

*Special Interest*

It is time once again for the annual South Carolina Technology Review. A look at where our state stands in the innovation areas. This will be our fourth report on technology and our state's ranking and ratings in the innovation economy. The per capita compensation for a technology worker had a small increase over last year's numbers. Our technology employees earned \$2,200,000,000 for the latest reported technology results.

## 67%

This percentage means more than \$ 21,000 in more earning than other private sector jobs across the Palmetto State.

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## SC Venture Capital Authority Begins Award Selections

Following the South Carolina Venture Capital Act has been exciting. The implementation of the Act has been taking place over the last several months. The Authority Board Members have all been appointed and are well into their work of selecting the best venture capital companies to invest our VC dollars. The evaluation process has been very disciplined, each proposal was reviewed and were both rated and ranked on their written proposals, as well as, oral presentations. The scoring has been close and the Board has been pleased with the overall results.

There will be around 45 million dollars awarded to the winning venture capital companies. These companies are referred to as DIG's which means Designated Investment Groups. There were eighteen companies that submitted RFP's and there were seven that made it into the presentation level. The final due diligence will be performed over the next sixty days with actual awards from the fund to take place right after the first of the year. The Authority Board Members are as follows: Chairman Chad Walldorf, Dr. Steve Imbeau, Bud Nalley, Tom

Persons, Michael Space, Steve Swanson, and John Warner. The Authority is hopeful that investments will start being made into South Carolina innovation companies within a few months of the awards. There are numerous new high tech innovation companies that are seeking funds to grow and improve their businesses. The Authority and the Act require that these dollars be invested in our state's promising tech companies and that with these investments will come mentoring opportunities with many of these companies. The VC companies will most likely have board seats or observers.

BioWatch adds to their Board of Directors and elevates **Jon Maynell to CEO**...reports of strong progress at BioWatch are exciting for our high tech community. BioWatch has been moving the company forward for a few years as they have worked to improve their Personal Health Monitoring Services which are Vital Signs Transmitter Center. The Vital Signs sign that fits comfortably under your clothing, the and ensures personal health with the built-in cell modem and electrodes.



www.biowatchmed.com

made up of two components: the (VST) and the Clinical Monitoring Transmitter has a slim, flexible de-around the chest like a belt. Worn Vital Signs Transmitter is discreet



## SCRA's knowledge economy engine

SC Launch! leveraging SCRA's Dynamic resources, drives development of high-growth technology companies while generating knowledge economy jobs; enhancing our state's quality of life; and providing strong prospects for all South Carolinians in the new economy. SC Launch! has formed partner alliances with corp-

orations, industry consortia, local and regional incubators, and economic development organizations to deliver service and support for its clients. SC Launch! supplies qualified entrepreneurs and researchers with key tools for success, providing high potential South Carolina based companies with a mix of up-front counseling, facilities, seed funding of up to \$200,000

in loans or investments, and ongoing mentoring. SCRA is driving the growth of the global and regional knowledge economy by collaborating to advance technology. SC Launch! has already made a number of investments and loans that are proving to move our states, entrepreneurial and innovation economy forward.

## Broadband, Rural Internet, Wi-Fi Getting Attention This Year

**COLUMBIA, S.C.** - Gov. Mark Sanford wants \$2 million in next year's state budget to help extend high-speed Internet access to the state's rural communities. "In an increasingly global economy, it's incredibly important that people living in places like Allendale have the same opportunity to access the information superhighway as people living in places like Greenville," he said in a release. His proposed budget for 2007-08 will recommend creating a Broadband Advisory Committee within the Department of Commerce to oversee efforts to provide people in rural communities with Internet access other than dial-up. The \$2 million from the state's general fund would be used for both direct and matching grants, said Sanford spokesman Joel Sawyer.

State law does not allow the regulation of broadband services, so their availability and subscription levels in South Carolina are unclear. According to the Federal Communications Commission, some form of Digital Subscriber Line is available in 73 percent of

the places statewide where phone companies provide service.

Tom Persons, President and CEO of the South Carolina Technology Alliance, called the proposed initiative a "great first start." High-speed Internet access would open up economic development opportunities for poor, rural areas, he said. "I believe broadband access should be like air and water," said Persons, a former AT&T executive. "It should be the right of every citizen to have basic, good high-speed Internet." Bob Elek, a Verizon spokesman, said extending broadband services to rural areas with few potential customers is a "very costly venture." "It will take a multi-prong approach to expand broadband into rural areas," he said, adding the company's interested in the governor's idea. Martha Smith, a BellSouth spokeswoman, said her company's supportive of any idea aimed at increasing residents' access to technology. "We would want all citizens to enjoy the benefits of broadband," she said. "Obviously, that's very important if we are to have the competitive edge."

### The Governor, Speaker

**Harrell, Jim Bryant, State CIO and Moss Bresnahan, SCETV Executive Director all have ideas about providing broadband across our state.** This has become a very important topic and legislative Agenda item for Speaker Harrell. He strongly believes that we have the capability to light up our entire state. Joe Taylor, Sec. of Commerce, also has ideas about this subject. He has been charged by Governor Sanford to make this a priority this year. He is putting together an advisory committee to begin reviewing the Governor's broadband ideas.

Speaker Harrell commissioned a study last year to be completed by the Thurmond Institute at Clemson, along with the State CIO's office on best practices being used in other areas around the country. This report is to be completed later next month and the results will be reported to Speaker Harrell and recommendations will be made for implementing a statewide broadband policy. Using the various resources from the CIO's office, ETV and the systems being used today on our tech college campuses there is potential to be the first state to light up all areas to broadband. This would provide South Carolina bragging rights that would certainly be heard around the world. The economic impact of universal broadband for our citizens could be most rewarding.

### Light Rail Broadband

Hopefully coming our way, according to Dr. Bill Hogue, V.P. & CIO for the University of South Carolina. He reviewed the latest plans to bring South Carolina on line with the **National LambdaRail** which is a high-speed national [computer network](#) in the [United States](#) that runs over [fiber-optic](#) lines, and is the first [trans-continental Ethernet](#) network. The name is shared by the organization of [research institutions](#) that [developed](#) the network, and, to date,

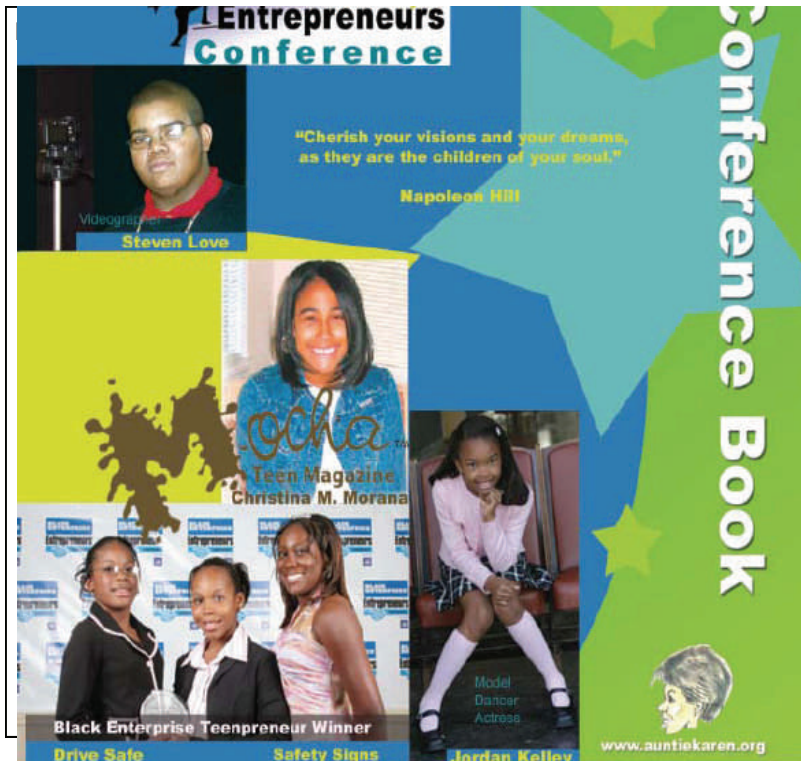
plans to continue developing it. Lambda Rail is similar to the [Abilene Network](#), but LambdaRail permits deeper experimentation than Abilene does.

It is primarily oriented to aid [terascale computing](#) efforts, but is also not intended to be a service network, but to be used as a network testbed for experimentation with next-generation large-scale networks. National LambdaRail is a university-based and -owned initiative, in contrast with Abilene and [Internet2](#), which are university-[corporate](#) sponsorships. This gives uni-

versities more control to use the network for these research projects.

Links in the network use [dense wavelength-division multiplexing](#) (DWDM), which allows up to 32 or 40 individual optical [wavelengths](#) to be used (depending on hardware configuration at each end). At present, individual wavelengths are used to carry a 10-[gigabit](#) Ethernet signal, although other systems such as [SONET](#) may also be used in the future. Stay tuned to Terabyte, more to come.

## Christina M. Morana 2006 Young Entrepreneur of the Year!



The South Carolina Technology Alliance awarded a HP laptop computer to this year's Young Entrepreneur of the Year winner! The Auntie Karen Foundation, for the fourth year, showcased many of the best young minds in our region. This year's winner was Christina Morana. She is a Spring Valley High School student who told us that the Auntie Karen Foundation has helped her understand that young African American women can THINK BIG AND KNOW BIGGER. She is the founder and publisher of "Mocha Teen Magazine". According to Christina, "the magazine is a new era for youthful minds and aims to bring flava and diversity by inviting creative writers, artists, poetic voices, and informative articles all designed to take our youth to the next level. The Foundation has truly impacted my life and winning this year's top honor has truly been a dream come true. The computer from the Technology Alliance will help make my magazine for young teenagers more successful." Tom Persons said that in awarding this computer to Christina that he had very high expectations for her continue to be a role model.

## South Carolina Economy Shows Improvement

South Carolina's economy, as reported in the *2007 Development Report For the States (DRC)*, shows improvement for those who work and live in our state. Our performance grade for 2006 is up from a D to a C for 2007. Businesses in the state continue to bolster the economy. The state's strengths include a good quality of life, competitive existing businesses, and good stewardship of natural resources and amenities. Business Vitality is an area of strength for South Carolina which was graded as a B. A number of new businesses are being formed, and those that do emerge are creating jobs. Our state ranked 8th in job creation by start-up businesses. The one item that continues to cause our technology and innovation leaders the most concern is the fact that one of the fastest growing industries is not represented very well in our state. We are currently ranked 43rd in technology industry employment.

Our indicators are not the same as found in this report. Our patents have increased each year since 2004 and the quality of the innovation is remarkably stronger than that previously tracked and reported. We will keep our eye on this area throughout the remainder of the year. We expect a much higher ranking in the 2008 report.

## South Carolina High Tech Automated Trading Desk Secures \$60,000,000 Venture Capital Investment!

Mt. Pleasant, S.C. -- **Automated Trading Desk (ATD)**, a Mt. Pleasant-based provider of automated securities trading technology, has raised \$60 million in a venture capital investment from **Technology Crossover Ventures**. ATD offers automated execution software for all domestic equity markets, including the listed, over-the-counter, exchange traded funds and bulletin board marketplaces. In November 2006, ATD averaged over 280 million shares a day and about 7% of NYSE daily volume and 7% of Nasdaq daily volume. The company said that the new investment funds from Technology Crossover will be used to expand its retail, options and institutional execution businesses. Congratulations to Steve Swanson and the entire ATD family, this is great news for one of our states high tech companies.



## **South Carolina And The High Tech Industry**

**28**  
**Of Every**  
**1000 Private**  
**Sector**  
**Workers In**  
**South Carolina**  
**Are Employed**  
**By High-Tech**  
**Firms**

**There were 800**  
**less Tech Jobs**  
**in South Caro-**  
**lina Year over**  
**Year**



**Leading High-Tech**  
**Industry Sectors**  
**Jobs:**

**Telecom Ser-**  
**vices**  
**12,100**

**Engineering**  
**Services**  
**10,100**

**Computer Sys-**  
**tems**  
**7000**

**Number of Tech**  
**Jobs:**  
**41,628**

**Number of Tech**  
**Companies:**  
**3,161**

**Annual Tech**  
**Payroll:**  
**\$2,200,000,000**

**Average Tech**  
**Wage:**  
**\$52,272**

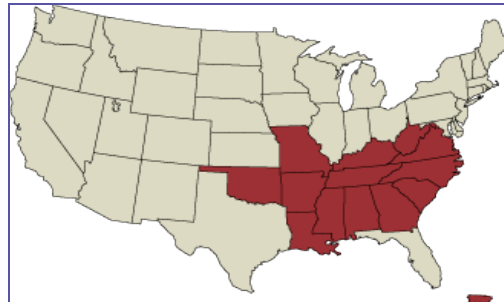
**Other Private**  
**Sector Wages:**  
**\$31,307**

## 2006 South Carolina Patent Review

### Southern Technology Council States

### South Carolina has Outstanding Year 21% Year Over Year!

The Palmetto State's patent results from 2006 are the best since the South Carolina Technology Alliance started the state's patent tracking. This year's results are by far our best. The percentage increase is impressive and is most definitely showing strong signs that our state's inventors, entrepreneurs and innovation businesses are improving. Our numbers this year show improvement when other leading southern states 2006 than they did in 2005. point this out to some of our



The clear winner in terms of was the state of Florida. Not championships in football and champions across the south

actually reported less patents in It has been exciting to be able to tech friends in other states.

numbers of new patents awarded only have they won the national basketball, but they are also the with over 3186 new patents.

SCTA sent personal letters to each patent awardee, congratulating them on the innovation patent. SCTA and SCRA are considering new ways to help these inventors market these technologies.

### 2006 Patent Award Results

State	2004	2005	2006	Total
<b>Alabama</b>	<b>381</b>	<b>369</b>	<b>420</b>	<b>1170</b>
Arkansas	140	180	204	<b>524</b>
Florida	2710	2666	3186	<b>8562</b>
Georgia	1368	1391	1707	<b>4466</b>
Kentucky	417	388	473	<b>1278</b>
Louisiana	341	286	359	<b>986</b>
Mississippi	154	130	150	<b>434</b>
Missouri	801	727	834	<b>2362</b>
North Carolina	1926	1882	2153	<b>5961</b>
Oklahoma	452	428	563	<b>1443</b>
Puerto Rico	16	32	27	<b>75</b>
<b>South Carolina</b>	<b>538</b>	<b>550</b>	<b>667</b>	<b>1775</b>
Tennessee	804	713	788	<b>2305</b>
Virginia	1036	1051	1189	<b>3276</b>
West Virginia	103	99	115	<b>317</b>
<b>Total</b>	<b>11187</b>	<b>10892</b>	<b>12835</b>	<b>34914</b>



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*E-mail [hightech@sctech.org](mailto:hightech@sctech.org) with your thoughts or suggestions  
for **The Terabyte***

*Terabyte: A unit of computer memory or data storage  
capacity equal to 1024 gigabytes .....one trillion bytes*

**SCMEP and SCTA partnering for the future!**



## Coming Soon On Our Web-Site !

### **New Statewide Technology and Innovation Directory**

The South Carolina Technology Alliance announced last week that, in partnership with the Department of Commerce and the South Carolina Research Authority, they will launch a new technology directory. This new directory will list all the state's high tech-innovation companies. This will be a very dynamic directory that will share information with firms around the world who are interested in doing business with South Carolina's growing high tech-innovation companies. The directory will contain information on more than 3161 high tech firms that will be categorized by regions, as well as, by innovation area such as bio-tech, automotive, software, network companies, nanotech, fuel cell and alternative fuels, optical fibers, advanced materials, telecom, computer systems and many others that make up our state's innovation economy. The directory will also list our research centers of excellence and the contacts for our university technology transfer offices at each of our research universities.

This directory will not only serve as listings for all our companies in South Carolina who are searching for innovation technology companies and services, but will also be used as a recruiting tool for other innovation companies. SCTA is hopeful that with these listings it will encourage existing companies to network with each other. The directory will be searchable by county, region, or high tech category. The listings will include the company names, locations, number of employees, revenues, web-site addresses, company logos and a brief description of their high tech / innovation product or service.

The web-site will be updated by the respective companies to ensure that the information is current and correct. Make sure your company is listed in this new directory.

Be on the look out for your opportunity to list your company in this new directory. Keep checking the South Carolina Technology Alliance web-site at [www.sctech.org](http://www.sctech.org) for the latest information regarding this technology directory.

The South Carolina Technology Alliance is grateful to the creative talents at Cyberwoven, [www.cyberwoven.com](http://www.cyberwoven.com), who have been the developers of this new tool for economic development for our state.

Please go on line and add your technology company to the new South Carolina Technology Directory.