



December 2017 Newsletter

TVA Economic Development Efforts Drive Strong Results In 2017

The Tennessee Valley Authority announced another successful year in economic development activity by stimulating \$8.3 billion in capital investment and growing or retaining 70,000 jobs in the TVA service territory in fiscal year 2017. More than 220 companies announced plans to locate to the Valley or expand existing operations in FY17, while boosting economic growth across the Tennessee Valley.

FY17 TVA Economic Development Year-end Results

	<u>Jobs Attracted/Retained</u>	<u>Capital Investment</u>
Alabama	10,700 jobs	\$1.3 billion
Kentucky	6,000 jobs	\$ 1.1 billion
Middle Tennessee	22,700 jobs	\$2.8 billion
Mississippi	6,870 jobs	\$520 million
Northeast Valley	7,760 jobs	\$1.1 billion
Southeast Valley	6,990 jobs	\$790 million
West Tennessee	8,260 jobs	\$540 million

“The true value of public power is our ability to enhance quality of life through our economic development efforts that lift up communities as a whole,” said TVA President and CEO Bill Johnson. “Our economic development team’s effort to attract and retain top-tier companies continues our mission to serve the nine million residents of the Tennessee Valley.”

Three key factors give the Tennessee Valley an advantage in attracting new business over other areas of the country:

- **Lowest industrial electric rates among peer utilities** - This gives companies choosing to relocate to the Valley an immediate cost advantage through lower energy costs.
- **Environmental stewardship** – Companies want to reduce their carbon footprint and TVA’s cleaner, reliable public power model provides them a carbon advantage.
- **Strong partnerships** – TVA’s economic development professionals work as a unified team with local power companies and local, regional and state development teams.

Since 2011, TVA’s economic development team has worked with local, regional and state partners to attract and retain more than 418,500 jobs and over \$48.1 billion in capital investments. For these efforts TVA received national recognition in 2017: *Site Selection* magazine recognized TVA for the twelfth consecutive year as one of the Top 10 utilities in North America for economic development, and Development Counsellors International honored the team as one of the top five economic development teams in America.



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TVA Biologist, Yale Professor Find New Fish Found Only in Tennessee

Behold the Tennessee Logperch. The fish, a darter, can grow to be 6 inches long. It has flattened little splotches on its flanks; that the splotches are flattened is important; those are what first led TVA aquatic biologist Jeff Simmons and Yale professor Tom Near to suspect they had discovered a new fish. Simmons explains that finding a new species of fish in the 21st century is more a matter of closely observing what is before our eyes than coming upon a lost island that holds two-headed dragons.

"With new techniques in molecular study, we are starting to see a lot more diversity than we thought," Simmons said. "Once you investigate and start getting enough data and using DNA testing, you start seeing that there are a lot of differences in fish. I think there is still a wide-open realm of discovery out there."

In the case of the Tennessee Logperch, Simmons found the fish while he was studying a closely related species, the Blotchside Logperch. Back in 2013, Simmons spotted a Blotchside Logperch, itself a rare darter, in East Tennessee.

"I was in the Big South Fork doing some research on mussels when I saw a Blotchside," he said. "It was a big deal since the fish had not been seen there since 1890. "A lot of people didn't believe me, but I started talking to Tom Near, and it opened the door to investigating the group of fish as a whole."

Near had worked with Simmons on several projects.

"We needed to thoroughly examine all specimens of this group," Simmons recalled. "We requested all records of this from all museums and natural history collections in the country. We also went back to all known population areas across the Tennessee River drainage system. I wanted to get my head underwater and see the fish that were there."

"I did the work of collecting the morphological data from more than 200 specimens," Near said. "The morphological dataset includes nearly every specimen of Tennessee and Blotchside logperches available in museum collections. Also, we were sampling specimens from our field work to fill in sampling holes for both the genetics and morphology. Jeff began taking the lead in our field work to sample new specimens."

Near believes the Tennessee Logperch won't be the last new fish discovered in the Tennessee River system. "Indeed, there is still quite a bit of biodiversity to discover in the Tennessee Basin," he said. "As we apply genetic data, there will be deep divergences discovered, and I suspect most of these divergences will be reflected in disparity of morphological traits that have been used by biologists since the 1820s to discover and describe species of fishes."



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TVA Officials Say Options Open for Colbert Fossil Plant

A Tennessee Valley Authority official has said that the agency is open to the Shoals utilizing a port at the decommissioned Colbert Fossil Plant, and they're also open to other uses for the site.

Bob Deacy, TVA senior vice president, General Construction Projects and Services, hosted a group of visitors, including state Rep. Johnny Mack Morrow, Brad Ojard, senior vice president of operations for the Alabama Port Authority, four Colbert County commissioners, other TVA officials, Northwest Alabama Council of Local Governments Executive Director Keith Jones, and Shoals Economic Development Authority Executive Director Forrest Wright.

In 2015, Colbert County commissioners and Colbert Extension Coordinator Danny McWilliams began exploring the possibility of utilizing the old coal offloading facility as a port to ship agricultural products and timber out of the Shoals. An Auburn University feasibility study concluded the existing port could be utilized in that manner.

TVA officials, including President and CEO Bill Johnson, have met with commissioners, and assured them they will preserve the port facility through the decommissioning and demolition process, Commissioner Charles Hovater said.

Deacy said the property has everything a large industry would want, including river access, a deep water port, rail access, TVA electric lines and natural gas. "This is a great place for economic development," he said. "It has everything large industrial customers want."



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ATVG is a 501(c) (4), not-for-profit, public interest
organization.

ATVG advocates for the interests of county and city/town
governments residing within the seven-state TVA region
and their partners in the public and private sectors.

*For details about ATVG's mission and program of work,
visit us on line at: www.atvg.org*



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DENSO Announces Expansion of its Operations in Maryville, TN

Tennessee Governor Bill Haslam, Department of Economic and Community Development Commissioner Bob Rolfe and officials from global automotive supplier DENSO announced that the company will expand its operations in Maryville. DENSO will create approximately 1,000 jobs in Maryville and invest \$1 billion to make its Blount County facility a primary manufacturing center in North America for electrification and safety systems.

"We want to thank DENSO for choosing to expand in Maryville, creating 1,000 new jobs and investing \$1 billion in Blount County," Haslam said. "This is a huge win for the state of Tennessee and Maryville. DENSO has been a part of Tennessee for over 30 years and continues to be a great part of our state. I appreciate DENSO for continually investing in Tennessee and helping us become one step closer to our goal of making Tennessee the No. 1 location in the Southeast for high quality jobs."

"Tennessee is No. 1 for growth in automotive employment in the Southeast since 2011, adding over 22,000 jobs, and it is because of companies like DENSO that the automotive sector continues to have momentum in our state," Rolfe said. "I want to thank DENSO for choosing to expand in Maryville, creating over 1,000 new jobs and investing \$1 billion. DENSO is a great partner to Tennessee and I look forward to seeing its continued success in our state."

With its global headquarters in Japan, DENSO has had a presence in Tennessee for nearly three decades. The company has two locations in the state, Maryville and Athens, and employs roughly 4,500 people. The Maryville campus, which is DENSO's largest U.S. manufacturing facility, consists of four manufacturing plants on 194 acres and is Blount County's largest employer.

"This is an investment in the future of DENSO, and also the future of transportation. We are seeing dramatic shifts in the role of transportation in society, and this investment will help position us to meet those changing demands," said Kenichiro Ito, chairman of DENSO's North America Board of Directors and chief executive officer of DENSO International America.

DENSO produces starters, alternators, instrument clusters, safety products and a wide range of electronic components and systems for the automotive industry at its operations in Maryville. Globally, DENSO is a leading developer of electrification systems for environmentally-friendly automobiles, sophisticated functions involved in vehicle safety and security, products that connect vehicles and society and thermal systems to cool the cabin and under-the-hood components.

"Since setting roots here, DENSO has played a major role in helping Tennessee transform into an automotive production leader," said Jack Helmboldt, president of DENSO Manufacturing Tennessee. "This investment enables us to provide new opportunities for top talent to advance the next generation of vehicles."

With this expansion, DENSO will expand multiple production lines to produce advanced safety, connectivity and electrification products for hybrid and electric vehicles. These new products will radically improve fuel efficiency and preserve electric power by recovering and recycling energy, and by connecting all systems and products inside the vehicles.



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Prior to this expansion, DENSO had invested approximately \$2 billion in Tennessee. Japan is the leading source of foreign direct investment in Tennessee over the last 30 years. In total, Japanese businesses have investment more than \$17 billion in Tennessee and employ more than 50,000.



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New Technology Allows TVA to Inspect Dams Faster and Cheaper

Technological advances are making Tennessee Valley Authority dam inspections cheaper and much quicker. New sonar equipment is being used in place of divers with video equipment and has cut inspection time for each dam down from about a week to a matter of hours. The technology, called Side Scan Sonar, is a combination of instruments attached to the side of a 22-foot boat that feeds data to a monitor.

"It's an amazing tool to be able to look underneath the water and not have the limitations that you traditionally have with a video system," civil engineer and dam safety inspector Benjamin Phillips said. "We're now able to get a better view of what's going on in our facilities."

Previously, divers inspected dams several feet at a time. Now, civil engineers sit in the boat monitoring a screen feeding the data. That information then is displayed as a colorful, three-dimensional on-screen rendering at the end of the inspection. It is then further analyzed and compared over time with other inspections. The team also prints out the readings for future use.

Teams, usually consisting of two TVA civil engineers, work in tandem to use the sonar system to perform routine inspections on 49 area dams. Since TVA purchased the technology last year, they've inspected roughly half of those. The new equipment not only saves time and money but allows dam inspectors to get a more thorough look at the dams, said Wesley Jaynes, a civil engineer and dam inspector.

Inspectors look for things such as cracks or trash that has found its way inside the dams' intakes. Material used in the making of the dams also causes the concrete to expand. TVA engineers are now able to use the data to track how much the concrete grows and moves over time.

"This is extremely valuable," manager of dam safety inspection Scott Kramer said. "We're seeing areas of the dams we've never seen before, at least not easily. With these inspections we're really trying to see if the dams are in good shape, so we're trying to identify any problems before they happen and become a serious issue." The system will be used to inspect each dam at least once every five years. That data will then be compared to see how the dams have changed over time.

Phillips also said the program could provide good internship opportunities for area students. The controls are similar to playing a video game, he said, and students interested in STEM subjects could help with the inspections to gain experience and learn about the process.



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Dear ATVG members and friends,

I want to welcome you to the Association of Tennessee Valley Governments (ATVG). We are a not-for-profit 501c (4) corporation chartered in 1981. Our primary purpose is to improve communication and understanding between local governments and the Tennessee Valley Authority (TVA). With nearly 1,000 local governments being served by TVA, we strive to advocate on behalf of our membership. ATVG represents local governments in Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee and Virginia.

ATVG has studied and often taken an active role in issues related to:

- 1) TVA's Integrated Resource Plan
- 2) Emergency Management Preparedness
- 3) Small Modular Nuclear Reactors (SMR)
- 4) Tax Equivalent Payments
- 5) Economic Impacts of closing coal facilities and conversion to natural gas plants
- 6) Selection of TVA's Board of Directors
- 7) Restructuring Park and Recreation Marine Contracts
- 8) Start-up of Watts Bar Unit 2 nuclear reactor
- 9) Addition of flood control provision at various dams
- 10) Addressing invasive aquatic life in the TVA reservoirs
- 11) Importance of Chickamauga and Kentucky Lock replacement.
- 12) Purchasing of coal and natural gas from within the valley
- 13) Future use of the Bellefonte site
- 14) TVA's Solar Strategy Initiative

ATVG meets quarterly within the TVA region for educational sessions and to conduct the organization's business affairs. This year we will meet in Murfreesboro in January, in Paris in April, in Muscle Shoals, AL in July and in Gatlinburg in October.

We recognize TVA as a major economic driver within our communities through its role as the provider of reliable, reasonably priced power, along with economic development initiatives for recreation and industrial activities. We further recognize TVA must be an active environmental steward of our natural resources.

ATVG will continue to advocate policies for our local governments and communities. We recognize that we can both support and be in opposition to various TVA policies; while fully understanding that it is through our education on the issues that we all make better decisions.

Learn more about ATVG at www.atvg.org including information on our quarterly meetings.

Sincerely,

John Gentry
2018 ATVG President
County Mayor, McMinn County, TN



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***Merry Christmas
And
Happy New Year
From your friends at ATVG***

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