

west virginia

expect the unexpected



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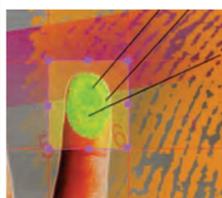
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WV facts

CENTRAL: West Virginia is within overnight trucking distance of more than 50 percent of the U.S. population and a third of the Canadian population.

PROFITABLE: Business costs are 14 percent below the U.S. average.

READY: Our K-12 school system received the highest marks in technology in the United States.

AFFORDABLE: Cost of living is 4.5 percent below the U.S. average.

NATURAL: West Virginia's 50 state parks and forests offer more than 800 miles of hiking trails and 5,000 acres of fishing waters.

GROWING: The state attracted \$3.8 billion in new investment and 19,000 new jobs since 2005.

GLOBAL: In 2006, WV's companies exported more than \$3.1 billion in goods to world markets.

POPULAR: Nine million overnight leisure travelers visited the state last year.

SAFE: WV has the fourth-lowest crime rate in the country.

HOME: Low property taxes help West Virginia lead the nation in home ownership.



WEST VIRGINIA OPEN FOR BUSINESS!

Gov. Joe Manchin making sure of it

By STEVEN KNIPP

Gov. Joe Manchin is perhaps the best envoy West Virginia could ask for. Soft-spoken, but hard driving, it was Manchin who, soon after moving into the governor's mansion in 2005, launched his state's highly successful "Open for Business" economic development efforts.

But for Manchin, who enjoyed a flourishing career in business before entering West Virginia politics in 1982, "Open for Business" is more than a slogan.

"What we're really trying to do is create a mindset," Manchin says. "When I took office I looked at West Virginia and the whole bureaucracy of government. People normally don't expect to get good service from government offices. The result is that we've trained several generations of citizens to

expect mediocre performance at best, in terms of public service.

"So I began thinking, 'What could be the niche for our little state?' All the states around us are bigger. They have larger populations. They have more finances. So I thought, What can make West Virginia different and better for businesses and for investors?"

"The difference can be that our government would be far more attentive, both to the needs of our citizens, and to the requirements of our small and large businesses. Trying to help people through this maze of bureaucracy, which can be overwhelming, I've always said at the end of the day, when a business decides to either expand, or to relocate or to make an investment, there's going to be a partner that sits down beside them. And that partner is going to dictate what the rates will be,

what the conditions will be. But this is someone whom you've never agreed to have as a partner — but that partner always ends up being government, whether it's the state you're looking at, or the local area you're interested in.

"So I said, 'West Virginia is going to be the best partner you've ever had!' And all we ask in return is, for you as a business partner, to create a great opportunity with a good job, a livable salary, and benefits, including health care. Do that, and we'll do all we can to make certain we live up to our end of the bargain."

To prove that he truly means business, and to give real traction to his pro-business crusade, the governor has introduced a raft of new ideas and initiatives, all specifically designed to make it easier for businesses to set up shop in his state. And once they arrive, to do everything possible to provide a profitable future. These initiatives have included reducing the state's food tax, reforming and privatizing the state's workers' compensation program, and reducing both the state business taxes and the corporate net income tax.

Thanks to such progressive efforts, the cost of doing business in West Virginia is now a whopping 14 percent below the U.S. average. "Combine that," says the governor, "with our low energy costs and our work force here — where you have the most committed and dedicated people, and I like to say that we're the envy of the whole business world, they just don't know it yet."

And the governor's pro-business stance is already seeing ample results. Since 2005, the Mountain State has added near-

ly 20,000 new jobs and \$4 billion in new investment, and that's come from such demanding corporate icons as DuPont, Amazon.com, Bayer, and Dow.

Recently, CertainTeed Gypsum Wallboard invested \$150 million in a 750,000-square-foot plant in Marshall County. The project is expected to create about 200 direct and indirect jobs. With announcements like this, it's no wonder Expansion Management Magazine ranked West Virginia the 8th best state for business recruitment and retention among the 50 states.

FOREIGN INVESTMENT STREAMING IN TOO—FROM EUROPE, FROM ASIA

Joe Manchin's pro-business position is not only attracting American investors. At a time when many Americans are struggling to cope with the problem of jobs being outsourced to overseas firms, West Virginia is attracting ever more foreign firms to set up their operations here — coming from as near as Canada, and as far away as Germany, Russia and South Africa. "If you put a 500-mile radius around our state," notes Manchin, "you have access to about 50 percent of the entire nation."

Take for example Japan's Hino Motors, West Virginia's latest partner in profit which in a few weeks will open an \$8.6 million plant. "What Hino Motors basically did," explains the governor, "was look at the success that Toyota has already had in West Virginia. Every year since Toyota first arrived in our state, it has enjoyed growth. Today this factory is one of Toyota's top-producing plants and it has been ranked the No. 1 engine manufacturing plant in the U.S."

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WV BIOMETRICS: Fertile ground for innovation

By KIM HARBOUR

In the late 1990s, a program to map Earth's terrain from space was applied to charting the geography of the human fingerprint, with its unique valleys and ridges. Thus, the biometrics field came to land in the hills of north-central West Virginia.

Lockheed Martin had been involved in the Mountain State since the 1960s, in the field of aeronautical manufacturing. But its development of the Federal Bureau of Investigation's Integrated Automated Fingerprint Identification System (IAFIS), in Clarksburg, W.Va., jump-started the company's work in biometrics. Today, Lockheed Martin is a world leader.

"IAFIS holds 500 million fingerprints. It is the world's largest law enforcement and criminal history system, making it possible to identify criminals in just minutes," explained Carline Blizzard, vice president of secure enterprise solutions for Lockheed Martin Transportation and Security Solutions.

"The work we did designing and deploying the IAFIS system in West Virginia was the foundation for the work we've done with other customers, including the Department of Homeland Security and the Transportation Security Administration," Blizzard said.

This May, Lockheed Martin opened the Biometric Experimentation and Advanced Concepts (BEACON) Center in White Hall, W.Va., to serve as a cooperative facility for biometrics research. The 6,000-square-foot facility is designed to be a gathering place, where local businesses and academics can showcase their latest work and collaborate. BEACON houses six high-tech computer pods. The front of the building has an auditorium for the center's regular lecture series.

"BEACON represents a true investment in West Virginia. It's one thing to come to the state and do work for the government. The work is here," explained John Dahlia of the Fairmont, W.Va., City Council and Global Science & Technology Inc. "It's quite another for Lockheed to invest in the community — to create something like this incubator that will be so critical to our infrastructure. Having BEACON here creates an image. It shows the world that West Virginia is the real deal for biometrics."

TAKING MEASURE: FOR SECURITY AND BUSINESS

Biometrics derives its meaning from Greek: "bios" and "metron" or "life measure." It is the study of the characteristics unique to each person, such as fingerprints, eye iris, voice pattern, face recognition, DNA, gesture, signature, odor and other physical or behavioral traits.

Biometrics can be used in any situation where positive identification of a person is

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AEROSPACE: Business soars in West Virginia



Pratt & Whitney Engine Services Inc.

By CATHERINE ZACCHI

For aerospace companies in West Virginia, the sky is not the limit. It is just the beginning.

The state is home to a number of successful aerospace companies, including Aurora Flight Sciences of West Virginia, FCX Systems Inc., BF Goodrich Aerospace, Sino-Swearingen Aircraft Corporation, ATK Tactical Propulsion and Controls Division, Lockheed Martin Aerospace, Pratt & Whitney Engine Services Inc. The Mid-Atlantic Aerospace Complex (MAAC) at Harrison Marion Regional Airport, in Bridgeport, W.Va., provides maintenance, overhaul, manufacturing and training services.

AURORA WV AEROSTRUCTURES

Part of Aurora Flight Sciences Corp., Aurora WV, manufactures composite and metal subassemblies for manned and unmanned aircraft. The West Virginia company was recently awarded a project to produce the main rotor pylon for the Sikorsky Aircraft CH-53K heavy-lift military helicopter. Aurora WV also fabricates major subassemblies for the Global Hawk RQ-4B and metal and composite components for the EA-68 Prowler, the E-2D Advanced Hawkeye and other U.S. military aircraft.

"Since 9/11, a lot has changed in the aerospace business," said Ron Richman, general manager. "Aurora has expe-

rienced increased demand for replacement parts for aging aircraft; demand for unmanned craft has really escalated."

Unmanned Aerial Vehicles (UAVs) can be used for observation or force.

"A squad in Iraq can use an unmanned craft to look ahead, scout out where they're going. That reduces risk to our soldiers."

UAV technology has evolved. "An unmanned craft used to need an operator on the ground to work the controls. Now the craft has a computer on board, programmed to carry out the mission. A data link to the troops lets them see what is going on. UAVs can weigh less than 50 pounds or more than 40,000 pounds.

"Some can fly for days and attain altitudes of 65,000 feet," Richman said. "I've seen the Global Hawk Unmanned Aerial System produce pictures with details almost as fine as mouse tracks in the desert."

Aurora WV's 130 employees include mechanical engineers, technicians, and tool and parts designers.

"When prospective customers visit our facility, they are surprised to see this small company in West Virginia with facilities, technology and work force as good as any in the world," Richman said.

Aurora WV uses special soft-

ware to integrate data and manage production planning. The facility covers almost 100,000 square feet, including a 10,000-square-foot clean room for composite lay-up, autoclaves with digital and analog control, computer data acquisition with bar code product scanning, Coordinate Measuring Machines, and large component C-scan nondestructive inspection capability.

FCX AVIATION GROUND POWER

FCX Systems is farther north along West Virginia's I-79 High Technology Corridor. The company manufactures converters and preconditioned air equipment for military and commercial aviation in Morgantown.

FCX Systems was launched in 1987 by a group of engineers with a vision for a better product, said President and CEO Don Gallion. "From the late 1950s up to that point, all jet aircraft on the ground relied on power provided by motored generators. Our alternative was solid-state frequency converters. The solid state units are more efficient and require less maintenance than motored generators."



Aurora Flight Sciences of West Virginia

BUSINESS SERVICES: Reduce duplication to multiply success

By CATHERINE ZACCHI

Businesses today often operate multiple offices scattered across the country, even around the globe. A growing number of savvy institutions are consolidating administrative services to streamline processes, reduce costs and improve quality.

Leaders in private and public organizations have established shared service centers in West Virginia. They include: Owens Corning's Global Business Shared Services in Charleston, W.Va., which has handled payroll, accounts payable and employee travel expenses for employees since 1993; Mountain State Blue Cross Blue Shield, which is investing up to \$27 million on a new corporate headquarters in Parkersburg, W.Va.; Orrick, Herrington & Sutcliffe LLP, which invested \$10 million to consolidate its finance, accounting and technology operations into one center in Wheeling, W.Va.; and the U.S.

Department of Treasury Bureau of Public Debt's Administrative Resource Center in Parkersburg.



Orrick, Herrington & Sutcliffe

ORRICK, HERRINGTON & SUTCLIFFE LLP

International law firm Orrick, Herrington & Sutcliffe employs nearly 1,000 lawyers. The firm has offices in such far-flung places as Beijing, Tokyo, Paris, Rome, London, New York, San Francisco and Washington, D.C. It also has 175 employees in the Global Operations Center (GOC) in Wheeling. The center handles

computer network management, help desk services, billing, collections, library services, human resources administration, as well as document and transcription services.

In 2000, Orrick retained site selection professionals to assess whether and where a shared services center should be established. Orrick partner Michael A. McAndrews was on the search team.

"The idea of centralizing administrative functions is not new," McAndrews said, "but had never been done in our industry before. We conducted an intensive location search in the 48 contiguous states. Each site was evaluated based on selection criteria that included quality of work force, accessibility, costs and infrastructure. Wheeling had the best combination of advantages."

Those advantages included square-footage that cost significantly less than in competitive states, access to Pittsburgh and its international airport, and proximity to other metropolitan areas. The comparatively low cost of real estate and square footage in West Virginia catches the attention of businesses from outside the state, said Will Turani, director of the Global Operations Center (GOC).

"But our real differentiating advantage is our work force. West Virginians have the necessary skill sets and work ethic that are second to none. We are loyal and genuinely committed to the well-being of the companies we work for. This is clearly evident in our state's labor turnover rate, which is the third-lowest in the country."

Since the GOC opened in 2001, Orrick recovered its initial investment within two years and realizes annual savings of approximately \$5.6 million.

"The center not only effectively controls costs, but delivers outstanding quality," said McAndrews. "To service our offices from Beijing to Paris the GOC has to respond regardless of time zone, 24 hours a day. The operation has succeeded beyond our expectations."

BUREAU OF PUBLIC DEBT'S ADMINISTRATIVE RESOURCE CENTER

The Administrative Resource Center (ARC) is a franchise service center within the U.S. Treasury's Bureau of Public Debt. ARC provides accounting, travel processing, procurement, human resources and other services to other federal agencies on a reimbursement basis. The center employs a staff of 560 in Parkersburg.

"The Bureau of Public Debt always had high quality administrative services," said Cynthia Springer, ARC executive director. "Public Debt saw an opportunity to extend those services to other federal agencies. In the 10 years since, our business has continued to grow."

ARC is one of four federal agencies recognized as a

AUTOMOTIVE INDUSTRY: West Virginia is a driving force

The motor vehicle parts and equipment industry is one of the fastest-growing sectors of the West Virginia economy. The state is home to nearly 30 companies with more than 3,000 employees. According to the most recent Bureau of Labor statistics, West Virginia ranked fourth nationally in percentage growth in motor vehicle parts manufacturing employment and ninth in absolute employment growth.

Companies open facilities in the Mountain State to take advantage of its central location, readily available raw materials, low utility rates, excellent transportation system and highly productive manufacturing work force.

West Virginia companies supply oxygen sensors, ignition coils, spark plugs, drive shafts, suspension systems, thermostats, stamped sheet metal, automotive fabrics, engines and transmissions. And now the state will soon add its first commercial truck assembly plant: Hino Motors Manufacturing U.S.A. Inc. These recent news items illustrate the industry's vibrancy:



Hino Motors Manufacturing U.S.A. Inc.

June 25, 2007:

HINO MOTORS OPENS TRUCK ASSEMBLY PLANT IN WEST VIRGINIA

WILLIAMSTOWN, W.Va. – Hino Motors Manufacturing U.S.A. Inc. (HMMUSA) announced that the company will assemble medium and heavy-duty trucks, making this the first vehicle assembly facility in West Virginia.

The \$8.6 million investment will be used to upgrade the facility and install manufacturing equipment at the 30.35-acre site. Once operations begin in November 2007, the 194,000-square-foot plant will employ about 80 people who will build 2,500 trucks annually.

"We are happy to call Wood County, West Virginia, home to our new truck assembly plant," said Hideichiro Chikahiro, president of HMMUSA. "This represents the latest step in our ambitious growth plans in America and we will strive to be a good corporate citizen."

The state's strategic location puts Hino's trucks close to the company's customer base in the eastern United States. West Virginia is within overnight shipping distance of more than half the U.S. population.

Financial Management Center of Excellence.

"Clearly one of the reasons for our success is our people," Springer said. "The center employs well-trained professionals. The high quality of life and low cost of living contribute to the center's high retention rate and that, in turn, produces very proficient employees."

Springer also cited ARC's Internet-based infrastructure. The Internet gives ARC customers easy online access to the center's automated support systems for accounting, travel processing and other administrative functions.

"With our systems, experienced people and low overhead, ARC can provide high quality services at less cost to our customer agencies, freeing them to perform their primary missions more effectively," she said.

May 17, 2007:

CHARLESTON STAMPING WILL BE AMONG COUNTRY'S MOST MODERN PLANTS

SOUTH CHARLESTON, W.Va. – Charleston Stamping & Manufacturing Inc. will invest more than \$35 million to refurbish a 922,000-square-foot facility with new automation equipment.

The modernization is expected to allow the company to create as many as 550 jobs by its fourth or fifth year. "The prospect of 550 good-paying manufacturing jobs is tremendous news anywhere in the country today," Gov. Joe Manchin III said.

Charleston Stamping will install 45 press-tending robots, automating four of its six lines, said John T. Wise, president and CEO. The press-tending robots will be among the largest in the industry, giving the plant the capability to produce large auto and heavy truck parts.

Wise said the work ethic of West Virginians is among the best in the world. "The new automation system will enable us to double the yield," he said. "That's the level of productivity we need to compete in the global market today."



Charleston Stamping & Manufacturing Inc.



Toyota Motor Manufacturing of West Virginia

May 31, 2007:

TOYOTA'S WEST VIRGINIA PLANT LEADS THE NATION

BUFFALO, W.Va. – Toyota Motor Manufacturing of West Virginia (TMMWV) leads the nation in productivity, according to Harbour Consulting, internationally-recognized consultants specializing in manufacturing productivity.

The 2007 Harbour Report's analysis of 4-cylinder engine plants rated the Buffalo plant first in the nation, taking an average of 1.69 hours to build an engine, followed by its much larger sister plant in Georgetown, Ky., at 2.08 hours. In ratings of 6-cylinder engine plants, TMMWV ranked second, averaging 3.03 hours per engine.

TMMWV ranked at the top of the productivity list for the previous five years.

"Our West Virginia team members are world class in both quality and productivity," said David Copenhaver, vice president and secretary for TMMWV. "They successfully maintain stringent quality standards...yet they are a benchmark in the industry for productivity."

The ratings underscore how the Toyota plant has continued to exceed expectations since it began producing engines in 1998. Since its start, Toyota has expanded and brought its total investment to more than \$1 billion, creating more than 1,200 jobs in Putnam County.

April 28, 2007:

NGK SPARK PLUGS EXPANDS ITS OPERATIONS IN WEST VIRGINIA, AGAIN

SISSONVILLE, W.Va. – NGK Spark Plugs (USA) Inc. announced it will build a spark plug assembly plant in Sissonville, W.Va.

NGK currently operates an oxygen sensor plant and a distribution center in the same city, employing 220 people. The company made the decision to expand here after a national search of other locations. The company said it found the West Virginia site to be the obvious choice for the expansion, based on its 12-year history with a dedicated work force and the cooperative efforts of government and private agencies.

Opening in 1995, NGK has invested \$45 million in West Virginia. NGK makes about 10 million oxygen sensors a year in its 112,063-square-foot manufacturing plant. The adjacent 70,000-square-foot distribution center ships about 19 million sensors and 28 million spark plugs a year to customers throughout North America.



NGK Spark Plugs (USA) Inc.

Mylan

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ARCTIC CHAR: Prized WV-grown fish becoming more popular

By STEVEN KEITH

Isis Arctic char, a prized West Virginia-grown fish once served primarily in exclusive restaurants from Washington, D.C., to Washington state, is now more widely available to commercial and home chefs.

West Virginia Aqua – the only Arctic char farm east of the Mississippi, and one of only three in the country – is now offering its fish to the public via a new Web site and an increased production schedule.

Known for its consistent texture, versatility in preparations and mild taste, Arctic char has become a sought-after dish showing up on finer restaurant menus nationwide.

In West Virginia, acclaimed chefs like Peter Timmons (The Greenbrier), Scott Duarte (formerly of Tamarack) and Robert Wong (Bridge Road Bistro) have long been singing its praises and offering a variety of char dishes. And some of DC's most highly rated restaurants – Maestro, Marcel's, Le Paradou, Johnny's Half Shell – have as well.

"Isis Arctic char is one of the freshest products we deal with and I love that it is consistently high in quality," says Ann Cashion, chef/owner of Johnny's Half Shell Restaurant at 400 N. Capitol St. NW. "I never would have imagined that some of the best seafood we've ever cooked with comes from the hills of West Virginia."

Because of high demand and limited production, Isis Arctic char has been hard to get your hands on, but it's a lot easier now. Orders placed on the company's Web site, www.wvchar.com, are quick-chilled, processed and shipped within 24 hours.

Or, better yet, come visit one of West Virginia's hot dining spots where the evening's char special is as fresh as fresh gets.

A member of the salmon family, Arctic char has a taste and texture somewhere between salmon and trout. It is the most northern of all freshwater fish, and can be found naturally in lakes within 500 miles of the North Pole. It is a staple of Arctic diets because of its availability and numerous nutritional benefits.

In addition to being a rich source of heart-healthy Omega 3 fatty acids and high in protein, different parts of the fish are also good sources of iron, calcium and essential B vitamins.

And because Isis Arctic char is grown locally in computer-controlled and environmentally sound surroundings, it is free of mercury, PCBs and other toxins associated with many types of fish.

Built on a former mining site, the company's production facility takes advantage of cold, clear water supplied by nearby underground mines, creating an ideal environment for hatching and growing. It takes about two years for Arctic char to grow from eggs to a marketable size.

"Not only is Isis Arctic char a sustainable food source, but our product is all natural," says President Glenn Yost. "We provide a top quality product without using hormones or chemicals and just as importantly, our seafood is free of all toxins."

With facilities in Mingo and Logan counties, West Virginia Aqua has been producing about 6,500 pounds of Arctic char a week to keep up with the demand. And the company eventually plans to triple its capacity to about 1.2 million pounds a year.

"Fortunately, we've grown significantly in sales every year since we began in 2000," says Yost. "And last year, our sales were higher than in 2002 and 2003 combined. With this level of growth, we hope to expand even more in the near future."

INKCORPORATED: Print industry spots state as place to be

By CATHERINE ZACCHI

The printing industry has been undergoing a technological and marketing revolution in recent years. West Virginia is on the front lines.

WVU INSTITUTE OF TECHNOLOGY PRINT PROGRAM

West Virginia University Institute of Technology in Montgomery offers one of the few print management degree programs in the nation. Students enroll in the Community and Technical College at WVU Tech to earn an Associate of Science Degree in printing technology. Once they have the A.S. degree, students can pursue a Bachelor of Science degree in printing management through the WVU Tech College of Business. A common market agreement enables out-of-state B.S. candidates from Maryland to Texas to enroll at in-state tuition rates.

In September 2007, WVU Tech opened a \$1.5 million National Publishing Innovation Center in downtown Montgomery. The Center will have a press simulation system that operates on the same principle as a flight simulator for pilots. Simulating a press run allows students to practice their skills, and even experienced printers to sharpen their problem-solving abilities.

"The center will be used for print industry education, training and research," said Jack Nuckols, professor and print program chair. "It will include Scripps Howard Company Distance Delivery Auditorium, Gannett Foundation Simulation training/laboratory, Flint Ink training/research laboratory, Randall Family, LLC Web Offset Press training/laboratory, paper training/research laboratory, multimedia Executive Conference Suite, Grand Hall Reception area, and multiple state-of-the-art computer laboratories."

QUAD/GRAPHICS

Quad/Graphics, Inc. originated in Wisconsin. Today, Quad is the largest privately-held printer in the world. The company has 12 manufacturing facilities in the United States and three international partner-

Quad/Graphics, Inc., offers its clients high-volume, high-quality printing on rotogravure presses, as well as sophisticated and targeted direct mail capabilities. National Geographic Magazine is one of many national publications printed at Quad's Martinsburg, W.Va., facility.



ships. West Virginia is one of 11 states in which Quad does business, and is home to one of its mega-sized manufacturing plants. Customers served by the Quad Martinsburg plant include Victoria's Secret, Lillian Vernon and National Geographic Magazine. "Our Martinsburg location makes sense for Quad," said Pam Rostagno, plant manager for the Martinsburg center. "We are situated just off the Interstate 81/70 corridors, which gives us great access to distribute up and down the northeast by the interstate system. We also have rail access that allows us to bring in almost all of our roll paper stock to print customers' catalogs, magazines and inserts."

Quad opened its plant in Martinsburg in 1997. The initial 439,000 square foot facility housed four rotogravure presses, cylinder preparation, paper warehousing and freight operations. In the past 10 years it has

grown to 1.7 million square feet under roof, 1,000 employees, 11 rotogravure presses, three web offset presses and more than 25 finishing lines.

A rotogravure press is used for high volume, high quality printing, producing a sharp, fine image. Rotogravure presses use digitally engraved cylinders.

"One of the biggest changes in the past 20 years has been the elimination of film in the reproduction process. We are now truly in a digital age," said Rostagno. "Whether it is digital data that drives the printed image or the data that drives the finishing and distribution, the world of managing print is about managing data."

Managing data extends beyond putting ink on paper. For example, she said, suppose a company has eight million names in its customer database. Two million of those customers buy toys. In the past, the business might have to print and distribute toy inserts in all eight

million catalogs in order to reach the two million with an interest in toys. Now, Quad can manage the database so the insert is mailed only to selected customers. That enables the company to appeal to its customers with personalized mailings, as well as reduce printing and distribution costs.

Controlling distribution costs is another area where a printer can shine, said Rostagno. This year, Quad's customers traced for a 9 to 11 percent postal rate hike and were stunned with increases in excess of 20 percent. Quad was able to help soften the blow with its co-mailing program. Different catalogs from different customers are presorted together in a way that qualifies for postal discounts.

"They can save up to \$25 for every 1,000 catalogs," said Rostagno. "As customers have print runs in the millions, the savings can be significant."

FAMILY BUSINESS PRESSES ON

Third-generation family-owned McClain Printing Company in Parsons, W.Va., has reinvented itself by expanding its markets and investing millions in the latest technologies. Ken Smith, grandson of company founder Ken McClain, heads McClain Printing today.

McClain Printing got its start in 1958 when newspaper publisher McClain was approached by a group of local history scholars. The resulting "Chronicles of Border Warfare" lead to other requests for small run specialty books, and McClain Printing was born.

The industry has continued to change, and McClain Printing has nimbly changed with it. The company is preparing to purchase a new five-color printer with aqueous coat capability. One printer represents a \$1.4 million investment, said Smith, but runs three times faster than the 1993 model it replaces.

The firm continues to print local histories, family genealogies and other small custom runs, but niche book printing represents only 10 percent of the company's business. Today, McClain Printing is a printers' printer.

"We are trade printers," said Smith. "We market to other printers and brokers. When other printers get jobs that are too large, too difficult, or just at the wrong time when they're already running at capacity, they subcontract to us."

The strategy must be working. This year, McClain Printing experienced 21 percent growth, Smith said. "That kind of performance will be a nice way to lead into our 50th anniversary next year."



COAL-BASED FUELS: Biomass adds renewable component

By KELLY BRAGG

The same scenic beauty that draws tourists to the state of West Virginia also attracts the development of new and innovative ideas for providing alternatives to imported petroleum.

The rich green carpeting of trees rolling over West Virginia's hills offers a peaceful background for hikers and bikers and can help fuel the nation's vehicles and power plants. Combined with the coal that powers West Virginia's economy, wood and crops known collectively as biomass can be turned into a gas or a fuel.

The state of West Virginia advances coal-biomass-to-liquids (CBTL) projects as an alternative to imported petroleum. These clean coal projects will demonstrate the overall enhanced environmental performance of liquids from coal when compared to conventional petroleum products.

"CBTL projects are complex and touch a number of different aspects of West Virginia's economy," said Kelley Goes, secretary of the West Virginia Department of Commerce. "West Virginia has knowledge and expertise in mining and energy, forestry and wood prod-

ucts as well as geology, all of which are tapped when we consider the development of these projects."

Carbon dioxide (CO₂) is released into the atmosphere when biomass dies. The same thing occurs when biomass is turned into a gas. Biomass offsets this release because its components - plants and trees - remove CO₂ during their life cycle. Biomass as a fuel source for gasification is termed carbon neutral because its natural growth offsets the CO₂ released when it dies or is gasified.

Beyond its importance in reducing CO₂ when it is used as a component of fuel manufacturing, biomass offers modern production yet another benefit: today's gasification systems that accommodate coal can also use biomass. This reduces or eliminates costs to producers while offering environmental benefits.

West Virginia also advances what is known as carbon sequestration: techniques for permanently storing CO₂ underground.

"Almost any clean coal project done today will include disposing of the CO₂ to address concerns with greenhouse gas

emissions," said Michael Ed. Hohn, director of the West Virginia Geological and Economic Survey and the state geologist. "Putting CO₂ underground, which still faces some scientific review and research, is not that dissimilar to storing methane or natural gas underground, processes that are already familiar and well-tested. West Virginia has received U.S. Department of Energy funding for several years for carbon sequestration study."

Renewable resources have a major role to play in the development of liquid fuels from coal, enhancing the environmental performance of the traditional coal-to-liquids process. West Virginia is uniquely positioned to merge its abundant and renewable resources with its well-established coal industry, easing the nation's dependence on foreign sources of petroleum.

NEW FOCUS ON ENERGY IN WV

The West Virginia Division of Energy was created this year by Gov. Joe Manchin III to provide leadership for the state's energy development and policies.

For more information, visit www.energywv.com.

Embrace The Best of West Virginia — Tamarack Style —

Experience

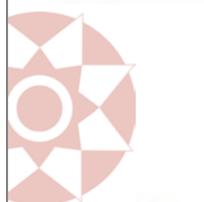
West Virginia's rich heritage expressed brilliantly through Tamarack's timeless treasures. One-of-a-kind handcrafts, glassware, pottery, furniture and fine art make wonderful gifts and inspire decorating themes for any décor. Our multi-faceted conference center accommodates your meetings, meals and fascinating experiential activities.

Enjoy

Tamarack's *A Taste of West Virginia* food court showcasing fine regional cuisine. Delectable menu items are prepared daily by The Greenbrier-trained chefs.

Discover

The Best of West Virginia – only at Tamarack.



One Tamarack Park Beckley, WV 25801
1-771-64 Exit 45 1-88-TAMARACK
Shop online at tamarackwv.com

ARTS AND CULTURE – West Virginia style

Celebrate life!

Arts, culture and music in West Virginia are tied to the state's mountainous terrain, ethnic diversity and industrial background. The state's small museums and art galleries offer unique displays of fine art and exceptional state craftsmanship. Musical entertainment runs the gamut from symphonic classics and Appalachian traditional music, to African-American hymns and southern Gospel harmonies, to the driving beat of true country and bluegrass.



Augusta Heritage Center

HERITAGE

West Virginia has its own **Carnegie Hall** located in historic downtown Lewisburg. Carnegie Hall serves as a center for drama, music and educational programs in the 221-year-old town. For a schedule of events, visit www.carnegiehallwv.com or call (304) 645-7917.

The **Heritage Farm Museum and Village** in Huntington offers nostalgic reminders of our agricultural background with tours of a one-room schoolhouse, blacksmith shops, country stores and log homes. On-site lodging is available. For more information, visit www.heritagefarm-museum.com or call (304) 522-1244.



The Clay Center's Avampato Discovery Museum



The Huntington Museum of Art

The **Museum of Radio and Technology**, Huntington, brings the wonders of developing electronics into perspective; visitors are treated to an eclectic display of batteries, radios and phonographs and early computers. Admission is free. Call (304) 525-8890 for museum hours or visit the Web site, www.mrtwv.org.

Wheeling's Kruger Street Toy and Train Museum will delight any toy collector. For museum hours and admission fees, call toll free (877) 242-8133 or visit www.toyandtrain.com.

Toy aficionados will walk down memory lane at **The Official Marx Toy Museum** in Glen Dale. The museum's Web site, www.marxtoymuseum.com, features an online museum tour. For more information, call (304) 845-6022.

ARTS AND SCIENCE

The **Arts Centre** in Martinsburg is a community center for the arts, offering exhibits and educational opportunities

for adults and children. The 2007 Nancy Rodig Regional Exhibit features the work of 33 artists from West Virginia's Eastern Panhandle, Maryland and Virginia and is open through Oct. 20. For more information about The Arts Center, visit the Web site www.theartscentre.org or call (304) 263-0224.

The **Huntington Museum of Art** has pleased visitors for 55 years with its exceptional permanent collections that include West Virginia glass, Silver and Portraits of Great Britain, Middle Eastern art and the 10 foot Chihuly Glass Tower. Visit <http://hmoa.org/> or call (304) 529-2701 for more information.

Charleston's **Clay Center for the Arts and Sciences** is a multi-cultural facility where visitors can enjoy an evening of musical or dramatic entertain-

ment as well as being fascinated by the permanent and traveling art exhibits and kids enjoy the **Avampato Discovery Museum**. Science galleries offer hands-on exhibits for children and the Electric Sky Theater features breathtaking shows. For ticket information, visit www.theclay-center.org or call (304) 561-3500.

MUSIC

Since 1984, **Mountain Stage** has brought unique musical entertainment to listeners of National Public Radio across the United States and throughout the world. The longest-running program of its kind, Mountain Stage presents contemporary music mixed with traditional and grassroots performers on every live two-hour program. For performance and broadcast schedules or ticket information, visit www.mountainstage.org.

From April through October, the **Augusta Heritage Center** in Elkins offers classes in traditional arts and music. The vitality of Augusta's creative environment is one of its most distinctive features. For a list of workshop dates, visit www.augustaheritage.com or call (304) 637-1209.

MOUNTAIN

Welcome to West Virginia, a state of unparalleled natural beauty and extraordinary hospitality. Plan a weekend getaway in the Mountain State this fall, when brilliant foliage is at its peak and every turn on the road leads to a breathtaking overlook. The changing landscapes and mountain vistas of this tour have to be ridden to be believed.

DAY 1

Crisp, early frosts begin painting the woodlands with radiant colors from mid-September to early October.

Visit **Canaan Valley Resort State Park**, perfect for year-round recreation ranging from championship golf to skiing. Nearby **Blackwater Falls State Park** is renowned for its spectacular five-story waterfalls and hiking trails. The view from **Lindy Point** is breathtaking, and the former lumber towns of **Davis** and **Thomas** have become hip gathering spots with dining and nightlife recognized nationally as hidden gems.

DAY 2

Take a pastoral foot-tall sandstone rock-climbing opp with underground Seneca and Smoke the stars at the Nat Green Bank, where space for signs of tive center explains

Just a short d Railroad's steam-p gers nearly a mile l a perfect view of b ence stunning au Highland Scenic F miles of unspoiled



Blackwater Falls State Park



WEST VIRGINIA'S RESORTS AND SPAS

Offer world-class luxury, pampering

By STEVEN KEITH

West Virginia may be known for its abundance of charming country inns, B&Bs and more breathtaking overnight campsites than you can shake a stick of kindling at, but how about relaxing under the sheets (high thread-count, of course) at one of the state's world-class resorts?

THE GREENBRIER—Nestled in the Allegheny Mountains, just a few hours from our nation's capital, The Greenbrier has been host to presidents, international dignitaries and Hollywood's hottest stars, all drawn to its luxurious accommodations, larger-than-life architecture, top-notch service and more than 50 activities—including a 40,000-square-foot spa, gorgeous indoor and outdoor pools and three championship golf courses. Even those who have visited before will enjoy the results of a recent \$50 million renovation, including a selection of updated contemporary rooms to complement classic Southern-style décor, and an exquisite new restaurant, Hemisphere, offering a variety of globally influenced tasting menus by Chef Michael Voltaggio. White Sulphur Springs, (800) 453-4858, www.greenbrier.com



The Greenbrier



Glade Springs Resort

GLADE SPRINGS RESORT—Southern West Virginia's Glade Springs Resort has blossomed into a destination within itself, offering championship golf, an equestrian center, lake, pool, skiing, outdoor adventures and an indoor adventure center that includes a spa, sauna, steam room, exercise equipment, tennis and basketball courts, bowling, a small theater and arcade. After a relaxing meal in one of Glade's outstanding restaurants, rest up for the next day in a new lodge room suite or one of many villas tucked throughout the lush grounds. Daniels, (800) 634-5233, www.gladesprings.com

STONEWALL RESORT—Near the center of the state, Stonewall Resort features a 190-room Adirondack-style lodge nestled along the shores of

Stonewall Jackson Lake. Whether you chose a room at the lodge or a well-appointed lakeside cottage, allow plenty of time to enjoy hiking and biking trails, water activities, spa, an Arnold Palmer-designed golf course and Chef Dale Hawkins' signature "New Appalachian" cuisine. Roanoke, (888)278-8150, www.stonewallresort.com



Stonewall Resort

OGLEBAY RESORT—Top off your trip in the state's Northern Panhandle, where Wheeling's expansive Oglebay Resort (it sits atop 1,700 gorgeous acres) has recently opened a new 53-room lodge addition that includes large suites with fireplaces. Wheeling, (800) 624-6988, www.oglebay-resort.com

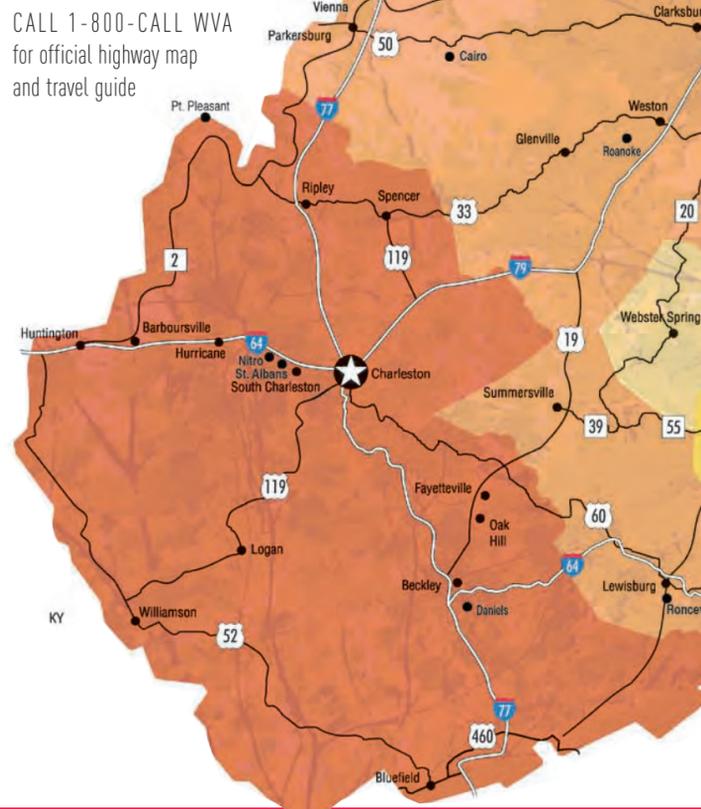


Stonewall Resort

MOUNTAINEER RACE TRACK & GAMING RESORT—A little farther north, Mountaineer's Grande Hotel & Spa and La Bonne Vie restaurant offer an elegant lodging and dining experience to accompany the excitement of live thoroughbred racing, video slots and, coming soon, Vegas-style table games. Chester, (800) 804-0468, www.mtrgaming.com

For more information on these and a variety of other West Virginia resorts and spas, call (800) CALL WVA or visit www.wweekends.com.

CALL 1-800-CALL WVA for official highway map and travel guide



Appalachian Power Park



Charleston East End main street

Scenes from CHARLESTON EAST END MAIN STREET:

A ballpark and a premier art center make this gateway to West Virginia's Capital a vibrant urban landscape.

Experience the pride and hospitality of West Virginia's 13 Main Streets, a program fostered through downtown and neighborhood revitalization. Soak in the atmosphere of quaint cafes, rare antiques, handmade crafts and world-class art. Browse unique specialty shops, galleries and boutiques. Enjoy exquisite architecture, charming neighborhoods and historic attractions.

- Charleston East End Main Street
- Charleston West Side Main Street
- Main Street Fairmont
- Main Street Kingwood
- Main Street Martinsburg
- Main Street Morgantown
- Main Street Point Pleasant
- Main Street Ripley
- Mannington Main Street, Inc.
- Philippi Main Street
- Ronceverte Main Street
- St. Albans Renaissance Group
- White Sulphur Springs Main Street

MAGIC Motorcycle tour



DAY 3

scenic drive to Seneca Rocks, a 900-foot outcropping that offers hiking and opportunities. This area is honeycombed with passages, creating such attractions as the Hole caverns. Or you may reach for the National Radio Astronomy Observatory at the huge radio telescopes search outer intelligent life and a modern interprets the science behind it all.

Drive from Green Bank, Cass Scenic overpowered Shay locomotives haul passengers high to the top of Bald Knob, offering beautiful fall color. You may also experience autumn beauty by driving across the Highway, West Virginia Route 150, 22 plateaus and valleys 4,500 feet high.

At the southern end of Highland Scenic Highway is Cranberry Glades, a natural botanical garden of unique bog vegetation and plant life living far south of their normal range. To the east, off U.S. 219, is Watoga State Park. The state's largest park is 10,100 acres and offers vacation cabins and camping facilities. A few minutes' drive south is Droop Mountain Battlefield State Park, West Virginia's oldest state park and site of the largest Civil War battle in the state, featuring a major re-enactment every other October.

Other driving tours are available from the West Virginia Division of Tourism at www.wvtourism.com, or call (800) CALL WVA for more information. Pocahontas County Convention and Visitors Bureau offers a Motorcycle Touring brochure and can be reached at www.pocahontas-county.wv.com or by calling (800) 336-7009.

Droop Mountain Battlefield State Park



Fall Foliage

- late September
- early October
- mid October
- late October



FOUR SEASONS with endless possibilities

When it comes to outdoor adventure, West Virginia's four seasons provide endless possibilities. Guests can enjoy vigorous or relaxing outdoor activities in varied backdrops.

HIKING

Hiking in the Mountain State is almost year-round. Practically any trail in the state will expose hikers to nature's splendor, but the classic 300-mile Allegheny Trail shouldn't be missed. West Virginia's numerous "rails-to-trails" conversions offer another excellent opportunity for hikers who are into generally level trails. More than 30 choices cover upwards of 375 miles.

MOUNTAIN BIKING

Named the No. 1 Mountain Biking State in the country by the International Mountain Bike Association (2004), West Virginia is known for its challenging, rocky single-tracks and its mountainous views.

For milder rides, check out the state's extensive rail-trail system. This includes the 72-mile North Bend Rail-Trail, the

77-mile Greenbrier River Trail, the 21-mile Allegheny Highlands Trail and the Cranberry/Tri-Rivers Rail-Trail.

ATV RIDING

The Hatfield-McCoy Trail System has quickly gained national recognition for its world-class ATV riding since opening in October 2000. With more than 500 miles of trails open to ATV riders, motorcyclists, off-road cyclists and equestrians, the area is known for its rocky, mountainous terrain and for its ATV-friendly attitude.

CAMPING

From tents to RVs, there are countless opportunities throughout West Virginia for a variety of camping experiences. Visitors can pitch a tent in the secluded wilderness or enjoy primitive and rustic campsites available in many state parks and forests, as well as in national forests. For those less likely to "rough it," campgrounds and RV parks with all the amenities are waiting to welcome you and your crew.

SKIING

With an average annual snowfall of more than 15 feet in the highlands, the state is the winter playground of choice for the Mid-Atlantic and Southeast. Canaan Valley Resort State Park, Snowshoe Mountain and Timberline are prime alpine skiing, snowboarding and cross-country skiing destinations.

RAFTING, FLOATING AND FISHING

While West Virginia is known for its world-class whitewater rivers, there are many waterways better suited for canoeing and floating trips taken at a more leisurely pace. Among the most scenic and accessible are the Shenandoah, Greenbrier and Cacapon rivers and the South Branch of the Potomac.

Floating and fishing go together on the Greenbrier and New rivers, where smallmouth bass abound. Or, try the Kanawha River, where your catch may be bass, walleye or muskie. Deep pools on the South Branch of the Potomac are home to trophy trout.

Every June, the West Virginia Chapter of Trout Unlimited hosts a Fly-Fishing School at Camp Pioneer 4-H Camp in Randolph County. Expert instructors, with more than 100 years of combined experience, teach everything from insects to safe wading in one weekend.

ROCK CLIMBING

While some may be satisfied with down-to-earth challenges, others may want to try something more gravity challenging, like rock-climbing. Nelson Rocks Preserve features the "via ferrata" (Italian for "iron way") type of mountain climbing that has a safety system permanently installed, making the climb suitable for persons with no prior training and minimal equipment.

No matter what type of outdoor activity visitors are seeking, West Virginia's seasons and terrain offer a variety of outdoor recreation to explore.

DINING IN WV: Mountain State boasts of award-winning restaurants

By STEVEN KEITH

Thoughts of "West Virginia dining" often evoke mouth-watering memories of good ol' fashioned country cooking. But the state has also experienced a culinary renaissance, of sorts, sprouting countless fine-dining spots where renowned chefs prepare fresh gourmet specialties in cozy, casual, chic and even cosmopolitan surroundings.

Start your culinary journey in West Virginia's nearby Eastern Panhandle, where historic and post-card-pretty Shepherdstown boasts some of the state's best restaurants in a charming small-town setting:



Downtown Shepherdstown

THE BAVARIAN INN - It's like having a little slice of the Swiss Alps right on the banks of the Potomac River. This award-winning German restaurant offers an authentic ethnic dining experience you won't soon forget. 164 Shepherdgrade Road, Shepherdstown, (304) 876-2551, www.bavarianinnwv.com



The Bavarian Inn

YELLOW BRICK BANK - An imaginative menu, extraordinary flavors, eclectic décor and cozy yet convivial ambiance has made this a perennial hot spot for Washingtonians for more than 30 years. 201 German St., Shepherdstown, (304) 876-2208, www.yellowbrickbank.com

THREE ONIONS - Global fusion cuisine, sleek décor and a decidedly cosmopolitan vibe. In only two years, this has become one of the region's hottest tables. 117 E. German St., Shepherdstown, (304) 876-8000, www.threeonions.com

STONE SOUP BISTRO - An exquisite menu focuses on organic dishes and locally grown ingredients. Who knew tofu could taste so good? 112 W. German St., Shepherdstown, (304) 876-8477, www.stonesoupbistro.com

Elsewhere in the state:

THE GREENBRIER - Dining at this enchanted Old South resort in the mountains of West Virginia is one of the best overall dining experiences you'll ever have. 300 W. Main Street, White Sulphur Springs, (800) 453-4858, www.greenbrier.com

THE CHOP HOUSE - This elegant restaurant is the epitome of top-notch service and quality, featuring USDA prime beef, classic veal chops, roasted rack of venison, luscious Colorado rib lamb chops, fresh lobster, succulent Beluga Caviar, hand-rolled cigars and an award-winning wine list that includes top shelf ports, cognacs and single malt Scotch. 1003 Charleston Town Center, Charleston, (888) 456-3463, www.thechophouserestaurant.com

SOHO'S - Chef Bill Sohovich's contemporary Italian cuisine and complementary wine list are outstanding. Try one of several Super Tuscan on the list. Capitol Market, 800 Smith St., Charleston, (304) 720-7646, www.capitolmarket.net

GLASSHOUSE GRILLE - Contemporary American and continental specialties served in a elegantly casual atmosphere. 709 Beechurst Ave., Morgantown, (304) 296-8460, www.theglasshousegrille.com

PROVENCE MARKET CAFÉ - Gourmet French-inspired cuisine served in a relaxing café or on a deck overlooking Anne's Creek. 603 South Virginia Ave., Bridgeport, (304) 848-0911, www.provencemarketcafe.com

LUI LUI - Influenced by some of the world's foremost Asian, Continental and Western chefs, Chef Lui's passionate creations are delicious works of art. 1510 Grand Central Ave., Vienna, (304) 295-8028, www.cheflui.com

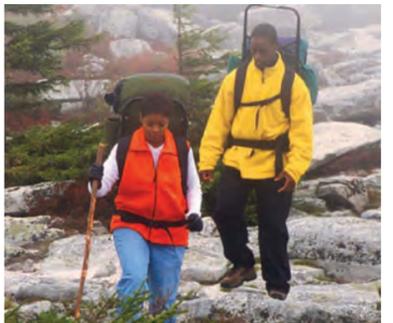
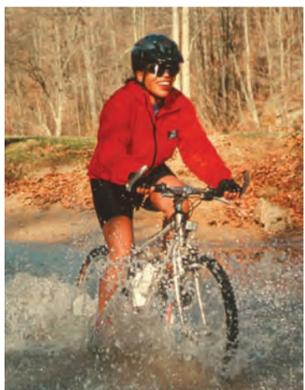
SPATS - Located inside the luxurious Blennerhassett Hotel, the restaurant's imaginative cuisine transcends traditional labels of American, French and Continental. And the martinis, oh! The Blennerhassett Hotel, 320 Market St., Parkersburg, (800) 262-2536, www.theblennerhassett.com

SAVANNAH'S - Situated in cozy dining areas throughout an old Victorian home, it's one of the state's best-kept culinary secrets. A fantastic wine list offers better value than you'll find at most restaurants of its caliber. 1208 Sixth Ave., Huntington, (304) 529-0919, www.savannahmenu.com

LA BONNE VIE - Adjacent to the new Grande Hotel on the expansive grounds of Mountaineer Race Track and Gaming Center, this exquisite upscale steakhouse is a sure bet. The rare tuna appetizer alone is worth a trip. Mountaineer Race Track, Chester, (800) 804-0468, www.mtrgaming.com



Camping at Summersville Lake



Dolly Sods Wilderness Area



Rafting on the New River

WEST VIRGINIA STATE PARKS: Getaways to Remember

By TRICIA SIZEMORE

Since the late 1920s, the West Virginia State Parks system has been the setting for special moments. For generations, visitors have been hosting family reunions, learning to fish, roasting hotdogs over an open fire or biking and hiking along trails.

Visitors can discover the more than 200,000 acres of West Virginia's state parks on their own or with a special package or event. More than 49 parks, forests, wildlife management areas and rail trails, are scattered on winding country roads or right off major interstates. Many of the most popular are within close proximity of Washington, D.C.

"There is a true sense of wonder here," says Sis Summers, State Parks program administrator. "At West Virginia's state parks or forests, much needed peace and quiet or an adventure is just around the corner."

With the diversity of the

GAMING RESORTS:

Ready to lay it all on the table

By STEVEN KEITH

Voters in three West Virginia counties recently passed local referendums allowing the race tracks in their areas to add casino-style table games to their offerings. And those three gaming resorts are wasting no time doing so.

Construction is on the fast-track, and sometime around the first of the year – current projections range from November to January – visitors to Mountaineer Race Track & Gaming Resort (www.mtrgaming.com) and Wheeling Island (www.wheelingisland.com) in the state's Northern Panhandle and Tri-State Race Track (www.tristateracetrack.com) just outside Charleston, will be able to try their hands at poker, blackjack, roulette, craps and a variety of other table-style games.

West Virginia will now be the 12th state in the nation to have full-fledged casinos offering both slots and table games, and becomes only the second in the nation, behind Iowa, to offer live racing, slots and table games at a single location. The change should help the state strengthen its position as one of the premier gaming destinations in the Mid-Atlantic and Southeast.

"From our perspective, the goal of this legislation was to help West Virginia's gaming resorts preserve existing jobs, create thousands of new ones, and maintain a competitive advantage over our surrounding states," said John Cavacini, president of the West Virginia Racing Association. Pennsylvania recently legalized video slots and Cavacini expects the same to happen in Maryland very soon.

"But what this means for the public is visitors to West Virginia's new and improved gaming facilities can expect to enjoy all of the same amenities found at the nation's finest destination resort casinos," he added. "Gaming, racing, nice hotel accommodations, entertainment complexes, food and drink, shopping, golf, spas – we'll have it all."

Cavacini said more than 11 million guests visited the state's four tracks last year and he expects that number to skyrocket with the addition of table games at three of them.

The fourth, Charles Town Races & Slots (www.ctown-races.com) in the state's Eastern Panhandle, offers its guests fine and casual dining amid the resort's Hollywood and Wild West themes. Although it does not have table games, the resort features more than 5,000 video slot machines, live thoroughbred racing five nights a week (Wednesday through Sunday) and simulcast harness and dog races.

state parks system and abundance of activities, visitors are able to create their own fun at their own pace and at an affordable price. Here, visitors can soak in nature surrounded by trees and wildlife. Other popular activities include hiking, swimming, golfing on championship courses and horseback riding.

Another option is to take advantage of special packages and a full calendar of events that follow the seasons, ecology, history, heritage, and flora and fauna of the Mountain State.

Dinner theater packages are available at some parks, including Hawks Nest, North Bend, Twin Falls Resort and Cacapon Resort. Performers entertain visitors with tales of the state, portrayals of famous Americans such as Pearl Buck and Mary



The Grist Mill at Babcock State Park

Draper Ingles, or original theatrical or musical works. There are even some murder mystery weekends that allow guests to be part of the show!

Summer outdoor amphitheater performances at Pipestem Resort and Chief Logan state parks offer a lineup of bluegrass, classical, jazz, country and pop musicians; theatrical performances or educational shows.

Visitors can learn the secrets of the natural world with lore and tracking weekends, wildflower pilgrimages, interpretive hikes and astronomy weekends. Naturalists provide special activities at lodge parks such as Blackwater Falls, Cacapon, Canaan Valley, Hawks Nest, North Bend, Pipestem Resort, Twin Falls and Stonewall resort state parks.

For outdoor recreational enthusiasts, organized mountain bike rides and workshops are scheduled in several areas and distance runs and marathons are arranged to test the endurance of runners.

State parks showcase Appalachian culture while also providing a glimpse into the past. History buffs are able to enjoy re-enactments at Droop Mountain and Carnifex Ferry state parks. The reconstructed mansion of Harman and Margaret Blennerhassett awaits visitors at Blennerhassett Island Historical State Park while fort life is showcased at Prickett's Fort State Park. A trip to Cass Scenic Railroad State Park offers a ride on antique Shay steam locomotives into a part of the state's industrial past.

When planning an

overnight getaway, visitors are able to choose from accommodations that won't break the bank, including campsites, cabins, cottages and lodges. For those wanting an outdoor experience, State Parks provide four different types of campsites ranging from primitive to sites with full hookups. Cabins and cottages are completely furnished and equipped with everything from cooking utensils to bed sheets. Guests need only bring food and personal items. Ten parks offer lodges, nine of which are open year-round. All lodges offer an in-house restaurant.

Whether planning a week-long vacation or quick getaway, West Virginia's state parks and forests are worth the trip. Memories will be made and cherished from these family getaways. For more information, call (800) CALL WVA or visit www.wvstateparks.com.

C
CLOSER
than you
THINK.

Believe it or not, the key to the perfect winter getaway may already be in your ignition. Southern West Virginia offers downhill and cross country skiing, snowboarding, tubing, and thrilling winter adventure for the whole family. And it's all close enough to enjoy whenever you need to get away.

For more information or a free travel guide, call or click.

West Virginia
Wild and Wonderful

Southern West Virginia
CONVENTION & VISITORS BUREAU

800.VISITWV · VISITWV.COM

WV Biometrics continued from page 1
needed. Unlike ID badges and PIN numbers, it's not just something in your wallet or something you memorize. It's something you are; so, it can provide the ultimate security.

The biometrics industry focuses on developing methods and tools for identity verification. The latest innovations are multi-model fusions, combining the analysis of two or more biometrics (say, an iris and a fingerprint) for greater certainty. Computer technology is used to match the recorded patterns on file for an individual to validate identity – often in real time at a point of authentication. Matches (or mismatches) can be discovered and acted upon immediately.

Since 9/11, the homeland security applications for biometrics have made the news: securing national borders, controlling access to facilities, or enhancing computer network security. But the technology has the potential to provide benefits to consumers and businesses by protecting against identity theft, verifying time and attendance or speeding pre-screened business travelers through airport security checkpoints.

"The use of biometrics



A graduate student at WVU demonstrates the use of iris scan technology.

already is expanding into financial services. ATMs in India use fingerprints for validation. 'Pay by touch' may replace credit cards, someday," Michael Kirkpatrick said. He is the executive director of the West Virginia Biometrics Initiative, also in Fairmont.

"When biometrics become commonplace in consumer products – that's when the industry will explode," he said, predicting West Virginia will be key in shaping that future.

Supporting the commercialization of biometrics will be the National Biometrics Security Project (NBSPP) and its Test Research & Data Center in Morgantown, W.Va. The 8,000-square-foot facility is the world's only ISO-certified inde-

pendent testing, training and data facility focused exclusively on biometrics.

"Standards are what drive commercialization. Devices need to be interoperable. They need to speak to one another," explained John Siedlarz, CEO and Chairman of NBSPP. The company's financial support of standards development has contributed to the number of published standards, growing from 13 to more than 50 in the past three years. Additionally, there are another 50 standards in development.

NBSPP's Qualified Products List (QPL) identifies those biometric products that have passed a series of performance tests over a six- to eight-week period. "Buyers can be assured

that the products that appear on the QPL meet specific performance standards," said Siedlarz.

FERTILE GROUND FOR HIGH-TECH BUSINESSES

No other geographic area of the world has north-central West Virginia's high concentration and high caliber of biometric companies. The I-79 Corridor is home to the FBI Center, BEACON, NBSPP, the Department of Defense's Biometrics Fusion Center in Bridgeport, and West Virginia University's Center for Identification Technology Research (CITeR), Morgantown.

In 2000, WVU developed the first degree program in biometrics in the United States and more than 50 students there currently major in biometrics systems. Graduates are in high demand. Most earn dual degrees, with a second degree in computer engineering, computer science or electrical engineering.

WVU has two related programs that put its students and faculty into the midst of applied research and application development for industry:

CITeR and the Biometric Knowledge Center, which serves as an economic development arm for WVU Identification Technologies.

Since 2001, CITeR has been awarded funding by the National Science Foundation to be the only Industry/University Cooperative Research Center focusing on biometric identification technology in the United States. It is a cooperative in which industry, government and academia join together to research solutions on key projects.

CITeR research affiliates include industry giants such as Northrup Grumman, Booz Allen Hamilton and Lockheed Martin and government entities including the FBI, Department of Defense, Federal Aviation Administration and the National Security Agency. CITeR affiliates contribute a fee that gives them voting privileges to approve what projects will be pursued by the researchers. In return, the affiliates become directly involved in the research from planning to completion. They get first looks at data and first opportunities to license ideas. Industry and government

groups mentor the students and faculty. Students get professional experience and easily transition into industry jobs upon graduation.

"In addition to the access to leading-edge research and a well-trained work force, locating a biometrics business in West Virginia makes business sense," said Kirkpatrick. "West Virginia offers low business costs, low cost of living, and high quality of life. Workers give you an honest eight-hour day. There is low absenteeism and low turnover.

"The location is ideal, too. The I-79 Corridor is a mere three-hour drive from Washington, D.C.," he added. "The fact that we are close to Washington, but not in it, has security advantages. This is a good location for back-up and disaster recovery."

Blizzard agreed about the state's capacity and qualities.

"As a long-term partner that's made a commitment to West Virginia, we've seen the value of our investment," she said. "The tremendous convergence of talent, academia, small businesses and visionary leadership has made West Virginia a fertile place for high tech businesses."

CSI: West Virginia

By LESLIE FITZWATER

From Sherlock Holmes to Nancy Drew; from Perry Mason to Matlock, who doesn't love a good mystery? Curious clues, hidden evidence and an unlikely suspect can capture anyone's attention.

But what about in real life? How are crimes investigated and solved outside the world of make-believe? It's no mystery that the trail to crime scene investigation begins with an education in forensic science.

West Virginia, which is ranked by FBI

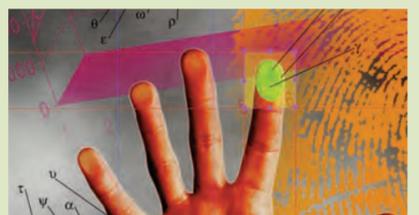
Uniform Crime Statistics as having the fourth-lowest crime index in the country, may be low on crime, but it's high on the list of states with exemplary forensic science programs. West Virginia University, Marshall University Forensic Science Center and Mountain State University's Martinsburg and Beckley campuses offer outstanding programs for students interested in careers in crime scene investigation, law enforcement or forensic science research.

Mountain State University Martinsburg Campus is located in the state's historic Eastern Panhandle, just a short drive from the nation's capitol, and offers a Bachelor of Science degree in forensic investigation. The Martinsburg Campus presents unique, hands-on learning opportunities, including a crime scene investigation house and automobile, both full of evidence just waiting to be "uncovered." Senior level students sometimes are called upon to provide support to

regional law enforcement investigations, and may also have opportunities to assist local law enforcement agencies with "cold case" investigations. Forensic investigation graduates have found employment as crime scene investigators, fingerprint technicians and homicide investigators.

The Marshall University Forensic Science Center (MUFSC) in Huntington offers a Master of Science with areas of emphasis, including DNA analysis, forensic chemistry, computer forensics, crime scene investigation, and forensic microscopy. The master's program is accredited by the Forensic Science Education Program Accreditation Commission, making it one of the few such graduate programs in the country. MUFSC admits 20 students yearly with graduates going on to work for the FBI, Secret Service, and other federal, state and local agencies.

Director Terry W. Fenger, Ph.D., said MUFSC is a national resource for state and



local law enforcement with state-of-the-art accredited DNA laboratories providing forensic testing, training and support in digital forensics. The center is the authorized West Virginia Combined DNA Index System (CODIS) database laboratory.

"Marshall is the first university to partner with a state police forensic science lab to develop and maintain a CODIS database from which DNA profiles of convicted offenders may help solve crimes," he said.



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A visit to Greenbrier County is the perfect way to put things in perspective. The breathtaking natural beauty of our rolling landscape, lush valleys and soaring peaks are sure to inspire you. You'll also fall in love with our rich mountain heritage, vibrant art scene and legendary hospitality. And a leisurely stroll through our award-winning, quaint small towns will lead you to one-of-a-kind shopping and irresistible dining. To discover just how rewarding a visit to Greenbrier County can be, call for a free getaway guide.

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West Virginia is Open for Business continued from page 1

WONDERFUL WV LIFESTYLE

Attracting good companies is one thing. But retaining them and their employees for the long-term is another. However, Gov. Manchin is confident his state can provide a company's employees with the kind of quality lifestyle that will make their CEOs smile.

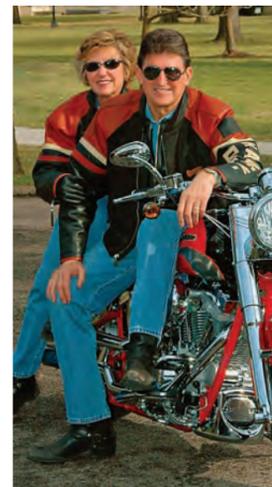
"A lot of people," beams the governor, "are very pleasantly surprised when they first visit our state, whether for vacation, or for a business venture, because they can immediately see the great quality of life here. I can tell you that this state is one of the best places in the United States, both for those who want to start, or expand a business, and for those who also want to raise a family—to have a comfortable lifestyle, with good educational standards, a very low crime rate, and a home where you can actively enjoy the great outdoors and the beauty of the land."

TOURISM A KEY INDUSTRY

West Virginia is a small state, but the people are delighted to share the remarkable beauty of their forested mountains with visitors, and tourism is rapidly becoming a major industry with an array of natural and manmade allures.

"As an outdoors person myself," says the governor, "I enjoy both fishing and hunting very much, and we have some of the greatest trout streams on the entire East Coast in West Virginia. Our snow skiing and cross-country skiing is the best in the Mid-Atlantic and we have some of the finest fall foliage in North America—and it's all on display only a few hours from Washington.

"The golf courses we have



Governor and Mrs. Manchin

throughout West Virginia are tremendous and our park systems have wonderful cozy cabins. We also have America's best whitewater rafting and kayaking. Hunting is also a big sport in West Virginia, with all type of game from pheasant and deer, to black bear hunting.

"And, if you're like me and enjoy motorcycling, you're not going to find another state that has both the splendid scenery and the great roads needed to truly enjoy this sport."

Many first-time visitors like what they see so much, they don't want to leave. That explains why West Virginia has become a leading state for second homes, says Gov. Manchin. "That tells you these people are buying their second homes here because they love what they see, and they're finding excellent housing values in stunning locations."

LEADING THE WAY IN ENERGY EFFICIENCY

No story on West Virginia

can be complete without mentioning coal, a natural resource which the Mountain State has in abundance. "We're the second-largest producer of coal in the United States," notes the governor, "and we still have tremendous deposits.

"For many years we in West Virginia have done the 'heavy lifting' — mining the coal, making the steel, all the really tough jobs. And now we're working to take coal to the next level. How do we keep this country secure in terms of energy efficiency and supply? We believe very strongly in alternative fuels. And I believe that West Virginia can be a tremendous help as far as eliminating our dependence on foreign fuels by turning coal into liquids. And also turning coal into synthetic natural gas. And by using clean coal technology."

Summing up, Gov. Manchin says, "We've been successful in these first two and a half years. But we still have many more dreams and visions for our state.

"Companies today not only want a dedicated work force, they want a well-educated work force that can meet the demands of the 21st century. And so we're working with our schools, and universities, and technical schools, to get the degrees and certifications that they will need for not just today's jobs, but the jobs of the future. If you are going to add value to your state, you are going to need an educated population. A well-educated population means both qualified and skilled employees, as well as knowledgeable citizens. That's the unique advantage which we in West Virginia are all working extremely hard to achieve. And we warmly welcome everyone

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“A physical disability is not an obstacle
to pursuing your dreams.”



At age 8, **Yew Choong Cheong** lost most of his hearing to a viral infection. At 14 he heard Beethoven . . . “I fell in love with music for the first time.” In 2001, a music scholarship brought him to the West Virginia University College of Creative Arts and his mentor, Peter Amstutz.

“My professor is just like my father here . . . he has been my friend, not just my teacher.”

Yew Choong recently played at the John F. Kennedy Center for the Performing Arts as one of four 2007 International Young Soloists.

For more of Yew Choong's story:

<http://wvuminate.wvu.edu/yew>

West Virginia University

www.wvu.edu

179 degree programs
34,637 students on four campuses

Students from 50 states and
90 nations

Morgantown, WV, the #1 Small
City in America

25 Rhodes Scholars
30 Goldwater Scholars
18 Truman Scholars