AGENDA: Science and Technology Study Commission

September 25 & 26, 2011
Savannah, GA

SUNDAY, SEPTEMBER 25: Day 1

Timing	Activity
4:30 PM	**Arrival & Check-In -** *Planters Inn on Reynolds Square Hotel*
5:30 – 6:15 PM	**Organizational Meeting** – *Planters Inn on Reynolds Square Hotel (Room TBD)* - Welcome meeting from Savannah technology stakeholders - Overview of Monday's activities & logistics - Questions
6:15 – 6:30 PM	**Walk to Dinner** – *Olde Pink House*
6:30 – 9:00 PM	**Dinner with Savannah Technology Stakeholders** – *Olde Pink House*
9:00 PM	**End of Day 1** - On your own after dinner

MONDAY, SEPTEMBER 26: Day 2

Timing	Activity
7:35 AM	**Meet in Lobby** – *Planters Inn on Reynolds Square* - Please be sure to grab anything you want for breakfast prior to boarding the bus
7:45	**Load Buses for Departure**
8:00 – 8:30	**Travel Time**
8:30 – 10:00	**Tour -** *Gulfstream*
10:00 – 10:15	**Load Buses for Departure**
10:15 – 10:30	**Travel Time**
10:30	**Arrival –** *Herty*
10:30 – 10:40	**Break & Transition to Public Meeting Space** - *Herty*
10:40 – 10:45	**Welcome Remarks** – *Herty Representative*
10:45 – 11:30	**Panel A –** *Topic* - Logistics
11:30 – 11:32	**Panel Transition**
11:32 – 12:17 PM	**Panel B** – *Topic* - Georgia & the International Marketplaces
12:17 – 12:25	**Break & Panel Transition**
12:25 – 1:00	**Panel C –** *Topic* - Education & Workforce Development
1:00 – 1:15	**Public Comment**
1:15 – 2:00	**Commissioners Lunch & Private Discussion** – *Herty*
2:00	**Break & Load Buses for Departure**
2:00 – 2:30	**Travel Time**
2:30 – 4:15	**Tour –** *Georgia Ports Authority*
4:15	**Load Buses for Departure**
4:15 – 4:45	**Travel to Hotel**
4:45	**End of Day 2 & Adjournment of Commission Meeting**

AGENDA: Science and Technology Study Commission

September 26, 2011
Herty Advanced Materials Development Center
Savannah, GA

Public Meeting Agenda

Timing	Activity
10:30	**Arrival –** *Herty*
10:30 – 10:40	**Break & Transition to Public Meeting Space** - *Herty*
10:40 – 10:45	**Welcome Remarks** – *Herty Representative*
10:45 – 11:30	**Logistics Panel:** - Chad Barrow, Coastal Logistics Group - George Powers, iTech - Don Ratliff, GA Tech Supply Chain & Logistics Institute - Bill Sutton, GA Ports Authority
11:30 – 11:32	**Panel Transition**
11:32 – 12:17 PM	**Georgia & the International Marketplace Panel:** - Todd Gerken, US Export Assistance Center - Michael Stolarczyk, Kontane Logistics
12:17 – 12:25	**Break & Panel Transition**
12:25 – 1:00	**Education & Workforce Development Panel:** - David Frost, GA Tech-Savannah - Nick Gant, Meddin Studios - Steve Weathers, Savannah Economic Development Authority (SEDA)
1:00 – 1:15	**Public Comment**
1:15 – 2:00	**Commissioners Lunch & Private Discussion** – *Herty*
2:00	**Break & Load Buses for Departure**

Chad Barrow
Coastal Logistics Group
Owner & President

Chad's unfailing commitment to excellence is second to none. He is driven to be on the cutting-edge of technology within the logistics industry, diligently seeking new ways to provide superior service to CLG's customers.

In addition to being Owner and President of CLG, Chad is actively involved in community charities and industry related associations. He earned his Bachelor of Science degree in Economics from the University of Georgia.

Coastal Logistics Group:

When the economy thrives, businesses do as well. It is in the challenging times, however, that true survivors emerge. As the world economy has seen a downturn, we at CLG gratefully report that we not only remained stable, but experienced solid growth for 2009. As a privately held company, our owners recognized the early signs of the current economic state and were proactive in their financial strategy to confront any issues that could arise. The foresight of our CLG leaders not only sustained operations, but also resulted in record revenues for 2009. By diversifying our customers and services, including Packing and Crating, Distribution, Manufacturing and those in the Specialized Port sector, we avoided the risk of a volatile market proving that forward thinkers really do stay ahead of the game.

GEORGE T. POWERS
iTech
Founder & Owner

EDU: ARMSTRONG ATLANTIC STATE UNIVERSITY

CAREER HIGHLIGHTS:

FOUNDED AMERICAN PORT SERVICES, INC. AND POWERS TRANSPORTATION SYSTEMS, INC. – 1987. GREW COMPANIES TO NATIONAL IN SCOPE, OPERATING 12 MILLION SQUARE FT. OF DISTRIBUTION SPACE IN MOST MAJOR PORTS IN THE COUNTRY, AS WELL AS INLAND PORT LOCATIONS. SOLD COMPANIES TO SCHNEIDER LOGISTICS IN 2005.

DEVELOPED OVER 5 MILLION SF OF DISTRIBUTION FACILITIES IN VARIOUS PORTS. SOLD REAL ESTATE PORTFOLIO TO DUKE REALTY IN 2007.

CURRENT STATUS:

INVESTOR & ENTREPENEUR. OWNS TWO TECHNOLOGY RELATED BUSINESSES (Itech & ICM) AND A REAL ESTATE INVESTMENT COMPANY (ARDMORE CAPITAL).

MEMBERSHIPS: PROPELLER CLUB, SAVANNAH OCEAN EXCHANGE (BOARD MEMBER), CHATHAM CLUB, SAVANNAH YACHT CLUB.

PERSONAL: SAVANNAH NATIVE, AGE 57, MARRIED WITH 3 CHILDREN.

iTech:

iTech was founded in Savannah, Georgia in 2001 as the Technology Provider for American Ports Services. American Ports Services, now a subsidiary of Schneider Logistics, Inc., enjoyed an incredible rate of growth in the U.S. logistics business from 1987–2005. The growth was due in no small part to the culture of using Technology to provide solutions for customers and at the same time drive down APS' costs. iTech was the technology services provider.

Today iTech's mission is unchanged: We help companies increase the availability of data in their organization while driving down cost and increasing efficiency. Through our vendors we provide solutions that protect that data, keeping it available in spite of hackers. We provide solutions that store the data in safe places so it's available to a business that is recovering from a disaster, man-made or natural. iTech can manage a network of any size located anywhere in the world from anywhere in the world. And with iTech managing your network, outages are a thing of the past. Our VoIP Telephony solution has been independently rated as the best in the land. With our mobility solutions we can roll out a fleet of a few or thousands of vehicles all equipped with mobile communications devices that can easily access company data.

H. Donald Ratliff
Regents Professor and Executive Director
Georgia Tech Supply Chain & Logistics Institute

Dr. Ratliff is a supply chain and logistics expert with more than 30 years of experience as an educator, researcher, consultant, and technology business executive. As Executive Director of the Georgia Tech Supply Chain & Logistics Institute, he provides leadership for the largest research program in the world devoted to the study of supply chains and logistics. This includes research and innovation centers in Panama, Costa Rica, Mexico and Singapore. As founder and President of the software company CAPS Logistics, Dr. Ratliff helped to pioneer the development of interactive software tools to design supply chain networks and optimize logistics processes. He is also co-founder of Scientific Logistics, Inc. a pioneer in the development of cloud-based optimization methodology to plan delivery routes for delivery trucks. He has worked with a wide range of companies and government organizations to recognize and evaluate opportunities for supply chain synchronization and logistics optimization, to develop strategies for exploiting these opportunities, and to develop the processes and technologies necessary to execute on these strategies. Dr. Ratliff's research into new logistics concepts and optimization algorithms has resulted in the publication of more than one hundred refereed journal articles and articles in popular trade magazines. He has given more than two hundred invited presentations at national and international meetings. His current research focus is on logistics performance and international trade. He serves on the Advisory Boards of the World Food Logistics Organization, the National Science Foundation Office of Polar Programs and the Dutch Institute for Advanced Logistics.

Dr. Ratliff is a Phi Beta Kappa graduate of the Johns Hopkins University. He has held a number of editorial positions including being Editor-in-Chief of the Journal of Operations Research. He has supervised the thesis research for more than twenty Ph.D. students, many of which currently hold faculty appointments in major universities. He has been selected to play a leadership role in five national professional meetings in Operations Research. He was awarded the "Outstanding Research Award" of the Institute of Industrial Engineers for his work in logistics and is a Fellow of the Institute of Industrial Engineers and a Fellow of INFORMS. Dr. Ratliff was elected to the National Academy of Engineering for his work in developing network optimization methodology for use in the design and operation of logistics systems. More than 200 companies and government agencies have implemented concepts developed by him and his colleagues.

Georgia Tech Supply Chain and Logistics Institute
The Supply Chain & Logistics Institute (SCL) at Georgia Tech provides global leadership for research and education in supply chain engineering. We define "Supply Chain Engineering" as the application of scientific principles to optimize the design and integration of supply chain processes, infrastructure, technology and strategy. While SCL has resources and programs in supply chain management, its primary focus is on development of new tools for analysis, design and management of logistics processes, and new concepts and strategies for the practice of supply chain engineering.

SCL is a unit of the H. Milton Stewart School of Industrial and Systems Engineering at Georgia Tech. The Stewart School is the largest Industrial Engineering program in the United States (more than sixty faculty members, 1000 undergraduate students and 400 graduate students). For seventeen consecutive years, U.S. News and World Report has ranked the Stewart School as the best undergraduate and graduate industrial engineering program in the United States

Bill Sutton
Georgia Ports Authority
Director – Information Technology

Bill began his career with GPA in 1998 as the Year 2000 Project Manager.
Prior to 1998, Bill worked 12 years with Great Dane Trailers as a Systems Analyst.
Bill led in the GPA's implementation of its Navis Terminal Operating Systems, Customer Support Systems, SAP Systems, as well as Human Resources Systems, Automated Security Systems, and Credentialing.

More recent GPA projects have included a wireless infrastructure to cover the terminal's 1200 acres, as well as the deployment of the GPA's Automated Asset Management System: an integration of OCR, RFID and DGPS technologies.

Bill is a lifelong Savannah resident where he resides today with his wife Nancy and their 3 children.

Georgia Ports Authority:

Facilitating global trade through strategic U.S. East Coast gateways, while creating opportunities for 9 million Georgians, the Georgia Ports Authority is a catalyst for international trade and investment. Georgia's ports combine industry innovations with proven flexibility to create new opportunities along the entire global logistics pipeline, delivering what the market demands. Now. Because in the world of trade, we're not just keeping up, we're setting the pace.

Todd Gerken
U.S. Export Assistance Center
Director, U.S. & Foreign Commercial Services (South Georgia)

Todd Gerken is Director of U.S. and Foreign Commercial Service programs in Southern Georgia. He came to the Commercial Service in 2008 from Washington, DC where he was Director of International Marketing for the U.S. Dairy Export Council (consumer and foodservice products). Prior to that, he spent 25 years in package goods advertising, industrial food marketing, trade development (for New Zealand), and international sales & marketing. Todd has an MBA in International Management from Thunderbird and a BA in Public Administration from the University of Florida.

U.S. Commercial Services

The U.S. Commercial Service is the trade promotion arm of the U.S. Department of Commerce's International Trade Administration. Located across the United States and in U.S. Embassies and Consulates in nearly 80 countries, our global network of trade professionals connects U.S. companies with international buyers, providing them with market intelligence, trade counseling, business matchmaking, and advocacy/commercial diplomacy support.

Whether you are a U.S. company looking to make your first export sale or expand to additional markets, or an international company looking to purchase products/services from the United States or find additional U.S. suppliers, we offer the expertise you need to connect with lucrative opportunities.

Michael Stolarczyk
Kontane Logistics
President

In December 2009, Michael J. Stolarczyk joined the team at Kontane Logistics in Charleston, SC, as President. Kontane Logistics is an industry leader in Third Party Logistics and operates in four locations within North and South Carolina. Kontane Logistics was established in 1995 as a separate operating division of Kontane Inc., a nationally recognized premier packaging design and builder based in Hickory, NC.

The Logistics division was originally formed as a dedicated third party logistics provider involved with packaging and exporting to several countries around the globe.

Since 1997, Kontane Logistics has expanded to include warehousing and distribution, cross-docking, freight consolidation, import material receipt, line sequencing, parts distribution, development of logistics information systems, sub-assembly, and foreign trade zones services.

Prior to joining Kontane Logistics Stolarczyk served as CEO of the Toledo-Lucas County Port Authority in Toledo, Ohio. Founded in 1955, the TLCPA was the first port authority in Ohio and operates the Port of Toledo, Toledo Express Airport and Toledo Executive Airport.

From 2005--2009, Michael worked as Senior Director for Exel, a leader in supply chain management that provides customer-focused solutions to a wide range of manufacturing, retail, and consumer industries in over 500 sites in the Americas. Mike supported the strategic growth of Exel's Retail customer roster. Prior to Exel, Michael founded FourPointStar (FPS - Ronin LLC) to establish a forum where people could stimulate collaboration and achievement.

Michael was with the A.P. Moller/Maersk Group from 1988 until 2004 and held various management positions within Maersk, ranging from Manager, International Accounts, with Maersk Hong Kong Limited, to Director, US Flag Liner Operations, for Maersk Line Limited, located in their Arlington, VA office.

In 2002, Michael's efforts led to the organization's quantum growth in Central Europe, and he was named to Fast Company magazine's debut list of "Fast 50: Global Innovators Whose Achievements Helped Change Their Company or Society."

In 1999, Mr. Stolarczyk was transferred to Prague to accept the Managing Director post within the Maersk Agency sro, administrating all business activities in the Central European countries of the Czech Republic and Slovak Republic. He was also Chairman of the Board for both Maersk Logistics Czech Republic sro and Maersk Intermodal Europe sro.

Board Positions:
In 2003, Michael was elected as vice chairman of the Ceske Pristavy a. s. (Czech Ports) Board of Directors by the shareholders of the company. He was also appointed to the Board of Advisors for West Virginia University's School of Business and Economics that same year. Additionally, Michael serves on the Board of Governors at West Liberty University in West Virginia.

Kontane Logistics:

Kontane Logistics was established in 1995 as a separate operating division of Kontane Inc.(Hickory, NC), the Southeast's Premier Packaging Design and Builder. The Logistics division was originally formed as a dedicated third party logistics provider involved with packaging and exporting to several countries around the globe.

Since 1997, Kontane Logistics expanded dramatically to include warehousing and distribution, cross-docking, freight consolidation, import material receipt, line sequencing, parts distribution, development of logistics information systems, sub-assembly, and foreign trade zones services.

Today we can integrate all or any of these services, utilizing transportation, sub-assembly, multi-warehouse locations, and expanded information systems. We can tailor our services around your specific needs where joint value and opportunity can be achieved.

At Kontane Logistics, we have the experience and resources to develop integrated solutions that add value and efficiency to your supply chain strategy. We will constantly pursue a way to develop these solutions, continually keeping your goals in mind.

Logical Logistics

A Common Sense Primer for your Supply Chain

Authored by Michael J. Stolarczyk

Logical Logistics by supply-chain guru Michael J. Stolarczyk goes beyond the business-as-usual approaches to supply chain operations to bust open the truth: most companies are ill-equipped, ill-prepared, and ill-situated to effectively compete in the global marketplace of the twenty-first century. The globalization of commerce has made sophisticated logistics technology a necessity for companies large and small. The need for advanced solutions may seem obvious, but a surprising number of companies still have a long way to go when it comes to global supply chain technology sophistication.

Many Fortune 500 companies report their global supply chain technology is inadequate to provide timely information required for budget and cash flow planning. Indeed, the global supply chain has been relatively ignored because it was traditionally a small part of a organization's business mindset. The themes of this book are: insight, foresight, and guidance from a common sense perspective on supply chain and logistics challenges in today's brave new world. We have moved into a conceptual age of business, when logical logistics understanding and decisions need to be made via vested collaboration and open dialogue with internal and external partners.

Stolarczyk has written a timely and essential guidebook that wastes no time cutting to the chase to present a no-nonsense, nuts-and-bolts reality check that any business can benefit from. Expertly written and organized for easy access to information, Logical Logistics is must reading for any executive, manager, or business school graduate. Companies wishing to compete on a global scale and maintain a sustainable and profitable footprint in today's challenging and fast-moving business environment must learn the lessons of twenty-first century supply chain logistics, or risk being left on the sidelines of international commerce. This book also includes an industry leading glossary and terms section.

David Frost
Georgia Institute of Technology – Savannah
GT Vice Provost, Director of GT Savannah

Dr. Frost obtained a B.A.I. in Civil Engineering and a B.A. in Mathematics from Trinity College in Dublin in 1980. After working for almost four years in Canada, including a year north of the Arctic Circle on the design, construction and performance monitoring of artificial sand islands for oil exploration, he returned to graduate school at Purdue University and obtained M.S. and Ph.D. degrees in Civil Engineering in 1986 and 1989, respectively. He served on the faculty at Purdue for three years before moving to Georgia Tech in 1992. His research uses computer-based imaging and visual analysis techniques to study the characteristics and behavior of natural and man-made geomaterials under earthquake and other dynamic loading conditions. In 1994, he received a National Science Foundation Young Investigator Award to support his research in applying these techniques to understand the consequences of earthquakes.

Georgia Institute of Technology – Savannah:

Initiated in 1998, Georgia Tech Savannah (GTS) was created as an upper division campus to unite education, industry, and technology in Georgia's Southeast region. GTS features distributed-learning capable classrooms, laboratories, faculty and staff offices, as well as a student center, café, library and learning commons, recreational facilities and a bookstore. In addition, the campus is home to the regional offices of the Georgia Tech Enterprise Innovation Institute, the Savannah Advanced Technology Development Center (ATDC), and the Georgia Logistics Innovation Center (LINC).

Continuing Georgia Tech's tradition of excellence in academics, research, and community outreach, the Savannah campus continues to have a strong presence in Southeast Georgia and is in the process of creating a new academic and operational model that will better serve the region

Nick Gant
Meddin Studios
Founder & Owner

About Meddin Studios:
In addition to bringing industry leading equipment, knowledge and technology to the southeast, Meddin was built to foster collaboration in the creative community. We wanted to provide a facility that can support every aspect of the pre-production, production and post production process from a single permit through distribution. The facility is also capable of handling processes outside the generation of creative content, to include asset management, accelerated file transfer, content management, as well as professional space for training, conferences, and special screenings. We provide a central location for companies, individuals and independent productions to have a resource for talent, documentation, exclusive content libraries, insight into new technology, and an environment that encourages the use of shared resources.

Due to the technical nature and cost of these resources, the purchase or build out of this type of environment is unrealistic for most creative individuals and businesses as on owned asset. As a collaborative facility, Meddin can act as:

* Pre Production Assistance
* Equipment Rental
* Camera Support
* Sound Stages / Support Facilites
* Post Facilities
* Asset Management
* Storage / Content Management
* Distribution

Meddin wants to extend the opportunity to an exclusive group of creative developers, content generators, media providers and companies in need of creative resources the ability to be a part of this environment. The Meddin Partnership Membership gives you exclusive access to the facility, the resources, its services and its members as we continue to build infrastructure needed by our members and the southeast.

Meddin also recognizes the need to have experienced talent in the area. Experienced talent can be very expensive for one company, even more expensive to bring that talent from out of town for a single project. With Meddin's membership we believe these resources can be shared and experienced talent can call the southeast home.

Nick Gant
Meddin Studios
Founder & Owner

Panelist Remarks:

Background/Company Overview:

We built a company that doesn't try to fix a problem by manufacturing a product or products, we built a company that provides infrastructure. We looked an entire industry that was missing the working parts.

What policies are currently in place that are barriers to your company/ organization's success?

Local politics and internal/hidden agendas. We are in changing economy and we embrace changing technology. The fear of the unknown and the fear to first scares people.

What policies have aided in your company/organization's success?

Forward thinking programs and "hope". Overall everything eventually reaches the decision of humility. You hope these people looking want this world to move forward. SBA programs, deferred fees, low interest rates and strong mentoring.

Where do you want to see your company/organization in ten years?

Hopefully 10 times larger and a success story for the American dream. We are two individuals with a great plan with every obstacle possible in front of us. We have been successful from day one. We have a struggling local government, weak and submissive leadership and we have new technology old people can't understand. People are afraid of collective information, new ways of communicating and the freedom to exchange knowledge / information.

How can the state of Georgia help your company/organization realize this goal?

Focus on forward thinking companies that are outside the standard economical mold. Manufacturing is great and fancy words like bioengineering, global / international commerce, carbon / green house energy credits - but none of the most successful companies today came from any of these. They can be timeless, undoubtedly. But the new leaders came from a couple of guys in their garage, their dorm room, in a diner, over the internet or even chat room. Arrogance and fear will crush the American dream.

Mr. Steven W. Weathers, CEcD
Savannah Economic Development Authority (SEDA)
President & CEO

Steve Weathers was named President and CEO of the Savannah Economic Development Authority (SEDA) and joined the staff in November 2010.

Prior to his role at SEDA, Steve was the President and CEO of the Regional Growth Partnership (RGP) since September of 2005, where he also led Rocket Ventures as its President & Managing Director. During his time at RGP, the organization assumed a leadership role that led to the creation of more than 7,200 new high-paying, high-skilled jobs in the region. Rocket Ventures, the region's first ever pre-seed venture fund which Steve led the effort to create, grew to become a $22.5 million early-state investment fund comprised of $7.5 million of private investment capital, as well as a $15 million grant from the State of Ohio. Rocket Ventures created 77 new technology companies in a three-year period.

Steve has been in economic development for more than 20 years, with 11 of those years in San Diego, California as Vice President of the San Diego Economic Development Corporation. Through the years, Steve has been involved in the attraction retention, growth and start-up of more than 500 companies. Some of his most significant and notable successes during his economic development career have been the attraction of the Novartis Genomic Research Center, Gateway Computers headquarters, the LEGO Theme Park and the SPAWAR Defense headquarters to the San Diego region, as well as the attraction of the GEICO, Citigroup and Intuit Software national service centers to the Tucson region.

Boards and Committees:

- International Economic Development Council (IEDC)
- Metropolitan Planning Organization
- Step Up Savannah, Inc.
- United Way of the Coastal Empire
- The Savannah Area Chamber of Commerce
- Savannah Technical College Foundation

Savannah Economic Development Authority (SEDA):

The Savannah Economic Development Authority (SEDA) provides professional site services and eases access to state and local resources. The organization, twice ranked as one of the best development groups in the country, has a clear record of success.

Among SEDA's major accomplishments is the nationally acclaimed Crossroads Business Park, home to more than five million sq. ft. of industrial space, headquarters operations, and educational institutions.

An independently funded organization, SEDA can act in the best interests of both the client and the community without the hindrances often associated with publicly-funded operations. And, Savannah/Chatham County itself, residents and government alike, has helped SEDA's mission with its strong commitment to remaining a vibrant, world-class community.

Research Brief: The Term "Asset" Defined[1]

September 2011

This research brief summarizes the results of a survey of eight definitions of the term "asset". These eight definitions were chosen as sectors that are economically significant to Georgia. Generally, **an asset is a resource with economic value that an individual, corporation, government or any other entity owns or controls with the expectation that it will yield to them a future benefit.**

1. **Agriculture**: the cultivation of animals, plants, or other life forms for use in food, or other products that sustain human life.
   Assets: Livestock, plants, fungi and fish that are produced by farmers; implements, tools, property, land, machinery and irrigation systems that are used by farmers to make their products; employees, managerial staff, accountants, and advisors who assist in the production, maintenance and sales of the agricultural products.

Citations: US Department of Agriculture (usda.gov), agriculture.com, Agriculture Education Website (agclassroom.org)

2. **Government**: the controlling body of a nation, state, or community.
   Assets: Legislators, administrators, arbitrators politicians and the administration that control the political decision making in the State; support staff that works for legislators, judiciary, or executors; voters; citizens; buildings that house meetings, living quarters and transportation means of the officials; finances derived from taxes, fines or other revenue methods that are operated by the government.

Citations: usa.gov, usajobs.opm.gov, City of Atlanta website (atlantaga.gov)

3. **Healthcare**: the diagnosis, treatment, and prevention of physical or mental impairments.
   Assets: Hospital facilities, campuses, machines, tools, doctors, nurses, assistants and employees who assist in the process of bringing healthcare to patients; pre-care mechanisms such as EMS, Life-flight, and fire response employees and tools; intellectual property that is designed, discovered, and used in the medical field to advance patient care and preventative medicine; medical schools that educate doctors and nurses.

Citations: US Healthcare Website (healthcare.gov), Whitehouse Healthcare Website (whitehouse.gov/healthreform), Children's Healthcare of Atlanta (choa.org), emoryhealthcare.org

4. **Higher Education**: Post-secondary education that refers to University or College.
   Assets: Includes the Board of Regents that presides over all schools; any affiliated university, college, technical school or institution; any intellectual property that is produced by the professors, researchers or students of any university; students, faculty, staff and employees; research facilities, classrooms, libraries or other facilities that are meant to enable learning or research; sports teams, competition teams or other student organizations that bring recognition to the individual schools.

[1] This research brief has been developed for use by the State of Georgia's Science and Technology Strategic Initiative Joint Study Commission. It was prepared from a comparative analysis of the term "asset". This document is meant to aid the Study Commission as they determine what types of information might be needed to support the development of a strategic plan for science and technology in Georgia. The document is subject to revision based on the request of the Study Commission.

Citations: University System of Georgia Website (usg.edu), usgfoundation.org

5. **K-12 Education**: Sum of the primary and secondary education systems, including Kindergarden-12th Grade.
   Assets: includes the School Board who makes decisions that are passed down to the individual schools; elementary, middle and high schools; students, faculty, staff and employees; faculty and student-led organizations that bring recognition to the school, including but not limited to bands, sports teams, competition teams, clubs and activities; parent organizations and the parents who fill those committees and make decisions for the school.

Citations: US Education Websites (k12.com, education.gov), scienceeducation.gov

6. **Logistics**: Management of the flow of goods between the point of origin and the point of use.
   Assets: Information that is essential in facilitating the flow of goods; transportations modes that are used, such as trains, planes, trucks, boats and helicopters; the inventory (whether physical or intellectual) that is being transported; the warehouses that store the data, inventory and materials that are used to transport the material and the human capital that is used to coordinate the transport.

Citations: logisticsworld.com, usps.com, ups.com

7. **Manufacturing**: use of machines, tools and labor to produce goods for use or sale.
   Assets: Tools, machines, property, buildings, refineries, vehicles, laborers, supervisors and managers that are used in the raw material extraction process, the production process, the transportation process and the recycling process; workers, buyers, sellers, and participants in the market for the goods produced by the manufacturing industry.

Citations: Coca-Cola Website (thecoca-colacompany.com), US Manufacturing Website (manufacturing.net, manufacturing.gov)

8. **Telecommunications:** transmission of information or data over significant distances.
   Assets: Any implements used in the facilitation of communication, such as computers, beacons, telegraphs, fiber optics, satellites, phones, wires, or radios; service industry personal that install the infrastructure necessary to facilitate communication as planned; hardware and software developers and companies that continually create new methods of facilitating easier and more intuitive methods of communicating.

Citations: Bureau of Labor Statistics (bls.gov), Telecommunications Industry Association (tiaonline.org), Business and Finance Online (cagull.org)

Research Brief: Previous S&T Reports and their Recommendations[1]

September 2011

This research brief summarizes the recommendations from 18 reports that contain recommendations with regard to some aspect of science, technology and/or innovation in Georgia. The reports span from 1998 to 2011 and contain 70 recommendations in over 12 sectors or fields. **None of the 18 reports contained identical recommendations.**

This document does not confirm the implementation of any recommendation, or attempt to validate or assess the effectiveness of these recommendations. It is assumed that other reports exist and should be added as identified.

Category:	Date	Report Name:	Recommendations
Aerospace Technology	1998	Senate Study Committee on Promoting Aerospace Development, Commercial Space Activities and Telecomm Tech	1. The Commission recommends state funding for SciTrek and Columbus's Coca Cola Challenger Space Science Center to help expand programs and to promote education in science and technology, especially in aerospace. 2. The Commission recommends that the state provide tax incentives for companies involved in the aerospace industry so as to attract high-tech companies to invest in Georgia. 3. The Commission recommends a resolution be introduced which would allow the Senate Study Commission on Promoting Aerospace Development, Commercial Space Activities, and Telecommunications Technology to continue studying the feasibility of a Georgia Spaceport. 4. The Commission recommends additional grants or HOPE scholarship money be awarded to students who enroll in aerospace, or aerospace related fields, similar to those awards given to students who enroll in traditional educational courses.
Electronic Commerce	1999	Final Report of the Electronic Commerce Study Committee	The Committee recommends that the FY 2000 budget include $200,000 to the Information Technology Policy Council for support in helping enable electronic commerce in the State of Georgia and help educate state agencies in the use of electronic commerce.
Technology Education	2001	Senate Study Committee on Technology Education	1. Develop a marketing plan to recruit information technology teachers. 2. Develop a plan to recruit undeclared students already attending the University of Georgia and Georgia Southern University. 3. Provide a program evaluation for recruiting and retaining information technology teachers. 4. Give service credit for teachers who move from the private industry into teaching. 5. Look at differential pay for teachers in the information technology field – pay more in line with

[1] This memo has been developed for use by the State of Georgia's Science and Technology Strategic Initiative Joint Study Commission. This document is meant to aid the Study Commission as they determine what types of information might be needed to support the development of a strategic plan for science and technology in Georgia. The document is subject to revision based on the request of the Study Commission.

			what the private market demands. 6. Provide funding for part-time extended day, especially in middle schools. The funding to allow middle school technology education teachers to be eligible for extended day contracts would compensate them for the additional hours spent doing preparatory work on their curriculum content and lab equipment, and supervising their local and state Technology Student Association Chapters.
Industry	2004	Commission for a New Georgia: Strategic Industries Task Force Final Report	1. Strategic Industries: strategic and supporting industries must be developed, and the potential ROI. 2. Bring innovation to Georgia's industries by driving innovation and supporting existing industries. 3. Best practices in economic development programs: accountability, relevance and focus. 4. University-Affiliated research parks must be developed by leveraging University resources.
Resource Utilization	2004	Commission for a New Georgia: Competitiveness Task Force Final Report	1. Recruitment and Retention: Focus Resources by creating Governor's Cabinet, instill strong executive oversight. 2. Financial Incentives: enhance B.E.S.T., decouple R&D tax credit; establish grant/loan Program; expand quick start and ICAPP Programs. 3. Access to the Capitol: utilize university research, reestablish green carpet tour, improve technology transfer, match investors and companies, and create tax credits for investments in emerging companies.
Work Force	2004	Commission for a New Georgia: Work Force Development Task Force	1. There isn't one solution: it needs to be comprehensive, holistic approach addressing the needs of those who want to work. 2. Need to have systems in place to begin preparing the workforce at age 3. 3. Need to have visible career paths to motivate continued learning and opportunity. 4. Need stronger linkage between industry's need and what education providers give.
Aerospace Technology	2005	Commission for a New Georgia Aerospace Technical Advisory Group	1. Develop Rapid Response training program to meet the State-of-Art Technology insertion for Aerospace. 2. Expand Georgia's Enterprise Zone Guidelines to promote expansion of existing facilities, motivate sub-contractors to relocate, and expand minority &disadvantaged business. 3. Create a Centralized Database for Aerospace Resources: intellectual resources for companies considering a move to GA, create data on skill and knowledge to supply workforce for Aerospace, provide network for the Industry and University liaison, and create a directory of training programs for Aerospace
Communication Technology	2005	Emerging Communications Technologies Study Committee	1. Residents would benefit from investment and innovation by technology providers in the state of GA. 2. Industry providers are encouraged to increase investment in broadband, wireless, and VoIP. 3. Propose legislation addressing the regulatory uncertainty regarding the emerging technologies of broadband, wireless and VoIP.

Life Sciences	2005	Commission for a New Georgia Life Sciences Technical Advisory Group	1. Investment: the financial dimension of innovation, including R&D investment; support for risk-taking and entrepreneurship; and encouragement of long term innovation strategies must be implemented. 2. Talent: the human dimension of innovation, including knowledge creation, education, training and workforce support. 3. Infrastructure: the physical and policy structures that support innovators, including networks and structures for collaboration among innovation stakeholders.
Communication Technology	2007	Senate Communications Taxes, Fees and Telecommunications Franchising Process Study Committee	1. Great need to reform Georgia's communications tax system, and the telecommunications industry must receive equal treatment in the code. 2. Corporate telecommunications citizens are subject to varying tax liability between the local and state level, this is inequitable. 3. Provide each citizen with equal access to emergency 9-1-1 service. 4. Create greater oversight for 9-1-1 funds so that this can be funded throughout the state. 5. Recommend legislation that will streamline the franchising process for telecommunications service providers desiring to do business in GA. 6. Support Senate Bill 408, it effectuates the principles from House Bill 227 from 2007 Legislative Session.
Aerospace Technology	2007	Aerospace Workforce Industry Supply and Demand in Georgia	1. Gaps which need to be closed: Avionics Maintenance Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of aircraft operating, control, and electronic systems. Includes instruction in flight instrumentation, aircraft communications and homing systems, radar and other sensory systems, navigation aids, and specialized systems for various types of civilian and military aircraft. 2. Aeronautical/Aerospace Engineering Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing, manufacturing and testing aircraft, spacecraft and their systems. Includes instruction in aircraft/spacecraft systems technology, design and development testing, prototype and operational testing, inspection and maintenance procedures, instrument calibration, test equipment operation and maintenance, and report preparation.

Aerospace Technology	2008	Georgia's Aerospace Strategic Industry	1. Bring Vision and Focus to the major opportunities for Georgia to accelerate aerospace industry growth by establishing an "Aerospace Industry Advisory Committee" under existing Executive authority, to be staffed day-to-day by the Center of innovation for Aerospace. 2. Embrace the aerospace industry's desire and ability to partner with state government to improve education. 3. Systematically exploit GA's existing vast research & development facilities, industry partners and talents to position itself as a global aerospace leader. 4. Improve existing aerospace firms' profitability and expand Georgia's aerospace industrial base by recruiting critically needed suppliers into Georgia from higher-cost states.
Intellectual Property	2008	Task Force on Commercialization and Intellectual Property	1. The University System should invest, provide and maintain standardized enterprise-wide innovation management software system to its research universities. 2. Develop an enterprise-wide structure which recognizes the importance of research accomplishments within the University System. 3. Create system-wide vehicle to promote and integrate “best practice” education and process improvement within the research universities. 4. Establish at the enterprise level an ongoing marketing program which creates and leverages the enterprise data into “a Georgia marketplace”.
Life Sciences	2008	House Bioeconomic Development Study Committee	1. The goal is for Georgia to become No. 3 or No. 4 in 10 years in life sciences development behind only California and Massachusetts. 2. Georgia needs to establish a Biotechnology Enterprise Center, and a statewide centralized commercialization center that proactively seeks licensable technologies for Georgia's industries. 3. Georgia should promote the establishment, where feasible, of university-affiliated research parks that leverage our research efforts, economic development assets and state's private sector. 4. Develop a Georgia Venture Fund based on a state guaranteed Bone which is paid back with interest. The fund remains evergreen and continues to grow.

Manufacturing	2008	Final Report of the House and Senate Study Committee on the Future of Manufacturing in GA	**Tax Policy Recommendations:** 1. Supporting legislation that eliminates the sales tax on energy used in the manufacturing process phased in over a five year period beginning in 2011. 2. Supporting efforts to eliminate the sales tax on coal used in the generation of electricity. Eliminating this tax, which is passed on to the consumer through a Fuel Cost Recovery Rider, would benefit all classes of consumers. 3. Allowing companies to sell tax credits that cannot be used to third parties, thereby enhancing this economic development strategy. 4. Allowing capital equipment expenses for innovation technologies used in the manufacturing process to qualify for the investment tax credit or the optional tax credit. 5. Removing the requirement that companies have a positive net income for the previous three years in order to qualify for the Research and Development tax credit. **Workforce Development Recommendations:** 6. Supporting the current budget recommendations for Quick Start, subsequently allowing Quick Start the flexibility to spend resources where they are most needed. **Voluntary Remediation Program Recommendation:** 7. Adopting a Voluntary Remediation Program (VRP) to complement the existing hazardous Site Response Act program that would allow property owners to voluntarily clean up listed sites using professional engineers.
Education	2009	Georgia Bio: Education and Workforce Development Committee	1. Achieve broad community and government support in Georgia for the life sciences industry through greater understanding of its benefits and economic impact. 2. Influence adoption of laws and regulations that support the life sciences industry's efforts to improve health and quality of life. 3. Influence the acceptance and support for life sciences research in Georgia. 4. Promote Georgia as the premier State in the Southeast for life sciences innovation.
Logistics	2010	Georgia Logistics Report	Educate businesses throughout the state of GA about "5 Factors of Logistics Competitiveness": Policy, Infrastructure, Operations, Technology and Workforce.

Aerospace Technology	2011	Operations Plan for FY2011: The Center of Innovation for Aerospace	1. Refocus work ready partnership activities to Savannah & Columbus area, and begin investigations into potential for "MRO University" program with GT, MGC, MGTC, and others. 2. Refocus innovation projects and grants based on goals and TRL: roughly half to be aligned with COIA initiatives and programs, rest to address high payoff opportunities. 3. Manage innovation project pipeline to match available resources (8-10 active projects at the time) 4. Focus on UAV-NAS integration & testing, leverage capabilities at MGC Aviation and other GA companies and leverage capabilities from GT Aero and MGC for Aerospace alternate Energy. 5. Establish Georgia Aerospace industry advisory committee with participation from companies, aero orgs, USG, and regional and community participants 6.Plan and execute annual Georgia Aerospace. Summit, with joint sponsorship with GAIAC members, 7. Expand media outreach and advocacy: 2 policy position papers per year, podcasts each month, website blogs, and twitter posts.

SR 68 – Subcommittee - Capital Needs - VC and Angel Funding
9/19/11 – Meeting Minutes

I. Introduction:
   a. Senator Albers welcomes attendees and subcommittee members.
   b. Subcommittee:
      i. Alan Taetle, Noro-Moseley Partners
      ii. Sig Mosley, Imlay Investments
      iii. Knox Massey, Keith-Massey Family Investments
      iv. Marc Herdegen, iGroup
      v. Michael Price, CEO Ventures

II. Overview/Goals:
   a. Albers addressed the number of comments and concern over the state's lack of capital in Georgia for angel and VC firms to invest in start-up companies
   b. The subcommittee will review and discuss potential funding programs to encourage increased capital flow in the state and investment opportunities and submit a set of recommendations that will be reviewed by the S&T Commission and adopted into their final report to the General Assembly
   c. Albers asked for comments and thoughts surrounding pension reform to allow for alternative investments:
      i. Alternative Investments through Pension Reform
      ii. Angel Investment Opportunities and Credits
      iii. Alternative methods to increased capital
      iv. Other methods not directly tied to capital funding, but would encourage VCs to look at Georgia companies as potential investment area

III. Public Pension Comments
   a. Georgia is the only state that prohibits using pension funds for investing in alternative assets. **Research other states and pension funds that do allow it.**
   b. MH suggested to, **look at the Ontario Teachers' Pension Fund** – private equity firm.
   c. AT discussed that if pension reform was considered that we need to realize only a small portion of the funds would be available for investment
   d. JA added that we need to work on educating the teachers who have been opposed to such reforms in the past.

IV. Angel Investment Opportunities and Credits
   a. SM and KM discussed the success of the angel investor tax credit that was passed last year. They needed more information, which is held by the Dept of Rev, on the number of companies that have filed to become eligible a qualified company and thus eligible to offer investors the tax credit.
   b. **Extending the business tax credits allowed in Georgia beyond the initial three years**.
   c. **Reshaping the movie and entertainment industry tax credit**; within the gaming industry, there are credits for software development and perhaps

looking at tax credits for other software development would stimulate business growth in Georgia.

V. Alternative Methods to Increasing Capital Funding
   a. AT - What can we do to make entrepreneurs want to stay in Georgia? One suggestion is to **look at the programs started in SC**; i.e., the state income tax credit, limited role of investors on partnership board.
   b. Seed money is needed. **Look at TN legislation**. - TNinvesco
   c. **Build an eco-system** to support all areas until the VC steps in.
      i. Incubation – technology spin-offs.
      ii. Engines
      iii. Invest in pre-revenue companies
      iv. Early support by angels
      v. Follow-on capital by venture capital to sustain the companies
      vi. How to get institutional capital
   d. Consumption-based tax really would have no effect on early-stage companies
   e. Need to get enough investors to share the risk. Allowing for firms outside the state to receive funds and invest in GA companies will help increase funding for local start-ups

VI. Other Items Related to Capital Investment:
   a. **Change perception** so that Georgia/Atlanta/metro is the upcoming Silicon Valley.
      i. We need more IPO's to attract new companies and investment. (C-Beyond was the last one.) Need to demonstrate the funding is available in Georgia.
      ii. What is Atlanta known for? Identify the logical segments; i.e., security, software hub, telecommunications, financial technology.
   b. **Consider** whether having a presence (**bridge offices**) in Silicon Valley, Boston, or NYC would be beneficial for attracting Angel and VC investment for start-up companies in Georgia and learning about strategic investments that are available.
      i. Also, to participate in demo days, in conferences to increase awareness of what's being developed in Georgia. To learn of the diversity with venture capital firms.
   c. Technology Investment Act
      i. Large act that would include items like a tax credit/incentive for VC and Angel funding, national promotion of sectors with focus on leading clusters
   d. Importance of **better publicity/communications** with people and potential companies.
      i. How to apply for investment credits.
      ii. Advantages for starting a company in Georgia (what Georgia has to attract business; i.e., lower operating costs, super universities, etc.). Perhaps create a 5-minute video of "why to start a business in Georgia."

VII. Action Items:
- a. Jenee Burke to research:
  - i. Companies that have applied to be a qualified company to offer angel investment credit to investors
  - ii. Ontario Teachers' Pension Fund for "best practices"
  - iii. TNinvesco and Maryland Capital Investment program – "best practices and overview of programs"
  - iv. The return other states have had that allow for "alternative investments" through their pension fund
- b. Alan Taetle to:
  - i. Look to add some larger VC firms that invest in mid-large size companies looking go from 50-100 million to 1 billion in revenue. Some options where:
    1. HIG
    2. Arcaptia
    3. Navigation Capital
- c. Next Meeting:
  - i. Group should come prepared to offer their specific recommendation for what should be included in the subcommittees recommendations.
    1. Members will review each item offered, discuss it, and set a priority to it
  - ii. Date for next meeting is TBD – 4-5 weeks ideally from 9.19.11.

VIII. Summary:

The capital subcommittee of the Science and Technology Study Commission met to review and discuss some potential items for consideration in terms of increasing Georgia's technology firms' access to capital. The group reviewed a number of items like pension reform to allow for alternative investments, extending the angel tax credit for more than three years, as well as discussed a few programs in other states like South Carolina, Tennessee and Maryland that have capital tax incentive programs that encourage and allow for increased investments. Additionally, they discussed other items like developing an ecosystem for VC and entrepreneurs to interact, receive funding and create jobs, building a bridge office in key funding cities like Palo Alta or Boston to encourage outside investment in Georgia's firms, and promoting the states tech based firms outside the state to brand Georgia as a leader in technology start-ups. They left with a few action items and will reconvene with specific items to review and prioritize at their next meeting.