TRANSFORMATIONS

THE VOLUNTEER SPIRIT IS DRIVING OUR JOURNEY to become a Top 25 public research university and creating “wow” moments all across our campus. It was just four years ago that we started on the journey. To be honest, there was skepticism internally and externally, because it was not the best of times economically and the goal is high. But I believe it was that downturn and the very high goal that invigorated us and turned skeptics into believers. We set goals and tied those goals to our progress on the journey. Our journey has been transformational. I never imagined what we would actually accomplish in four years, and now it feels like the university is unstoppable.

Our first priority is the student experience; it’s at the center of everything we aspire to be. When we set out on this journey, our students were already Top 25 caliber. Their potential strengthened our resolve to create an environment for them to shine. That bright light is leading the way for us all.

Our graduation and retention rates are up. Our student athletes are making record progress in the classroom, posting the highest GPAs since we have been keeping records. Our students are making an impact in communities across the world—and we know this is just the beginning.

We celebrated a huge Big Orange pride moment this year when we learned that one of our students was named a Rhodes Scholar. Ms. Lindsay Lee will change the world.

Our world-class faculty inspire our students. Their accomplishments and honors are competitive with Top 10 universities in the humanities, enhancing our reputation and helping us make great strides on our journey. The creative discovery of our faculty makes us competitive on the world stage. Our research is about moving the global community forward and imagining new possibilities. Our discoveries will touch your life in some way.

We also work on discovery with our most important partner, Oak Ridge National Laboratory. The opportunity for our students and faculty to engage in study and research at ORNL helps us attract some of the best minds in the country. It’s a true competitive advantage.

Creativity fosters opportunity as we travel on our journey. Each college and department faces its own challenges, and I am amazed at the big ideas that have sparked results—they have truly created excitement and commitment to the journey. Some of our best ideas are included in this report.

The landscape is changing at Tennessee, and I mean that literally. We are committed to providing the best facilities for our great students and outstanding faculty and staff. Scaffolding is our friend and it’s everywhere. This year alone we dedicated two new academic buildings, and we have more on the way as well as a new student union. In the fall, we will dedicate our first new residence hall in over forty years, and five years from now, new halls and expanded living and learning communities will transform the experience for our residential students.

We are sharing some of our best “wow” moments in this report; it will show you why we are so optimistic about reaching our goal to become a Top 25 public research university. As I reflect on the last four years, our big ideas have transformed our campus. I am so excited about what we’ve accomplished and where we’re going.

Jimmy G. Cheek, Chancellor
LINDSAY LEE, OUR NEWEST RHODES SCHOLAR, exemplifies today’s exceptional UT students. Not all of them will be Rhodes Scholars, but, like Lee, they all expect to change the world.

Lee wants to use mathematical modeling and statistics to improve health care for marginalized groups. A Haslam Scholar majoring in math and Spanish, she’s done research at Oak Ridge National Laboratory and UT’s National Institute for Mathematical and Biological Synthesis. She’s studied abroad twice, served in student government, and written for the Daily Beacon.

Lee, who was diagnosed with muscular dystrophy at age three, saw a need for improved services for our disabled community on campus. She founded Campus Disability Advocates and led the creation of UT’s Disability Week, held for the second time this past fall.

More than ever, today’s university is a training ground and launching pad for future leaders like Lee. Our job is to help them achieve their goals—and we’re upping our game to do it.

We’re equipping our classrooms with smarter technology and training our faculty members to use it effectively. We are delivering more content online, freeing up class time for activities and discussion that help students apply what they’re learning. We’re also expanding research opportunities for undergraduate students and increasing service-learning options so students can put classroom lessons to work in the community.

Our students need and want international experience. Each year, about 1,000 students immerse themselves in another culture while studying abroad. Others count on us to create a diverse campus community so they can learn about other cultures right here at home. This year’s freshman class is 19 percent minority and includes significantly more international students.

College is a 24-7 experience. We are making campus feel more like home by building modern new residence halls and expanding our living and learning communities, where students with similar majors, interests, and academic programs can engage and learn beyond the classroom.

From the classroom to the residence hall, our students can expect to change the world. We provide the resources and support they need to achieve their big ideas.
GONE ARE THE DAYS WHEN STUDENTS would have to visit three separate offices to handle the business of paying tuition and enrolling in classes. When One Stop Express Student Services opened in the summer of 2013, it streamlined the most common financial aid, enrollment, registration, student records, and payment services into a single location in Hodges Library.

In One Stop’s first six months, counselors assisted nearly 13,000 student walk-ins, replied to almost 11,000 e-mails, and answered more than 60,000 phone calls, all with a satisfaction rate above 95 percent. One Stop provides the level of customer service that is expected of a Top 25 university.

The underlying systems that drive the daily operations of a university are not glamorous, but they are essential—and done well, they can have a profound and positive impact on our students and the university as a whole. A perfect example of such a system is uTrack, which we debuted in the fall. uTrack helps undergraduates stay on track to graduate on time by creating a road map for their major and warning them when they veer off course. Students who maintain a schedule that leads to graduation in four years have less debt, and those with scholarships have less risk of losing that support. Each extra semester students attend dramatically increases the cost of their education and delays their entry into the workforce.

Having students on track for graduation also helps the university. It allows us to plan more efficiently for the classes we need to offer each semester, thereby reducing students’ frustrations at not being able to take the classes they need. Additionally, a recent change in state law pegs our state funding to our on-time graduation success, and boosting that rate is an important part of our Top 25 plan.

EXPANDING SERVICES FOR STUDENT VETERANS

The Post-9/11 GI Bill has more than doubled the number of veterans attending college nationwide. These students often have needs that are very different from those of traditional students. We have taken a variety of steps to assist more than 600 students per semester who are using GI education benefits, including expanding the Veterans Affairs Office and introducing a welcome-home dinner for student, faculty, and staff veterans. Our efforts are working: in 2013, US News & World Report ranked UT fifteenth in the nation in its Best Colleges for Veterans. We are proud to support these men and women who have bravely served their nation.
ONE NATIONAL ACADEMY OF ENGINEERING FELLOW, one National Academy of Inventors fellow, two National Endowment for the Humanities fellows, three National Science Foundation CAREER award winners, four American Association for the Advancement of Science fellows, and five Fulbright scholars.

These are just some of the UT faculty who have received national awards over the past year. It is an impressive list that speaks volumes about how our journey to the Top 25 is transforming our campus. In fact, we are actually in the top ten for both Fulbright scholars in 2013–14 and the number of National Endowment for the Humanities grants awarded over the last decade.

We continue to make world-class and highly visible additions to our faculty. We added three Governor’s Chairs—Sudarsanam Suresh Babu, an expert in advanced manufacturing from The Ohio State University; Ramamoorthy Ramesh, an expert in nanomaterials engineering from the University of California, Berkeley; and Steve Zinkle, an expert in nuclear materials from ORNL. We expect to announce two more in 2014. We also welcomed alumnus and inventor of the personal computer Mark Dean from IBM as the John Fisher Distinguished Professor in the Department of Electrical Engineering and Computer Science.

Our faculty are leaders in their fields. They invigorate their disciplines, their classrooms, and our campus.

Chemistry Professor Jimmy Mays received a Bill and Melinda Gates Foundation Grand Challenges award to further his research of special polymers called superelastomers. His research aims to improve global health through the development of the next generation of condoms.

English Professor Nancy Henry received NEH funding to complete her book Women and the Nineteenth-Century Cultures of Investment, which explores cultural responses to the democratization of the stock market in nineteenth-century Britain. In an era when women could not vote in political elections, they could and did exercise their vote in stockholder meetings, thereby complicating notions of separate domestic and public spheres. For women in Victorian Britain, investing was a distinctly modern way of thinking about independence, risk, global communities, and the future in general.

Chancellor’s Professor and Distinguished Professor of Earth and Planetary Sciences Harry “Hap” McSween was honored this year with the Southeastern Conference Professor of the Year Award and the Whipple Award from the American Geophysical Union. His work has uncovered mysteries of outer space with pioneering studies on the parent planets of meteorites and the geological history of Mars.
OUR 220-YEAR HISTORY TELLS THE STORY of serving others, from our neighbors in Knoxville to communities and cultures across the globe. Today, we are developing a new campus culture that recognizes the value of outreach scholarship and ensures that the university and the people we serve get the most from our mutually beneficial partnerships.

Through new programs like the Chancellor’s Outreach Incentive Grants, our faculty, staff, and students are impacting communities by sharing knowledge and tackling tough problems.

Last year, UT students and faculty helped Knox County Schools pilot a Walking School Bus project at six elementary schools. The project aims to get kids moving more by using the safest shared routes to their school.

UT English professors and Knox County teachers have teamed up to understand why so many well-qualified freshmen come to college missing core composition skills. They’ve learned plenty by studying common student errors and have developed curriculum strategies for writing readiness.

Business professor Alex Miller said “yes” to a community request for help in creating the region’s first nonprofit resource center. The center will help nonprofit agencies fulfill their mission as efficiently as possible while making the most of limited resources. UT faculty and students will conduct research and offer cutting-edge business and management tools. Students will gain invaluable experience working with established local agencies that are trying to positively impact the region.

Our students are true Volunteers, and they reap lifelong benefits from these experiences. Next fall, students will be able to choose from designated service courses, which will formally integrate community-based learning into the curriculum.

Our shared commitment to serving communities beyond our campus borders is why the university is pursuing a Carnegie “Community Engagement” designation. Only about 10 percent of US universities earn the classification. If our application is successful, it will recognize our many efforts at community engagement.
IF YOU WANT TO CATCH A GLIMPSE OF THE FUTURE, step into any of the College of Engineering’s facilities. There you will find some of our brightest minds at work on the latest innovations to change the way we live—from cleaner energy to better medicines.

Helping spur this ingenuity is an unprecedented commitment from the state in $3 million of recurring funds to increase the college’s number of faculty, support staff, and graduates. This serious investment helps UT as well as Tennessee gain a competitive edge in developing the next big idea and in creating and gaining quality jobs related to science, technology, engineering, and mathematics.

This past year marked 175 years of engineering at the University of Tennessee. The anniversary provided an opportunity for the college to see how far it has come and the bright future that lies ahead.

Indeed, it is booming in every way. It welcomed a record-breaking number of freshman students—a total of 708, an increase of 14 percent from last year’s class. It is also seeing a surge in doctoral student enrollment, up 62 percent since 2006; an expansion of the faculty, including the hiring of nine prestigious Governor’s Chairs; and an increase in the number of endowed fellowships and professorships.

The college is also expanding its footprint. In two years, it has added two new cutting-edge facilities—the Min H. Kao Electrical Engineering and Computer Science Building and the John D. Tickle Engineering Building. An engineering services building is also in the works.

This growth translates into a better experience for more students as well as an increase in skilled workers, economic development, and innovation in Tennessee and around the world.

And the College of Engineering’s momentum has only just begun to swell. The best remains on the horizon.
FROM DEVELOPING “SMART” BANDAGES to mapping deadly diseases, our research transforms lives. We continue to broaden our scholarly scope and discover solutions to the world’s toughest challenges.

PATENTED DISCOVERY
Today, if a soldier is wounded on the front lines and far away from first aid, he or she faces the risk of infection. Research by Steven Ripp, James Fleming, and Tingting Xu in the Center for Environmental Biotechnology aims to change this. They have developed a patented bandage smart enough to treat infection and signal for help using a computer chip.

RESEARCH IN THE WORKS
Sometimes the most promising discoveries are unexpected. Mingjun Zhang, an associate professor of biomedical engineering, was researching a fungus (Arthrobotrys oligospora—seen at right) that lives on a diet of roundworms. What he found may be able to fight cancer. While investigating how A. oligospora traps its next meal, he discovered it produces nanoparticles. After further study, he found those nanoparticles may hold the power to stimulate the immune system and destroy tumors.

TOUCHING LIVES
In Clay County, Kentucky, clean water is hard to come by. If a natural disaster hit the area, shelter and medical treatment also would be hard to find. Students and faculty within the Global Disaster Nursing program are collaborating with colleagues across campus and within the community to improve the county’s overall wellness. Their work is putting the county on track to have what many take for granted—clean water, sound buildings, and disaster preparedness, along with a plan in place to implement and pay for the enhancements.

COLLABORATIONS FOR CHANGE
More than 3,500 researchers from around the world have come to UT to conduct research at the National Institute for Mathematical and Biological Synthesis. Last year, the National Science Foundation awarded UT $18.6 million to continue the institute’s interdisciplinary efforts in developing new mathematical approaches to problems across biology. The center has made great strides in helping the world meet pandemics head-on through analysis of the potential spread, impact, and control of diseases such as West Nile virus, anthrax, swine flu, and mad cow disease.
TWO OF THE MOST COMMON QUESTIONS from new students are: Where am I going to live? and What are the closets like? For the first time in nearly half a century, our answers will be changing.

Opening in fall 2014, the new Fred D. Brown Jr. Residence Hall—our first new residence in forty-three years—is just the first step in transforming twenty-first-century residential life at UT.

The recently proposed west area overhaul, if approved, will replace six residence halls around Presidential Court with seven new modern facilities over five years. These residential “villages” will couple modern amenities with dedicated learning communities designed to transform the student experience.

We are doubling our number of living and learning communities—in which students live together on designated floors, take classes together, and take part in group activities—because students who participate are more engaged and perform better in the classroom.

And we have better classrooms for them, as well.

The Natalie L. Haslam Music Center and the John D. Tickle Engineering Building both opened in the fall. Designed for musicians from the ground up, the Natalie L. Haslam Music Center includes a 400-seat recital hall, integrated music library, “smart” classrooms, and ample rehearsal space.

The new John D. Tickle Engineering Building adds two dozen laboratories, including a geotechnical lab and a high-bay area for both structural testing and asphalt road surface testing. It is the first time in sixty-four years that we have opened two new academic buildings in the same school year.

Work has begun on turning the vacant Sophronia Strong Hall into a nine-story modern science class and laboratory facility.

Daily visible progress is being made on the new Student Union, with the first phase scheduled to open in 2015. The site is no longer a hole in the ground—visitors can now imagine the grand facility that will emerge from the steel beams that are climbing skyward.

There is no more visible indication of how we are transforming the campus than the various construction sites and resulting detours. Admittedly, it can be frustrating at times. But as we now tell prospective students and their parents while touring the campus, if they visit other campuses and don’t see construction, they need to wonder about whether the school is planning for the future. At UT, the answer is pretty evident.
In 2013, our student-athletes posted a record performance in the classroom, finishing with a cumulative GPA of 3.05 in the spring and 3.02 in the fall. It’s been more than a decade since our UT athletes have collectively performed this well academically.

Last year, under the new leadership of Senior Associate Athletic Director and Assistant Provost Joe Scogin, the Thornton Athletics Student Life Center introduced a comprehensive holistic approach to success that is transforming the lives of our athletes.

Working with both academic and athletic coaches, the Thornton Center is helping our student-athletes develop the skills they need to be successful—not only for the four years they are on campus, but also for the rest of their lives.

At the Thornton Center, all student-athletes now receive the same level of academic coaching, regardless of their grade point average—those with a 4.0 GPA have different needs than those who struggle in the classroom, but they still have needs. The academic coaches work with students using a plan that is customized to their specific needs.

Our athletes are among the most visible of our students. Fairly or not, they are often expected to be role models for fans. That’s why the Thornton Center provides them with leadership coaching. They also receive professional development training and get help in finding their niche in serving the community, an important part of being a Volunteer.

Another critical component of the Thornton Center’s program is its long-term commitment to the person, not just the athlete. The doors stay open to UT athletes well beyond their NCAA eligibility. It’s not uncommon for the center to work with an athlete who left UT before graduation to play professionally. When the center can get a former student-athlete to come back and complete a degree, it’s a win-win situation for both the student and our graduation rate.

The resources and support provided by the Thornton Center, coupled with our student-athletes’ determined will to succeed, is paving the way for more outstanding academic performances in the future.
WE’VE TURNED A LONGTIME FOOTBALL tradition into a year-round celebration. “Big Orange Friday” encourages all members of the Volunteer family to wear orange each and every Friday to celebrate and show their support for the university.

In the fall, Fridays are the first day of a football weekend. Year round, however, Fridays are the most popular day for prospective students and their families to tour our campus. When our prospective students are welcomed to campus by a sea of orange, they feel our strong sense of community—our Volunteer spirit. With Big Orange Fridays they get this same experience regardless of the season of their visit.

“Tennessee Orange” is an energetic color, steeped in more than a century of tradition. But it is more than a color. Its energy is central to and symbolic of the momentum we are achieving as we realize our goals on our journey to the Top 25.

Our ability to recruit and retain students and faculty, increase our endowment, and forge new partnerships is enhanced by our reputation. Our reputation is enhanced by a strong identity. Our identity is enhanced by a unique and recognizable visual language.

Since developing the “Big Orange. Big Ideas.” branding campaign, our campus has come alive with orange. Orange and white banners line campus streets and sidewalks, and the new state-of-the-art campus transit system boasts a fleet of twenty orange buses.

For many members of the Volunteer family, it is the word orange that first comes to mind when they think of UT. Likewise, orange is affectionately synonymous with our university to the outside world.

We are continuing to strengthen that association—to make strides as a university with the same energy our color exudes and to foster ideas as big as our orange.
WHEN MELISSA LEE, A SENIOR NEUROSCIENCE STUDENT in the College Scholars Program, had the opportunity to study and conduct research at the University of Zurich’s Brain Research Institute, she turned to crowdfunding to help finance the trip. A first-generation college student from a single-parent low-income family, Lee had already pieced together several scholarships to help pay for the trip, but she was still short financially. That’s where Impact Big Ideas (volsconnect.com/impact) kicked in, drawing inspiration from Kickstarter. Impact Big Ideas is a UT-specific crowdfunding website where students and faculty members submit university-related projects in need of funding. With a click, donors can support a project that personally resonates with them. The donations tend to be small, but taken together, they can make a big difference. For Lee, it was the difference between staying home and taking advantage of a unique opportunity. Impact Big Ideas also allowed 125 dedicated fans of the student-run campus radio station WUTK-FM to support improvements to the radio transmitter tower, thereby allowing UT’s “College of Rock” to be heard by more listeners. The LGBT and Ally Resource Center is offering additional programs this year to raise awareness and acceptance for our LGBTQQIA students. And a group of engineering students will compete at a national robotics competition. Another successful nontraditional fundraising effort was November’s Big Orange Give campaign. Using social media almost exclusively, the effort sought to raise $125,000 in a 125-hour period. It more than doubled its goal. Perhaps even more importantly, a full 44 percent of those who gave were either first-time or lapsed givers—groups whose support is vital to our journey to the Top 25.

The alumni giving rate—the percentage of alumni who donate back to the university—is a key metric in the US News & World Report university rankings. UT has been very fortunate to have generous alumni and friends; in fact, we recently ranked thirty-sixth in total private gifts among all US universities, public and private. We are still working, however, to improve our alumni giving rate. Pursuing smaller donations from a larger base of donors helps create a culture of giving among all our alumni. Those who give small gifts in the first few years after graduation are much more likely to give major gifts later. The use of microphilanthropy—targeted smaller gifts—is an effective way to engage more and more alumni in UT’s continuing success by giving them the opportunity to see the direct impact of their generosity.
AS WE CONTINUE OUR JOURNEY to the Top 25, we celebrate our successes with the stories throughout this report. Here, we look at the numbers—the quantitative metrics we use to measure our progress.

From 2010 to 2013, we showed improvement across every priority area: undergraduate study, graduate study, research and creative activity, faculty, and infrastructure.

Our measures for research and infrastructure have seen the most progress. We have reached our goals on specific measures for undergraduate study and faculty; however, we must not rest on our laurels. Our peer and aspirational schools are also actively striving to improve themselves. That’s why we regularly evaluate and adjust our goals. Numbers that would have put us in the Top 25 in 2010, when we began our journey, may not be sufficient in 2015 or 2020.

To keep our university community and friends better informed about our progress, we will soon launch a revised Top 25 website. There you will easily be able to find our most recent data on the primary metrics represented here, as well as the dozens of secondary metrics we are tracking that provide insight into our journey. Watch for it at utk.edu/top25.

### 2010–2013 Top 25 Data

#### Master’s & Professional Degrees Awarded

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