Central Arkansas in Slow Growth Mode
Global Cyber-Security and the Central Arkansas Connection
Cyber-Security: A New Way of Thinking
Retailing in 2016 and Beyond
Manufacturing
New Housing Stays in Slow Growth Mode
Construction Values
Economic Outlook 2017
About Metroplan

Metroplan is a voluntary association of local governments that has operated by interlocal agreement since 1955. Originally formed as the Metropolitan Area Planning Commission of Pulaski County, Metroplan now has members in five counties of the six-county metro area (see below). Metroplan is the designated metropolitan planning organization (MPO) under Title 23 of the United States Code.

Metroplan serves as the regional voice on issues affecting Central Arkansas, develops transportation plans required by federal law, convenes stakeholders to deal with common environmental issues, and provides information and staff resources to our member local governments, the business community and the public. As part of that mission, Metroplan publishes Metrotrends twice yearly. The spring edition is the Demographic Review and Outlook; the fall edition is the Economic Review and Outlook.

About CARTS

The Central Arkansas Regional Transportation Study, or CARTS, is the cooperative effort by the participating communities, transportation providers and many other interested parties to develop a long-range transportation plan for the metropolitan area.
Central Arkansas in Slow Growth Mode

Regional economic growth remains slow but steady in late 2016. Job growth has picked up compared with a nearly flat trend 2013–2014, and from July 2015 to July 2016 matched the U.S. average of 1.7 percent. Over the past year growth in the local business and professional services sector handily outpaced the U.S. average. Other areas of local strength have included retail trade, transportation, utilities, education and health services. The region saw no significant change in manufacturing, while U.S. manufacturing saw a minor 0.3 percent loss. The area saw major job losses in the mining and construction sector (mostly construction). Completion of the bulk of construction funded under a North Little Rock School District bond issue may help explain the decline. Another weakness was the information sector, with a 6.1 percent local job loss contrasted by slow growth at the U.S. level.

While job growth has been modest, unemployment has fallen to historic lows. In April of 2016, unemployment in the Little Rock-North Little Rock-Conway MSA fell to 3.0 percent (3.1 percent seasonally adjusted), its lowest level since Metroplan began tracking this figure in the early 1990s. By August it had climbed to 3.4 percent (3.5 percent seasonally adjusted), still abnormally low. In fact, the Little Rock metro area ranked 32nd lowest for its unemployment rate, among 388 U.S. metros, or the top 8 percent for 2016.
low unemployment. This may correlate with employers reporting wage pressures in a survey conducted in the Federal Reserve’s St. Louis Region, and it is likely these pressures will continue in Central Arkansas so long as low unemployment remains near or under 4 percent.

The region’s low unemployment rate has been accompanied by rising labor force participation, which the chart at bottom shows has risen for two straight years. Abnormally low unemployment is enticing some non-workers back into the workforce, after years of staying out.

While growing competition for workers may be helping local incomes to grow again, regional growth has lagged. U.S. per capita income grew about 4.9 percent from 2010-2014, while local growth amounted to just 2.2 percent. U.S. productivity growth has slowed in recent years, putting a brake on income growth.

This issue of the Metrotrends Economic Review and Outlook looks at areas of promise in the local economy. First among these is cyber-security, where news data shows the region holds an outsized presence. This issue emphasizes entrepreneurship, exemplified by the Venture Center and a sampling of successful local firms in cyber-security, retailing, and manufacturing. The Central Arkansas region has customarily depended on its stable base in government, education and health care. Economic demands are changing, though, and traditional “eds and meds” sectors will probably generate less growth going forward. Greater entrepreneurship in private and non-profit sectors can raise local living standards and quality of life in a time of continuing economic transformations.  

Global Cyber-Security and the Central Arkansas Connection

For several hours on Friday, October 21, 2016 millions of computer and mobile-device users couldn’t access Twitter, Amazon, PayPal, Netflix, Etsy, Reddit, and numerous other web sites. It was a DDoS (Distributed Denial of Service) attack, which hides in the devices of innocent users, then launches an avalanche of simultaneous requests to saturate targeted sites. Typically such an attack is challenging, because it must subvert millions of devices to generate enough “hits” to take down a site. In this case, however, just 100,000 internet devices were enslaved into a “botnet” to make a virulent “amplification attack.”

A week later it was still unclear whether the attack had been made by a hostile government, terrorists, or private hackers. There is no real line between national security and domestic crime with the internet, which spans the globe yet also reaches into homes and offices. The Internet of Things (IoT) is expanding exponentially, and many inter-connected devices have little or no protection against cyber-attack. As the IoT expands, so does the risk to cyber-security. Attacks are growing in both frequency and severity.

Cyber-security is one of the fastest-growing businesses in the U.S. (and world) economy. A recent article in Forbes pointed out the cyber-security market is likely to more than double in the five years from 2015 to 2020, from $75 billion to $170 billion. The U.S. Bureau of Labor Statistics projects job growth for Information Security Analysts will be among the fastest of all occupational sectors.

What does all this have to do with Central Arkansas? Way more than you probably suspected, because the Little Rock-North Little Rock-Conway MSA has the highest share of cyber-security jobs of any metro area in the country. You can see this in the table. The share of jobs is shown by the Location Quotient, which measures each region’s share of jobs against its total workforce. As you can see, Central Arkansas scores 8.53, meaning it has nearly nine times as many jobs in this sector as the national average, in comparison to total jobs. Even security-centric Washington DC ranks lower, with a score of 6.38. The table compares the fifteen U.S. metro areas with the largest number of Information Security jobs. Even in total jobs, Central Arkansas comes out ninth in the USA, outranking larger metros like Minneapolis, Houston, and San Francisco. Nationally, the average Information Security Analyst job pays an annual wage of $93,250. In Central Arkansas, the typical wage for this sector in Central Arkansas is a more modest $53,270, or $58,804 when adjusted for local purchasing power.

The articles following give further background on how and why the Little Rock metro area is a national leader in this critical field. Local business leaders, government officials, educators and others need to know that Central Arkansas holds expertise in an activity that’s becoming a vital fulcrum of national security and global economic stability.  

Information Security Analyst Jobs 2015

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>State</th>
<th>Location Quotient</th>
<th>Employer Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Miami-Fort Lauderdale-Pompano Beach, FL</td>
<td>16.6</td>
<td>Miami-现象, Fort Lauderdale-现象, Pompano Beach-现象, FL</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Los Angeles-Long Beach-Orange County, CA</td>
<td>15.5</td>
<td>Los Angeles-现象, Long Beach-现象, Orange County-现象, CA</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td>13.9</td>
<td>Phoenix-现象, Mesa-现象, Scottsdale-现象, AZ</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Boston-Cambridge-Malden, MA</td>
<td>12.1</td>
<td>Boston-Cambridge-现象, Malden-现象, MA</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>San Diego-Carlsbad, CA</td>
<td>10.2</td>
<td>San Diego-现象, Carlsbad-现象, CA</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Atlanta-Atlanta-Conyers-Rockdale County, GA</td>
<td>10.0</td>
<td>Atlanta-现象, Atlanta-现象, Conyers-现象, Rockdale County-现象, GA</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Charlotte-Gastonia-Concord-Rock Hill, NC-SC</td>
<td>10.0</td>
<td>Charlotte-现象, Gastonia-现象, Concord-现象, Rock Hill-现象, NC-SC</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Chicago-Naperville-Joliet, IL</td>
<td>9.6</td>
<td>Chicago-现象, Naperville-现象, Joliet-现象, IL</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Baltimore-Columbia-Towson, MD</td>
<td>9.5</td>
<td>Baltimore-现象, Columbia-现象, Towson-现象, MD</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Phoenix-The West Valley-Sugar Land, TX</td>
<td>9.4</td>
<td>Phoenix-现象, The West Valley-现象, Sugar Land-现象, TX</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Minneapolis-St. Paul-Bloomington, MN-WI</td>
<td>9.3</td>
<td>Minneapolis-现象, St. Paul-现象, Bloomington-现象, MN-WI</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>St. Louis, MO-IL</td>
<td>9.0</td>
<td>St. Louis-现象, MO-IL</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>San Francisco-Oakland-San Jose, CA</td>
<td>7.7</td>
<td>San Francisco-现象, Oakland-现象, San Jose-现象, CA</td>
<td></td>
</tr>
</tbody>
</table>

Cyber-Security: A New Way of Thinking

The Internet got its start as the ARPANET, a system for transferring data used primarily by universities and the U.S. military. While there were security measures from the early days, the revolutionary technology has grown exponentially through its history, and the cyber-security industry continues racing to catch up. The talent shortage in cyber-security is so severe that automated systems are being developed. Malicious programs are often well-hidden in computer code, so sometimes the best answer is to diagnose programs from how they act: if it’s trying to eat sheep, it’s probably a wolf.

Since wrong-doers often use neutral sites for “side door” entry that helps conceal their origin, there’s little separation between local, national and international security issues. At present China, Russia, Iran and North Korea are the most notorious for cyber-spying, but new threats are emerging in South Asia and Latin America. One of the most dangerous threats involves attacks on Industrial Control Systems (ICS). An attack of this nature temporarily knocked out Ukraine’s power grid in late 2015. The list at right gives a brief introduction to some of the terms and issues you may need to know as cyber-security grows in importance.

### Zero Day

—a form of software vulnerability. The term refers to a software vendor’s lack of awareness of the problem, hence having zero time in which to provide a fix or patch.

### DDoS

—Distributed Denial of Service. This is an attack via saturation, often using computers and devices temporarily “enrolled” by a malicious program to do harm.

### Botnet

—a collection of computers or devices that have been enrolled and robotized to conduct a DDoS attack (the “bot” refers to “robot”).

### Year Zero

—the year 2012, when the U.S. and Israel allegedly used the Stuxnet virus to disable Iranian uranium-enrichment devices.

### Spear-phishing

—generating highly targeted (but fraudulent) emails that look authentic to a user, which contain malicious content. Such messages are crafted to seem to be coming from a friend, boss or organization familiar to the intended victim.

### Year Zero

—a collection of computers or devices that have been enrolled and robotized to conduct a DDoS attack (the “bot” refers to “robot”).

### Year Zero

—the year 2012, when the U.S. and Israel allegedly used the Stuxnet virus to disable Iranian uranium-enrichment devices.

### Spear-phishing

—generating highly targeted (but fraudulent) emails that look authentic to a user, which contain malicious content. Such messages are crafted to seem to be coming from a friend, boss or organization familiar to the intended victim.

The View from First 72 Cyber

We visited First 72 Cyber to get some perspective on the cyber-security industry and its role in Central Arkansas. It’s a startup firm based in Little Rock that focuses on corporate cyber-security. Its primary investor is the Circumference Group, also locally based. We talked with Greg Schaeffer, CEO and founder and also a veteran of the U.S. Department of Homeland Security, Fidelity Information Services, Alltel and the U.S. Department of Justice.

Greg wasn’t surprised when we told him the Little Rock region has the nation’s highest share of information security analysts. We “punch above our weight” in corporate headquarters, he explains, and demand for cyber-security comes with the package. Firms that employ cyber-security experts aren’t automatically “tech” firms. Retailers, utilities, banking and finance businesses and health institutions also have major demands for cyber-security.

The cyber-security field has huge growth potential, Greg says, because “the trendlines are really terrible.” Here are a few reasons why. “Defenders must succeed in fending off attacks 100 percent of the time across all of an institution’s infrastructure to win,” Greg points out, “attackers need only find one tiny crack in the defenses anywhere to rack up a ‘win’ for the bad guys.” Attackers can almost always find a way in, if not by attacking an institution, then by attacking a vendor, client or partner and moving laterally from there to the intended victim. Attackers are innately creative, and can work their way past mere software. Corporations will invest in cyber-security, but they want a one-time fix. In reality, constant vigilance is mandatory.

What’s most needed in the field is not more software, but people—well-trained, creative, talented, and dedicated. Many “good guys” need to be hackers themselves, who strive to break a system to identify weaknesses. The best cyber-security experts are creative people with eccentric personalities who don’t fit easily into layered, hierarchal corporate structures. Corporations want to relegate cyber-security to their IT departments when, in reality, the security staff needs a direct link to management.

Joe Gugliemi, President & CEO of First 72 Cyber, says cyber-security is one of the most important trends in business today. Many businesses are investing heavily in cyber-security, but they need more help with the implementation of their cyber-security strategies. First 72 Cyber helps businesses to develop a comprehensive cyber-security strategy that is tailored to their specific needs.

The IoT stands for the Internet of Things, a web of gadgets networked together. Each item contains an embedded computer system that communicates with the Internet. Cars, trucks, traffic signals, home utilities, power stations, weather monitors, health devices and other items are becoming woven together in a web of information exchange and automation. The chart shows data from Cisco about the growth in connected devices, from half a billion in 2003 to about 25 billion today, and forecast to hit 50 billion by 2020.

IoT stands for the Internet of Things, a web of gadgets networked together. Each item contains an embedded computer system that communicates with the Internet. Cars, trucks, traffic signals, home utilities, power stations, weather monitors, health devices and other items are becoming woven together in a web of information exchange and automation. The chart shows data from Cisco about the growth in connected devices, from half a billion in 2003 to about 25 billion today, and forecast to hit 50 billion by 2020.

### Internet of Things—Connected Devices

<table>
<thead>
<tr>
<th>Year</th>
<th>Connected Devices (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>0.5</td>
</tr>
<tr>
<td>2010</td>
<td>12.5</td>
</tr>
<tr>
<td>2015</td>
<td>25.0</td>
</tr>
<tr>
<td>2020</td>
<td>50.0</td>
</tr>
</tbody>
</table>

The IoT will give us more efficient HVAC systems, better health monitoring, smarter traffic signals, and other improvements too numerous to count. Yet many IoT devices have fewer protections than PCs, tablets or smart phones (and even these devices can be hacked). Cyber-terrorists could use the IoT to attack the economy, or even human lives. For now, growth in IoT means a growing security risk.

—Generating highly targeted (but fraudulent) emails that look authentic to a user, which contain malicious content. Such messages are crafted to seem to be coming from a friend, boss or organization familiar to the intended victim.

The law allows cities that already had it, like Conway, to be grandfathered in. This explains some of Conway’s success in the tech sector.

4The famous Target hack was done by stealing the credentials of an HVAC vendor. The hacker then used access to Target’s billing system to move laterally to its point-of-sale system.

5The law allows cities that already had it, like Conway, to be grandfathered in. This explains some of Conway’s success in the tech sector.
The Venture Center

In 2013, local business leaders foresaw a need for greater entrepreneurship in Central Arkansas, and banded together to provide the mentorship and teamwork to make it happen. Arkansas had performed poorly in some national rankings for innovation and entrepreneurship. These leaders formed a nonprofit organization to change this game, aided by support from pro-entrepreneurship groups like the Kauffman Foundation, Startup America, IBM and Startup Federation.

The Venture Center is sometimes confused with the Innovation Hub, a program just across the river in Argenta, North Little Rock (described in previous editions of this newsletter, and still thriving), but they serve different roles. Whereas the Innovation Hub provides "maker space," and includes outreach programs for K-12 and STEAM education programs, the Venture Center aims to incubate new firms, help them develop business models, and assist them with scaling their business and finding funding as they prepare to launch into the corporate world.

If you visit The Venture Center in its downtown Little Rock office, the atmosphere feels informal and relaxed. If you stay long, however, you will realize that people here take their mission seriously, work long hours, and put a premium on creativity. Already occupying space in downtown Little Rock, The Venture Center will move into the Tech Park on Main Street soon.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring "good idea" is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.

Local talent hard at work at a Venture Center tech event. Photo credit: The Venture Center.

In early 2017 Little Rock will formally dedicate the Tech Park, several years in the making. The Venture Center will be one of its first tenants.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

If you visit The Venture Center in its downtown Little Rock office, the atmosphere feels informal and relaxed. If you stay long, however, you will realize that people here take their mission seriously, work long hours, and put a premium on creativity. Already occupying space in downtown Little Rock, The Venture Center will move into the Tech Park on Main Street soon.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring “good idea” is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.

Local talent hard at work at a Venture Center tech event. Photo credit: The Venture Center.

In early 2017 Little Rock will formally dedicate the Tech Park, several years in the making. The Venture Center will be one of its first tenants.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring “good idea” is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.

Local talent hard at work at a Venture Center tech event. Photo credit: The Venture Center.

In early 2017 Little Rock will formally dedicate the Tech Park, several years in the making. The Venture Center will be one of its first tenants.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring “good idea” is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.

Local talent hard at work at a Venture Center tech event. Photo credit: The Venture Center.

In early 2017 Little Rock will formally dedicate the Tech Park, several years in the making. The Venture Center will be one of its first tenants.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring “good idea” is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.

Local talent hard at work at a Venture Center tech event. Photo credit: The Venture Center.

In early 2017 Little Rock will formally dedicate the Tech Park, several years in the making. The Venture Center will be one of its first tenants.

The Venture Center’s pre-Accelerator program can take prospective entrepreneurs from idea to business in fourteen weeks. Photo credit: The Venture Center.

Anyone with startup aspirations can come here to try out a business idea. Would-be entrepreneurs can attend the Pre-Accelerator program on Monday nights, from 6 to 9, in a fourteen-week program. By the end of the period, The Venture Center will help them determine if the aspiring “good idea” is a business or not. If not, it’s useful to know. If yes, the next goal is to accelerate the business, positioning a company to reach $1 million or more in annual revenue. Aspiring entrepreneurs can work and share in the collaborative and creative culture. Every enterprise The Venture Center has referred to investors so far has attained funding. Venture Center-supported startups have raised a combined total of $19 million in seed capital.

The Venture Center’s mentoring program allows newcomers to learn skills from those with more experience, while also encouraging seasoned and successful participants to donate their time mentoring others. So far The Venture Center has 70 trained mentors. It has made inroads into minority and veterans groups and among women. Most important, it has created 286 jobs in two years. Economists know that small startup firms account for the bulk of job growth. Expect The Venture Center to incubate more new jobs.

Venture Center Companies

The Venture Center helps entrepreneurs shorten their development time from three-five years to 12–18 months. Thirty-eight percent of the new businesses are owned by women, minorities or veterans. Below is a small sampling of recent startups.


Retailing in 2016 and Beyond

Over the past two decades, retailing has undergone a lot of change. During the 1990s, the role of malls declined, while power centers hosting big-box stores grew rapidly. Internet sales emerged around the turn of the century, beginning as a tiny share of the total but growing rapidly. Today e-commerce accounts for about eight percent of total sales. The chart below shows quarterly e-commerce sales from late 1999 to the present, with a linear projection to 2025. Internet sales zigzag seasonally, hitting a peak in the fourth quarter with Christmas shopping, then dipping early each year before a sharp seasonal up-tick. Sales in the fourth quarter of 2016 may reach near the ten percent mark before subsiding in early 2017. By 2020, if current trends continue, annual sales will average above ten percent, and could reach twelve percent by 2025. The projection, based on the linear trend visible since 2010, may be conservative, since sales accelerated in about 2013.

Traditional “brick and mortar” retailers are competing for a diminishing share of the total. Changing trends have hit retail sectors unevenly. As the table below shows, book and music stores have taken the biggest hit, followed by department stores and office supplies. Vending machines have also seen less business. The next table (facing page) shows the retail sectors with the most growth. Not surprisingly, e-commerce/mail-order sales have seen nearly 35 percent growth in the 2010–2014 interval. Auto dealers were battered by the Great Recession but saw a fast recovery. The rapid rise in used merchandise sales may hint at financial strain in many households in a time of rising inequalities, coupled with smart marketing by some firms. Full-service restaurants have outpaced limited-service ones, a reversal of earlier trends.

As brick-and-mortar retailers adapt to changing market conditions, they are emphasizing the quality of shopping experience, often striving to create an atmosphere of uniqueness. While many firms are adapting to e-commerce by developing their online presence, L.L. Bean—traditionally a catalog and e-commerce retailer—may be signaling a new trend by expanding its brick-and-mortar stores, which will serve as merchandise showrooms.

During 2016 Economic Census figures came out, providing useful insights into changing local trends. The chart at right shows sales growth figures by county for the 2007–2012 period, contrasted with the 2002–2007 interval. While the figures lag current trends, they show a slowdown in retail growth in Faulkner County, which yielded the lead to Lonoke County for the fastest retailing growth. Residents of Faulkner, Saline and Lonoke Counties can do more of their shopping close to home. As Internet sales continue growing, many traditional stores in all locations will face pressures to adapt. E-commerce opens new horizons in convenience and selection, but shakes up the assumptions.

The new Lewis Crossing Center is adding nearly 500,000 square feet of retail space to the Conway area.
Local florist Tipton & Hurst plays a big role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.

Tipton & Hurst needs tech workers to help with creative messaging and keep the web site up-to-date. The local area’s large government / hospital sector presents a role in Central Arkansas and across the state. The firm has been around since 1886, when the fastest way to deliver flowers over long distances was via railroad. Tipton & Hurst introduced same-day delivery in 1900, using telegraph to communicate orders, and later telephone. The switch to online sales went smoothly with the Tiptonhurst.com site in the 1994–95 period. Today Internet sales account for about one-third of the business. Many customers still use the telephone, with the web site as a brochure for choosing arrangements. Many people still visit stores, but “foot traffic” is flat while Internet sales are constantly growing.
During the first half of 2016 new housing construction proceeded slowly. Compared with the same interval a year earlier, the region saw a moderate uptick in single-family construction, and a slowdown in multi-family, as shown in the chart below. Single-family moved upward in Conway, which saw the most new single-family units since the January–June interval in 2010. Bryant and Maumelle both saw a doubling in new single-family construction, while Cabot, Jacksonville, North Little Rock and Sherwood all logged higher numbers than the first half of 2015. Only Little Rock and Benton were lower.

Multi-family housing saw relatively few new starts in the first half of 2016. The largest project was in North Little Rock, with 82 units along Maple Street in the Argenta area. In February a permit was issued for 40 new units near German Lane in eastern Conway. Plans for more multi-family units along Bowman Road in western Little Rock have been put on hold while the city studies the issue. In September a developer was denied a permit to build a 240-unit apartment complex along Bowman Road.

The demand for multi-family housing remains fairly strong in many parts of the region. In August, North Little Rock’s planning commission granted approval for a 960-unit complex in the McCain / North Hills area, likely to be built in phases. In September, Little Rock approved 48 units along Scott Street in the downtown area, as well as 191 units along Rushmore Avenue near Cooper Orbit Road in western Little Rock.¹ The region’s low unemployment rate and steady job growth are likely factors boosting demand for multi-family housing.

### Half Year (January–June) Housing Unit Permits 2012–2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single-Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benton</td>
<td>103</td>
<td>113</td>
<td>66</td>
<td>101</td>
<td>92</td>
</tr>
<tr>
<td>Bryant</td>
<td>49</td>
<td>64</td>
<td>51</td>
<td>33</td>
<td>72</td>
</tr>
<tr>
<td>Cabot</td>
<td>48</td>
<td>55</td>
<td>28</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td>Conway</td>
<td>86</td>
<td>76</td>
<td>82</td>
<td>83</td>
<td>111</td>
</tr>
<tr>
<td>Hot Springs VII</td>
<td>28</td>
<td>25</td>
<td>22</td>
<td>27</td>
<td>20</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>14</td>
<td>16</td>
<td>20</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Little Rock</td>
<td>104</td>
<td>189</td>
<td>196</td>
<td>105</td>
<td>169</td>
</tr>
<tr>
<td>Maumelle</td>
<td>41</td>
<td>41</td>
<td>33</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>N Little Rock</td>
<td>87</td>
<td>55</td>
<td>83</td>
<td>46</td>
<td>52</td>
</tr>
<tr>
<td>Sherwood</td>
<td>59</td>
<td>73</td>
<td>70</td>
<td>24</td>
<td>105</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multi-Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benton</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bryant</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Cabot</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Conway</td>
<td>48</td>
<td>84</td>
<td>67</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Hot Springs VII</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Little Rock</td>
<td>207</td>
<td>256</td>
<td>466</td>
<td>310</td>
<td>6</td>
</tr>
<tr>
<td>Maumelle</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>108</td>
<td>0</td>
</tr>
<tr>
<td>N Little Rock</td>
<td>96</td>
<td>2</td>
<td>0</td>
<td>82</td>
<td>0</td>
</tr>
<tr>
<td>Sherwood</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total SF</td>
<td>642</td>
<td>694</td>
<td>556</td>
<td>504</td>
<td>721</td>
</tr>
<tr>
<td>Total M2</td>
<td>278</td>
<td>440</td>
<td>444</td>
<td>544</td>
<td>501</td>
</tr>
<tr>
<td>Grand Total</td>
<td>920</td>
<td>1134</td>
<td>1100</td>
<td>1170</td>
<td>827</td>
</tr>
</tbody>
</table>

¹None of these are shown in the table at right, which depicts the January–June period.
The region’s total dollar value of construction activity was down in 2015, following the sawtooth up-and-down pattern it has followed with occasional exceptions over the past two decades. Saline County bucked the trend, however. A large ($28 million) 612-unit apartment complex, along with the Benton River Center ($9.3 million) and a Boys and Girls Club ($6.7 million) kept construction crews busy in Benton, Saline County’s largest city. In fact, Benton’s total construction value of $117.2 million ranked third in the region behind Little Rock ($403.7 million) and North Little Rock ($150.2 million), and ahead of Conway ($112.9 million).

Commercial construction accounted for about 60 percent of total dollar value in the region. New residential construction remained about one-third of the regional total, down from nearly one-half of the total in the years prior to the national housing bust from about 2007–2008 onward. This decline in residential housing investment correlates with a slowdown in single-family housing construction. While multi-family construction has filled some of the gap, the average dollar investment per multi-family unit averages about one-third as much.

Ironically, although the number of new units under construction has slowed, the average value of single-family units has increased in recent years. As the chart at bottom shows, in 2015 the average new unit had a median permit value of $175,999, up 11 percent from 2010. With more people living in multi-family and rental units, the market in new single-family units is serving a smaller, wealthier clientele.

While new homes in Central Arkansas are pricier than they used to be, local costs and prices are rising more slowly than the U.S. average. The chart and figures at bottom of page 15 show that by 2015, nearly 46 percent of newly-built U.S. homes cost more than $300,000, up from just 25 percent in 2010. The local share of newly-built homes valued at over $300,000 was just 18 percent in 2015, higher than earlier years but less drastically so.

At the same time, the Central Arkansas area housing offers higher square footage than the U.S. average, or more house for the money. Economic trends today are favoring large metropolitan areas, many of them coastal, with far higher housing costs. Although local prices have risen, national prices have climbed much faster. It looks like the moderate cost of Central Arkansas housing is becoming a competitive regional advantage, at least for those who desire (and can afford) homeownership.
Economic Outlook 2017

The situation of the Central Arkansas Economy might be summarized as "low pain, low gain." The regional unemployment rate is among the lowest in the country. Labor force participation has risen from its trough in 2014, gaining for two years straight. Local residents who want a job, it seems, can have one. Job growth remains slower than average, though. From January–October, 2016 local jobs grew by 2.3 percent, against 2.4 percent for the state and 3.4 percent for the U.S.A. Local income growth is picking up. The latest release from the American Community Survey (ACS) shows local per capita income reversed its recent decline to gain 5.9 percent from 2014 to 2015, well ahead of the U.S. gain of 3.7 percent.1 Single-family housing continues growing tepidly, with a focus on high-end homes. Multi-family faces stronger prospects. While the volume of local multi-family building-permit activity was low through 2016, several large projects are likely to begin construction soon. This includes one near North Hills and McCain Boulevards in North Little Rock that will begin with about 250 units during 2017, eventually building out to 650 or more by 2020. A smaller 48-unit project was recently announced in the Aldersgate area of Little Rock. Large new multi-family projects may be announced near Chenal Valley in Little Rock during 2017. Multi-family construction remains possible east of the Clinton Library near the river front as well.

Reviewing the local economy, some sectors are doing well, and others are lagging. The analysis on p. 11 showed that, although it is a smaller share of the economy than the U.S. average, local manufacturing has increased output faster than it has grown jobs, a sign of climbing productivity. While Central Arkansas has lost numerous traditional manufacturing firms over the past two decades, many remaining firms are thriving. A recent decision by Tianyuan, a Chinese garment-maker, to open a plant in Little Rock during 2017 is an encouraging anecdote. Anecdotal evidence suggests that a rise in protectionist sentiment in the U.S. has encouraged foreign firms to invest in U.S. locations. Not all outcomes of changing U.S. trade policies will be positive for local manufacturers, however, and a likely continuing rise in the dollar will present an exporting challenge.

The region's large health care / hospital sector faces changing prospects, but policy specifics cannot be foreseen at present. Local retailing has performed well in recent years but also faces a cloudy prospect, due to a very different circumstance: the relentless and continuing rise in Internet sales.

The local tech sector, which has grown only slowly since the late 1990s, might be poised for dramatic growth. Much of this can be attributed to the region's outsized footprint in cyber-security. Cyber security is an odd field, which defies much of the NAICS industry coding. A fair amount of cyber security work is scattered across the industry groups, including business/professional services, financial services, management, and even health care. There is an opportunity for local educational institutions to enhance their partnerships with the region's budding cyber-security operations. On-the-job experience is vital in information security, and any economic development efforts must recognize the sector's informal qualities. The list of firms moving into Little Rock's Tech Park, with an official opening planned for early 2017, demonstrates the local cyber security presence. The Tech Park will offer an environment of creative exchange and innovation, set in a reinvigorating downtown with top-notch art, entertainment and recreation opportunities. The Venture Center exemplifies a new focus on business incubation with promising future prospects.

Quality of life is an important factor in attracting "tech" talent. While Central Arkansas has a share of high-quality urban environments, it will never be able to outdo the nation's larger urban areas for cosmopolitan sophistication. Instead, the Natural State has advantages of its own, a combination of outdoor recreation and sports opportunities on the one hand and a mix of livable and affordable urban and suburban lifestyles on the other.

Statistical Supplement

The figures below were gathered during research for this edition of the MetroTrends Economic Review and Outlook. They are provided for hard-core data users, to encourage deeper understanding of the local economy, or as a beginning for further research. Don't hesitate to contact Metroplan with questions.

The table below gives detail on Information Technology (IT) occupations in the Little Rock-North Little Rock-Conway Metropolitan Statistical Area. The figures represent jobs by occupation, not industry. The codes at left are from the U.S. Bureau of Labor Statistics, which makes additional information available at its O-Net site of occupational data, at http://onetonline.org. As you can see, there were about 12,260 IT jobs in the region in 2015. This amounts to a local Location Quotient (LQ) of about 1.20, meaning the region has an above-average share of about 1.2 jobs in IT fields for every one job at the national level. The LQ for Information Security Analysts is 8.53, the highest among all U.S. metros. The region also ranks above average in Network and Computer System Administrators, Database Administrators, and several other fields. It lags the U.S. average in software and web developers, however.

The table at bottom compares total Information Security Analyst jobs in the state of Arkansas against the U.S. average. Arkansas ranks above average in this field, and is projected to see faster proportional growth in job sector LS-1122 than the national average.

Employment by Occupation—Information Security Analysts 2014 Statistics with Projections to 2024

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Title</th>
<th>2014 Employment</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1063</td>
<td>Computer Systems Analyst</td>
<td>1,166</td>
<td>1.30</td>
</tr>
<tr>
<td>15-1132</td>
<td>Information Security Analysts</td>
<td>1,350</td>
<td>8.53</td>
</tr>
<tr>
<td>15-1131</td>
<td>Computer Programmers</td>
<td>730</td>
<td>1.37</td>
</tr>
<tr>
<td>15-1133</td>
<td>Software Developers, Applications</td>
<td>580</td>
<td>1.32</td>
</tr>
<tr>
<td>15-1138</td>
<td>Software Developers, Systems Software</td>
<td>740</td>
<td>0.77</td>
</tr>
<tr>
<td>15-1134</td>
<td>Web Developers</td>
<td>230</td>
<td>0.73</td>
</tr>
<tr>
<td>15-1131</td>
<td>Database Administrators</td>
<td>390</td>
<td>1.47</td>
</tr>
<tr>
<td>15-1132</td>
<td>Network and Computer Systems Administrators</td>
<td>1,180</td>
<td>1.85</td>
</tr>
<tr>
<td>15-1143</td>
<td>Computer Network Architects</td>
<td>100</td>
<td>0.83</td>
</tr>
<tr>
<td>15-1152</td>
<td>Computer User Support Specialists</td>
<td>1,590</td>
<td>1.28</td>
</tr>
<tr>
<td>15-1139</td>
<td>Computer Network Support Specialists</td>
<td>490</td>
<td>1.00</td>
</tr>
<tr>
<td>15-1199</td>
<td>Computer Occupations, All Other</td>
<td>330</td>
<td>0.50</td>
</tr>
<tr>
<td>Total IT</td>
<td></td>
<td>12,260</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics
2016 Metroplan Board of Directors

**PRESIDENT**
Mayor Gary Fletcher
City of Jacksonville

**SECRETARY**
Mayor Jill Dabbs
City of Bryant

**VICE PRESIDENT**
Mayor Art Brooke
City of Ward

**TREASURER**
Judge Jim Baker
Faulkner County

Mayor Paul Mitchell
City of Alexander

Mayor Bernadette Chamberlain
City of Austin

Mayor Bill Russell
City of Bauxite

Mayor David Mattingly
City of Benton

Mayor Bill Cypert
City of Cabot

Mayor David Graf
City of Cammack Village

Mayor Tab Townsell
City of Conway

Mayor Sammy Hartwick
City of Greenbrier

Mayor Sam Higdon
City of Guy

Mayor Janie Lyman
City of Haskell

Mr. Keith Keck
Hot Springs Village

Mayor Mark Stodola
City of Little Rock

Mayor Wayne McGee
City of Lonoke

Mayor Mike Watson
City of Maumelle

Mayor Randy Holland
City of Mayflower

Mayor Jonathon Hawkins
City of Mount Vernon

Mayor Joe Smith
City of North Little Rock

Mayor Mike Kemp
City of Shannon Hills

Mayor Joe Wise
City of Sheridan

Mayor Virginia Young
City of Sherwood

Mayor Michael Nash
City of Traskwood

Mayor Terry Don Robinson
City of Wooster

Mayor McKenzie L. Riley
City of Wrightsville

Mayor James Firestone
City of Vilonia

Judge Jim Baker
Faulkner County

Judge Denice Nall
Grant County

Judge Doug Erwin
Lonoke County

Judge Barry Hyde
Pulaski County

Judge Jeff Arey
Saline County

Ms. Jessie Jones
Arkansas State Highway and Transportation Department

Mr. Jarod Varner
Rock Region Metro