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PRIORITIZING CYBERSECURITY

Growing sophistication of attacks requires up-to-date, multipoint defenses and employee training

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LANE ONE-ON-ONE: CHARLES HAGERTY President, New Age Technologies



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On the Cover

Kentucky businesses and their IT services partners are in an ongoing competition with digital vandals and criminals to protect their mission-critical systems and information from being infected or stolen. Photo illustration by Paul Blodgett/PJB-Marketing.com

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Old National's Lexington Commercial Team, pictured left-right: Wesley Barringer, Commercial Relationship Manager; Kim Martin, Commercial Loan Assistant; John Douglas, Commercial Relationship Manager and Scott Cvengros, Central Kentucky Market President.

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PERSPECTIVE

REBELLION VIA ELECTION

Now it's up to new leaders to deliver change voters want

BY PAT FREIBERT

2016 has been quite a momentous ride for Kentucky and the nation. A presidential election characterized by insults, scandals, allegations of corruption and a thoroughly discredited media ended with the surprise election of Donald Trump. Here in the commonwealth, a powerful and entrenched Speaker of the Kentucky House of Representatives, Greg Stumbo, was ousted by the voters. Republicans won majority membership in the House and the new speaker will be Jeff Hoover of Jamestown.

What all this will mean in Washington and Frankfort in coming years depends on the performance of the winners. Can they deliver on their promises and commitments to change? Will they? The answer is not yet known, but it is clear that American voters and Kentucky voters chose change – a change from governing "with a pen and a telephone" without approval of the Congress, and a change in policies like Obamacare.

On major issues such as Obamacare, the debt, tax reform, illegal immigration and border security, school choice, sanctuary cities, regulatory excess, rebuilding our military, energy exploration and production, and myriad other issues, American voters and Kentucky voters came down on the side of President-elect Donald Trump. Kentucky also placed all three branches of state government in Republican hands for the first time in nearly a century.

In Kentucky, Gov. Matt Bevin now stands a better chance to get some of his reforms approved in the Kentucky House under Speaker Hoover. Bevin's nemesis, Stumbo, had effectively blocked the governor's major agenda proposals. The historic shift of power in Kentucky state government from Democrat to Republican seems to affirm voters' appetite for change.

In the presidential election, candidate Donald Trump was a non-politician and a successful businessman who had to run not only against candidate Hillary Clinton but also against the mainstream media, which took sides against him and appeared to collude with his opponent. In addition, he ran without support, and in some cases, with opposition from the elite establishment in the Republican Party. His campaign was vastly outspent by his opponent's, and he was universally dismissed and demeaned by pundits. The reaction of voters seemed to be a rejection of the pollsters, media pundits and consultants. Trump carried the previously "forgotten" middle class, the "outsiders" and especially those in "fly-over country."

The losers were candidate Clinton and President Obama, who campaigned that his ideas were on the ballot. Other losers include Hollywood celebrities, the "establishment elites" in both major parties, and those college students, professors and administrators who have been unable to accept the outcome of the presidential election. The childishness displayed by many adult college students when learning the election results is stupefying: Students at Oberlin College complained of suffering breakdowns because school work was interfering with their political activism; a Yale professor responded to "heart-felt notes" from students "in shock" by making that day's exam "optional"; at the University of Michigan distressed students were provided with Play Doh for comfort and distraction; Cornell had a "cry-in" with officials handing out tissues and hot chocolate; other reports on "therapy dogs," students participating in a "primal scream" to express their frustration productively; and on and on. Is it any wonder that American business complains that an increasing number of college-graduate job applicants arrive unprepared to work and to take responsibility for their own lives?

In a letter to James Madison in 1787, Thomas Jefferson wrote: "I hold it that a little rebellion, now and then, is a good thing, and as necessary in the political world as storms in the physical." The 2016 presidential election and Kentucky's legislative elections may reflect such rebellion. If the Trump and Bevin administrations cannot take steps to improve the nation's and the commonwealth's economy, their elections will have been a pointless gesture. But every opportunity exists to make 2017 a better year – maybe the best year yet. America's can-do attitude is up to this job if good leadership and resolve guide our executive leaders.



Pat Freibert is a former Kentucky state representative from Lexington. She can be reached at editorial@lanereport.com.



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FAST LANE A compilation of economic news from across Kentucky

PADUCAH: WORLD'S FIRST LASER URANIUM-ENRICHMENT PLANT COULD CREATE UP TO 1,200 NEW JOBS IN W. KY



GE-Hitachi Global Laser Enrichment LLC plans to build a facility in Paducah that would be the world's first commercial laser enrichment facility.

A proposed facility to use depleted uranium to produce natural uranium could bring up to 1,200 jobs to the Paducah area, according to a statement released by the **U.S. Department of Energy** (DOE).

Natural uranium is used for production of fuel for civil nuclear reactors.

GE-Hitachi Global Laser Enrichment LLC (GLE) has reached an agreement to purchase depleted uranium from the DOE and has proposed building its state-of-theart **Paducah Laser Enrichment Facility**

(PLEF) near the DOE's **Paducah Gaseous Diffusion Plant**. Depending on the required regulatory approvals and prevailing market conditions, construction of the plant – which would be the world's first commercial laser enrichment facility – would likely begin in the early 2020s. GLE will finance, construct and operate the facility under a Nuclear Regulatory Commission license.

Paducah Mayor Gayle Kaler told **WKMS** that while the new facility "won't happen right away," the DOE agreement represented a "big hurdle" and said the hope is that venture capitalists will want to invest in the company. Kale called the deal "a game changer for Paducah" and said the proposed facility promises high-wage engineering jobs and technical work, along with construction jobs.

The Paducah plant was constructed in the 1950s to enrich uranium for national security applications, and later enriched uranium for commercial nuclear power generation. The Energy Department resumed control of the plant enrichment facilities in 2014 after the operator ceased gaseous-diffusion enrichment operations in 2013.

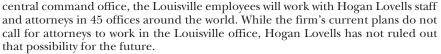
The Energy Department's Portsmouth/Paducah Project Office (PPPO) is currently deactivating the plant in preparation for decontamination and decommissioning, while it continues to complete environmental cleanup that began in the late 1980s. Cleanup includes groundwater remediation, inactive-facility demolition, conversion of depleted uranium to more stable forms for reuse or disposal, and other projects.

LOUISVILLE: GLOBAL LAW FIRM HOGAN LOVELLS OPENS FIRST U.S. SUPPORT CENTER, PLANS TO HIRE UP TO 250

OGAN Lovells, one of the world's largest law firms, has opened an office support center in Louisville that is expected to bring up to 250 new jobs to the city.

The support center is the only such office in the United States for the firm, which ranks as the 14th largest law firm in the world (in revenue) and employs 2,500 attorneys and a staff of 6,000 worldwide. (The firm's only other office support center is located in Johannesburg, South Africa.) Hogan Lovells is co-headquartered in Washington, D.C. and London and specializes in business-oriented issues.

The Louisville office will house employees who will provide services such as administrative support, accounting/finance, human resources, information technology and marketing/business development, among others. As a global



OWENTON: 450 JOBS TO BE LOST AS ITRON ANNOUNCES PLAN TO CLOSE KY PLANT

HE city of Owenton will be losing its largest employer with the announcement that **ltron** plans to close its Owenton plant, which currently employs approximately 450.

The Owenton plant, which has been in operation since 1978, produces electric, gas and water meters. The decision to close the facility is part of the Washington-based company's recently announced restructuring project designed to lower costs and increase efficiency. Plans call for the Owenton oper-



Itron's Owenton plant produces a variety of gas, electric and water meters.

ations to be transitioned over the next 18 to 24 months to Itron's facility in Oconee, S.C., one of the company's 25 locations worldwide.

Owenton leaders say the closing will be devastating to the small Northern Kentucky community, which has a population of approximately 1,500. Mayor David Wotier told the **Owenton News Herald** that the city could lose up to \$250,000 in annual tax revenue. That, in turn, could necessitate cutting hours for city hall employees and possibly having to eliminate at least one police position.

City officials are hoping Itron's plans to sell the 140,000-s.f. plant – which includes office, industrial and warehouse space as well as a loading dock – will bring another company to the community to help replace the jobs that will be lost due to Itron's move.



<< -



Celebrating the Hogan Lovells' ribboncutting ceremony in Louisville on Nov. 3 were (pictured left to right) William Ball, managing director of global business services, Hogan Lovells; Steven Immelt, CEO, Hogan Lovells; Deanna Epperly Karem, vice president of regional growth, Greater Louisville Inc.; and Greg Fischer; mayor of Louisville.

AUBURN: CHAMPION PETFOODS EXPANDS PRODUCTION CAPACITY, ADDS 33 JOBS



Champion Petfoods' Auburn facility, which just opened in January 2016, is already expanding to meet customer demand for its dog and cat foods. Lexington-based Gray Construction was in charge of the project and was recently recognized with a national award from the Design-Build Institute of America for its work. HAMPION Petfoods USA is adding production capacity at its recently opened DogStar Kitchens in Auburn, taking its total employment to 200 and overall investment to more than \$178 million.

Champion opened its 371,000-s.f. Logan County production and distribution center in January with a

147-member staff. Now the company is adding a third production line and more jobs to help meet demand from consumers across the U.S. and Latin America for the company's Orijen and Acana dog and cat food brands.

Champion Petfoods President and CEO Frank Burdzy said the plant relies on Kentucky farmers, ranchers and fishermen to provide fresh, regional ingredients and has a mandate to never outsource food production.

Based in Morinville, Alberta, Champion Petfoods is a Canadian company with agriculture roots dating back to 1985. Its brands are sold in more than 80 countries. The Auburn plant is the company's first U.S. location.

HOPKINSVILLE: EXOTIC WOOD AUTO PARTS COMPANY ADDS MORE SPACE, 42 JOBS

Barts LLC, an automotive aftermarket supplier of domestic and exotic wood bed kits for pickup trucks, is investing \$3.7 million to expand its operations near Hopkinsville.

The project will

more than double



Bed Wood and Parts specializes in wood bed liners such as this one from the RetroLiner product line that fits pickup trucks that have a metal bed floor.

the company's space, bringing it to 23,000 s.f., and will include growing the staff from six to 48.

The new manufacturing space and equipment will enable the company to increase production of its product lineup, which includes more than 20 species of wood for classic truck, SUV and station-wagon restoration and modification projects. The company also plans to distribute various products online through both **Wal-Mart** and **Amazon**, including its patented **Wood-Bone Tailgate Butcher Block**, which fits across the inside of truck tailgates and is becoming increasingly popular among hunters and for athletic and motorsports tailgating events.

BUSINESS BRIEFS

BARDSTOWN

■ Heaven Hill Distillery held a ribbon-cutting ceremony on Nov. 18 to celebrate the opening of its new Cox's Creek warehouse site. Cox's Creek is the newest expansion to Heaven Hill Distillery, which now holds over 1.2 million aging barrels across Jefferson and Nelson Counties. The Cox's Creek Warehouses have seven



floors and cover 40,000 s.f., making them the largest warehouses permitted by code in Kentucky. The 175-acre site will hold in excess of 660,000 barrels after all development is complete.

BOWLING GREEN

■ The **Macy's** store in Bowling Green's **Greenwood Mall** is one of five stores that the company has sold to **General Growth Properties** for a total of \$46 million. The store, which has 61 employees, will remain open through the holidays, but is scheduled to close in the spring. According to a report by the Bowling Green **Daily News**, General Growth plans to fill the 124,000-s.f. space with a **Belk** department store that will open later in 2017.

■ After beginning commercial flight service between Bowling Green and Atlanta at the end of August, **Contour Airlines** has scaled back the frequency of the service by nearly 50 percent after assessing traffic patterns on the route over a two-month span. Instead of offering two flights per day Monday through Friday, the airline now has one flight each way scheduled for Monday through Friday and one flight each way on Sundays, with Saturday flights eliminated entirely. Contour CEO Matt Chaifetz told the Bowling Green **Daily News** that cutting back the unneeded flights will help "maximize the longevity" of the local, state and federal funds that have been allocated to subsidize the air service.

BURLINGTON

■ Heritage Bank has partnered with Texas brokerage firm Investment Professionals Inc. to offer comprehensive financial planning and



investment advisory services to its customers. **Heritage Wealth Management** will offer services such as retirement planning, professionally managed advisory accounts, mutual

funds, annuities, 529 plans, 401K plans and long-term care and life insurance plans. Heritage operates 17 locations across the Northern Kentucky area.

COVINGTON

■ Demolition crews have been working on Washington Street in Covington in recent weeks, marking the first step in physically redeveloping the site for the **NorthPointe Group**'s mixed-use project. Phase 1 of the **Duveneck Square** project will include 110 one- and two-bedroom units that are expected to bring a new cohort of residents and commercial tenants to the city's central business district. Phase 2 will include a parking structure, retail and office space, as well as additional residential units. Residential and business tenants are expected to begin moving in by early 2018.

ERLANGER

■ DHL Express held a hiring fair on Nov. 5 to fill 250 ramp and warehouse agent positions at its hub at the Cincinnati/Northern Kentucky International Airport (CVG). The logistics giant, which currently employs a staff of approximately 2,400



at CVG, recently completed a \$108 million, 18-month expansion project that added ramp space to park 16 wide-body aircraft and included other upgrades and productivity enhancements.

FAST LANE

BUSINESS BRIEFS

FORT MITCHELL

■ The Northern Kentucky Chamber of Commerce has launched the NKY Chamber Small Business Academy through a partnership with Cengage and Gateway Community & Technical College Workforce Solutions to help address workforce needs and support regional businesses. Participants can earn professional certificates or select only one or two classes. Courses will include classes in Microsoft Word, Excel and PowerPoint as well as professional communications courses that cover presentation and speaking skills, meeting facilitation, and constructive dialogue and active listening. Classes begin in January and will be held at the NKY Chamber offices in Fort Mitchell.

HARLAN

■ Harlan Appalachian Regional Healthcare Hospital has been designated as a Level IV trauma center, becoming the 18th trauma center in the commonwealth. The Kentucky Trauma Care System has four tiers, with the top two levels generally associated with medical teaching hospitals, resident training programs, and 24-hour availability of advanced surgical interventions. Level III trauma centers have board-certified or eligible emergency physicians on duty 24 hours, general and orthopedic surgeons available around the clock, and a variety of support services. Level IV trauma centers are physician-staffed emergency departments with trauma treatment protocols, equipment and supplies.

HOPKINSVILLE

■ A 22-acre tract in Hopkinsville's 316-acre **Commerce Industrial Park** has received certification as Kentucky's 10th Build-Ready site, a designation that offers companies a streamlined process to rapidly locate, build and begin operations. Build-Ready means a site includes a pad of 50,000 s.f. or greater, expandable to 100,000 s.f. or more; utilities extended to an edge of the site; and indicates that the necessary permits and studies are in place, including water, phase-1 environmental, archeological, historical and geotechnical, as well as preliminary building plans, cost estimates and schedule projections.

LEXINGTON

■ Keeneland closed its 2016 Fall Meet with a record total attendance of 276,543 and substantial gains in wagering. The attendance figures exceeded last fall's total by nearly 15 percent and exceeded the previous record of 266,466 set during the 2013 Fall Meet. Total ontrack wagering of \$17,793,419 outpaced last fall's total by 12.5 percent.



■ Central Kentucky's entrepreneurial community created 307 new jobs and raised \$65.3 million in capital funds in fiscal year 2016, according to a report released by the **Bluegrass Business Development Partnership**. The companies employ a total of 1,090 people with an average full-time salary of \$72,280 and represent biotechnology, advanced manufacturing, e-commerce, independent game development, IT and software development, energy technologies and business services.

The Bristol Group,

a Lexington-based design-build firm, has formed a new business that will take on the company's established precast concrete manufacturing operations. **Ohio Valley Precast LLC** was formed in response to an increas-



ing demand for Bristol's concrete wall panels that are used in projects ranging from dam rehabilitation, highway sound barriers and pedestrian bridges to manufacturing facilities, commercial offices and retail projects. The new company will be located in Charlestown, Ind., and will employ a staff of approximately 80.

HARLAN: WOOD PELLET ENERGY CENTER ON ABANDONED MINE SITE TO HIRE 30-35

HE Harlan County Industrial Development Authority Inc. has received a \$2.5 million federal grant to help build an **alternative-energy manufacturing center** in Harlan County.

The funds will be used to leverage an additional \$10.5 million in private investment from **Harlan Wood Products LLC** to create 30 to 35 new jobs at



Wood pellets produced at the new Harlan do Wood Products facility will be exported to Europe for use in the biomass fuel market.

a new Harlan Wood Products production center that will be located on a previously reclaimed abandoned mine lands site in Yancey. The center will produce wood pellets that will be exported to Europe – primarily Italy and Denmark – for biomass fuel for both the residential and commercial markets.

The pellet manufacturing process involves debarking, drying, grinding and extruding wood fiber under high pressure and temperature. The raw materials for the production center will consist of the cull timber and branches greater than four inches in diameter that remain from area logging operations, as well as saw dust from nearby wood processing facilities.

While Harlan Wood Products will provide the investment to purchase and install the equipment used in the manufacturing process, the Industrial Development Authority (IDA) will use the \$2.52 million to ensure the site has the necessary water, natural gas and electric, foundation work and shell facility to house the equipment and access road upgrades. In addition, IDA plans to explore a partnership with the **University of Kentucky** to determine the opportunities for utilizing a portion of the facility's revenue for reforestation efforts within the reclaimed mine areas of the county.

LOUISVILLE: TURNING POINT WILL ACQUIRE SMOKE FREE TECHNOLOGIES FOR \$27M

URNING Point Brands, a Louisville-based tobacco company, has signed a definitive agreement to acquire **Smoke Free Technologies Inc.** (dba VaporBeast) in a \$27 million transaction.

VaporBeast, headquartered in Carlsbad, Calif., is a leading e-commerce platform and sales organization focusing on the sales, distribution and development of smoke-free technology. The company markets a wide range of products – including e-liquids, vaporizers and accessories – under its own proprietary brands, selling directly to consumers and more than 4,700 nontraditional retailers.

Turning Point President and CEO Larry Wexler said the acquisition will enable the company to "dramatically accelerate" its efforts to increase its presence in the fast-growing nontraditional retail channels with "significantly less resources."

The VaporBeast agreement follows Turning Point's Nov. 4 statement announcing its intent to acquire four chewing tobacco brands and a twist tobacco brand from Tennesseebased **Wind River Tobacco Co.** The \$2.5 million purchase adds WRTC's discount chewing tobacco brands (**Big Mountain, Appalachia, Black Mountain** and **Springfield Standard**) and a twist tobacco brand (**Snake River**) to Turning Point's chewing tobacco portfolio, which includes **Stoker's**, **Beech-Nut** and **Trophy**.

BOWLING GREEN: BLUECOTTON EXPANDS OPERATIONS, PLANS TO ADD 94 JOBS

BLUECOTTON, a custom screen-printing and embroidery company, is investing nearly \$6 million to expand its operations in Bowling Green, where it plans to add 94 full-time jobs to support the expansion.

The Bowling Green-based business, which was founded in 1991 by two **Western Kentucky University** graduates, has acquired a 112,000-s.f. facility that will house the new production lines necessary to meet the company's growing customer base.

Much of BlueCotton's growth can be attributed to the launch of its online presence in 2003. Since then, the company's revenue growth has averaged 20 percent each year. As a result, the company has been included on *Inc.* magazine's Inc. 5000 list as one of the nation's fastest-growing private companies for the last eight years.

The latest expansion is the company's third expansion project since 1999. This past June, BlueCotton moved into their new space in the South Central Kentucky Industrial Park and has already hired 30 of the 94 new jobs associated with the expansion, bringing its full-time employment to approximately 80.

BELL COUNTY: **\$24M WILDLIFE ATTRACTION** EXPECTED TO BE MAJOR TOURISM DRAW

\$12.5 million grant from the U.S. Office of Surface Mining and Reclamation Enforcement will help fund development of a wildlife center in Bell County that will feature a museum of natural and regional history, a theater, a hall dedicated to the natural history of elk, bird watching, an astronomy pavilion and a 15-mile, self-guided scenic road for wildlife viewing.

The Appalachian Wildlife Center will be located on 19 square miles along the Cumberland River and is expected to attract 638,000 visitors a year by the fifth year of operation

The grant is part of the \$30 million in federal grant money that was made available from the U.S. government's General Fund through the 2016 AML (Abandoned Mine Lands) Pilot



program for projects in Appalachian counties that have the potential to create long-term economic benefits. To that end, the Appalachian Wildlife Center is projected to generate more than \$1 billion in regional economic activity over the first 10 years of operation.

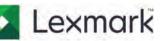
The center is projected to cost \$24 million, and will be developed over a five-year period. Revenues from admission fees and on-site spending are projected to make it financially self-sustaining in the second year of operation, while generating funding for scholarship, research and land conservation programs.

"This pilot program provides an exciting opportunity for our leaders in Appalachian counties," said Gov. Matt Bevin. "By leveraging some of Kentucky's greatest competitive advantages – magnificent natural beauty, abundant wildlife and a strong sense of history and place – this program will help to create future opportunities for Kentuckians across the region."

BUSINESS BRIEFS

LEXINGTON

■ The completion of Apex Technology/ PAG Asia Capital's previously announced



acquisition Lexington-based **Lexmark International** was announced on Nov. 29, along with the news that Lexmark's Enterprise Software group is being separated from the company and rebranded to Kofax. In contrast to recent efforts to diversify Lexmark's imaging business by expanding the company's software offerings, the new owners plan to grow the imaging business, particularly in China and the Asia-Pacific region. Lexmark will remain headquartered in Lexington, with David Reeder, formerly vice president and chief financial officer, taking over as the new president and chief executive officer, succeeding Paul Rooke. Rooke has been chairman/CEO for the last six years.

LOUISVILLE

■ Seven Counties Services, a Louisville behavioral-health organization, has finalized an affiliation with Nashville-based Centerstone that combines their operations, creating a five-state, nonprofit behavioral health organization that will serve people of all ages in 211 locations across Florida, Illinois, Indiana, Kentucky and Tennessee. Seven Counties' 31 locations across Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer and Trimble counties will continue to operate but will do so under the name of Centerstone of Kentucky. Seven Counties executive and senior management teams will remain unchanged, with Seven Counties President Tony Zipple serving as CEO of Centerstone's Kentucky operations.

■ Angel's Envy officially

opened its new distillery and visitor center on Nov. 19, becoming the first full-production whiskey distillery in downtown Louisville. The opening is the culmination of a \$27 million renovation to the original structure that began in 2013.



■ QSR Automations, a Louisville company that is a leading provider of automation technology for the hospitality industry, is building a new \$10 million headquarter facility in Louisville that will include a 20,000s.f. warehouse and a 51,220-s.f. office building. QSR produces the popular mobile app **DineTime**, which lets consumers add their names to restaurant wait lists or book reservations from their phones. The company's success has led to increased hiring – the company currently employs around 115 – with more expected in the months ahead.

■ Data from the **2016 Greater Louisville Survey of Nonprofits** shows that the area's 2,038 nonprofits account for \$10.5 billion in annual revenue. While the nonprofit sector is growing – 59 percent report that they expanded services in FY 2015 – they are also experiencing a financial strain, with 34 percent ending the fiscal year with a deficit.

■ The James Graham Brown Foundation has awarded \$767,000 to the Greater Louisville Foundation, an affiliate of the metro chamber of commerce. The grant will be applied to the organization's GROW! (Greater Louisville Region Optimizing Workforce) initiative, a threeyear plan developed to retain and attract talented people to the region.

■ Kentucky Trailer, a Louisville manufacturing company that specializes in custom trailers, truck bodies and mobilized workplace solutions, has acquired select assets of **Bussman Medical & Research**. Bussman, headquartered in the Netherlands, focuses on modular solutions for the healthcare



industry such as operating theaters, endoscopy units and dialysis units. The Bussman acquisition follows Kentucky Trailer's 2015 purchase of Netherlands-based **Smit Mobile Equipment**, an established global provider of mobile solutions for the medical sector, and further bolsters Kentucky Trailer's portfolio of products specific to mobile and modular categories.

FAST LANE

BUSINESS BRIEFS

LOUISVILLE

■ Vantiv, a Cincinnati-based payment-processing company, has filed notice with the Kentucky state government of its plans to close its Louisville call center by the end of March 2017. The closure will affect 200 employees.



■ Churchill Downs Racetrack has announced a \$37 million capital project that will create more than 1,800 new seats for the 2018 Kentucky Derby through the addition of new luxury suites, interior dining tables and third-floor grandstand seats. The Starting Gate Suites capital project will encompass 77,250 s.f. of new space on the north end of Churchill

Downs Racetrack's 147-acre facility. The structure, which will feature three floors of individual suites along with dining and event space, will be erected adjacent to the **Jockey Club Suites**, which opened in 2003.

Louisville Gas and Electric and Kentucky Utilities Co. are investing \$2.2 billion to install intelligent control equipment that will help improve safety and reduce outage times for electric customers and replace aging natural gas steel service lines with new plastic pipes. To help cover the investment, KU is requesting a base-rate increase of \$103.1 million, while LG&E is requesting \$93.6 million for its electric business and \$13.8 million for its natural gas operations. If approved, KU residential customers using an average of 1,179 kilowatts per month will see an increase of \$7.16; LG&E residential electric customers using an average of 957 kWh per month will see an increase of \$9.65; and residential gas customers using an average of 55 Ccf of natural gas per month will see an increase of \$2.99.

LUDLOW

City leaders in Ludlow have unveiled the concept plan for Ludlow Yards, a mixed-use development proposed for the gateway to the community's main business district. The design, which is inspired by the city's railroad heritage, includes residential, office and business spaces well suited for design studios, creative firms and technology companies, as well as a public plaza.

MIDWAY

■ Midway University has received a \$2 million gift from long-time trustee Jan Hunter. Midway President John P. Marsden said the university plans to "utilize this gift in the way that will touch the most students - improving their living space and enhancing our student center and athletic facilities.'

NICHOLAS COUNTY

■ Nicholas County has been certified as Kentucky's newest Work Ready Community, a designation from the Kentucky Workforce Innovation Board that assures employers that a local workforce has the talent and skills necessary to staff existing jobs and master the innovative technologies new jobs will require. Counties have to meet criteria in six areas including high school graduation rates, National Career Readiness Certificate holders, demonstrated community commitment, educational attainment, soft-skills development and digital literacy. Nicholas is the 33rd county to earn the certification.

NICHOLASVILLE

Alltech, a global animal nutrition company headquartered in Nicholasville, has opened a new facility in Brazil that will increase production capacity by 150 percent. The plant will supply the entire central-west and northeast regions of Brazil.



RICHMOND

Baldwin CPAs has merged with **Humphrey & Co.**, a Lexington firm that has more than 50 years of experience in accounting, tax and management consulting services. The merger adds four new employees and one new partner to the Baldwin staff. Richmond-based Baldwin plans to relocate its Lexington office to the Humphrey & Co. office, which is located in the city's Beaumont area.

LOUISVILLE: KINDRED ANNOUNCES PLAN TO SELL NURSING FACILITY BUSINESS

OUISVILLE-based Kindred Healthcare Inc. has entered into an agreement to sell all of its nursing facilities to Ventas Inc. - including all 36 currently leased from Ventas, a Chicago real estate investment trust - as it moves forward with its plans to exit the skilled nursing facility business.

Kindred ĈEO Benjamin Breier said, "Over the past cally transformed the composition of Kindred, and our Healthc drivers of profitability and



growth. Following our exit of the skilled nursing facility business and the associated cost realignment initiative, Kindred's earnings stream, cash flow generation and leverage profile will be substantially improved, including significant reductions of fixed costs such as rent and capital expenditures.³

Breier said that over time, when complete, the company expects approximately half of its earnings before interest and income taxes to come from Kindred at Home, the nation's largest home health, hospice and community care provider; roughly one-quarter from its long-term acute care hospital division; and the remaining quarter to come from its rehabilitation services division, which includes one of the fastest growing inpatient rehabilitation facilities businesses in the country.

Breier noted that while the timing of the company's exit from the skilled nursing facility business depends on a number of factors, the company hopes to complete the exit before the end of 2017. Kindred's nursing center portfolio primarily consists of the 36 Ventas Properties, 26 owned nursing centers, 25 nursing centers leased from other third parties and four managed nursing centers, along with seven assisted living facilities. Kindred expects the after-tax net proceeds from the sale of the assets to be between \$100 million and \$300 million.

LOUISVILLE: PILOT PROGRAM WILL GIVE FREE MARKETING ADVICE TO STARTUPS

new pilot program has been launched that will give five Louisville-area start-up companies the opportunity to receive free advice from marketing experts to help further their progress on the path to success.

The **Revit** program was designed by **Nucleus**, which serves as the central point for science, innovation and health-related companies interested in locating in Louisville, and Enterprise Corp, the entrepreneurial arm of Greater Louisville Inc., the region's economic development organization.

"Entrepreneurs are experts in the technology and solutions they are building, but oftentimes the strategy of marketing and selling their products falls by the wayside," said Mary Tapolsky, director of Technology Transfer and Program Administration for Nucleus. "We looked at a number of programs happening in other cities to address this problem and custom built this program to fit Louisville's needs."

To apply, companies must be located in the Greater Louisville region and have some customer traction and revenue. They must also already have a website and digital analytics on their web traffic. During the application process, the companies will be asked to explain their biggest marketing problem. That information will then be passed along to the marketing coaches who will develop a customized strategy to address the issue.

For more information and to apply for the program, visit enterprisecorp.com/programs/revit.

WINCHESTER: EKPC MOVES FORWARD WITH PLANS FOR SOLAR PANEL LEASE PROJECT

HE Kentucky Public Service Commission has approved a request from **East Kentucky Power Cooperative Inc.** (EKPC) to offer customers the opportunity to use solar power without putting solar panels on their roofs.



EKPC has proposed allowing customers to essentially lease one or more of the 32,300 panels in a

large-scale solar electric generating facility the utility company will build in Clark County.

Customers will pay a one-time fee of \$460 per panel for a 25-year lease. The electricity generated can be used to offset up to all of a customer's electric usage, and customers will also receive solar renewable energy credits that can be sold or retired.

Community solar projects are intended to give customers an alternative to rooftop solar panels. In its application, EKPC stated that its proposed facility will cost – per-kilowatt of capacity – about half the median cost of rooftop solar, and will be somewhat less expensive to operate.

EKPC has contracted with Lendlease Public Partnerships to plan and construct the solar project. The \$17.7 million facility will be built next year adjacent to the EKPC offices in Winchester. It is expected to begin producing power in November 2017.

BUSINESS BRIEFS

SALYERSVILLE

■ Logan Corp. opened a new manufacturing facility in Salyersville on Nov. 3 to help meet increasing demand for the company's custom-made, highend dump truck beds. The company has invested \$2.6 million in a 137,000s.f. manufacturing site that replaces its 27,000-s.f. facility in Debord's Honey Branch Industrial Park. The new location provides space for 70 new full-time positions, in addition to the company's current 47-member staff.

■ The Kentucky Transportation Cabinet reports that the first construction project of the Mountain Parkway Expansion is substantially complete and is even ahead of schedule. The \$22.4 million project in Magoffin County began early last year and opened to traffic about a month earlier than expected. The Mountain Parkway Expansion is a 46-mile transportation improvement project designed to close the only gap in a 400-mile, fourlane, high-speed corridor for commerce and mobility across Kentucky. The project will widen 30 miles of the existing parkway to four lanes and extend the parkway by about 16 miles between Salyersville and Prestonsburg.

VERSAILLES

■ Yokohama Industries Americas Inc. is investing more than \$5 million to expand



its Versailles operations, a project that will add 134 full-time jobs. Yokohama's hose division plant in Versailles currently employs a staff of approximately 300 who handle the production and distribution of hose assemblies for vehicle air conditioning, power steering and transmission oil cooler systems. The expansion project will add two new production lines. Yokohama Industries America is a subsidiary of Tokyo-based **Yokohama Rubber Co. Ltd.**, which was founded in 1917 as a joint venture between **Yokohama Gable Manufacturing** and **B.F. Goodrich Co.** The Versailles facility, one of two Yokohama plants in the city, opened in 1989. The other Versailles plant produces sealants and adhesives.





POWERING YOUR BUSINESS THROUGH TECHNOLOGY AND STRATEGY

SIS is a technology solutions provider collaborating with clients on innovative data center strategy, technology and application solutions in the cloud or on prem to help their strategic initiatives succeed.

SIS is also home to the SIS Managed Solution Center, located in our corporate headquarters in Lexington, KY. This tier 3, SSAE 16 certified data center offers managed hosting, as well as cloud and managed solutions.

- Infrastructure Solutions
- Data Center and Cloud Solutions
- Software Defined Networks
- Disaster Recovery/Business
 Continuity
- Data Protection Solutions

SIS Corporate Office

INTERSTATE LANE

Business news from Indiana, Ohio, Tennessee and West Virginia

BUSINESS BRIEFS

INDIANA

■ **TriMedx**, a provider of healthcare technology management services, is investing \$21.5 million to expand its operations in Indiana, where it plans to add 108 new jobs to support the expansion. The Indianapolis-based company was founded in 1998 from **St. Vincent Hospital**'s clinical engineering department and now has 1,500 associates nationwide.

■ Team 360 Services, a fire protection and building services company, is adding up to 137 new jobs as part of the company's plan to expand its Indianapolis headquarters. Founded in 2005, the company currently has 170 employees in Indianapolis as well as 130 associates at offices across the country.



CliqStudios, a Minnesota company that specializes in semi-custom kitchen cabinetry, has invested \$5.1 million to locate a new cabinet design studio in downtown Indianapolis that will create up to 200 new jobs by 2020. CliqStudios is a subsidiary of **Wayzata Home Products**, which manufactures CliqStudios cabinets at a 1.5 million-s.f. facility in Connersville, Ind. Wayzata Home Products opened the facility in March 2014 and is on track to add a total of 309 new jobs in Connersville by the end of 2018.

■ HomeAdvisor, a leading online home-improvement marketplace, is investing nearly \$2 million to more than double its footprint in Indiana and plans to add up to 170 jobs in 2017. The Denver-based company, which connects homeowners with prescreened home-service professionals, is expanding its existing facility in Indianapolis and adding another Indianapolis location. HomeAdvisor currently employs 70 full-time employees in Indiana.

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■ Huntington Bank is investing \$183 million to build a new 210,000-s.f. facility that will create 1,000 new jobs in Columbus, Ohio, by 2024. The company also announced that it plans to lend \$300 million over the next five years in low-to-moderate income neighborhoods of Columbus, a city that has served as the company's headquarters for the last 150 years.

■ General Electric has opened a 338,00-s.f. global operations center in Cincinnati as part of the company's global initiative to consolidate operations into four locations worldwide. The Cincinnati office, which serves North America, houses approximately 1,000 people working in finance, accounting, human resources, IT and procurement services. GE's other operations centers are located in China, Hungary and Mexico.

OHIO/TENNESSEE

■ After emerging from Chapter 11 bankruptcy earlier in 2016, Memphis-based **Verso Corp**. has announced plans to move its corporate headquarters to Miamisburg,



Ohio. Verso, which produces printing and specialty papers and pulp, acquired the Ohio location as part of its \$1.4 billion acquisition of **NewPage Holdings** in 2014 and currently has more than 200 employees there versus 60 employees in Memphis. Company officials said the consolidation will reduce costs and improve efficiency while also producing the advantage of having the entire corporate staff working in one location.

TENNESSEE

■ Armada Nutrition, a contract manufacturer of nutritional powders, is investing more than \$2 million to expand its operations in Spring Hill, Tenn. The company is taking over an existing 300,000-s.f. facility, previously owned by **Capstone Nutrition**, that it will primarily use for contract blending and packaging of sports nutrition products. The expansion will create 310 new jobs and retain 111 jobs from Capstone Nutrition.



■ Harry's Fresh Foods, an Oregon-based manufacturer of refrigerated and frozen foods, has opened a 200,000-s.f. production facility in Nashville that will produce branded and private-label

products for club, retail, industrial and food-service customers. The facility will eventually employ more than 300 workers.

TENNESSEE: WARNER MUSIC BRINGING 175 FINANCIAL JOBS TO NASHVILLE

ARNER Music Group is establishing a new financial shared-services center in Nashville that will bring up to 175 jobs to Music City.

To establish the new center, the New York-based company will move some of its U.S. departments – including accounting operations, cash management and recorded music rights administration – to bring its financial, legal and administrative functions under one roof.

The new center is expected to open by mid-2017 and will be located in leased space in downtown Nashville. The company's longstanding presence on Music Row in Nashville will



WARNER MUSIC GROUP

remain in that location. The 175 jobs being added in Nashville as a result of the new financial center will include new hires as well as personnel relocating from New York and Los Angeles.

"As we all know, Nashville is not only home to the best artists and songwriters in the world, but it has a vibrant and growing economy," said John Esposito, chairman and CEO of **Warner Music Nashville**. "Nashville is the perfect home for Warner Music's newly created division."

Tennessee Economic and Community Development Commissioner Randy Boyd said the music industry currently supports 56,000 jobs in the Nashville area and has a \$10 billion economic impact on the region annually.

INDIANA: HIRING/RECRUITING FIRM WILL ADD 284 JOBS TO HELP MEET DEMAND

Safe Hiring Solutions and its sister company, Safe Recruiter Solutions, have announced plans to expand their high-tech operations in Indiana that focus on enhancing hiring, recruiting and workforce development.

The companies are investing \$1.3 million to renovate a building in Crawfordsville, Ind., that will supplement the firms' existing headquarters facility in Danville, Ind., to help meet growing demand for the companies' products.

Founded in 2004, Safe Hiring Solutions offers background checks, automated reference checks and visitor management systems through its web-based technology for schools, corporations, hospitals and nonprofit organizations around the world. The company serves thousands of organizations, from small businesses to Fortune 500 companies, and has been named one of the nation's 5,000 fastest-growing companies by *Inc.* magazine for the last two years.

This year, the company launched Safe Recruiter Solutions, which works to ensure future employees have the skills needed to find quality jobs in industries such as manufacturing, distribution and healthcare. The company works closely with local high school and community college students to train, screen and provide them with practical work experiences and industry certifications to meet workforce demands from local industry leaders.

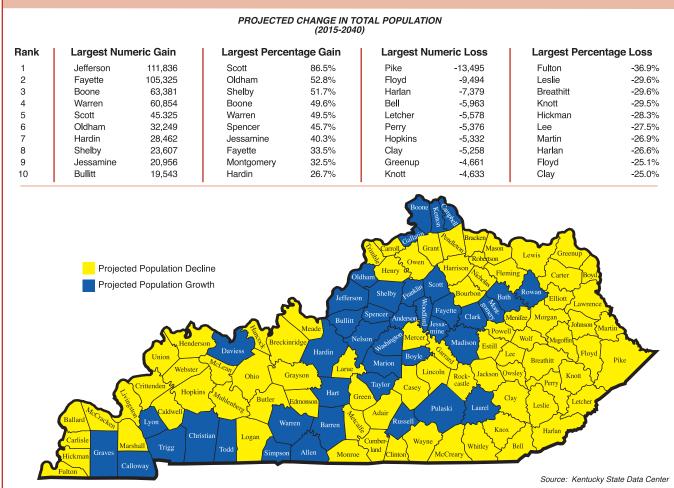
As a result of their growth, the companies plan to add 284 new jobs by 2020, including c-level, operations, recruiting, business development, marketing, human resources and software development positions. The average salary of the positions is expected to be approximately 30 percent higher than the state's average wage.

KENTUCKY INTELLIGENCER®

A sampling of business and economic data

KENTUCKY GROWTH TRENDS

New projections from the Kentucky State Data Center indicate that Kentucky's population is expected to increase 10.4 percent between 2015 and 2040, a gain of 461,289 people. However, of Kentucky's 120 counties, 79 (66 percent) are projected to experience declines in total population.



KENTUCKY'S MOST AFFORDABLE CITIES

There's more to home affordability than just the sticker price. A recent study by financial tech company SmartAsset measured housing costs relative to income data in cities across the commonwealth to determine which cities were most affordable.

Rank	City	Avg. Closing Costs	Annual Property Tax	Annual Homeowner's Insurance	Avg. Annual Mortgage Payment	Median Income	Affordability Index
1	Princeton, KY	\$2,237	\$403	\$580	\$3,488	\$37,008	93.68
2	Vine Grove, KY	\$2,827	\$890	\$910	\$5,573	\$55,986	92.84
3	Hebron, KY	\$2,964	\$1,406	\$1,131	\$6,932	\$70,562	92.77
4	Central City, KY	\$2,219	\$538	\$567	\$3,451	\$35,057	92.76
5	Flatwoods, KY	\$2,329	\$870	\$649	\$3,940	\$41,344	92.70
6	Alexandria, KY	\$2,987	\$1,895	\$1,169	\$7,086	\$74,464	92.60
7	Bellevue, KY	\$2,786	\$1,328	\$852	\$5,162	\$54,288	92.49
8	Erlanger, KY	\$2,832	\$1,413	\$917	\$5,617	\$56,625	92.04
9	Burlington, KY	\$3,018	\$1,636	\$1,220	\$7,480	\$71,064	91.70
10	Williamsburg, KY	\$2,278	\$647	\$611	\$3,671	\$34,408	91.46

Source: SmartAsset

CORPORATE MOVES

New leadership for Kentucky businesses

BANKING/FINANCE

■ Farm Credit Mid-America, an agricultural lending cooperative headquartered in Louisville, has announced the following appointments: Scott A. Smith - assistant vice president-market strategy; Jonathan Carter - assistant vice president of growing forward; and Joe Dagher - government and legislative affairs officer.

■ Suzanne Bays has joined Meridian Wealth Management as vice president of investments. Bays works at the company's Lexington office.

■ Paula Scott has been named vice president at Lexington-based Bank of the Bluegrass & Trust Co. Laura Martin has been named assistant vice president.

CONSTRUCTION

■ Mike Cox has been named chief executive officer of Lexington-based Denham-Blythe Co.

ECONOMIC DEVELOPMENT

Mable Duke has been named director of workforce services for the Bluegrass Area Development District (ADD).

EDUCATION

Lee Vermeulen Jr. has joined the University of Kentucky Center for Health Services Research as director of the Office for Value & Innovation in Healthcare Delivery and professor in the Division of Biomedical Informatics within the UK Department of Internal Medicine.



Vermeulen Jr.

Suzanne

Bays

Mike

Cox

■ Michael O. Murray has been named general counsel for the Kentucky Community and Technical College System.

Cheryl Davis has been appointed associate provost for research and creative activity at Western Kentucky University.

Linda Medley has joined Midway University as vice president of advancement. Ben Shaffar has been appointed athletic development officer.

Brian G. Hutzley has joined Centre College as vice president, chief financial officer and treasurer.

GOVERNMENT

LaDonna Koebel has joined the state's Personnel Cabinet as chief of staff.



Hutzley

M. Blaine Hedges has been named executive director of the Kentucky Commission on Military Affairs. Hedges will continue to serve as commissioner of the State Council for Kentucky's Military Interstate Children's Compact Commission.

Zeb Weese has been appointed director of the Kentucky State Nature Preserves Commission.

HEALTHCARE

Carri Chandler has been appointed vice president of the St. Elizabeth Healthcare Foundation.

Dennis Skrajewski has

been named Louisville market president for JenCare Senior Medical Center.

INSURANCE

Bill Jones has been named president of WellCare's Medicaid and Medicare Advantage businesses across Kentucky.

MEDIA

■ Joel Christopher has been named executive editor for The (Louisville) Courier-Journal.

NONPROFIT

Bill Goodman has been named executive director of the Kentucky Humanities Council Inc.

Beth Malcom has been

appointed as the new chief executive officer of the Kentucky YMCA Youth Association.

Fran DeVasto has joined Lexington-based Community Ventures as president of the organization's lending division.

Ann Evans has been named executive director of Ronald McDonald House Charities of the Bluegrass.

PROPERTY/FACILITIES MANAGEMENT

Brian Wint has been named chief financial officer of Divisions Maintenance Group, a Newport-based facilities management services company.



Bill

Fran

Goodman

Evans

Betty Hollis has joined Louisville-based Al J. Schneider Co. as vice president of human resources.

SPORTS

Sarah Bosso has been named vice president of business development for the Lexington Legends baseball team.

TECHNOLOGY

■ John Emard has been named vice president of sales for Louisville-based Matrix Integration LLC.

OTHER

■ Matti Masanovich has been appointed chief financial officer and senior vice president of Highland Heights-based General Cable Corp.



HELP TWO GREAT ORGANIZATIONS WITH ONE SPECIAL HOLIDAY GIFT

WUKY and Stewart Perry of State Farm Insurance are challenging Central Kentuckians to help them fill 500 backpacks for God's Pantry Food Bank's Backpack Program, which provides food weekly for hungry children.

For every donation made to WUKY until December 31st, Mr. Perry will fill one backpack (up to 500 total backpacks). By giving to WUKY this Holiday season, you are not only providing food for your mind and soul, but food for a child in need!

Give today at WUKY.org.



Chandler

ON THE BOARDS

Kentuckians named to organizational leadership roles

Candice

Crowell

AMERICAN PSYCHOLOGICAL ASSOCIATION

Candice Crowell has been appointed to the Council of Representatives for the Society of Counseling Psychology, a division of the American Psychological Association. Crowell is an

assistant professor in the University of Kentucky Department of Educational, School and Counseling Psychology.

CENTRE COLLEGE

Beth Paxton Klein has been named to the board of trustees at Centre College.

GATEWAY COMMUNITY AND TECHNICAL COLLEGE

Beth ■ Gateway Community and Paxton Klein Technical College has

announced the following appointments to its board of directors: Chair - Kenneth Paul; Vice-Chair - Julie Smith-Morrow; and Secretary - Paul Whalen.





Kenneth Paul

Paul Smith-Morrow Whalen

KENTUCKY BOARD OF SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

Julie

■ Virginia M. Rose, of Lexington, has been appointed to the Kentucky Board of Speech-Language Pathology and Audiology.

KENTUCKY CHAMBER OF COMMERCE EXECUTIVES

The Kentucky Chamber of Commerce Executives has announced its new board of directors for the coming year: President - Brad Richardson, Hardin County Chamber; President-Elect - Aaron Dail, Murray-Calloway County Chamber; Secretary - Deanna Herrmann, London-Laurel County Chamber; Treasurer -Vicki Steigleder, Maysville-Mason County Chamber; Immediate Past President - Brad Schneider, Kyndle; Board members - Shawna Burton, Greater Louisville Inc.; Jacob Colley, Southeast Kentucky Chamber; Jill Cutler, Mercer County Chamber; Virginia Davis, Hart County Chamber; Carmen Inman, Frankfort Area Chamber; Lee Lingo, Madisonville-Hopkinsville County Chamber; Dorothy Walker, Greater Muhlenberg County Chamber; and Dana Zinger, Commerce Lexington.

KENTUCKY CLAIMS COMMISSION

Gov. Matt Bevin has appointed the following individuals to serve on the newly formed Kentucky Claims Commission, which will oversee crime victims' compensation claims, tax appeals and negligence claims against the state: Carlo Wessels, Villa Hills; Jessica Burke, Stearns; and Marcus S. Carey, Sparta.

KENTUCKY COUNCIL ON POSTSECONDARY EDUCATION

Ronald

Beal

Seven new members have been named to serve on the Kentucky Council on Postsecondary Education: Ronald C. Beal, Bowling Green; Benjamin Brandstetter, Hebron; Lucas Mentzer, Lexington; Joseph Papalia, Louisville; Vidya Ravichandran, Louisville;

Sebastian Torres (student representative. Eastern Kentucky University); and Carol Wright,



Lucas Mentzer

Carol

Benjamin

Brandstetter

Ravichandran Wright

KENTUCKY FINANCIAL INSTITUTIONS BOARD Kenneth Alan Potish. Terry Bunnell and

Vidya

James Michael Rogers have been appointed to the state's Financial Institutions Board. Potish, of Louisville, is sales manager of Alpha Leasing Company. Bunnell, of Glasgow, is a community banker at The Peoples Bank. Rogers, of Prospect, is retired and the former chief operating officer of Hilliard Lyons.

KENTUCKY HORSE PARK COMMISSION Theodore R. Kuster, Pamela Blatz-Murff

and Abby Jones have been appointed to the Kentucky Horse Park Commission. Lawrence Joseph Bisig has been designated as vice-chair of the commission. Kuster, of Paris, co-owns Thoroughbred farm Shawhan Place. Blatz-Murff, of Lexington, is a retired Thoroughbred owner/breeder. Jones, of Lexington, is principal at A. Jones Enterprises LLC. Bisig, of Louisville, is CEO of Bisig Împact Group.

KENTUCKY HUMANITIES COUNCIL

Ashley Bruggeman, Thomas H. Appleton, Aristofanes Cedeno and Howard V. Roberts have been appointed to the Kentucky Humanities Council. Bruggeman, of Lexington, is a regional account executive at Scranton Products. Appleton, of Lexington, is a professor of history at Eastern Kentucky University. Cedeno, of Louisville, is an associate professor of Spanish at the University of Louisville and executive director of the Kentucky Governor's Scholars Program. Roberts, of Pikeville, is dean and professor at University of Pikeville's Coleman College of Business.

KENTUCKY MANSIONS PRESERVATION FOUNDATION

The membership of the Kentucky Mansions Preservation Foundation has elected its board officers and directors for the coming year. Chair - Robert C. Magrish; Chair-Elect - Bill Howell; Secretary - Trudy Burkhard; Treasurer - Wade S. Littrell; Immediate Past Chair - Dee Dee Moran. Directors: Brady W. Dunnigan, Dan Graves, Trina R. Sheets, Ann Bretz Boone, John D. Davis, Ann Todd Dupree, Bill Farmer, James C. Klotter, Priscilla Lynd, Melissa A. McEuen and Kent Whitworth

KENTUCKY RETIREMENT SYSTEMS

David J. Adams has been appointed to the board of trustees of the Kentucky Retirement Systems. Adams, of Prospect, is CEO of the Institute for Product Realization at the University of Louisville.

LEXINGTON PHILHARMONIC SOCIETY

The Lexington Philharmonic Society has named its 2016-2017 board of directors: President - Michael McNalley; President-Elect -Carol McLeod; Past President - R. Scott King; Treasurer - Tim Dunn; Secretary - Jim Elliott; Chair-Community Engagement - Colman Elridge III; Chair-Development and Marketing - Becky Reinhold; Board members – Carl Frazier, John Gardner, Jim Gay, Linda Gorton, Don Granger, Steve Grossman, Dustyn Jones, Ellen Karpf, Oscar Mendiondo, Dan Poposki and Ron Saykaly. Officers elected to the Lexington Philharmonic Guild, the arm of the Lexington Philharmonic Society that operates to assist with fundraising, educational, social and volunteer functions, include: President - Carol McLeod; President-Elect/First Vice President - Elizabeth Rosenberg; Second Vice President -Kathy Winger; Third Vice President - Sarah Cornette; Recording Secretary – Tracy Lovan; Corresponding Secretary – Chris Smith; Treasurer - Trish Featherston; and Past President - Faye H. Porter. Lexington Philharmonic Orchestra Foundation board members include: Chair - Denise McClelland; Carol McLeod, Larry Deener, Michael McNalley, Allison Kaiser, David Porter, R. Scott King and Ron Saykaly.

THE NEST – CENTER FOR WOMEN, CHILDREN AND FAMILIES

The Nest -Center for Women, Children and Families in Lexington has announced its executive committee for the 2016-2017 fiscal year:



Ashley Grigsby

Chair - Marc Ray, CPA PSC; Vice-Chair - Ashley L. Grigsby, DelCotto Law Group; Secretary - Mary B. Venezie, Alex G. Campbell Jr. LLC; Treasurer - Patty Breeze, Patty Breeze and Associates; and Past Board Chair - Cliff Feltham. Kentucky Utilities Co. Board members: Bill Norton, Briana Persley, Connie Guilfoil, Fenella Smith, Hannah Hodges, Kelli Soard, Jessica Hundley, Matthew Ransdell, Nancy Polk, Pam Graves, Paula Johnson and Whitney Sparks.

WOMEN LEADING KENTUCKY

Marc

Ray

Chrisandrea Turner has been elected chair of Women Leading Kentucky. Turner is a partner with the law firm of Stites & Harbison, based in the Lexington office.



LANE ONE-ON-ONE

Kentucky's leaders express their opinions



Charles Hagerty

Charles Hagerty is president/CEO of New Age Technologies Inc., a Louisville-based IT training, consulting and staffing company he founded in 1996, and executive managing partner of Argentum I.T. LLC, an IT managed services firm he founded in 2009. Hagerty was a sales executive in Louisville for NCR, Memorex/Telex and Bay Networks. He is a past board member and founder of Imagetel (now Trinity Video Communications) and Hagerty Worldwide Holding, parent of KYK Marketing. He has served on the boards of the Greater Louisville YMCA and of its Safe Place Services, St. Xavier High School, and Big Brothers Big Sisters of Kentuckiana. Hagerty has a bachelor's in economics from the University of Kentucky. He and his wife Janet live in Louisville and have three grown children: Chad, Melissa and Andrew.

HOW TO KEEP UP IN THE CHANGING WORLD OF TECHNOLOGY

New Age Technologies President Charles Hagerty talks about what companies need to do to keep IT systems safe

BY MARK GREEN

Mark Green: How many clients/customers does New Age Technologies training and Argentum IT services have, and what is their range in size?

Charles Hagerty: We have around 200 corporate accounts. At any one time, probably 40 are active. New Age Technologies works more with Fortune 5000 companies, so those tend to be much larger projects, and the clients typically manage the projects. Argentum tends to go after smaller clients who want us to take more control of the project, and they often also need us to manage the systems once they are in place.

The training business is a national footprint. We've trained tens of thousands of students over the years. We at one point were going all over the world for some vendors, training other companies how to do the training. But that industry has changed a lot, so I'm retooling and remodeling the training business right now.

MG: What skills are you training your customers to do?

CH: Most are vendor-authorized training, and most of it is geared around infrastructure, security, data storage, the advanced skills on how to build enterprise-quality infrastructure and networks for corporations, technologies like dmware, Microsoft, EMC, med app. There are about 30 vendors and several thousand classes. Some classes we teach ourselves and some we bring in instructors from anywhere in the country; we're in a network of companies connected to 70 training sites around the country, and we have a videoconferencing system.

MG: Why do they hire you rather than the vendor doing the training themselves?

CH: Vendors tend to not be in all geographical markets, and a lot of vendors outsource their training. They don't want to be a training company. And then we can also blend: We can be talking about dmware and bring NetApp storage or EMC storage into the conversation and talk about integrated mobile technologies. If you're only being taught by the vendor, you're not going to get that angle.

MG: How many employees do you have?

CH: Currently we're just under 100. With the nature of our projects, it can go up and down quickly. We've fluctuated mostly between 95 and 125. In 2008-09, which were very tough years, we were down to 66.

MG: You are the second largest IT employer in state. Where have you found candidates? Are Kentucky and

Greater Louisville producing enough trained IT workers?

CH: We recruit regionally and, if necessary, nationally, to find talent; we start local and work out. Countrywide, there's a shortage of good IT talent. Think through the dynamics of the economy and what has happened in the IT industry: Around 2000, you had the dot-com bubble burst, which was devastating to a lot of IT companies and the employees who worked for them. A lot of kids going to college then shied away from IT because it was a disaster. Then you had a recession, so jobs were hard to get. Then you had a trend where a lot of larger companies started sending development work and IT work to India and other offshore countries. Opportunities in IT really were shrinking, and a lot of kids - a whole generation - really didn't focus on IT as a career path.

And 2008-09 didn²t help when that recession hit. Now, as the economy's been gradually coming back, a lot of companies that went offshore found it's not the mecca they thought, so they're trying to bring work back to the United States. You have companies bringing in HB-1 visa workers. We have a combination of growth in the economy, the adoption of technology, the internet's expansion of how technology can be applied to businesses or homes that's increased demand, and the supply of IT workers has not kept up.

Louisville has done more than most cities. With Code Louisville they're helping career changers and millennial kids develop basic coding skills and techniques. That is extremely helpful. Those people are going to be the leaders in this industry a couple decades from now. But entry-level jobs aren't where the shortage is – the skilled, experienced people are very difficult to find because of the dynamics of what's happened the last decade.

MG: What are your revenues?

CH: We range between \$8 million and \$12 million. The IT work for Fortune 5000s is where that swing comes in. Right now we're a little bit down; we're a little under \$10 million, because of changes in the training industry.

MG: What categories of IT training are most in demand?

CH: A lot of the work is how to build out your basic infrastructure: how to build a Microsoft server, how to build a virtual network, put security around it, how to administer and manage that. There are two things: One is, you focus on the engineering/design aspects so systems are built correctly. Then, two, what skills do you need to manage it on a day-to-day basis; that's the people and process. The people have to learn the process and the skills it takes to manage those systems, and there's a lot to it. Some you learn from experience, but there's a lot you can learn in the classroom.

There are YouTube videos, and a lot of vendors now are coming out with self-paced computer-based training; those are great tools to develop your skills. In an instructorled class you can bring your advanced issues and challenges to your instructors. In class we can answer specific questions on the challenges they're facing. And a lot of times there's more than one right answer. That's what people don't realize: There are best practices, but just like there's more than one way to build a building, there's more than one way to build a system.

MG: We entered 2016 with information security listed as one of the top challenges for CEOs, but the problem seems to have only worsened. Is that the opinion of IT professionals?

CH: Yes and no. Originally, only big corporations had computer systems and networks, and they were private. The security threats were more internal - things like systems breaking, human error, a disgruntled employee. Those were real threats just as damaging as anything a hacker on the internet could do, and all those threats are still there. In fact, some of the biggest disasters I've seen the last five years were created from an internal employee - some intentional, some accidental, but they were not threats from the outside. But it doesn't get as much publicity when somebody makes a mistake and loses all the company's data, and nobody was paying attention to the backups and they weren't there when they went to grab them.

With the internet and connectivity that has grown more and more pervasive, now people all over the world can see your systems. That definitely has grown into a bigger threat than it used to be, but it's manageable. It's just that people have to learn the hard way that it has to be a high priority, versus waiting for the disaster to hit.

MG: Regarding outside threats, what is the difference in threat levels for small, medium and large businesses? Do small businesses have as much concern?

CH: It comes down to how critical is that system and that data to their business, and what is the cost if they lose those systems? A Humana or a Yum! Brands or most Fortune 500 or 5000 companies that lost their IT systems would have to shut their doors until they got them back up. Small companies are in that same boat. It may not be on the same scale, but to that owner and those employees that want to keep their jobs, it's every bit as important and critical.

The threats are real because the viruses, the attacks, are coming to every-

body. A lot of small companies have called me over the last few years who had that encrypto virus. You've got the ransomware and said, "Hey, my system's all locked up; some guy wants money to give them back to me." And we have to go in and recover them. I hate to say it, but that's how we get some of our best customers. If something like that happens, then they understand the priorities. I would love it if I could get those guys to work with us before that happens, but that's human nature. Large companies might become the target of the day for a denial-of-service attack, and there may not be much interest to shut down XYZ Plumbing for denial of service. That threat is probably greater for public companies who they would get more publicity if they attack that company versus a noname company.

MG: What day-to-day IT issues do businesses bring to Argentum/New Age Technologies most often?

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CH: They're looking for ways to manage: They're having problems with their systems; they need to upgrade, or they're running poorly; or they've had attacks or whatever; or they're just looking for some ways to improve the efficiency and performance of the company. That's at the Argentum side. We can come in and be their CIO, help them put together strategic plans, help them identify budgets, and come up with ways to solve whatever problems they're trying to address.

The larger Fortune 5000 companies are different. They need to scale up quickly for an IT rollout that might be nationwide, or they need 10 or 15 developers for a six-month or a one-year software project and don't want to hire staff and then lay those people off. We have those people available or in our database where we can get them on-site quickly.

A Fortune 5000 company may be very good at fast food or healthcare or insurance but not good maybe at managing a help desk or a part of their IT operation. Some of them come to us and we manage that operation for them because we do it every day for multiple businesses. Some employees are so good at what they do and can get it done in a fraction of the time as anybody else. We have people who know how to get it done very quickly and very efficiently.

MG: What is the key question a business should ask its current or prospective IT provider about protecting its data and network?

CH: The key question to ask is, what experience do you have working with companies of similar size and of similar needs as your business? And really question do they have the skill sets, talents and resources available to help you manage your business systems.

One of the reasons I created Argentum was to target small to medium customers. We have clients from four users up to about 1,000 in the Argentum brand, whereas the business model for New Age IT staffing and training really does target the Fortune 5000. We go to market a lot differently for the Fortune 5000 and manage the business differently than we do for the small to medium business.

MG: Business continues to go through a lot of disruption from technological change. Is this going to slow down or accelerate in the next few years?

CH: I hate to say it, but it's more likely to accelerate. One of the challenges communities have is putting the metropolitan infrastructure in place it takes to support the new capabilities that are developing. If your internet speeds don't keep up with the data demands, it's going to limit

what companies can do to stay competitive. Additionally, if you keep up with technology news, there is artificial intelligence, the Internet of Things, virtual reality, new cloud-based applications. Your phone systems can be delivered to you now via the cloud in very advanced ways, and over that phone system you can do video conferencing.

Increasing the amount of data being created is also challenging the metropolitan infrastructure. The amount of knowledge these large companies have on you is going to increase: If you're wearing a piece of clothing that's tracking of your body temperature, they'll probably be able to predict what you're doing and what your needs are. Right now, you shop and buy something on the internet, and they show you the next three products they think you're going to want to buy. You know the emotional state of that person, because you're monitoring them. Companies are going to utilize that data; I don't know how, but I know it's going to be used.

MG: Should businesses be planning to expand data storage and processing/ accessing capabilities, maybe dramatically? CH: A traditional business, an HVAC company with a customer base they're servicing, that's pretty much not going to be utilizing those new technologies; they're not needing video, not needing to grow data. But innovative companies, in healthcare for example, consumer-oriented companies that are taking advantage of those technologies we mentioned – those technologies inherently are going to generate more and more data. Is that data going to be stored in the cloud for a lot of people to access and data mine? Or is it going to be proprietary for one individual company to keep to themselves and utilize to get an advantage over the competition?

The nature of business in this industry is it tends to go from a lot of innovators, to a very few, to a monopoly which kind of controls the market. That is a challenge not only for regulators and government policies but also for businesspeople to understand: Are they on the leading edge or the bleeding edge, or where are the innovative things they can do to make themselves known in the marketplace?

MG: How does a small- or medium-size business with limited resources determine how much IT capacity it needs, and what investments provide the best, fastest return on investment?

CH: Companies come to us to help do that planning. We must sit down and understand what the vision of the owners is and where they want to take the business, do strategic planning to figure out their vision, then present the strate-

gies and the technology they can implement to implement that vision. There's no absolute. Some of it comes down to how sophisticated the business owners are at applying technology to solve problems. Sometimes they may have ideas on what they can do, but they don't know how to implement.

When it comes to the greatest ROI (return on investment), if you're generating more revenue because you can take care of your customers better, that's a pretty high ROI.

MG: What level of adoption of cloud computing are Kentucky companies undertaking, and how does that compare with national averages?

CH: I haven't read any national averages reports, but Kentucky does have a lot of cloud adoption when it comes to softwareas-a-service, things like Salesforce, or QuickBooks online, or Microsoft 365. Those are relatively low-risk. When it comes to the more advanced systems, one of the biggest challenges that has slowed down adoption is the unavailability of good, reliable internet bandwidth in the marketplace – gigabit and ethernet connections that not only are reliable but affordable, that make it possible for companies to move their systems into a cloud infrastructure. That's been a real problem.

MG: Do you view gigabit service as essential economic infrastructure?

CH: Yes. We also need to be looking ahead to what's coming next and be ready to implement that, because those are the things that differentiate communities. If you want to attract technology companies and jobs to this marketplace, get that infrastructure in place.

MG: Do you have any closing comments?

CH: I'd like to make a point to parents and people with young adults and kids. Whether you're an artist, a writer, in athletics, or what the kid's natural inclinations and interests are, introduce them to and get them around technology as much as possible and utilize it in some way, whether it's art or whatever. For generations to come, their comfort level and experience with that technology is going to have an impact on their success. Public schools need to continue to integrate technology into the curriculum and use it as a tool. Kids need to be comfortable with technology because tomorrow's workforce in some way is going to use it.



COVER STORY

Prioritizing Cybersecurity



Growing sophistication of attacks requires up-to-date, multipoint defenses and employee training

BY ROBIN ROENKER

ETAILS of cybersecurity breaches across government, education and industry sectors made headlines – repeatedly – over the past year, with no signs of slowing down. Yet despite the frequent incidence, 66 percent of companies report they are unprepared for a major cybersecurity attack, according to a national survey released in November by the Ponemon Institute.

Last February, hackers breached the U.S. Department of Justice's database, releasing personal information on 10,000 Department of Homeland security employees and 20,000 FBI employees. That same month, the IRS announced that a 2015 breach compromised the information of some 700,000 American taxpayers, while the University of California-Berkeley revealed a records breach affecting 80,000 students, alumni and employees.

In October, Yahoo reported that a breach believed to have occurred in 2014 affected as many as 500 million user accounts – one of the largest such breaches to date. On Oct. 21, cyber attackers took down the internet for a

large swath of the Eastern United States for most of the day, using a malware virus known as Mirai that attacks vulnerable internet-connected devices such as web cameras, DVRs and routers.

As these high-profile cases make clear, today's cyber attackers are highly sophisticated.



Scott Logan, Technical Director of Security, NetGain Technologies "These attacks just keep happening over and over again. Businesses are very anxious, and even fearful," said Scott Logan, technical director of security for NetGain Technologies Inc., Kentucky's largest managed IT firm with offices in Lexington, Louisville and out of state. "Many of these attacks could not only force you to lose information, but they could also ruin your brand. If you're a bank and you become breached, how do you assure your customers that you're going to be able to protect their money?"

The bottom line is simple.

"Companies are going to need to invest in more technology to protect them from security threats," said Brendan Jacobson, co-founder of NetGain Technologies. "It is just going to get worse."

It's not necessarily that the attack tools are getting smarter; it's the manner in which they are being used. Malicious players don't even have to be highly tech savvy, said Cody Shackelford, systems engineer with Data Strategy, which acquired Louisville-based boice.net this year.



Cody Shackelford, Systems Engineer, Data Strategy

Basic malware or ransomware packages are readily available on the black market or dark web, he said. Attackers today are succeeding by researching a target company or agency to determine a weak link – for example, a "socially engineered" phishing campaign with an email that looks like it came from and is written in the style of a regular communi-

cation partner, perhaps even a coworker. Organizations can achieve very high levels of protection, though, by employing multiple levels of defense that screen all incoming digital traffic, that restrict anything that does get through to an individual work station, and especially that train workers in best practices for handling data, Shackelford said.

Cybersecurity best practices

Kentucky cybersecurity experts agree: The worst possible response to the increasing threat of cyberattack is to assume you're not at risk.

"For a long time, small businesses just didn't feel like they were a big enough player to be worried about threats," Logan said. "Their mindset was, 'I'm not Chase Bank or Anthem (Blue Cross Blue Shield),' and they believed they didn't have to worry about

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an attack. But now even small businesses have begun to realize that hackers are increasingly targeting smaller entities, on the assumption that they may be less secure and therefore easier targets."

To shore up their defense against attack, businesses should first work with their IT or information security team to do a comprehensive risk assessment, Logan said.

We often see new clients who simply don't know what their vulnerability to an attack is, because they've never had a risk assessment done," he said.

Gui Cozzi, director of the security consulting group at SDGblue, an information security and IT managed service company based in Lexington, agreed. Conducting a risk assessment is not only a crucial first step in identifying where a business's cyber weaknesses may lie, but also in "understanding what its risk appetite



Gui Cozzi, Security Consulting Groub Director, SDGblue

is," Cozzi said - in other words, how much, or how little, risk of attack the company is comfortable with. Understanding that threshold is essential in determining "an appropriate response in terms of investment.'

Unfortunately, there is no single, one-size-fits-all approach to cyber safety.

'Some organizations have been told that if they buy a specific product, that it will be a magical solution to all their cybersecurity needs," Cozzi said. "But that single silver bullet doesn't exist. You have to apply sound principals, and you have to have a security program that's layered."

"I think the biggest trend is that folks are seeing that the way they have been doing security is not comprehensive enough," said Todd Hamill, an account manager in the Lexington, Ky. office of Integration Partners, a Massachusetts-based IT firm. "Security issues reach across multiple aspects of



Todd Hamill, Account Manager. Integration Partners

the organization. It's not just an IT issue. Security has to be viewed holistically."

And while each firm's cybersecurity approach will be specific to its own unique needs, experts did offer these general rules to consider.

• Ensure baseline security is up-todate. This includes use of anti-virus software; patching on servers, work stations and routers; implementing a sound backup system; use of firewalls; and "a layered security approach, where there's multiple points to protect you," said Joe Danaher, vice president of operations



for Integrity IT, a Lexington-based IT and internet security firm.

If your current firewall system is more than five years old, consider investing in a newer one. New models include state-of-theart intrusion detection prevention systems (IDPS) built in, which can help



Joe Danaher, Vice President of Operations, Integrity IT

identify security threats at the perimeter, before they reach the network, Logan said.

• Install end-point protections. In the past, "end points" (i.e., individual employee computer stations) typically received only a simple anti-virus install, Logan said. In today's threat climate, that's not enough.

"They need to have their own intrusion prevention system at that end point so that if it becomes infected, it can't spread throughout the network," Logan said. "There are also controls like application control, which can prevent applications that are not business applications from running on a business model PC. There's device control, which would restrict the user from, say, sticking in a USB stick and downloading a virus. There are a lot more end-point protections that you can employ now than ever before."

• Update data routinely, locally and off-site. "Because the threats have increased so much, it's important that you have a good, secure backup," said Danaher. "Usually what you do, is a full back-up daily and then incrementals timed throughout the day, based on how much data you can stand to lose. Most customers still do an onsite backup, and it's very important for disaster recovery to have an off-site backup as well," he said.

• Phishing emails can spread ransomware. In years past, bogus phishing emails were easy to spot. Not so today.

Hackers have gotten increasingly sophisticated at mimicking the look of real emails from businesses - say a bank or credit card company - you routinely interact with. But if an employee clicks on an email containing malware at their work desk, without the proper safety in place, a virus can be unleashed on their company's entire network system.

Ransomware – in which the hacker encrypts all your computer files and only provides the decryption key at a set ransom price - is on the rise, say experts.

"We've seen people pay that ransom. It can be very devastating," Danaher said. "And it's not just a new threat every couple of months. We're seeing new threats and new variations on these viruses every day."

"Phishing and spearphishing [an email spoofing attack that targets a specific individual] continue to be the biggest threat we're seeing," said Greg Garcia, executive vice president of the Washington, D.C.-based Signal Group, who served as the nation's first assistant sec-



President. Signal Group

retary for cybersecurity under President George W. Bush from 2006-08.

Understand risks associated with IoT

At the invitation of the Technology Association of Louisville Kentucky (TALK), Garcia spoke in Kentucky this past summer on cybersecurity and the Internet of Things, a broad term for the rise of interconnected devices, from smart phones and home security systems to manufacturing stations and self-driving cars.

While increased device interconnectivity can lead to convenience and even better productivity in manufacturing, logistics and other sectors, it can also lead to increased cyber risk. The widespread Oct. 21 Mirai attack was just one

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example of what's possible as hackers manipulate weak internal security in certain interconnected online devices – including webcams, DVRs, routers and more – to turn them into "bots" in a targeted denial-of-service attack.

"Every device that has an IP address, an internet protocol address, is in fact visible on the internet and vulnerable," Garcia said.

In some cases, the default password for these connected devices cannot be changed and is publicly available online. Hackers use this readily available information to control the devices to do their bidding, essentially. Key takeaway: If possible, always change from the default password on any device after installing it, experts urge.

Invest in employee training

"You can spend a large portion of your company's budget on security technology, and it can be made instantly ineffective by someone getting access to the environment through social engineering," said Patrick Zanella, security practice lead with Lexington, Mass.-based Integration Partners.

In "social engineering" breaches, attackers email or call an employee or call into a call center and name-drop to sound as if their request for sensitive company information is legitimate.

"The end user (employee) is consistently the weakest link in the security chain," Logan agreed. "And it's simply because of this: End users are inherently designed and conditioned to help. They're in a workplace where they are questioned about information they may or may not know, and they try to provide an answer."

In March, for example, personal information for 700 current and former Snapchat employees was stolen when hackers posed as Snapchat CEO Evan Spiegel and tricked an employee into emailing them employee payroll data.

As noted, other breaches can occur when employees fail to identify a phishing email; therefore constant employee training on identifying such scams is essential, said Danaher.

And, of course, employees should be trained on basic safety protocols including never using the same email and password for private social media accounts and work accounts, Cozzi said.

Have strong protocols in place

Experts admit it's impossible to calculate how cyber threats will continue to evolve, since new iterations come along so fast. (On average, 300,000 to 400,000 new malware files are uploaded on a daily basis, Zanella said.) That's why developing a sound, holistic cyber security strategy is key.



"It's really hard to predict what's going to come," Cozzi said. "Regardless of what's going to be the newest ransomware, or the newest threat, what's most important is just that businesses follow sound principles. The goal is really to make it more difficult for the cyber criminals to get to you, so that they go knocking on the next door."

Zanella agreed.

"Rather than going after the shiny new (cybersecurity) product, it's best to have a security framework in mind with a three- to five-year roadmap," he said. "The mindset should be, 'Here's where we are today, and here's where we want to be in five years.' "

More funding for public oversight

With the influx of threats poised to continue, attention has turned toward the need for additional cybersecurity funding both at the federal and state level.

"It's very ironic that cybersecurity breaches are at the top of the totem pole for concerns, but at the bottom when it comes to funding and for action, frankly," said Brian Fox, senior account executive at Level 3 Communications in Lexington.

Lobbyists and cybersecurity advocates are hoping to change that divide.

Fox points to ongoing conversations in Washington aimed at finding funding to "react to the cyberwarfare that is going on. There is even a consortium that is looking to appropriate a tax to handle cyber warfare at the state and local level," he said.

Talks in Washington also center on how to best prevent cyber vulnerability within the nation's most targeted sectors, from transportation and energy to commerce, banking and healthcare.

One complicating factor in developing federal regulations to lessen IoT device breach susceptibility, for example, is that cybersecurity is an issue that spans multiple sectors - and therefore, multiple government agencies, from the Department of Homeland Security to the National Telecommunications and Information Administration within the Department of Commerce. Increasingly, these agencies have begun dialogues with one another and with industry to work toward developing a system of cybersecurity principles, Garcia said. (On Nov. 15, DHS released a set of "Strategic Principles for Securing the Internet of Things (IoT), Version 1.0," which can be found online at dhs.gov/ securingtheIoT.)

"The government knows what it doesn't know (when it comes to cybersecurity)," Garcia said. "And that's a good thing. They understand that there are more complexities here than regulation would be able to anticipate and solve. So this is going to have to be an iteractive process between industry and government, and not just between one sector at a time.

"You can talk about self-driving automobiles, but when you're doing that, you're also dealing with other suppliers and service providers in the value-chain of self-driving automobiles. You've got the telecom carriers and the components manufacturers and so on," Garcia said. "That's the challenge: to develop a comprehensive approach to cybersecurity across the IoT ecosystem."

Training the next generation

Another challenge facing cybersafety advisors is the scarcity of trained cybersecurity workers nationally. An online Cybersecurity Supply/Demand Heat Map (cyber-



Brian Fox, Senior Account Executive, Level 3 Communications

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seek.org/heatmap.html) illustrates this scarcity on a state-by-state basis. It reports that there are currently more than 348,000 cybersecurity job openings across the nation.

Addressing the cybersecurity workforce shortage in Kentucky has required a hands-on approach.

Dawn Yankeelov, president of ASPectx and executive director/CEO of Technology Association of

Louisville Kentucky (TALK), is currently in talks with the Kentucky Department of Education and Jefferson County Public Schools to incorporate cybersecurity training as an optional career track within JCPS' 9th- to 12th-grade curriculum.

The ready-made curriculum, developed by NICERC (National Integrated Cyber Education Research Center), would be free for teachers to implement if it is approved, Yankeelov said.

"There is a huge gap in the ability to fill cybersecurity-related jobs," Yankeelov said. "And there is more than a 50 percent increase every year in the number of jobs available. At TALK we're trying to show



Dawn Yankeelov, President, Aspectx; Executive Director; Technology Association of Louisville Kentucky companies that it's not just your problem that you can't find (cybersecurity) workers. It's a nationwide problem, and it's not going to go away."

In Lexington, SDGblue hired Brad Yaun as a talent ambassador 18 months ago, and as such, it's his job to promote the need for cybersecurity workers across the state. Yaun has worked closely with the University of Kentucky's computer science and information communica-



Brad Yuan, Talent Ambassador, SDGblue

tions technology programs as well as Eastern Kentucky University's criminal justice and computer science departments, for example, to help develop relationships between students interested in cybersecurity and area firms – like SDGblue – who need them.

"For companies looking to hire talent, they have to move away from the mentality of the 2008 crisis, where there were a lot of people who needed jobs, and they didn't have to try very hard. That's not where we're at in 2016. It's the total opposite," Yaun said. "You have to move to the realization that, today, there are not enough workers for everyone. So what are we going to do to attract the best?" Students studying cybersecurity through Northern Kentucky University's information technology degree

track or its business informatics degree track have no trouble finding jobs upon graduation, said Dr. James Walden, director of NKU's Center for Information Security, which launched in 2014. In their cybersecurity

coursework at NKU, stu-

dents learn to set up fire-



James Walden, Director, NKU's Center for Information Security

walls, VPNs (virtual security private networks) and intrusion detection systems, among other skills. In computer forensics courses, students must investigate the memory of a compromised network system in order to determine what went wrong, Walden said. During their capstone class, many students conduct security assessments for area businesses. Some have even reverse-engineered malware.

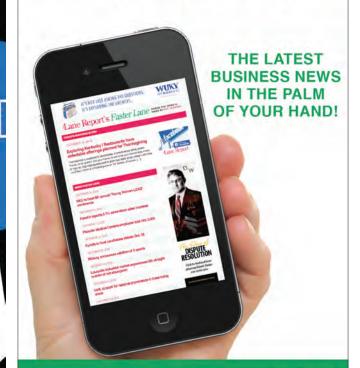
"The students get a ridiculous number of job interviews when they finish," Walden said. "It's a great time to get into the cybersecurity field."

Robin Roenker is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.

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MANAGEMENT



Do We Need a Board?

Industry veterans' skills bring benefits, but new body can legally control the company

BY ROBBIE CLARK

T'S a successful entrepreneur's worst nightmare: The company you've worked tirelessly to create with your hard work and innovation is usurped by the banal vision of a misguided board of directors.

One of the most notorious conflicts between a company's founder and the company's board of directors played out in the mid-'80s, when the board of directors at Apple wrestled control from the iconic tech company's co-founder and Chairman Steve Jobs after the company's first iteration of the Macintosh computer was deemed a financial flop. Unable to influence the direction of his company or the products they were developing, Jobs left Apple in 1985. Jobs, of course, got to live an entrepreneur's "I told you so" dream when he was brought back to the then-struggling Apple in the mid-'90s and turned the company into the world's largest technology firm by creating generationdefining electronics like the iPod, iPhone and other gadgets.

It's an extreme example, but Jobs' situation illustrates some of the potential quandaries an entrepreneur can be exposed to when taking on an investor or a group of investors. On one hand, a business may have reached its earning potential in its current position with its current resources, and an influx of finances could enable it to expand and grow. However, in exchange for the investment, an entrepreneur is basically introducing an authority – a boss – they will have to answer to who has the final say in decisions the company makes.

The individual owner of a company is referred to as a sole proprietor, or can be considered a sole directorship.

Van Clause, PhD, the chair of the Forcht Center for Entrepreneurship at the University of Louisville College of Business, said when an entrepreneur wants to change the legal status of their

MANAGEMENT



company – usually from an LLC to a C corporation – the business owner needs to make sure he or she is comfortable with whom they will be working and the arrangement of that relationship.

"You want something the entrepreneur, the owner of the business, is comfortable with. This is going to be a working relationship, a long-term working relationship with your investors," Clause said. "It's very rare that investors will put their money in and then you don't ever hear from them again. So you need, during this courting relationship of looking for investors, to have a good working relationship with those individuals."

The nature and makeup of the board of directors the investors and the entrepreneur is creating is something to be considered, as well. Do the investors want two of the three board seats, giving them majority control of the board? Do they want two of the five seats? What sort of process do they want in picking an independent board member? Clause said a typical board of directors for a young startup is small, especially compared to a large Fortune 500 company. The common combination is three or five people. In each situation the odd

number is usually filled by a professional who is independent of the company – isn't an employee and doesn't have any money invested.

Along with money, however, investor board members usually bring a set of skills – finance, marketing, sales, management – that are not normally in the entrepreneur's toolbox and can be a tremendous benefit to help grow the com-

Van Clause, PhD, Chair, Forcht Center for Entrepreneurship, University of Louisville College of Business

pany, guide the organization through a transition such as a succession, and help find other talented members for the management team.

A board of directors can also help give direction to the company and provide a system of governance for the business, as well as for the board itself. And, above all, they have a fiduciary responsibility to be good stewards of their and other investors' interest in the company.

Given the complicated nature and importance of the contract between investors and founders, Clause always recommends legal counsel.

"In all cases, I always recommend that entrepreneurs retain legal counsel, someone who is familiar with these types of deals – equity investment deals, succession planning deals – because it's really a negotiation between the investor and the startup business," Clause said.

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But first, an advisory board

But before an entrepreneur is in the position to begin considering if they want to take on an investor's money – and the oversight of a board of directors – Clause also suggests that they have a formal or informal board of advisors, or an advisory board.

"You are not required to have a board of directors with an LLC. Most of the businesses I've worked with, though, do want some sort of an advisory board because they want someone that has an interest in their business that they can use as mentors or experts in a particular area," he said. "Most businesses starting out, if they are going to have an external group helping them, will want to start out with a board of advisors, and that is an informal advisory group. It doesn't require any legal relationship with the venture."

Christopher Clifford, PhD, the Phillip Morris associate professor of finance with the University of Kentucky Gatton College of Business and Economics, agrees that having access to an advisory board is invaluable, especially with a young startup company. The challenge to the entrepreneur, however, is the required legwork to find the people who will be of real benefit to the company.

Christopher Clifford, PhD, Phillip Morris associate professor of finance, University

of Kentucky Gatton College of Business and Economics

"Finding good people who are willing to sit on your board for probably pennies – to justify their time – it's very difficult to do," Clifford said. "There's not thousands and thousands of qualified directors just



sitting around retired, waiting to jump on boards. It's really difficult, in my opinion, to form a good quality board."

As with a board of directors, an advisory board, even if it's just a small group of professionals who meet only a few times a year to talk about the company, can be extremely beneficial to a small company when the business goes through any number of transitions, from an acquisition to a succession to a younger family member.

"A board could provide continuity from that one generation to the younger generation," Clifford said, "and provide guidance drawn from past experiences: "This is what's worked in the past, we ran into this problem four years ago.' If you're coming in to take over the business, having that continuity of information from one generation to the next would be valuable."

Along, of course, with articles of incorporations that are filed with state officials, the typical process includes adoption of corporate bylaws declaring the powers of directors, length of members' terms, frequency of meeting, appointing and dismissing a chairperson, vacancy protocol and compensation. A board of directors agreement might be appropriate. Meetings should have an agenda and minutes kept.

Robbie Clark is a correspondent for The Lane Report. He can be reached at editorial@lanereport.com.



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REAL ESTATE & CONSTRUCTION



Senior Communities Going 'Age-Friendly'

Housing developers rediscovering the benefits of reconnecting intergenerational activities

BY DAWN MARIE YANKEELOV

OUISVILLE this fall became the fourth Kentucky city to receive AARP's "age-friendly" classification, another step for Kentucky toward what is called "intergenerational equity." Louisville Metro is the 120th national AARP Network of Age-Friendly Communities member, joining Berea, Bowling Green and Lexington.

The intergenerational equity concept features providing multigenerational housing, working environments and open public spaces that allow for deeper connections and exchanges between senior populations, young families and under-represented, diverse audiences.

Developers are finding value in the concept, too, as they invest in residen-

tial construction projects, including Friendship Health & Rehab and its new Generation Connect Foundation in Pewee Valley, Ky. That \$100 million senior community living campus now under construction will include youth soccer fields, public walking trails to a bridge community and hands-on participation in key activities for youth and seniors in sports, art and music. The development is only one example of what's happening in the region.

Intergenerational public housing

Intergenerational equity also is central to the concept of another Louisvillearea sustainable development, according to the principals in the Marian Group and LDG Development LCC. The joint venture team is building a \$70 A rendering of the 34-acre, \$70 million Riverport Landings campus of LDG Development's Family Scholar House project in the Cane Run area near Louisville. Its 412 units of multigenerational and affordable housing are designed to provide settings where multiple generations of a family can nurture youth to succeed in education and self-sufficiency.

million, 34-acre multigenerational, affordable housing complex called Riverport Landings with 412 units in the greater Cane Run area, where nearly 55 percent of residents are African-American and 22 percent of families include children under 18.

Construction was slated to begin in late fall on the all-rental community, which will take public housing credits. Senior housing will be 108 units that will be for households with incomes no higher than 60 percent of area median income. Low-income home units will be further restricted to incomes no higher than 50 percent of AMI. On the family housing side, occupancy of all 240 units will be restricted to households with incomes no higher than 60 percent AMI.

A Family Scholar House community onsite with 64 units will serve single-parent families and youth aging out of foster care who are pursuing a degree from an accredited college or university. All 64 units will receive Section 8 rental assistance Housing Choice Vouchers provided by the Louisville Metro Housing Authority.

Founded in 1997, the Marian Group is a full-service real estate development, construction, advisory and investment firm. LDG Development of Louisville is a joint venture partner on the project, and the two operate under Riverport Development Inc.

"This is an intergenerational community model and follows two other similar developments found in Austin (Texas) where we are involved," said Project Manager Michael B. Gross of LDG. "The model looks to have all members of a family live close, and that includes non-traditional members who are not blood relatives. To keep a family going requires people who can participate as parents, grandparents and nurture youth.

"We have done site visits to other programs, like the Generations of Hope initiative in Illinois, to research the model. They are actually tracking outcomes for seniors from these types of communities," Gross said.

The Villages of Ben White and The Pointe at Ben White in Austin, Texas, are LDG projects that by design bring seniors and children together in communities serving the needs of families and aging populations in a concept similar to Riverport Landings.

"There is an intergenerational movement in Kentucky. We are looking for shared performance in well-being on campus environments where single parents can interact with older adults for extended family ties, for example," said Joe D'Ambrosio, director of health innovation and sustainability at the University of Louisville's Institute for Sustainable Health & Optimal Aging. "With the Industrial



Joe D'Ambrosio, Director of Health Innovation And Sustainability, Institute for Sustainable Health & Optimal Aging, University of Louisville

Revolution came segregating older adults into their own communities, but this model is outdated," D'Ambrosio said. "People are living longer and can share knowledge and wisdom to younger generations. Shared space and responsibilities for the neighborhood make for educational conversations about what we can do in making a cultural shift for optimal aging and connection possible."

The UofL Institute plans to push the AARP "age-friendly" Louisville initiatives forward.

Riverport Landings is financed by Redstone Tax Exempt Funds LLC, PNC Bank, the Kentucky Housing Corp. and Develop Louisville, which is a division of Metro Louisville government. The city will manage a 2.5-acre public park in the midst of multifamily dwellings, senior apartments, a pool and a Family Scholar House apartment complex model for aspiring single parents and their children. There will be 10 multifamily buildings with 240 garden style, one- to three-bedroom apartments in addition to senior apartments.

Family Scholar House's state model

Family Scholar House, based in Louisville but working statewide, has a mission to end the cycle of poverty and transform communities by empowering families and youth to succeed in education and achieve life-long self-sufficiency. It is contributing private fundraising dollars from its own resources for the Riverport Landings project. This is Family Scholar House's fifth project in Louisville; others are in Pikeville and Covington.

Riverport Landings will offer a commercial area where doctors' offices and other service providers can be on campus, and will include an education building for hosting various services and an art studio. Since the 1970s, U.S. senior populations have been encouraged to "seek out their own" in communities that cater specifically to them, but these retirement villages often did not provide the kind of support found in a melting pot environment where multiple generations interact in daily living, said Dr. Anna Faul, executive director of the University of Louisville's Institute for Sustainable Health and Optimal Aging.

The Institute will be the host organization for Louisville's AARP Age-

> Tuesday, February 7, 2017 8:00 a.m. to 12:00 p.m. Lexington Convention Center



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aims to ensure that everyone gets the same things in order to enjoy full, healthy lives," according to a 2014 article on human wellbeing by researchers J.K. Summers and L.M. Smith printed in Ambio, an interdisciplinary journal that explores sustainability.

In 2011, the U.S. Envi-

ronmental Protection

Agency's Office of

Research and Develop-



Dr. Anna Faul, Executive Director, University of Louisville's Institute for Sustainable Health and Optimal Aging

ment program, Sustain- *Optimal Aging* able and Healthy Communities, coined the term TRIO (Total Resources Impact Outcome) to represent approaches that fully incorporate all three pillars of community sustainability – environmental, economic and social. This holistic approach to sustainability is embodied in a Human Well-Being Index

WHO and AARP push Kentucky cities forward

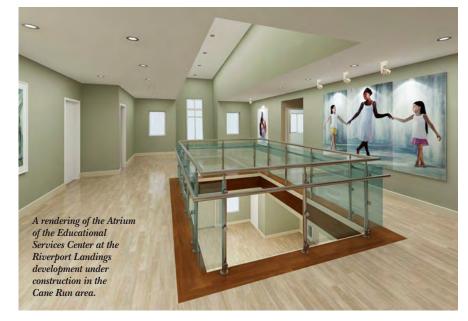
model, including societal well-being.

AARP's Network of Age-Friendly Cities and Communities is affiliated with the World Health Organization's Global Network of Age-Friendly Cities and Communities. It helps participating communities become great places for people of all ages by adopting features such as safe, walkable streets; better housing and transportation options; access to key services; and opportunities for residents to participate in civic and community activities.

Other communities – including Austin, Texas, home to LDG's similar project, and Tulsa, Okla., where You 177 has been established – are already thinking out of the box. You 177 stands for: 1 World, 7 Generations, 7 Billion People and You. Tulsa public school kindergar-



A master plan of the \$100 million Friendship Manor development in Pewee Valley that over the next five to eight years will enhance an existing 52-acre campus that has housed a mursing home for 40 years. Friendship Health & Rehab plans walking trails and athletic fields for intergenerational activity along with new townhouses, memory care apartments and assisted living units.



ten classes have been set up in a nursing home where seniors help children read. Seniors reported their health improved as a result, and parents said their children were better prepared for school.

UofL wants a "living lab"

The Institute at UofL will soon announce its plans for its own nonprofit, civic-minded intergenerational development and "living lab" concept. The idea is to train the next healthcare workforce using UofL's School of Medicine and "flourish where you age," said D'Ambrosio. "Living together, participating in decisions together and celebrating community. The connection of generations is vital to urban areas and taking care of children, in particular disadvantaged and under-represented youth," he said.

Influence of grandparents continues

"I remember how much I enjoyed being with my grandparents," recalls Robert Young, CEO of Friendship Health & Rehab. He founded Generation Connect Foundation to bring girls age 9 to 12 to the senior campus to stimulate art, sports and other connections for wellness in a continuum of care model.

"In 2008, there began a push in the medical literature to bringing generations together for optimal aging and intergenerational approaches," Young said. "It is calming to be with younger generations as you age. And what people can give back is critical to relationships and community growth." His model calls for a doubling effect each year in expanded participation. The groundbreaking for assisted living and memory care facilities to extend the current nursing home complex will be in fall 2017. Generation Connect participation from the community will have doubled by then, he said.

"Communities are looking for models where non-traditional views of family can succeed and open the door for wellbeing," Young said.

Friendship Health & Rehab has unveiled its plans to expand its 52-acre campus in Pewee Valley, which has housed



Robert Young, CEO of Friendship Health & Rehab

a nursing home facility for more than 40 years. The owners, led by Young, will soon expand into other senior living facilities and begin the five- to eight-year anticipated buildout of the campus, with a focus on intergenerational activities. The campus includes a natural wooded area, as well as a soccer field and open green spaces, and the owners will look to preserve these elements. A community walking trail, several sports fields, and a rehab pool are planned as part of the development.

Upon completion, the campus will accommodate up to 550 senior adults. This will bring employment to 300 from a current staff of 120, and ultimately will be the showcase senior healthcare campus in Oldham County. Phase I, a private pay model, will include an assisted living and memory care center, with up to 64 beds in the building.

Dawn Marie Yankeelov is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.

WORKFORCE DEVELOPMENT



The Apprentice Can Fill Skills Gap

Kentucky believes its traditional solution will satisfy modern manufacturing's growing appetite for talent

BY DEBRA GIBSON ISAACS

VER the next decade, nearly 3.5 million well-paying manufacturing jobs likely will need to be filled, according to the Manufacturing Institute. This economic silver lining for the U.S. economy is accompanied, though, by a dark cloud: 2 million of those jobs could go unfilled because of the technical skills gap between present workforce abilities and those advanced manufacturing will need.

The good news is that Kentucky Secretary of Labor Derrick K. Ramsey foresees a time-tested solution to this modern skills conundrum: more use of apprenticeships. The commonwealth has 150 approved apprenticeship training tracks, some in place for many decades.

"I believe apprenticeship programs will change the trajectory of the workplace in Kentucky during the next 25 years," Ramsey said.

"If you look at the business landscape, apprenticeships are tailor made for Kentucky. Sixty percent of our young people go to college, but only 20 percent graduate. Some 350,000 of our young people do not have a high school diploma or GED (high school equivalency). When you start Dr. Schneider Automotive Systems in Russell Springs has a nationally recognized youth apprenticeship partnership that may be replicated across the state as part of the Kentucky Trained, Kentucky Built initiative. Pictured there in June are, from left, Education and Workforce Development Cabinet Secretary Hal Heiner, Plant Manager Torsten Langguth, Garrett Foley, Randa Ballenger, Tyler Moore, Dylan Bryant, and Labor Cabinet Secretary Derrick Ramsey.

looking at these numbers, you are talking in excess of half a million people. We need to give them a chance to get a slice of the American pie."

Ramsey sees that chance coming through apprenticeships.

Registered apprenticeships are a formal process combining on-the-job training with related classroom-style technical instruction; upon completion, the worker is certified as a journeyman in his or her skill specialty.

According to the U.S. Department of Labor, there are approximately 448,000 apprentices currently enrolled in registered apprenticeship programs. In FY 2015, more than 52,500 participants graduated from the apprenticeship system, where, on average, graduates receive a starting salary of \$50,000.

WORKFORCE DEVELOPMENT

To be registered, an apprenticeship must meet national standards with the U.S. Department of Labor and, in Kentucky, the Kentucky Office of Apprenticeship. There is a written contract between the apprentice and the business (called a sponsor) that specifies the length of training, instructional



Derrick K. Ramsey, Kentucky Secretary of Labor

hours, skills to be learned and the on-thejob wages. Apprenticeships are designed to produce highly skilled workers fully competent in all aspects of an occupational trade.

According to the Kentucky Labor Cabinet, apprenticeship programs range from one to five years in length, but the majority are four years. For each year of apprenticeship, the participant receives about 2,000 hours of on-the-job training and a minimum 144 hours of related classroom instruction. The Labor Cabinet works with each company to craft a customized curriculum specific to the employer's needs. At completion of the training program, the apprentice receives a nationally recognized certification.

Apprentices earn a paycheck from day one and incremental raises as skill levels increase. Typically, an apprentice starts at 40-50 percent of a skilled worker's wage. The average wage for a fully proficient worker who has completed an apprenticeship is approximately \$50,000 annually. Apprentices who complete their program earn approximately \$300,000 more over their career than non-apprenticeship participants, according to the Labor Cabinet.

Not a new tool

As bright and shiny as the talk is about them, apprenticeships are not new. Kentucky currently has 1,100 businesses

(sponsors) and approximately 3,000 apprentices participating in a Registered Apprenticeship Program. The state is looking to grow the number of apprentices by 1,300.

Bevin said today's economic environment makes apprenticeships particularly relevant now.

opportunities that require training keys to making this happen."

New grant will help

New federal funding could help the state meet Bevin's goal of more apprenticeships. In October, Kentucky received a \$896,000 grant from the U.S. Department of Labor called the ApprenticeshipUSA State Expansion Grant Initiative. The commonwealth's grant is part of more than \$50.5 million in awards to 37 states from the U.S. Department of Labor to help expand apprenticeship opportunities.

for Kentucky to create a workforce pipeline, increasing the number of registered apprentices by 1,300, including women, minorities, 16- to 24-year-olds, individuals age 45 or older, veterans, and people with disabilities.

inner cities, Ramsey said.

have been overlooked and forgotten about," he said.

Kentucky Gov.

Matt Bevin

Kentucky Gov. Matt

"Apprenticeships are going to transform Kentucky," Bevin said. "They will fill the skills gap in

beyond a high school level but not necessarily a four-year degree. If we are to be the hub of excellence in manufacturing, we must have a highly trained workforce, and the apprenticeship program is one of the

The proposal that was funded calls

The focus will be in rural areas and

"We want to focus on people who

Ramsey said this funding is critical to the Labor Cabinet's goal of expanding not only the number but the scope of industries with registered apprenticeships.

"We're very proud of the approximately 1,100 employers and 150 different programs that already exist here in Kentucky," he said, "but this award will play an important role in growing those numbers.

A new branding campaign

In September, The Labor Cabinet also launched an ongoing effort to re-brand and promote apprenticeships called "Kentucky Trained. Kentucky Built."

This initiative is designed to help new program "sponsors" (businesses) learn about apprenticeship opportunities. Ramsey said the Labor Cabinet has hired four new people who will travel the state to talk to business people and encourage them to consider becoming part of the apprenticeship program.

"We will not be the long arm of the state," Ramsey joked. "We will be more like a matchmaker."

Many businesses already on board

Mubea, a German-owned company with a plant in Northern Kentucky, has invested more than \$2 million in its apprentice program, which is patterned after the one in its home country. The German program is nearly a century old and is recognized as the gold standard within the industry.

"We could not find enough qualified (job) candidates," said Andrew Farris, Mubea training and apprenticeship manager, of why the company started the apprenticeship program. "Those we did find were 200 to 300 miles away."

Mubea's apprentice-

apprentices in December 2015. Today, Mubea is training 36 apprentices in industrial maintenance, machinist,

mechatronics, and tool and die fields. It

collaborates with nearby Gateway Com-

munity and Technical College for the

required classroom work, Farris said. In 2013, the company – which manufactures automotive components such as springs, hose clamps and stabilizer bars - opened a state-of-the-art tailored rolled-blank advanced manufacturing facility, the first of its kind in North

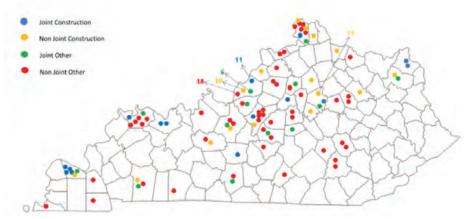


Andrew Farris. Mubea training and apprenticeship manager

ship program began in 2012 and graduated its first nine

America.

Apprenticeship programs in Kentucky



Kentucky has 152 apprenticeship programs. To find an alphabetized list of these programs, go to bit.ly/2ghIXqa

they understand not just the technical

"The apprenticeship program helps us give additional opportunities to existing employees and train new employees," Farris said. "Through the program, aspects of the work but the company culture. They become a part of the Mubea family."

Mubea employs 10,500 worldwide, including 1,400 in Florence.

FAME focuses on smaller companies

Farris also praises the Kentucky FAME (Kentucky Federation for Advanced Manufacturing Education) program. KY FAME began in 2010 as a companysponsored partnership of regional employers in Central Kentucky. The program has grown to 10 chapters encompassing most counties, including Greater Louisville, Northern Kentucky, and the Lincoln Trail regions, and more than 125 companies.

FAME students attend classes two days per week at their local community college and work 24 hours per week for a sponsoring employer. After completing the program, students receive an associate degree in applied sciences, and more than 95 percent have begun full-time employment with the business. Some further their technical education and earn an engineering degree.

Developed originally with Toyota Motor Manufacturing, FAME is an 18-month program that includes the basic core skills to get started in manufacturing maintenance (machine tool, electricity, and maintenance technology) as well as soft skills.

Over in Florence, Mubea's apprentice program is 36 months long, touching more on skills needed to succeed in the company's specialized fields. At Mubea, younger apprentices are partnered with more experienced workers who serve as mentors. All the costs for school, books and even study time are paid by the company. If apprentices want to earn a bachelor's degree, the company offers a tuition reimbursement program. Mubea also has an apprenticeship shop with state-of-the-art equipment used exclusively for training.

"We are fortunate to be a company with a lot of resources," Farris said. "If we need help, someone from our Germany site can come and help us. That's great, but if your company is smaller or doesn't have those resources, Kentucky FAME is a great resource."

Expanding the base

Current Kentucky apprenticeships are mostly in traditional industries such as the automotive sector that Mubea represents.

Ramsey hopes to expand apprenticeships to fill vital advanced manufacturing positions that require years of careful mentorship.

Voestalpine Roll Forming Corp. in Shelbyville is a good example. Founded in 1947, this roll-forming technology



and manufacturing company began a registered apprenticeship program 13 years ago. Today, the company has four apprentices under the tutelage of 11 journeymen who have completed the company's apprenticeship program. Company sales have gone from \$25 million to \$125 million during this 13-year period.

RFC President and CEO Ray Leathers credits not only the apprenticeship program for helping fuel the company's success but local partnerships with the Shelby County Area Technology Center and the Jefferson Community & Technical College's Shelby County Campus.

elby County Campus. Roll Forming Apprenticeship pro-Corp.

Ray Leathers,

President/

Voestalpine

CEO.

grams in Kentucky often partner with local community and technical colleges. These schools provide the core training virtually all apprentices need. The company then steps in with industry-specific skills.

"Since 2003, 13 employees have been successfully certified as apprentices for the tool and die-making trade – completing 576 hours of classroom instruction and 8,000 hours of on-the-job training over a four-year period," Leathers said. "The tool and die-maker apprentices have been an integral part of our company's technology development by providing the competitive edge that has contributed to our growth.

Micah Craig, a former tool maker turned process engineer after graduating from RFC's apprenticeship program, is one of them.

"RFC afforded me the opportunity to participate in the four-year apprenticeMachinist apprentice Lauren Mountford, front, commutes an hour each way to Florence to be among 36 participants in the program at Mubea, a Germanowned auto components manufacturer. Mubea, which was 100 years old in October, opened its 1,400-employee operation in Florence in 1982. With deep experience using on-the-job training, it launched its Kentucky apprenticeship program in 2012.

ship program with Jefferson Community & Technical College," Craig said. "This culminated in me landing a position as a tool maker in 2005, and after completing my apprenticeship in 2007, I was promoted to design engineer. Knowing that I wanted to grow my skill set while continuing to work in Shelbyville, leadership at RFC supported me when I chose to pursue the completion of my bachelor's degree in 2012 and eventually promoted me to my current position today."

Back in Frankfort, Ramsey said the current need for this workforce development tool is at an all-time high.

"As I've traveled the state speaking with students, parents and business leaders, it's more apparent than ever that apprenticeships are gaining momentum because of their unique ability to address the skills gap that hinders job growth and economic opportunities for so many," he said. "We are committing an unprecedented amount of new resources toward growing apprenticeships in this state, and I look forward to carrying this message to new employers and apprentices who can benefit from this proven method of training."

Debra Gibson Isaacs is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.

EMERGING LANE

Kentucky's young professionals and creatives



Looking Out for Everyone's Good

Meet Monticello's youthful second-term mayor, Jeff Edwards

ONTICELLO Mayor Jeff Edwards entered the political arena at 24 when he was elected to Monticello City Council, after losing his first campaign for office at 22. Now at 36, he's in his second term as mayor and has an aggressive agenda to improve lives and bring more business to the small southern-Kentucky town.

TLR: What is your background?

JE: I was born in Northern Kentucky, but Monticello has been my home. I have an associate's degree from Somerset Community College, a bachelor of arts from Eastern Kentucky University and recently started my master's of public administration through EKU. Prior to being elected mayor of Monticello in 2010, I served three terms on the Monticello City Council. I worked as a real estate principal broker for eight years prior to election. **TLR:** What made you want to get into politics, and what are your goals?

JE: I've always had an interest in government and our community as well as our state. I first ran for City Council with the hopes of becoming more involved in our community and with the hopes of changing a mindset that just because we are a smaller rural town it doesn't mean we cannot improve the quality of life for our people and give them the opportunities that they deserve.

TLR: As mayor, what are you bringing to Monticello?

JE: Since being elected mayor, we have made an effort to invest in our infrastructure. We completed a \$13 million new water treatment plant, an \$8 million upgrade to our waste water treatment plant, and recently began upgrading our broadband internet and fiber. We are working on upgrading the overall appearance of our community and improving the quality of life. We started a new Parks and Recreation Department. We are about to begin work on a new Artisan Center in downtown Monticello. We also have been working toward a new Senior Citizens Center in downtown Monticello.

TLR: Did you ever feel intimidated to enter politics being so young? **JE:** I have never felt intimidated because I am doing things I believe in and feel confident about. Some peo-



ple may look at a younger person through a different lens at first; however, if given the opportunity, through hard work, passion and determination, you can overcome that.

TLR: I understand you have a busy life outside of your role as mayor.

JE: I have had the opportunity to serve on many local boards and committees, to serve on the KLC Board of Directors and last year had the privilege of being part of the Leadership Kentucky class of 2015. I am a long-time member of the Monticello Lions Club, serving two years as president.

On a personal level, I've made eight trips over the last four years with First Baptist of Monticello to the share the love of Jesus with the indigenous people in the Southern Yauyos region of Peru in the Andes Mountains. We have served in 12 villages in the Catahuasi area doing everything from Bible schools, art projects, teaching English and playing soccer. —*Abby Laub*



Monticello Mayor Jeff Edwards first entered the political arena at the age of 24. He's also been on eight mission trips (pictured here) over the last four years with his local church.

Kentucky's Gift-Makers Will Impress This Holiday Season

HERE'S no shortage of artists or entrepreneurs across Kentucky – or artistic entrepreneurs and entrepreneurial artists, come to think of it. Here's a look at four such young professionals creating unique Kentucky-made products and gifts.

Alex Gash – Sheltowee Hammock Co.

ShellHammocks.com

Camping with a sleeping bag on the ground? Alex Gash prefers to sleep in a hammock between two trees about 12 feet apart. "Hammock camping is just a lot more fun than sleeping on the ground," he said. "It's a lot more comfortable." In 2004 he became an avid hammock camper. Four years later he graduated from Centre College



in Danville and moved to Colorado. By 2012, Gash was back in Kentucky, making his own hammocks with an adjustable layer of insulation, and in 2016 he was in a manufacturing space in Lexington. The smallest hammocks pack down to the size of a softball; the heaviest is insulated for 20 degrees and weighs 4 pounds. With more than 350 hammocks assembled to date, taking around eight hours apiece, Gash sells his custom products on his website and has recently gotten his hammocks into retail stores in Louisville.



Michelle Lyn Strader and Frederick Bartolovic – Silver Run Ceramics

SilverRunCeramics.com

With backgrounds in fine arts, Michelle Lyn Strader and Frederick Bartolovic moved to Catlettsburg in Boyd County in 2011 and found themselves working collaboratively in clay. "We had such an amazing response from family, friends and customers that we decided to make a go of selling our wares more seriously," Strader said. She has been Silver Run Ceramics' full-time studio artist since fall 2015. Bartolovic heads the ceramics department at nearby Marshall University across the river in Huntington, W.Va. For their

own products, he creates forms by throwing them on the pottery wheel and she illustrates each ceramic piece by hand. They sell their wares on their website and through Etsy.

Matthew Gaddie — The Meadows Pottery

MeadowsPottery.com

As a grad student in 2004, Matthew Gaddie turned his pottery hobby into a business. The following year he took an offer to run the wood-kiln program at Bernheim Arboretum and Research Forest in Clermont. "We had people come fire with us from all over the country," he said. By 2007 he developed a national reputation for being a wood-fire potter, but the Bernheim kiln program was shut down. So Gaddie built one on his family farm in Bardstown. It takes six cords of wood to fire the 35-ton kiln, which burns at 2,400 degrees and can hold 600 to 800 pieces of pottery at a time. Custom projects and one-off corporate



gifts have become Gaddie's mainstay, like orders for 400 mugs, a dozen trophies or a singular wall installation. As a side hustle, he travels all over the country teaching other potters how to build their own wood kilns.—*Kathie Stamps*

Mentorship Over Money in Louisville

Everyone knows mentorship is equally as important, or even more important, than funding when it comes to entrepreneurship. Greater Louisville Inc. in November launched its Mentor Louisville program that matches qualified entrepreneurs with a personally selected mentor, subject matter expert, or service provider offering experience launching, growing, scaling, and investing in a business. Startup founders and those interested in becoming mentors can sign up at MentorLouisville.com.

Making Part-Time Legal Education Accessible

Beginning in spring 2017, Northern Kentucky University's Salmon P. Chase College of Law is restructuring its evening program to make part-time legal education more accessible than ever. The evening program academic year will begin in May instead of September. The college will adjust evening class schedules and offer more online courses, changes that will make it easier for students to attend law school while working and allow more time for individual study. Chase offers both evening part-time and day full-time programs at its NKU's Highland Heights campus.



Lexington Ranks in Top 100 Cities for Singles

According to WalletHub, Lexington is the nation's 53rd best city for singles and Louisville the 106th. WalletHubs's 2016's Best & Worst Cities for Singles ranked a total of 150 cities. Rankings were based on three categories: Dating Economics; Romance & Fun; and Dating Opportunities. Lexington ranked 48th in Dating Economics, 67th in Romance & Fun and 62nd in Dating Opportunities. Louisville ranked 52nd in Dating Economics, 131st in Romance & Fun and 99th in Dating Opportunities.

New Restaurant Hits Lexington Food Scene

This month, Carson's Food and Drink opens in Lexington, bringing a new dining and cocktail venue to downtown. Owner Mark Fichtner said the restaurant, at 360-362 E. Main St., features a menu of chef-driven American cuisine and Prohibition Era-style craft cocktails in a rustic but elegant dining room. Carson's has 20 taps and 50 patio seats included in the space. Fichtner ultimately aims to build the concept up to 10 Carson's throughout the South.

THE LANE LIST

TOP IT SERVICES COMPANIES IN KENTUCKY

Ranked by number of employees

COMPANY	WEBSITE	TOP EXECUTIVE (IN KENTUCKY)	KENTUCKY OFFICES	YEAR FOUNDED	NUMBER OF EMPLOYEES
NetGain Technologies	netgainit.com	Mark Jacobson	Lexington – Louisville; Cincinnati, Ohio	1984	160
SIS LLC	thinksis.com	Steve Sigg	Lexington – Louisville and London, Ky; Cincinnati, Ohio; Charleston, W.Va	1982	130
New Age Technologies/ Argentum IT	newat.com	Charles Hagerty	Louisville	1996	97
Data Strategy (acquired boice.net)	data-strategy.com	Bill Hall	Louisville and Lexington, Ky.; New Albany, Ind.; Cincinnati, Ohio	2004	90
AIC Analysts International Corp.	analysts.com	Norm Viens	Lexington	1991	75
Kinetic Corp.	thetechnologyagency.com	Ray Schuhmann	Louisville	1968	71
Advanced Solutions Inc.	advancedsolutions.com	Michael Golway	Louisville	1987	68
MakeTime	maketime.io	Drura Parrish	Lexington	2014	55
V-Soft Consulting Group Inc.	vsoftconsulting.co	Purna Veer	Louisville	1997	55
Modis Inc.	modis.com	Ryan Frazier	Louisville	1997	51
Ebit Information Systems	ebitinfosys.com	Danny Castleman	Jeffersonville, Ind.	2005	50
Prosoft LLC	prosoftconsulting.net	David Easterling	Louisville	2003	50
Creative Strategies US	creativestrategiesus.com	John Carroll	Louisville	1990	48
CLICK IT Staffing	clickitstaffing.com	Sam Smith	Louisville	2013	44
The Mirazon Group	mirazon.com	John Ross	Louisville	2000	44
Louisville Geek	lougeek.com	Erik Eckel	Louisville	2004	40
C-Forward Inc.	cforward.com	Brent Cooper	Covington	1999	32



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Sources: NPR Digital Attitude Survey, NPR Listeners Panel, July 2012; Lightspeed Research, NPR Sponsorship Survey, November 2014 Percentages based on respondents who agreed with each statement, where "agree"=7-10 on a 0-10 point scale. WKYU-FM Bowling Green

WEKF-FM Corbin

WKUE-FM Elizabethtown

WEKH-FM Hazard

WKPB-FM Henderson/ Owensboro

WUKY-FM Lexington

WFPK-FM Louisville

WFPL-FM Louisville WUOL-FM Louisville

WMKY-FM Morehead

WKMS-FM Murray

WNKU-FM Northern KY

WEKP-FM Pineville

WEKU-FM Richmond

WDCL-FM Somerset

SPOTLIGHT ON THE ARTS



Give a Gift Made in Kentucky

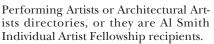
Unique gifts made by Kentucky artists are available online and in stores

B LACK Friday, Small Business Saturday and Cyber Monday have passed, but that doesn't mean

you've missed an opportunity to find the perfect gifts for your friends and family.

The Kentucky Arts Council has launched its annual Give a Gift Made in

Kentucky campaign on its website and social media. Artists whose works and events are part of the 2016 campaign are members of the Kentucky Crafted,



In addition to artists in those directories, the Give a Gift campaign has been expanded to include holiday events hosted by Kentucky Arts Partnership organizations.

The Give a Gift section of the website is a great place to find Kentuckymade art and craft, recordings or tickets to events.



Above: Small leather journal, made by Kentucky Crafted artist Melissa Oesch, owner of Reimagined by Luna in Lexington.

Artists who chose to participate in Give a Gift find inspiration from their Kentucky surroundings and communities.

"Since I arrived in Kentucky in 2001, I found far more opportunities than were available to me previously – I can honestly say my artwork and art career have grown exponentially ever since," said Bruce Frank, a Kentucky Crafted artist living in Georgetown. "A large part of this was my early involvement with the Kentucky Arts Council and its many educational and exhibition opportunities."

"My current body of work could not exist outside of Kentucky," said Berea artist Laura Poulette. "My painting process begins with a walk in the woods and meadows surrounding my Madison County home."

Work by artists in the arts council's Kentucky Crafted program is represented not only in their own studios, but also in the shops of 28 Kentucky Crafted Retailers in Kentucky, Missouri and Ohio. Kentucky Crafted Retailers offer a wide variety of merchandise and actively promote the Kentucky Crafted brand. It's a distinction available to gift shops, galleries and other businesses that sell art and craft. If you own a business and are interested in becoming a Kentucky Crafted Retailer,

contact Dave Blevins, the arts council's arts marketing director, at david.blevins@ ky.gov or (502) 892-3120. ■

Tom Musgrave is communications director of the Kentucky Arts Council.



"Wednesday," a sculpture by Architectural Artists Directory artist William Kolok, owner of Kolok Wood and Stone in Owensboro.

EXPLORING KENTUCKY



2017 – A Foodie's Year

Grab your calendar and prepare to celebrate Kentucky's food heritage

BY KATHERINE TANDY BROWN

S if you didn't know, the holiday season is almost history for another year. So far, you've devoured the leftover Halloween candy, made it through Thanksgiving's triple pie sampler and can still zip your pants. Those visions of sugarplums won't add inches as long as they stay in your imagination.

So, as a reward, grab your 2017 calendar, hunker down by the fireside, and get ready to pencil in your favorites among Kentucky's amazing array of annual food festivals. Fortunately, not every month features one, but you can always take home goodies to freeze and sustain you until the next foodie gathering.

Hands down, the commonwealth's oldest celebration of food is **Benton Tater Days**, also the oldest continuous trade day in the country. In 1843, West Kentucky farmers brought produce to sell on the town square on court days. That included sweet potatoes, or "taters." Eventually, this became an annual festival honoring the sweet tater, complete with a parade, horse show, carnival, fiddling contest, gospel singing, pageants, and baking and canning competitions. From March 31 through April 3, 2017 – 170-plus-years later – the festivities continue, with a parade, car show, flea market, carnival rides and stage events. But alas, no taters! *kentuckylake.org; (270) 527-0024*

Also a front-runner in longevity, Harlan's 2017 Poke Sallet Festival, scheduled for June 1-3, will be its 62nd annual event. An Appalachian heritage staple, poke sallet is actually a weed that's poisonous until boiled, when the greens turn quite tasty. Some folks cook 'em with eggs and some with bacon grease, according to individual preference. A fun part of the festival is its recipe competition, where creative cooks try new ways of fixing poke sallet, such as poke sallet pancakes and bread, just like zucchini bread but hold the squash and add a mess of greens. Several Harlan restaurants feature poke sallet dinners.

pokesalletfestival.com; (606) 573-4495

The 55th annual **Fulton Banana Festival** takes to the streets of the Twin Cities – Fulton, Kentucky and Tennessee – in September. Back in the 1880s, the United Fruit Company, now Chiquita, transported bananas from South America to New Orleans, then loaded them The cooking teams participating in the Owensboro's International Bar-B-Q Festival know that the sauce is the key to great barbecued chicken. Each cooking team prepares a minimum of 400 chickens basted with gallons of their special recipe.

onto 162 tons of ice in refrigerated railroad cars for shipping north. Centrally located, Fulton had the only icehouse on the route to Chicago. Eventually, 70 percent of the nation's bananas passed through Fulton, which became known as the "Banana Capital of the World." Cashing in on that heritage, the Fultons celebrate with a slew of events that would make Chiquita Banana's fruittopped head spin. The schedule includes a Banana Bake-off, Banana Ball (a must-attend social event), Banana Brawl (muscular men take each other on in a ring), Banana Bowl (football), greased pig contest, doggie pageant, Banana Car rides, and the crowd fave, a one-ton banana pudding (the world's largest) for all to dig into.

thebananafestival.com; (270) 472-9000

Not to be outdone, the **Casey County Apple Festival** (CCAF) features the world's largest apple pie, a luscious 10 feet wide, that's served a la mode and is free to all hungry comers. Now in its 43rd incarnation, the festival holds sway Sept. 21-23 in Liberty, where revelers can also share a 10-foot pizza and a 10-foot chocolate chip cookie. A week prior, Miss CCAF and her court of baby, pre-teen and teen royalty are chosen to reign over a Friday parade, Saturday night live headliner concert and fireworks. There's even a kids' frog-jumping contest.

caseycountyapplefestival.org; (606) 787-5355 or (606) 787-9297

With western Kentucky's reputation for great barbecue to uphold, the competition at Owensboro's 38th annual İnternational Bar-B-Q Festival – scheduled this year for May 12-13 - gets more fierce every spring. Six crackerjack cooking teams vie for top honors in the Governor's Cup, set up 60-foot-long open-fire cooking pits, and rustle up their best mutton, pork and chicken barbecue, and burgoo. After the judging, the goodies all get sold, usually within an hour. And in a Backyard Barbecue competition open to anyone, 35 to 50 wannabe chefs fire up their grills to win cash prizes and bragging rights, cooking foods donated by the festival's Gold Sponsors. Post-judging, the crowd can sample the results.

"One category is Specialty Food Groups," explains the event's director, Sharon NeSmith. "Even barbecued bologna is good!" Laurel County hosts the World Chicken Festival each year, featuring the world's largest skillet, which fries up more than 7,500 pieces of chicken in just two and a half days.

Raising lots of money for charities, the festival also includes a beer garden, live music and a Mutton Glutton VIP party, all on the Ohio riverfront. *bbgfest.com; (270) 929-8663*

Now in its 28th year, the World Chicken Festival will light up London with all things poultry Sept. 21-24 to celebrate Laurel County's heritage as the home of Colonel Sanders' first and original restaurant and of Lee's Famous Recipe Chicken, begun by Lee Cummings, the colonel's nephew. The festival's egg-citement includes a rooster crowing, clucking and strutting contest; toilet-lid horseshoes; a Spam-eating contest; redneck joke competition; armpit serenade (yep, it's just what you think); and kids' chick-a-lympics. Tuck in your napkin for some egg-cellent chicken cooked in the world's largest known frying skillet. Oh, and be sure to bring your sense of humor.

chickenfestival.com; (800) 348-0095



Fairly new on the scene, the **Fort Harrod Beef Festival**, begun in 2005, honors Kentucky's status as the largest beef cattle state east of the Mississippi. With a focus on that hearty meat, the Harrodsburg event kicks off with the Cattle Crawl progressive dinner and includes a steak and egg breakfast and a Kentucky Proud wine and cheese tasting with beef appetizers. Date TBA.

FortHarrodBeefFestival.org; (800) 355-9192 or (859) 734-4378 Serious foodies will also want to attend the **Morgan County Sorghum Festival** in West Liberty (MorganCountySorghum-Festival.com; (606) 743-3330), the **Monroe County Watermelon Festival** in Tompkinsville (monroecountyky.com; (270) 487-5505) and the **Marion County Country Ham Days** in Lebanon (marioncountykychamber.com/ham-days/).

Katherine Tandy Brown is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.

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Ky. Initiative to Reduce Regulatory Red Tape Earns National Praise

OTED workers' compensation expert Robert Wilson, of WorkersCompensation.com, has hailed Kentucky's efforts to reign in unnecessary regulatory burdens on Kentucky businesses through its Red Tape Reduction initiative.

"One of the biggest challenges we hear from employers and carriers struggling to maintain compliance across multiple workers' compensation systems in this country is the complexity and growth of regulatory burdens which must be contended with," Wilson said. "Every state is vastly different, and it seems with each legislative action, more and more requirements are thrown into the myriad of existing regulations they must follow."

"For many years we had separate Injury, Occupational Disease and Hearing Loss claim forms," Kentucky Labor Secretary Derrick Ramsey stated. "We identified this process as being cumbersome and unnecessary, and have since successfully combined these forms into



a single online application as a key feature of the new Litigation Management System (LMS). For these efforts, we have received tremendous positive feedback and we will continue to carefully examine all regulations and processes within the Cabinet and identify areas where we can improve the customer experience for Kentuckians."

Wilson said Kentucky's efforts were praised at a recent national workers'

Small Business Saturday Garners Increasing Consumer Support

S Small Business Saturday wrapped up its seventh year on Nov. 26, the outpouring of support for local businesses across the country hit record highs, with 72 percent of U.S. consum-

ers aware of the day. More shoppers reported visiting local independent businesses on Small Business Saturday this year than ever before, according to results from the Small Business Saturday Consumer Insights Survey, released by

the National Federation of Independent Business (NFIB) and American Express. This year, an estimated 112 million consumers reported shopping at small businesses on Small Business Saturday, marking a 13 percent increase from 2015.

Small Business Saturday saw record levels of support from communities and local organizations in 2016. More than 6,700 Neighborhood Champions rallied local businesses and created events in their communities for Small Business Saturday — an increase of 63 percent over last year. Additionally, the estimated number of small-business owners reached through the Neighborhood Champion program was 2.1 million.

More than 480 organizations joined the Small Business Saturday Coalition, a 13 percent increase over last year. The Coalition, a group created in 2011 to help amplify the Shop Small message, is comprised of national, state and local associations that help coordinate activities for

Small Business Saturday with consumers and small-business owners.

At a time when an increasing number of consumers are opting to shop online – and are spreading their holiday shopping spending over a longer period of time than they did traditionally – many still pri-

oritize visiting brick and mortar small businesses on Small Business Saturday. According to the survey, among U.S. consumers who went out and shopped instore, total reported spending reached an estimated \$15.4 billion at independent retailers and restaurants on the day. That is a decrease, though, from the estimated \$16.2 billion spent in 2015.

"Small businesses across the nation are often run by the friends, family and neighbors that we know well, so supporting them is not only personal but critical to their success," said NFIB CEO and President Juanita Duggan. "Partnering with American Express to promote the awareness and importance of shopping small is something we are very proud of, and we look forward to continuing the success of Small Business Saturday." compensation summit of industry experts.

"When discussing the broader issue of system stability, I posed the question, "What jurisdiction seems to work?" said Wilson. "The answer from several employers and professionals in the room indicated Kentucky had some adjudication processes worth looking at. Today, with their action of reducing the number of required forms and simplifying the reporting process, they seem to have earned another round of positive recognition.

"To hear of a jurisdiction like Kentucky making strident efforts to simplify and reduce this burden is extremely rare today but also very encouraging," he continued. "As a national conversation on this subject continues to evolve, one of our goals is to identify and pursue opportunities to reduce the regulatory burden these stakeholders face. Simplifying these systems will allow more flexible response and care, providing for improved outcomes at lower cost. It is a scenario where everybody wins."

National Christmas Tree Sparkles with Spirit of Kentucky

ANDCRAFTED ornaments by Kentucky artists are being showcased at a national celebration in Washington, D.C., adorning one of 56 trees representing each U.S. state, territory and the District of

Columbia as part of the annual National Christmas Tree Lighting display.

The Living Arts & Science Center in Lexington worked with artists from all over the state to design 12 ornaments showcasing Kentucky's raw materials, the cornerstone of traditional arts and crafts found throughout the state. The ornaments include



Among the 12 ornaments featured in the National Christmas Tree display is this one, created by the husband and wife team of Beth Hester and Scott Gilbert, of Scottsville, Ky.

small wooden elements carved from native Kentucky hardwoods, ceramic vessels formed from Kentucky clay, quilting, fiber arts, glass arts and basket weaving.



Research Shows Entrepreneurs' Passion, Speaking Skills Often Confused



Representation of the starter of the

That's the question a group of University of Louisville College of Business researchers explored in a study published online recently in the journal "IEEE Transactions on Professional Communication."

The researchers surveyed 40 student entrepreneurs about their passion for entrepreneurship. Then they recorded the entrepreneurs' business pitches

and showed the videos to investors. They asked the investors to rank and rate their perceptions of each of the entrepreneurs' passion, and to discuss their reasoning.

The researchers then conducted statistical analyses to assess whether the investors' perceptions of passion aligned with the entrepreneurs' reports of personal passion.

What they found was that the investors had difficulty differentiating between the most and least passionate entrepreneurs. But, that problem could be attributed to the entrepreneurs themselves. When entrepreneurs had weak presentation skills, it caused investors to underestimate passion. When they had strong skills, it led investors to overestimate passion. For investors, that means "buyer beware," as a good presenter may not necessarily have the follow-through it takes to keep a business going after a setback.

"... Investors may miss investment opportunities with passionate entrepreneurs who are simply struggling with presentation skills, or make less than optimal investments in entrepreneurs who are projecting a passionate image but do not have the 'fire in the belly' to back up their message," the researchers concluded.

The study will be published in the December journal and is available online at http://ieeexplore.ieee.org/document/7604127/.

Helping Holidays Feel Like Home for Troops

FOR U.S. troops serving in Afghanistan, Iraq, Kuwait and Bahrain, it's looking a little more like the holidays back home, thanks to DHL Express' annual Operation Holiday Cheer. Now in its 13th year, the project delivers fresh-cut Christmas trees along with thousands of holiday letters, menorahs, decorations and gifts to U.S. troops serving our country.



This year's shipment of trees, pro-

vided by Dees Nursery in Long Island, New York, started out on Dec. 5 from the DHL gateway facility at JFK International Airport in New York. The load was then flown to DHL's Americas hub at the Cincinnati/Northern Kentucky Airport, where they were loaded onto a DHL 777 for a nonstop flight to the Middle East.

DHL Operation Holiday Cheer began in 2004, when the mother of a soldier who was stationed in Iraq asked Dees' Nursery if she could buy a Christmas tree and send it to him. The nursery wanted to donate the tree but needed help shipping it overseas. Dees' owner Tom Di Dominica Sr. mentioned his dilemma to local businessman Jim Adelis, whose son also was stationed in Iraq. Adelis then reached out to DHL Express and the community, and DHL Operation Holiday Cheer was born. That first year, DHL sent 135 trees to our troops, along with lights, decorations, menorahs and holiday cards, and has since shipped thousands more.

The Giving Season

G IS the season to be giving. And the latest World Giving Index shows that Americans are some of the most generous people in the world, ranking second out of 140 countries in 2015. That year, U.S. donors gave more than \$373 billion to charity, and 71 percent of that figure came directly from individuals, according to the National Philanthropic Trust.

But Americans don't just reach in their pockets to help the needy. They also contribute their time – and plenty of it. Between 2014 and 2015, nearly 63 million people volunteered with an organization at least once, serving a median of 52 hours per year.



According to personal-finance website WalletHub's recently released rankings of the nation's most charitable states, Kentucky ranked 20th in the nation for being the most charitable.

The rankings were based on an evaluation of metrics across two key dimensions: "volunteering and service" and "charitable giving."

The commonwealth was 15th in the nation in terms of charitable giving, 23rd in terms of volunteering and service and ranked second in the nation for having the highest percentage of its population collecting and distributing food.

Keep it up, Kentucky....it's good to give back.

KENTUCKY PEOPLE

LOUISVILLE: SIMMONS PARTNERSHIP WITH NATIONAL ORGANIZATION BRINGS HQ, CONVENTIONS TO KY



Simmons College of Kentucky (SCKY) formed a significant partnership this fall with the National Baptist Convention of America International Inc., a leading international African-American religious organization. The partnership includes relocating NBCA's headquarters from Dallas to Louisville; Simmons becoming the education provider for the NBCA; and the announcement of two annual conventions slated to meet in Louisville in 2017 and 2020. Pictured here are (left to right) SCKY President Rev. Kevin W. Cosby; Louisville Convention and Visitors Bureau (LCVB) Executive Vice President Cleo Battle; LCVB Senior Religious Sales Manager Susan Sauer; LCVB Director of Southeast Sales Peggy Riley; Rev. F. Bruce Williams; and NBCA President Rev. Sam Tolbert.

FRANKFORT: NEIL HUFFMAN AUTO GROUP CELEBRATES ADDITION OF 2 NEW DEALERSHIPS IN CENTRAL KY.



Frankfort city officials joined representatives from the Neil Huffman Auto Group in Frankfort to celebrate a ribbon-cutting ceremony for the company's newest dealerships, Neil Huffman Chevrolet Buick GMC and Neil Huffman Nissan of Frankfort. Pictured here on the front row are, left to right: Steve Al-Jabiri, Neil Huffman Auto Mall of Frankfort GM; Kameron Huffman, Neil Huffman Honda finance manager; Shane Huffman, Neil Huffman Auto Group Dealer principal (holding his daughter Cruz Huffman); Kim Huffman, Neil Huffman Auto Group co-owner; Dow Huffman, Neil Huffman Auto Group co-owner; Dow Huffman, Neil Huffman Auto Group co-owner; Daniel Wolford, Neil Huffman Auto Group the drive advisor; Shannon Huffman, Neil Huffman Auto Group HR director; Tony Schmidt, Neil Huffman Chevrolet Buick GMC sales manager; Becky Carr, Neil Huffman Nissan of Frankfort sales manager; and Paul Dunseath, Neil Huffman Chevrolet Buick GMC sales manager. On the back row, left to right, are Franklin County Judge Executive Huston Wells and Frankfort Mayor William May.

LOUISVILLE: UofL COLLEGE OF BUSINESS INDUCTS MEDLEY, REED INTO THE ENTREPRENEURSHIP CIRCLE OF FAME



The University of Louisville's College of Business added two alumni names to its Entrepreneurship Circle of Fame in November, honoring Diane Medley and W. Earl Reed III. Medley (center) is the managing partner and co-founder of MCM CPAs & Advisors and is a member of the UofL Foundation board of trustees. Reed (left) is the founder of healthcare companies Springstone and The Allegro Group. Pictured with Reed and Medley is Alan Attaway, interim dean of the UofL College of Business.

LEXINGTON: LEGENDS BASEBALL TEAM, EXECS BRING HOME AWARDS

Lexington's minor league baseball team, the Lexington Legends, and two of their executives were recently recognized with awards from the South Atlantic League. Pictured here are (featured top to bottom) Legends President/CEO Andy Shea (left) accepting the South Atlantic League Club Merit award from league President Eric Krupa, presented to recognize the complete baseball franchise that has demonstrated franchise stability and success as well as significant contributions to its community and the league; Ame Mapson receiving the league's Female Executive of the Year award; and Gary Durbin receiving the South Atlantic League General Manager of the Year award.







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new year, more new drama

new season Sherlock KET Sunday, Jan. 1 • 9/8 pm KET2 Wednesday, Jan. 4 • 9/8 pm *new series!* **The Coroner KET** Thursday, Jan. 19 • 10/9 pm **KET2** Saturday, Jan. 21 • 11/10 pm new season Mercy Street KET Sunday, Jan. 22 • 8/7 pm KET2 Wednesday, Jan. 25 • 8/7 pm



The training revolution starts in Kentucky

Shane Daniel is working in manufacturing and going to school, thanks to an innovative new apprentice-style program called KY FAME, open to elite students interested in advanced manufacturing.

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