Industry players
Emerging, long-standing sectors define a region
not a bad way to earn a paycheck, Booker, 40, acknowledges, but it was a long time coming.

When he was a teen, just simple computer games like solitaire were around, and Booker was an avid player of the tabletop game Dungeons and Dragons. It was then, while patiently waiting for technology to advance, that “I knew exactly what I wanted to do,” Booker says.

But by the time he got to college, majoring in video game design wasn’t an option. When he entered the workforce, Booker’s first jobs were mostly IT work for various companies, though he was able to do some freelance design work and later started his side business, Creative Brain Studios.

Now, working at NetDevil as a design director, Booker, along with others, is responsible for game content. NetDevil’s virtual creations include Jumpgate, a multiplayer flight simulator, and Warmonger, a first-person action game, among others.

NetDevil staffers, including Booker, are now developing LEGO Universe. Collaborating with the popular toy manufacturer to produce a large-scale, mass-market, multiplayer game is a benchmark for NetDevil, which began in the Denver suburb of Louisville in 1997 with just three part-time staff. It now employs more than 75, and is growing as the popularity of games rapidly spans the globe.

For Booker, this may mean job security. For the region, this industry may mean a significant economic impact.

Business demand has pushed the software industry into the projected top 10 growing sectors in the country. Software publishing and computer design already have experienced significant expansion in Colorado especially, with the video game market standing out as a key component of the industry, say Chad Wilkerson, economist, and Megan Williams, associate economist, both at the Federal Reserve Bank of Kansas City’s Oklahoma City Branch. Wilkerson is also the Branch executive in the Oklahoma City office.

Wilkerson and Williams recently researched what industries define (in terms of concentration and the number of employees)
Defining industries—those that make a region or state different from the nation—tend to drive growth. The industries that define specific states in the District vary widely, although some industries define several District states. Most District states have a large industry presence in the energy or agriculture sectors, or both. The seven states in the District are: Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and New Mexico. In each state, recent employment growth has mirrored the growth of each of the state’s defining industries. Missouri’s industrial structure most resembles that of the nation, while Wyoming’s has the least resemblance.
the Tenth Federal Reserve District, which is made up of western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico.

“Identifying defining industries and understanding how they are changing can provide context for growth and help recognize future risks to the region,” Wilkerson says.

The industries of the District continue to evolve, and although industry trends often mirror those of the nation, the regional variety still makes the District unique. It’s these defining industries that often dictate overall growth and economic strength, Williams says.

The District remains heavily concentrated in several long-standing industries, such as oil and gas, agriculture, and aircraft manufacturing. The outlook for these sectors is mixed; based on their research, Wilkerson and Williams project modest growth at best.

Several emerging industries, however, may affect the region favorably in both urban and rural areas, Williams says. Like the software industry, others with anticipated high growth include call centers, data processing, biosciences and wireless telecom. These sectors may have a direct impact on economic prospects.

As an area’s defining industries change, so might the potential for economic growth there. States with little growth in defining industries also had slow overall growth. Many industries that have no specific location requirements may even offer new opportunities for growth in rural America.

“States with defining industries that have prospered in recent years have grown quickly overall, while states with defining industries that have struggled in turn have grown sluggishly,” Wilkerson says.

Research shows several District states’ economies remain among the most distinct in the country, but “aeronautics is pretty unique,” Miller says, especially for Kansas. The industry has been prominent since planting its roots in
Known as “The Air Capital of the World,” the city of 350,000-some is home to six major aircraft manufacturing companies as well as McConnell Air Force Base. The area’s top three largest employers are Cessna Aircraft Co., Spirit Aerosystems Inc. and Raytheon Aircraft Co. The manufacturing sector as a whole employed 58,400 of 282,800 nonfarm jobs in the Wichita metro area in 2004, according to the chamber of commerce.

Miller sees signs of industry expansion, something he attributes to its history, the co-location of many aircraft companies and resources, and the partnership with Wichita State University. The majority of the 300 or so students in aerospace engineering there find post-graduate work locally. It’s like six degrees of separation, Miller says; everyone in Wichita has a tie to the aircraft industry.

Though research is mixed on whether it’s better for a state’s economy to be diversified or specialized, industries that define an area’s economy seem to play a significant role in growth through time. There’s no doubt the aircraft manufacturing industry defines Kansas.

Wilkerson and Williams consider an
industry “defining” if it is more concentrated in the region than in the rest of the nation. This measurement distinguishes defining industries from driving industries, which may employ large numbers of people but are not more important in the region than in the nation, such as the health-care industry. Defining industries also account for at least 0.2 percent of employment in the region, which equated to more than 25,000 jobs each in 2005.

Based on these two criteria, Wilkerson and Williams analyzed a group of 15 defining industries in the District, which accounted for about 10 percent of the area's total employment in 2005. The top five were the same in 1990.

**The District’s five most defining industries overall are:**

**Oil and gas extraction:** Employment in the District is most highly concentrated in this industry; activity is up significantly after a period of moderate growth. High energy futures prices and new extraction possibilities have improved the outlook. Oklahoma, New Mexico and Wyoming have the heaviest concentration in the District, followed by Colorado and Kansas.

**Farming:** Employment has been weak as technology replaces workers; little growth is forecast, although ethanol production recently boosted farmland values and incomes in corn-growing states such as Nebraska.

**Rail transportation:** Computers have changed the industry's operations considerably, leading to a decrease in employment, but activity has improved recently. The industry is heavily concentrated in Nebraska, Kansas and Wyoming.

**Aircraft manufacturing:** Cutbacks in national defense spending and struggling airlines have hurt the industry, and employment has declined considerably since 1990. The outlook is brighter as demand for personal air travel rises and spending for defense aerospace production increases.

**Animal slaughtering and processing:** Recent growth is a result of rising demand for meat products, especially beef. Plants are located throughout the District, particularly in rural Nebraska, Kansas and Oklahoma.

“Overall, recent growth in these industries—which have defined the District for so long—has been sluggish at best,” Wilkerson says. “They are unlikely to create a sizeable number of jobs in the years ahead. The region may need to look elsewhere for new jobs.”

**Emerging industries**

Unlike most of the long-time defining industries of the District, several saw rapid employment growth from 1990 to 2005. As a result, they have become increasingly concentrated in the region, and may offer growth opportunities, Williams says.

**High-growth defining industries in the District include:**

**Gambling:** New legislation has expanded gaming significantly in Oklahoma, New Mexico and Missouri, in both urban and rural areas.

**Business support services and data processing services:** While located mostly in metro areas, increased technology allows call centers, electronic and mail order houses, and data processing and related services to operate in rural locations. Google, for example, recently announced it will open a new data center in Pryor, Okla., a town of less than 9,000.

**Retail superstores:** Retail superstores, such as Wal-Mart Supercenter and Super Target, are now more concentrated in all of the District’s seven states than in the nation as a whole.

Despite their growth opportunities and overall popularity, the desirability of superstores and casinos often is debated. The superstores generally offer lower prices and large selections, but can drive out locally owned shops, more so in rural areas than metros. Research is mixed on superstores’ effect on local employment.
In some areas, casinos have increased employment growth by double digits, often in Native American communities where unemployment was high. But, there are potential economic drawbacks associated with gambling. In order to boost economic growth in a casino's surrounding area, the gambling money must come from outsiders, not local residents, Wilkerson says. Other costs may include increased crime and more frequent personal bankruptcy.

A little more than a year ago, the Potawatomi Nation opened a 125,000-square-foot, Vegas-style casino off Interstate 40 near Shawnee, Okla. The multimillion-dollar facility includes restaurants and bars, and an entertainment venue that has featured Wayne Newton, the Beach Boys and other performers as well as events, such as cage fighting. The Potawatomi Nation plans to start construction on a nearby hotel this year and hopes to add a golf course in the future.

The idea is for FireLake Grand Casino to be a destination point, says Linda Capps, Potawatomi Nation vice chairman. The casino alone already has been an economic benefit to the tribe, she says, as well as a boost to the nearby towns' commerce and quality of life by offering locals entertainment and dining options they would otherwise drive 40-plus miles to Oklahoma City for. The majority of FireLake's patrons, though, are tribe members. The tribe doesn't rely on this industry exclusively, but casino revenue pays for services, such as the health clinic or housing assistance for some members.

“It is an industry where you can make money relatively fast,” Capps says. “We wouldn’t be able to do a lot of things for our (tribe) members if it wasn’t for profits from gaming.”

Future growth

At NetDevil, Brian Booker sees “huge potential” in the computer games industry. He attributes the growth and strong outlook to several factors, including consumers’ increased time and comfort level online; overall increased access to computers and the Internet; and, perhaps most important, the rising popularity of this type of entertainment.

In the District, states with both the largest overall growth rate and highest growth in defining industries recently were Colorado, New Mexico and Wyoming, Wilkerson says.
In Kansas and New Mexico, the biosciences industry has been rapidly growing, especially in areas where a university and research campus are located. Similar to health-care-related industries, this sector is projected to be among the 10 fastest-growing in terms of wages and employment.

As the oil and gas industries in Wyoming see high growth, the machinery and equipment rentals industry is increasingly important there. This provides new opportunities in a sector that has relatively high pay.

“Certain states in the region have seen growth in sectors that may have the potential to become defining industries,” Williams says.