

Written Testimony of Dr. Harold L. Martin, Sr. Chancellor, North Carolina Agricultural and Technical State University

"Recognizing the continuing contributions of the 1890 land-grant universities on the 125th anniversary of the passage of the Second Morrill Act"

Committee on Agriculture United States House of Representatives

1300 Longworth House Office Building

July 15th, 2015

Chairman Conaway, Ranking Member Peterson and Members of The House Committee on Agriculture; with special recognition being given to Congressman David Scott for his commitment to 1890 land grant institutions and North Carolina Agricultural and Technical State University graduate- Congresswoman Alma Adams, who has served as a representative and advocate for our university for more than 20 years, both in the North Carolina General Assembly and now in the U.S House of Representatives.

I am Harold L. Martin Sr., chancellor of North Carolina Agricultural and Technical State University (N.C. A&T) in Greensboro, North Carolina. Mr. Chairman, I am pleased to submit my written testimony for the official hearing record.

Mr. Chairman, today's hearing provides 1890 land-grants the opportunity to highlight the innovative research being performed by our outstanding faculty, discuss the "return on investment" we provide to our local, state and regional economies through the education, research and outreach we provide, and offer recommendations for ways the federal government can further support the 1890 community.

Background: N.C. A&T and the Second Morrill Act of 1890

Yesterday

In 1890, Congress passed the Second Morrill Act, which included the stipulation that African Americans be included in the U.S. Land-Grant Higher Education System without discrimination. With southern and border states unwilling to admit African American students to their universities, many of states established second land-grant institutions. The Agricultural and Mechanical College for the Colored Race—now N.C. A&T—was established as that second institution in the state of North Carolina by an act of the General Assembly, ratified on March 9, 1891. Originally operating in Raleigh as an annex to Shaw University, the college made a permanent home in Greensboro. In 1915, state legislators changed the college's name to the Agricultural and Technical College of North Carolina; and in 1967, they elevated it to university status. A&T became a constituent university of the University of North Carolina in 1972.

Today

N.C. A&T is a learner-centered community that develops and preserves intellectual capital through interdisciplinary learning, discovery and engagement, and is committed to fulfilling its fundamental purposes through exemplary instruction, scholarly and creative research, and effective public service and engagement. A&T is dedicated to providing "ladders of opportunity" to high-achieving students seeking a superior education and is committed to creating a campus climate that fosters student satisfaction and a sense of community. The university's academic and outreach efforts illustrate how campus and community collaborations enhance the quality of life for the citizens of North Carolina, the nation, and

the world. Through the years, A&T has adapted its curriculum to strengthen science, technology, engineering and mathematics (STEM)—its academic core and foundation. Riding the crest of the technological revolution, A&T has moved rapidly to blend its academic and research programs with the needs of society and industry, forming a symbiotic relationship.

A&T is ranked by the Carnegie Classification System as a "doctoral/research university" and, for the past nine years, has ranked third among The University of North Carolina system's member institutions for sponsored research funding. With an enrollment of nearly 11,000 students, A&T is recognized as the largest among the nation's historically black colleges and universities, and the School of Agriculture and Environmental Sciences at A&T is the largest school of its kind among the nation's HBCUs. A&T ranks No. 1 in the nation for the number of baccalaureate degrees in engineering awarded to black or African Americans (American Society for Engineering Education) and is the top producer of African Americans with undergraduate degrees in STEM disciplines, arts and humanities, and education. Notably, the Carnegie Foundation for the Advancement of Teaching selected A&T for its 2015 Community Engagement Classification.

Tomorrow

A&T considers the social, economic and global challenges facing higher education as opportunities for a new 21st century renaissance. The goals established for its future, recognize the importance of embracing diverse populations of students and pursuing research agendas that focus on the solutions to critical world issues such as poverty, health care, adequate and secure foods, clean water and other problems that challenge global sustainability. Educational delivery methodologies will continue to transcend older limitations imposed by time and space. As laid out in our strategic plan, "A&T Preeminence 2020," A&T is a university committed to embracing the history, traditions and outstanding accomplishments of its rich past and creating a future as a global driver of technology-enhanced scholarship, teaching, learning, and engagement.

A&T's commitment to underserved communities

In an era where family farms and farmland are rapidly disappearing from the American landscape, North Carolina farm census data shows that African American owned farms in North Carolina are on the rise, having increased in number from 1,491 in 2007, to 1,637 in 2012. Overall acreage under cultivation in these enterprises has increased by nearly 20,000 acres. Despite these successes, challenges loom for North Carolina's small farming community, and particularly, for new farmers. According to North Carolina farm census data, 86 percent of African American farms had gross sales of less than \$50,000 and 51 percent of those farmers' sole source of income is farming. Small farmers of all races are

also aging and nearing retirement and unfortunately, only 3 percent are under 34 years old. A&T is committed to providing the education and training needed to attract and retain the next generation of farmers and has done so through effective community outreach and innovative undergraduate and graduate programs.

A&T is striving to make small farming in North Carolina more profitable and more attractive, while continuing its unique mission to serve minorities in rural communities. Through new ideas like our Small Farms Collaborative and Local Foods and Health Initiative (funded through the 1890 Facilities Program), A&T plans to use its 492-acre farm as a strong community education resource for local food production. Elements of the farm plan mentioned include a food processing facility to teach entrepreneurs how to add value to North Carolina agricultural products, a pasture-based dairy and creamery producing A&T-branded yogurt, ice cream and artisanal cheeses for revenue production, an organic vegetable production research and demonstration site, a student-run farm, and land for community gardens that will be available to residents of the surrounding communities.

A&T's commitment to the Piedmont Triad Region

The Piedmont Triad where A&T is located, was recently ranked No. 1 in food insecurity in the nation by the Washington-based Food Research and Action Center. USDA has designated 24 food deserts in the city of Greensboro and many more than that exist across the state. In recognizing a need, A&T has partnered with the city of Greensboro to establish the city's first urban farming enterprise to serve residents of long-standing food deserts. The city has already provided land and committed additional resources, and A&T has engaged several enthusiastic and well-established community groups, which the agriculture school will train in best practices for urban farming. The expectation is that this site will become a model for other communities across the state.

A&T's School of Agriculture faculty have also been active in getting a new Guilford County Food Council chartered, which is dedicated to strengthening the local food system by supporting local farms, growers and other food businesses to create access to healthy food to all communities.

In addition to assisting small farms with newly created agriculture technologies, A&T's Cooperative Extension service is also helping families and communities, particularly in impoverished rural counties, with nutrition programming aimed at: reducing obesity, diabetes and other chronic diseases; parenting classes for troubled families; financial literacy training; and youth development through 4-H programs. Cooperative Extension specialists at A&T have also partnered with Wal-Mart for research and farmer education on organic strawberries. In addition, the Cooperative Extension Program is developing organic vegetable production technologies and conducting research to serve small-scale meat producers with assistance from 1890 extension program funding.

A&T's commitment to North Carolina

In October 2014, National Geographic published an extensive exposé on North Carolina's persistent hog waste problem and the challenges it creates for North Carolina's fisheries and water resources. Heeding the call to action, A&T's swine unit used preliminary research supported by the Evans-Allen program to develop solution oriented technology. As a result of those efforts, The Bioadhesive Alliance—an A&T spinoff company—was established to market the technology for hog-waste derived bioasphalt and bioadhesives that perform better and can be produced at a fraction of the cost of petroleum derived asphalts and adhesives. This product, which has been named PiGrid, has the potential to convert North Carolina's 15.5 million tons of hog waste from a costly environmental issue into a profitable, green source of revenue for our state and our farmers, and will create savings for Departments of Transportation and industries that rely on adhesives.

A&T's commitment to all

A&T's USDA federally-funded research has resulted in notable success important to allergy sufferers. From the university's Carver Hall, a building named after agricultural researcher George Washington Carver, who is renowned for his work with peanuts, A&T food scientists are continuing his legacy. They recently developed a post-harvest process for reducing the major allergens in peanuts by 98 percent or more. This research has produced the university's newest spin-off company, AlrgnBio, which is now marketing the hypoallergenic peanut technology to food companies. This same A&T research team hopes to move on to research allergen reducing processes for soy, wheat and tree nuts, for the benefit of millions of people who suffer from these dangerous food allergies. Such innovative agricultural research underscores A&T's relevance to North Carolina, where agriculture is the largest industry, contributing \$78 billion to the state's economy, accounting for more than 17 percent of the state's income, and employing 16 percent of the workforce.

FY2016 budget request

1890 land-grant universities provide much of the research and education that sustain U.S. food production and delivery, while addressing many urgent and important local, regional, and national needs. Financial support for this global innovation comes from both public and private sources, but the most significant funding source is the federal-state partnership managed by the National Institute of Food and Agriculture (NIFA).

A&T fully supports President Obama's FY 2016 NIFA budget proposal request (which includes an increase from FY 15 to support Central State University—the new 1890 landgrant university) and encourages members of Congress to continue to make overall NIFA funding a high priority and specifically requests funding for the six core NIFA priorities (Agriculture and Food Research Initiative, Smith-Lever 3(b)-(c) Hatch Act, Evans-Allen,

1890 Institutions Extension, McIntire-Stennis Cooperative Forestry, 1994 Institutions Research and Extension) that support research, education, and extension efforts at America's land-grant universities.

Evans-Allen One-to-One Match Oversight

A&T and its fellow 1890s institutions have always done "more with less." However, it has never been by choice. Since being signed into law in 1977, the Evans-Allen Act and the National Agricultural Research Extension and Teaching Policy Act (NAREPTA) of 1977 have provided critical base funding for agricultural research and Extension programs at 1890 institutions. The investments made in 1890 universities by Evans- Allen and NAREPTA funding have led to scientific breakthroughs and innovation in agriculture that has created a real return on investment. Secretary of Agriculture Thomas Vilsack recently cited studies that show that every dollar invested in agricultural research returns \$20 to the economy.

Unfortunately, each year half or more of the 1890s do not receive the full match from the states they serve. This shortage means that each year, half or more of the 1890 institutions are confronted with a burdensome need to produce waiver documentation in order to become eligible for at least some of the federal Farm Bill funds allocated over the 50 percent threshold. According to the Association of Public and Land-Grant Universities' (APLU) policy briefing entitled *Land-Grant but Unequal: State One-to-One Matching Funding for 1890 Land-Grant Universities*; "From 2010 to 2012, 56 percent of the 1890 land-grant institutions did not receive 100 percent of the one-to-one matching funds from their respective states for either extension or research. The loss of funding to 1890 land grant universities due to states not meeting the one-to-one match requirement for between 2010 and 2012 is nearly \$57 million."

At this time, A&T requests that Congress provide additional oversight to ensure that states meet their obligation for providing the one-to-one match requirement and to encourage states to provide equitable formula funding to each land-grant university within each state.

Conclusion

In conclusion, Mr. Chairman, Ranking Member, and Members of the Committee, thank you for the opportunity to be one of six 1890 university presidents and chancellors to testify before you today. It is my hope that the opportunities for improvement and recommendations mentioned today are considered as you move forward with budget negotiations.