

STRATEGIC PLAN

TEXAS A&M
AGRILIFE
EXTENSION

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TEXAS A&M AGRILIFE EXTENSION SERVICE STRATEGIC PLAN

Informing our Agency Strategic Plan

The Texas A&M AgriLife Extension Service's strategic plan is the result of an extensive, multi-year process that drew upon the input and expertise of over 200 faculty, educators, specialists, agents, managers, and Extension Leadership Team members. This strategic plan builds upon the foundational work of multiple steering committees and the agency's Central Leadership Team, who gathered and evaluated feedback from a range of internal and external constituents to review and refine Extension's existing vision and mission statements.

In the last few years, the agency's previous strategic plan and process faced unprecedented challenges from the COVID-19 pandemic. The operational details, metrics, and milestones in that document have influenced the revision and updated programming goals found in this new strategic plan. We have prioritized ongoing adaptations, analyzing key components to ensure the plans remain responsive to the diverse needs of Texans in every county across the state. The outcome is a comprehensive, forward-thinking document that combines committee and leadership insights, adapts best practices, and assesses the agency's strengths, weaknesses, opportunities, and threats (SWOT).

Overall, the Texas A&M AgriLife Extension Service's strategic plan demonstrates a commitment to excellence and responsiveness, and a recognition of the vital role Extension programming and educational activity plays in benefiting Texas communities. The agency's continued dedication to engaging diverse perspectives and involving a wide range of stakeholders in the planning process will help ensure that Extension remains a leading force in agricultural, natural resources, youth development, and community health initiatives throughout the state.

This strategic plan highlights the agency's commitment to maintaining its prominent role as the nation's premier Extension Service and our statewide educational authority in Texas.

An adaptive strategic planning process has been implemented to detect and respond to variability across a broad scope spanning agricultural policy, environments, public health, disaster recovery, community and economic development, and related impact areas.

Adaptive Strategic Planning

Adaptive strategic planning is a process of refining and adjusting strategic plans to respond to changes in the environment. It involves ongoing monitoring, evaluation, and adjustments to ensure that an organization's strategic priorities remain aligned with its mission and goals.

This approach is particularly useful to the Extension Service because of the statewide presence of our agent network. The agency is a nimble and responsive organization focused on service and delivering educational programming for Texans. In a state where communities often face complex and uncertain environments, future outcomes are difficult to predict. By evaluating and adjusting the plans, the Extension Service can remain agile and adaptive to emerging trends and opportunities within educational service. This allows the agency to proactively address potential threats and take advantage of emerging community needs.

Adaptive strategic planning also requires a culture of openness to change, where feedback is actively sought and incorporated into decision-making processes. It similarly requires a commitment to ongoing learning and evaluation — key components of both the agency's statewide and county-by-county program planning process.

Adaptive strategic plans must be able to evaluate and respond to new information in order to remain effective. They must include mechanisms that promote innovative ideas evaluated in an iterative or repetitive process, leading to continuous improvements in action plans and delivered outcomes. These proposed mechanisms will:

- Conduct regular monitoring and evaluation of Extension's plan of work implementation and effectiveness.
- Build flexibility into the Extension plan, allowing for adjustments to be made as needed based on new information.
- Foster a culture of openness to feedback and new perspectives, encouraging agency committees and leadership to consider alternative viewpoints.
- Ensure that the Extension plan remains aligned with the agency's overarching goals and values, even as new information arises.

The adaptive strategic plan will use an ongoing process carried out by a small, independent, and critical group of AgriLife Extension Service leaders to rapidly identify, communicate, and advance meritorious ideas through the evaluation and refinement processes for presentation to decision-makers.

BACKGROUND AND INTRODUCTION

Our Fundamentals: Vision, Mission, Core Values

Vision

The Texas A&M AgriLife Extension Service will be the leader in providing science-based information and solutions in agriculture and health to Texans when and where they need us.

Mission

The Texas A&M AgriLife Extension Service works daily to make Texas better by providing innovative solutions at the intersection of agriculture, natural resources, youth and health, thereby improving the well-being of individuals, families, businesses and communities through education and service.

Core Values

- Instructional Excellence
- Unbiased Programming
- Research-based Education
- Exemplary public service
- Respect
- Excellence
- Loyalty
- Leadership
- Integrity
- Selfless Service
- Creativity
- Innovation
- Inclusiveness
- Agility
- Teamwork
- Accessibility
- Responsiveness

These values reinforce Texas A&M AgriLife Extension Service's commitment to fulfilling the Land Grant mission to provide educational programming and service opportunities that bring innovative solutions to Texas producers, industry members, and both urban and rural communities to support the nourishment and well-being of all people. These efforts lead to the stability and continual enhancement of our state's agroecosystems and natural resources, further ensuring the economic competitiveness and excellence of agriculture and human health at the local level.

Defining Our Strategic Pillars

The Texas A&M AgriLife Extension Service is working to deliver educational programming to support lifelong learning and skills in every Texas community. This programming is designed to meet the demands of a growing population, changing climate, fluctuating economic conditions, unpredictable geopolitical environments, declining resources, and public health crises. The agency's strategic plan aims to take the research-based knowledge of the Texas A&M University System, including that of AgriLife Research and other sister agencies, and translate this knowledge into programming that all Texans use to work for economic prosperity, environmental stewardship and an improved quality of life.

The Extension Service in Texas is based in a grassroots methodology to cultivate educational programming aligned with its strategic pillars. By engaging directly with community members in both formal and informal issue identification activities, Extension agents gather valuable input that informs relevant subject matter, programming efficiency, and the design and delivery of initiatives. With a presence in all 254 Texas counties, Extension leverages local expertise and networks to tailor education to local contexts. This approach fosters a sense of ownership and inclusivity, it empowers communities to take an active role in their development, and it enhances the agency's capacity to drive sustainable, community-driven change.

Strategic pillars are areas that the Extension Service will emphasize over the coming years to make measurable progress toward enhancing the responsible stewardship of Texas' natural resources, nurturing the next generation's educational opportunities, promoting health and preparedness, boosting economic resiliency, and integrating science into nutrition, health, and agriculture for the betterment of our world. After reviewing the vision and mission, evaluating the competitive advantages, and considering the context of the obstacles of delivering educational programming and service opportunities that impart lifelong knowledge to the residents of Texas, the following five broad priority areas — “pillars” — became clear:

Pillar One: Resource Stewardship

Prioritize research-based educational programming and interdisciplinary collaboration to promote the responsible stewardship and sustainable practices of Texas' natural resources for both new and established landowners, and across various sectors and industry partnerships.

Pillar Two: Youth Development

Enhance the programming and resources available to schools, youth organizations, and families which are necessary to broaden concepts in agriculture, natural sciences, human health and community engagement for the next generation of Texas citizens and leaders.

Pillar Three: Community Sustainability

Engage innovation, science and service to address the current and future community needs focusing on workforce development, leadership development, civic engagement, and disaster preparation, response, and recovery.

Pillar Four: Economic Strength

Enhance the efficiency, profitability, and resiliency of agriculture, natural resources, food systems and local economies in the state of Texas and around the world.

Pillar Five: Healthy Living

Deliver science-based preventive and educational health programs to apply, coordinate, and integrate scientific evidence at the intersection of nutrition, human health, and agriculture.

Synergistic Interactions Between Priorities

These five Extension priority areas interact synergistically to sustain the human, natural resources, and financial needs of the state of Texas. Focused educational programming is the foundation of this strategy, which empowers the nexus between agriculture and human health by cultivating science-based solutions to develop sustainable, profitable, and resilient agriculture that provides affordable, high-quality, nutritious food and healthy living practices.

Pillar One: Resource Stewardship

Prioritize research-based educational programming and interdisciplinary collaboration to promote the responsible stewardship and sustainable practices of Texas' natural resources for both new and established landowners, and across various sectors and industry partnerships.

Pillar One emphasizes the responsible stewardship of natural resources on both public and private lands in Texas. Water, as a crucial component of agricultural productivity, takes center stage. At the Extension Service, we provide a broad range of resources, information, and programming to support large-scale components of the agricultural industry in Texas, such as ranching, beef cattle, dairy producers, crop production, horticulture, and the nursery industry. Our state's agricultural producers encounter various challenges, including ecosystem, range-land, and soil health issues that impact the food sources of animals and people alike.

For over a century, our Extension and Research agencies have been facilitating the Land Grant mission by providing research-based education to help agriculturists tackle critical issues like invasive species, seasonal plant and pollinator management, pesticide application, and drought-tolerant alternatives. We are fortunate to receive strong industry backing in areas such as beef cattle, cotton, integrated pest management, green industry, forage and livestock grazing, feed, and coproduct utilization. Sustainable management practices are pivotal to establishing resilient food and fiber production systems in each of these components.

Today and in the future, we aim to continue our mission by engaging land managers, policy-makers, and citizens with interdisciplinary research, education, and public service. We seek to generate new opportunities for Extension professionals to incorporate and coordinate natural resource education with healthy living topics in each area of agency expertise. We will teach innovation and promote collaborative practices in wildlife protection, sustainable soil and plant health methods, and science-based solutions for water quality and quantity challenges across Texas and the United States. Our ultimate goal is to safeguard and improve the agricultural sector in Texas by ensuring sustainable and profitable practices with our natural resources.

The Extension programming and service opportunities include, but are not limited to:

- Leading education in optimizing water usage and sustainability in crop production.
- Continued emphasis on research-based education to producers in Texas' foundational food and fiber crops.
- Curriculum offerings in the best management practices of livestock and wildlife to reduce bacteria in waterbodies, wells, and watersheds.
- Education of precision agriculture technologies and implementation that reduce input usage and increase efficiencies.

- Increasing the adoption of soil health management systems that enhance the vitality and productivity of soils.
- Education about various marine-related topics and issues, including: marine policy, fisheries, aquaculture, seafood safety, and environmental quality.
- Anticipating and analyzing changing trends in public policy that impact land usage.
- Engaging new and established ag producers in emerging topics of farm management, business planning, taxation/land valuation, regulatory and legal issues.
- Conservation efforts to promote and protect the regional biodiversity and habitats of native flora and fauna in all Texas regions.
- Wildlife management techniques and best practices for new landowners.
- Expanding home horticulture offerings and programming to new Texas residents.
- Improved forage production and the expansion of drought-tolerant alternatives.
- Developing production and best management solutions for urban commercial and controlled environment agriculture industries.
- Specialized coursework and intensive programming in Beef Cattle topics for adult education.
- Empowering volunteers in the Master Naturalist and Master Gardener programs to earn certifications and identify opportunities for community leadership.

Expected Outcome:

Pillar One fully aligns the Land Grant mission of the Extension Service across the food and fiber industry by creating a pathway and emphasis on research-based sustainability and optimization for the people and lands of Texas. Work in this area will enhance water usage and sustainable crop production for large producers in rural areas and also for geographically condensed agriculture needs in urban commercial and controlled environment settings. Wherever our help is most needed, our goal is to safeguard and improve the agricultural sector in Texas by ensuring sustainable and profitable practices for our natural resources through:

- Continued emphasis of research-based education in both traditional and developing Texas agricultural industries.
- Engaging landowners and producers in the balance between sustainability and profitability within agricultural initiatives.
- Developing educational programming to inform decision makers in the development of consistent public policy and solutions that address the anticipated trends of shrinking agricultural acreage and increased urban commercial production.
- Increased marketing and resources driving public awareness to the variety of programs and services Extension offers in our statewide network of educators and volunteers.

Pillar Two: Youth Development

Enhance the programming and resources available to schools, youth organizations, and families which are necessary to broaden concepts in agriculture, natural sciences, human health and community engagement for the next generation of Texas citizens and leaders.

Pillar Two is committed to fostering understanding and value for scientific achievement in agriculture and health in the next generation of Texas leaders. We accomplish this through immersive experiences, project-based learning, and observations, both in and out of the classroom, with the goal of developing future leaders in every walk of life. Whether one ever engages in farming or not, we believe that a person's sympathies, outlook in life, and usefulness as a citizen is vastly broadened by a well-planned study in modern agriculture.

Successful Extension educational programming ensures that children from both urban and rural areas are well-prepared to both participate and collaborate in discovering future careers, developing life skills, and in leading the way for the future of public health and world agriculture. Our premier programming is led through the Texas 4-H Youth Development Program, and its five key program areas: Ag & Livestock, Family & Community Health, Natural Resources, Leadership & Citizenship, and STEM. Whether it be through 4-H programming or other community partnerships and resources, our agency and our statewide volunteer network dedicate our efforts to educating and enriching the lives of youth to help them grow and develop into productive adults and future leaders of our world.

This pillar showcases the traditional focus of the Land Grant mission by highlighting the synergy between the AgriLife Extension Service, AgriLife Research, and the higher education institutions within the Texas A&M System. We use these partnerships and resources to offer young Texans a solid foundation in STEM subject matter specifically related to Texas agriculture and community health — critical components of every aspect of Extension's educational initiatives and service opportunities. We also build strong character education programming through the 4-H Youth Development Program and community partnerships.

The Extension programming and service opportunities include, but are not limited to:

- Mentoring youth through community partnerships and local internships to foster leadership, communication, and decision-making skills.
- Advancing new frontiers in agriculture by introducing youth leaders from urban and rural settings to confront complex challenges in global food and fiber production.
- Self-directed professional development training and coursework to engage Texas teachers, volunteers, and parents in multidisciplinary topics.
- Directed K-12 study in emerging agricultural topics and related career fields.

- Learning experiences that foster mental health, social and emotional learning, and physical well-being.
- Project-based learning in interdisciplinary topics such as: water management, bioenergy, gardening and human nutrition.
- New and expanded TEKS aligned curriculum, delivery methods, and audiences in STEM learning in each of the Texas 4-H program areas.
- Involvement in the Texas major livestock shows to build on traditions, develop structure, and support scholarship opportunities for Texas youth.
- Enhancing the marketing of Texas 4-H programs to emphasize the customized educational experiences available to students and families.
- Strengthening public awareness and enhancing community impacts among each of the Texas 4-H Ambassadors programs.
- Enhancing the awareness and recruitment of adult Texas 4-H volunteer opportunities across Texas in historically under-represented groups and communities.
- Expanding teaching certificate programs across multiple disciplines to increase youth involvement and educational / career opportunities.
- Facilitating pathways in career development internships and industry-based certificates.

Expected Outcome:

Pillar Two leverages the expansive Texas 4-H Youth Development program and the statewide county Extension agent network to promote awareness and appreciation for agricultural education, while also building strong character in our state's future leaders. We will continue to build courageous future leaders through hands-on programming, guided leadership activities, public speaking opportunities and more. We will encourage the next generation of Texans to find collaboration between urban and rural communities in our 4-H programming and statewide educational partnerships. And finally, this pillar will actively guide the agency to empower parents and students with learning programs focused on sustainable and responsible practices within local, national, and global food and fiber systems resources by teaching:

- Project-based learning and leadership opportunities aligned with relevant, applicable TEKS standards.
- Advanced leadership skills in high schoolers to encourage mentoring other youth and identifying opportunities to advocate, build teams, and collaborate on problem solving.
- Environmental awareness and sustainable practices in modern farming technologies and methods of protecting and enhancing the state's natural resources.
- Career paths available to STEM-related fields and topics within the agricultural industry.
- Proper nutrition habits and practices that promote health, decrease chronic diseases, and prevent obesity.
- Critical thinking skills to address vital challenges and emerging issues across Texas.

Pillar Three: Community Sustainability

Engage innovation, science and service to address the current and future community needs focusing on workforce development, leadership development, civic engagement, and disaster preparation, response, and recovery.

Pillar Three aims to proactively address the ever-changing needs and challenges faced by a quickly growing state through effective planning and technological support. Texas faces multiple challenges from rapid development and urban growth that must be carefully balanced with the needs of our vibrant rural and frontier communities. These factors collectively intensify the need for strategic planning, education, and collaboration to tackle the resiliency and sustainability challenges of our large state. It is vital that public and private interests collaborate with policy makers to find solutions that promote sustainable growth, community health, and cohesive development while also ensuring the preservation of Texas's natural resources.

Volunteering is a form of civic engagement through which individuals can make meaningful contributions to their own vision of societal well-being. Volunteer labor and philanthropic non-profit organizations are dedicated to filling gaps in service provisions that markets do not reach. Volunteers are the resources that help expand AgriLife Extension outreach and programming into many Texas communities and neighborhoods.

State and federal regulations mandate certification, licensing, or ongoing education for specific vocations due to their vital functions and public safety requirements. High quality training and continuing education are essential for service providers and employees in occupations under this regulatory oversight. Robust workforce development and training resources will continue to provide a high quality of life in Texas, ultimately attracting new businesses and residents.

The Extension programming and service opportunities include, but are not limited to:

- Educational programming recognized by state and industry accreditation authorities that meet continuing and certification requirements for a growing workforce.
- Ensuring that educational needs are met through programs, published materials, and counsel to county officials, community organizations, and citizens throughout Texas.
- Mobilizing and organizing a strong volunteer base to expand the mission of fostering civic engagement across Texas communities through Extension programming.
- Engage families and communities through comprehensive, multi-disciplinary programs to promote preventive health at the most local level of the community.
- Laying groundwork to create efficient and sustainable communication channels with rural communities to address health and healthcare disparities.
- Education on the relationships between food / energy / connectivity for communities.

- Increased use of technology and planning to protect communities where dense urban and suburban development co-exists with agricultural lands.
- Education on sustainable infrastructure to ensure the availability of clean water to meet society's water demands.
- Providing science-based, watershed education to help citizens identify and take action to address local water quality impairments and mitigation needs, particularly in urban landscapes through a combination of applied and social science research efforts.
- Partnerships with local jurisdictions for emergency preparedness and support functions related to agriculture, natural resources, and human food and water supplies.
- Increased support within local jurisdictions to assist in completing preliminary damage assessments.
- Expansion of volunteer programs where communities rely on citizens to implement youth education, operate parks, nature centers, and maintain natural areas.
- Providing adult education opportunities and leadership training through the V.G. Young Institute of County Government and Texas Agricultural Lifetime Leadership (TALL).

Expected Outcome:

Pillar Three underscores the agency's steadfast commitment to science-based education and service opportunities across all 254 counties in Texas. In the next decade, Texas will face an uncertain future in sustaining land infrastructure within a large intergenerational transfer of rural lands. Texas has experienced a 48% increase in population in the last two decades, with seven of the nation's fifteen fastest-growing cities located within its borders. Building resource capacity, convening thought leaders and driving issue awareness within communities is a fundamental role of the agency. Through our Disaster Assessment & Recovery (DAR) unit, Extension is uniquely positioned to excel at "blue sky" readiness educational programming while also nimbly responding to targeted areas when urgent assistance is required. An unwavering focus on education and service ensures that the agency will continue to meet the various and diverse needs of all Texas communities by the following:

- Enhancing civic engagement through recruiting more volunteers, one of AgriLife Extension's most valuable assets, allowing the agency to reach more people, ensure relevant programming, and interpreting the value of agency programming to others.
- Growing community engagement by aligning Extension volunteers to improve their own skills in various disciplines, and also help other Texans gain knowledge and skills for life.
- Implementing robust community management practices for ensuring adequate and clean water supplies for all Texans.
- Fostering collaboration in public policy and individual behavior to support small acreage owners in areas of land fragmentation.
- Enhancing Extension's Disaster Assessment & Recovery unit and the Extension Agent Network to respond effectively across Texas during crises.

Pillar Four: Economic Strength

Enhance the efficiency, profitability, and resiliency of agriculture, natural resources, food systems and local economies in the state of Texas and around the world.

Pillar Four focuses on fostering the economic strength and profitability of Texas' agricultural production system, while also addressing the workforce development needs of our rapidly growing state. In recent years, Texas' agricultural production system has encountered several challenges, ranging from droughts to labor and trade issues, as well as recent catastrophic weather events and the global health crisis. However, despite these obstacles, our food and fiber production systems have remained resilient, diversified, and consumer focused, and the Extension agent network has worked tirelessly to support this system's workforce.

Furthermore, Texas' agritourism opportunities are rapidly expanding, creating employment and opportunities to work on both public and private lands and waters. Extension continues to develop targeted resources, educational materials, and best practice seminars, which are increasingly available to community officials who seek to foster development in the industries, economic engines, abilities and placemaking that complement their unique strengths.

As part of our core mission, the Texas A&M AgriLife Extension Service bolsters economic strength by focusing on workforce development and providing numerous professional certification programs, including Integrated Pest Management, Passenger Safety/Child Passenger Safety, Early Childhood Education, Certified Food Managers, and more. Our programs enhance community economic development and strength by teaching workplace safety culture, reducing workers' compensation costs, attracting new businesses, and establishing a reputation for communities as safe and healthy places to work and do business.

The Extension programming and service opportunities include, but are not limited to:

- Optimizing animal and plant production systems from agricultural to consumer use.
- Customizing methods for profitability of controlled-environment agriculture systems.
- Identifying alternative, abundant, and high-quality water sources.
- Relationships between energy availability and economic strength.
- Economic and cost-benefit analysis and training to consumers and producers.
- Developing food processing and safety procedures to enhance agricultural product diversity and profitability.
- Educating new landowners and managers on successful ag business practices, land use, conservation, natural resource protections, and individual management objectives.
- Outreach and cost benefit analysis regarding climate smart production practices.
- Facilitating public policy and leadership in the ag sector with emerging Texas leaders

through the programming of Texas Agricultural Lifetime Leadership (TALL) and the Agricultural and Food Policy Center (AFPC).

- Certification programs and interactive technologies to deliver the latest research and best practices in health and safety.
- International market opportunities and challenges.
- Education and outreach to producers and landowners providing research and information within the agricultural, food and environmental law field.
- Equipping and enhancing marketing skills among agricultural producers, ag lenders, and others through the Extension Master Marketer program.

Expected Outcome:

Pillar Four will focus the Extension Service on work enhancing the economic strength and profitability of Texas' food production system, while also addressing the workforce development needs of a growing and economically diversified state. By ensuring constant feedback between this pillar and our other four strategic pillars, we uphold our agency's direct link to research-based education that builds strong families, develops a robust workforce, and guides profitable and sustainable practices in every sector of the Texas agricultural industry. Our certification programs and training opportunities help fulfill a growing workforce need and there are still more opportunities to purposefully expand our lifelong learning educational portfolio across multiple industries and professional career choices. We will continue maintaining a strong and unbiased approach to agriculture and community development within our Land Grant mission by bridging the needs of our community stakeholders and industry partners with the educational outreach of our agencies, academic departments, and research opportunities within the Texas A&M System.

- Accurately and objectively assessing the impacts of farm programs, risk management tools, renewable energy, and climate change legislation on U.S. agricultural operations.
- Empowering agriculture producers and industry partners with marketing techniques, marketing plans, technical analysis, futures and options, to create a marketing "toolkit" and to confidently boost marketing plans in agricultural business.
- Leading our state and region in the development and delivery of innovative educational and applied research programs that meet the decision support needs of targeted audiences and stakeholders.
- Conducting public outreach with up-to-date education on various legal issues impacting Texas agriculture, specifically focused on: water law, oil and gas law, leasing, property rights, right to farm statutes, and landowner liability.

Pillar Five: Healthy Living

Deliver science-based preventive and educational health programs to apply, coordinate, and integrate scientific evidence at the intersection of nutrition, human health, and agriculture.

Pillar Five places emphasis on improving the nutrition and overall health of Texans, a critical and extensively researched topic in the original Land Grant mission. As a statewide resource of programming, we are committed to educating individuals and communities on nutritional needs, positive changes in food consumption, and altered behaviors to alleviate the burden of chronic diseases. We emphasize preventative and healthy lifestyle habits to promote long-term health and wellness for Texans of all ages, including the emerging adult population of the state, and we prioritize the mental health and well-being of our citizens and communities.

To optimize human health, we educate others on the complex interactions between food access, availability, choice, consumption, and composition in the context of individual nutrition needs and global food system demands. It is also essential to recognize the complex interactions of a diversified state population with unique needs, customs, resources, and strengths. As part of the core Land Grant mission, our agency provides customized support for food environments, product development, and nutritional needs, encouraging healthy eating practices that combine with physical activity and self-care management to enable Texans to thrive.

Conversely, the absence of these components can lead to the development of chronic diseases, resulting in increased healthcare costs and decreased quality of life for individuals and local communities. Education plays a critical role in managing the prevalence of chronic disease conditions in Texas. Quality educational programming, activities, and evaluations offer an opportunity to address chronic diseases throughout the state, helping people maintain their health risks, costs, and productivity levels close to those without the disease.

The Extension programming and service opportunities include, but are not limited to:

- Teaching about evidence relating nutrients in food and human disease prevention.
- Leading self-management health programs at the most local level of the community, focused on diabetes, nutrition, physical activity, youth outreach, and family health.
- Collaboration with Texas A&M System health agencies and research partners in relevant areas of expertise across adult and youth programs.
- Providing TEKS-aligned curriculum to address child obesity and health issues by developing healthy behaviors through nutrition, physical activity, and family engagement.
- Utilizing educators and paraprofessionals in the Better Living for Texans (BLT) and Expanded Food and Nutrition Education Program (EFNEP) to provide free nutrition education classes to vulnerable limited-resource families and youth.

- Addressing mental health and suicide stigmas to save lives, support health, increase well-being, and reduce barriers to seeking help.
- Equipping Texans with resources and knowledge to protect urban and rural watersheds, and raising awareness of PFAS pollutants that threaten ecosystems and human health.
- Diabetes management courses teaching people with type 2 diabetes and those that prepare food for them how to manage the disease and reduce the risk of complications.
- Responsiveness to local community needs and the opportunities for academic connections, research opportunities, and community outreach and education programs.
- Prevention of foodborne illness outbreaks through retail, home, and wild game food safety training and certifications.
- Reinforcing the practical and economic benefits of wellness programs from lifetime health care cost savings, avoidance of lost wages, and nutrition-related food cost savings.
- Increased volunteer programming through Master Wellness volunteers and Healthy Texas Youth Ambassadors in the Texas 4-H Youth Development Program.

Expected Outcome:

Pillar Five seamlessly integrates essential knowledge and cutting-edge research findings from all four preceding pillars. We are dedicated to advancing human health through the optimization of agriculture and food systems, and to fostering a dynamic interdisciplinary approach to healthy living. By doing so, we forge a transformative pathway that extends groundbreaking innovations, research-based education, and a diverse array of programming and volunteer initiatives to the people of Texas. These foundational goals of the Extension Service remain rooted in the timeless mission of our agency, honoring the noble legacy of the Land Grant tradition. Through our exceptional programming, we will:

- Facilitate the adoption of relevant programs and approaches to improve public health through nutrition and physical activity.
- Disseminate technology, programs, and tools that enable consumer adoption of personalized dietary and related health recommendations.
- Educate the public on what pathogens in food and animals contribute to food safety issues and develop food safety mitigation strategies.
- Incorporate education that focuses on reducing risks, building resilience and establishing supportive environments for promoting mental health and healthy individuals.
- Expand and leverage the reach of health and nutrition programs through Master Wellness volunteers who help identify issues, needs, and program priorities based on their experience and connections with the community.

AGRILIFE EXTENSION SERVICE COMPETITIVE ADVANTAGES

The Texas A&M AgriLife Extension Service serves as an essential part of the Texas A&M System's land-grant mission and stands as the premier and largest extension service in the United States. The agency offers unparalleled educational opportunities in agriculture and human sciences by connecting research-based education with the needs of the public sector, and serves as a bridge to enhance the well-being of individuals, families, businesses, and communities across the state.

At the core of the Extension Service's strategic planning and success is an extensive network of educators, specialists, and county agents spread across all 254 counties in Texas, with offices in 250 counties. This vast network ensures that cutting-edge resources and knowledge are accessible to every Texas community, regardless of location or size. The Extension Service's educational and service programs strive to improve the well-being of Texans in all walks of life.

The Extension Service's reach and capabilities are unparalleled, providing a significant resource to the agricultural community of Texas. By empowering agricultural producers and businesses with the latest advancements and informed decision-making, the Extension Service drives the state's economy forward, contributing to Texas' overall success.

This statewide network is made possible through shared funding commitments between the Extension Service and the elected county Commissioners Courts of over 200 Texas counties. Extension agents actively participate in their communities and interact directly with elected officials from city councils, school boards, the Texas Legislature, and the Texas Congressional delegation in Washington, D.C.

By engaging with local, state, and federal educational programming and service opportunities, the Extension Service serves as a force multiplier. Unlike other state agencies, the Extension Service can reach across every Texas community, including every city and county, providing resources, experience, knowledge, and manpower. With an increased capacity through the Disaster Assessment & Recovery (DAR) unit, the agency can help in situations of great need, and stand ready to serve Texans where and when they need it most.

The Extension Service's strategic vision and commitment to Texas centers around maintaining its presence, responsiveness, and service within the communities it serves. This tradition dates back more than 100 years, and the Extension Service is committed to preserving it for another 100 years to come. By providing resources, education, and service to Texans, the Extension Service remains an essential institution in the state's agricultural industry, contributing to its growth, prosperity, and overall well-being.

The educational programming carried out by Extension applies to a variety of systems, providing solutions to agriculture- and life-science-related challenges at the state, national, and international levels.

Texas has extremely variable geographical and climatic regions, and each population center has distinct needs. Extension specialists and agents provide education and volunteer opportunities to teach various agriculture-related matters that are important not just to Texas, but also to the nation and the world.

A sample of the many possible educational programming areas include:

- Improving the efficiency of food production while conserving soil, water, and natural resources
- Coordinated management techniques to counter effects from land fragmentation
- Pathogen and pest control strategies
- STEM-focused K-12 project-based learning
- Youth leadership and civic engagement
- Implementing novel food processing technologies
- Urban agriculture techniques
- Rural community economic development
- Chronic disease prevention
- Animal and human nutrition
- Public safety certifications
- Effects of climate change on all the above
- Effects of public policy on all the above

The Texas A&M AgriLife Extension Service harnesses the collective knowledge and cutting-edge research of 15 departments within the prestigious Texas A&M University College of Agriculture and Life Sciences. This expertise is utilized to develop comprehensive educational programming, curriculum, and courses that advance the agricultural industry in Texas while also safeguarding our precious natural resources. The Family and Community Health unit plays a vital role in improving the lives of Texans through evidence-based educational programs that promote better health and wellness for individuals, families, and communities.

The Texas 4-H Youth Development program, offered through Extension, fosters positive youth development in over 40 project areas spanning Agriculture & Livestock, Family & Community Health, Leadership & Citizenship, Natural Resources, and STEM. Whatever the topic may be in the realms of agriculture and human health and wellness, the Extension Service has the expertise and understanding to illuminate tailored programming and educational opportunities that cater to the unique needs of Texas communities. With its unwavering commitment to excellence, the Texas A&M AgriLife Extension Service remains at the forefront of advancing agriculture and promoting well-being in the Lone Star State.

OUR COMMITMENT: SERVING TEXANS WHERE THEY NEED US

Maintaining Our Statewide Community Presence and Honoring the Land-Grant Mission of Extension

Extension is dedicated to leading Texas in providing science-based information and solutions for agriculture and health. This entails a commitment to safeguarding and maintaining a strong local presence through 250 county offices in all 254 Texas counties, ensuring accessible support, daily access, and full integration of our people and programming within communities. Similarly, it requires a commitment to honor the traditional land-grant mission of Extension to provide education and service to Texans **where** they need us and **when** they need us.

Goals and tactics:

- Invest in faculty and employee recruitment and retention.
- Invest in support programs and other initiatives to enhance the ability of Extension employees to secure extramural funding and advance programming.
- Improve delivery methods with new technology partnerships that facilitate access to research-based programming, events, activities, and services to new and diversified audiences across Texas.
- Integrate agency responsiveness through the DAR unit with the Texas Division of Emergency Management and other disaster preparedness agencies housed within the Texas A&M System.
- Coordinate and manage program, financial, evaluation, and impact reporting expectations with Texas A&M Health.
- Recognize and reward faculty and staff successes by nominating them for internal and external awards.
- Support professional development and advancements in research-based education among Extension specialists, educators, and agents.
- Foster communication with internal stakeholders and nurture relationships with external stakeholder groups to grow programming and measure accountability.
- Develop mechanisms for securing funding from private entities and other stakeholder groups to advance the AgriLife Extension Service mission.

APPENDIX: WATER, WORKFORCE DEVELOPMENT, VOLUNTEERISM

Water

Population growth, increasing water demand, contamination issues, and ongoing droughts have placed the state's water supply under tremendous stress. Water demand in Texas is projected to increase by 17% from 2020 to 2070. Protecting water resources and utilizing conservation practices will be essential to sustaining the state's water demand-supply balance.

As detailed in the Texas Comptroller's recent report, "*Texas Water: Present and Future Needs 2023*," the Texas Water Development Board (TWDB), calculated the state's total current water supplies at approximately 16.8 million acre-feet and those supplies are expected to decrease to roughly 13.8 million acre-feet per year by 2070. Groundwater is predicted to have the largest decrease at 32.4 percent between 2020 and 2070. Existing surface water supplies are projected to decrease by about 2 percent, while reuse water will increase by 15 percent during the same period.

The State Comptroller's report has identified long-term conservation strategies as an essential part of the state's overall water plan. These include: ongoing education activities, universal metering, water accounting and water savings from reuse/recycling activities, leak detection and repair, and other conservation-related activities. Other practical opportunities exist for homeowners and small landowners to participate in conservation efforts such as rainwater harvesting, water reclamation and reuse, and other digital technologies designed to increase irrigation efficiency and provide water use savings to families.

Through 2,700 educational events, planning meetings and workshops in 2021, AgriLife Extension reached more than 1.3 million educational and other contacts to increase public awareness and adoption of practices vital to improving and sustaining the state's water demand-supply balance. These programs teach participants about efficient water use, sustainable practices, watershed management and environmental stewardship.

The benefits of these programs are measured in terms of water saved, water-cost savings, number of jobs and annual wages for trainees in the landscape-irrigation profession, and benefits associated with watershed protection and educational programs. Water conservation programs have resulted in a potential savings of 4.1 billion gallons annually (enough to supply 37,500 households), valued at \$15 million. The ultimate societal benefit of Extension water programming is the protection and more efficient use of scarce water resources.

Workforce Development

According to the latest Texas Workforce Commission (TWC) FY 2022 report, Texas has experienced remarkable growth, adding 728,600 jobs and expanding its workforce by 2.3% in just one year. The Lone Star State now boasts over 620,000 employers, three million small businesses, and a labor force comprising nearly 14.6 million Texans. This trend of job growth isn't limited to Texas; it is seen across various sectors in the United States. Particularly in the agricultural and food industries, projections indicate that by 2026, there will be over 21 million full and part-time job opportunities nationwide, with annual increases reaffirming this upward trajectory. (NASDA, 2022).

The economic development strategies of Texas require a well-educated and prepared workforce, ready to take on the challenges of a thriving and growing population. Due to the critical role of certain occupations, state and federal regulations require certification, licensing or continuing education to maintain minimum competency standards. High-quality training and continuing education are essential for service providers and employees in the occupations with these requirements. Recognizing the need for parents to have access to high-quality child care needs, TWC has approved more than \$5.8 billion of federal stimulus funds (as of the end of FY 2022) to support the needs of families and the child care industry.

The Texas A&M AgriLife Extension Service offers numerous educational programs recognized by state and industry accreditation authorities for meeting continuing education and certification requirements. These programs serve thousands of people who render vital community services, enabling them to obtain or keep a job, start a business or stay in business. AgriLife Extension directly supports 76,400 jobs in Texas, with an estimated annual wage of \$1.7 billion with its workforce-related continuing education and certification programs.

Volunteerism

Volunteers play a crucial role in expanding influence and access through civic engagement. They contribute to our shared vision of societal well-being and bridge service gaps untouched by markets. They are instrumental in reaching a broader audience, ensuring program relevance, and communicating the value of educational organizations like AgriLife Extension.

Unfortunately, state and national trends show a declining rate of volunteerism in our society. In partnership with the U.S. Census Bureau, AmeriCorps conducts a longitudinal survey about volunteerism and other forms of civic engagement within the United States. The most recent reports indicate that the share of Texas residents who formally volunteered through organizations has dropped precipitously in the last several years, ranging from 28.4% in 2017, to 26.4% in 2019, and finally 21.3% in 2021 after the height of the COVID-19 pandemic.

Engaging in volunteer activities has been linked to improved physical well-being. It often involves physical exertion and increased mobility, contributing to enhanced fitness and overall health. Moreover, the social connections formed while volunteering can reduce feelings of isolation and loneliness, which are known to have adverse effects on health. Volunteer work fosters a sense of purpose and fulfillment, contributing to lower stress levels and even a longer life expectancy. It is not just the recipients of volunteer efforts who benefit; the volunteers themselves reap the rewards of better physical health.

In addition to the physical health advantages, volunteerism has a profound impact on mental well-being. Volunteering promotes a sense of belonging and community, reducing the risk of depression and anxiety. Engaging in meaningful, purpose-driven activities can boost self-esteem and confidence. It also provides an opportunity to develop new skills, increasing mental agility and cognitive functioning. Overall, the act of giving back not only strengthens communities but also enhances the mental health and overall quality of life for those who dedicate their time and efforts to helping others.

The Texas A&M AgriLife Extension Service relies on its extensive volunteer program, mobilizing resources to extend outreach across diverse Texas communities. Extension volunteers not only enhance their skills but also impart knowledge and lifelong skills to others, serving in various capacities, including youth boards, master programs, leadership advisory boards, and program area committees and task forces.

People who choose to serve their communities as Extension volunteers have credibility because they are not financially dependent on the organization. These volunteers help Extension reach more people than would be possible without them and add another layer of oversight that validates how Extension programming remains relevant and valuable to the community.

Master Gardeners, Master Naturalists, and Master Wellness volunteers are vital supporters of Extension programs. These are certified Master volunteers who have completed a minimum specified number of specialized training in a particular subject and who are committed to giving a minimum number of specific hours of service in that subject. These are powerful functions within the Cooperative Extension system.

In the 2022-2023 programming year, the AgriLife Extension Service engaged over 83,400 volunteers, dedicating an average of 85 hours annually, and amassing 7.15 million volunteer hours worth an estimated \$233.4 million. This significant contribution strengthens the delivery of programs addressing vital issues. Volunteers are the backbone of AgriLife Extension's mission, amplifying its impact and connecting with communities on a meaningful level.

TEXAS A&M AGRILIFE EXTENSION SERVICE LEADERSHIP

Extension Leadership Team (ELT)

Rick Avery, Ph.D. — Agency Director
Angela Burkham, Ed.D. — Executive Associate Director
Donald Kelm, Ed.D. — Associate Director for County Operations
Dan Hale, Ph.D. — Associate Director for Agriculture and Natural Resources
Courtney Dodd, Ph.D. — Associate Director for Health, Families and Youth Programs
Donna Alexander — Chief Financial Officer
Chris Elam — Strategic Initiatives Lead
Dayla Hall — Executive Assistant to the Director and Office Coordinator

District Extension Administrators (DEA)

Josh Brooks, District 1 — Panhandle
Michael Clawson, District 2 — South Plains
Lorrie Coop, District 3 — Rolling Plains
Hurley Miller, Ed.D., District 4 — North
Shelia Harris, District 5 — East
Rebel Royall, District 6 — Far West
Marty Gibbs, District 7 — West Central
Jay Kingston, District 8 — Central
Eric Zimmerman, District 9 — Southeast
Michael Haynes, District 10 — Southwest
Donnie Montemayor, District 11 — Coastal Bend
Ruben Saldaña, Ed.D., District 12 — South

County Extension Directors (CED)

David Wright, Urban Program Director
& Harris County CED
Nelda Speller, Bexar County CED
Xiomara Diaz, Dallas County CED
Denise Rodriguez, El Paso County CED
Amy Ressler, Ph.D., Fort Bend County CED
Courtney Davis, Tarrant County CED
Maggie Johnson, Travis County CED

Regional Program Leaders (RPL)

Molly Forman, North Region - FCH
Danny Nusser, North Region - ANR
Dana Tarter, Ph.D., Central Region - FCH
Brent Batchelor, Central Region - ANR
Paula Butler, East Region - FCH
Larry Pierce, East Region - ANR
Jana Osbourn, South Region - FCH
Jason Ott, South Region - ANR
Erika Bochat, Southeast Region - FCH
Philip Shackelford, Ph.D., Southeast Region - ANR
Stacy Drury, West Region - FCH
Robert Pritz, West Region - ANR

Associate Department Heads (ADH)

Steven Klose, Ph.D. — Department of Agricultural Economics (AGEC)
Darlene Locke, Ed.D. — Department of Agricultural Leadership, Education & Communication (ALEC)
Andy Herring, Ph.D. — Department of Animal Science (ANSC)
Dana Porter, Ph.D. — Department of Biological & Agricultural Engineering (BAEN)
David Kerns, Ph.D. — Department of Entomology (ENTO)
Larry Stein, Ph.D. — Department of Horticulture (HORT)
Brian King, Ph.D. — Department of Hospitality, Hotel Management & Tourism (HMGT)
Beth Racine, DrPH, RD — Department of Nutrition & Food Science (NUTR)
Kevin Ong, Ph.D. — Department of Plant Pathology & Microbiology (PLPM)
Morgan Farnell, Ph.D. — Department of Poultry Science (POSC)
Parr Rosson, Ph.D. — Department of Rangeland, Wildlife & Fisheries Management (RWFMM)
Larry Redmon, Ph.D. — Department of Soil & Crop Sciences (SCSC)

Extension Programs, Units & Institutes

Don Rennie, Ph.D. — Agricultural & Environmental Safety
Renda Nelson — Better Living for Texans
Monty Dozier, Ph.D. — Disaster Assessment & Recovery
Rachel Bauer — Disaster Assessment & Recovery
Chelsea Bishop Smith — EFNEP
Stephen Green, Ph.D. — Family & Community Health
Rusty Hohlt, Ed.D. — Healthy South Texas
James Cathey, Ph.D. — Natural Resources Institute
Brian Faries — Office of Data & Accountability
Montza Williams, Ed.D. — Texas 4-H Youth Development
Allen Berthold, Ph.D. — Texas Water Resources Institute