FORD EXPANDING REGION’S ECONOMIC HORSEPOWER

$1.3B Kentucky Truck Plant investment drives wide range of activity from home sales to aluminum smelting

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WHEN IT COMES TO STATE-WIDE LEGAL MATTERS, WE’VE BEEN THERE BEFORE.
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On the Cover
Ford Motor Co. is in the midst of making a $1.3 billion investment at its Kentucky Truck Plant in Louisville that is creating 2,000 new jobs. The upgrade and expansion supports production of the newest F-Series Super Duty. Ford has invested more than $1.5 billion in Kentucky and Louisville since 2014, stimulating a wide range of regional economic activity from home sales to expansion of the aluminum industry in the state.

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PERSPECTIVE

VOTING RIGHTS AND JUSTICE
Kentucky taking the correct approach on expungements

BY PAT FREIBERT

Efforts to expunge felony records and allow reinstatement of felons’ voting rights have been trending in the United States, for the past several years. The 2016 Kentucky Legislature passed legislation “providing a second chance” for thousands of Kentuckians who have a single, low-level felony charge. Such legislation had been introduced many times in recent years, but failed to pass. This time, the bill had the support of the governor and both the Kentucky Senate and the House of Representatives.

On April 22, Virginia’s Gov. Terry McAuliffe issued an executive order granting voting rights to 206,000 convicted felons, including murderers and rapists. Previous Virginia governors have believed such a drastic change in voting rights could not constitutionally be done without approval of its legislature. Gov. McAuliffe’s order also allows persons convicted of serious crimes to serve on juries. Victims of violent crimes in Virginia can now face people convicted of rape or murder in the jury box. Moreover, McAuliffe’s order extends voting rights to felons convicted of violent crimes who “have not fully paid restitution to their victims for the injuries they caused.”

The speaker of the Virginia House of Delegates responded with outrage, pointing out that the governor, a close friend and political ally of Hillary Clinton, probably aspires to be appointed by her to a cabinet position if she becomes president.

In Virginia, the number of convicted felons is about 4 percent of the number of registered voters – more than enough to potentially change the outcome in many of Virginia’s statewide elections that have recently been very close. After spending nearly $40 million and outspending his opponent nearly 2-to-1, McAuliffe became governor by winning 47.9 percent of the vote compared to his opponent’s 45.5 percent.

Most states deny voting rights to persons convicted of serious crimes, and usually provide a way for individual convicted felons to regain voting rights if certain conditions are met. Since Virginia law does not allow its governor to run for re-election, McAuliffe will be out of a job in less than two years. He knows Hillary Clinton needs to carry Virginia to win the presidency. Based on the belief that convicted felons are more likely to vote for candidates of his party, McAuliffe threatens to issue new executive orders to further expand the number of convicted felons.

In Kentucky, the issue of restoring voting rights to convicted felons has been addressed the correct way, by an act of the legislature following several years of study and debate. And Kentucky’s legislation specifies single, low-level felony charges to become a candidate for restoration of voting rights. Contrast that with what has occurred in Virginia, which resulted in sweeping benefits for convicted felons, all for political advantage and power.

A loss of voting rights is condign punishment for those convicted of serious crimes and must never be taken off the table. At the same time, a second chance is also an important element in the realm of America’s pursuit of justice. This second-chance legislation will require assiduous monitoring to be judged a success. Who will monitor and measure its results? What will be the fiscal costs of monitoring such results?

A second chance is a good thing, an American thing. But justice trumps all other considerations. Kentucky’s approach would seem to have a much better chance of success than Virginia’s approach, which appears to be born of political advantage and power.

Pat Freibert is a former Kentucky state representative from Lexington. She can be reached at editorial@lanereport.com.
Professor Rob Keynton recognized an opportunity to connect the Speed School of Engineering with UofL’s Medical School. This resulted in the Department of Bioengineering, where he leads the way in creating biomedical products, conducting award-winning research and placing students in one-of-a-kind co-op programs.

See Rob’s story — or start your own — at UofLNow.com/stories
STATE: HEALTH INSURANCE COMPANIES SEEKING AVERAGE INDIVIDUAL PREMIUM INCREASES OF 22.3% FOR 2017

**REQUESTED PREMIUM INCREASES FOR KY MARKET**

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<th>COMPANY NAME</th>
<th>MARKET SEGMENT</th>
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**STATE:** PRODUCTION OF 1.8M BARRELS OF BOURBON IN 2015 IS MOST SINCE 1967

Kentucky’s iconic bourbon distilleries filled a whopping 1,886,821 barrels of amber nectar last year, breaking production records all the way back to 1967, according to an announcement from the Kentucky Distillers’ Association.

The previous all-time high was 1,922,009 barrels filled in 1967.

Since the turn of the century, Kentucky bourbon production has skyrocketed more than 315 percent and the commonwealth now has a total inventory of 6,657,063 barrels of bourbon – meaning there are now 1.5 barrels for every person living in Kentucky.

“This is astounding, phenomenal, mammoth,” said KDA President Eric Gregory. “We’re running out of adjectives to describe the growth and success of Kentucky bourbon. Plus, filling nearly 2 million barrels in one year should remove any doubts about the future of our signature industry.”

From an economic standpoint, distillers are paying $17,814,134 in ad valorem barrel taxes this year, another all-time high. Revenue from the ad valorem barrel tax funds education, public safety, public health and other needs in local communities where barrels are stored.

Long one of the state’s well-known industries, bourbon’s popularity has exploded in recent years. It is now a $3 billion economic engine that generates more than 15,400 jobs with an annual payroll topping $700 million and pours $166 million into state and local coffers each year.

KDA member distilleries are in the midst of a $1.3 billion building boom, from new production facilities to aging warehouses, expanded bottling lines, state-of-the-art tourism centers and more.
BARDSTOWN: LUXCO BREAKS GROUND ON $30 MILLION BOURBON DISTILLERY

Luxco’s held a ground-breaking ceremony in May for a new $30 million distillery in Bardstown. Pictured here at the ceremony are (left to right) Con. Matt Bevin; Michele Lux, wife of Luxco Chairman and CEO Donn Lux; Donn Lux; Kim Huston, president of the Nelson County Economic Development Association; Nelson County Judge-Executive Dean Watts; Bardstown Mayor John Royalty; and Luxco President and COO David Bratcher.

STATE and local officials joined Luxco executives on May 2 for a groundbreaking ceremony celebrating the Luxco’s first stand-alone, wholly owned distillery, a $30 million project in Bardstown that will create 34 full-time jobs.

Luxco currently contract distills its bourbon brands – Rebel Yell, Ezra Brooks and Blood Oath – through relationships with other distilleries. The new facility will give Luxco 100 percent control over quality and production volume of its bourbon.

The campus will include a 18,000-s.f. distillery and visitors center with a tasting room and event space. In addition, the company will construct up to six barrel warehouses on its 70-acre site off State Highway 245. Construction is slated to be complete by late 2017.

BOWLING GREEN: KOBE STEEL TO HIRE 105 FOR NEW ALUMINUM-EXTRUSION PLANT

KOBE Steel Ltd., one of Japan’s leading metal producers, is investing nearly $47 million to locate a new aluminum extrusion and fabrication facility next to a sister aluminum-forging plant in Bowling Green, bringing 105 new jobs to Warren County.

Kobe will construct its new facility, Kobelco Aluminum Products & Extrusions Inc., near the existing Kobe Aluminum Automotive Products LLC in the South Central Kentucky Industrial Park. Construction is expected to begin in June, with product fabrication operations expected to begin by December 2017. Kobe executives anticipate the plant’s melting, casting and extrusion areas will begin production by October 2018.

The new facility will help capitalize on the automotive industry’s growing demand for aluminum products. Federal fuel-economy requirements and consumer preference for more efficient vehicles are driving that demand. Automakers use aluminum in bumper beams, suspension components, body framework and other areas to lighten vehicles.

Founded in 1995, Kobe Steel operates worldwide under the Kobelco brand. The company added aluminum and copper supply to its lineup in 1917. The company employs more than 36,000 people at 97 locations across 16 countries.

KAAP, the sister facility in Bowling Green, opened in 2005 and currently employs a staff of approximately 375 who produce forged suspension components for cars and SUVs. Last fall Kobe announced a $57 million expansion – KAAP’s sixth – that will add 112 jobs.

BUSINESS BRIEFS

BOWLING GREEN

■ Contour Airlines has announced plans to begin daily commercial air service between Bowling Green-Warren County Regional Airport and Atlanta. The Tennessee-based airline will also begin offering seasonal service between Bowling Green and Destin, Fla. Contour will offer two flights a day between Bowling Green and Atlanta during the week, and one flight daily on the weekends. The service to Destin will be offered once a week. According to local reports, the airline hopes to start service to both destinations by late summer.

■ Alltech China and Western Kentucky University have teamed to offer a new internship program in conjunction with the Chinese Language Flagship Program at WKU. The language program – one of only 12 such programs in the nation – will now include internships with Alltech in China, where the company began doing business in 1994 to serve the local feed and livestock industry. Participation in the Alltech China internship will provide selected WKU students with the opportunity to further their Chinese language skills while exploring China’s unique business environment.

DANVILLE

■ The board of directors of the Boyle County Industrial Foundation has joined the Danville-Boyle County Chamber of Commerce in opposition to a proposal that would allow Kinder Morgan to transport natural gas liquids (NGL) from the Utica Marcellus areas to the Gulf Coast via a pipeline that would pass through Boyle County. Both the chamber and the industrial foundation cited the project’s potential negative impact on economic development in the community if an accident should occur, as has happened in other areas of the country. In those cases, pipeline leaks have contaminated groundwater, creating serious concerns for surrounding communities.

ERLANGER

■ Average airfares at the Cincinnati/Northern Kentucky International Airport have declined 20 percent year-over-year based on the 4th quarter 2015 Department of Transportation airfare report. CVG’s cost ranking among the top 100 airports in the U.S. dropped to No. 22 and is the lowest ranking achieved by CVG since the report started being published in 1985.

■ Frontier Airlines has added new nonstop flight service from the Cincinnati/Northern Kentucky International Airport to Philadelphia. The service operates on Monday, Wednesday, Friday and Saturday. The low-cost carrier also recently launched service from CVG to San Francisco, Los Angeles and Houston in addition to its nonstop flights to Atlanta, Dallas, Las Vegas, Orlando, Phoenix and Fort Myers.

FORT MITCHELL

■ Sullivan University has announced that it is opening a new location in Fort Mitchell. The Sullivan University Center for Learning-Northern Kentucky will initially offer education programs tailored to meet the needs of the region’s largest industries, including logistics and transportation management, business administration, healthcare management, and conflict management. The Northern Kentucky location will be led by Vicki Berling, a Northern Kentucky native who has held administrative and management positions at Northern Kentucky University and Thomas More College. In addition to its main Louisville campus, Sullivan has locations in Lexington, Fort Knox and Louisa, as well as an online division.

■ Integrity Express Logistics, a third-party logistics provider headquartered in Blue Ash, Ohio, has opened its fourth operation and first Kentucky facility in Fort Mitchell. The company – which specializes in less-than-truckload, truckload and intermodal freight brokerage – has invested $820,000 to renovate and equip a 4,300-s.f. building and plans to hire 30 full-time employees to staff the operation. The Fort Mitchell opening is part of a series of expansions for the family-owned company. A Tampa location opened last year, and a new facility in Chicago will begin operations later this year.

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JUNE 2016
FAST LANE

BUSINESS BRIEFS

FRANKFORT
■ In an effort to keep up with the increasing demand for its bourbon, Buffalo Trace Distillery is investing more than $200 million to expand its distilling operations in Frankfort over the next seven years. Seven buildings have recently been acquired or converted to serve as barrel warehouses, but with the company still struggling to keep up, Buffalo Trace plans to begin building 30 new barrel warehouses in 2017 on a 200-acre tract it purchased a few years ago. Plans call for one new warehouse to be built every five months for the next 10 years. For now, however, huge demand for Buffalo Distillery products has resulted in “shortages across the board for all brands,” according to distillery spokesperson Kris Comstock.

GEORGETOWN
■ Creform Corp., a material-handling systems company, is investing $4 million to build a 35,000-s.f. facility in Georgetown. The new plant will produce pipes and joints used to construct racking systems and automated guided vehicles used for shuttling materials inside automotive factories. Creform, a subsidiary of Japan-based Yazaki Kako Corp., has its U.S. headquarters in South Carolina and currently operates an administrative office in Georgetown. The new facility is expected to open by December and will create 10 new jobs.

HARRODSBURG
■ KeyTronicEMS, a company that specializes in printed circuit board assembly and turnkey contract manufacturing, has announced plans to close its Harrodsburg facility in order to “improve operating efficiencies.” According to paperwork filed with the state, the closure will be completed by June 22 and will affect 73 employees.

HEBRON
■ Hahn Automation Inc., a high-tech manufacturer of automation systems for the automotive industry and medical device markets, is investing $1.75 million to build a 20,000-s.f. addition and renovate existing space at its Hebron facility. The expansion, which is being handled by the Paul Hemmer Co., is expected to be complete by late September and will result in the creation of 30 new jobs.

HIGHLAND HEIGHTS
■ Northern Kentucky University has announced plans to launch a nurse anesthesia program to help fill the local and national shortage of certified registered nurse anesthetists. The program, which is now accepting applications for the May 2017 launch, is a 36-month curriculum that will culminate with a doctor of nursing practice (DNP) nurse anesthesia specialization. Graduates will assume the role of an advanced practice registered nurse (APRN) as a certified registered nurse anesthetist (CRNA). In Kentucky, only Murray State University currently offers the program. In Greater Cincinnati, the University of Cincinnati offers a master’s level DNP program.

■ General Cable Corp., a Highland Heights-based Fortune 500 company that is a leader in the wire and cable industry, has reached a definitive agreement to sell its North American automotive ignition wire business to Standard Motor Products Inc. for approximately $71 million. General Cable President and CEO Mike McDonnell said that while the automotive ignition wire business has been a strong performer over the years, the company determined that it needed to focus on growing its businesses in the electric utility, communication and industrial markets where it has leading positions, scale and sustainable profitability.

LEXINGTON
■ The University of Kentucky Federal Credit Union is building a 63,000-s.f. high-tech operations center near I-75 in Lexington to better meet the needs of its membership, which now totals nearly 64,000. The new structure, designed by Lexington-based architectural firm Brandstetter Carroll Inc. and built by DW Wilburn Construction Co., is scheduled to be complete by mid-2017. The expansion will add 25 jobs to the current 150-member staff.

STATE: KY TOURISM SEES STRONGEST ECONOMIC GROWTH RATE IN A DECADE

Kentucky’s tourism industry generated $13.7 billion in economic impact during 2015, an increase of 5 percent over the previous year and the strongest overall economic impact growth rate the state has seen since 2005. Kentucky tourism generated more than $1.43 billion in taxes, with $184.9 million going directly to local communities, and supported more than 186,000 jobs, including 6,200 jobs created in 2015.

“The economic impact numbers for 2015 reinforce the fact that the tourism industry continues to be an economic driver for Kentucky,” said Department of Travel and Tourism Commissioner Kristen Branscum. “Our growth in 2015 is a great indicator of how well we are marketing Kentucky and the encouraging way visitors are responding.”

The Kentucky Department of Travel and Tourism plans to build upon the six pillars of Kentucky Tourism (horses, bourbon, music, arts, outdoors and culinary) over the next year with creative marketing and programming that will reach new audiences and present Kentucky as a top-level destination.

In addition, commonwealth is investing $18 million to restore the Kentucky state park system and repair aging infrastructure, improvements that will further strengthen the tourism industry. Projects are underway at nearly 20 parks across the state and include structural repairs, painting, and interior and exterior upgrades. Parks Commissioner Donnie Holland said the funding “will go a long way” in updating the parks and refreshing them to their former glory.

MIDWAY: MIDWAY BOARD VOTES TO MAKE UNIVERSITY FULLY COED BY SPRING ’17

Midway University is transitioning into a fully coed institution with the board of directors’ recent vote in favor of admitting men to the university’s daytime undergraduate programs.

Midway President John P. Marsden said the decision ultimately centered on ensuring the institution remains viable during challenging times for higher education. With fall 2015 enrollment of 1,042 students, only 25 percent were enrolled in the Women’s College, and the residential population was under 200.

“We see this as an opportunity to overcome existing challenges we have faced with tight budgets, decreased interest in single-sex education, and a national trend in declining enrollments,” said Marsden. “We understand that this change will not come without some disappointment among some of our alums and others outside the university. However we cannot continue to preserve something that is unsustainable merely for nostalgic purposes.”

The university already offers coeducational programs in its evening, online, and graduate programs. Men will be admitted as commuter students in the traditional daytime programs for the fall semester; applications for male students in residence halls will be accepted for spring 2017.
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STATE: JUMP IN BREWERIES LEADS KY AG TO EXPLORE HOPS FARMING VIABILITY

The Kentucky Department of Agriculture (KDA) is in discussions with Western Kentucky University and the University of Kentucky to study the viability of hops production in the commonwealth, Agriculture Commissioner Ryan Quarles said.

“The number of craft breweries in Kentucky has grown more than 600 percent just in the past five years, and that has created a market for Kentucky-grown hops,” Quarles said.

“It’s important that we work with our universities on research to establish the best production methods for potential emerging crops such as hops.”

While noting that discussions and research are in the early stages, Quarles said hops could be a viable crop in eastern Kentucky as well as the more traditional croplands in central and western Kentucky.

A typical yield of hops is about 6,000 pounds per acre wet or 2,500 pounds per acre dry. A small craft brewery uses an average of 18,000 pounds of hops a year, but some use much more.

Alltech’s Lexington brewery, West Sixth Brewing and Country Boy Brewing use about 100,000 pounds of hops a year combined.

Kentucky’s craft breweries directly provide more than 460 jobs and have invested $27 million in start-up and infrastructure. This year alone, craft brewers have committed more than $22 million in expansions in Kentucky. Beer produced in Kentucky has an estimated economic impact of $495 million a year.

Hops production was widespread in Kentucky, particularly Northern Kentucky, until the early 20th century, when mildew, pests, droughts and fluctuating prices forced hop producers in the eastern U.S. to cease operations or move to the Pacific Northwest. Prohibition in the 1920s accelerated the decline of hops production in Kentucky. Today, 98 percent of U.S. hops production is in Washington, Oregon and Idaho.

LOUISVILLE: EXPANSION AT NTT DATA ADDS 300 FINANCIAL SERVICES JOBS

NTT DATA Inc., a major business and information technology services provider, is expanding its North American service delivery center (NASDAQ) in Louisville, a project that will create 300 new positions.

The expansion is part of the Texas-based company’s response to provide support for its growing financial services business in the United States.

The Louisville facility offers NTT clients a domestic, on-shore delivery approach to outsourcing that provides specialized skills, quality-control infrastructures, state-of-the-art security and cost efficiencies. The 300 new jobs in Louisville will all focus exclusively on financial services.

“NTT DATA currently works with 25 of the leading financial institutions in North America. The addition of a financial services focus at the NASDC further strengthens our ability to help financial services clients successfully manage the relentless pressures of regulatory compliance and capital requirements,” said Jim Mide, president of NTT DATA Financial Services and Insurance.

BUSINESS BRIEFS

LEXINGTON

■ DelCotto Law Group PLLC has opened an office in Louisville, its fourth location in addition to offices in Somerset, Danville and its primary location in Lexington. The boutique law firm handles individual and business debtor/creditor matters including financial disputes, restructurings and bankruptcies in all chapters. It also focuses on commercial litigation, mediation, and asset protection planning. The Louisville office will be led by member Jamie L. Harris.

■ The Georgetown Trading Co., which produces the James E. Pepper 1776 whisky, has announced plans to build a distillery, museum and tour destination in the historic remnants of the James E. Pepper Distillery in downtown Lexington. Col. James E. Pepper — in whose honor the Old-Fashioned cocktail was created — originally built his distillery on the site in 1879 and operated it until his death in 1906. The distillery continued operating until 1938, when it was shuttered and then abandoned for over 50 years, eventually falling into disrepair. Over the last few years a portion of the site and adjacent buildings have been revitalized as a vibrant ‘Distillery District’, full of thriving local businesses. A grand opening for the new distillery is planned for mid-2017.

■ Baptist Health Lexington has officially opened its new North Tower, the most significant structure of the hospital’s $246 million expansion project. The opening of the North Tower, along with renovations of the original hospital area, has resulted in the hospital now being able to provide each patient with a private room. The expansion also brings all of the hospital’s cancer services under one roof for the first time.

■ The U.S. Department of Energy has selected the University of Kentucky’s Center for Applied Energy Research for a five-year renewal of its United States-China Clean Energy Research Center (CERC) grant. CERC was created in 2009 by the DOE, the China Ministry of Science and Technology and the China National Energy Administration to facilitate joint research and development on clean energy by teams of scientists and engineers from the U.S. and China. The DOE grant totals $2.4 million over five years and will support CAER efforts to develop advanced coal technologies.

LOUISVILLE

■ BAE Systems has received a $72 million contract from the U.S. Navy to produce and deliver propulsion systems for Block IV Virginia-class submarines, which are designed to maintain their effectiveness in the deep ocean while incorporating new technology and features specifically for use in shallower coastal regions. Production will take place at BAE’s Louisville facility and will begin this year, with deliveries scheduled through 2022. The contract’s value could eventually amount to $162.9 million if all options are exercised.

■ On May 2, the board of directors of Louisville-based Stock Yards Bancorp declared a three-for-two-split of the company’s common stock. Stock Yards Chairman and CEO David P. Heinze said the split reflected the company’s strong performance and the board’s confidence in future earnings growth. The company’s total returns to shareholders over the past 10 years have increased 111 percent. The company operates offices in the Louisville, Indianapolis and Cincinnati markets.

■ Churchill Downs Inc. has announced an expansion of its Oxford Casino property in Maine that includes adding a $25 million hotel with more than 100 new guestrooms. The project is the second expansion of the Oxford facility since CDI purchased the property in July 2013. The casino currently employs more than 400 people and is the community’s largest employer.
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We are built on compassion and care.

We make certain that our members have dependable coverage in an often-undependable world. We help them navigate through daily life challenges and obstacles. And we pledge to not only help provide better health care, but the opportunity for better lives.

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**FAST LANE**

**BUSINESS BRIEFS**

**LOUISVILLE**
- Spalding University has officially opened its new “College Center,” which houses the university’s comprehensive outpatient rehabilitation facility. The facility is also home to EnTECH, which advances assistive technology education opportunities for individuals with special needs.

- Republic Bancorp Inc. has completed the previously announced acquisition of Florida-based Cornerstone Bancorp Inc. and its subsidiary, Cornerstone Community Bank, for approximately $32 million in cash. With the acquisition, Republic now has six banking centers in the Tampa-St. Petersburg-Clearwater area and 44 banking centers throughout the entire network.

- The board of directors of Louisville-based Brown-Forman has approved a two-for-one stock split for all shares of Class A and Class B common stock. Brown-Forman CEO Paul Varga said the decision “reflects the company’s confidence in our ability to sustainably grow our sales, earnings and cash flow over the long term.” The split is the company’s seventh in 35 years.

- Celebrity chef Guy Fieri has announced plans to open a new dining concept in Louisville’s Fourth Street Live dining and entertainment district this fall. Guy Fieri’s Smokehouse will be a flagship location of a new restaurant concept for Fieri and will feature smoked meats along with burgers, chops, sandwiches and vegan dishes. The restaurant is expected to open in early September.

**MAYFIELD**
- Remington Outdoor Co. has announced plans to close its firearms facility in Mayfield and will move the operations to the company’s plant in Huntsville, Ala. In a statement announcing the closing, the company said the move was part of an effort to “become more organizationally focused and competitive.” The closure is expected to be complete by the end of July, according to paperwork filed with the state, and will affect approximately 200 employees.

**NICHOLASVILLE**
- Alltech, a Nicholasville-based company that ranks among the top five animal health companies in the world, has acquired Keenan, a leading farming solutions company in Ireland. Established in 1978, Keenan has become a leader in farming solutions, focused on maximizing feed efficiency. Keenan interprets data for more than 1 million cows from nearly 10,000 farms in 25 countries around the world, representing one of the world’s largest field databases on dairy feed efficiency. The purchase represents the 14th acquisition by Alltech since 2011.

**WILMORE**
- Asbury University has entered into an agreement to obtain the rights to the name and legacy of Ichthus after Creation Festivals announced earlier this year that it was discontinuing the Christian music festival that has been held in Wilmore for decades, drawing as many as 20,000 people to the small central Kentucky community each year. Asbury has been highly involved with Ichthus over the years, supplying volunteers who contributed to the long-term success of the event. Mark Troyer, Asbury vice president for enrollment management, said the university will be considering how to merge the mission of Ichthus and Asbury in the future.

**STATE**
- Passport Health Plan has announced its new Improved Health Outcomes Program (iHOP), which will be providing grants to community agencies for innovative initiatives that demonstrate improvements in quality, access and efficiency in healthcare for Medicaid members or the uninsured. The program is now seeking proposals for the grants, with the first step being the submission of a letter of intent. Detailed information about the program and how to submit a letter of intent is available at passporthealthplan.com/about-us/our-services/improved-health-outcomes-program/ . The deadline to submit a letter of intent is July 13.

**PADUCAH: DIPPIN’ DOTS SEES SALES SURGE FOLLOWING 2012 ACQUISITION**

When private equity firm Fischer Enterprises LLC acquired Paducah-based Dippin’ Dots LLC in 2012, the Oklahoma company began implementing a growth strategy for the producer of the unique frozen ice cream treat that included developing a strong franchise base and the pursuit of partnerships with other well-known brands.

A little over three years later, it seems that strategy is paying off. Sales of the company’s core ice cream products jumped more than 60 percent from 2013 through 2015 and the robust sales growth is expected to continue, with sales on track for an additional 25 percent growth in 2016. Year-over-year franchising revenue grew by more than 45 percent in 2015 and is exceeding that pace so far this year.

Corporate growth is also being driven by the co-branding of Dippin’ Dots with Doc Popcorn, which specializes in fresh-popped, kettle-cooked flavored popcorn and was acquired by Fischer Enterprises in 2014. Co-branded Dippin’ Dots/Doc Popcorn outlets are currently operational in five states and an additional 15 co-branded units are expected to open in 2016.

Long a popular item at theme parks and stadiums, Dippin’ Dots – which was invented in 1988 by microbiologist Curt Jones – continues to be available in those venues. The company has added 350 new accounts in that sector in the 2013-2015 span, which helped increase nonfranchised sales by more than 33 percent.

Dippin’ Dots products continue to be made at the company’s production facility in Paducah and are distributed to all 50 states and 11 countries.

**ERLANGER: CVG ANNOUNCES ANOTHER 2 DEVELOPMENT PROJECTS ON 33 ACRES**

Just two months after officials with the Cincinnati/Northern Kentucky International Airport announced two major land development projects, two more initiatives have been announced that will continue the airport’s plan for revenue diversification and economic development.

CVG has entered into a lease agreement with Paul Hemmer Co. for the development of a build-to-suit facility for Bosch on approximately 11 acres of land. The second deal involves a lease agreement with Dermody Properties for development of a commercial warehouse/distribution facility on 22 acres of land.

Both projects are expected to be complete by April 2017. Part of CVG’s current five-year strategic plan includes land development with a goal to lease approximately 350 acres of land for development by 2021.

Earlier this year, CVG CEO Candace McGraw noted that “the geographic position of CVG is a highly desirable and strategic location for land developers. These projects create win/win/win opportunities for the airport, the community and developers. The airport receives new revenue streams, which lowers the cost of operations for airlines and tenants; the community sees job growth and economic development; and developers have access to over 75 percent of the U.S. population within 600 miles of the airport.”

12 JUNE 2016
STATE
■ The Council on Postsecondary Education and the University of Kentucky have completed an upgrade of the Kentucky Regional Optical Network (KyRON), a project that provides all public universities with a tenfold increase in high-speed access to Internet2, operator of the nation’s largest and fastest, coast-to-coast research and education infrastructure. The upgrade allows universities that are part of KyRON to transmit very large databases, conduct complex scientific research, and access remote computing systems. Research network connectivity at the 100G scale opens the door for a wide range of collaborative big data and other science data flows for research communities.

■ Kentucky has unveiled a statewide dual-credit scholarship program that will be made available to every Kentucky high school senior at no cost to the student. Funded with lottery proceeds, the program will allow students to earn both high school and postsecondary credits concurrently for approved courses, reducing the number of courses they have to pay for once in college. The program has been approved for the 2016-17 and 2017-18 school years.

■ Bullitt, Montgomery and Trigg counties have been certified as Kentucky Work Ready Communities, a designation that assures employers that a local workforce has the talent and skills necessary to staff existing jobs and master the technologies new jobs will require. The most recent certifications brings the total number of Kentucky counties that have achieved the Work Ready designation to 29. Another 39 counties are in progress to meet the goal and 37 have submitted a letter of intent. 

BUSINESS BRIEFS

STATE
■ St. Catharine College Board of Trustees Chairman John Turner announced on June 1 that the private school will close its doors for good at the end of July. Turner said a decline in overall enrollment, caused by the federal Department of Education’s (DOE) admitted wrongful withholding of student aid for several key academic programs proved too difficult to manage in addition to the debt obligation the college had assumed in recent years with the construction of new residence halls, a health-sciences building and a state-of-the-art library.

■ In an April newsletter, St. Catharine President Cindy Gnadinger said “a detailed and lengthy mediation process… failed to resolve the profound negative impacts that prior DOE decisions have had on our institution.” Furthermore, the DOE would not agree to pay damages to the college for diminishing its overall enrollment and reputation.

■ Prior to the problems with the DOE, enrollment was approximately 600 full-time students. Enrollment for the fall 2016 semester had declined to fewer than 475 students, a drop college officials attribute exclusively to the negative impact of the DOE’s refusal to allow financial aid for key programs.

■ St. Catharine administrators said they explored alliances with other institutions in an attempt to stay afloat, but such efforts proved unsuccessful. The college filed a lawsuit earlier this year to fight the DOE’s sanctions, but does not – despite donations from local sources – have the financial resources to continue while awaiting a decision.

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INDIANA

■ Winona PVD Coatings LLC, a provider of bright finish coatings for the automotive wheel industry, is investing more than $10 million to add high-tech equipment and machinery for a new production line at its plant in Warsaw, Ind. The new line is expected to increase production by 30 percent and will be housed in Winona’s newest 83,000-s.f. building, marking the company’s third expansion since its establishment in 2007. The new line will add up to 50 new jobs to the current 155-member staff by the end of 2016.

■ Barchayard has opened a new call center in Hamilton, Ohio, that is expected to create 1,500 new jobs by 2018. Barchayard is one of the fastest-growing credit card issuers in the country, with some 10 million customers.

■ German automotive and industrial supplier Schaeffler is investing $60 million to expand its automotive facility in Wooster, Ohio. The expansion will create 250 new jobs at the plant, which currently employs a 1,767-member workforce. The Wooster plant designs and manufactures transmission system components — primarily torque converters — for original equipment manufacturers around the world.

■ Digital Reasoning, a company that specializes in cognitive computing and artificial intelligence software, is adding 189 jobs as part of the expansion of its headquarters facility in Franklin, Tenn. The company’s Synthesys product allows users to listen to how humans communicate and learn from the context and content within their data to identify potential risks.

■ Memphis-based FedEx Corp. has completed its $4.9 billion acquisition of TNT Express, one of the world’s largest express delivery companies. Headquartered in The Netherlands, TNT provides road and air delivery services in Europe, the Middle East and Africa, Asia-Pacific and the Americas, and reported 2015 revenues of $7.7 billion.

■ Harry’s Fresh Foods is investing $34.3 million to locate a new production plant in the Nashville facility that previously housed beef jerky-producer Oberto. The Oregon-based company produces premium refrigerated and frozen soups, entrees, sides and desserts, using fresh ingredients that are sourced locally when possible, according to the company. The Nashville facility will employ more than 300 workers and will produce branded and private-label foods for club, retail and food-service customers. The plant is expected to be operational in the third quarter of 2016.

WEST VIRGINIA

■ WesBanco Inc. is acquiring Your Community Bank in a deal valued at $221 million. As of March 31, 2016, Wes-Virginia-based WesBanco had consolidated assets of approximately $8.6 billion while Your Community, headquartered in Indiana, had consolidated assets of approximately $1.6 billion. WesBanco plans to add two Your Community banking directors to its board of directors, and James D. Rickard, president and CEO of Your Community Bank, will become WesBanco’s market president for Kentucky and Southern Indiana. When the transaction is consummated later this year, WesBanco will provide banking services through 177 branch locations in five states. The acquisition will expand WesBanco’s franchise by 36 offices located throughout the Louisville, Elizabethtown, Lexington and Evansville MSAs.

TECHNOLOGY

■ Salesforce has announced plans to invest more than $40 million over the next 10 years to expand its regional headquarters in Indianapolis. As part of the new investment, the company plans to add 800 new jobs over the next five years. To accommodate the growth, the company will establish a new regional headquarters in downtown Indianapolis that will be branded as Salesforce Tower Indianapolis.

Salesforce specializes in customer relationship management and has become one of the world’s fastest growing software companies. The company is one of the largest technology employers in Indiana, with more than 1,000 employees in the Indianapolis area.

In announcing the expansion, Indiana Gov. Mike Pence noted, “In recent years, the technology sector has added more than 5,000 jobs in central Indiana alone, growing at a rate more than triple the national average.”

The company will begin moving into the Salesforce Tower in early 2017. The new headquarters will house both Salesforce and Salesforce Marketing Cloud, founded as ExactTarget in 2000. Plans call for the lobby to be renovated to create a dedicated space where guests can experience interactive, hands-on demonstrations of the company’s products.
HELPING SMALL BUSINESSES SUCCEED

After surveying 5,000 small businesses across the United States, the Federal Reserve Bank has released the results of the “2015 Small Business Credit Survey: Report on Employer Firms.” The chart below outlines some of the findings revealed by the survey results:

**TOP BUSINESS CHALLENGE BY TYPE OF FIRM**

<table>
<thead>
<tr>
<th></th>
<th>All firms N=2980</th>
<th>Growing N=482</th>
<th>Startup (0–3 years) N=230</th>
<th>Micro (&lt;$100K) N=316</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow</td>
<td>22%</td>
<td>24%</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Costs of running business</td>
<td>19%</td>
<td>23%</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>Hiring and/or retaining qualified staff</td>
<td>17%</td>
<td>16%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Revenues/sales</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Government regulations</td>
<td>10%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Taxes</td>
<td>9%</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Credit availability</td>
<td>9%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**DEMAND FOR FINANCING BY TYPE OF FIRM**

<table>
<thead>
<tr>
<th></th>
<th>All firms N=3454</th>
<th>Growing N=495</th>
<th>Startup (0–2 years) N=326</th>
<th>Micro (&lt;$100K) N=391</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application rate</td>
<td>47%</td>
<td>61%</td>
<td>55%</td>
<td>53%</td>
</tr>
<tr>
<td>Reason(s) for applying</td>
<td>Application rate (%) of employer firms</td>
<td>Expand business/new opportunity (%) of applicants</td>
<td>Operating expenses (%) of applicants</td>
<td></td>
</tr>
</tbody>
</table>

**LENDER SATISFACTION SCORE**

<table>
<thead>
<tr>
<th></th>
<th>Small bank N=619</th>
<th>Credit Union N=46</th>
<th>Large bank N=424</th>
<th>Online lender N=140</th>
<th>Other N=117</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lender satisfaction</td>
<td>75%</td>
<td>56%</td>
<td>61%</td>
<td>33%</td>
<td>33%</td>
</tr>
</tbody>
</table>

**SUCCESSFUL APPLICANTS’ REASONS FOR DISSATISFACTION**

<table>
<thead>
<tr>
<th></th>
<th>Lack of transparency</th>
<th>Long wait for credit decision</th>
<th>Difficult application process</th>
<th>Unfavorable repayment terms</th>
<th>High interest rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small bank</td>
<td>22%</td>
<td>22%</td>
<td>21%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Credit Union</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Large bank</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Online lender</td>
<td>51%</td>
<td>51%</td>
<td>51%</td>
<td>51%</td>
<td>51%</td>
</tr>
<tr>
<td>Other</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank
CORPORATE MOVES
New leadership for Kentucky businesses

ARCHITECTURE/ENGINEERING
• Kyle Wilson and Ernie Dreher have been named partners in the Louisville firm of TEG Architects.

ARTS
• Kevin Moore has been named managing director of Actors Theatre of Louisville Inc.

BANKING/FINANCE
• John Douglas has joined Old National Bank in Lexington as vice president, corporate relationship manager; Wesley Barringer has joined the bank as vice president, commercial lender.

• Community Trust Bank has announced the following appointments: Thomas McCoy – senior vice president and manager applications systems; Dwayne Stevens – vice president and corporate information security officer; Brian K. Hatmaker – senior vice president and building and facilities manager; Terry L. Spears – vice president and small business banking officer; and Zachary L. Cantrell – assistant vice president and assistant director of marketing/sales.

ECONOMIC DEVELOPMENT
• Helen Mountjoy has rejoined the Greater Owensboro Economic Development Corp. as director of workforce development and education.

• Tonita Goodwin has been named assistant director of the Kentucky Innovation Network at Richmond, based at Eastern Kentucky University.

EDUCATION
• Robert Schalkoff has been named inaugural director of Centre College’s Lincoin Scholars scholarship program; Gregory Chery has been named director of community service for the college.

• The University of Kentucky has announced the following appointments: James Griffioen – director of the Center for Computational Sciences; Jeffrey Johnson – director of the School of Architecture; William “Billy” Clark – director of research information service.

• The University of Kentucky Gatton College of Business and Economics has announced the following appointments: Nicole Jenkins – executive associate dean; Ken Troske – associate dean of graduate programs and outreach; and Nancy Johnson – associate dean of international affairs.

• Rusty Kennedy has joined Midway University as athletic director.

• Sherry Powers has been named dean of the Eastern Kentucky University’s College of Education. Justin McKinney has been named director of farms at EKU.

• Martin W. Smith has joined Transylvania University as vice president for advancement.

• Anthony McAdoo has been named executive director of the Western Kentucky University Alumni Association.

• Daniel Nadler has been named vice president for student affairs at Northern Kentucky University.

• The University of Pikeville has appointed Lori Werth as the university’s first provost.

EQUINE
• Laura Prewitt has been named executive director of the Kentucky Horse Park.

GOVERNMENT
• John R. “Rick” Bender has joined the Kentucky Department of Energy Development and Independence as executive advisor.

• Kenneth F. Bohac has been named inspector general of the Kentucky Finance and Administration Cabinet.

• The Kentucky Horse Racing Commission has appointed Steve May as supervisor of pari-mutuel wagering and compliance.

• Melanie Blandford has been named executive director of the Kentucky Department of Agriculture’s marketing office.

HEALTHCARE
• Cheryl Benze has joined UK Arts In Healthcare as creative arts clinical coordinator.

• Bonnie J. Hackbarth has been named director of communications for Foundation for a Healthy Kentucky.

• Matthew Hollenkamp has joined Edgewood-based St. Elizabeth Healthcare as vice president of marketing and public relations.

INSURANCE
• Gregory Hamlin has been named claims director for Lexington-based KEMI (Kentucky Employers’ Mutual Insurance).

• Carl Felix has been named vice president of Louisville-based Passport Health Plan.

LEGAL
• Ross T. Ewing and Daniel E. Whiteley Sr. have joined the law firm of McBrayer, McGinnis, Leslie & Kirkland as associates. Katherine K. Yunker has joined the firm as of counsel.

• Rene R. Savarise has joined Bingham Greensbaum Doll as a partner, practicing in the firm’s Louisville office. David W. Tandy has joined the firm as of counsel and is a member of the economic development practice group in Louisville.

MANUFACTURING
• Sarah Carlson has been named vice president of marketing for AutoGuide in Georgetown.

REAL ESTATE
• Steve Stevens has been named chief executive officer of the Kentucky Association of Realtors.

TECHNOLOGY
• Brian Ruschman has been promoted to vice president of C-Forward, an information technology services company headquartered in Covington.

UTILITIES
• David Hinson has joined American Water as director, corporate counsel for Kentucky American Water.

OTHER
• Leila Salisbury has been named director of the University Press of Kentucky, the scholarly publisher for the Commonwealth of Kentucky that represents all state universities, five private colleges and two historical societies.

• Scott Turner has been named chief operating officer of Bernheim Arboretum and Research Forest.

• Jennifer Park-Brown has joined Uspireus as director of community based services – Central Kentucky.
Kentuckians named to organizational leadership roles

AMERICAN ACADEMY OF PEDIATRICS
- Charles R. Woods Jr. has been elected incoming chair of the executive committee of the American Academy of Pediatrics’ section on epidemiology, public health and evidence. Woods is associate chair of the University of Louisville Department of Pediatrics and director of the department’s child and adolescent health research design and support unit.

ASSOCIATION OF COLLEGE AND UNIVERSITY PRINTERS
- Richard Tussey has assumed the presidency of the Association of College and University Printers. Tussey is director of auxiliary services in the division of business services/financial affairs at Eastern Kentucky University.

BEREA COLLEGE
- Rocky S. Tuan and Betty H. Olinger have been elected to the Berea College board of trustees. Tuan, of Pittsburgh, is the founding director of the Center for Cellular and Molecular Engineering at the University of Pittsburgh School of Medicine and director a multidisciplinary research program. Olinger, of Berea, has an extensive background in higher education and nursing and recently retired as chair of the School of Nursing at Kentucky State University.

CENTER FOR COURAGEOUS KIDS
- Brian Clemmons, president of the Moore/Allen markets for South Central Bank, has joined the board of directors of the Center for Courageous Kids in Scottsville. The center provides summer and weekend camps for children coping with a variety of illnesses.

KENTUCKY BAR ASSOCIATION
- Greg Dutton has been elected vice chair of the Kentucky Bar Association section of environment, energy and natural resources law. Dutton is of counsel with the firm of Goldberg Simpson.

KENTUCKY BOARD OF TAX APPEALS
- Marcus S. Carey, of Sparta, and Carlo R. Vessels, of Villa Hills, have been appointed to the Kentucky Board of Tax Appeals.

KENTUCKY BOXING AND WRESTLING COMMISSION
- The following individuals have been appointed to the newly created Kentucky Boxing and Wrestling Commission and Medical Advisory Panel: Chair – Chad E. Miller, Louisville; Co-Chair – Thomas W. Gilt, Louisville; Dr. Tad D. Seiffert, Louisville; and Timothy Nolan, California, Ky.

KENTUCKY HORSE PARK COMMISSION
- The following individuals have been appointed to the Kentucky Horse Park Commission: Tandy Patrick, Louisville; Nancy Cox, Lexington; Larry Bisig, Louisville; Porter Peeples Sr., Lexington; Bennie Sargent, Georgetown; Matt Dedden, Burlington; Rebecca Jordan, Georgetown; Lisa Ball, Lexington; William Ferko, Prospect; R. Paul Feemster, Smithfield; and Richard “Happy” Broadbent IV, Lexington.

KENTUCKY HORSE RACING COMMISSION
- The following individuals have been appointed to the Kentucky Horse Racing Commission: Chairman – Frank Kling, Villa Hills; Vice Chairman – John Roach, Lexington; Lesley Howard, Lexington; David Richardson, Louisville; Mark Simendinger, Eddywood; Breerer C. Jones Jr., Midway; Pat Day, Louisville; Doug Hendrickson, Mayville; Kerry Caughen, Lexington; Kenneth Jackson, Lexington; Gerald Holt, Munfordville; and Stuart Brown, Versailles.

KENTUCKY HOUSING CORP.
- Gail F. Lively, of Louisville, and Stephen P. Brunson, of Fort Wright, have appointed to the Kentucky Housing Corp. board of directors.

KENTUCKY LOTTERY CORP.
- Mark F. Sommer, of Louisville, has been appointed to the board of directors of the Kentucky Lottery Corp.

KENTUCKY MINE SAFETY REVIEW COMMISSION
- Attorney William D. Donan, of Louisville, has been appointed to the Mine Safety Review Commission.

KENTUCKY PERSONNEL BOARD
- Mark O. Haines, of Glasgow, has been appointed to the Kentucky Personnel Board.

KENTUCKY RETIREMENT SYSTEMS
- David Eager and John Farris have been appointed to the board of trustees of the Kentucky Retirement Systems. Eager, of Louisville, is a partner with the marketing and consulting firm of Eager, Davis & Holmes LLC. Farris is the interim vice president of investments and chief financial officer at Centre College and founder and president of Commonwealth Economics and LandFund Partners.

KENTUCKY STATE FAIR BOARD
- The following individuals have been appointed to the Kentucky State Fair Board, which oversees operations for the Kentucky Fair and Exposition Center: Mark Lynn, Louisville; Michael Poynter, Stanford; Marshall Coyle, Owingville; David Wallace, Verona; Mike Grisanti, Louisville; Joe Goggin, Danville; David Williams, Danville; Phil McCoun, Shellibury; Hoppay Bennett, Shellibury; Ryan Bivens, Hodgenville; Sharon Furches, Murray; and Jennifer Yue Barber, Louisville. Ex-officio members include: Don Parkinson, Louisville; John J. Quarels, Georgetown; Nancy Cox, Lexington; Wesley Estes, Russellville and Calvin Andries, Lawrenceburg.

MUSEUM OF EARLY SOUTHERN DECORATIVE ARTS
- Richard “Dick” H. C. Clay has been elected to the advisory board of the Museum of Early Southern Decorative Arts. Clay is a partner in the law firm of Dismuke & Shohil LLP working out of the Louisville office.

NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY ATTORNEYS
- William Thro has been elected as a member-at-large of the National Association of College and University Attorneys board of directors. Thro is general counsel at the University of Kentucky.

SIGMA BETA DELTA INTERNATIONAL HONOR SOCIETY FOR BUSINESS MANAGEMENT
- James Maxwell has been appointed to the board of directors of the Sigma Beta Delta International Honor Society for Business Management. Maxwell is a professor in the graduate school at Sullivan University–Lexington.

SOCIETY FOR THE ADVANCEMENT OF MANAGEMENT
- Jerry Sims has been appointed to the editorial board of the Society for the Advancement of Management (SAM) Journal. Sims is a professor of management at Sullivan University’s Lexington campus.

UNIVERSITY OF KENTUCKY
- Lee X. Blonder has been elected as a faculty representative on the University of Kentucky board of trustees. Blonder is a professor in the department of behavioral science and the Sanders-Brown Center on Aging.

UNIVERSITY OF KENTUCKY COLLEGE OF COMMUNICATION AND INFORMATION
- Angela Evans, Larry Forester, Lois Mateus and Peggy Noe Stevens have been named to the national advisory board for the University of Kentucky College of Communication and Information. Evans, of Lexington, is an attorney and serves as a council member of the Lexington-Fayette Urban County Council. Forester, also of Lexington, is senior vice president – senior lender for Cumberland Valley National Bank. Mateus, of Louisville, is a retired Brown-Forman executive and is chairman of the advisory board of the University of Kentucky’s Center for Rural Journalism and Community Issues. Stevens, of Louisville, has had a long career in the hospitality and marketing industries and currently works with corporations to design women’s research and strategy studies for corporations.
LANE ONE-ON-ONE
Kentucky’s leaders express their opinions

Mark Green: Give us a brief history of Mazak in Kentucky and what the ownership structure is.
Brian Papke: It’s family-owned by the Yamazaki family in Japan, and in 2019 it’ll be a 100-year-old company. We’ve been in Florence, Ky., since 1974. In Japan, it started as a very simple company making tatami mats, bamboo mats that people sleep on. The former chairman, Teruyuki “Terry” Yamazaki, is the one who took a completely different approach than most Japanese-owned companies. He internationalized much sooner than other Japanese-owned companies.

He started an office in Long Island with one American secretary and 20 to 25 Japanese guys. Today, we probably have 25 Japanese here full-time and 30 maybe in North America, out of about 1,100 people. We were the first Japanese-owned company to manufacture in the state of Kentucky. And I think there are about 160 now, many of which came through here quite a bit sooner than Toyota. Mazak in Florence started very small, 12,000 s.f., and grew to 800,000 s.f. today, plus what we call technology centers around North America.

MG: Why does this region have a significant history of machine-tool companies?
BP: This was a machine tool manufacturing center in the country. Cincinnati was the machine tool manufacturing capital of the world. That was why we came here. It wasn’t such an international industry many years ago. European companies came to areas like Milwaukee; Cleveland; Rockford, Ill.; and Cincinnati was the largest center. A lot of them were German. In Illinois, they were more Swedish. Milwaukee also was very German in heritage. The people settled here, and they started machine tool businesses.

Most of these guys were really strong entrepreneurs. They were very creative in making machine tools, but the industry looked so different than it does today. I had occasion to be in China on one trip at a big dinner in the Great Hall of the People, in Tiananmen Square, with maybe 1,000 people from the machine tool industry from all these different countries. We all felt at home with each other because the industry is so international today, but it’s not large. Countries want to make machine tools because it’s a gateway to other kinds of technology.

MG: It’s a cornerstone of manufacturing?
BP: It is and it’s radically, absolutely radically, changing. There’s a lot of opportunity for the companies that want to change and innovate — it’s a classic “Who Moved My Cheese?” scenario.

Machine tools are innovating in terms of software usage, and the eventual relationship to the internet of things (IoT) is considerable. We just spent three days with a cool group of people from Cisco Systems, the leading builder of equipment for the internet. We didn’t even know those people years ago; there wasn’t even an internet. Machine tools were hardware-based.

MG: How mature is the internet’s influence on the machine tool sector?
BP: We’re at the infancy. The Association for Manufacturing Technology (AMT) brings together a broad group of people — software providers and people who make accessories for machines and coolant manufacturers and truck manufacturers and a wide variety of people who affect manufacturing. We’re no longer just making machines that are hardware based. Some years ago, computer-controlled machines came into the picture, and they became more sophisticated. Then the controls evolved and started to look like your smartphone; they’re internet-compatible.

AMT wanted to do something for U.S. manufacturing to differentiate not just machine tools but manufacturing per se from things being done in other countries. It got together with a group from the University of California at Berkeley – I was on the AMT board at that time – and we embraced a whole new protocol they came up with called NT Connect, which is a connectivity standard. You use software and create analytics that allow you to get better utilization. It’s pretty complex stuff. And that’s before IoT.

MG: Before internet-of-things development? When was this?
BP: Just nine years ago. Now, that world has evolved. As we start doing that, we get involved with Cisco because they provide the cybersecurity for IT departments. Like big data for other things, big data manufacturing is coming. With networking of information and cloud-based technology, you can study patterns and make determinations. Companies today get high utilization of their equipment; the machines are more sophisticated and maybe they require fewer machines but more complex machines. They’re very dependent upon them, and they want them to run constantly.

One thing you can do is predict the maintenance that’s required – not just preventive but actually predictive. So a component is going to fail; when is it going to fail? That’s just one example. Mazak is a leader in terms of adopting that technology and trying to move this industry toward IoT.

World’s Manufacturers Rely on Kentucky Machine Tool Maker

President Brian Papke explains the digital revolution that is radically transforming business at Mazak Corp.

By Mark Green

Brian J. Papke
Brian J. Papke joined Mazak Corp. in 1987 and was named president in 1989. Papke is board secretary for the Association for Manufacturing Technology and a trustee of the MTConnect Institute, creator of a connectivity standard for the future integration of factories. Florence, Ky.-based Mazak is the North American manufacturing and marketing unit of Yamazaki Mazak Corp., headquartered in Oguchi, Japan. He is a Northern Kentucky Chamber of Commerce Board member and has taught MBA courses at Northern Kentucky University. A native of Milwaukee, Wisc., who grew up in Rockford, Ill., Papke is a graduate of the University of Illinois.
MG: How will that affect personnel needs?
It will require more technical skill to over-
see these more sophisticated machines,
but does it mean fewer workers?
BP: We’ve done so much in terms of
technology that supposedly reduces
employment, but it’s the opposite.
Employment has grown because we
found all kinds of things that provide
value to customers. Mazak’s employ-
ment has grown. And every time you
create a manufacturing job, it creates
anywhere from three to 10 other jobs.
There’s all kind of people who work
around this area who are not Mazak
employees, but they get their livelihood
as a result of what we do. But, yes, you
need experience with manufacturing.
As far as our needs, we were very
involved with the origins of Gateway
Community and Technical College in
2001. I personally went to Frankfort
and talked to Gov. Ernie Fletcher at the
time because we saw we have different
needs. We’ve got software engineer
needs that are obviously a growth area.
Companies today must be more auto-
mated in what they do, so there are
needs for automation-type engineers.
We can’t just sell machines to customers
as much as we did at one time; we have
to help them apply it. So we created
these technology centers in the build-
ing across the street and a whole group
of engineers are needed who help cus-
tomers apply those machines to their
operation. And then all the people in
the plant, making the machines.
We accepted the fact that we were
going to need more skilled workers and
that people were going to retire, and we
had to play a role in that. We started
recruiting people and actually paying
their tuition to Gateway.

MG: Are broad industry trends creating
an expectation for further growth?
BP: Everything kind of evolves. Years
ago everybody thought all manufactur-
ing was going offshore, and it was a mis-
take. Educational institutions, the
media, even the manufacturers them-
selves made some mistakes in that
assumption that all manufacturing was
going offshore. As we talk about the
kinds of products that we’re developing,
that are more high-tech, there’s a great
opportunity to do that here. There are
all kinds of smart products that are
being developed by companies that
want to do it here, but you have to set
up the right kind of manufacturing to
do it. You can’t do it the way you did 20
years ago. You need new automated
machines and so forth. Automation
requirements are increasing, and the
technology in terms of electronics and
internet capability and connections with
the machines is evolving, and that trend
is absolutely going to continue.

MG: What does the rise of the internet of
things, in which nearly everything is con-
ected continuously by the internet, mean
for your business? Already it has acceler-
ated your innovation, growth and change.
BP: Looking to the future of our indus-
try, this digital solution area is going to
play a bigger and bigger role. Not just
with the machines, but selling different
kinds of software that will be compatible
with IoT and that you can use for predic-
tive maintenance. There’s what we call
‘health monitoring’ of the machines,
where you’ve got a footprint of the
machine and then you can compare it so
that when somebody makes a part, they
know that the machine can do it. These
machines are incredibly accurate – we’re
talking tens of a thousandth of an inch
accuracy in their positioning. And
they’re getting more accurate all the
time, because the end products are get-
mg: is u.s. manufacturing growing today?
bp: the opportunity is there. we’ve seen it go down as a percentage of the gdp and kind of bottom out. it’s fluctuating around a little bit now, but actually we’ve seen this glimmer of hope that, as a percentage of the gdp, it’s going up. i see that continuing. this is still a huge manufacturing country.

people have a huge misunderstanding of what factories look like. factories are evolving! there are still some old factories that need to change, but as companies build new ones and new companies are coming online all the time, these are really neat places to work. people here are excited. we have very low turnover at mazak. however, there are work skills concerns because turnover is so low that although we are a relatively young company we now have an aging workforce. we have to replace people that are retiring and then we have our growth. it’s really evolving now.

mg: does mazak have difficulty finding enough skilled employees?
bp: it jumps around. on the whole, that is true. and in the future, we’re going to have more needs for high-tech people. the skill levels are going to go up, and then the wages will go up relative to their skill levels. there are great opportunities. and i see the same thing happening in other companies, because they have the same kind of skill requirements that are still evolving. the training levels that are going to come into play are going to be even higher than they are today. the skill needs we’re training people for right now are only going to become higher.

mg: how did mazak play a role in the 2001 creation of gateway community and technical college, which has created special training programs for you?
bp: gov. fletcher walked into the room, and i thought i was there just as one of the members who was providing input, and he said, “mazak, we’re going to decide what we’re going to do on economic grounds. i’d like to hear from you.” so right from the beginning we’ve been very vocal on the need for more skilled worker requirements, and that has continued.

mg: so gateway, from its origins, has had training programs that were, to some degree, designed to train employees for mazak?

bp: gateway provides the basic training that people need to work here, and then we have to supplement the training – things that make them specific to what our needs are. while they’re going to school, they also work here.

mg: how many employees does mazak have?
bp: i’ll say 700 in kentucky and about 1,100 total around the country.

mg: how many expansions has mazak had in the past decade, and why has this growth happened?
bp: there have been 16. this started with a building across the street that was originally 12,000 s.f. we now have 800,000 s.f. here in northern kentucky. and i don’t see it being the last expansion as we broaden our technology out. there are a number of reasons for that. one is, we invest in our own factories. this factory is a very high-tech factory. we’re a leading innovator, and we put in place ways of keeping ourselves competitive relative to other countries of the world that manufacture machines. significant numbers of products we sell are designed here, and some of those designs get transposed on a world basis, and we export some machines. so that’s played a role in our expansions.

we came up with this technology center concept, where we located facilities to help customers develop their manufacturing processes. we’ve changed from a machine tool manufacturer to a solution provider, and that made another significant difference in our business. we have wonderful people here frankly. among our north american operations, we only manufacture in kentucky – we never felt the need to go anywhere else. we just keep expanding here.

mg: how many products does mazak make?
bp: we can make 100 models of machines here. we can make 400 models around the world at different plants, but this plant actually probably makes the most number of models of any plant in the world. that’s because of our design capability; we can develop products here that match the market, which gives us opportunity for growth.

mg: what’s the price range?
bp: the price range would be anywhere from $100,000 to $2 million for a machine. but we also sell a lot of systems that integrate machines together; they can be much higher. one of the magic things we do is to sell machines that match smaller companies, and we have machines that match larger companies. we have products that match a wide-ranging number of industries. if you need a hip or knee, we’re the leading builder of machines for the medical service companies – the zimmers, the strykers, johnson & johnson, all the big ones – and a lot of small shops that make those components.

we’ve been the leading supplier for the oil service industry. we make machines for the mining industry. construction equipment: caterpillar is one of our largest customers, and so are all the companies that make parts for them. the aerospace industry is very active for us. we do a lot of semiconductors. automobiles, of course, and trucks. anywhere there’s a product that takes tolerance and precision machining, would be a mazak machine.

mg: your relationship with customers can be very collaborative. how many customers order straight from your catalog, as it were, versus customers for whom you have to create a customized product or system?
bp: it’s a blend. probably half the machines customers order are pretty standard, and then there’s another group of machines that there’s something completely unique about it. and then there are those – and that may be the other 25 percent – that have really got some engineering involved. special software, special handling, a lot of robotics involved that might be special. today there’s a lot of partnering in the industry among people who make specific products that come together with our products.

mg: is it significant for kentucky business and industry to have a machine tool maker like mazak located here?
bp: yes. and we’ve evolved into a company that is known everywhere in the world in manufacturing circles. we’re known as a high-tech leader in manufacturing. the international machine tool show in chicago every two years is the largest – it’s 1.2 million s.f. mazak is the biggest presenter and has the premier booth, front and center. but imts is much more than machine tools and draws companies from all over the world to show manufacturers all kinds of new technology related to manufacturing. that includes more software and iot compatibility as we look towards the future and adaptive technology that i spoke of, these adaptive machines.

mg: do the local or state economic development officials use mazak as a recruiting tool?
BP: A great deal of the companies that have come to Kentucky have come through our plant, looking at what we do and deciding where they’d like to locate. We have a very strong passion for this area. So we’re happy to do that, and I think we do set a nice image, because the equipment is very modern, the method of manufacturing is very up-to-date and the technology that we use is up-to-date.

MG: Is current public policy and government regulation for your industry at an appropriate level, or are there changes that you would advocate?

BP: We would like to see the tax code change. This country is the highest for corporate income tax. Not just for us – I’d like to see it change for manufacturers; that would improve the ability to recruit them and keep them here in the U.S. Looking at the future, there’s a danger that other countries could go further in terms of advocating compatibility in the IoT or Industry 4.0. I’m starting to see initiatives towards tax incentives for investment in that area by other countries. We’re the leading country, and you don’t see that being advocated. I’d like to see the government give encouragement to manufacturers to invest in IoT technology. But because of our international connections, I see that this could move faster in places like Japan, Germany and even China than here. The technologies are here, and the big guys in IoT are here. But there’s not really a specific incentive to invest in that.

MG: What are your expectations for growth and demand in the near term?

BP: Now is a slow time because of the global economy. For our customers who export to a place like China, if China’s economy is slow, then Caterpillar sells fewer machines, and their subcontractors make fewer parts, and that all comes back to us. Right now large construction equipment, mining equipment, farm equipment and the oil and gas stuff particularly all are slow. So that affects us. Aerospace is high, and medical is coming up, and the automotive industry is hot. Mazak is diverse, so we have some pluses and some minuses. But the net effect now is a little negative.

But the future? Excellent. I feel very good about manufacturing here and what can be done from a manufacturing standpoint. I’m also including Mexico, because the U.S. is so closely related economically. There’s a lot happening in Mexico for U.S. companies too.

MG: Do you have a closing statement?

BP: The future of manufacturing is going to be much different than we’ve known it. Even for people who feel comfortable that it has advanced and is different than it was, it’s going to be much different in the future, much more so. There are going to be very good job opportunities for people if they have the right backgrounds. And each manufacturing job will provide multiple jobs outside that company. I see it as a nice opportunity for us because our customers are all kinds of manufacturers who make precision equipment, and the way we’re going to address that is to be a continual innovator, come up with new products. So I think it’s going to be a strong success for this company.
Ford Motor Co. is nearing completion of a huge expansion in Louisville, and that is good news for the city and for Kentucky.

In a city that lost thousands of manufacturing jobs in the 1970s and ’80s, where manufacturing was thought to be in permanent decline, Ford’s growth represents an astonishing return to form.

“The type of investment Ford has made is in a category of its own,” Louisville Mayor Greg Fischer said in a recent interview. “And of course, those are good, strong, middle-class jobs. We’re the fourth-fastest city to recover from the Great Recession, and that’s in large part because of Ford and GE.” (Louisville-based GE Appliances — now in the process of being acquired by China’s Haier Group — also has invested significantly in recent years and has hired new workers.)

Todd Dunn, president of Louisville’s United Auto Workers Local 862, said vehicle output could exceed 850,000 vehicles annually at the two plants by next year, and he couldn’t be more thrilled. “We’re the largest union local in all of Ford,” he said — and that includes Detroit. “We build more than just cars and trucks,” he said. “We build the community.”

State officials are equally delighted.

“I can’t think of anything more rewarding than watching a long-time economic partner of Ford’s calibre reaffirm its commitment to Kentucky in such a big way,” said Mandy Lambert, Commissioner of Business Development for the state Cabinet for Economic Development. “And the impact goes far beyond the new jobs. The ripple effect is enormous, as suppliers provide parts and services to Ford, and new employees require housing, groceries, healthcare, schools for their kids and everything else people need every day. All the merchants and other providers these new employees do business with will then spend those dollars to buy their own goods and services, and so on down the line.”

Transportation has been at the core of Louisville’s business identity since its founding during the height of America’s war for independence. From pioneer days through steamboats, from auto manufacturing to the explosion of logistics-based companies such as UPS, Amazon and CafePress, the business of moving people and freight has always been in Louisville’s blood. Maybe that’s why, when it came time to build a new bridge over the Ohio River recently, Louisville paused for a moment and said, actually, let’s make it two.

Louisville’s start, officially marked as 1778 and credited to surveyor and Revolutionary War commander George Rogers Clark, was born of necessity. European explorers and traders plying the Ohio were forced to stop on its shore to avoid smashing their boats and risking death in the only falls — or more accu-
rately, rapids – interrupting the Ohio’s otherwise placid, 981-mile course westward to the Mississippi. For decades, travelers had to unload their river boats and reload them downriver to avoid the falls. That often meant overnight stays, which led to business opportunity, which led to permanent residence.

A canal was built in 1830 to bypass the falls and ease navigation on the Ohio, and by that time the arrival of steamboats had accelerated the city’s stature as a major trade center and greatly boosted its population. River traffic was slow, however, and railroads and automobiles were fast on its heels. In 1913 Henry Ford opened the city’s first automobile assembly operation at 931 South Third Street, employing 17 people who built a maximum of 12 Model T’s per day.

Fast forward another century, and Ford Motor Co. is investing $1.3 billion and adding 2,000 employees to its 47-year-old Kentucky Truck Plant (KTP) on a 413-acre site in the city’s eastern suburbs. Ford’s investment includes an all-new body shop, facility upgrades and retooling to build the new, aluminum-body, F-series Super Duty pickup truck. This is in addition to an $80 million investment in 2014 to meet growing demand for the F-250, F-350, F-450 and F-550, resulting in 350 new jobs, plus another $129 million investment (and 300 more jobs) to support Lincoln MKC production at the older Louisville Assembly Plant near the airport on the south side of town. The latter plant dates to 1955, and in 2012 it underwent a $600 million revamp to a flexible design so it could produce up to six different models at once – including the redesigned Ford Escape.

The upgrades – now nearly complete – bring total employment at Louisville’s Ford plants to just under 15,000, including nearly 8,000 at KTP. The two plants combined produce more than 2,000 vehicles per day, according to Ford spokeswoman Kelli Felker. Indeed, a report last June from the University of Louisville’s Urban Studies Institute on the economic impact of the automotive industry in Kentucky said that for every automotive manufacturing job created, another three-plus jobs are created in the broader economy. “These are among the largest employment multipliers of any industry in the state,” according to the report. “Combining assembly and parts manufacturing,” the report says, “the economic contribution of automotive manufacturing is 136,500 jobs, $14.3 billion in gross state product and over $6 billion in payroll.”

The report estimates that Ford and its suppliers in the Louisville area contribute $3,900 per job in income taxes and sales taxes to the state’s economy. All told, the report says, automotive manufacturing in Kentucky provides the state $488 million in such taxes. The industry provides another $116 million in local occupational taxes, with more than $50 million of that created in Louisville alone. According to the report, the average automotive manufacturing worker in Kentucky earns about $58,280 per year.

The real deal on real estate

Some of that money, of course, goes to housing. With inventory unusually low, the real estate market in Louisville these days is already “very hot,” especially for houses priced below $250,000, said Judie Parks, broker/owner of Berkshire Hathaway HomeServices Parks & Weisberg and an official with the Greater Louisville Association of Realtors. The heat will only rise with the Ford expansion, she said – although exactly how much is anyone’s guess.

Ford’s first Louisville operation in this 1914 photo completed assembly of 12 Model T cars daily. The vehicles were shipped already partially built in Michigan.

Workers pictured behind the first Louisville Ford plant at 931 S. Third St. in 1913. Front row left is Louis Millet, who retired 50 years later in 1963.

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Ford is expanding production of its popular F-Series Super Duty truck lineup made at the Kentucky Truck Plant in Louisville. The new models mark a major transition from steel to lighter aluminum, which boosts fuel efficiency.

workers through the community and technical college system.

- **Momentum** – Now that the automotive industry is well established, the decision to move or stay here is made easier.

Just as important as the four major assembly plants turning out finished vehicles are its suppliers, which now total close to 490 across the commonwealth. While most of the manufacturing is clustered around Louisville, Georgetown-Lexington and Bowling Green, 80 of Kentucky’s 120 counties can claim at least one automotive facility.

In 2015, the Kentucky Automotive Industry Association says, suppliers of parts, services and technologies announced 75 investments in the state, creating more than 2,500 new jobs. “It’s testimony to the health of the automotive industry in the state,” Tatman said.

**Aluminum: Let there be light**

One reason for the growth of suppliers is the emergence of aluminum in vehicle bodies. With its F-series pickups, Ford was among the first mass-consumption automakers to begin transitioning from steel to more lightweight aluminum in order to meet new government fuel-efficiency standards. The shift means a boom to Kentucky’s already vital aluminum industry.

A story in the Wall Street Journal last year said the growing use of aluminum in American vehicles – led by Ford’s F-series trucks – was a “transformational” event that led Netherlands-based Constellium NV, one of the world’s biggest aluminum companies, to shift its focus to the United States from Europe and build a $150 million plant in Bowling Green.

In October of 2014, Aleris, a worldwide company that had been producing automotive body sheet in Belgium for high-end European vehicles for over a decade, broke ground on a $350 million expansion of its Lewisport rolling mill in Hancock County to equip the site with the additional heat treatment and finishing capabilities necessary.

And a major Japanese metal producer, Kobe Steel, announced just last month that it would build an aluminum-forging plant in Bowling Green. The $46.7 million project is expected to create 105 jobs.

**Kentucky’s powerful appeal**

It’s not just Ford either. The auto industry throughout the rest of Kentucky is in serious growth mode as well. General Motors has added 316 new jobs and invested a total of $617.5 million since 2011 in its Corvette assembly plant in Bowling Green. Toyota Motor Corp. last fall rolled its first-ever U.S.-made Lexus, the popular ES 350, off its assembly line in Georgetown, creating 750 new jobs on a $360 million investment. The plant, which opened in 1988, continues to produce Toyota’s perennially best-selling Camry and its flagship sedan, the Avalon.

So why Kentucky?

The Urban Studies Institute report says Kentucky has plenty to offer Ford and other automotive manufacturers, including:

- **Location** – “Auto Alley” has been shifting south from Detroit for decades, and Kentucky has consistently promoted the fact that it’s within a day’s drive of most of the population centers of the eastern U.S.

- **Highways** – A 2006 industry study noted that the presence of interstates and other limited-access highways significantly increases the likelihood of a manufacturing plant locating there. A strong rail network and access to river transportation are also important. Kentucky has all of the above.

- **Utility costs** – As of 2014, Kentucky’s cost of industrial electricity was the fourth-lowest in the nation.

- **State incentives** – Kentucky benefits by offering packages to employers that subsidize training for potential new hires, he said. “I might feel better about the economy and decide to buy a new house, a new boat, a new car. A rising tide floats all boats.”

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“I do know that people already have purchased houses because of this expansion,” Parks said. Still, she said, the full impact on home purchases might not be felt for two or three years, after new workers have had time to save up for a down payment. Since many of the new Ford employees are just starting their careers, some will be moving out of Mom and Dad’s house into an apartment of their own – or will move from their first apartment into a nicer apartment.

Parks said there is already an uptick in rental demand, and two large new developments totaling almost 600 apartments now under construction on Westport Road a few miles west of the plant might be just the ticket for some Ford workers. But Parks said the benefits of Ford’s growth will spill across the entire community, not just near the plant.

“Whenever a company does expand, it always helps the entire local economy and real estate market. It gives consumers confidence, even if they don’t work at Ford,” she said. “They might see their neighbor doing better and go out and buy new appliances.”

Dave Tatman, executive director of the Kentucky Automotive Industry Association, said the optimism that comes with new hires is contagious.

“It’s what I call the ‘halo effect,’” affecting more than just those who get the new jobs,” he said. “I might feel better about the economy and decide to buy a new house, a new boat, a new car. A rising tide floats all boats.”

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Tatman, who worked for GM for many years before moving to the industry association, said aluminum is not new to automobiles, but new technologies make the use of aluminum more feasible for lower-priced vehicles now.

By 2025 more than 75 percent of pickup trucks and 20 percent of SUVs and large sedans produced in North America will be aluminum-bodied, according to the Urban Studies Institute’s report. This represents an aluminum body sheet content 10 times greater than 2012 levels, “with even more room to grow beyond 2025,” the institute said.

Louisville’s economy is far more diverse than it was 50 years ago, with healthcare, logistics, food service, bourbon production and more all sharing the limelight today. But manufacturing is stronger – and more sophisticated – than ever.

“We’ve got about 75,000 jobs in manufacturing now,” Fischer said. While some manufacturing jobs require a college diploma, others do not. “People in high school say, ‘Well, I want to work with my hands.’ Ford is a place you can go and have a stable, middle-class job for the rest of your life.”

Cary B. Willis is a correspondent for The Lane Report. He can be reached at editorial@lanereport.com.

Ford’s 47-year-old Kentucky Truck Plant produces the F-250, F-350, F-450 and F-550 work vehicles. KTP and the Louisville Auto Plant, maker of the Ford Escort and Lincoln MKC, together produce around 2,000 vehicles a day and employ about 13,000.
HACKERS breached the computer database of retail giant Target in 2013, affecting 40 million customers’ data and costing the retail chain more than $116 million. It was the first large public breach, but others quickly followed. Today no company, large or small, is immune.

Importantly, as this number of computer breaches has skyrocketed, so has the need for experienced cybersecurity specialists. Job titles such as information security analyst are projected to grow as much as 18 percent by next year, according to the U.S. Bureau of Labor Statistics — much faster than other jobs. In addition, the jobs pay well, with a median annual salary of $90,120 for those with a bachelor’s degree.

Filling these jobs will be difficult, however, according to many computer experts, including Amy Justice, senior security and compliance consultant for SDGblue LLC in Lexington, a professional information technology company specializing in security, network infrastructure, and technology and consulting services.

Two reasons dominate. First there is a skills gap. “Many computer science majors learn scripting, programming and logging,” Justice said, “but they don’t graduate with the critical thinking skills needed to analyze risks.”

Second, those critical-thinking skills largely come with experience, and that experience today is mostly a chicken-or-egg kind of thing. “Employers look for and typically require around five years of experience for security engineers,” she said, “but potential employees find experience hard to come by since there are few internships.”

For example, Justice said SDGblue offered two internships recently. They had more than 50 applicants for the two positions.

James Walden, associate professor and director of the Center for Information Security at Northern Kentucky University, agreed.

Many big hacking targets remain “The demand for cybersecurity has increased greatly in the last few years,” Walden said. “There have been a large number of public data breaches, many in retail and healthcare. There are also a lot of rumors about banking breaches. The next big hacking targets will be cars, medical devices and home security devices. Everything on the internet can be hacked.”

Kentucky programs aim to fill demand for IT skills created by successive business data breaches

BY DEBRA GIBSON ISAACS
And a skills gap? “Definitely,” said Walden.

Computer science program “curriculum standards don’t require security courses yet,” he said. “Students can earn a degree in computer science without taking any courses in cybersecurity.”

Even so, several Kentucky schools are offering courses and certificates in cybersecurity designed to help students prepare for these jobs.

NKU has been offering a track in networking and security since 2005. The university also offers a minor in computer forensics and computer science, a graduate degree in corporate information, and in 2014 added an online certificate in online security.

The 18-hour certificate program covers information technology fundamentals – databases, operating systems, networking, programming – to provide a foundation for learning about the major areas of cybersecurity, including cryptography, secure programming, network security, authentication, access control, security policies and governance, and web security.

“While the certificate includes courses that overlap with majors in computer information technology, business informatics and computer science in the College of Informatics, it can be paired with any major,” Walden said.

The National Security Administration (NSA) and the Department of Homeland Security (DHS) has named NKU a National Center of Academic Excellence in Information Assurance/Cyber Defense Education.

Filling skills gap a national priority

The NSA and the DHS jointly sponsor the National Centers of Academic Excellence in Information Assurance/Cyber Defense programs. The goal is to reduce vulnerability in the national information infrastructure by promoting higher education and research in IA/CD and producing a growing number of professionals with IA/CD expertise in various disciplines.

For students, these designations offer several benefits. First, students attending designated schools are eligible for scholarships and grants through the Department of Defense Information Assurance Schol-
arship Program and the Federal Cyber Service Scholarship for Service Program. Secondly, employers recognize the value of these designations, giving students an edge when it comes to employment.

The University of Louisville is also a National Center of Academic Excellence in IA/CD Education. UofL offers a graduate certificate in network and information security. The graduate certificate in network and information security is designed for advanced computer professionals as well as students majoring in disciplines other than computer engineering and computer science.

“The certificate gives masters’ students an advantage over other students looking for jobs,” said Roman Yampolskiy, associate professor of computer engineering and computer science at the UofL Speed School of Engineering.

UofL has a Cybersecurity Laboratory, which Yampolskiy directs. Lab members research a multitude of topics related to security of cyber infrastructure.

“The lab’s strengths include work in behavioral biometrics, game security, artimetrics (robot authentication), forensics, passwords and cryptography,” the professor said.

Eastern Kentucky University and Kentucky State University also offer degrees in cybersecurity.

Co-ops, internships, competitions
EKU offers a bachelor of science degree in network security and electronics; two BS/master’s programs in network security and electronics; two associate of applied science degrees in technology and computer electronics concentration; and a minor in computer electronics technology.

Students are encouraged to participate in the university’s cooperative education program in areas related to computer systems, networks, electricity and electronics. They work as interns in IT, computer support, help-desk, network, web development and electrical with local industries.

KSU also offers a certificate in information security. A computer science background isn’t required to earn the certificate. Students just need to complete 12-13 credit hours.

Students at all of the programs also learn through competitions, most notably the National Collegiate Cyber Defense Competition.

Three types of competitions prevail:
• Time management – the pressure to perform against the clock
• Infosec skills – practical applications of knowledge in live fire scenarios
• Teamwork – the ability to work well with others.

According to their website, these competitions ask student teams to “assume administrative and protective duties for an existing ‘commercial’ network – typically a company with 50-plus users, seven to 10 servers, and common internet services such as a web server, mail server and e-commerce site.

Each team begins the competition with identical hardware and software and is scored on its ability to detect and respond to outside threats, maintain availability of existing services such as mail servers and web servers, respond to business requests such as the addition or removal of additional services, and balance security needs against business needs.

Throughout the competition an automated scoring engine is used to verify the functionality and availability of each team’s services periodically and traffic generators continuously feed simulated user traffic into the competition network. A volunteer team provides the ‘external threat’ all internet-based services face and allows the teams to match their defensive skills against live opponents.”

It is yet another way to prepare potential employees for a job in high demand.

“There is a huge shortage of people for these jobs right now,” said U of L’s Roman Yampolskiy. “Every company wants one. Every company needs one. There is nothing hotter in computer science.”

Debra Gibson Isaacs is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.
Creating her own Cyber Defense major is what Morgan set out to do at WKU. Through the help of a faculty advisor and the Honors College at WKU, Morgan was able to design a unique major in the exact career field that she has been interested in since she was a child. Through her major, Morgan has had the opportunity to get hands on experience by conducting research with professionals in the Cyber Defense field. The Honors College at WKU has enhanced her college experience and provided Morgan a path to achieve her specific career goals.

MORGAN TAYLOR
Tompkinsville, KY
“Today’s interstates and roadways are essentially rolling warehouses,” said Kentucky Association of Highway Contractors Executive Director Chad LaRue. “Our society runs on just-in-time delivery at this point.”

For Kentucky to fully take advantage of its U.S. logistical prowess and to better ensure the safety of working in, living in and traveling through the state, keeping roads maintained and new ones built is crucial.

Projects are huge instant job creators both for the contractors performing the work as well as the suppliers that provide the resources used.

And it promotes better tourism in the state.

Travelers don’t need to look far to see the proof that Kentucky is working hard on its roads.

Louisville’s and Southern Indiana’s $2.3 billion Ohio River Bridges Project is the most noteworthy one underway.

Beyond Louisville, plenty more is happening. This spring, the General Assembly passed a two-year, $4.5 billion spending plan on 1,239 total Kentucky roads and bridge projects. Major projects in House Bill 305 include continuing the expansion of the Mountain Parkway in Eastern Kentucky, the single largest dollar item in a plan that also funds projects on many of the state’s largest interstates.

“There’s a challenge in constantly upgrading our infrastructure,” said Erik Dunnigan, acting secretary of the Kentucky Cabinet for Economic Development. “The challenge is to do it while keeping the state’s economy moving.”
The Abraham Lincoln Bridge, right, in downtown Louisville is part of the Ohio River Bridges Project. Its adds six lanes to I-65’s north-south traffic capacity, improving the region’s already strong logistics capabilities.

With the expansion of the Mountain Parkway, Dunnigan and LaRue hope to see Eastern Kentucky become a bigger manufacturing player and gain a much-needed economic boost.

Exports statewide are improving. Last year Kentucky exported a record $27.6 billion in goods and services, and in the first quarter of 2016 the state improved on that pace compared to the same months of 2015.

“It’s safe to say our highways, roads and bridges helped move a significant portion of those exports,” Dunnigan said. “Our highway and road networks provide gateways to the U.S. South and Midwest. Major logistics companies, including UPS, DHL and FedEx, as well as distribution-related businesses – notably Amazon and certainly many others – recognize these benefits and continue to reinvest, expand and create jobs here.”

In Northern Kentucky, DHL Express announced a $108 million expansion of its hub at the Cincinnati/Northern Kentucky International Airport last May.

Each year, Kentucky’s asphalt contractors pave thousands of miles of smooth, sustainable roadways and highways. It’s a big job and we’re glad to do it.
“While it concentrates on air cargo, a substantial number of the DHL hub’s packages — whether coming or going — travel Kentucky highways,” Dunnigan said. “Believe me, our state wouldn’t have been in the running for that additional investment if our infrastructure didn’t meet and exceed the company’s needs.”

Infrastructure improvements in Northern Kentucky will be vital to keep the progress going. With an estimated $750 million replacement price tag, the outdated and overcrowded Brent Spence Bridge that carries Interstates 71 and 75 across the Ohio River to connect Northern Kentucky and Cincinnati is a major dilemma.

Public officials and engineers alike say a new bridge is a must. It consistently ranks among the nation’s worst bridges and sees a lot of accidents for drivers.

LaRue cites a May report by The Hill, a Washington-based political news website, ranking the Brent Spence Bridge as the No. 1 most dire transportation need in the United States. According to that report, the 55-year-old bridge is responsible for moving 4 percent of gross national product, but it’s handling double the amount of traffic that it should.

Finding the funds to improve or rebuild that bridge will, like the Ohio River Bridges Project in Louisville, be yet another challenging but economically necessary roads project.

“I do think as a general rule our roadways are probably on par with other states,” LaRue said. “I liken it to owning a house; it’s maintaining what we have and keeping it in good operating condition.”

The work is paying off. Dunnigan said cabinet officials hear from prospective companies considering moving here that they are impressed with the quality of highways and roads that the state offers.

Sarah Davasher-Wisdom, chief operation officer of Greater Louisville Inc., said the city foresees increased development in the next decade as a result of the massive Ohio River Bridges Project that involves two brand new bridges and major improvements in existing infrastructure.

“The largest piece of this project is the construction of the two new bridges, but included within it is the ‘untangling’ of what is known as Spaghetti Junction, where I-65, I-64 and I-71 come together,” she pointed out. “This will greatly improve safety on all three interstates thanks to the elimination of tight curves and short merges.”

This safety is crucial to an area like Louisville that is so dependent on being able to move goods quickly and attract new talent.

“Over 30 years, the Ohio River Bridge Project is expected to generate an average of 15,000 new jobs every year and $29.5 billion in personal income according to a study done for the Indiana Finance Authority,” said Davasher-Wisdom, adding that the project has already had a major economic impact on the state through construction jobs and generating more interest in the region’s major corporate parks like River Run and River Ridge.

But it’s not just business that will benefit. Louisville has talent attraction and quality of life in mind.

“Quality of place and life is a key component of growing any economy,” Davasher-Wisdom said. “These bridges are a fantastic addition to our region because they will allow more people to travel to and from their homes to job centers faster. When you cut down on commute time, people are more satisfied with where they work and live. These projects will also increase economic growth and opportunities in our region, which is an important factor in improving the quality of life for everyone in our region.”

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

The $2.3 billion Ohio River Bridges Project includes “untangling” improvements to Louisville’s notorious Spaghetti Junction intersection of three interstates: I-65, I-64 and I-71. The project is expected to generate an average of 15,000 new jobs annually for 30 years, according to a study for the Indiana Finance Authority.
Good Roads
Save Lives

A modern, well-maintained road system is vital to the growth and sustainability of the communities of the commonwealth. Kentucky Association of Highway Contractors’ member companies build and maintain the bridges and roadways that provide safe, efficient travel for everyone in Kentucky whether they are commuting to work, moving commercial goods, providing services, traveling to school, or driving for pleasure.

The 156 contractor members and 138 associate members of the Kentucky Association of Highway Contractors provide an estimated 25,000 jobs throughout Kentucky.

Highway contractors will be working hard this season to build and maintain Kentucky’s roadways. Please drive safely and slow down when driving through highway work zones.

Good Roads Save Lives.

Kentucky Association of Highway Contractors

502.223.3422 | kahc.org
WHEN you think of the arts industry in Kentucky, at first quaint school craft shows, gallery hops and hip designers might come to mind. The reality is that the arts and crafts business in the state is worth billions of dollars and accounts for more jobs than the commonwealth’s acclaimed automotive and aircraft manufacturing sectors combined.

Seven-year-old Hound Dog Press prints with historic units built from 1892 up to the 1960s. Both men attended the University of Kentucky as art majors, Baute said, and feel fortunate to have full-time jobs and a business in the art industry, especially in a time when most people want things printed quickly and cheaply.

“We feel really supported, especially in Louisville,” he said. “It’s a very supportive of small business here.”

Other artists, whether they run sustainable businesses in their chosen craft or not, are feeling the love, too.

The Kentucky Arts Council, led by Executive Director Lori Meadows, is working hard to get the state’s creatives the support they need. She and her colleagues are in tune with artists around the state, what they are producing and how much, and what their needs are. They know many by name.

“Kentucky certainly has a really strong arts heritage and has for generations,” Meadows said. “Particularly in things like craft and music and the literary arts. One of the things that we often hear from panelists that come in from out of the state is the fact that we don’t have the arts just in the major cities and more urban areas, but we really have things going on across the entire state. That doesn’t always happen in other states.”

Breaking down the numbers
In Kentucky, the creative industry collectively employs 108,498 people, according to a study the council commissioned. It found there are 60,504 direct jobs. There are another 11,708 direct creative jobs in non-creative enterprises, and 36,286 indirect jobs in the arts and crafts industry, mostly supply-chain-related.

“The study looked at four different sectors, within what we define as Kentucky’s creative industry,” said Creative Industry Manager Emily Moses of the Arts Council. “Those are visual artists, which includes craft, performing artists, all of the design fields (including landscape, architecture, graphic design), and communication and media, which includes advertising.”

Creative work is the primary source of income for 31 percent of people who responded to the Arts Council’s survey, and 37 percent are also employed elsewhere. Nearly 20 percent were retired but still doing creative work.

“That number is many times larger than the proportion of self-employed people across all other industries in Kentucky,” Meadows noted.

These jobs account for 2.5 percent of Kentucky’s total employment and annual earnings of $1.9 billion. The average wage of a creative worker is $34,299.

An area not included is education and its art teachers, Meadows noted.

The council tracks sales partially through its annual three-day Kentucky Crafted: The Market event, “which has a wholesale and retail component. That makes us different from most other shows,” Meadows said.

Participating artists must be adjudicated into the Kentucky Crafted program annually. This year’s market took place in March in Lexington, and usually averages around $1 million in sales.
Its 2015 economic impact was estimated at $1.3 million.

Programs like Kentucky Crafted and the Kentucky Arts Partnership help artists around the state thrive. The latter program provides money to support operations of 90 to 100 arts organizations across the state, including Lexington’s LexArts.

The Kentucky Arts Council awarded just over $1.4 million in 2015, supporting 607 full-time jobs, 974 part-time jobs and 1,980 contract-for-service positions. Recipient organizations generated federal tax revenue of $5.3 million, $1.45 million for the state, and $550,000 to municipalities and counties. The council’s support also helped recipients leverage nearly $62 million in other funds.

Business training offered
Those are big numbers but offer no guarantee of success to Kentucky artists and organizations.

“Whatever we have found is that artists needed assistance in basic and advanced business training,” Moses said. “Things like financing, legal resources, living and workspace, technology, computer and web-related activities. Always, we find that artists need assistance with marketing.”

Kentucky has a good mix of working professional craftspeople with higher education and training and those who are self-taught.

“Regardless of the category, they usually didn’t take business classes,” she said, “yet they are operating a small business. We can help people in the creative industry by connecting them and providing business training for them.”

The council partners with several organizations to offer business training courses and works with entities like the Mountain Association for Community Economic Development in Berea, and Kentucky Community and Technical College in Hazard, which is offering the state’s first Etsy Craft Entrepreneurship Program. Many such programs are free or very inexpensive.

The Arts Council relies heavily on federal and state funding. Across the state, Meadows said, organizations, artists and communities are becoming more savvy about applying for federal funding, and she’s seen an increase in grants from National Endowment for the Arts programs.

“And there is a lot more collaboration among different organizations and community entities, and working across industries. We are seeing more partnerships forming and more networking,” she said.

The Arts Council is diligently reaching out to Kentucky’s business community about the importance of the arts, Meadows said, and created purchase awards and incentives at this year’s Kentucky Crafted for businesses who bought artwork by Kentucky artists for their places of business.

International love
Appreciation of Kentucky art attracts collectors and distributors come from around the world. Meadows noted that Paducah is world renowned as a quilting hot spot. The western Kentucky town has an official United Nations Educational, Scientific and Cultural Organization Creative City designation for its folk art. Meanwhile, the council is thrilled to see a major entity like 21c Museum Hotels open its location in Lexington, making Kentucky the only state with two of the unique art venues.

“Kentucky also has an incredibly active literary community, much more so than some larger states,” Meadows said. “We have some really talented and important writers here. … They are being published out there internationally.”

The state is known for its basket makers, and has craftspeople like willow-furniture makers, video game creators, public art creators and so much more.

And Kentucky is welcoming of arts from other countries. For example, the council has funded two master apprenticeships in Lexington for the pipa, a Chinese stringed instrument.

Education will help carry the torch of art, even for non-artists
Teaching Kentuckians to appreciate as well as produce art also aids in improving outcomes for everyone, regardless of the field in which they eventually work.

“Arts education in school is really critical. Having arts education can teach you collaboration, partnerships, solving problems and thinking outside the box,” Meadows said. “As we are looking at some of the skills needed for the 21st century workforce, creativity and innovation are two of the most important things.”

Everyone has an innate desire to create, whether they think they have artistic talent or not, according to Judith Pointer Jia, an art professor at Centre College in Danville.

“Creating art of any kind involves problem solving,” Jia said. “People taking a class in the arts learn new ways of thinking critically about a problem and then finding technical and conceptual solutions to it. People gain an appreciation for the processes involved with creation of an end product. That is valuable knowledge that can translate into many areas – manufacturing, for example.”

Centre art majors “have gone on to work in the fields of architectural preservation, art therapy, teaching, dentistry, art auctions, museum and gallery work in addition to becoming professional artists,” Jia said.

Bookbinder Melissa Oesch is among the juried artists who participate in the annual three-day Kentucky Crafted: The Market sales event of the craft and artwork of commonwealth artists.
## THE LANE LIST

### KENTUCKY’S LARGEST HIGHWAY PROJECTS
Currently active projects ranked by dollar value

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CONTRACT AMOUNT</th>
<th>CONTRACTOR</th>
<th>PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson</td>
<td>$891,819,440.42</td>
<td>Walsh Construction Co.</td>
<td>Louisville Southern Indiana Ohio River Bridges Project</td>
</tr>
<tr>
<td>Hardin/Hart/Larue</td>
<td>$138,485,749.38</td>
<td>Scotty’s Contracting and Stone LLC</td>
<td>Tennessee state line to Elizabethtown. Widen I-65 to six lanes from MP 78.6 to MP 82.2 in Hardin County</td>
</tr>
<tr>
<td>Marshall/Trigg</td>
<td>$131,501,214.28</td>
<td>Johnson Brothers Corp.</td>
<td>Cadiz to Aurora (US 68/KY80); Bridge over Kentucky Lake</td>
</tr>
<tr>
<td>Trigg</td>
<td>$128,285,913.55</td>
<td>PCL Civil Constructors Inc.</td>
<td>Cadiz to Aurora Road (US 68)/Bridge Replacement</td>
</tr>
<tr>
<td>Trigg</td>
<td>$54,242,008.83</td>
<td>Rogers Group Inc.</td>
<td>Cadiz to Aurora; from Averitt Lumber Road to Cadiz Bypass – grade, drain and surface with bridge</td>
</tr>
<tr>
<td>Fayette</td>
<td>$53,223,132.98</td>
<td>LM Asphalt Partners LTD dba ATS Construction</td>
<td>Reconstruction of KY 4 (New Circle Road) and US 60 (Versailles Road) interchange</td>
</tr>
<tr>
<td>Perry</td>
<td>$42,655,967.57</td>
<td>Bizzack Construction LLC</td>
<td>Improve safety, upgrade geometrics and capacity issues for KY 15 from Morton Boulevard to Bonnynan</td>
</tr>
<tr>
<td>Bullitt</td>
<td>$40,972,000.00</td>
<td>Louisville Paving Co. Inc.</td>
<td>KY 61 begins south of KY 44 and ends north of the newly constructed Conestoga Parkway</td>
</tr>
<tr>
<td>Marshall</td>
<td>$37,862,591.74</td>
<td>Jim Smith Contracting Co. LLC and Affiliates</td>
<td>Reconstruct I-24 Julian Carroll Parkway interchange (149 corridor improvement)</td>
</tr>
<tr>
<td>Magoffin</td>
<td>$28,655,882.09</td>
<td>Bizzack Construction LLC</td>
<td>Widen the Mountain Parkway to four lanes from 0.4 miles east of KY 3050 overpass (MP 71.0) to 1.1 miles west of bridge over Licking River; bridge with grade, drain and surface</td>
</tr>
<tr>
<td>Owsley</td>
<td>$25,738,599.33</td>
<td>LM Asphalt Partners LTD dba ATS Construction</td>
<td>KY 30 from north of Jct KY 947 at Traveller’s Rest to end of new construction to KY 11 at Levi; grade, drain and surface with bridge</td>
</tr>
<tr>
<td>Trigg</td>
<td>$25,543,388.32</td>
<td>Rogers Group Inc.</td>
<td>Cadiz Bypass (US 68) design build</td>
</tr>
<tr>
<td>Graves</td>
<td>$24,146,349.49</td>
<td>Jim Smith Contracting Co. LLC and Affiliates</td>
<td>Reconstruct Julian Carroll Parkway intersection with the Mayfield Bypass to provide superior through movement to the parkway; bridge with grade, drain and surface</td>
</tr>
<tr>
<td>Warren</td>
<td>$23,857,883.74</td>
<td>Scotty’s Contracting and Stone LLC</td>
<td>Construction of new I-65 interchange in Warren County; bridge with grade and drain</td>
</tr>
<tr>
<td>Nelson/Bullitt/Spencer</td>
<td>$22,671,726.80</td>
<td>Bizzack Construction LLC</td>
<td>Relocation of US-31E from just south of Whitesides Drive in Nelson County to the Salt River Bridge in Spencer County; grade and drain with alternate pavements</td>
</tr>
<tr>
<td>Magoffin</td>
<td>$22,298,409.04</td>
<td>Bizzack Construction LLC</td>
<td>Mountain Parkway (KY 9009) widening and safety improvements from MP 73 to 1.1 mile west of Licking River; grade and drain with asphalt surface</td>
</tr>
<tr>
<td>Letcher</td>
<td>$21,180,501.42</td>
<td>Bizzack Construction LLC</td>
<td>Partridge to Oven Fork Section 4, US 119 relocation from 0.1 mile west of Brown Branch to 0.15 mile west of KY 806; bridge with grade, drain and asphalt surface</td>
</tr>
<tr>
<td>Magoffin</td>
<td>$19,418,066.97</td>
<td>Bizzack Construction LLC</td>
<td>New interchange at Gifford Road from 0.7 mile west of Middlefork Licking River Bridge (MP 69.6) to approx. 0.4 mile east; bridge with grade, drain and surface</td>
</tr>
<tr>
<td>Fayette</td>
<td>$19,111,174.97</td>
<td>LM Asphalt Partners LTD dba ATS Construction</td>
<td>Newtown Pike Extension – priority 3; from Versailles Road to Broadway (Phase III); asphalt surface with grade and drain</td>
</tr>
<tr>
<td>Warren</td>
<td>$16,998,021.56</td>
<td>Scotty’s Contracting and Stone LLC</td>
<td>Construction of new I-65 interchange in Warren County; grade and drain with asphalt surface</td>
</tr>
<tr>
<td>Floyd</td>
<td>$16,140,884.40</td>
<td>Hi-View LLC</td>
<td>Minnie-Harold Connector from Boy Hollow of Simpsons Branch to Little Mud Creek; grade &amp; drain with asphalt surface</td>
</tr>
<tr>
<td>Pike</td>
<td>$15,481,614.57</td>
<td>Hi-View LLC</td>
<td>Pikeville to Virginia state line US 460/KY 80 from Beaver Creek near Flat Fork to Beaver Creek Station 883+00 near KY 1573; grade and drain</td>
</tr>
<tr>
<td>Wolfe</td>
<td>$15,292,136.01</td>
<td>Hinkle Construction Services LLC</td>
<td>Reconstruct KY 205 from the Wolfe/Breathitt County line to the Mountain Parkway; grade, drain and surface with bridge</td>
</tr>
<tr>
<td>Jefferson</td>
<td>$14,532,000.00</td>
<td>Hall Contracting of Kentucky Inc.</td>
<td>Remove and replace ac pavement on US-51W from just south of Gene Snyder interchange (MP 6.69) to intersection of KY 1931; asphalt pavement and roadway rehab</td>
</tr>
<tr>
<td>Hopkins</td>
<td>$14,042,963.01</td>
<td>Road Builders LLC</td>
<td>Reconstruct Morton’s Gap interchange at MP 37.07 in Hopkins County to interstate standards (I-65 corridor improvement); grade, drain and surface with bridge</td>
</tr>
</tbody>
</table>
For many people, purchasing art and handmade craft may seem to be an easy transaction. You go into a gallery, look around, select a work that speaks to you and pay the artist or the gallery director. That’s the case if you’re buying a painting or a piece of handmade jewelry, but larger pieces like metal sculptures, handmade furniture or stained glass panels require more finesse in getting from the maker to the buyer.

If the drive is no greater than 12 hours, many artists will transport pieces themselves and do installation, if necessary, on site. That’s the case with furniture maker Mark Whitley of Smiths Grove.

Whitley has operated his studio, where he makes handmade contemporary furniture, since 2000.

“I rarely ship,” Whitley said in a phone interview as he was driving home from delivering a piece to a client in Asheville, N.C. “It’s a real pain to crate it and to try to deal with it on a truck shipment. You never know what’s going to happen.”

Indeed, shipping an item almost cost Whitley a pretty penny when sending a piece to his alma mater, Chapman University in Orange, Calif.

“The university president commissioned a rocking chair that was school-themed,” Whitley said. “I knew I had to crate it and ship it.”

Whitley said he forgot to write the quoted price – $400 – on the bill of lading, when the driver got to the university, he demanded that the president pay $1 per mile – $2,700 – for the shipment.

“That was two-thirds the cost of the chair. I got a call from the president. He wasn’t happy,” Whitley said. “He’s a guy I wanted to keep happy, but he wrote the check anyway.”

“I thought I had to eat that, but I called the trucking company, talked to a nice person and they refunded the money to the president.”

Stained-glass artist Guy Kemper of Versailles witnessed his work nearly being destroyed in transit.

During the delivery of a glass sculpture to the Woodford County Thoroughbred farm of the late Sheikh Maktoum bin Rashid al Maktoum, the former ruler of Dubai, Kemper’s truck encountered a rushing wind.

“I heard a thump and looked in the rearview mirror.”

What Kemper heard was the crate coming out of the truck and landing on the road, catapulted out of the vehicle by a powerful gust of wind.

“Luckily, somebody stopped and helped me load it back into my truck. A couple of pieces were broken, but I was able to fix it and take it to his farm for delivery to Dubai.”

Lexington stone sculptor Julie Warren Conn also believes in the do-it-yourself approach to delivering her art.

“Sheedi.”

Conn has gone the extra mile – or several – delivering to clients in the past. When she lived in Oregon, she drove her forklift across town to unload her pieces from a truck that had gone ahead of her and waited at the installation site.

“That’s not something I want to do too much,” she said. “They don’t go too fast and they’ve got no shocks.”

Whitley said transporting pieces, and the trials associated with that necessity, are the cost of doing business.

“If you’re going to be in business, you have to be where the buck stops,” he said. “If something goes wrong, I feel it’s my responsibility to fix the situation. I’ve made that a rule.”
A Passion for Making a Difference
Ky. State Treasurer Allison Ball is a force to be reckoned with

Q&A

AT 34, Kentucky State Treasurer Allison Ball is the youngest female statewide elected official in the country. The Prestonsburg native earned her Juris Doctor from the University of Kentucky College of Law and has a lot to say about the state’s future.

TLR: As the 38th State Treasurer of Kentucky, you are the youngest statewide female elected official in the country. How does that make you feel?

AB: I hope that my position will inspire other women to pursue the things that they feel called to do. I hope it encourages more young women to get involved and assume leadership positions. So often we think that you have to wait until you are older, when your children are grown, or when you have retired, before you can do something of significance, and this is particularly true for young women. We need more young women to rise to the challenge and become leaders. Studies show that businesses and other organizations are more successful, more productive, and more civil when men and women work together. We need more women’s voices in Frankfort. Women work together. We need more productive, and more civil when men and women organizations are more successful, more productive, and more civil when men and women work together. We need more women’s voices in Frankfort.

TLR: Your colleague, Kentucky Agricultural Commissioner Ryan Quarles, is the youngest of all statewide elected officials in the country. What do you think this uniquely prepared you to be the state treasurer?

AB: Prior to becoming state treasurer, I spent four years prosecuting child abuse cases in Prestonsburg. That experience taught me about the importance of protecting vulnerable people. I also developed a backbone and learned that there are times that you have to fight for what is right. After serving as a prosecutor, a buddy of mine from law school and I opened a practice in Pikeville focused primarily on bankruptcy law. I helped a lot of coal miners who had lost their jobs and teachers who were worried about their retirement. That experience deepened my desire to help people in need and has uniquely prepared me to have the skill set to do the job of State Treasurer.

TLR: What do you hope to do for all Kentuckians through your new post?

AB: I see where our money is going, and that gives me a unique awareness of the seriousness of our financial situation. I understand the necessity of getting our financial house in order. I will continue to do my part as a watchdog of our state’s money, and I intend to fight for sound fiscal policies on the various boards that I sit on.

TLR: What has been the most surprising thing you have done while working in state government?

AB: I think it says something very positive about Kentucky. It says that we have people who, at a young age, want to make a difference, serve their state, and bring energy and fresh ideas to old problems. Commissioner Quarles and I are old friends and former classmates, and I am very proud to serve alongside him in Frankfort. I don’t think it’s a coincidence that the two youngest male and female statewide officer holders in the United States ran on the platform of fiscal responsibility.

TLR: Your career so far has been marked by taking on tough subjects, like bankruptcy and juvenile delinquency. How do you think this uniquely prepared you to be the state treasurer?

AB: When I was very young, I got an allowance of five dollars a week. I was very happy and felt like life was going exactly the way I wanted it to, until I turned nine years old. At that point, my parents came to me and said, “Allison, we have decided to stop giving you an allowance because giving you an allowance is only teaching you socialism.” True story. They told me that I had become spoiled and expected everything to be given to me. They were probably right, because my first reaction was to pout and show them all that I was still entitled to an allowance simply because I was a child in the family. After a while, it became apparent that my parents were serious, and if I ever wanted to buy toys or go to the movies again, I would have to figure out some way to earn money. That’s when I started my own business. I started Positive Pencils International (I was thinking very big), and sold pencils that had positive sayings on them like “I can do it” or “I’m a winner.” I sold them for 25 cents each or four for a dollar. The week that I started my pencil business, I sold pencils to everyone I could, and by the end of the week, I earned $200. I remember thinking, “Mom and Dad were right!” I suddenly felt that I could do anything if I just worked for it. — Abby Laub

$2 Billion Business in Fayette County

For the first time, tourism and travel-related spending in Fayette County topped the $2 billion mark. To be exact, visitors forked over a total of $2.02 billion in 2015, which was up from $1.95 billion in 2014 for total travel expenditures.

A Birdseye View in Newport

If you’ve traveled to London – the one where they talk funny – and taken a leisurely ride on the London Eye overlooking the Thames, you can have the same experience beginning next summer in Northern Kentucky. Newport on the Levee, the city of Newport and a St. Louis-based company reached a deal this spring to add a SkyWheel attraction on the bustling riverfront. The $10 million-plus attraction will draw an estimated 500,000 visitors every year, where they will enjoy spectacular views of the Ohio River, downtown Cincinnati and the surrounding Kentucky and Ohio hills and communities.
Gerry Seavo James had just finished a 137-mile overnight nonstop standup paddleboard trek on the Ohio River when we spoke on the phone to discuss his work with the Explore Kentucky Initiative.

“It was one of the most tiring things, mentally and physically, that I’ve ever done,” James said. That’s a lot coming from a member of the Air Force.

The former “military brat” and Campbellsville University graduate, quickly fell in love with the state’s underutilized outdoors scene and environmental conservation projects when he moved to Kentucky for school.

After graduating in 2013, his career led him to Louisville, where he launched the nonprofit Explore Kentucky Initiative and is creating a new firm called Ascend. Ascend will provide social media content, photography, videography, graphic design, event planning for outdoors-related organizations, and 10 percent of the proceeds will go back to helping Explore Kentucky.

The 26-year-old Air Force reservist already has proved he can pull off the marketing thing.

In the early days of Instagram, he began using it to share photos of his outdoor adventures and realized he was onto something when people from China were commenting on photos of Cumberland Falls.

Now the EKI offers guided trips, plans volunteer conservation events, assists adventurers with planning excursions around the state and helps educate the public about the opportunities available to explore the state.

His favorite thing to do is standup paddleboarding – better known as SUP – on the Ohio River around Louisville.

“The reason why is because by paddling on the Ohio River it’s me taking back the river,” he said. “Because it’s viewed as a dirty place, industrial and commercial. There’s a Louisvillian sort of generational prejudice against the river. It’s an act of defiance against the cultural norms, and helping others by getting out there. Outdoor recreation is not just about the fun, but it’s the way you become a steward of the land.”

“SUP is my big passion,” said James, an American Canoe Association certified canoe instructor and SUP guide, adding that Kentucky has thousands of waterway miles suitable for SUP.

He encourages other young people to get into the sport because it is so easy to do. Grab some SUPs and head to Big South Fork.

“That’s one of the most under-utilized national parks in the state,” he said, noting that in one quick weekend you can explore majestic waterfalls, rock climb, hike, bike on trails, camp, swim and SUP. — Abby Lamb
When former Kentucky coal miner Harold C. “Sonny” Koger decided to keep a slice of McCreary County’s coal mining legacy alive, his dream was to restore the mining camp where his father, Austin, had worked for 48 years. Born in Fidelity Coal Camp and raised in another, called Cooperative, until the age of 14, Sonny knew about coal camp life.

In the late 1990s, former Stearns Mining Co. President Frank Thomas began selling off parcels of McCreary County land to the federal government. Koger convinced the man to sell the Barthell parcel – the site of the first of 18 Stearns Coal and Lumber Co. camps – to him for restoration of the coal camp.

Thomas, however, had one condition: Koger’s restoration had to be historically accurate. So Sonny engaged the University of Kentucky to do an archival study, which revealed the original locations of 41 houses and nine buildings that had been occupied and tended from 1902 until the early 1950s.

After six years of reconstruction, the Barthell Coal Mining Camp opened in 1999 as a public attraction, sharing boundaries with the U.S. Forest Service and National Parks Service (NPS). Even before opening, the project garnered the NPS Southeast Region’s 1993 Preservation Award and the Ida Lee Willis Memorial Foundation’s Service to Preservation Award in 1995.

“It’s a real step back in time to a culture not a lot of people know much about,” says Richard Koger, who has run the camp along with brothers Dwight and Brian and his mom, Marilyn, since his dad passed away in 2003.

“The Coal Facts
Restored coal camp pays homage to hard-working miners of yesteryear

BY KATHERINE TANDY BROWN

Originally occupied actively from 1902 through the 1950s, the Barthell Coal Mining Camp in McCreary County reopened in 1999 after six years of restoration. Its wide range of buildings include this structure with a museum and meeting rooms as well as “company houses” for overnight stays.

Because Sonny worked hard to make his vision as close to the original camp as possible, visitors have a lot to experience.

A guided camp tour features a number of antique-filled buildings, such as the Bath House, where filthy miners showered at the end of the day to remove workday grime before changing back into street clothes. The School House features period furnishings of both a school and a church, since it originally served as both for the community, while the Doctor’s Office displays numerous 20th-century medical artifacts. Other structures include a machine shop, mining motor displays, a company store, a reconstructed circa 1890s log cabin, “Granny’s House” and a moonshine still. Lots of antique cars and trucks are on display, and a museum brings together the whole coal camp story.

A second guided tour travels around 300 feet into Mine #1, from which the first trainload of coal was shipped in June 1903. As Sonny Koger planned, this peek into a historic shaft pays well-deserved homage to hard-working miners. Visitors learn about the dirty, difficult and dangerous job of a 20th-century coal miner. During 10-hour days, a man had to pick and shovel hunched over, as the ceilings in mine shaft tunnels were too low for standing up. Miners loaded coal into small cars, which had to be pushed to areas where mules hauled them away from the mine. Inside, the mine air was stale and dusty, and some 1,500 men per year would develop a breathing ailment called black lung. Many miners were killed or injured by rock falls and gas explosions.

Located right in the middle of Daniel Boone National Forest, the Barthell Coal Mining Camp lies adjacent to the country’s newest national park, the Big South Fork River and Recreational Area.

If you’re looking for a place to put your feet up for a few days to commune with nature, the camp has 12 reconstructed “company houses,” all with central air and heat. While the floor plans are original 20th century, the interiors are modern, complete with maid service, if requested. Nine are one-bedroom and three are two-bedroom; the one-bedrooms have hide-a-beds and will sleep four. Each has a living room, full bath, kitchen and dining area with fridge, microwave, toaster and coffeemaker. All are furnished...
with antiques from the time the mine was operating, 1902 through 1948.

When hunger hits, either cook your own or take a short drive to Whitley City and pure nostalgia at The Dairy Bar, a 1950s-style diner that still has curb service.

Meeting rooms are available at Barthell for special events and family reunions. Think girlfriend getaways amid lovely wildflowers and towering cliffs.

All houses have porches with swings that overlook the camp and Paunch Creek, with ripples that will lull you to a good night’s sleep. Stay five consecutive nights, and the sixth is free. Consider making Barthell your base of operations while you take in the nearby attractions.

You can hike and go whitewater rafting, canoeing or kayaking in the Big South Fork River and National Recreation Area, catch a moonbow or simply ogle the beauty at Cumberland Falls State Resort Park, go boating on Lake Cumberland, hop aboard a choo-choo on the Big South Fork Scenic Railway, and explore historic Stearns and the Stearns Mining Co.’s Mine No. 18 at Blue Heron.

Barthell’s Coal Mining Camp is open from the first of April through mid-November. Guided tours of the camp and the mine are $15 each or $25 for both tours. Learn more about Barthell’s storied history, make reservations and get directions at (888) 550-5748 or barthellcoalcamp.com.

Richard Koger sums it all up nicely. “Dad’s father and his father all worked for the Stearns Co. I’m as proud of his legacy as he was.”

Katherine Tandy Brown is a correspondent for The Lane Report. She can be reached at editorial@lanereport.com.
OVER the last few months, University of Kentucky law students have lived and breathed StreetLaw—a brand-new student organization at the UK College of Law dedicated to teaching high school students and members of the Lexington community about law and the legal system.

Working under the supervision of faculty advisor Cortney Lollar, assistant professor of law at the UK College of Law, and local attorneys Carmen Ross and Lindsay Perdue, UK Law students have utilized their legal education to teach real-life lessons in law and government to high school students, empowering them to go forward and make positive changes in the community, while also inspiring them to consider a future legal career. Lessons taught include criminal and civil law, employment law, housing law and family law.

The idea for StreetLaw at UK came from the national nonprofit organization that began in 1972, when a small group of Georgetown University Law Center students developed an experimental curriculum to teach District of Columbia high school students about basic legal principles. It was Lollar’s vision to establish such a program at UK Law and use it to make a difference in the Lexington community.

Following Lollar’s initial announcement of StreetLaw at UK, 60 law students quickly jumped at the idea to join. Bryan Station High School and Martin Luther King, Jr. Academy for Excellence in Lexington agreed to be host schools.

“The administrations at both schools recognized the value of the StreetLaw program for their students and were willing to provide both their students and our students the opportunity to further their education in a very hands-on way,” Lollar said. “The law students and the high school students both learned a lot from each other over the course of the semester.”

In December, the organization held elections to establish an executive board. The elected board members then drafted and approved a constitution and provided training to certify 30 student teachers. With strengths, diversity and law class variation in mind, student teachers were paired off to complement each other in the classroom. After modernizing problems contained in each lesson, student teachers gave trial presentations to coordinators and volunteer attorneys who provided valuable feedback and direction.

UK Law students successfully taught 20 lessons this past semester, 10 at each of the two participating high schools, with 10 to 12 students at each lesson. At the end of the 10-week period, each participating high school student was presented with a certificate at an awards celebration in recognition of their accomplishment.

Looking ahead to the next school year, the organization is planning to continue the initiative, with the hope of adding a third high school into the program.

“Our goal was to make a small difference;” said third-year law student Thomas Wall, “but the impact this unforgettable experience had on us as law students was profound.”
Kentucky Agriculture Commissioner Ryan Quarles joined other state officials and science experts on May 9 to announce a partnership of the Kentucky Department of Agriculture and the Kentucky Department for Public Health (DPH) to prevent the spread of Zika virus in Kentucky.

The campaign, called “Fight the Bite Day and Night,” aims to provide information to the public about the Zika virus and ways to avoid being bitten by the mosquitoes that carry it.

The U.S. Centers for Disease Control and Prevention says the Zika virus is spread to people primarily through the bite of an infected *Aedes* species mosquito and the virus has been identified by the World Health Organization as an international public health threat. There are no known cases of Zika transmission occurring in the state of Kentucky – or any part of the United States – at this time and Zika virus is not known to be circulating in the mosquito population in Kentucky. However, the DPH and the Department of Agriculture are working together to respond to mosquito control issues if the virus enters the state’s mosquito population and emphasizing the importance of localized and individual prevention.

“We need every Kentuckian to be a part of this effort,” Quarles said. “Citizens can do their part by eliminating areas of standing water that could serve as breeding grounds for mosquitoes – puddles, old tires, buckets, and any household items that potentially could fill with water if left outside. With your help, we can help minimize the spread of the Zika virus across the commonwealth.”

The KDA’s Division of Environmental Services sprays for mosquitoes at the request of local officials and local health departments. The division operates ultra-low-volume (ULV) fogging machines for mosquito control in parks, summer camps, and other outdoor areas where people congregate. (To find out more about the KDA’s mosquito spraying program, including a mosquito spraying schedule, go to kyagr.com and click on Public Pest and Recycling Assistance in the Regulatory Programs menu.)

There is no vaccine to prevent infection and no specific antiviral treatment for Zika. The most common symptoms of Zika are fever, rash, joint pain or red/burning eyes. Recent evidence reveals that Zika can cause microcephaly and other fetal birth defects in infants born to women who are infected during pregnancy. Microcephaly is a condition where a baby’s head is smaller than normal. Microcephaly can be found alone or in conjunction with other birth defects. The CDC is also investigating a potential link between Zika and Guillain-Barré syndrome (GBS), a sickness of the nervous system in which a person’s own immune system damages the nerve cells, causing muscle weakness and, sometimes, paralysis.

Dr. Ardis Hoven, infectious disease specialist for the DPH, said the virus is circulating in many areas of the world where Kentuckians travel for vacation, work and mission trips. The DPH is advising travelers to take measures to protect themselves and their family members from mosquito bites during travel and for three weeks after departure from an area with active Zika transmission, such as areas in South and Central America and the Caribbean.

More information about the Zika virus can be obtained from the DPH Health Alerts website at http://healthalerts.ky.gov/Pages/Zika.aspx or at cdc.gov/zika/index.html.

### Recommendations for Those Traveling to Zika-Affected Areas

- Women who are pregnant should not travel to areas with Zika. Pregnant women who must travel to one of these areas for business or family emergencies should talk to their doctor or other healthcare professional first and strictly follow steps to avoid mosquito bites.
- Women trying to become pregnant should consult with their healthcare professional before traveling to these areas and strictly follow steps to avoid mosquito bites during the trip.
- Pregnant women should avoid sexual contact with any man who has recently returned from areas with Zika transmission or consistently and correctly use condoms with each sexual encounter for the duration of the pregnancy.
- Men who develop symptoms during or after travel to Zika-affected areas should wear condoms for six months or consider abstaining from sexual activity.
- Men who travel to a Zika-affected area and do not develop any symptoms within two weeks of travel should wear condoms for 8 weeks after departure from a Zika-affected area. The duration of Zika virus being present in semen after infection is not presently known.

By the Numbers:
- The CDC says there have been 2,763 cases of Zika virus in the United States – at this time and the virus has been identified by the World Health Organization as an international public health threat.
- The U.S. has identified 603 cases of Zika virus infection in pregnant women.
- Of these, 20 women have given birth to infants with birth defects.

Dr. Hoven advises that pregnant women who are planning to travel to Zika virus-affected areas to follow these steps:

- Avoid mosquito bites.
-限制 mosquito bites during travel and for three weeks after departure from an area with active Zika transmission, such as areas in South and Central America and the Caribbean.

More information about the Zika virus can be obtained from the DPH Health Alerts website at http://healthalerts.ky.gov/Pages/Zika.aspx or at cdc.gov/zika/index.html.
KENTUCKY PEOPLE

MURRAY: NATIONAL SCIENCE FOUNDATION AWARDS
$250,000 GRANT TO MURRAY STATE UNIVERSITY

The National Science Foundation’s ADVANCE Program has awarded a $250,000 grant to Murray State University for a project entitled “Differences and Deficits Affecting Women STEM Faculty: Creating a Framework for Change at a Rural Public University.” Research will explore the impact of gender-related beliefs and expectations on female STEM (science, technology, engineering and math) faculty, particularly in a rural public university setting. The grant’s principal investigators are (pictured left to right) Maeve McCarthy, Paula Waddill, Robin Zhang, Echo Wu and Engineering and Technology Dean Stephen Cobb.

RICHMOND: LECTRODRYER RECEIVES NATION’S HIGHEST AWARD FOR SUCCESS IN EXPORTS

Richmond-based Lectrodryer was honored in Washington, D.C. in May with the President’s “E” Award for Exports, the highest recognition any U.S. entity can receive for making a significant contribution to the expansion of U.S. exports. Lectrodryer specializes in the engineering and manufacturing of process solutions and specialty-drying systems for the removal of humidity and other impurities from air, gases and liquids. Over the past four years, the company’s export sales have surged from 34 percent of total sales to nearly 54 percent of total sales. Pictured here at the award presentation are (from left) U.S. Secretary of Commerce Penny Pritzker, Lectrodryer Director of Research and Development Ted Warren and Lectrodryer CEO John McPherson.

CLERMONT: JIM BEAM BOURBON CELEBRATES INDUSTRY FIRST WITH THE FILLING OF ITS 14-MILLIONTH BARREL

Gov. Matt Bevin (right) was on hand at the Jim Beam American Stillhouse in Clermont May 2 to hammer the bung into Jim Beam’s 14-millionth barrel. Bevin joined Fred Noe (left), Jim Beam’s great-grandson and seventh-generation master distiller for Jim Beam Bourbon, to make history with the filling of the milestone barrel—a bourbon-industry first.

LEXINGTON: THOMAS WAID RECEIVES KIDNEY FOUNDATION AWARD

Dr. Thomas Waid (left), professor in the University of Kentucky College of Medicine, was recently honored with the Distinguished Physician Award from the National Kidney Foundation. Waid, pictured here with a representative from the National Kidney Foundation, is a professor of internal medicine specializing in nephrology. He started the Organ Failure and Transplant Network in 2008 and has served as its director since then.

DANVILLE: DALE KIHLMAN HONORED BY KHA FOR HEALTHCARE LEADERSHIP

Dale Kihlman, left, was recently honored by the Kentucky Hospital Association (KHA) with the Health Care Governance Leadership Award, which recognizes individuals who have had a positive and sustainable impact on the quality of care in their community. Kihlman, pictured here with KHA Board Chair Kevin Halter, is board chair of the Ephraim McDowell Health board of directors in Danville.
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