Let me begin with a little background:
- SLIDE: Campus planning history
- SLIDE: Capital and Campus Plan Revision Timeline
- SLIDE: Strategic Plan Revision Timeline

The Strategic Plan defined our mission (SLIDE).
We believe that this mission is still valid today. However, we also believe that we need to be flexible in responding to changing conditions as we carry out our mission.

The Strategic Plan laid out an agenda that we thought would take us 15 years to achieve. (SLIDE)

The 15 years are not yet up, but the changing context in which we are operating has made it clear that a revision of our agenda is in order, and I want to ask you for advice as we do that. There are a number of reasons why we have undertaken a revision five years into what we originally thought of as a 15-year plan:
- SLIDE: Educating students
- SLIDE: Technological development
- SLIDE: Resources
- SLIDE: Outside perceptions

SLIDE: So, we are revising the plan because…

Let’s take a look at the megatrends that are already creating the context of the coming century. Technology is ubiquitous, and for a technological institution like ours, this is to our advantage. Computing is pervasive, and the combination of the Internet and the rapid growth of information is changing all aspects of our lives. Even for a technological university, these trends are going to demand attention in creating the future teaching and learning environment.

Talent is dominant, and our population is becoming ever more diversified. We have to use these trends to our advantage if we are to succeed. Interdisciplinary is “in” and entrepreneurs have the edge. The question is, does Georgia Tech have the ability to change its culture to accommodate this new environment? Finally, the economy is globally networked, and research is driving innovation.

It will be difficult to succeed in this demanding new environment. We will have to be clearer about where we want to go, and more focused and deliberate in our efforts to get there. Yet the opportunities to become truly world-class have never been greater.

A world-class university has a world-class presence, and Georgia Tech is moving in that direction. The Sam Nunn School of International Affairs and the European Union Center give us an edge over others in providing an international perspective here on campus and projecting our influence beyond campus. Our students are taking advantage of a growing range of study abroad and exchange programs to help them prepare for leadership roles after leaving Tech.
Beyond Atlanta, Georgia Tech is setting up shop where our interests lie, both within and without our national boundaries. The green triangles indicate actual facilities. Within the state, GTREP has taken us to Statesboro and Savannah. We have research facilities in Huntsville, Alabama; Arlington, Virginia; and Dayton, Ohio. We have a thriving satellite campus in Metz, France, and next year the College of Architecture will celebrate 25 years in Paris. The locations of our study abroad and exchange programs are indicated in yellow.

Last month, Engineering Dean Jean-Lou Chameau and my wife, Anne, and I traveled to Singapore to formally initiate the new Logistics Institute-Asia, which will offer master’s degrees at the National University of Singapore. We are at all of these locations because we have been asked to be there and our services are sought after above all others. There is no more tangible evidence of our growing national and international reputation than this.

If we really want to be known as a world-class university, we must continue to upgrade our profile in Blue Chip organizations like the National Academies of Science and Engineering. As I noted earlier, we have made progress in this area, but we have much more ground to cover. We must develop and offer policy expertise, and build partnerships with other world-class universities, as we have with Columbia University in the Center for Science, Policy and Outcomes, and with Emory University in biotechnology.

We also need to build academic excellence across the board in all of our colleges. This is one of our biggest challenges and one of the most significant factors keeping us in the shadow of the world’s finest universities.

We have begun to explore the economy of the new century, and we have several opportunities to expand our efforts. The DuPree Center for Entrepreneurship figures out what makes start-up companies succeed. The new iXL Center for Electronic Commerce studies business on the Internet, a dynamic area that offers great potential to Georgia Tech and its management college. Our executive master’s degree programs in the management of technology and international logistics give Georgia’s business leaders skills for the new century. And we are hoping to build an executive education and continuing education center on Fifth Street to house these rapidly growing programs.

There is no debate that we must be a leader in computing. In 1946, Georgia Tech became the sixth university in the nation to own a state-of-the art AC network calculator – a sort of rudimentary computer that was as big as a room. Today, more than 50 years and countless product cycles later, leading the way in computing continues to be both a challenge and an opportunity.

Our fastest-growing majors are computer science and computer engineering – academic programs that didn’t even exist when I was a student 35 years ago. We now have more than 1,300 students majoring in computer science. Our research efforts in virtual reality and information security are among the best in the nation.

We have begun to offer master’s degrees over the Internet, and unlike universities that simple plop video onto the Net, Georgia Tech’s courses are designed specifically for Internet delivery. We are going to take just a minute here to give you a taste of what our far-flung Internet students see and hear when they sit down at their computers for Jonathan Colton’s class. (INTERNET DEMO)

This is education on demand – any time and any place you can plug into the Internet, and over the next two years we will use this technology to offer master’s degrees in mechanical engineering, civil engineering and electrical engineering.
The major economic development initiative undertaken by our new Governor Roy Barnes is known as the Yamacraw Mission, an effort designed to make Georgia a major center of software engineering and electronic design over the next five years. I was proud to have participated in the design of the Yamacraw Mission, and am pleased to announce it will lead to the addition of 45 new faculty members at Georgia Tech – 15 of them have already been hired this year.

Yamacraw dovetails beautifully with another initiative that is being implemented at the same time. The Metro Atlanta Chamber of Commerce Industries of the Mind initiative has targeted 520 high-tech companies to recruit to Atlanta, and Georgia Tech is a major drawing card. Tech is working closely with the Chamber to implement the Industries of the Mind effort, and through the Yamacraw Mission, we will provide the talent to drive it. Nowhere in the nation are there two such initiatives as the Yamacraw Mission and the Industries of the Mind effort, and nowhere do such ambitious efforts intersect on one institution as is occurring today at Georgia Tech.

These efforts to expand Atlanta’s high-tech communication industries complement the research at GCATT – the Georgia Center for Advanced Telecommunication Technology – to give us the ingredients we need to become a world leader in advanced communications. In addition to its research labs, GCATT also houses an Advanced Technology Development Center, a component of our nationally recognized high-tech business incubator. The ATDC serves entrepreneurs and now incubates start-up companies at three Atlanta locations, in Warner Robins and soon in Savannah. Georgia Tech is one of only a handful of universities in the nation have a business growth machine like ATDC.

All of these attributes – educating a technological workforce, conducting research and promoting high-end economic growth – make Georgia Tech a driving force in stimulating a Midtown Atlanta Renaissance. As our campus becomes the center of a high-tech community, quality housing, retail and service outlets are completing the picture. We are seeing the leading edge of what will become Atlanta’s Silicon Valley, and we are at the heart of it.

The high-tech economic developing around our campus is changing the residential and commercial climate for the better. Today, Centennial Park has replaced Techwood Homes, and improvements like this are helping to make our campus a safer place.

Just at a time when Tech strives for a new level of excellence in the sciences, the hottest research fields are in the gap between the sciences and technology, enabling our strong engineering and computing programs to give the sciences a leg up. Many universities pay lip service to interdisciplinary endeavors, but Georgia Tech is actually becoming interdisciplinary from the ground up – in partnerships with Emory University and the Skidaway Institute for Oceanography in Savannah, and in facilities like the uniquely designed BEM Complex.

The Biosciences and Bioengineering Building is built; the Environmental Sciences and Technology Building will soon be under construction; and we have begun raising funds for the Molecular and Materials Science and Engineering Building.

Already representatives from other universities are coming to our campus to understand this innovative approach to creating a knowledge complex. It is designed to operate as a unit, not as three individual buildings, and faculty occupying its offices and laboratories are drawn from a range of disciplines. This complex is essential for our sciences to compete in the new era, since the last science building at Georgia Tech was the Boggs Chemistry Building, constructed in 1966.
In the next century, faculty and students at Georgia Tech will lead in developing the new knowledge that drives a range of interdisciplinary research areas important to the future. We have already built positions as a leader in these fields. As you can see from this map Atlanta is the only major Internet hub in the Southeast. This is one of the few cities in the United States where you can find three major gigapop sites within spitting distance of each other, and one of them is here at Georgia Tech.

Another major research challenge right here in our own backyard is Atlanta’s high levels of air pollution and traffic congestion. Georgia Tech is helping to provide the expertise needed to solve these problems.

Just like Atlanta, Georgia Tech has experienced exceptional growth, and it is stressing our facilities and campus support systems. And just like Atlanta, our challenge for the future is to catch up with the growth and be smart about how we manage and direct any additional growth.

Not only has our overall enrollment increased by 70 percent over the past 30 years, but our graduate enrollment increased by 167 percent. That puts extra stress on our facilities, because graduate students need more in the way of office and lab space than undergraduates.

When you’ve got more students earning more degrees, you need more faculty. Our faculty growth has paralleled student growth, but has not quite kept pace, so we have not made the progress we need in improving our student/faculty ratio. That is another of our challenges.

In addition to enrollment growth, on-campus housing for students, including Greek housing, has more than doubled over the past 30 years. Those new Olympic dorms are great, but they are putting pressure on other campus life infrastructure, much of which was created in the late 60s and 70s, when we were a university of 10,000 students.

The increasing demand for workforce education is reflected in the significant growth that Tech’s continuing education programs have experienced over the past 20 years. Revenues from these programs cover the cost of their operation, but we have to have somewhere to put them.

But the largest increase of all has been in sponsored research, which has grown 30-fold over the past 30 years. Research is important because it drives high-end economic development, and it is a powerful magnet for attracting and holding quality faculty and students.

The trajectory for all of our major growth factors is up, and our challenge for the future is to craft a strategy that will carefully manage and focus our growth to achieve higher levels of quality. That strategy includes limiting our campus enrollment to 15,000 students, targeting our research at carefully chosen fields, serving the market for continuing education at market prices, and catching our campus infrastructure up with growth. And I’ll say a little more about that last one in just a minute.

As we limit our campus enrollment, we face the additional challenge of increasing its diversity. Georgia Tech has made tremendous progress in encouraging women and minorities to enter technology fields. We now graduate more women and minority engineers than any other university in the United States. Our challenge is to continue and expand our efforts to prepare women and minorities for technology leadership.

Now, back to that challenge I mentioned a moment ago of catching facilities up with growth. We have a lot to do, and we have the plans to get us where we need to be. As we do that, we will also gain the elbowroom to do some desperately needed renovation of the many older buildings on our campus.

Too many of our classrooms are in old buildings, like Engineering Science and Mechanics, that are in desperate need of renovation. The days are also gone when education technology consisted of a T-square and a slide rule. Today Georgia Tech is one of America’s
most wired campuses, with 1,700 miles of fiberoptic cable, and “virtual” learning communities are developing. As we renovate our old buildings, they need to be redesigned and retrofitted for the high-tech learning environment of the future.

We are planning a new Undergraduate Learning Center that will not only provide space for state-of-the-art classrooms, but also space for library resources and student activities. It will also be one of the most visible buildings on our campus, being located next to the existing library and across from the Student Center.

Our infrastructure needs extend beyond classrooms to athletic facilities. We need to bring our intercollegiate team sports from our present 16 to 20, the ACC average. The Olympic Aquatic Center stands as a gaunt reminder that it is not finished. The Student Athletic Complex next door was built in 1977 when our student population was only 10,000. Our student recreation facilities are only half the size of most universities with the same number of students. Our plan calls for one innovative project that will enclose the Aquatic Center so it can be used for intercollegiate competitions, and at the same time incorporate the Aquatic Center into an expanded and renovated Student Athletic Complex.

So there is much to do, but the opportunities are great and our students, faculty and staff deserve all we can give. Our students are at the heart of our efforts, and we want to provide a campus environment for the next century that encourages their growth and allows them to use their talents to the very best of their very substantial abilities.

Georgia Tech has ascended to new heights, but history knows no resting places. Our choice is either to press ahead or fall behind. It is said that complacency is death, and this is a truism. But a corollary is that complexity is slow death. We have to be focused and strategic. Yesterday’s strategies will no longer work, and the changes ahead are unpredictable. The only approach that is likely to succeed is for us to engineer the future, and the Strategic Plan is the tool that will guide us.