TECH TOMORROW

STRATEGIC PLAN

"We stand in an ideal position to educate our students on the social, economic, and historical impact of these technologies. This sets **Tennessee Tech** apart from most other universities."

I believe it's time for Tennessee Tech University to stake claim to the value and vision faculty, staff, students, and alumni know from experience: Tech is Tennessee's best university for a real education for real people who seek real careers.
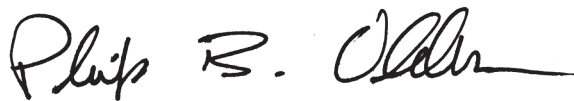
We have the best educational return on investment in Tennessee. This is based on our affordable tuition, coupled with successful career placement for our graduates. As we shout that message with confidence, we must focus on anticipating and preparing for change.

In his book "The Industries of the Future," Alec Ross clearly points out in lay terms the changes we are about to experience due to technological achievements in genomics, robotics, codification of money and markets, cybersecurity, big data, and autonomous transportation.

We stand in an ideal position to educate our students on the social, economic, and historical impact of these technologies. This sets Tennessee Tech apart from most other universities.

We must plan to take advantage of our position. That's why this Strategic Planning Process is so important. It's designed to capture the energy, information, and innovation from our campus community and to share clear strategic direction across campus.

I ask you to take part in the journey and forever be a part of taking Tennessee Tech to a stronger, higher place. We are Tennessee Tech!

Dr. Philip Oldham, President

LETTER FROM THE DEANS

Dear Colleagues,

In August 2017, President Oldham charged the strategic planning committee with honing a shared and impactful vision for Tennessee Tech. He challenged us to consider Tech's unique stature, key constituencies, core principles, and foundational strengths as we chart our course through a dynamic and competitive environment. Rising to this challenge, a diverse team of faculty, staff, and administrators set about their work with excitement, humility, and a determination to obtain insight and integrate input from our stakeholders.

During the past year, the 18-member committee has met regularly and engaged in dozens of interviews, small group discussions, and forums. Our team has met with over 1,000 people including students, alumni, faculty, staff, board members, and external constituents (including but not limited to community partners, business leaders, government officials, and public school representatives). Discussions have taken place across our campus in college, departmental, and unit meetings. Interactive sessions were held with the Faculty Senate, Deans' Council, and in individual and small group conversations on and off campus. Stakeholders also shared input through the strategic planning website and emails to our members.

As we transition to the implementation phase, we are energized by the fact that so many people have shared their ideas. This remarkable level of participation has informed and strengthened the strategic plan. As importantly, this interaction is contributing to a common understanding of Tennessee Tech's aspirational future. While bold in its call to action, the strategic plan is true to our core principles and leverages our strengths to serve students, communities, and employers.

Last fall, we reached out for input and shared the strategic planning website. In spring, we provided an update to the Board of Trustees and again asked for input. As we complete our charge to design a clear vision and cohesive plan for Tennessee Tech, we need to remember that this is a living document – one that will evolve and

Thomas Payne   **Lisa Zagumny**

provide flexibility as our needs, opportunities, and contexts shift. More than a document, it is a tool to guide our actions, examine our progress, and measure our success. As we move into an implementation plan, strategic metrics and continuous improvement processes will be developed. Thank you in advance for your continued engagement, innovative ideas, and inspirational support as we endeavor to make the Tech Tomorrow vision a reality.

Dr. Thomas Payne, Dean
College of Business

Dr. Lisa Zagumny, Dean
College of Education

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MISSION

Tennessee's technological university creates, advances, and applies knowledge to expand opportunity and economic competitiveness. As a STEM-infused, comprehensive institution, Tennessee Tech delivers enduring education, impactful research, and collaborative service.

VISION

Tennessee Tech will achieve national prominence and impact through its engaged students, dedicated faculty, and career-ready graduates known for their creativity, tenacity, and analytical approach to problem solving.

CORE PRINCIPLES

Academic Excellence

We expect and produce high academic achievement, foster collaboration, exemplify integrity, and inspire creativity and realized potential for the entire campus community.

Community Engagement

We collaborate with community members and organizations to advance positive societal and economic change.

Meaningful Innovation

We are purposefully innovative in all we do.

Student Success

We empower students to realize their potential, craft individualized experiences, and discover their passion.

Supportive Environment

We are committed to a diverse and welcoming community and provide a campus size and atmosphere that fosters personal attention and fit.

Value Creation

We provide a high return on investment from our state, tuition, and donor resources and foster productive, responsible, and caring contributors to society.

RURAL REIMAGINED

Accelerating Rural Collaboration & Innovation

WhiteHouse.gov provides a definition of Grand Challenge: "Grand Challenges are ambitious but achievable goals that harness science, technology, and innovation to solve important national or global problems, and that have the potential to capture the public's imagination."

A rural focus offers a unique approach among universities that have adopted a Grand Challenge.

A rural focus is relevant, impactful, and scalable. Rural America faces challenges that are broad in scope and negatively affect quality of life. If rural challenges are met successfully and replicated elsewhere (scaled), it provides relevance at the national level. If the challenges are confronted and crafted into coherent, often cross-disciplinary projects, the diversity of ways to reach success can involve Tennessee Tech holistically. A focus on challenges that face rural communities would resonate with the people of the Upper Cumberland, alumni, friends of the university, the Tennessee State Legislature, and beyond.

www.tntech.edu/grand-challenge

A Grand Challenge with a rural focus can have the following outcomes:

1. **Engage the entire campus community** with a topic that can be grasped and envisioned by everyone on campus, with their own ideas for solutions incorporated into the endeavor.

2. **Increase student engagement** by offering them the opportunity to address real issues and inspiring them and their faculty mentors to solve regional problems to improve quality of life.

3. **Increase student career readiness** by opening up new career and learning opportunities, establishing new connections and expanding professional networks.

4. **Improve scalability of our experiential learning processes** by inclusion in appropriate classes throughout the curriculum (UNIV 1020); even by offering new classes based on the Grand Challenge.

5. **Support diversity** by bringing multicultural and inclusive activities to local communities.

6. **Integrate important new technology** into Grand Challenge activities and appropriate classes.

7. **Provide a focus for innovation and creative ideas** by campus implementation of the Grand Challenge.

8. **Provide high impact economic and entrepreneurial activities** for the Upper Cumberland region, including its schools, businesses, and other community groups.

9. **Attract new and encourage current stakeholders** to engage in interdisciplinary opportunities that align with our mission and goals to achieve various aspects of the Grand Challenge.

10. **Increase Tennessee Tech's relevance** and establish our leadership and relevance to the community and every beneficiary by providing additional learning opportunities to the Upper Cumberland region, such as job shadowing with local Tech alumni and by establishing a presence in our Upper Cumberland school systems.

11. **Raise Tennessee Tech's public profile** and dramatically improve public sentiment, garnering press coverage, and other visible accolades.

STRATEGIC GOAL
ONE

Education for Life

Tennessee Tech provides education that unleashes the potential and passion within our students and prepares them for successful careers and culturally enriched lives. TTU also provides educational opportunities, programs, credentials, and degrees to fuel the lifelong learning necessary for enduring achievement.

PRIORITY ACTIONS

A. Incorporate multiple experiential learning opportunities in all undergraduate programs.

B. Create a Tech-unique general education curriculum to provide the foundation for technologically adept, analytically capable, career-ready graduates.

C. Increase student diversity.

D. Develop and expand experiences that emphasize diversity and build global awareness, such as international travel, study abroad, and other high impact practices.

E. Develop innovative, stackable credentials, and associated pathways responsive to stakeholder needs and entrepreneurial opportunities.

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TACTICS

A.

i Evaluate and transform programs, courses, and opportunities to incorporate experiential learning that permeates the educational process – cumulatively and systematically developing students' career and societal readiness.

ii Create and sustain a network of partners (faculty mentors, career counselors, alumni, professionals, businesses, schools, civic groups, etc.) to engage and mentor students in career preparation.

iii Ensure that every undergraduate student will participate in a grand challenge to address a significant problem and contribute to impactful interdisciplinary solutions.

B.

i Convene an advisory panel (external constituents, board members, faculty, and administrators) to determine specific areas of need for technology adept, analytically capable, career-ready graduates.

ii Convene a faculty-led committee to review and revise the core curriculum to infuse analytical competencies.

iii Develop guidelines and shared resources to promote analytical thinking and problem solving in every discipline.

iv Prioritize and increase opportunities in existing courses to develop and assess discipline-related communication skills.

C.

i Examine existing diversity levels, including comparative data from similar institutions.

ii Create a college-specific plan for increased student diversity in collaboration with Admissions and Enrollment Management.

D.

i Examine, revise, and expand awareness of existing academic and co-curricular programs to enhance global understanding, experience, and education.

ii Expand and improve academic and co-curricular programs to enhance global understanding, experience, and education.

E.

i Evaluate and improve existing programs and develop new ones through rigorous determination of workforce demand, societal need, and financial viability.

ii Incorporate and integrate stackable credentials, including certificates, minors, and concentrations into programs of study.

iii Regularly survey employers to determine if workforce needs and associated expectations are being met.

iv Leverage technology, enhance quality, and increase accessibility through online and hybrid offerings.

STRATEGIC GOAL
TWO

Innovation in All We Do

Tennessee Tech innovates in all we do, embracing and deploying our technological foundation in our education, research, service, and stewardship.

PRIORITY ACTIONS

A. Every college will develop and implement technologically infused programs.

B. Increase research, scholarly activities, and intellectual and creative contributions aligned with university, college, and departmental strategic priorities.

C. Implement specific strategies, structures, and resources to serve adult learners and offer online/hybrid delivery systems to increase accessibility, expand our reach, and enhance our impact and reputation.

D. Recruit, hire, retain, and reward a diverse faculty/staff with a demonstrated commitment to collaboration, external engagement, and lifelong learning.

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TACTICS

A.

i Develop and implement distinct technologically focused programs. Existing or proposed programs should be vetted through a rigorous determination of workforce demand, societal need, and financial viability.

B.

i Each college will identify three to four areas of strength and relevance and prepare a plan, including specific actions, to become nationally renowned.

ii Review and refine existing practices to support research, scholarly activities, and intellectual and creative contributions.

C.

i Provide support to units that strategically transition existing programs to online or hybrid platforms.

ii Create opportunities and processes (including feasibility and financial viability analyses) for unit faculty and administrators to develop and implement new programs and associated courses offered online or hybrid.

D.

i Enhance recruitment and hiring practices to ensure candidates' commitment to collaboration, external engagement, and lifelong learning.

ii Significantly increase employment of underrepresented groups.

iii Review and refine departmental agreement on responsibilities to integrate substantive engagement activities and better reflect overall workload.

iv Develop a plan to recognize and compensate employees' educational preparation, experience, ability, and interests. Review and revise employee compensation assessments in consideration of educational preparation, experience, and range of ability.

v Review and refine staff training and learning opportunities to support retention, provide professional growth, and ensure Tech-best practices.

THREE

Exceptional Stewardship

Tennessee Tech is committed to optimizing resources and continuously improving effectiveness, efficiency, and return on investment for students.

PRIORITY ACTIONS

A. Improve efficiency and effectiveness of operational/administrative processes and procedures.

B. Increase the size and effectiveness of scholarship endowments.

C. Continue to develop, implement, and evaluate a dynamic long-term budget model that informs effective financial management and consistent strategic investment.

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TACTICS

A.

i Identify and implement technologically based innovative administrative processes to improve interoperability and enhance support of learning, research, and business practices.

ii Develop a comprehensive strategic enrollment management recruitment plan.

iii Examine faculty workload and deployment.

B.

i Initiate a pooled endowment fund to provide need-based scholarships and internships to qualified students.

ii Equip fundraisers across units with advancement techniques, tools, and practices.

iii Convene a committee to determine processes for awarding need-based scholarships and Tech-based internships.

iv Correlate scholarship strategies to fit enrollment strategies and financial success.

C.

i Educate the university community on the budget model.

ii Effectively utilize the budget model to improve operations and resource allocation. Determine and implement a plan for funding units that recognizes both expectations of impact, mission-based performance, and contributions to the bottom line.

iii Identify and implement technology-based information systems and processes to facilitate more efficient practices and procedures and ensure system interoperability to enhance service to users (including existing and prospective students, faculty, staff, administrators, and external stakeholders).

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STRATEGIC GOAL
FOUR

Engagement for Impact

Tennessee Tech fosters partnerships with government, business, and non-profit organizations to advance economic and workforce development, create and disseminate knowledge, serve the public good, and generate cultural impact.

PRIORITY ACTIONS

A. Develop new strategically driven sustainable partnerships.

B. Modernize, adapt, and create academic programs, continuing education certificates, and training activities responsive to impactful engagement.

C. Create and support a network of scholars to evaluate community engagement topics and opportunities.

D. Increase alumni and friend engagement and impact.

E. Support economic development to transform and sustain a thriving hub for innovation, creativity, and employment opportunities.

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TACTICS

A. **i** Inventory existing partnerships to identify gaps.

B. **i** Be the leading producer of math and science teachers for Tennessee public schools.

ii Continuously evaluate programs to determine if they meet workforce and societal needs.

iii Explore feasibility of a professional school(s).

iv Be responsive to the needs of adult learners.

C. **i** Convene a faculty-led and community-informed committee to identify beneficial engagement topics and collaborative opportunities.

D. **i** Examine existing engagement levels.

ii Create a college-specific plan for increased engagement in collaboration with the Crawford Alumni Center and University Advancement/Development.

E. **i** Encourage and support faculty involvement in local, regional, and state economic development activities.

ii Convene a Tech economic and community development committee to examine existing activities and identify opportunities for workforce and business development, entrepreneurship, cultural enrichment, and lifelong education and training.

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