—including employment and capital spending—even as the rest of the economy appears in the early phase of recovery.

To be sure, most experts, including economists at NAM, are predicting an upturn for manufacturers in the second half of this year and there are early signs that orders are starting to pick up. The report is part of NAM’s continuing campaign to get the Bush administration to bolster the sector, including getting tougher on China in regard to its policy of pegging the Chinese currency to the U.S. dollar at an artificially high exchange rate.

“We’re not going to suggest anything protectionist,” says Jerry Jasinowski, NAM’s president. “But what this study shows is loss of pricing power in manufacturing, largely as a result of this international competition.”

The report points to a number of trouble signs, including the loss of 2.3 million manufacturing jobs since July 2000, the largest decline the sector has seen since the early 1980s, and the diminishing share of capital investments and R&D spending by manufacturers compared with other parts of the economy.

The report also says the cost of doing business in the U.S. is rising dramatically and that manufacturing exports as a share of gross domestic product have contracted since 1997.

Economist Joel Popkin, author of the report, says manufacturing is important to the economy because it spawns more additional economic activity and jobs than any other economic sector. Each $1 of final demand for manufactured goods, for instance, generates an additional 67 cents in other manufactured products and 76 cents in products and services from nonfactory sectors, he said.

By analyzing growth rates in 40 countries, Mr. Popkin concludes that for every one percentage point rise in manufacturing output, nonindustrial production rises by almost a half percentage point. “The result suggests that economies with no economic growth in manufacturing would experience economic growth of less than 1.5% a year,” he says, which is less than half the rate the U.S. has experienced in recent years.
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<th><strong>MANUFACTURES</strong></th>
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<td><strong>2,300,000</strong></td>
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<tr>
<td><strong>NUMBER OF MANUFACTURING JOBS LOST IN THE U.S. SINCE JULY 2000</strong></td>
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'It has been estimated that every manufacturing job creates seven jobs in the economy because manufacturing concerns pay wages that allow people to go buy cars and other consumer items that in turn lead to additional employment opportunities.'

Steve Roberts, president of the West Virginia Chamber of Commerce, on the importance of manufacturing.

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<td><strong>NUMBER OF U.S. STATES IN 2003 WHOSE EMPLOYMENT BASE EXCEEDS 19% MANUFACTURING JOBS</strong></td>
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Imports to the U.S. from U.S. owned factories or from foreign companies to their U.S. affiliates.

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<th><strong>THREE-THOUSAND FIVE-HUNDRED THIRTY-THREE</strong></th>
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<td><strong>Total number of employees at Weirton Steel.</strong></td>
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<th><strong>$138 BILLION</strong></th>
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<td><strong>PROJECTED AEROSPACE MANUFACTURING SALES IN THE U.S. FOR 2003.</strong></td>
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The average tenure of a manufacturing employee in the United States. The highest tenure for any major private industry sector of the economy.

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<th><strong>5.5 years</strong></th>
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<tr>
<td><strong># OF MANUFACTURING JOBS IN WEST VIRGINIA</strong></td>
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The number of manufacturing companies in West Virginia with 500 or more employees collectively accounting for an annual payroll of $1,951,990.

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<th><strong>66,000</strong></th>
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<td><strong>CANADA + MEXICO</strong></td>
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<td><strong>THE TWO LARGEST IMPORTERS OF AMERICAN METAL EXPORTS.</strong></td>
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Research and Development reps. favor

Six federal agencies conducting manufacturing research have created a “major” new coordinated activity called the Government Agencies Technology Exchange in Manufacturing (GATE-M) that intends “to represent the voice of federal interests in U.S. manufacturing,” says the new group’s charter. GATE-M hopes to act as an advocate for manufacturing R&D and “provide the foundation or framework for a national initiative in manufacturing,” it says. “GATE-M will actively pursue the communication of GATE-M positions to other, national-level entities pursuing national manufacturing initiatives and interagency activities ... [and] could serve and be widely recognized as the voice of federal manufacturing.”

Agency representatives in charge of manufacturing R&D started meeting two years ago to share information and investigate the opportunities to coordinate research initiatives. “The driver was the realization that there is some commonality of interest among the agencies but we didn’t have a formal way of sharing information,” says Dale Hall, director of the National Institute of Standards and Technology’s Manufacturing Engineering Laboratory and the first chairman of the GATE-M panel. “One of the motivators for GATE-M is being able to speak about a federal manufacturing agenda rather than the individual interests of the agencies. A higher level of integration is needed here.”

The six agencies represented — NIST, the National Science Foundation, the Department of Energy’s National Nuclear Security Administration and its Office of Energy Efficiency and Renewable Energy, the Department of Defense and NASA — have been motivated to work together, in part, by the rapid decline in manufacturing in the United States over the past three years. “Many of us are concerned about the current state of manufacturing,” Hall told “Manufacturing & Technology News.” GATE-M is our attempt to prepare ourselves and do everything we can to advance the [manufacturing] agenda.”

Manufacturing related federal R&D represents less than five percent of all federal R&D, “and that share is declining,” says a GATE-M background document. “GATE-M may...
decide to issue a joint ‘challenge,’ where sponsorship would be obtained to promote the issuance of some type of reward to the research community for tackling and solving an exceptionally difficult technical challenge that would be defined by GATE-M and be related to the particular, identified issues.” The group may also develop specific topics to be addressed within the Small Business Innovation Research (SBIR) portfolio, and it is considering commissioning joint studies to be conducted by third parties to address technical issues. It will also work within an industry, government, academia and manufacturing associations “in an integrated effort” involving environmentally focused technologies and processes, homeland and national security, manufacturing education, manufacturing process development in metals and composites, manufacturing quality and reliability and supply chain systems, integration and interoperability.

To make the most of the government’s current investment in manufacturing R&D, representatives of the six agencies started comparing their manufacturing research agendas and found little overlap in their portfolios save for areas of nanotechnology and intelligence in manufacturing. GATE-M participants are conducting interagency reviews of programs in these subjects and may jointly sponsor workshops and the development of roadmaps.

“Several of the agencies are basically product focused, whereas several others are focused on issues that are more infrastructure in nature,” says the GATE-M background material. “Once the primary topics were identified, it wasn’t necessarily as straightforward as it might appear to get us to the point where we could talk together,” added Hall. “We originally set out to develop a mechanism so that we can exchange information with each other about our technical program and perhaps find ways that we could work together. Where it goes from there is still an open question.”

For a copy of the GATE-M background report, go to www.mel.nist.gov/pdfs/ir6950.pdf or call David Stieren of NIST’s MEL at (301) 975-3197.
Consider:

Fifty years ago, jobs in West Virginia were pretty evenly split between the manufacturing sector and the service sector.

Today, the ratio of service to manufacturing jobs is about 6-to-1 with service jobs far in the lead.

Since July 2000, manufacturing has lost 2.3 million jobs nationwide.

“If the U.S. manufacturing base continues to shrink at its present rate and the critical mass is lost, the manufacturing innovation process will shift to other global centers,” according to a study prepared for the NAM Council of Manufacturing Associations. “Once that happens, a decline in U.S. living standards in the future is virtually assured.”

Pretty scary stuff.

West Virginia had the eighth lowest rate of manufacturing job loss from 2000 to 2002 in the U.S. (Every state and the District of Columbia lost manufacturing jobs during that time period.) All of our competitor states saw a higher rate of manufacturing job loss.

The West Virginia Development Office focuses very intensely on the state’s existing businesses, with careful attention to its manufacturers. In recent years, industry-specific organizations such as the Chemical Alliance Zone, the Polymer Alliance Zone and the Hardwood Alliance Zone have formed to pool the resources of existing manufacturers in those sectors and recruit suppliers and similar companies to the zones.

The West Virginia Industries of the Future program works with state manufacturers as a catalyst for projects, partnerships and programs that increase energy efficiency, reduce and utilize waste materials and improve industrial productivity.

This is the third year of a project co-funded by Industries of the Future (IOF) where Weirton Steel, Wheeling-Nisshin Steel, West Virginia University, Oak Ridge National Lab and 15 other industry partners developed new materials and hardware design that could save the U.S. galvanizing line industry $46 million each year.

Century Aluminum, Applied Industrial Solutions LLC and West Virginia University are partners on a project that targets energy savings of approximately $15 million per year at Century Aluminum in Ravenswood. This project has the potential to reduce electricity demands in the U.S. aluminum industry by more than 500 million kilowatt/hours each year.

An IOF-WV team assessed energy usage at Bayer’s plant in New Martinsville. This study, co-funded by the IOF program, identified more than $1.5 million in annual energy savings opportunities. The estimated payback period for required investment is less than 12 months.

An IOF-WV research team is working with DynaTech Adhesives in Grafton on an IOF co-financed project to improve energy efficiency and productivity in the manufacture of pressure-sensitive adhesives.

The IOF-WV Metal Casting Group worked with the West Virginia Department of Environmental Protection to establish guidelines and processes for beneficial reuse of spent foundry sand. These guidelines have saved HK Casting of Weston $657,000, enabling the company to weather the recession and stay in business, according to its president, Pat Minehardt.

We are intent on retaining, modernizing and expanding our existing industries through a methodical program of visitation and worker training. All this is not to say that West Virginia is bucking trends. The state must, however, continue
West Virginia’s aggressive program of incentives, in the form of tax credits and financing, attracts the economic development projects we need for a brighter future. West Virginia’s economic development strategy helps to shape important changes that have improved the state’s climate for business. Companies also now have a simpler, faster and easier way to apply for many of West Virginia’s tax credits.

The new Economic Opportunity Credit replaces West Virginia’s Super Tax Credit, lowering the job threshold to 20 (from 50) for qualifying companies to offset up to 80 percent of state business taxes for up to 13 years.

For higher wage companies – those offering wages of more than $26,000 a year – the new credit could offset up to 100 percent of taxes. It also allows small businesses to receive credit if they create 10 new jobs.

Aurora Flight Sciences in the morning and the retention of Bombardier in the afternoon in Bridgeport.

The new Strategic R&D Credit strengthens West Virginia’s focus on attracting technology companies – particularly those connected with the biometrics industry. It offsets up to 100 percent of taxes for R&D projects. Direct expenses in research and development are now eligible for a sales tax exemption.

The new Manufacturing Investment Credit allows a company a 50 percent corporate net income tax and franchise tax credit based on its investment with no new job creation required.

Tax increment financing permits the use of property tax increases associated with qualified economic development and public improvement projects to assist with long-term financing of these projects.

We are intent on retaining, modernizing and expanding our existing industries

Some additional heavy-hitting companies that announced projects in Fiscal Year 2003:

The Cabela’s project – with its breathtaking retail store – promises to be a huge tourist attraction, drawing a potential 4 million visitors a year.

ebSource, LLC brings high-technology, high-paying jobs to West Virginia. Limbic Systems uses the latest in digital imaging technology.

Sequelle Communications Alliance, Inc., which offers wireless broadband communications, will bring jobs with salaries of at least $45,000 annually.

These companies provide the jobs of the 21st century: high-quality jobs on which to build an economy.

In short, West Virginia’s economy is diverse. Recruitment efforts focus on quality jobs. Retention efforts do not take a back burner. Add to that the fact that West Virginia has come together as never before to shape its economic future in the “West Virginia: A Vision Shared” plan.

It’s clear that West Virginia is working.
For nearly 80 years, St. Mary’s has been committed to bringing the latest medical technology to the people of the tri-state region. This year is no exception.

Today, we are grateful to be able to offer some of the most beneficial advancements in medical care.

**New Heart Care Technology.**

It’s called a CYPHER Stent, and it’s designed to help prevent reblockage of coronary artery lesions which occur in 15 to 30 percent of patients who receive a bare metal stent. The CYPHER Stent slowly releases Sirolimus, a medication that helps prevent scar tissue build up that can cause in-stent restenosis.

**A new way to treat Acid Reflux Disease.**

St. Mary’s doctors are now using the Stretta System to treat chronic gastroesophageal reflux disease (GERD) commonly known as heart-burn. The system can dramatically reduce the painful symptoms of GERD.

**New spinal surgery reduces scarring, pain and recovery time.**

St. Mary’s patients requiring spinal fusion procedures can now benefit from smaller incisions and minimal cutting or stripping of the muscles from the spine during surgery. The new CD Horizon® Sextant® allows the lumbar spine to be stabilized with less trauma to the patient resulting in less pain and faster recovery.

**New endoscopy exam from swallowing a capsule.**

The M2A® Capsular Endoscopy Given® Diagnostic System gives St. Mary’s patients a painless, non-invasive gastrointestinal exam while they continue their normal daily activities. As the capsule passes through the GI tract, it records images of the entire small intestine for medical diagnosis by the physician.

**St. Mary’s Regional Heart Institute Treats Chronic Blocked Arteries with minimally invasive techniques.**

Some patients with complete blockages of coronary arteries can now be treated with a new micro-dissection system that gently creates a passage through the plaque that blocks the arteries.

You can count on St. Mary’s Medical Center to bring you the latest advances in medicine.

For more information on these and other new medical procedures at St. Mary’s, call 304-526-1234 or visit www.st-marys.org and click on “What’s New.”
In our personal lives, we all look at our balance sheets. We always strive to ensure that our assets are greater than our liabilities. We work hard and want our money to work just as hard for us. We want to create personal wealth so we can enjoy the better things in life.

West Virginia wants to ensure that its assets outweigh its liabilities and state officials want to create wealth so that we can offer better programs and services to our citizens. There are only three ways for a state to create real wealth – mining, manufacturing and agriculture. Real wealth allows us to spawn additional economic activity and jobs, including those in the high-tech world.

One way to achieve this “positive balance sheet” is to attract more manufacturing investment to West Virginia. The goal of the West Virginia Manufacturers Association is to do just that – increase the presence of manufacturing in West Virginia. Established in 1913, WVMA is the only statewide organization representing the interests of manufacturers to state and federal policy makers and legislative leadership.

In the August 1940 edition of National Geographic an article, “West Virginia, Treasure Chest of Industry,” highlighted many manufacturing sites, touting the Mountain State’s strength in the manufacturing industry. At that time, West Virginia was extremely strong in manufacturing. We had an abundance of raw materials to use in our processes and an ample supply of labor. That was just about all that was needed for manufacturing.

The times, however, have definitely changed. Today we are in a new era and manufacturing is taking on new directions. In the new business models for manufacturing, the assets are knowledge, information, people and innovation.

West Virginia must be prepared to meet the needs of this new model and develop programs and policies that will invite manufacturing to grow in this state. We have assets, but we must be willing to increase them. We are fortunate to have the Robert C. Byrd Institute for Advanced Flexible Manufacturing, which provides manufacturers the opportunity to explore innovative ways to manufacture their product without the costs involved with setting up a new line of production. We have manufacturing, therefore, we have “steel in the ground” and thus the opportunity to attract new investment, if the state’s climate for economic growth is inviting.

Research and development will also play a key role in future manufacturing and West Virginia certainly has the ability to develop products from research that is being carried out at our universities and various plant sites in the state.

In March of this year, a forum was held in Washington, D.C., called New Directions in Manufacturing, sponsored by the National Research Council. From the presentations, it is clear that manufacturing will continue to be an economic driver in this country and throughout the world. Participants in the forum identified experience, learning, technology, capital and innovation as productivity drivers for manufacturing.

Business will gravitate to places in the world that offer the assets they need to be successful. Our Governor, the Legislature and other state leaders must understand the needs of manufacturing and be willing to make changes to existing policies that hamper development and be willing to create new policies and programs that will help manufacturing grow. We should focus our attention on education, access to capital, stimulating research and development and other costs of doing business issues. We have a manufacturing base in this state on which to build and we should take advantage of that asset. Manufacturing is taking on a new direction and it is on the move globally. It will not wait on us, we must demonstrate that we are ready for this new direction by taking action now.

You may view the entire proceedings of the New Directions in Manufacturing online at www7.nationalacademies.org/bmaed.
WHEN WEST VIRGINIA JOINED THE UNION IN 1863, MORE THAN 90 PERCENT OF ITS PEOPLE WERE FARMERS. ONLY A HANDFUL OF WORKERS EARNED THEIR LIVING MAKING GUNS IN THE ARSENAL AT HARPER’S FERRY, WORKING AT THE SALT-MAKING OPERATIONS IN THE KANAWHA VALLEY, OR TURNING OUT NAILS, CIGARS, OR OTHER PRODUCTS IN THE EARLY FACTORIES OF WHEELING.

This would quickly change, however, as West Virginia industry expanded to meet the needs of a growing state and nation.

In 1900, West Virginia industry employed nearly 68,000. By 1919, the figure grew to more than 93,000 as thousands of West Virginians left the farm for new opportunities in industry. World War I brought a major new employer, the chemical industry, to West Virginia, and World War II saw West Virginia industry roll up its sleeves as part of the “Arsenal of Democracy.”

Thus, West Virginia played an historic role in helping make the United States the world’s undisputed leader in manufacturing.

\[\text{Since being sworn into the U.S. Senate on January 3, 1959, Senator Robert C. Byrd of West Virginia has cast more than 16,200 votes, a Senate record.}\]
But in recent years, foreign competition has taken a heavy toll on American industry. Today, a local manufacturer may find that its toughest competitor isn’t across town or in a neighboring state but on another continent. To compete in today’s global market, corporate leaders have to work not only harder but also smarter, using the very latest technology and adapting to revolutionary new ways of doing business.

Fortunately, as West Virginia companies struggle to meet these challenges, they have a powerful ally, a tenacious leader who has weathered his share of turbulent times - United States Senator Robert C. Byrd.

THE CASE FOR A STRONG MANUFACTURING AND LEADERSHIP BASE

Senator Byrd’s long career of exemplary service to the people of West Virginia is one that has taken him from humble beginnings to his 2001 selection as “West Virginian of the 20th Century.”

Born in 1917 in North Carolina, Byrd was only one year old when his mother died, a victim of the 1918 influenza epidemic. Honoring her dying wish, Byrd’s father gave the boy to his sister and her husband to be raised. The future senator grew up in the West Virginia coalfields, where times were tough and life was hard. But, early on, Byrd discovered the joy of learning and, in 1934, graduated as valedictorian of his high school class.

College was out of the question in Depression-era West Virginia, so the young Byrd took whatever job he could find. He pumped gas, worked as a produce clerk and got a job as a butcher after studying a meat-cutting manual at night. When World War II came, he worked as a welder, helping to build Liberty and Victory ships in Baltimore and Tampa. His early jobs gave Byrd a lifelong respect for those who support themselves and their families by the sweat of their brow.

Returning to West Virginia in 1946, Byrd ran for — and won — a seat in the House of Delegates. And, as the saying goes, the rest is history. Political and leadership history in this case.

Not only has he never lost an election, Byrd has also held more legislative offices than anyone in West Virginia history — serving in the House of Delegates, the state Senate, the U.S. House, and the U.S. Senate, where he has cast more than 16,200 votes — a Senate record. He has held more leadership positions in the U.S. Senate than any Senator of any party. During his 50-year tenure on Capitol Hill, he has served with 11 U.S. presidents.

In recent years, Byrd has used his seniority and legislative skill to steer more than $1 billion in federal spending to West Virginia. His critics have denounced his efforts, labeling him the “Prince of Pork.” Byrd simply shrugs off their criticisms and continues to direct a variety of resources to build the critical infrastructure in West Virginia which is so needed by our manufacturers to become and/or remain globally competitive.

Nowhere is Byrd’s handiwork more evident than in West Virginia’s transportation network of highways, airports, and river ports. When Byrd served in the House of Delegates, West Virginia had only four miles of divided, four-lane highway. Today, thanks in large measure to Byrd’s efforts, West Virginia has more than 1,000 miles of four-lane superhighway, 549 miles of interstate highway, 88 miles of the West Virginia Turnpike, two national and eight scenic byways. There are 37,370 total miles of public roads in West Virginia, roughly 34,000 of which are state highways.

Given the critical role transportation plays in the economy and West Virginia’s strategic geographical location — within a day’s drive of 60 percent of the nation’s population and markets — Senator Byrd’s vision and foresight has helped to retain some of West Virginia’s manufacturing arsenal as well as recruit new businesses to the state.

“For far too many years,” says Byrd, “we have seen our young people leave West Virginia to settle elsewhere. They deserve the opportunity to make their homes among friends and family here in our beautiful hills.”

But Byrd’s efforts to build a stronger West Virginia aren’t limited to winning funds to improve and expand the state’s highways, water and sewer systems, and other infrastructure. Indeed, it’s hard to name a sector of the state’s economy — from coal to steel to the newest high tech ventures — that hasn’t benefitted from his attention, including today’s world-class manufacturing sector.

“Manufacturing generates economic growth and has produced the highest living standards in history,” Byrd said. “That is why I have worked diligently to preserve and expand our state’s manufacturing base.”

The proof of the economic growth is seen in the direct benefits that the manufacturing sector offers the state and national economy. For every manufacturing dollar invested, seven are returned to the state in tax revenue. Another boon is that for every job created in the manufacturing sector, three spin-off jobs are required in the service sectors to support and assist the manufacturing sector’s production of goods.
**USING COAL IN NEW WAYS**

“Because the United States is heavily dependent on Middle East countries for oil, we are too much at their mercy when it comes to fuel prices,” warns Byrd. “Therefore, if we are to gain greater control over our economic circumstances and shore up our domestic security, we need to address America’s reliance on foreign fuel sources.” This need, he says is all the more critical in the wake of the war with Iraq. West Virginia is, of course, rich in coal. But expanded use of this abundant natural resource long has been stymied by concerns about the environmental effect that burning coal has on the quality of our air.

These concerns led Byrd to create the national Clean Coal Technology program in 1985. This initiative matches government and industry funding to develop and implement innovative methods of using coal in more efficient and environmentally friendly ways. The initial authorization for the program was $750 million. Since then, it has expanded through a joint government-industry initiative to an investment of more than $6 billion.

Much of the research underlying this effort originated at the National Energy Technology Laboratory, with facilities in Morgantown and Pittsburgh. “As the work at this laboratory is proving,” says Byrd, “economic growth does not have to mean environmental retrenchment. We can expand our job base and protect our planet. If we are to continue to find new and better ways to strengthen our economy and protect our environment, we must also find new ways to use fossil fuels cleanly. Skeptics may say that it cannot be done, but I believe that it can.”

Because 56 percent of the nation’s electricity is generated in coal-fired power plants, it simply makes good sense to update these plants in ways that enable them to better use coal. Doing so will help us trim our over-reliance on foreign fuel sources while also cutting power plant emissions. An energy resource as abundant and vital as coal must play a crucial role in creating and supporting the technologies that will fuel our state’s economic engines well into the future. The ultimate goal: a new era of clean, efficient power plants, fired by our nation’s most abundant fuel, generating a strong, vibrant industrial base to create the high-paying jobs with good benefits that come with today’s manufacturing sector.

**MAKING STEEL STRONGER**

In a June 2003 survey of voters from nine key electoral states in America’s industrial heartland, an overwhelming majority of voters said they support investment in manufacturing. Nearly 80 percent of the voters surveyed said they would support a major government investment in new technologies that would make the United States energy independent, while creating new manufacturing jobs. The survey, released by the United Steelworkers of America (USWA), was based on a representative sample of 800 voters in nine states, including West Virginia. Steelworkers President Leo W. Gerard said the findings are another wake-up call – “[We’ll] rally to a presidential candidate who calls for bold federal action to reassert America’s role as the world’s manufacturing leader.”

Since 1997, this country has been flooded with cheap steel from abroad; much of this foreign steel is made by workers paid little more than slave wages, laboring in plants that would flunk even the simplest safety and pollution inspections. Frequently its production benefits from hefty government subsidies. As a result, foreign companies can sell steel products in the United States at prices far below their actual production costs. It is little wonder that the nation’s domestic steel industry has found it difficult to compete against this onslaught.

More than 20 American steel companies have been forced into bankruptcy and thousands of steelworkers – including many in West Virginia – have seen their jobs vanish. Some pundits argue that the steel industry’s problems are self-inflicted. Byrd pulls no punches in rejecting this view.

“American companies,” he says, “have fought hard to stay competitive — retraining workers, cutting costs, investing in new technology, and finding innovative ways to produce steel at a lower price. Yet, despite its efforts, the U.S. steel industry cannot match the unfair, below-cost prices offered by foreign competitors.”

Byrd has worked tirelessly in an ongoing fight to win fair treatment for the domestic steel industry. In 1999, he wrote and shepherded to enactment the Emergency Steel Loan Guarantee Act, which extended $1 billion in urgently needed financial assistance to ailing steel companies. With no assurances that steel imports would abate, financial institutions were unwilling to extend loans to steel companies. Without such aid, many faced closure. The 1999 act provided federal guarantees for the needed loans. But, as Byrd cautioned at the time, the loan guarantees alone were not adequate “to prevent this import wave from someday drowning the U.S. steel industry.” Thus, he wrote legislation urging the president to initiate a comprehensive review of all steel imports. This review, called a “Section 201” investigation, is perhaps the most powerful tool in the nation’s arsenal of trade weapons. When the International Trade Commission undertook such a probe in 2001, it determined what many in West Virginia already knew: namely, that imports had caused serious injury to the American steel industry. As a result, the federal government placed tariffs on imported steel in an effort to make American steel more competitive.

Byrd promises continued vigilance to protect the future of American steel – and with it the jobs of steelworkers in West Virginia and other steel-making states. “Travel through West Virginia’s Northern Panhandle,” he says, “and you can see how vital the steel companies are to the area’s economy. Those plants provide thousands of jobs directly, and even more indirectly. On a national level, a healthy steel industry is critical to our security. Our military relies on steel for its ships, tanks and fighter jets. American steel keeps our military strong. But if the domestic steel industry disappears, our national defense and the economic health of many communities could collapse.”
THIS PART REPRESENTS 881 JOBS IN WV.

WE HELP MAKE THE PART POSSIBLE.

RCBI is committed to manufacturing in West Virginia and has provided modernization and technology assistance to more than 925 manufacturers that employ nearly 39,000 workers.

www.rcbi.org 800.469.RCBI mfg@rcbi.org
SUPPORTING THE TROOPS

Just as Byrd has strived to make sure the nation’s military has the steel it needs, he also has worked hard to link West Virginia’s high-tech manufacturers with the Pentagon. Understandably, much of this information is stamped ‘top secret.’ However, enough details have emerged to make clear the Mountain State’s vital role in supplying support for U.S. troops fighting all around the globe.

“West Virginians contribute greatly to the defense of our nation, whether through service in the military or through the development of new tools and technologies that benefit our servicemen and servicewomen,” Byrd says. A good example is the unmanned Global Hawk surveillance aircraft. The Global Hawk’s tail assemblies, aft fuselages, and engine parts are built at Aurora Flight Sciences, part of the Mid-Atlantic Aerospace Complex at the Harrison-Marion Regional Airport in Bridgeport.

Also located at the complex is a Pratt & Whitney plant that builds engines for the T-6A, which is used to train Air Force and Navy pilots.

Since 1993, Byrd and Rep. Alan B. Mollohan, D-W.Va., have been instrumental in the development of the Mid-Atlantic Aerospace Complex, turning a once-sleepy West Virginia airport into a center for high-tech jobs.

As one travels westward across the state to Wirt County, there is Mustang Survival Manufacturing Inc., which produces military issue life preservers and survival vests for aircrews. The Elizabeth-based manufacturer is also a major supplier of anti-exposure suits, inflatable bladders and wet weather trousers among its other life-saving equipment.

In 1998, Byrd established a national Composites Technology & Training Center through the Robert C. Byrd Institute for Advanced Flexible Manufacturing (RCBI) at the Harrison-Marion Regional Airport. The facility is designed to promote the needed technical training, access to new technologies and production opportunities to enhance growth of the aerospace and composites sectors. Another example is the Allegany Ballistics Laboratory (ABL) in Rocket Center, W.Va., where Alliant Techsystems produces tactical rocket motors, warheads, fabricated metal parts and composite structures for weapons systems, including the laser-guided Hellfire missile and the Javelin anti-tank weapon system.

“Through my position on the Senate Appropriations Committee,” Byrd says, “I have long supported work to update facilities at the Allegany Ballistics Laboratory to ensure the long-term viability of West Virginia’s only government-owned/contractor-operated defense facility, recognizing the benefit of this facility to our state and our nation. The public-private partnership at ABL has resulted in a world-class defense manufacturing facility.”

MEETING MANUFACTURING CHALLENGES

From Marshall University in Huntington and West Virginia University in Morgantown to the state’s Northern Panhandle, from Clarksburg and Fairmont to the Eastern Panhandle, and throughout southern West Virginia, Byrd is helping West Virginians everywhere to meet today’s high-tech manufacturing challenges.
One new study shows that manufacturing, which has long been the engine for true economic growth and good jobs, is feeling pushed by intense global competition and the rising cost of doing business across the United States. This push, in turn, is threatening the sector’s capacity to maintain the nation’s economy and high standard of living.

The study, “Securing America’s Future: The Case for a Strong Manufacturing Base,” asserts that manufacturing is “the heart of an innovative process that powers the U.S. economy to global leadership” and that “America’s unprecedented wealth and world economic leadership are made possible by a critical mass of manufacturing within the American common market.”

The findings of the study, commissioned by the National Association of Manufacturers, were hardly a surprise to Byrd, who has long recognized the need to preserve a strong manufacturing base. More than 13 years ago, he secured funding for RCBI.

With facilities in Huntington, Charleston, Bridgeport, and Rocket Center, RCBI works hand in hand with West Virginia manufacturers, both large and small, from Japanese automaker Toyota’s $1 billion plant in Putnam County to HK Casting, which employs 40 individuals at its foundry near Weston.

Since 1998, RCBI assistance with production and prototyping equipment, technology adoption, technical training and business development has been directly responsible for the creation of 638 jobs in West Virginia. These jobs, in turn, have generated a combined annual payroll of nearly $32 million — or roughly $50,000 a person, double the state’s average wage. However, during the past 10 years, West Virginia has lost nearly 15 percent of its manufacturing employment. Programs such as RCBI — that enhance manufacturer’s bottom lines – are more important than ever if the state is to assure quality living standards for all her citizens.

As a result of technical offerings available to private sector manufacturer at statewide RCBI facilities, the ensuing increased industrial activity contributes $142 million in new sales each year. When subsequent transactions are included in this tally, it is estimated that RCBI services are responsible for 1,379 additional jobs, $52 million in personal incomes and $209 million in annual sales. Nine companies that have received RCBI assistance report that RCBI is responsible for keeping them in business.

“The future of our state and nation depends upon the ability of our private sector to compete economically in the global arena,” says Byrd. “The Robert C. Byrd Institute for Advanced Flexible Manufacturing exemplifies how government and academia can help industry to prepare our

West Virginians contribute greatly to the defense of our nation, whether through service in the military or through the development of new tools and technologies that benefit our servicemen and servicewomen.”

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STARTING A BUSINESS FROM SCRATCH CAN BE DIFFICULT ENOUGH, BUT WHEN YOU CAN’T GET YOUR STARTUP MONEY FROM THE BANK, IT’S EXPONENTIALLY HARDER. Fortunately, another option exists for businesses a bank may consider too risky — venture capital firms.

Venture capital firms are a way for individuals with a “risky” or non-traditional business idea to get funds to finance their dream.

“We go out and we raise money from private investors,” states Pat Bond, a partner in Mountaineer Capital in Charleston. “These investors might be wealthy individuals, banks, and West Virginia state government; the idea is that we will invest in companies that have a high potential for growth and return.”

The deal does not usually come without a tradeoff. In exchange for the seed money, the firm usually asks to have an active seat on the new business’ board of directors or asks for a percentage of ownership. The company sacrifices a bit of autonomy to get itself off the ground. Fair tradeoff?

“We [Mountaineer Capital] require them to have a board of directors, a financial statement and yearly audits,” Bond adds. “By law, we can’t own more than 49 percent of a company’s stock, so we cannot control that company.”

Some aspiring business people would welcome the experience a venture-capital manager might bring to the company. Often, these managers are experienced business leaders in their own right and their insight can prove invaluable to the success of the company.

“We have, with any number of our companies, because of contacts in the business community or experiences we’ve had, been able to help them with their business,” Bond says.

THE SBA AND LOANS

West Virginia ranks 47 in the nation in terms of venture capital investments, according to the 2002 State New Economy Index (http://www.neweconomyindex.org/states/2002/index.html). The index analyzes the transformation of the economy from an industrial-based to a technology-based economy.

Most venture capital firms receive matching loans from the U.S. Small Business Administration (SBA). These matching funds can be up to three dollars for each dollar from the state. The SBA was created in 1953 to “aid, counsel and protect, insofar as possible, the interests of small business concerns.” By 1954, the SBA was making direct business loans to startups.

According to its Web site, the SBA backed more than $12.3 million in loans to small businesses last year. A small business is classified as a business with revenue of less than $2.5 million, few locations and the owner as the day-to-day manager.

Banks are usually reluctant to finance an entrepreneurial venture without the backing of SBA, according to businesspipeline.com. This is because the SBA backing assures the bank that the loan will be repaid. The SBA is more likely to guarantee a loan to an established businessperson rather than someone just starting out — just as a venture capital firm would.
capitalist is more likely to finance someone who has already established him or herself.

“A bank is compensated by interest and capital repayment of the loan and it is usually secured on the assets of the firm,” says Dr. Lawrence P. Shao, head of the division of finance at the Elizabeth McDowell Lewis College of Business at Marshall University. “As a last resort, if the company defaults on its repayments, the lender can put the business into receivership, which may lead to liquidation of assets.”

THE CYCLE

To get venture capital, you first have to pitch your idea to an investor. To do this, you will need to work up a business plan that outlines your marketing plan, management strategy, means of finance and capital costs. (A more detailed explanation is available at: www.namasthenri.com/vc/vencap.html.)

Venture capital firms tend to specialize by industry, says Shao, so multiple firms should be approached to find the necessary capital. Shao also said Pratt’s Guide to Venture Capital Sources is an indispensable reference tool for someone trying to find an investor.

In making the deal, the investor creates a network of investments he or she will consider. Due diligence is the act of evaluating an investment proposal. This includes checking out aspects related to a proposal such as technology, management and the market.

“Typically, venture capitalists finance only a very small number of the deals that are brought to them,” Shao said.

Investment evaluation involves analyzing and speculating about the future profitability of the investment and the possible turns the economy might take.

“Industry statistics tell you that of 10 investments, three or four will die, three or four will break even and three or four will do spectacularly well,” Bond said.

The big successes make up for those occasions when you break even or perhaps fall short of your goal.

Structuring the deal involves the investor and the entrepreneur negotiating the terms of their deal. The length of the association between the investment firm and the entrepreneur is decided upon here. Bond said 10-year investments are normal.

Exit strategy is the payoff for venture capitalists. At this stage they can end their association with the company they

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THE IMPORTANCE OF MANUFACTURING

BY STEVE ROBERTS
President of the West Virginia Chamber of Commerce

STEEL, CHEMICALS, ALUMINUM, GLASS, TIMBER, CHARCOAL, HARDWOOD PRODUCTS, ENGINES, PLASTICS. WEST VIRGINIA'S MANUFACTURING SECTOR HAS A LONG AND DISTINGUISHED HISTORY. IT HAS PROVIDED A HIGH-QUALITY STANDARD OF LIVING FOR MANY GENERATIONS OF MOUNTAINEERS.

With our state's close proximity to feed stocks, abundant natural resources, a productive labor force, an extensive transportation network and affordable energy supplies, West Virginia has been an ideal location for manufacturing operations -- past and present. Moreover, West Virginia also has been blessed with one of the best qualities of life and natural beauty of any state.

However, the changing economy and new global forces are making it much more challenging for West Virginia to preserve and grow jobs in the goods-producing sectors of our economy. Indeed, the state's manufacturing base has been experiencing a downward trend for years. Communities all across our state have been hard hit -- from the Northern Panhandle to the Ohio River Valley to the southern counties.

Some blame the decline in manufacturing on our nation’s continued evolution to a service economy, on a series of national ‘restructuring’ recessions and on the growth of manufacturing overseas. Others blame more localized issues, such as tougher environmental regulations, increasing costs and broad court decisions. Whatever the reasons, the state's manufacturing industry continues to be an important and vital component of West Virginia’s employment and business base.

Our consuming society and world economy still rely on goods produced, not just services provided. People will always need to buy things that are made by others, and industries still have needs for manufactured products in their production of goods ultimately purchased within that consuming society and world economy.

So, West Virginia’s manufacturing sector still can have a bright future. Other states that have endured decreases in their number of manufacturing jobs have begun to reverse this trend and are building for a stronger future. So conceding manufacturing jobs to other areas or accepting the decline as inevitable is both shortsighted and contrary to the experience in other states in our region. Indeed, witnessing the experience of our neighbors, West Virginia also can reverse its manufacturing decline and begin to grow this important segment of our economy.

We can trace the more precipitous decline in manufacturing in West Virginia to the recent recession, particularly the severe recession of the early 1980s, from which our goods-producing economy has never fully recovered. Labor statistics show that in 1980, our state had 117,200 jobs in manufacturing. By 1990, that number had dropped to 87,500, and now, 13 years later, the latest figures show that West Virginia has roughly 66,000 jobs in manufacturing – a 45 percent decrease since 1980.

Among several factors, jobs lost in manufacturing have fallen victim to West Virginia’s historically highest-in-the-nation Workers’ Compensation costs, high business taxes and first-place status in amount of gross state product that goes to the cost of uncontrolled lawsuits. Those conditions have had consequences on West Virginia’s economy and job growth potential.
State policies and judicial decisions that either impose or allow these high costs on employers have a direct effect on the bottom line for manufacturing companies that make economic decisions on where to employ people.

Neighboring Kentucky provides an interesting contrast. While that state also experienced a sharp decline in this economic sector during the early 1980s, Kentucky’s economy has rebounded to the point where today, there are more jobs in manufacturing than there were in the early 1980s.

With a mostly Appalachian economy very similar to West Virginia’s, Kentucky defies the claims of those who would suggest that our state’s manufacturing decline is hopelessly inevitable or our destiny. While West Virginia has said “goodbye” to Sterling Faucet, Owens Illinois, Houdaille and far too many others, Kentucky has been nurturing and growing IBM, Lexmark and Toyota, to name but a few.

The major difference is that state decision-makers in Kentucky have responded to economic decline or downturns with pro-active and pro-growth policies that make their state more attractive for investment in goods-producing industries. Employers in Kentucky have been viewed more favorably as sources of income through job creation, economic hope and opportunity, not simply as sources of income from lawsuits, workers’ compensation, overregulation and taxation.

The focus and attention to issues affecting business and manufacturing in West Virginia is getting better, and state leaders have demonstrated a willingness to work on several issues to improve our state’s climate for employers and employees. One

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FOR TOO LONG, WEST VIRGINIA BUSINESS AND ECONOMIC LEADERS HAVE SEARCHED FOR AN ECONOMIC PLAN THAT WOULD FINALLY PUT WEST VIRGINIA IN GOOD ECONOMIC HEALTH.

Thanks to the work of the West Virginia Council for Community and Economic Development (WVCCED), and with the support of Gov. Bob Wise and the Legislature, that plan is in place. The state is embracing a new vision for growth, one that incorporates local, regional and statewide concerns and affects every person in the state. This initiative, A Vision Shared, is bringing about progress and taking advantage of opportunities to advance the state’s welfare and well-being.

The WVCCED is a 19-person council comprised of private-sector leaders supported by the West Virginia Development Office. Initially, the council commissioned Market Street Services to assess the state’s economic climate past and present and to recommend a plan. In November 2000, they presented A Vision Shared.
For West Virginia’s industries and workers to thrive, all pieces of the puzzle must be in place: a healthy, well-trained workforce; better access to capital and ideas needed for expansion; a more efficient government; a modern infrastructure; and a positive national image of our business climate. Through this visionary process, the state is committed to providing the economic base, people, tools and infrastructure it needs to prosper. It offers West Virginia a holistic approach to economic development.

Through initial funding from the Claude Worthington Benedum Foundation and from the state, the council committed to a multi-year time frame to implement the plan. In 2002, Governor Wise appointed a diverse task force, the Implementation Task Force Leadership Team, composed of business and labor leaders, along with ordinary citizens throughout West Virginia to bring the vision to reality.

To begin the process, the Task Force held focus groups with the state’s 11 regional development councils. The meetings served the purpose of informing the regions of the progress of A Vision Shared and allowed for input from the groups. Along with presentations and discussions with organizations, individuals, and Governor Wise, these activities provided for a solid foundation from which to launch the formal implementation phase of the plan.

Building from the blueprint established by the Vision Shared Task Force and legislative successes, in October 2002 the Vision Shared Implementation Leadership Team developed a Year 2 action plan. A total of 44 different issues were earmarked for action. Committee chairs determined how best to structure the teams to focus on Year 2. Volunteers comprised the working groups and their activities were reported through monthly progress reports to the Task Force. The resulting recommendations and actions are beginning to be submitted to the Leadership Team for consideration. In all, approximately 250 people have been involved in this work to date.

In October 2003, the results of Year 2 will be compiled and plans for Year 3 developed. This systematic, quality approach helps ensure that A Vision Shared is truly a long-term sustainable effort. In addition, all those involved feel that the act of people coming together from all walks of life and all parts of the state is a critical success factor. Therefore, new volunteer membership is continually sought.

Another key aspect of A Vision Shared is the capacity to sustain adaptive change over time. Through concrete change in targeted areas, such as the workers’ compensation system and tax modernization, A Vision Shared is serving West Virginia well. With such a strong beginning, a communications team was developed to help communicate the importance of A Vision Shared. The team developed a Web site, www.visionshared.com, and a host of other communication initiatives scheduled to launch soon.

One mantra often cited by our Implementation Task Force is: “This is a marathon, not a sprint.” Indeed, the concept of working on a solid action plan, spaced across a number of years, will increase both the short-term quality of work and the long-term achievement of true change for West Virginia. As this process fulfills its promise, the results will be revolutionary for both industry and the people of West Virginia. Join us in sharing the vision!

Feedback from West Virginia businesses and industries is critical to the successful implementation of A Vision Shared and to the development of our state’s economy. Anyone who would like to volunteer to help with the implementation of A Vision Shared or make suggestions for its improvement should contact Task Force leader Mike Basile at mbasile@spilmanlaw.com or Kenny Perdue at kperdue@wvaflcio.org. In addition, please look for details about the progress being made by each of the working groups charged with tackling Year 2’s work plan in upcoming issues of Capacity.

Mike Basile is an attorney with the law office of Spilman, Thomas and Battle. His primary areas of practice are business, state tax, corporate, administrative and government relations law.

Kenny Perdue is secretary-treasurer of the WV AFL-CIO and has been an active member of the Sheet Metal Workers International Association for over 25 years.
Recent passage of the comprehensive workers’ compensation legislation (SB 2013) marked a defining moment in the Legislature of the State of West Virginia. The Legislature, along with the Governor, began working with business and labor to solve one of many critical problems facing West Virginia — Workers’ Compensation. This problem did not develop overnight; instead, it was a crisis waiting to happen. By keeping everyone at the table, a final bill was passed which was more comprehensive than anyone thought possible.

Problems with the Workers’ Compensation Division seemed insurmountable. A long history of lax administration, insufficient premiums, inadequate worker classifications, non-funding of the second injury fund, poor collection policies, liberal benefits, too few safety programs, inadequately implemented fraud and abuse policies were only part of the dilemma. Unfortunately, the problem plagued division also included: insufficient legislative oversight, lack of trained insurance professionals, no stability in the executive director position, no formalized medical practice guidelines and shortfalls which also consisted of no pharmaceutical formulary. The painful difficulties seeking desperate repair continued with inadequate management and policy structure at the Performance Council level. Further complicating the issue was a general lack of a clear mission understanding that the Workers’ Compensation Division was an insurance program, not a welfare program of last resort. This long list is short in comparison to the troubles that hounded the Workers’ Compensation Division.

The Joint Commission on Economic Development began studying the problem in the summer of 2002. By that fall, the seriousness of the problem was becoming apparent to all. Due to the complexity of the issue and the volatility of the situation, no final Commission recommendation was reached in time for the beginning of the legislative session in January 2003. The House of Delegates, under the leadership of Speaker Bob Kiss and Delegate Sam Cann, prepared draft legislation as an initial attempt to begin to correct the problems. The Senate, under the direction of President Earl Ray Tomblin and myself, began to prepare a more comprehensive bill with the direct input from business and labor.

With business and labor working together, the success of A Vision Shared was becoming apparent to everyone. In fact, much of the foundation of the final legislation was proposed early on by labor, represented by Jim Bowen and Kenny Purdue of the AFL-CIO. The changes include: the elimination of the second injury fund, self administration of the self insureds, increasing the eligibility threshold from 40 percent to 50 percent for permanent total disability, separation of the Workers’ Compensation Division from the Bureau of Employment Programs and separating costs of the old system, i.e., legacy debt, from the prospective costs going forward under a reformed system. The significant focus on safety programs, aggressive management of all forms of fraud and abuse, and the implementation of an employer violator system were also the result of labor’s unyielding efforts to make the system more functional and efficient.

The business community, helped by A Vision Shared and coordinated by Paul Arbogast and Mike Basile, focused on improved management of the system, the tightening of benefits, and better defining the roles of the Office of Judges, Appeals Board and the Supreme Court. Additional attention was paid to the “rule of liberality” and the ability to utilize health maintenance and preferred provider organizations.

Depending on the specific issue, business and labor were not always in agreement. In some cases the level of benefits were dramatically opposed. Even though labor presented a constant and united front, it was much harder for the business
community. This was not a clash of wills between business and labor. It was the contentious and disjointed interaction of the defenders of the injured worker, i.e., labor, and a disparate group of conflicting interests including those of large, self-insurers, whether they be the more hazardous extractive and manufacturing industries or the less hazardous service industries and utilities. The difference in perspective of a large employer in the workers’ comp system versus a small business, which never had a claim, was also dramatic. Companies with good safety records felt abused by those with excessive claims. This hard-to-manage group was held together by the able leadership of the West Virginia Chamber of Commerce, West Virginia Manufacturers Association, the West Virginia Roundtable, and the Business and Industry Council (BIC) among others. The BIC meetings became the place where many internal disagreements within the business community were hashed out and resolved.

When workers’ comp reform failed to pass on the final day of the regular session, focus shifted to a work group composed equally of members from the Governor’s office, the Senate and the House. This group spent several months bringing all the parties together into a unified whole. Bipartisan in nature, the group put politics aside and crafted the most significant workers’ compensation reform in West Virginia’s history.

The fact that a major piece of legislation was created without the burning of bridges gives us hope that a new day may be dawning. Perhaps we are beginning to move away from the “winner takes all” mentality. West Virginia has so many opportunities it can pursue, and we can no longer spend our limited resources fighting to the death on every issue where there is major disagreement. Rather, we must work and rally together. We must posture ourselves for the next engagement by maintaining some level of trust among ourselves. Senator Robert C. Byrd is providing the resources to create a new economy in our great state. If we are to seize the opportunities being afforded to us by Senator Byrd and our capable congressional delegation, then we must work together, even when issues are as contentious as Workers’ Comp. The recent workers’ compensation legislation is as much about the reforms as it is about the process whereby these reforms were achieved. We have a good beginning, let us have a good finish.
As Chairman of the Robert C. Byrd Institute (RCBI) Machinist Technology Program Advisory Board, I’ve seen how RCBI has helped manufacturers in West Virginia and the region. Bob Daidone with FMV Composite Systems is one of those.

Daidone occasionally peeks out a window toward a building across the runway at the Harrison-Marion Regional Airport in Bridgeport, W.Va. He’s not necessarily watching those who go into the RCBI Composites Technology & Training Center. His interest is in who comes out. The FMW Vice President of Operations knows RCBI provides individuals with technical training and experience that his contracts demand.

“We are an ISO-registered [9001] supplier. We require all of our hands-on employees and engineering staff to have a background or some skill-base in composites before we let them near any hardware,” Daidone explains. “Every one of our technicians has been through at least two or three training courses over there [RCBI] — and some of them even beyond that. We’ve gotten a lot of use out of their composites training.”

As RCBI fills Daidone’s technical training needs for an ideal workforce, it’s also strengthening West Virginia’s reputation as a manufacturing company’s resource for educated, well-trained employees. That’s a label the state was in danger of losing several years ago as county vocational schools began redefining West Virginia’s needs and eliminating manufacturing courses. A void threatened our industry as older people left the workforce and few, if any, potential employees had the necessary skills to fill the vacancies.

RCBI develops a prospective manufacturing workforce in West Virginia through various programs that meet current industry requirements for certification, plus it places many graduates on the leading edge of working with new products, hardware and software. Thousands of students have been through facets of RCBI since it began beefing up the state’s education and training capabilities. Some are students preparing for a career. Others are those already employed and moving through customized training programs for specific new skills.

RCBI programs are intensive. Those individuals who go full-time are able to complete, in one year, a machinist training that is both recognized and certified nationally. Evening classes for part-time students spread the instruction over two years. An option of earning an associate degree from the Marshall University’s Community and Technical College or Potomac State College of West Virginia University is also available.

Rick Houvouras, managing partner of Star Technologies, LLC, a Huntington-based company that manufactures precision clamping devices and stampings for the military and commercial use, credits RCBI and its technical offerings and training assistance for the successes of his company.

“Without their [RCBI] help, we could not have built our [machine] tooling to get started,” Houvouras said. “We could not have achieved AS 9000 quality standards and we could not be a vendor for General Electric aircraft engines and Lockheed Martin and Pratt Whitney without the help of the Robert C. Byrd Institute.”

Whichever route an individual chooses to travel through RCBI, the end result is the same. The graduate becomes a valuable asset to West Virginia and is in a strong position to find a rewarding job with good pay, benefits and a chance for career advancement. RCBI places about 90 percent of its Machinist Technology Program graduates. The market demand is so great for qualified people that it’s not uncommon for companies to try to lure students to work before they fully complete their courses.

Machining and manufacturing technology have been the focus of RCBI for more than a decade. The relatively new Composites Technology & Training Center in Bridgeport feeds the need for qualified workers in the north-central region of West Virginia, which is quickly developing into the aerospace hub of the state and across the mid-Atlantic region.

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Representing Clients to the Letter of the Law

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helped to build. The investors can choose to buy out the company and become the sole owner, sell their shares to another company or sell through an Initial Public Offering.

“We get in a lot of requests from people for loans,” Bond says. “We explain to them that we don’t do that — we want to make equity investments and get out.”

Bond says most exits these days are done through merger with or acquisition by another company.

Venture Capital Fundamentals

Po Chi Wu, one of four managing directors of Alameda Capital, a venture capital firm in Pleasanton, California, has written papers on venture capitalism and entrepreneurship. One of his papers lists myths and truths about venture capital investment. Here are key points from this paper.

• Don’t presume. Never gather anything from the demeanor of the potential investors. In all likelihood, they are simply extending business courtesy to you.

• Make your presentation understandable without talking down to prospective investors. If they do not understand the concept, they will not invest. If they feel insulted, they probably won’t invest either.

• Don’t underestimate or downplay the risks to your investor. If your idea fails, you have burned a bridge with that investor because you did not adequately explain the risk involved. Some of the blame, however, can be placed on the potential investor for not being inquisitive enough.

• Hire the best individuals you can in order to get your idea off the ground. Do not let affordability be too big of a limitation.

• Without exaggerating, explain why you think your idea will control the market share. Make yourself believable and establish some credibility with the investor.

• Don’t let overconfidence get the better of you.

• Everything is negotiable. Don’t be overbearing, but don’t simply take what’s handed to you.

(The entire work is available at: www.alamedavc.com/pdf/vc/pdf.)
When the goal seems just out of reach...

We get you there.
bright spot is the focus that state leaders, particularly our state’s congressional delegation, have placed on attracting manufacturers to West Virginia. Toyota’s massive engine assembly plant in Buffalo is an outstanding accomplishment and shining example of West Virginia at its best. Other successes include NGK, Diamond Electric, Bombardier, etc.

Another positive development is the Legislature’s recent approval of a strong workers’ comp reform bill and lawsuit venue reform. These are certainly steps in the right direction. Both will go a long way toward making the bottom line of doing business in West Virginia more predictable and, thus, more attractive.

West Virginia has wonderful proximity to our nation’s major markets. We have an abundant supply of clean usable water. Because of our network of railroads, rivers and highways, we have the capacity for moving bulk goods. Our abundant natural resources result in some of the nation’s most competitively priced electricity and natural gas.

But more needs to be done if we are to safeguard the state’s manufacturing base and begin to attract new manufacturing investment or retooling. Kentucky and other states in our region have demonstrated that growth in manufacturing is possible. Given the economic assets mentioned above, West Virginia could grow, too.

Increasingly our state’s decision-makers understand that job creation requires a positive and attractive climate for investment and growth. More and more legislators understand that profitability is the foundation of economic growth, not an evil word or reason for contempt.

As that kind of attitude prevails in all three branches of government – including the judiciary that has a tremendous effect on the policies that either repel or attract employers – then our state can attract more manufacturing jobs and experience growth in manufacturing that other states have had. This will ultimately preserve our state’s manufacturing base for many generations to come.

Goods-producing jobs produce higher wages and have a proportional effect on the economies of our state and communities. Where manufacturing operations have grown and prospered in our state, local economies have grown and prospered. Conversely, in communities where manufacturing jobs have evaporated, local economies have struggled.
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A small manufacturer that regularly supplies aluminum-clamps and other alloy components for aircraft engines is just one of the companies that regularly uses RCBI to help meet its technology, technical training and quality management standards needs. Star Technologies is a Huntington-based company that manufactures precision clamping devices and stampings for military and commercial uses by General Electric, Lockheed Martin and Pratt Whitney. An attractive component of business at Star involves the economic effect it has on the region: every dollar in sales comes from outside the area, so each dollar the company brings in is a new dollar for its community.

Another example of the proven, technical capabilities of West Virginia manufacturers involves the production of fuel cell bladder components for U.S. Marine Corps’ vehicles. The entire production of this component is now done in West Virginia by FMW Composite Systems, located at RCBI’s Bridgeport facility. The result of this public-private teamwork is not only a unique, highly-effective means of refueling tanks while they are on maneuvers but one that also provides the Marines a reduction in costs that is conservatively placed at 30 percent.

It’s the composites program that gives businesses like FMW a competitive edge. Composites manufacturing involves producing complex materials with two or more components to form specific structural or functional properties that make them stronger and lighter.

“I can say without a doubt that this is one of the most well-trained workforces we’ve been able to recruit into the business short of going out and picking up people with 10 to 15 years’ experience,” Daidone states. “It’s a fact not lost on our customers.”

FMW’s client list includes giants such as NASA, Boeing, General Electric, Goodrich and Lockheed Martin.

RCBI’s programs provide West Virginia manufacturers a pool of qualified, skilled individuals...
Similarly, high-tech enterprises across West Virginia, such as Touchstone Research Laboratories, HGO Technology, and the NASA-sponsored National Technology Transfer Center (NTTC), established with funding that Senator Byrd added to federal appropriations bills, are taking their places next to traditional businesses. Touchstone and the Navy are developing new materials for the construction of ship bulkheads. Using a Touchstone product called carbon foam, which does not burn, the Navy hopes to build ships that are safer, lighter and less expensive. HGO specializes in computer network engineering, consulting and software development. Its clients include the U.S. Census Bureau, NASA and the Air Force. The NTTC is an undisputed industry leader in technology transfer and commercialization.

Sometimes Byrd’s efforts are vital not only to fostering new manufacturing jobs, but in helping West Virginia keep the family-supportive, manufacturing jobs that are already in place. For example, in 1999, local United Auto Workers officials alerted Byrd to the fact that General Motors was considering closing its Martinsburg parts distribution facility, a move that would have cost the region 500 jobs. Byrd immediately contacted General Motors officials and, working with Sen. Jay Rockefeller and then-Rep. Bob Wise, convinced the automaker to remain in Martinsburg.

“There is,” cautions Byrd, “no magic potion for reversing the economic challenges that have faced West Virginia for decades. Believe me, if such a potion existed, I would have taken long draughts of it many years ago. Improving the future of West Virginia takes commitment; it demands sacrifice and it requires a willingness to dream of what might yet be, and not focus on what has been lost.

“While my work has required that I spend much of my time away from the hills and hollows of my youth,” Byrd said, “I cherish every report of new businesses choosing to establish themselves in West Virginia, and of West Virginia companies adding jobs and products to their operations in the state. These reports mean that my dreams for West Virginia are coming true, that the dream of so many West Virginians, to remain in the state and raise their families here, is becoming a reality.”

ready to go to work. And what is good for West Virginia manufacturing is very good for the state’s economy. West Virginia offers a significant opportunity for growth in manufacturing. Without the advantage of a desirable labor force, the state misses out on this opportunity and we may not be viewed as a potential site to locate new businesses or to expand and keep existing ones. Companies are always looking to recruit and maintain employees. If the state doesn’t have the framework for personnel, it’s unrealistic for businesses to come or stay.

RCBI has come to be recognized as a hands-on resource. It offers programs and courses with solid, useable skills that meet our industry needs. Recent high school graduates, middle-aged individuals, older men and even a grandmother have taken courses side by side. RCBI is a way for West Virginia to establish a desirable workforce. This leads to better jobs in the state and a stronger economy.
CAPACITY: What were your first thoughts when you learned you would take over Dow’s operations in West Virginia?

ALLAN FOWLER: I look forward to the challenges of the new job here as President of West Virginia Operations. The Dow leadership team is outstanding and they have made my first month on the job very seamless. Dow’s West Virginia Operations has gone through significant change in the first two years of the Dow-Union Carbide merger. We are appropriately sized for business success and are an integral part of Dow’s global operations.

CAPACITY: What percentage of Dow’s operations relate to manufacturing?

AF: In the Kanawha Valley, approximately 65 percent (of Dow’s operations) are linked to manufacturing.

CAPACITY: How do you think the rebounding economy will affect the manufacturing and chemical industries?

AF: The global economy and, more specifically, the chemical business, has experienced very difficult business conditions over the past several years. The current oil/natural gas pricing is particularly hard on Dow as we use significant amounts for both fuel and feedstocks. Improvements in the global economy will bode well for Dow and will have a favorable impact on our operations here in the valley.

CAPACITY: The South Charleston Technical Center hasn’t been upgraded since the 1977 addition of the data processing center. Are there any plans for further expansion to the center? Perhaps to attract more researchers to it?

AF: The recently announced Mid-Atlantic Research and Innovation Center (MATRIC) is an excellent example of how we are working to bring more talent and diversity to the technical center, now named the Technology Park. As to upgrades of the facilities, several projects are under study and underway to continue to keep the Technology Park state-of-the-art and technically viable.

CAPACITY: Venture capital has become a major influence in WV’s manufacturing industry. What role do you see venture capital playing in the chemical industry?

AF: [Venture Capital] has a place in the chemical industry as new startups, new ideas, etc. need “incubator-like” funding and nurturing. Numerous companies, including Dow, participate in these programs. On a local basis, Dow is working closely with BIDCO, CAZ and the newly announced MATRIC effort as examples of bringing investment to the area.

CAPACITY: Both the chemical and manufacturing industries are facing an aging workforce. Does Dow have a strategy to prepare itself for the retirement of its aging workforce?

AF: We continue to support a recruitment effort, even during tough economic times. Retraining is also a key component of our people strategy. I believe we are well-positioned to have a competitive workforce for the future.

CAPACITY: What kind of programs or partnerships with state and local learning institutions does Dow have to prepare for the next generation of workers?

AF: We have created several partnerships with the higher education institutions, particularly Marshall University, WV State College and West Virginia University, to enhance both educational program offerings as well as business development. For example, our new partnership with Marshall in the biotechnology arena has expanded their course offerings by providing available lab and office space for research and created a more attractive business environment. We continue to enhance our relationships with colleges and universities, and are working to start programs with other universities in the future.

We have partnered with Kanawha County schools to develop strategic and interactive science and mathematics achievement programs for middle school students and teachers called the “middle school enhancement of math/science achievement initiative.” Dow donated $250,000 to finance much needed lab and classroom equipment, training modules and other supplies to develop an integrated math, science and technology instructional programs to students in surrounding communities.

This partnership allows science teachers to participate in a national science training program offered by the Keystone Center in Colorado to integrate science best practices here. Our employees play an integral role in local schools by participating in career fairs, providing students hands-on learning opportunities through the cryogenics shows as well as the Dow Visible Scientist Program where Dow employees actually go into schools and teach students the dynamics of science and physics using fun experiments.

CAPACITY: What workforce changes can we expect in the near future for Dow Chemical?

AF: The past two years’ efforts here in the valley have gotten us to a competitive workforce strength. Any future changes are likely to be incremental as each individual business or function may find the need to increase or decrease their local efforts.
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