

State of the Institute – *Today and in the Future*

October 20, 2009

G. P. "Bud" Peterson President, Georgia Institute of Technology





Georgia Tech Today

- Nationally ranked programs
- Outstanding faculty, staff & students
- Interdisciplinary leader
- Award-winning research
- The place for success













Our Graduates are in Demand



- Academic excellence, co-op, internship & study-abroad experiences set our students apart.
- 8,120 interviews held on campus, 471 companies represented
- Average starting salaries by discipline range from \$42,500 to \$60,000









Outstanding Faculty

Faculty Awards

- 137 faculty NSF CAREER Award recipients
- Top ten in number of faculty elected to National Academy of Engineering
- Top ten in number of faculty receiving Presidential Early Career Awards in Science and Engineering.
- Increasing awards in public policy, architecture, business & liberal arts
- Fulbright, Newberry Library & National Endowment for the Humanities Fellowships









Record Levels of Research

New Sponsored Awards for FY09 – more than \$483 million

- Energy and sustainability Commercialization from Tech labs in Suniva, the South's first solar cell manufacturing company
- Biotechnology recently announced the Global Center for Medical Innovation
- High Performance Computing Mapping the energy spectrum of graphene

We have some truly remarkable research underway here at Georgia Tech that will help to shape the future.







A Time of Positive Momentum

Capital construction

- Formal opening of the Marcus Nanotechnology Building
- Ground Breaking for the Zelnak BB Practice Facility
- Clough Undergraduate Learning Commons construction underway (220,000 gross square feet)
- Many deferred maintenance projects underway

Given the economic situation in the country, there is an amazing amount of capital construction underway at Georgia Tech.









Economic Engine for Georgia

- Produced more than 300 invention disclosures annually
- One of the state's top patent producers, ranks 3rd
- Spins off an average of 10 new companies a year
- ATDC has incubated more than 120 start-up companies
- Has generated more than \$13 billion in revenue and \$100 million in profits
- In the past decade, companies have attracted more than \$1 billion in venture capital
- In the past year, Georgia Tech programs for existing industries assisted more than 3,000 Georgia companies, saving or creating 20,000 jobs.

Georgia Tech worked with state government to attract NCR to Georgia – drawn by our talented workforce and opportunities for research partnerships.





If you take all the students in the U.S. who enter our educational system as Kindergarteners...



And look at the underrepresented population...



Only 2/3 graduate from High School



Only 51% will attend college





And only 9% will graduate with B.A.



Georgia Tech Promise

Helps ensure that all eligible Georgia students can attend Tech, regardless of their family income

2009-2010 Academic Year

- 225 Tech Promise Scholars
 - Average family income \$24,500
- Covering the cost
 - Other assistance \$2,019,771
 - Georgia Tech Foundation ~ \$900,000









Georgia Tech – Economics

FY 2010 - \$1.2 Billion in Operating Revenue



We continue to work towards the development of a long- term sustainable financial model.





Peer Budget Trends

- Declining state support for public institutions across the board
- Greater dependency on revenues from tuition and sponsored operations
- Shrinking endowments at both public and private institutions
- Shift the tuition discussion to a focus on "investment" rather than "purchase"





Georgia Tech - - The Last 25 Years....

	Indicator	<u>1984</u>	<u>1999</u>	<u>Today</u>
•	Enrollment Mix (UG/GRAD)	10,956 80/20	14,075 73/27	20,000 67/33
•	Colleges	Four	Six	Six
•	Teaching faculty	515	680	925
•	Student-to-faculty ratio	21:1	21:1	22:1
•	Total employees	2,800	4,200	5,700
•	Research Awards	\$66M	\$217M	\$483M
•	Budget State Appropriation Percentage from State	\$174М <i>\$53М</i> 30%	\$582M <i>\$188M</i> <i>32%</i>	\$1.2B \$260 M 22%
•	Tuition (In-state)	\$1,130	\$2,414	\$6,070
•	Facilities Square Feet	4.6M	8.7M	14.5M



The World Today

Google Digital Library Project



Our challenge is to help students take the tremendous amount of information available to them and turn it into knowledge, because there is a difference.





The World Today

Telepresence isn't just for Star Wars anymore...



The future is already here...

We just don't know it yet!



Designing the Future at Georgia Tech

- What role will we have in preparing students for leadership in a globalized world?
- How will we use science and technology to help society address major problems?
- How will we build an enterprise that can be sustained in an ever-changing environment?
- What will we be on our 150th anniversary?

We must address issues and create circumstances that ensure success in the future.







Strategic Planning – The Rationale

The Strategic Planning process will chart a new course for Georgia Tech for the next 25 years – one that:

- Provides greater agility in a rapidly changing environment
- Enables us to make investments today to better prepare for tomorrow
- Helps us better serve the state, the region, the nation and the world through our education, research, creative works and service

We are preparing students for jobs that don't yet exist, using technologies that have not been invented, to solve problems that we don't know are problems yet! - "Did you Know"







So Where Do We Start?

Our vision is right – "Define the technological research university of the 21st century and educate the leaders of a technologically driven world."

Our mission is relevant – to provide the state of Georgia with the scientific and technological knowledge base, innovation, and workforce it needs to shape a prosperous and sustainable future and quality of life for its citizens

How we achieve both needs a plan based on creative thinking and bold action which we will use to guide unit based planning and resource allocation We must identify those things that will differentiate us from other institutions and ensure the success of our graduates.







Looking Ahead

Why 25 years?

- Allows us the freedom to think without the encumbrance of existing problems and conditions.
- The plan considers needs of students yet to be born: the generation beyond iPods, "MySpace," Twitter and Blackberries.
- If you have a vision and understand where you are going, you can make investments today to get you there.
 - Can make 25-year vision tangible by setting short term actions and benchmarks that will point us toward the long-term.



Strategic Planning – the Process

- Comprehensive & Inclusive, reaching out to entire Georgia Tech community
- Led by a 75 member Steering Committee of internal and external "stakeholders"
- Strategic Planning Subcommittees explore "Strategic Themes"
- Includes subject matter experts and "core contributors"
- Website for sharing information and soliciting input
- Open Forums
- Interview thought leaders, business and community leaders
- Will solicit input from the Board of Regents





Tech's Envisioned State in 2035

Strategic themes – "a key area in which GT must focus in order to succeed – this contrasts a current state to a future state and specifies measurable actions that need to be taken over time to achieve the future state"*

Big Ideas – long range statements of the future that are consistent with our vision and culture, but which may be outside of our comfort zone. These ideas need to be so compelling that they ignite our passions and strengthen our resolve to achieve them. In addition to identifying the envisioned status, we must determine what we must do in the next 12 to 18 months and the next 3 to 5 years to achieve that state.



Summation of strategic themes \rightarrow The GT Strategic Plan

* Norton and Kaplan, The Strategy Focused Organization





Strategic Themes

- Sustain and Enhance Our Culture
- Enrich the Student Experience
- Be Purposeful and Relevant in What We Teach and Learn, and innovative in How We Teach and Learn
- Ensure Georgia Tech's Research Preeminence
- Enhance GT's Role in Georgia
- Leverage GT's Global Engagement
- Lead in Big Payoff, Transdisciplinary Areas
- Establish and Use Best-in-Class Administrative and Business Practices and Processes







Scenarios for 2035

Dominant Issues, Economic Implications

Social Implications

- Clash of Titans
- Hot, Flat & Crowded
- Lifespan Mecca
- Network U.





Clash of Titans

- Battle with MIT and Stanford for dominance in Engineering
- Compete with premier international universities for global rankings
- Fierce talent competition
- Top students at all levels expect and get near-free education
- The top players continue to dominate receipt of Federal funds
- Costs soar, much raised from philanthropic sources
- Changing demographics impacts how alumni best relate to their alma maters

"What a dangerous precedent. What if there are more heroes like him? What if courage and imagination became everyday mortal qualities? What will become of us?"

Thetis: Clash of the Titans





Hot, Flat & Crowded

- Global parity emerges in graduate education in science and technology
- Greater collaboration among institutions emerges
- Many of the best jobs are in Asia
- Scarcity and constraints dominate sustainability debates; clashes of belief systems create political turmoil and security concerns;
- Federal and state support diminish as portions of budget; industrial and philanthropic support are increasingly competitive
- Global footprint of top universities increase by necessity; social, cultural, and ethnic diversity of faculty and students increases in turn

The trends of Hot, Flat and crowded are converging.

1. Hot = Global Warming 2. Flat = Globalization of marketplaces 3. Crowded = Growing competition for resources







Lifespan Mecca

- Demand for postgraduate and executive education surges as career changes become quite common
- demand steadily grows for education and arts by an increasingly urban older population
- Two or three MS or MA degrees become common across careers, as do certificate programs
- Tuition revenues soar for executive programs and graduate education programs popular with elders;
- Median age of students increases substantially,
- Diversity of faculty increases substantially to satisfy diversity of demands

The non-traditional student will become the traditional one as people embrace a lifetime of learning.







Network U.

- Social technology prevails; access to the best content and faculty is universal; nevertheless
- Classroom experience is now highly interactive, both remotely and face-to-face
- Students and faculty have broad and easy access to knowledge, often via other people; with the "best in class" universally available
- More teaching professionals are needed for recitationsized classes; teaching skills are at a premium;
- Students and faculty are networkers par excellence;
- students seamlessly transition from K-12 to university to lifespan education

What can we do now to ensure that we are included in the "best of the best" in the world?"







Some Possible "Big Ideas"

- Educational guarantee
- National leader in IP policy
- Staple a green card
- Virtual learning environment
- Cluster Requirements
 - Performance Cluster
 - Service Learning Cluster
 - Research Cluster
- Foster Healthcare Excellence

This is just a start and only a sample of what we are thinking.









Strategic Planning – Timeline

Summer 2009 – Planning Process Begins
August 3, 2009 – President's offsite to identify key issues
August 24, 2009 – 1st Meeting with the Steering Committee
September 3, 2009 – Planning sessions with Tech Community
September 24, 2009 – Parents Association Workshop
September 25, 2009 – GTAB Mtg. to discuss Issues and plan

- December, 2009 Initial Steering Committee Drafts due
- May, 2010 Final Draft to Communications
- Summer 2010 Review with various constituencies
- August, 2010 Strategic Plan finalized and printed
- September 2010 Introduce Georgia Tech's New Strategic Plan
- October 2010 Public announcement of Capital Campaign

We must identify where we want to go and then plan how best to get there.





How Can You Provide Input?



www.gatech.edu/vision/

Our New Public Service Announcement



Questions or Comments??

Thank You

Success is not a random act. It arises out of a predictable and powerful set of circumstances and opportunities... — Malcolm Gladwell (Outliers)



